

# ***Human-Machine Interface***

---

## User guide

<b>Document</b>	Asyril_HMI_User_Guide_EN 000.100.536		
<b>Version</b>	D	<b>Date</b>	31.03.2017
<b>HMI version</b>	rc5.0v2.4.2		
<b>Produits</b>	Asycube 50, Asycube 80, Asycube 240, (Asycube 130) SmartSight Module Asyfeed Pocket Cellule Asyfeed Pocket Robot Pocket, (Robot Desktop), (Robot Power)		


<b>asyril</b> Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri SA User Guide	© Copyright Asyri S.A.
Table of Contents	Document version : D	31.03.2017

## Table of Contents

Introduction .....	3
General information.....	3
Roles and access levels .....	4
Installation .....	6
Prerequisite .....	6
Installing the HMI software on a specific computer.....	6
Pre-installing.....	6
Installing .....	7
Problem of access rights .....	8
Starting HMI .....	10
General.....	11
Main window .....	11
Operator action panel : States.....	16
Operator action panel : Messages.....	18
Operator action panel : Options.....	20
Operator action panel : Login .....	21
Operator action panel : Shortcuts.....	22
Operator action panel : Statistics.....	24
Operator action panel : Recipes .....	26
Operator action panel : Vision .....	28
Configuration .....	30
HMI configuration .....	32
Product configuration .....	35
Asycube configuration with Ethernet .....	36
Asycube configuration with RS .....	39
AsyView configuration.....	42
Robot configuration .....	44
Process configuration.....	46
User management.....	48
User management : home .....	48
User management : manage users .....	50
User management : edit panel .....	52
Asycube.....	54
Home .....	55
Easy tune .....	58
Platform .....	63
Outputs .....	68
Hopper.....	72
Scripting.....	76
Backlight.....	79
Process.....	81
HMI Scripting.....	85
Terminal .....	89
Configuration .....	91
AsyView.....	97
Main page .....	98
Cell .....	100

<b>asyril</b> Experts in Flexible Feeding Systems	Human-Machine Interface - Asyril SA User Guide	© Copyright Asyril S.A.
Table of Contents	Document version : D	31.03.2017

Module.....	102
Vision.....	104
Home.....	105
Live.....	109
Image configuration.....	112
Calibration.....	116
Calibration pixel/mm.....	118
Calibration of linked devices.....	122
Teaching.....	125
Process calibration.....	130
Asycube.....	133
Process.....	134
Home.....	135
Programming.....	137
Statistics.....	142
Robot.....	144
Home.....	145
Advanced.....	149
Collection.....	152
Frames.....	154
Frame type 3.....	157
Tools.....	160
Points.....	163
Settings.....	165
Display settings.....	169
Recipes.....	170
Home.....	171
AsyView.....	174
Cell.....	177
Module.....	178
Asycube.....	179
Process.....	181
Troubleshooting.....	183
Technical support.....	184
For a better service.....	184
Contact.....	184
Revision table.....	185

 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Introduction	Document version : D	31.03.2017

## Introduction

This documentation describes the pages of this interface and possibilities supplied by. How to configure your products is not described in it.

Another specific documentation explains how to work with your product and the HMI provide only a solution to do it.

## General information

This document is the property of Asyri! S.A.; it may not be reproduced, modified or communicated, in whole or in part, without our prior written authorisation. Asyri! S.A. reserves the right to modify any information contained in this document for reasons related to product improvements without prior notice. Before using the product, please read this entire document in order to ensure that the product is used correctly. However, if you encounter difficulties when using the product, do not hesitate to contact our customer service department.

In this manual, the safety information that must be respected is split into three types: "Danger", "Important" and "Note". These messages are identified as follows:



### **DANGER!**

Failure to respect this instruction may result in serious physical injury.



### **DANGER!**

This instruction identifies an electrical hazard. Failure to respect this instruction may result in electrocution or serious physical injury due to an electric shock.



### **IMPORTANT!**

Failure to respect this instruction may result in serious damage to equipment.



### **NOTE:**

*The reader's attention is drawn to this point in order to ensure that the product is used correctly. However, failure to respect this instruction does not pose a danger.*



### **Reference ...**

*For more information on a specific topic, the reader is invited to refer to another manual or another page of the current manual.*







## Roles and access levels

The HMI has many different access level to be able to limitate access to important, sensible or dangerous parameters to operators.


In this documentation, minimum level required to access to an element is identified by icons on the right of the explanation of the element. If there is no icon signify that operator has access to this element.

Icons list:

Icon	Level access minimum
	Advanced operator
	Technician
	Advanced technician
	Integrator

The table below defines the actions that can be performed by each professional permitted to work on the machine:

	Operator	Advanced operator	Technician	Advanced technician	Integrator	Developer
Switch on/switch off the unit						
Login/Logout						
Select/load a recipe						
Launch/Stop production						
Create a statistical report						
Access the basic functionalities of the "header" screen						
Read the values of the process dynamic variables						
Acquire and analyse an image						
Move the robot						
Vibrate the Asycube						
Add/modify an operator						
Modify the values of the process dynamic variables						
Obtain and analyse an image						
Perform a new calibration						
Save a recipe						
Access the full ARL program						
Create a new process						
Access the full Vision parameters						
Create a new Vision recipe						
Add/modify a technician						
Access maintenance/debugging						
Add/modify an integrator						
Advanced access to HMI, Robot and AsyView						

 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Installation	Document version : D	31.03.2017

## Installation



### NOTE:

*If a computer is included in your product, the "HMI" software is already installed.  
This chapter explains how to install the HMI on your own computer if needed.*

## Prerequisite

To install and execute the HMI you need those elements:

- Computer with windows 7 (or 8) 64bits (a 32 bits version of HMI can be delivered on request)
- .Net 4.0 minimum installed.
- User access defined by your IT service to be able to install and execute software.



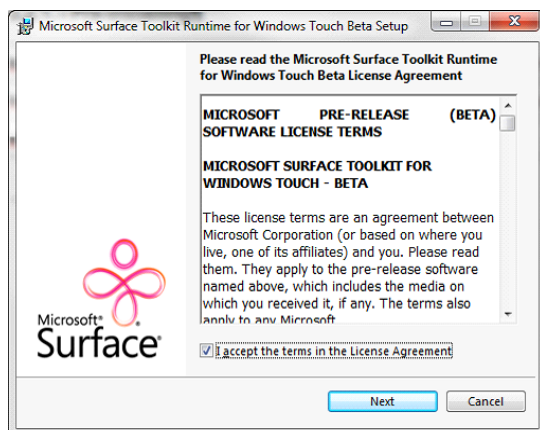
### NOTE:

*Check that your version of the ".net framework" is up to date. You can download this version from the Microsoft website: <http://www.microsoft.com/download/>*


## Installing the HMI software on a specific computer

### Pre-installing

<b>Step 1</b>	Insert the USB key into the computer on which the HMI should be installed.
<b>Step 2</b>	Double-click on the SurfaceToolkitRuntime.msi executable file to launch the installation procedure.
<b>Step 3</b>	Accept the license agreement and follow the instructions provided by the wizard



<b>Step 4</b>	When installation is complete, click on "Finish" to close the wizard.
---------------	---

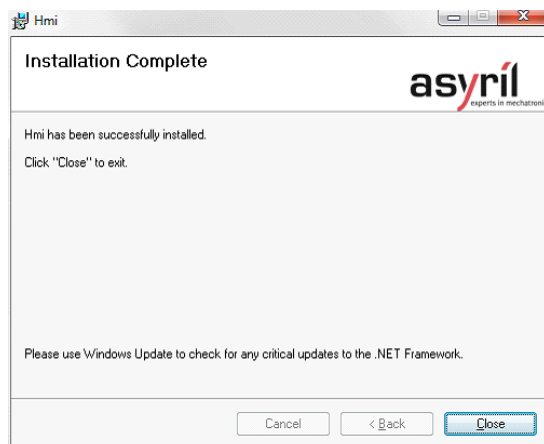
 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri SA User Guide	© Copyright Asyri S.A.
Installing	Document version : D	31.03.2017


## Installing

<b>Step 1</b>	Insert the USB key into the computer on which the HMI should be installed.
<b>Step 2</b>	Double-click on the HMI_Installer_x64.msi executable file to launch the installation procedure.



<b>Step 3</b>	Follow the instructions provided by the wizard.
<b>Step 4</b>	When installation is complete, click on "close" to close the wizard.



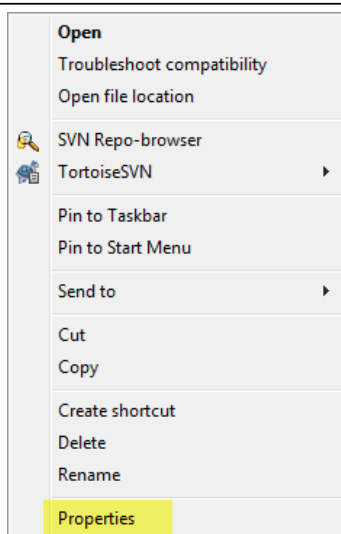
 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Problem of access rights	Document version : D	31.03.2017

## Problem of access rights

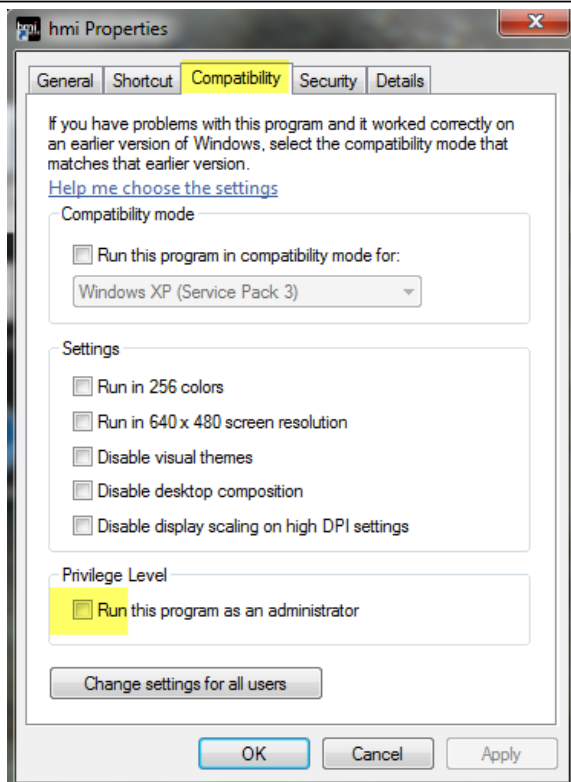
If the account used on your computer does not have administrator access rights to the Asyri!Data folder, you need to start **one time** the HMI with the administrator access right.

To do that, follow this procedure :


<b>Step 1</b>	Right-click on the HMI shortcut on your desktop.
<b>Step 2</b>	Click on the Property choice.




<b>Step 3</b>	Select the Compatibility tab.
<b>Step 4</b>	Check the "Run this program as an administrator" option.



<b>Step 5</b>	Click Ok.
---------------	-----------

 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyril SA User Guide	© Copyright Asyril S.A.
Problem of access rights	Document version : D	31.03.2017

<b>Step 6</b>	Start the HMI.
<b>Step 7</b>	When HMI is started, stop the HMI.
<b>Step 8</b>	Uncheck the "Run this program as an administrator" option in the same place as before.
<b>Step 9</b>	Start again the HMI, normally you have the correct access rights to the AsyrilData folder.

 <div> Experts in Flexible Feeding Systems </div>	Human-Machine Interface - AsyriL SA User Guide	© Copyright AsyriL S.A.
Starting HMI	Document version : D	31.03.2017

## Starting HMI

<b>Step 1</b>	Click on the shortcut created on the desktop .
<b>Step 2</b>	If needed, configure the HMI depending of your products on the <a href="#">configuration page</a> .

## General

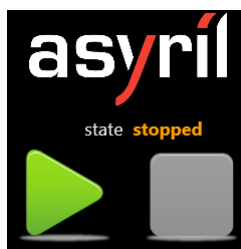
This chapter introduces you to the general aspect of the HMI. Page descriptions for products can be found in the following chapters.

## Main window





## 1 Start/Stop panel



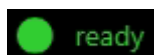
This part of the window give access to the start/stop action and show the OMAC state if the process is used. In other cases, this panel has only the Asyri icon.

## 2 Operator action panel

module	HMI connection	data	internal connection	state	alarm	detail
robot	Connected	Loaded			False	
process	Connected	Loaded		stopped	False	stopped
asyview	Connected	NotLoaded	Connected	IDLE		
cell		NotLoaded	Connected	IDLE		

The operator action panel is the zone where operator can see some informations and execute some actions. Each button on headband selection menu display various informations or give access to some actions. Is this example, the states panel is displayed (see description of this panel [here](#)).

## 3 State LED



This LED indicator shows the global state of the HMI. If one product is in error, the global state is in error. For more details for product states, click on states button on [headband selection menu](#).

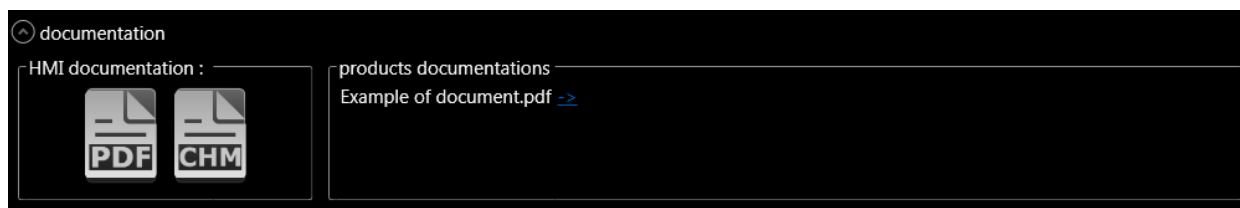
## 4 Headband selection menu



This menu gives access to all informations and actions that an operator can see or execute.

Name	Description	Link
<b>Statistics</b>	Informations about the production (when using the process).	<a href="#">more details</a>
<b>States</b>	Informations about the states of all products (connection state and working state).	<a href="#">more details</a>
<b>Shortcuts</b>	Allows to execute some simple actions on every products.	<a href="#">more details</a>
<b>Messages</b>	Displays messages. This panel is automatically selected when an alarm or a message occurs.	<a href="#">more details</a>
<b>Recipes</b>	Allows to select and load a recipe.	<a href="#">more details</a>
<b>Options</b>	Gives access to some options like language choice.	<a href="#">more details</a>
<b>Login</b>	Allows to login/logout.	<a href="#">more details</a>
<b>Vision</b>	Gives access to the displays of cameras	<a href="#">more details</a>

## 5 Documentation panel



This panel gives access to documentations.

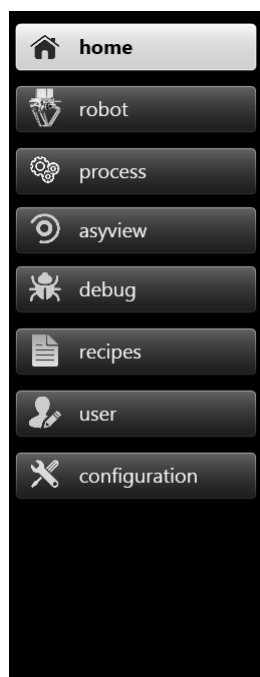
In standard, user can access to the HMI documentation in PDF and CHM (Microsoft Compressed HTML) formats. In option, user can access to some products documentations.



### NOTE:

*Documents can be added in AsyrlData\Documentation folder and will be visible after a restart of the HMI.*

## 6 Product and options selection menu



This menu gives access to all products defined in HMI configuration and to various other elements. See the list below :


Icon	Name	Access to	Level
	<a href="#">asycube</a>	Asycube configuration pages	
	<a href="#">asyview</a>	AsyView configuration pages	
	<a href="#">robot</a>	Robot configuration pages	
	<a href="#">process</a>	Process configuration pages	
	<a href="#">home</a>	HMI home page	
	<a href="#">user</a>	User management pages	
	<a href="#">configuration</a>	HMI configuration pages	
	<a href="#">recipes</a>	Recipe management pages	
	debug	Debug page	

## 7 Manage window panel



This panel is the standard panel to minimize, restore or extend to fullscreen the HMI window.

The question mark gives access to the help buttons in many places on the HMI.

When the question mark looks like this , some help buttons will appear on the HMI. By clicking on these, the documentation will be opened on the page concerning the element where the help button is located.

Examples of help buttons :

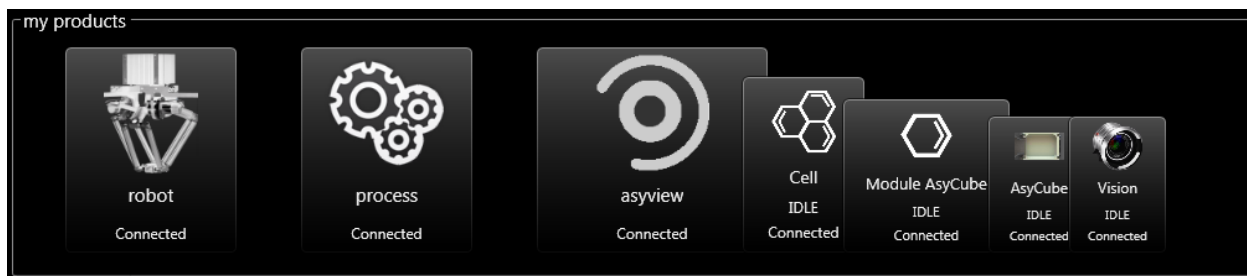


## 8 Information message display

welcome message  
welcome on Asyri HMI

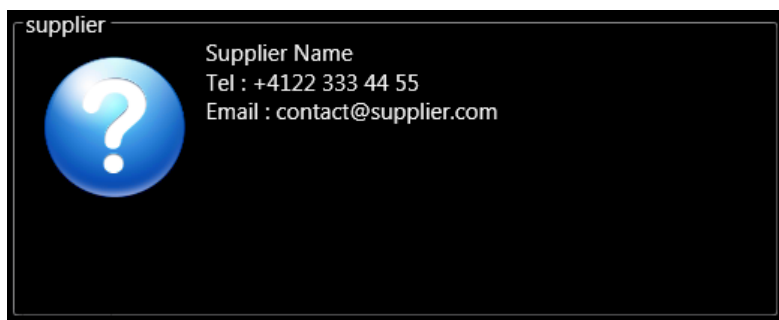
This group displays the text entered in the [configuration](#) page.

## 9 Configured products overview



This group displays an overview of all configured products and their sub-elements if exist (for example for AsyView). A click on a button will open the configuration page of the element.

## 10 Supplier contact panel



This group displays the supplier contact informations. Those informations can be modified in AsyriData/Data/supplier.txt. The icon can also be replaced by the supplier logo by replacing the supplier.png by the supplier logo (rename the supplier logo to supplier.png).

This fonctionnality is usefull for integrators or technical service to set their own contact informations.

<b>asyril</b> Experts in Flexible Feeding Systems	Human-Machine Interface - Asyrl SA User Guide	© Copyright Asyrl S.A.
Main window	Document version : D	31.03.2017

11

## Asyrl contact panel



This group displays Asyrl contact informations :

- Name, address, phone number and commercial e-mail address.
- Asyrl homepage link.
- Asyrl support e-mail address.
- Asyrl SAV ticketing system link.
- Asyrl Remote Access start (teamviewer quicksupport).

## Operator action panel : States

This panel displays states of all products. It is essential and very helpful to have a global view of the state of the products.

**HMI version informations** (1)

**State table** (2)

module	HMI connection	data	internal connection	state	alarm	detail
robot	Connected	Loaded			False	
process	Connected	Loaded		stopped	False	stopped
asyview	Connected	NotLoaded	Connected	IDLE		
cell		NotLoaded	Connected	IDLE		

### 1 HMI version informations

Hmi Controller rc4.0 - Droopy - 2.3.2.15411 - 10/27/2016 9:33 AM

The HMI version information can be found in this panel. This version number should be communicated in the event of any contact with the After-Sales department of Asyрил SA.

## 2 State table

module	HMI connection	data	internal connection	state	alarm	detail
robot	Connected	Loaded			False	
process	Connected	Loaded		stopped	False	stopped
asyview	Connected	NotLoaded	Connected	IDLE		
cell		NotLoaded	Connected	IDLE		

This table provides more information about the connection state of each module (robot, process, asycube and asyview) and indicates whether an alarm has occurred. In addition, the "data" column indicates whether the data related to each module has been loaded or not.

The table contains following informations :

Column title	Description
<b>module</b>	Name of the involved product.
<b>HMI connection</b>	State of the connection of the HMI on the product (disconnected, connected, connecting).
<b>data</b>	State of the data (loaded, not loaded).
<b>internal connection</b>	Internal connection state of the product (disconnected, connected, connecting). This field indicates if the product is connected on its devices (for example a camera in an AsyView)
<b>state</b>	State of the internal process of each product (idle, execute, stopping, etc).
<b>alarm</b>	Indicate if a product has an alarm (true/false).
<b>detail</b>	Additional process state (used only by the process to indicate the state of the current program execution).

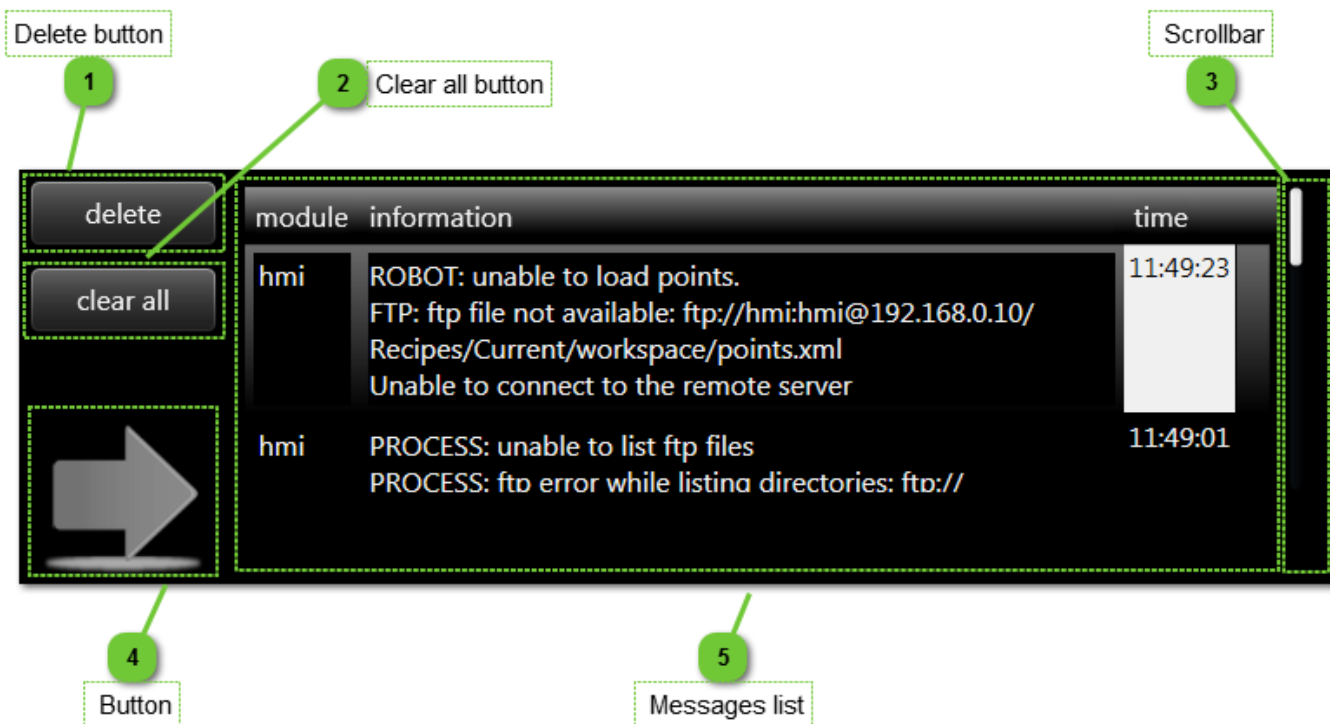


### NOTE:

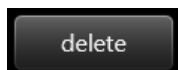
*Alarm and Detail columns are only displayed in integrator level.*

## Operator action panel : Messages

This panel displays messages, warnings and alarms of all products and of the HMI itself.



### 1 Delete button



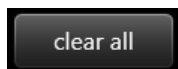
This button is used to delete one preselected message.



#### NOTE:

When an alarm message is deleted using the "delete" or "clear all" buttons, the alarm is not deleted, only the message is cleared. It is necessary to press the "➡" button before being able to resume production.

### 2 Clear all button



This button is used to delete all alarm messages.



#### NOTE:

When an alarm message is deleted using the "delete" or "clear all" buttons, the alarm is not deleted, only the message is cleared. It is necessary to press the "➡" button before being able to resume production.

### 3 Scrollbar



The scrollbar allows to navigate in messages. The scrollbar is visible only when all messages cannot be displayed in the panel.

### 4 Button



This button is available when an alarm occurs, and is greyed out under normal conditions.



#### NOTE:

When an error occurs, the situation that generated the alarm must be resolved and then the alarm cleared by clicking on the "➡" button

### 5 Messages list

module	information	time
hmi	ROBOT: unable to load points. FTP: ftp file not available: ftp://hmi:hmi@192.168.0.10/Recipes/Current/workspace/points.xml Unable to connect to the remote server	11:49:23
hmi	PROCESS: unable to list ftp files PROCESS: ftp error while listing directories: ftp://	11:49:01

This table provides useful information for diagnosing errors:

- The "**Module**" column gives the name of the module issuing the error (such as the Robot, AsyView, HMI, etc.).
- The "**Information**" column contains a clear explanation of the error encountered and possibly a solution to resolve it.
- The "**Time**" column provides information about the time and date on which the error occurred.



#### NOTE:

By keeping the mouse on the time value, the date of the message is displayed.

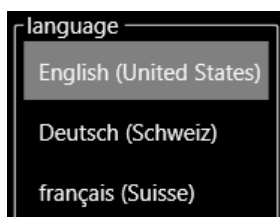


## Operator action panel : Options

This panel gives access to global options, like language choice.



### 1 List of languages



A specific language may be chosen by pressing the associated name. This parameter only affect the language of the texts but not the configuration of the virtual keyboard inside the HMI.



#### NOTE:

*Some languages can be added on request; for more information, please contact Asyrl customer services.*

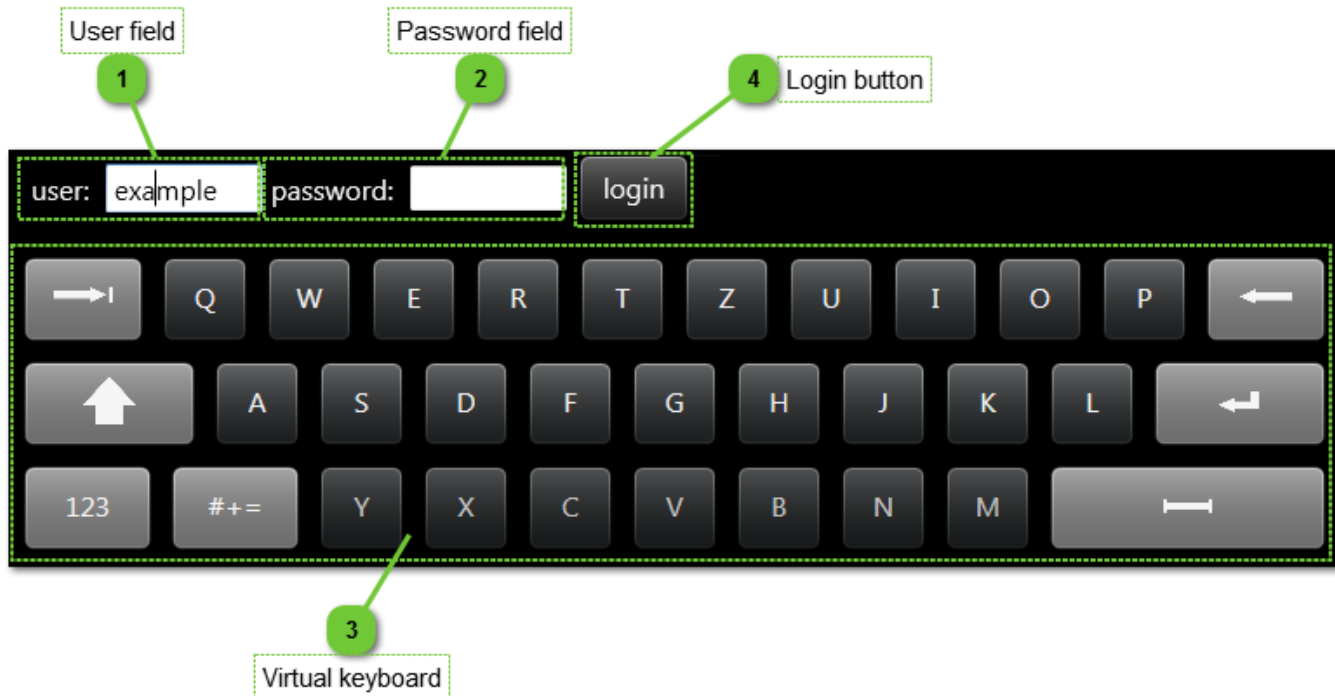
### 2 Ok button



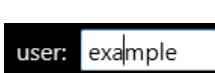
Press this button to validate the language selected.

## Operator action panel : Login


This panel allows to login or logout on the HMI. See level access chapter for more [details](#).



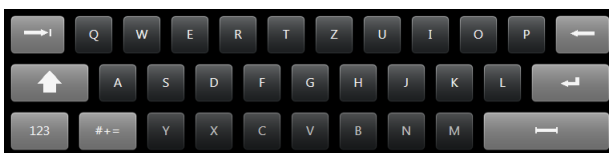
### 1 User field


 Enter user name here.  
 Click in the field to make keyboard visible.

### 2 Password field



 Enter password here.  
 Click in the field to make keyboard visible.

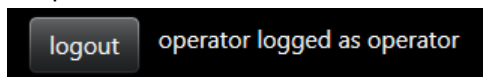
### 3 Virtual keyboard



Keyboard allows to enter username and password.  
The keyboard configuration cannot be modified.

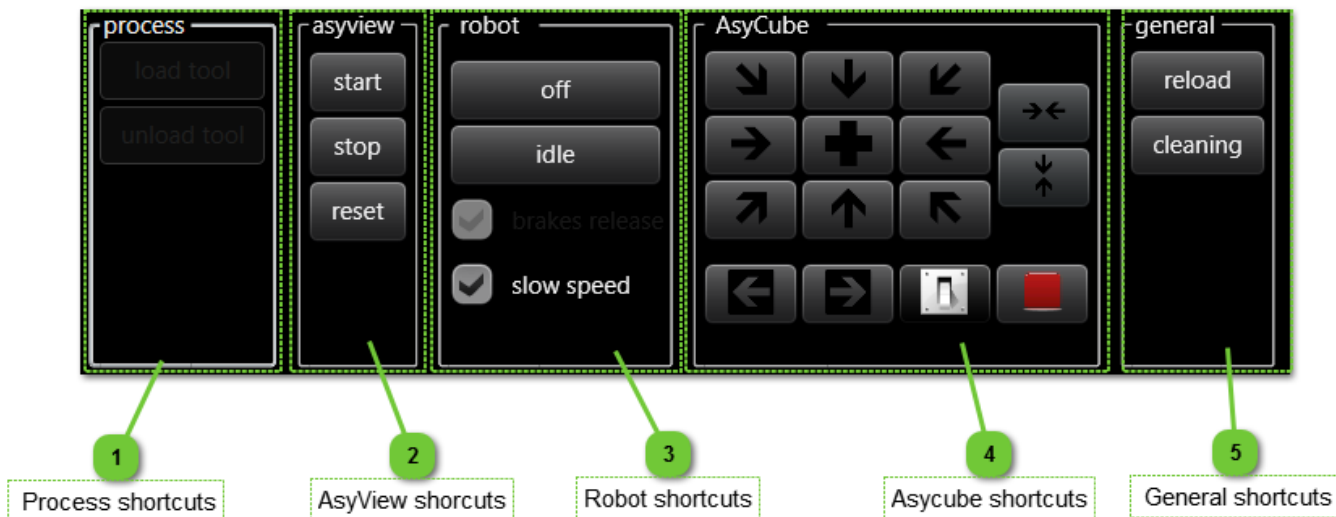
### 4 Login button


 Press this button to log in.  
 When logged in, the panel become like that :

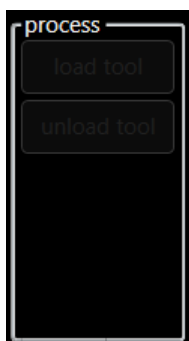


## Operator action panel : Shortcuts

This panel gives access to simple, accessible for operator, functions for all products.



### 1 Process shortcuts



Shortcuts to functions of process give access to standard functions like Load/Unload tool and specific programs defined in programming page of process.

The two buttons "load tool" and "unload tool" enable a tool to be loaded or unloaded from the robot's platform.

Any other program whose name begins with " \_ " will be displayed in this list in the form of a shortcut button.



#### IMPORTANT NOTE:

*The programs executed from this list no longer respect the sequence of OMAC states. The program will be directly executed without passing through the "starting", "stopping" phases, etc.*

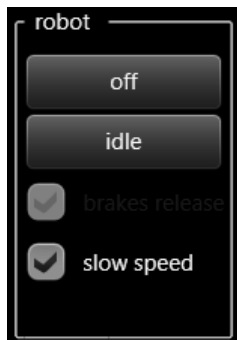
### 2 AsyView shortcuts



Shortcuts to functions of AsyView give access to main functions of AsyView:

- Pressing the "start" button enables to start the AsyView and set it in process mode.
- Pressing the "stop" button enables to stop the AsyView and set it in configuration mode.
- Pressing the "reset" button allows to reset the AsyView (in case of error state).

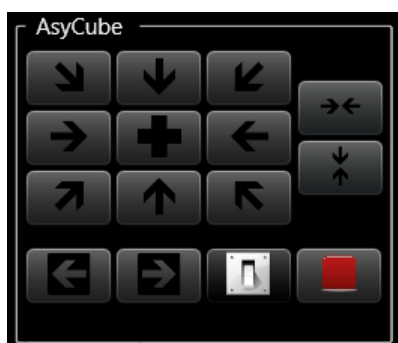
### 3 Robot shortcuts



Shortcuts to functions of Robot give access to useful functions of Robot:

- The "off" button is used to activate the brakes and to switch off the power to the motors.
- The "idle" button is used to activate the power to the robot and to initialize it.
- The "slowspeed" box enables the robot to be set at slow speed.
- If it is necessary to release the brakes (for the calibration steps for example), the "brakes release" box should be ticked (not possible in Operator level).

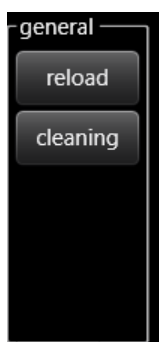
### 4 Asycube shortcuts



Shortcuts to functions of Asycube give access to standard functions of Asycube:

- Nine buttons which provide to execute the standard vibrations for Platform (forward, right, backward-left, flip, etc.)
- Two buttons (on the right) to execute standard advanced vibrations (center long size and short size). These buttons are only visible for Asycube 240.
- Two buttons (bottom) to execute hopper activation (vibrations for Asycube 50, Asycube 80, Asycube 130 and outputs activations for Asycube 240). In both cases, vibrations A and B are executed by these buttons.
- One button allows to switch the backlight on and off.
- One button allows to stop both vibrations and outputs activation.

### 5 General shortcuts

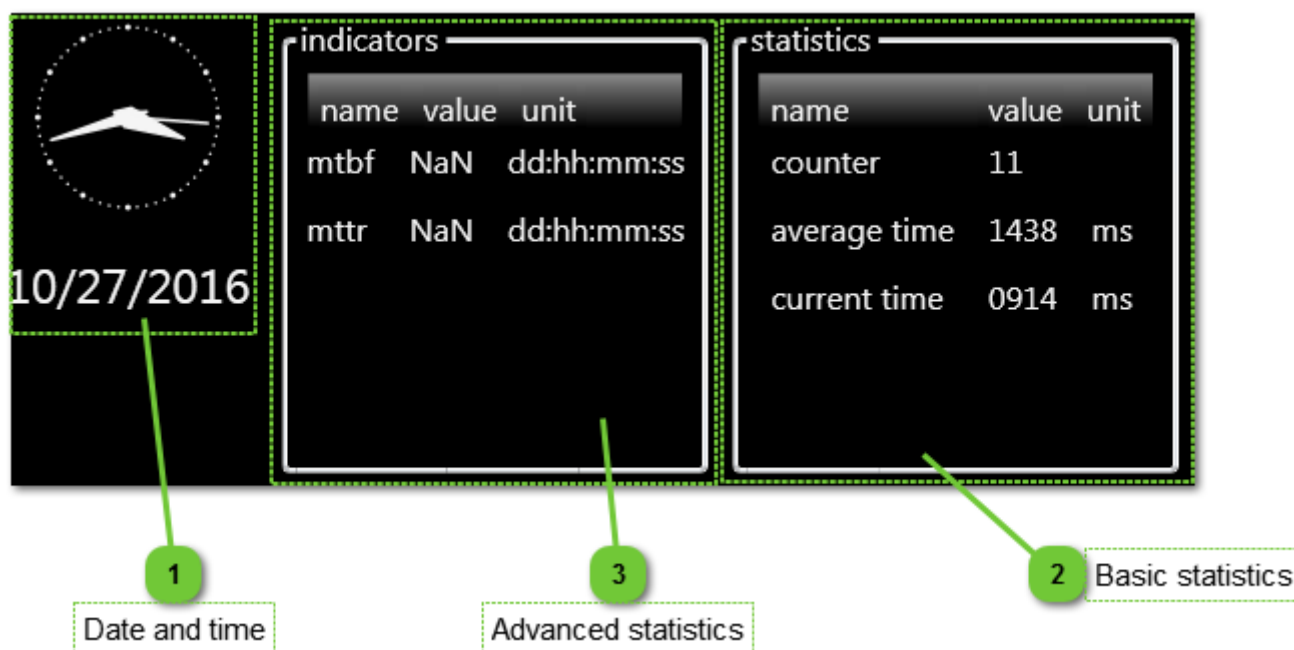


This general panel give access to general functions:

- Reload execute a data reload for all connected products.
- Cleaning display open a special page during 20 seconds to be able to clean the touch screen.

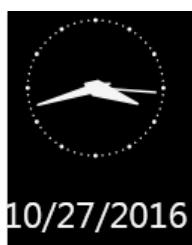
## Operator action panel : Statistics

This panel displays some statistics value (cycle time, mtbf, average time, etc.) of productions.



### 1 Date and time

Display of actual date and time.



#### NOTE:

*The date and time can be modified directly from the Windows toolbar*

### 2 Basic statistics

statistics		
name	value	unit
counter	11	
average time	1438	ms
current time	0914	ms

The statistics displayed in this table are defined in configuration file ; it creates a link with ARL variables.



#### NOTE:

*For more information about this functionality, please contact Asyri! customer services.*

### 3 Advanced statistics

indicators

name	value	unit
mtbf	NaN	dd:hh:mm:ss
mttr	NaN	dd:hh:mm:ss

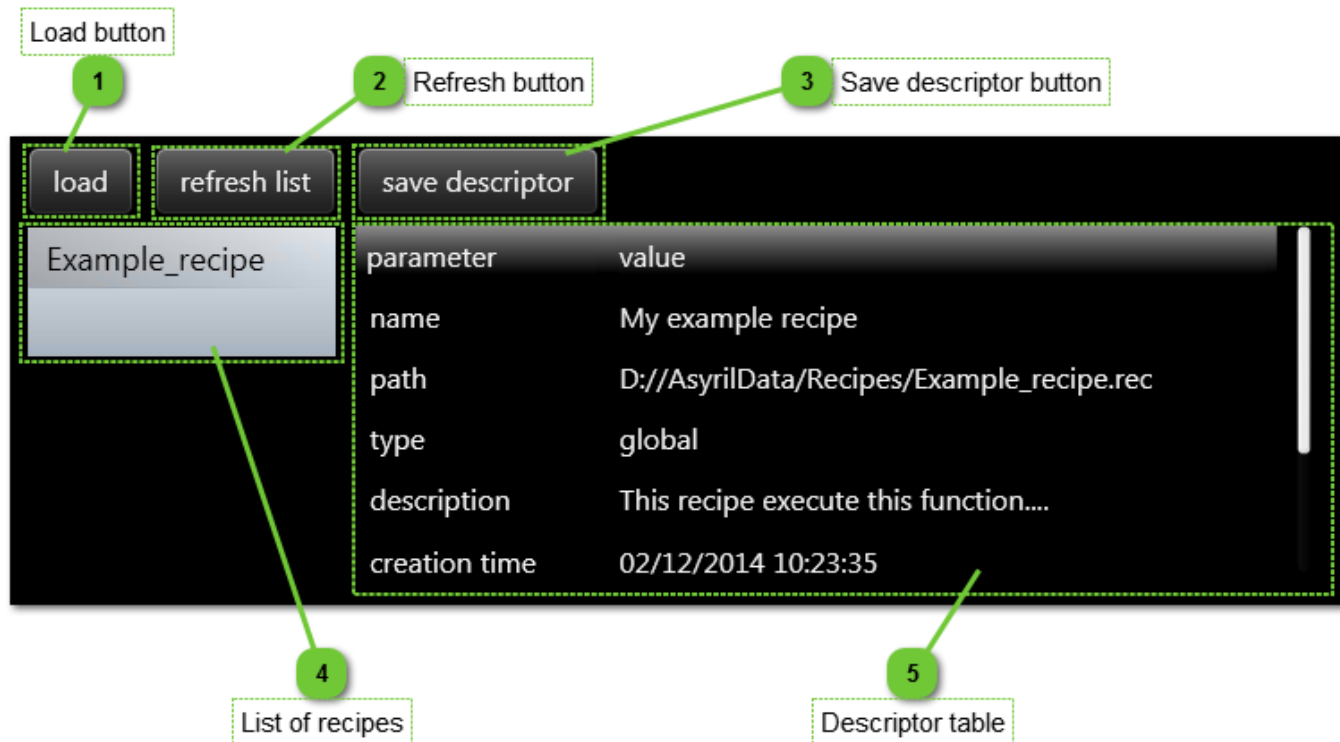
The statistics displayed in this table are defined by Asyri! SA.



**NOTE:**  
For more information about this functionality, please contact Asyri! customer services.

## Operator action panel : Recipes

This panel allows to choose the recipe needed for the production.

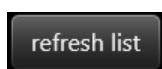


### 1 Load button



When a recipe is selected in the list of recipes, this button allows to load the recipe.

### 2 Refresh button



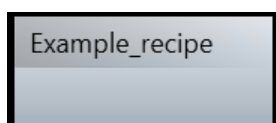
This button is used to refresh the content of the list of recipes.

### 3 Save descriptor button



This button allows to save the descriptor.

### 4 List of recipes



This dropdown list makes it possible to scroll through all of the recipes configured and to load one.

#### NOTE:



A recipe must be loaded in the recipes folder in order to be displayed in the dropdown list.

The recipes folder can be choose in [HMI configuration](#). Default value is ...\\Asyri!Data\\Recipes\\

## 5

## Descriptor table

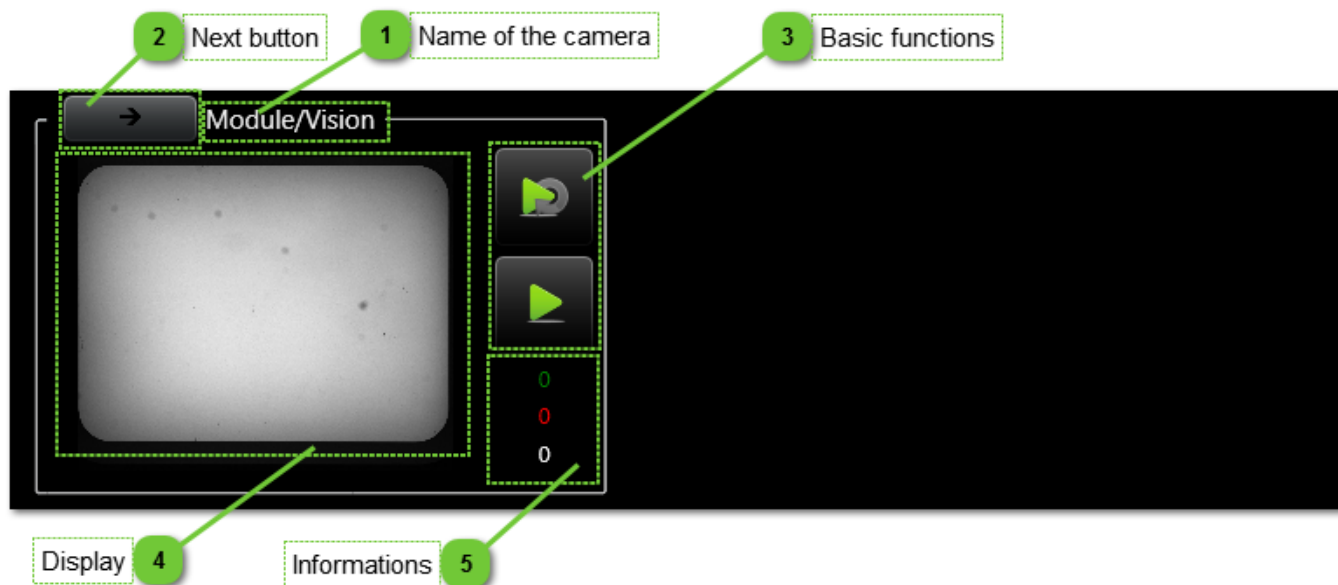
parameter	value
name	My example recipe
path	D://Asyri!Data/Recipes/Example_recipe.rec
type	global
description	This recipe execute this function....
creation time	02/12/2014 10:23:35

This descriptor is loaded when a recipe is selected. It may be modified then saved by clicking on the "*save descriptor*" button.



## Operator action panel : Vision

This panel gives access to the displays of cameras and to basic functions and informations.



### 1 Name of the camera

Module/Vision

This zone indicates the name of the module and the name of the camera.

### 2 Next button



This button allows to switch between the cameras. It appears only if there is more than two cameras on the system.

### 3 Basic functions




The basic functions are the following :

- Activate or deactivate live mode.
- Execute a simple acquisition and analyse (run once).

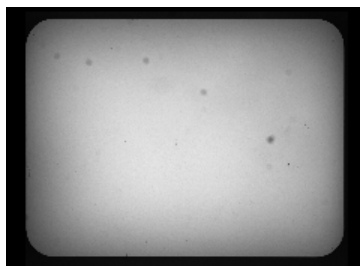


#### NOTE:

*Thoses buttons are disabled during process running.*

 <b>Experts in Flexible Feeding Systems</b>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Operator action panel : Vision	Document version : D	31.03.2017

## 4 Display



This zone displays the last image received and the overlay icons of the good and rejected parts.

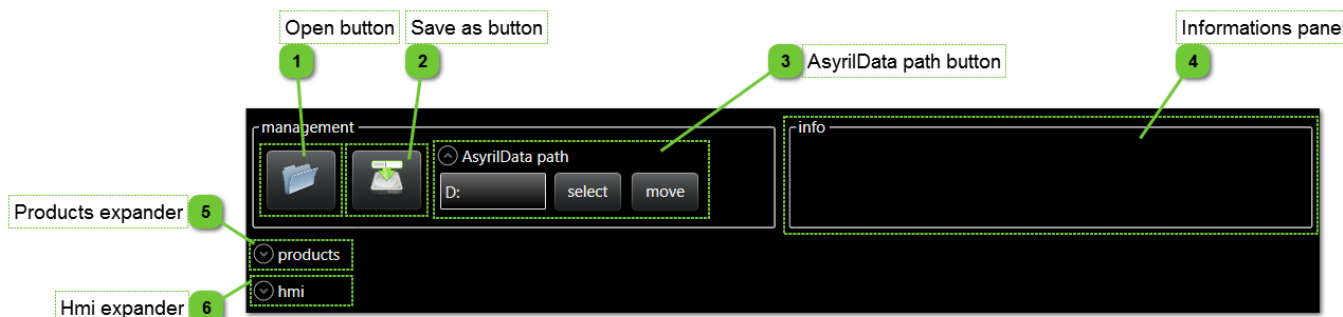
## 5 Informations



This numbers indicates the good parts (green), the rejected parts (red) and the number of parts detected by the feeding information (white).

## Configuration

This page allows to access to the HMI configuration editor.



### 1 Open button



Click on this button to load a HMI configuration file (\*.arc). You need to restart the HMI to activate the loaded configuration.



### 2 Save as button



Click on this button to save the HMI configuration file (\*.arc).



### 3 AsyriData path button



This panel gives access to the HMI data folder.

- The field displays the actual data folder.
- The select button allows to choose the target folder.
- The move button allows to choose the target folder and move data from actual folder to this folder.



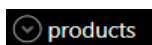
### 4 Informations panel



This panel displays some informations when editing HMI configuration.




### 5 Products expander



This expander allows to show/hide the products configuration part of HMI configuration.

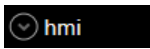
This section is used to configure the products ([more details](#)).



 <div> <div>Experts in</div> <div>Flexible Feeding Systems</div> </div>	<div>Human-Machine Interface - Asyri! SA</div> <div>User Guide</div>	<div>© Copyright Asyri! S.A.</div>
<div>Configuration</div>	<div>Document version : D</div>	<div>31.03.2017</div>

6

Hmi expander



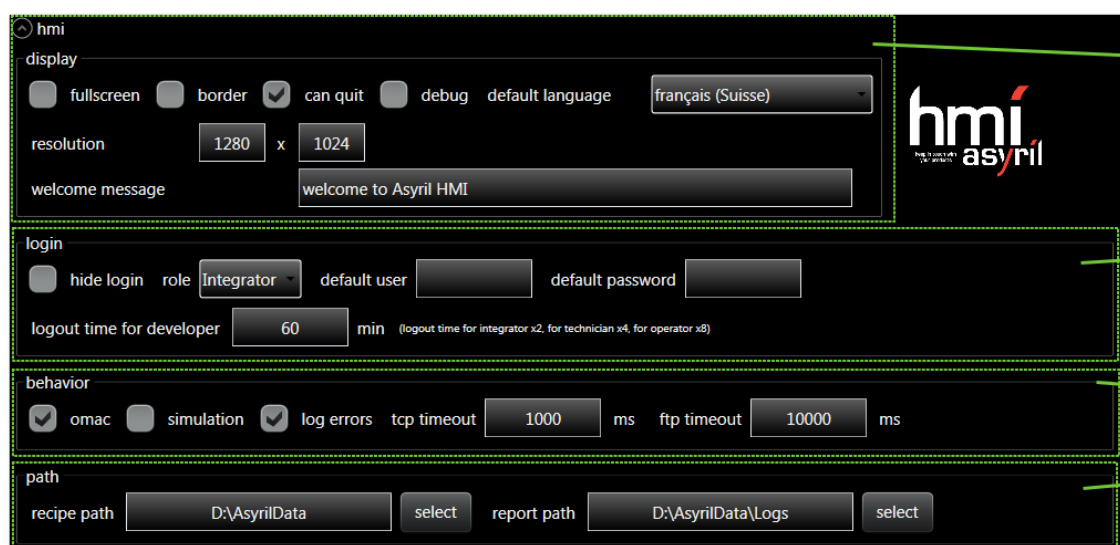
This expander allows to show/hide the HMI configuration part of HMI configuration.  
 This section is used to modify some configuration of HMI ([more details](#)).



## HMI configuration

This part of configuration page contains all specific parameters of HMI. These HMI parameters are divided in four different kind of parameters:

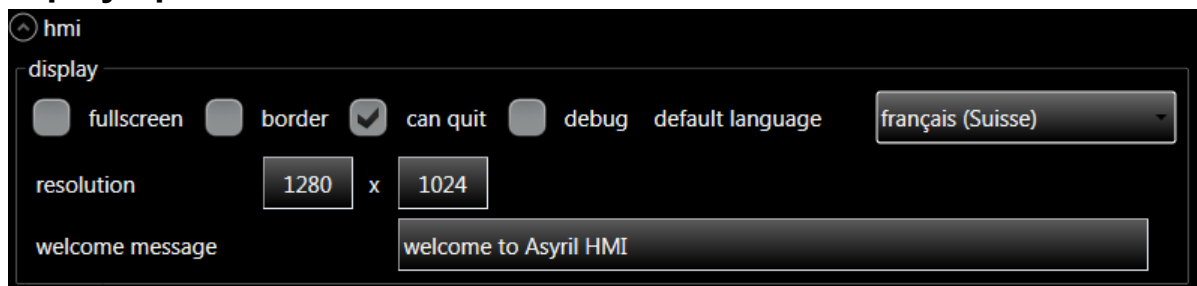
- Display parameters allow to change aspect of HMI.
- Login parameters allow to manage access to HMI on startup.
- Behavior parameters allow to control the way of work of HMI (certain of these parameters are useful only with a specific product, not for all).
- Path parameters allow to modify standard path used by HMI.



The screenshot shows the HMI configuration window with the following sections:

- 1 Display options:** Includes checkboxes for fullscreen, border, can quit (checked), and debug. A dropdown for default language is set to 'français (Suisse)'. Resolution is set to 1280 x 1024. A text field for welcome message contains 'welcome to Asyrl HMI'.
- 2 Login options:** Includes a checkbox for hide login, a role dropdown set to 'Integrator', fields for default user and default password, and a logout time for developer set to 60 min.
- 3 Behavior options:** Includes checkboxes for omac (checked), simulation, and log errors (checked). TCP timeout is set to 1000 ms and ftp timeout is set to 10000 ms.
- 4 Paths options:** Includes fields for recipe path (D:\AsyrlData) and report path (D:\AsyrlData\Logs), each with a select button.

### 1 Display options



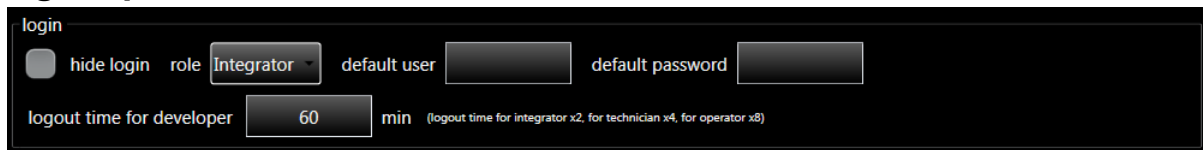
This close-up shows the 'display' section of the configuration window. It includes the same controls as described in the previous section: fullscreen, border, can quit (checked), debug, default language (français (Suisse)), resolution (1280 x 1024), and welcome message (welcome to Asyrl HMI).

This group gives access to following display parameters :

Option	Description
<b>fullscreen</b>	Activate this option to start HMI in fullscreen mode.
<b>border</b>	Activate this option to have border around HMI window.
<b>can quit</b>	Activate this option to have quit button on the top right angle of HMI window.
<b>debug</b>	Activate this option to display debug page.
<b>default language</b>	Select the default language to use when no user is logged.
<b>resolution</b>	Enter resolution values to start HMI with specific resolution (default values are 1280x1024).
<b>welcome message</b>	Enter the text to display on HMI home page.



## 2 Login options

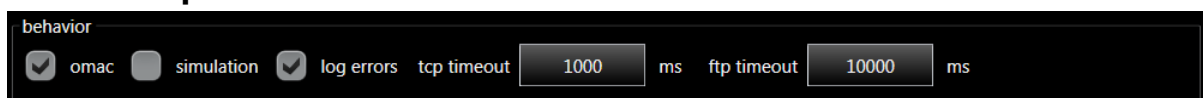


This group gives access to following login parameters :



Option	Description
hide login	Activate this option to hide the login button in <a href="#">headband menu selection</a> and the user button in <a href="#">Product and options selection menu</a> .
role	Select the default role to use when no user is logged (more details about roles <a href="#">here</a> ).
default user and password	Enter the default login name and password (to be automatically logged on startup).
logout time for developer	Enter the logout time for developer (system logout automatically the developer if no activity is detected during logout time value). The logout time for integrator is 2x logout time for developer. The logout time for technician is 4x logout time for developer. The logout time for operator is 8x logout time for developer.

## 3 Behavior options

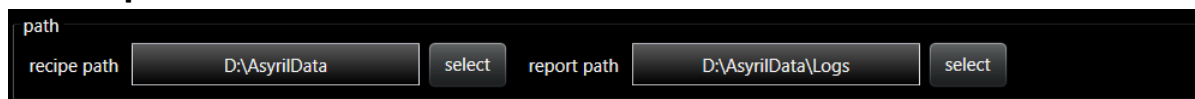


This group gives access to following behaviour parameters :



Option	Description
omac	Activate this option to enable using OMAC states (only useful with process).
simulation	Activate the simulation mode (work only with robot and process).
log exception	Activate this option to log HMI exceptions.
synchro date	Activate this option to synchronize date with robot.
tcp timeout	Enter the tcp timeout for all tcp communications (if product doesn't answer after this time, the product is considered disconnected).
ftp timeout	Enter the ftp timeout of all ftp communications.

## 4 Paths options



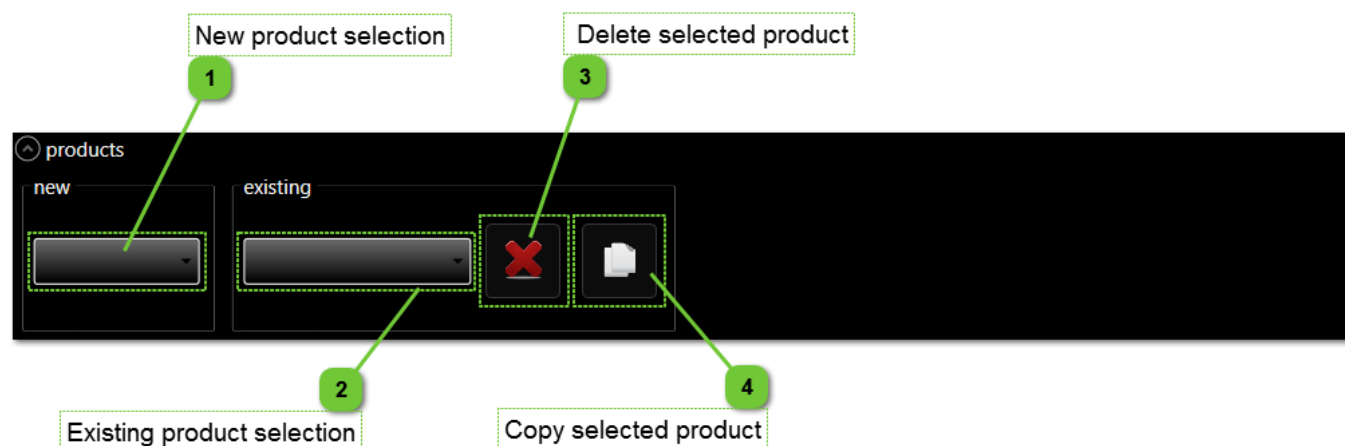
This group gives access to following paths parameters :



Option	Description
<b>recipe path</b>	Enter the target recipe path (if path is changed, recipe in actual folder will not be copied in the new folder).
<b>report path</b>	Enter the target report path (if path is changed, reports in actual folder will not be copied in the new folder).

## Product configuration

This part of configuration page allows to declare new product in HMI or to modify parameters of an already defined product.



### 1 New product selection



Select a product type in this list to define a new product (of this type) in HMI configuration.



### 2 Existing product selection



Select an existing product in this list to modify, delete or copy a product definition.



### 3 Delete selected product



Delete the selected existing product from the HMI configuration.



### 4 Copy selected product



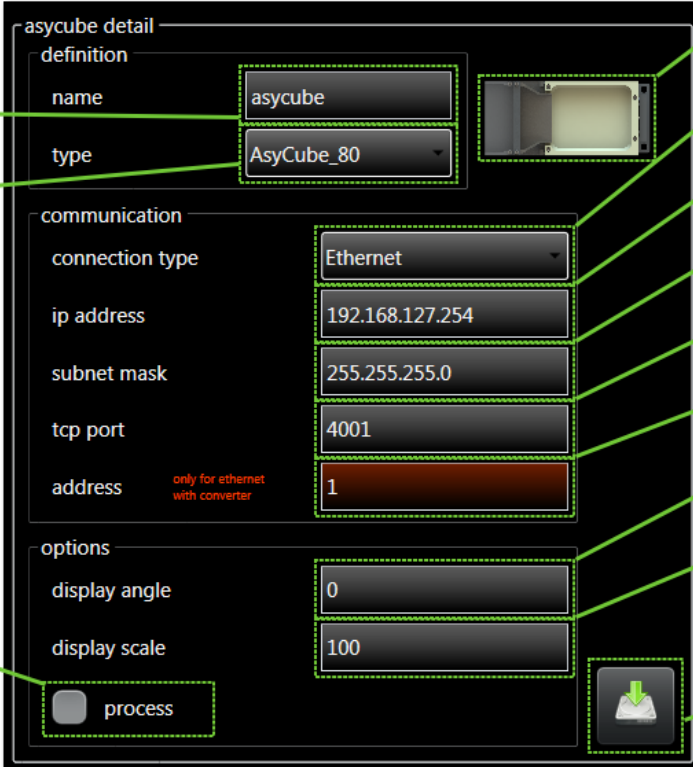
Copy the selected existing product from the HMI configuration and create a new one. A numeric suffix is added to the name of the product for the new product.





## Asycube configuration with Ethernet

This panel appears when an Asycube is selected in one of the two lists and contains all parameters needed to define an Asycube in the HMI. This example is for an Asycube with Ethernet communication.



The screenshot shows the 'asycube detail' configuration window. It is divided into three main sections: 'definition', 'communication', and 'options'. 
 

- 1 Asycube name:** A text field containing 'asycube'.
- 2 Asycube type:** A dropdown menu showing 'AsyCube\_80'.
- 3 Process option:** A checkbox labeled 'process' which is currently unchecked.
- 4 Picture of the Asycube:** A small image showing the physical Asycube device.
- 5 Connection type:** A dropdown menu showing 'Ethernet'.
- 6 IP address:** A text field containing '192.168.127.254'.
- 7 Subnet mask:** A text field containing '255.255.255.0'.
- 8 TCP port:** A text field containing '4001'.
- 9 Address:** A text field containing '1'.
- 10 Display angle:** A text field containing '0'.
- 11 Display scale:** A text field containing '100'.
- 12 Apply button:** A button with a green arrow pointing down.

 A red note next to the 'address' field states: 'only for ethernet with converter'.

### 1 Asycube name

asycube

Enter a name of the Asycube. This name is used in all HMI displays where this product is involve (e.g. in [Products and options selection menu](#)).



### 2 Asycube type

AsyCube\_80

Select the Asycube type of your product (Asycube 50, Asycube 80, Asycube 130 or Asycube 240).



### 3 Process option

☐ process

Select this checkbox to activate the page of the Asycube process.

#### NOTE:



The page displayed by this option is useful to parametrize the process and to save it in a file (\*.fproc file). It is useless if you don't integrate the .NET DLL because the process "intelligence" is contained in the .NET DLL and not in the electronic of the Asycube.



### 4 Picture of the Asycube



This picture gives a preview of the Asycube type selected.



## 5 Connection type

Ethernet

Select the connection type of the Asycube selected. Connection type possibilities depend of Asycube type as follow :

T

Type Asycube	RS485	RS232	Ethernet via converter	Ethernet native
Asycube 50	x*	x*	x*	x
Asycube 80	x*	x*	x*	x
Asycube 130	x*	x*	x*	x
Asycube 240				x

\* connection types only available for old products Mezzo, Forte and Fortissimo

## 6 IP address

192.168.127.254

Enter IP address of your Asycube (default parameter is 192.168.127.254).

T

## 7 Subnet mask

255.255.255.0

Enter subnet mask of your Asycube (default parameter is 255.255.255.0).

T

## 8 TCP port

4001

Enter tcp port of your Asycube (default parameter is 4001).

T

## 9 Address

1

Enter the address of your Asycube (1 for Asycube 240 and 1 to 8 according with rotativ selector for the other Asycubes).

T



### NOTE:

*This parameter is available only for RS485, Ethernet with converter and Ethernet with old firmware. The native Ethernet with the new firmware does not require this address.*

## 10 Display angle

0

Enter an angle value for the display of Asycube pages.

I



### NOTE:

*This parameter is useful to have display of Asycube in HMI in the same position as real Asycube position (e.g. hopper on left or right).*



### IMPORTANT!

*This value is not intended to have skew values (e.g. 30°, 45°, 78°, etc.). The standard values are 0°, 90°, 180° and 270°.*

## 11 Display scale

Enter a scale value for the display of Asycube pages.



### NOTE:

*This parameter is useful to rescale displays in case of special angle used (e.g. decrease ratio with 90° or 270°).*



## 12 Apply button



Click on this button to save the configuration of your Asycube. You need then to restart HMI to apply configuration changes.



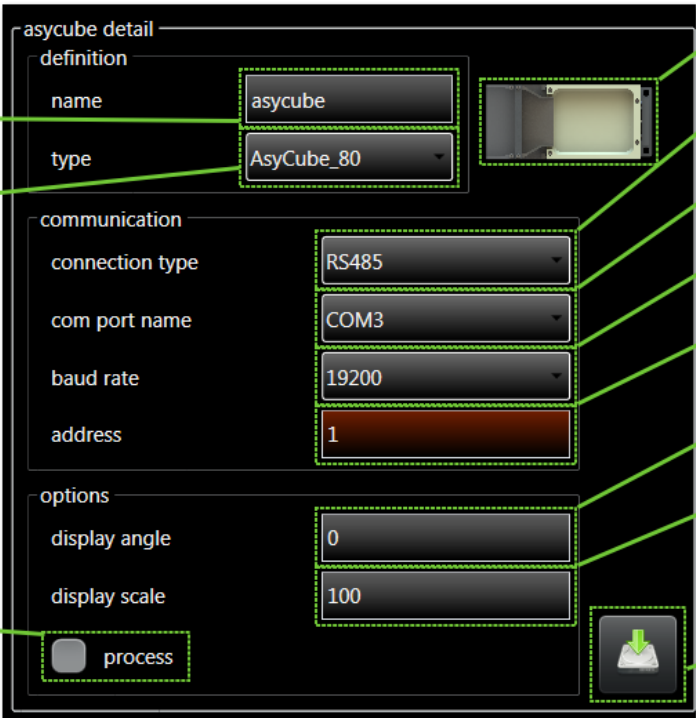
### NOTE:

*A message in [Information panel](#) inform you to restart the HMI to apply configuration changes.*



## Asycube configuration with RS

This panel appears when an Asycube is selected in one of the two lists and contains all parameters needed to define an Asycube in the HMI. This example is for an Asycube with RS communication.



The screenshot shows the 'asycube detail' configuration window. It is divided into three sections: 'definition', 'communication', and 'options'. 
 

- 1 Asycube name:** A text field containing 'asycube'.
- 2 Asycube type:** A dropdown menu showing 'AsyCube\_80'.
- 3 Process option:** A checkbox labeled 'process' which is currently unchecked.
- 4 Picture of the Asycube:** A small image showing the physical Asycube device.
- 5 Connection type:** A dropdown menu showing 'RS485'.
- 6 COM port number:** A dropdown menu showing 'COM3'.
- 7 Baud rate:** A dropdown menu showing '19200'.
- 8 Address:** A text field showing '1'.
- 9 Display angle:** A text field showing '0'.
- 10 Display scale:** A text field showing '100'.
- 11 Apply button:** A button with a green arrow icon pointing down.

### 1 Asycube name

Enter a name of the Asycube. This name is used in all HMI displays where this product is involve (e.g. in [Products and options selection menu](#)).



### 2 Asycube type

Select the Asycube type of your product (Asycube 50, Asycube 80, Asycube 130 or Asycube 240).



### 3 Process option

☐ process

Select this checkbox to activate the page of the Asycube process.

#### NOTE:



*The page displayed by this option is useful to parametrize the process and to save it in a file (\*.fproc file). It is useless if you don't integrate the .NET DLL because the process "intelligence" is contained in the .NET DLL and not in the electronic of the Asycube.*



### 4 Picture of the Asycube



This picture gives a preview of the Asycube type selected.



## 5 Connection type

Select the connection type of the Asycube selected. Connection type possibilities depend of Asycube type as follow :



Type Asycube	RS485	RS232	Ethernet via converter	Ethernet native
Asycube 50	x*	x*	x*	x
Asycube 80	x*	x*	x*	x
Asycube 130	x*	x*	x*	x
Asycube 240				x

\* connection types only available for old products Mezzo, Forte and Fortissimo

## 6 COM port number

Select COM port to use.



## 7 Baud rate

Select baud rate to use (standard value is 19200).



## 8 Address

Enter the address of your Asycube (1 to 8 according with rotativ selector of the Asycube).



## 9 Display angle

Enter an angle value for the display of Asycube pages.



### NOTE:

*This parameter is useful to have display of Asycube in HMI in the same position as real Asycube position (e.g. hopper on left or right).*



### IMPORTANT!

*This value is not intended to have skew values (e.g. 30°, 45°, 78°, etc.). The standard values are 0°, 90°, 180° and 270°.*



## 10 Display scale


Enter a scale value for the display of Asycube pages.



### NOTE:

*This parameter is useful to rescale displays in case of special angle used (e.g. decrease ratio with 90° or 270°).*



 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Asycube configuration with RS	Document version : D	31.03.2017

## 11 Apply button



Click on this button to save the configuration of your Asycube. You need then to restart HMI to apply configuration changes.

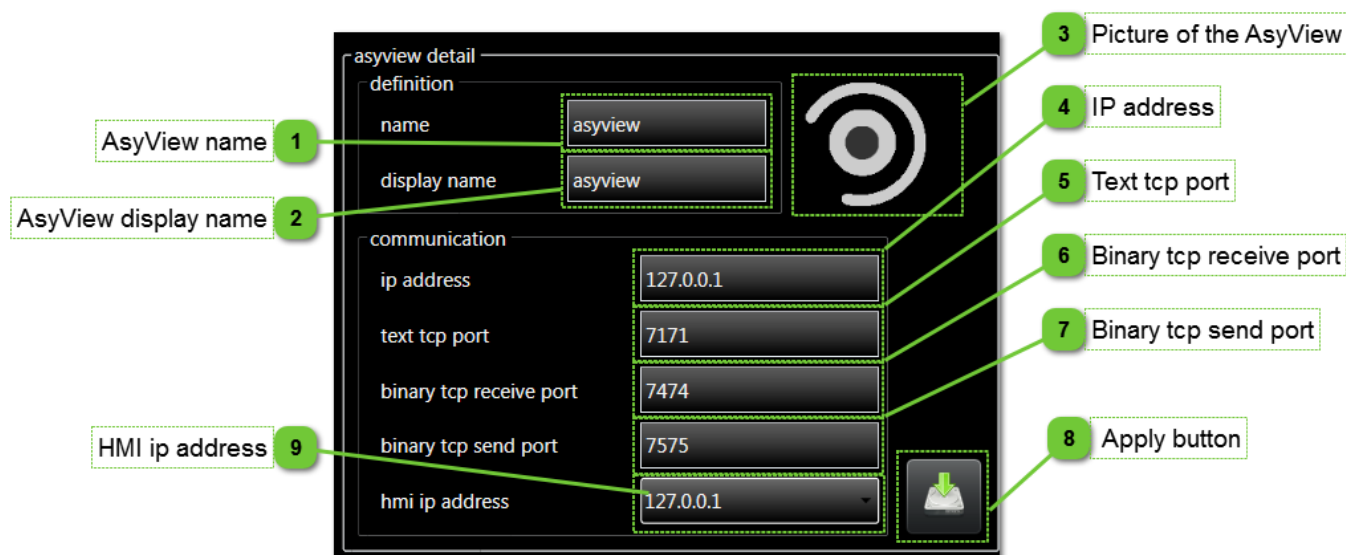


### NOTE:

A message in [Information panel](#) inform you to restart the HMI to apply configuration changes.

## AsyView configuration

This panel appears when an AsyView is selected in one of the two lists and contains all parameters needed to define an AsyView in the HMI.



- 1 AsyView name**

Enter a name of the AsyView. This name is used for communication.

T
- 2 AsyView display name**

Enter a display name of the AsyView. This name is used in all HMI displays where this product is involve (e.g. in [Products and options selection menu](#)).

T
- 3 Picture of the AsyView**

This picture indicates that there are parameters for AsyView.

T
- 4 IP address**

Enter IP address of your AsyView (default value is 127.0.0.1 when HMI is on the same computer as AsyView).

T
- 5 Text tcp port**

Enter tcp port of the text communication protocol (default value is 7171).

T

## 6 Binary tcp receive port

Enter tcp port of the binary protocol receive port (default value is 7575).



## 7 Binary tcp send port

Enter tcp port of the binary protocol send port (default value is 7474).



## 8 Apply button



Click on this button to save the configuration of your AsyView. You need then to restart HMI to apply configuration changes.



### NOTE:

A message in [Information panel](#) inform you to restart the HMI to apply configuration changes.

## 9 HMI ip address

Select the IP address of the ethernet interface used to communicate with the AsyView (default value is 127.0.0.1 when HMI is on the same computer as AsyView).



### NOTE:



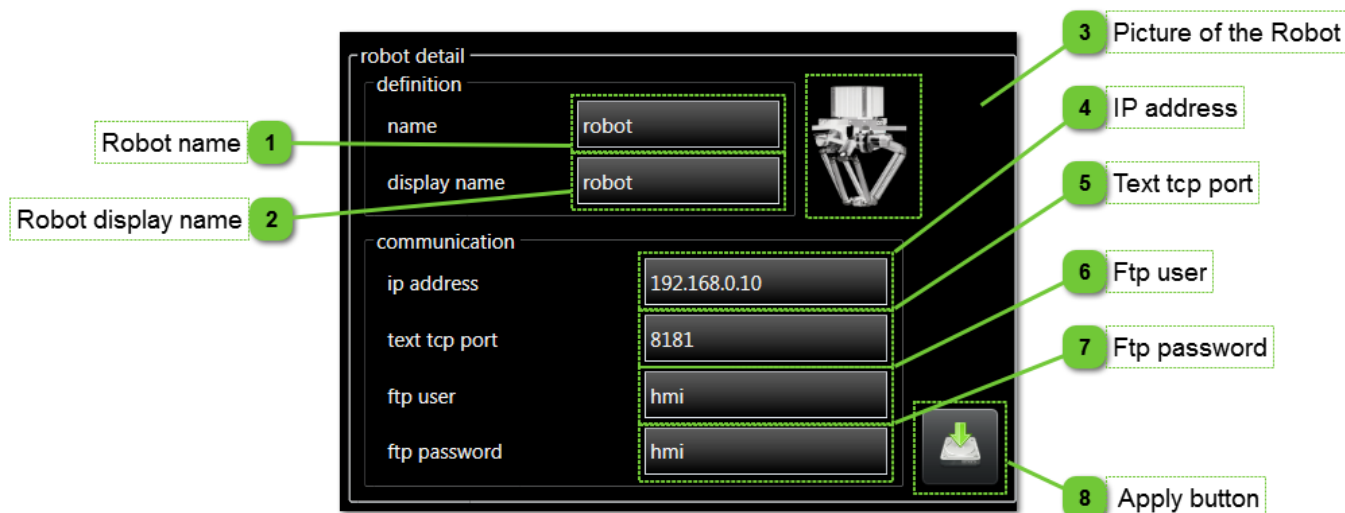
*This address is transfered to AsyView after connection to established a connection from AsyView to HMI to send results informations.*

*This address may vary in case of the PC has various subnets.*



## Robot configuration

This panel appears when a Robot is selected in one of the two lists and contains all parameters needed to define a Robot in the HMI.



### 1 Robot name

Enter a name of the Robot. This name is used for communication.



### 2 Robot display name

Enter a display name of the Robot. This name is used in all HMI displays where this product is involve (e.g. in [Products and options selection menu](#)).



### 3 Picture of the Robot



This picture indicates that there are parameters for Robot.



### 4 IP address

Enter IP address of your Robot (default value is 192.168.0.10 for Pocket, 192.168.0.20 for Power, 192.168.0.30 for Desktop).



### 5 Text tcp port

Enter tcp port of the text communication protocol (default value is 8181).



## 6 Ftp user

Enter the ftp user to use to connect to the Robot ftp access (default value is "hmi").



### NOTE:

*Ftp connection is used to transmit alarms, frames, points and tools.*

## 7 Ftp password

Enter the ftp password to use to connect to the Robot ftp access (default value is "hmi").



### NOTE:

*Ftp connection is used to transmit alarms, frames, points and tools.*

## 8 Apply button



Click on this button to save the configuration of your Robot. You need then to restart HMI to apply configuration changes.

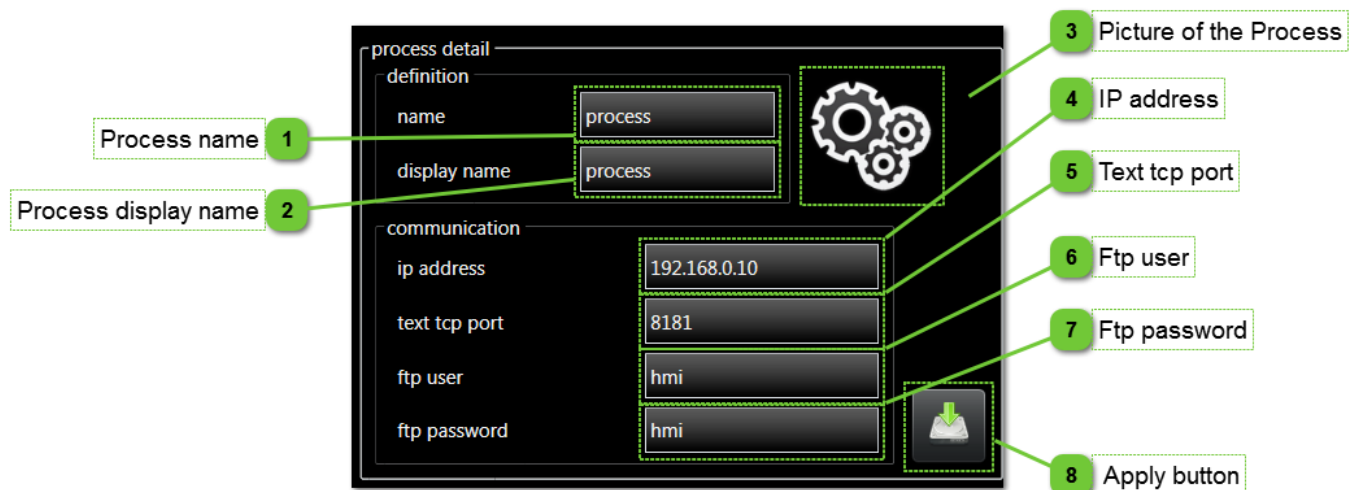


### NOTE:

*A message in [Information panel](#) inform you to restart the HMI to apply configuration changes.*

## Process configuration

This panel appears when a Process is selected in one of the two lists and contains all parameters needed to define a Process in the HMI.



### 1 Process name

Enter a name of the Process. This name is used for communication.



### 2 Process display name

Enter a display name of the Process. This name is used in all HMI displays where this product is involve (e.g. in [Products and options selection menu](#)).



### 3 Picture of the Process



This picture indicates that there are parameters for Process.



### 4 IP address

Enter IP address of your Process (default value is 192.168.0.10 for Pocket, 192.168.0.20 for Power, 192.168.0.30 for Desktop).



### 5 Text tcp port

Enter tcp port of the text communication protocol (default value is 8181).



## 6 Ftp user

Enter the ftp user to use to connect to the Process ftp access (default value is "hmi").



### NOTE:

*Ftp connection is used to transmit recipes.*

## 7 Ftp password

Enter the ftp password to use to connect to the Process ftp access (default value is "hmi").



### NOTE:

*Ftp connection is used to transmit recipes.*

## 8 Apply button



Click on this button to save the configuration of your Process. You need then to restart HMI to apply configuration changes.



### NOTE:

*A message in [Information panel](#) inform you to restart the HMI to apply configuration changes.*

## User management

The user management part of HMI allows to create, edit, delete user. Define various type of users with various roles allows to give different access to operators, technician, maintenance technician, programmer, etc.

Default users and passwords are listed below:

User name	Password	Role
operator	operator	Operator
advoperator	advoperator	Advanced operator
technician	technician	Technician
advtechnician	advtechnician	Advanced technician
integrator	integrator	Integrator
only Asyрил S.A.		Developer

### User management : home

The home page of the user management allows to display and edit the logged user data.

The screenshot shows the user management home page interface. It includes fields for username, real name, role, current password, new password, confirm new password, and a save button. There are also checkboxes for 'AdvancedOperator' and 'AdvancedTechnician', and a dropdown for 'language'.

Numbered callouts point to the following elements:

- 1: User name
- 2: Real name
- 3: Role
- 4: Advanced operator option
- 5: Advanced technician option
- 6: Current password
- 7: New password
- 8: Confirm new password
- 9: User language
- 10: Save button

#### 1 User name

integrator

The login information actually in use is displayed here.

#### 2 Real name

Integrator

The name associated with the login informations enables the person logged in to be identified easily.

### 3 Role

Integrator

The role of the person logged in is displayed here.



#### NOTE:

For more information about roles and associated access rights, please read the chapter "[roles](#)".

### 4 Advanced operator option

☐ AdvancedOperator

Checked if the advanced operator role is activated for the logged user.

### 5 Advanced technician option

☐ AdvancedTechnician

Checked if the advanced technician role is activated for the logged user.

### 6 Current password

Enter the actual password of logged user.



#### NOTE:

This field enables password of logged user modification.

### 7 New password

Enter the new password of logged user.

### 8 Confirm new password

Confirm the new password of logged user.

### 9 User language

English (United States) ▼

This dropdown list enables the user language to be chosen.

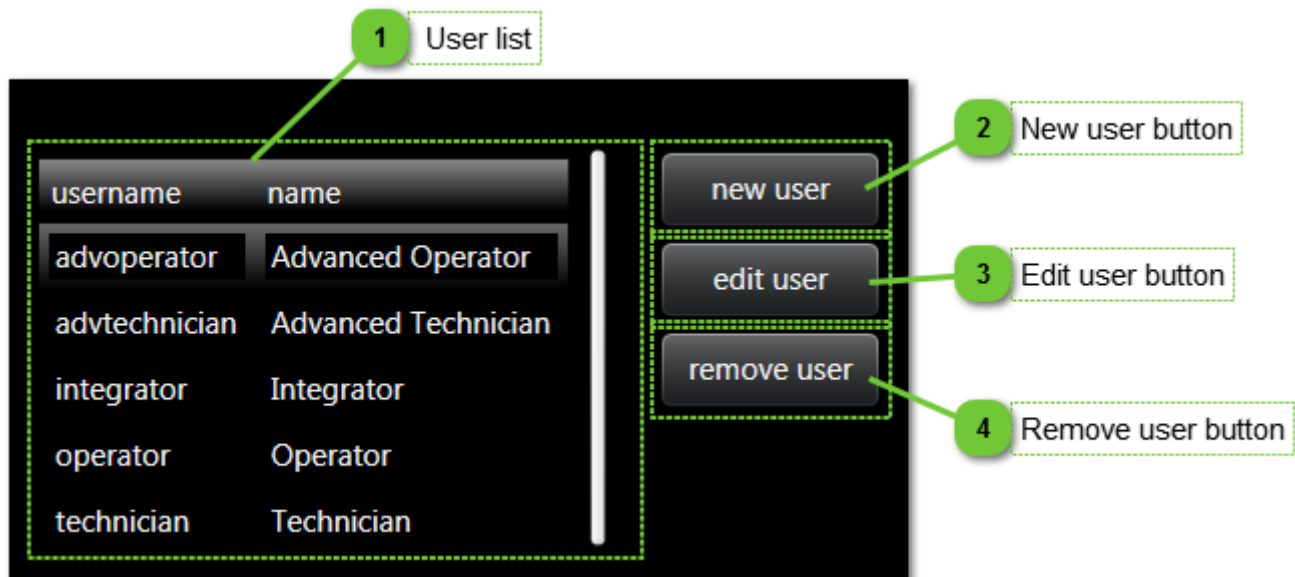
### 10 Save button

save

Click on this button to save your new password and language modification.

## User management : manage users

This page allows to manage users on HMI.

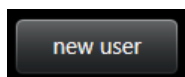


### 1 User list

username	name
advoperator	Advanced Operator
advtechnician	Advanced Technician
integrator	Integrator
operator	Operator
technician	Technician

The list of all users declared and their login informations are displayed here.

### 2 New user button



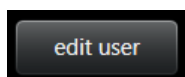
Click on this button to create a new user.



#### NOTE:

*You can only create a user who has a hierarchical role below yours.*

### 3 Edit user button




Click on this button to edit the login information, role or language of a user.

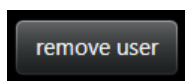


#### NOTE:

*You can only modify the content of users who have a hierarchical role below yours.*

 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
User management : manage users	Document version : D	31.03.2017

## 4 Remove user button



Click on this button to permanently remove a user selected in the list.



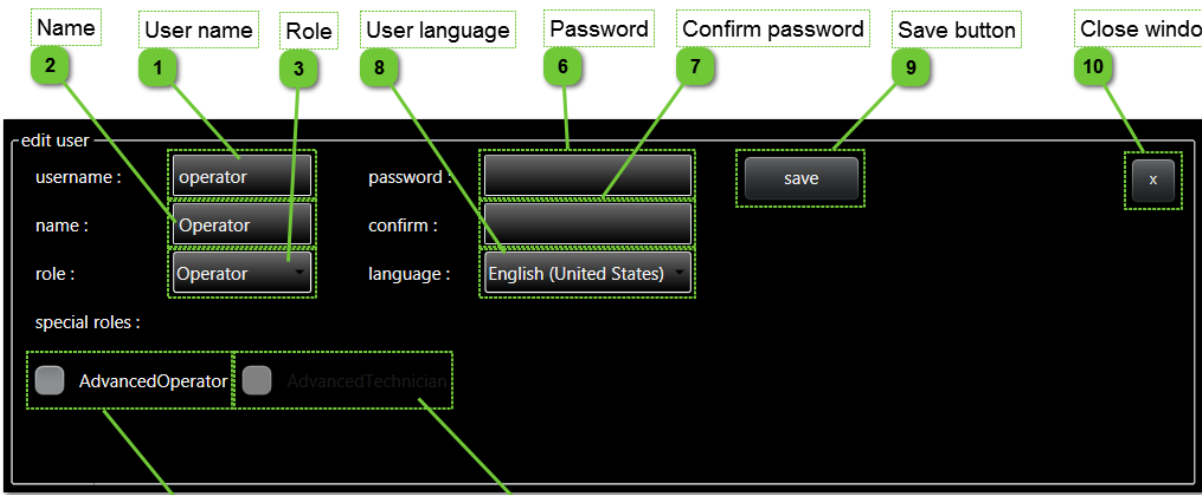
### NOTE:

*You can only remove a user who has a hierarchical role below yours.*



## User management : edit panel

This panel appears on the bottom of the page when new user button or edit user button is clicked.



The screenshot shows the 'edit user' panel with the following fields and buttons:

- 1 User name:** A text input field containing 'operator'.
- 2 Name:** A text input field containing 'Operator'.
- 3 Role:** A dropdown menu showing 'Operator'.
- 4 Advanced operator option:** A checkbox labeled 'AdvancedOperator'.
- 5 Advanced technician option:** A checkbox labeled 'AdvancedTechnician'.
- 6 Password:** A password input field.
- 7 Confirm password:** A password input field.
- 8 User language:** A dropdown menu showing 'English (United States)'.
- 9 Save button:** A button labeled 'save'.
- 10 Close window button:** A button labeled 'x'.

### 1 User name

Choose or edit the login information for the user you wish to create or edit.

### 2 Name

Choose a user name that enables you to easily identify the person logged in.



#### NOTE:

*This "name" is not the login information used by the user, it simply enables the person logged in to be identified.*

### 3 Role

Choose the user's role.



#### NOTE:

*For more information about roles and associated access rights, please read the chapter "[roles](#)".*

### 4 Advanced operator option

☐ AdvancedOperator

Choose advanced operator role.



#### NOTE:

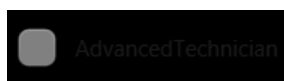
*This special role is enable only if operator role is selected.*



#### NOTE:

*For more information about roles and associated access rights, please read the chapter "[roles](#)".*

## 5 Advanced technician option



Choose advanced technician role.



### NOTE:

*This special role is enable only if technician role is selected.*



### NOTE:

*For more information about roles and associated access rights, please read the chapter "[roles](#)".*

## 6 Password

Enter the desired password.

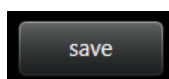
## 7 Confirm password

Confirm the desired password.

## 8 User language

Select the user favorite language.

## 9 Save button



Click on the "Save" button to apply your modifications.

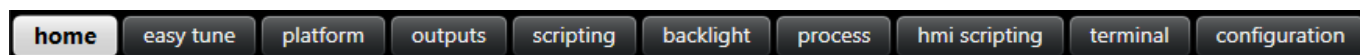
## 10 Close window button



Close the window without saving.

## Asycube

This chapter describes pages related to Asycube.



### Pages list

Home .....	55
Easy tune.....	58
Platform.....	63
Outputs .....	68
Hopper .....	72
Scripting .....	76
Backlight .....	79
Process .....	81
HMI Scripting .....	85
Terminal .....	89
Configuration.....	91

### Controls disabled

Some pages, tabs, buttons, textboxes, etc can be disabled depending of the following parameters :

- Asycube connection state (disabled when not connected).
- The function is not possible for the moment (another function is processing).
- The level access is not correct to access to the parameter.

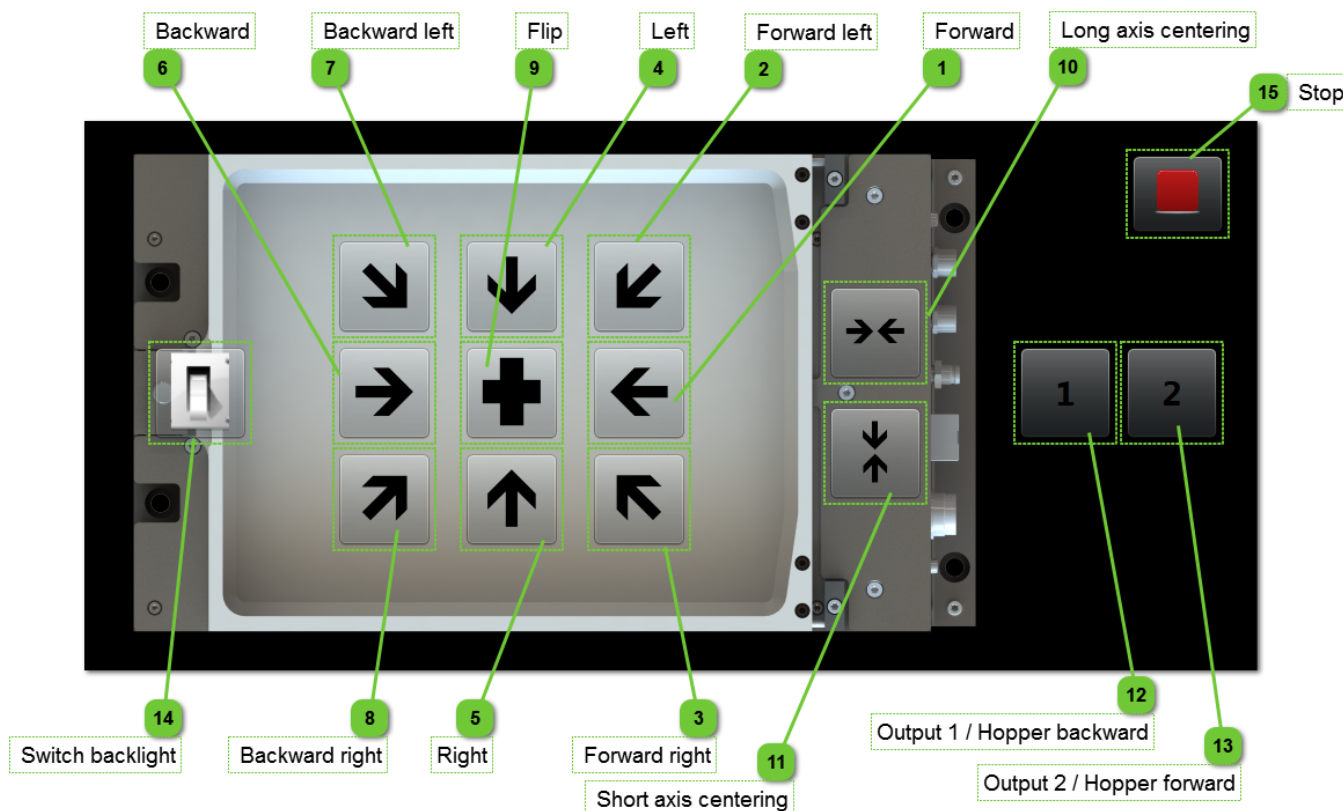
### Controls not visible

Some pages, tabs, buttons, textboxes, etc can be not visible depending of the following parameters :

- The Asycube type does not have this element (i.e. backlight).
- Option is not valid for your product (for example process tab is useful only when using the dll :NET or the AsyView system).
- The level access is not correct to access to the parameter.

## Home

Home page gives access to all standard functions of Asycube (platform vibrations, hopper vibrations or outputs activation and backlight activation).



### 1 Forward



This button activates the platform vibration A which has as standard configuration to move parts forward.

### 2 Forward left



This button activates the platform vibration B which has as standard configuration to move parts forward left.

### 3 Forward right



This button activates the platform vibration C which has as standard configuration to move parts forward right.

#### 4 Left



This button activate the platform vibration D which has as standard configuration to move parts left.

#### 5 Right



This button activate the platform vibration E which has as standard configuration to move parts right.

#### 6 Backward



This button activates the platform vibration F which has as standard configuration to move parts backward.

#### 7 Backward left



This button activates the platform vibration G which has as standard configuration to move parts backward left.

#### 8 Backward right



This button activates the platform vibration H which has as standard configuration to move parts backward right.

#### 9 Flip



This button activates the platform vibration I which has as standard configuration to flip parts.

#### 10 Long axis centering



This button activates the platform vibration J which has as standard configuration to move parts centered in long axis.



#### NOTE:

*This button is only visible for Asycube 240. For other Asycube types, vibration J is a user custom vibration.*

## 11 Short axis centering



This button activates the platform vibration K which has as standard configuration to move parts centered in short axis.



### NOTE:

*This button is only visible for Asycube 240. For other Asycube types, vibration K is a user custom vibration.*

## 12 Output 1 / Hopper backward



For Asycube 240 :

This button activates the outputs activation A which has as standard configuration to switch on digital output 1.



For other Asycube types :

This button activates the hopper vibration A which has as standard configuration to move parts forward.

## 13 Output 2 / Hopper forward



For Asycube 240 :

This button activates the outputs activation B which has as standard configuration to switch on digital output 2.



For other Asycube types :

This button activates the hopper vibration B which has as standard configuration to move parts backward.



### NOTE:

*This button is visible only if the hopper allows the possibility to move the part backward. It is not possible on Asycube 50 and Asycube 80 of new generation.*

## 14 Switch backlight



This button switches the backlight ON and OFF.



### NOTE:

*This button is not visible when Asycube has no backlight (configuration in the firmware of the Asycube which can be modified in Asycube [configuration page](#)).*

## 15 Stop



This button stop all vibrations or output activations.



### NOTE:

*This button doesn't stop the backlight, use the switch backlight button to do that.*

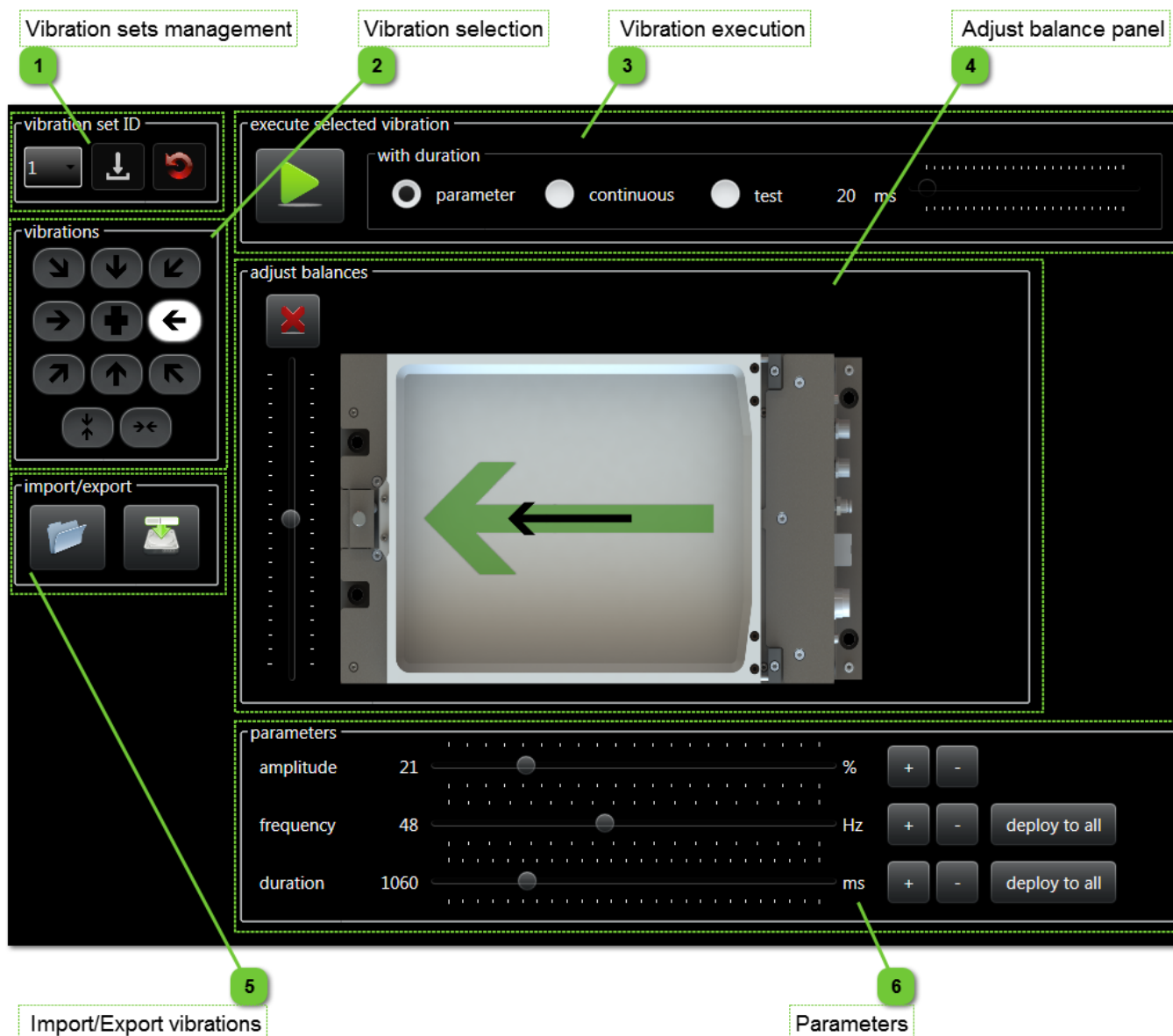
## Easy tune

This page allows to modify standard vibrations by giving access to only needed parameters. Full access to all parameters is possible in [Platform](#) page.



### NOTE:

*This page is only available for Asycube 240.*



### 1 Vibration sets management



This group gives access to the management of the vibration sets.

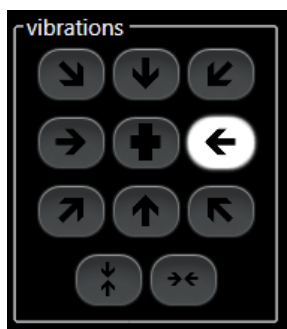
- The combobox allows to select the vibration set to use.
- The flash button allows to save the modifications to the current vibration set.
- The reload button allows to cancel the modifications and take back the old saved parameters.



### NOTE:

When a parameter have been modified, the user has to choose if he want to save or cancel the modifications done before to be able to select another vibration set.

## 2 Vibration selection



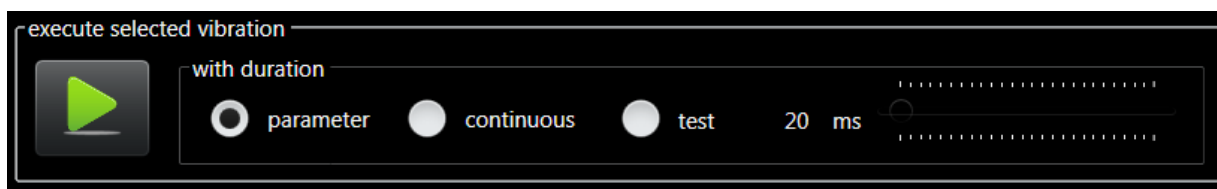
This group gives access to the standard vibrations for "classic" movements. Selecting one of them will display its parameters.



**NOTE:**

Select a vibration in this page select the same vibration in Platform page.

## 3 Vibration execution



This group allows to execute the selected vibration. The user can choose which duration must be used when pressing the start button and to modify these values :

- Parameter select the vibration duration. The vibration executed in the HOME tab correspond to this duration. The value can be changed in [Parameters group](#).
- Test select a custom duration that can be adjusted by the slider next to the selector (it's usefull if you don't want to modify the vibration duration when doing some tests).
- Continuous indicates that the vibration will ends only when you will press the stop button (or when actuators will be too hot and system will stop it for security).

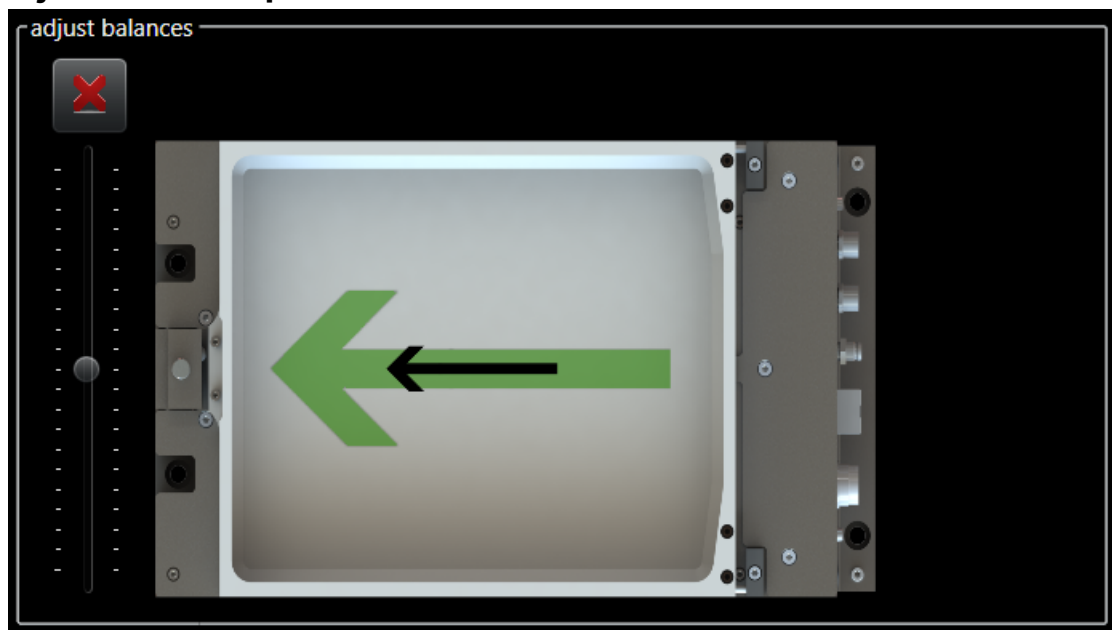


**NOTE:**

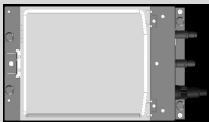



The maximum value is 32767 ms.







## 4 Adjust balance panel

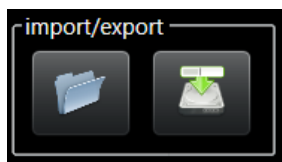


This panel allows to adjust the vibration amplitude balances. In it, there is few controls and graphical elements describe below:

Control	Description
	Background picture indicates the direction of the Asycube.
	Green arrow indicates the theoratical movement of the selected vibration. <b>NOTE:</b> <i>This arrow represent the movement that parts must have when parameters are correctly defined.</i>
	Black arrow indicates the programmed movement of the selected vibration. The size of the arrow will depend of amplitude defined in <a href="#">Parameters group</a> . <b>NOTE:</b> <i>This arrow don't represent the real movement of parts, but only the programmed movement needed to obtain green arrow movement.</i>
	Clear balances button allows to reset both balances.

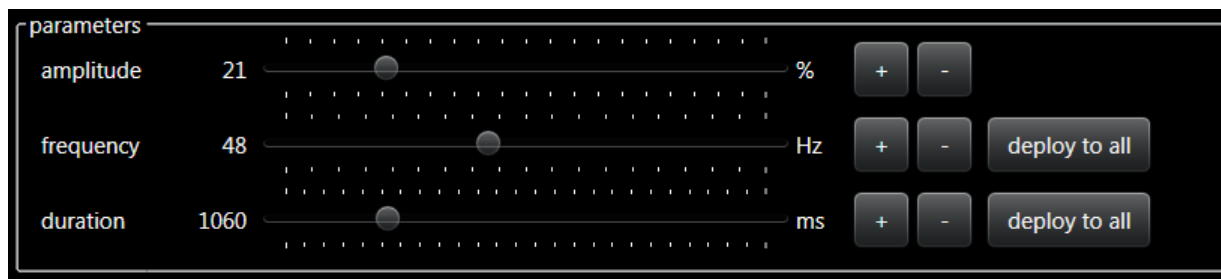
	<p>Short side slider allows to adjust amplitude balance Left-Right.</p> <p><b>NOTE:</b>   <i>The vibration amplitude defined in parameters group will always be set to minimum one actuator. Amplitude of other actuators will be decreased depending of balances.</i> </p>
	<p>Long side slider allows to adjust amplitude balance Forward-Backward.</p> <p><b>NOTE:</b>   <i>The vibration amplitude defined in parameters group will always be set to minimum one actuator. Amplitude of other actuators will be decreased depending of balances.</i> </p>

## 5 Import/Export vibrations






In this group, you can find all buttons to import and export your vibrations configurations (the selected vibration set).

## 6 Parameters

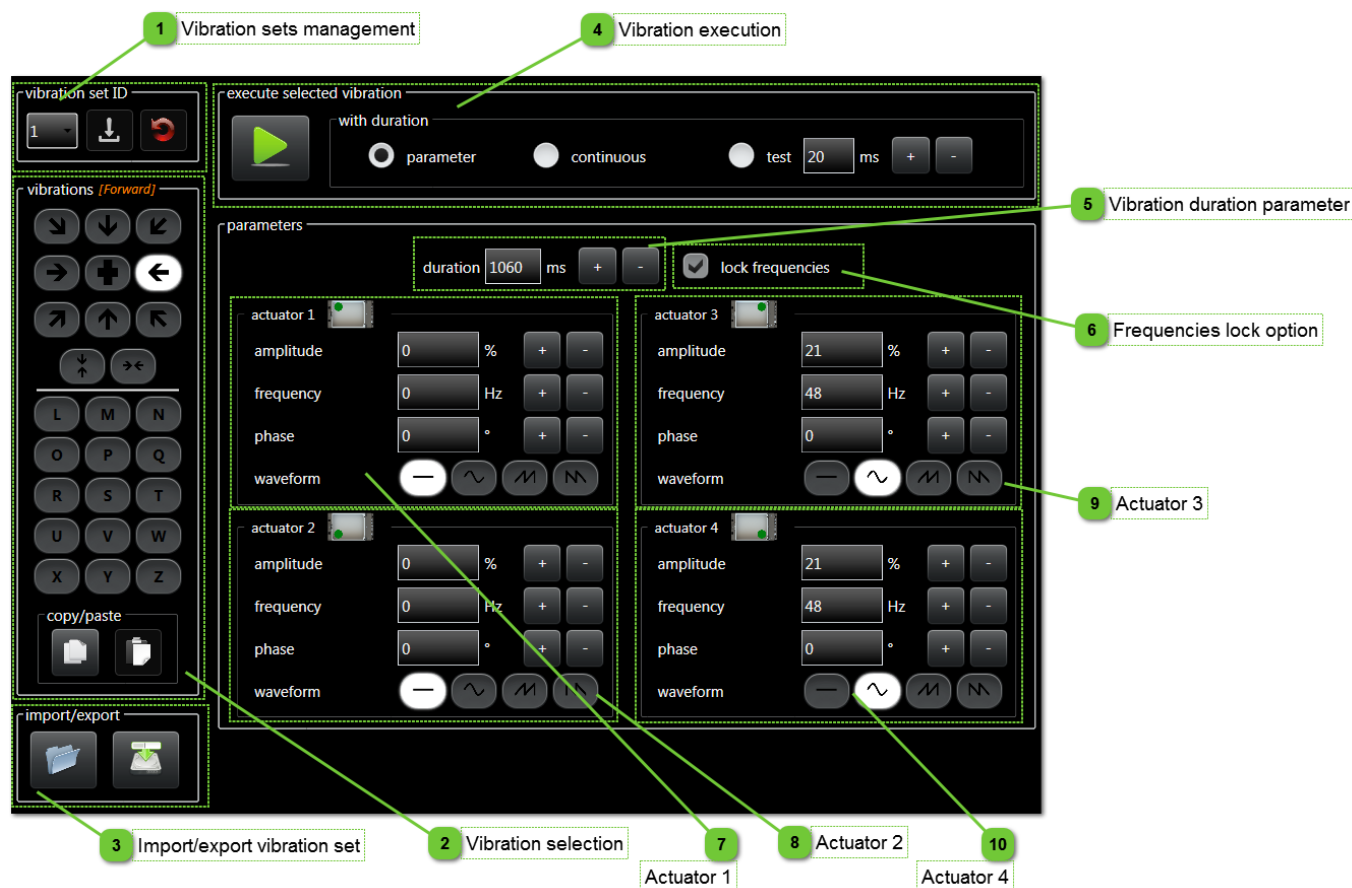


This group allows to modify parameters :

Parameter	Description
amplitude	Amplitude value can be changed by using slider or +/- buttons. The amplitude set will be automatically distributed to actuators depending of movement selected and balances.
frequency	<p>Frequency value can be changed by using slider or +/- buttons. The frequency set will be automatically distributed to actuators depending of movement selected.</p> <p><b>NOTE:</b>   <i>The frequency is always the same for all actuators.            The "deploy to all" button allows to apply the frequency set to all standard vibrations (except flip movement).</i> </p>
duration	<p>Duration value can be changed by using slider or +/- buttons.</p> <p><b>NOTE:</b>   <i>The "deploy to all" button allows to apply the duration set to all standard vibrations (except flip movement).</i> </p> <p><b>NOTE:</b>   <i>If a longer duration is needed, slide the value to maximum and press the + button. Additionnal time is added to the maximum value.            Slide then in a lower value decrease the maximum value.            Note that the maximum value is 32767 ms.</i> </p>

## Platform

This page provides access to the platform vibration parameters. There is 26 vibrations available, but 9 vibrations (for Asycube 50, Asycube 80, Asycube 130) or 11 vibrations (for Asycube 240) have predefined functions. The goal of this page is to adjust vibrations parameters and to try it using "play" button. In this window, you can also import or export the vibrations parameters (the vibration set).



### 1 Vibration sets management



This group gives access to the management of the vibration sets.

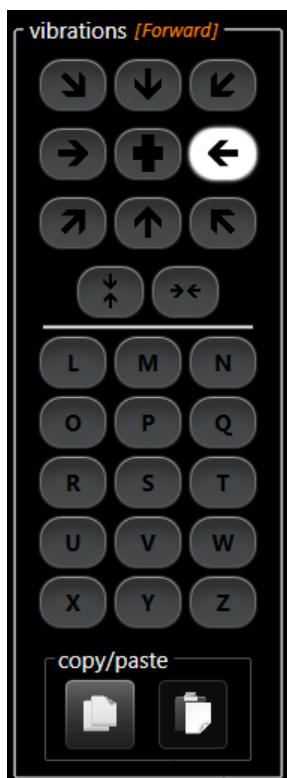
- The combobox allows to select the vibration set to use.
- The flash button allows to save the modifications to the current vibration set.
- The reload button allows to cancel the modifications and take back the old saved parameters.

#### NOTE:



When a parameter have been modified, the user has to choose if he want to save or cancel the modifications done before to be able to select another vibration set.

## 2 Vibration selection



This group gives access to the 26 vibrations. The buttons without letters are standard vibrations and others are vibrations which can be customized for special vibrations. Selecting one of them will display its parameters. For the standard vibrations, the motion is described in the title of the groupbox in orange color (non standard vibrations are called custom).



### NOTE:

The non-standard vibrations are only accessible from technician access level.

The copy/paste group allows to copy a vibration and paste it on another. The procedure is the following :

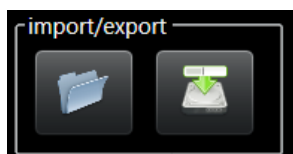
1. Select the vibration to copy on Vibration selection group.
2. Click on copy button.
3. Select the vibration that you want to replace.
4. Click on past button.



### IMPORTANT!

*All values of the vibration will be copied (amplitude, frequency, phase, waveform for all actuators and duration).*

## 3 Import/export vibration set



In this group, you can find all buttons to import and export the vibration set parameters.

Default file import and export allow to import or export a standard vibration set (import to restart with a standard vibration set and export to be able to overwrite the manufacturer standard vibration set).



### NOTE:



The import and export of a standard vibration set are only available in firmware version under 2.4.0 for Asycube 240 and 3.1.0 for Asycubes 50 and 80. In more recent versions, the vibration set 26 is the standard vibration set and can be only modified by Asyri technician.

## 4 Vibration execution



This group allows to execute the selected vibration. The user can choose which duration must be used when pressing the start button and to modify these values :



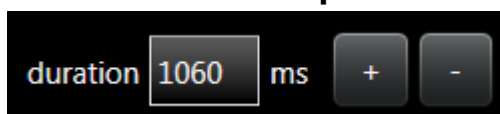
- Parameter select the duration of the vibration specified in the parameter of the vibration. The value can be adjusted in the parameter group using the field or modified by +/- buttons.
- Test select a custom duration that can be adjusted in the field or modified by +/- buttons (it's usefull if you don't want to modify the vibration duration when doing some tests).
- Continuous indicates that the vibration will ends only when you will press the stop button (or when actuator will be to hot and system will stop it for security). The stop button appears when the user starts the vibration.



### NOTE:

The maximum value is 32767 ms.

## 5 Vibration duration parameter



This group allows to parametrize the duration of the vibration.



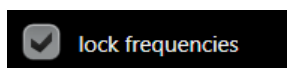
Parameter	Description
duration	Duration of the vibration. This value is used in the Asycube process and in the sequence. The value must be the time needed to put the perfect number of parts on the platform.



### NOTE:

The maximum value is 32767 ms.

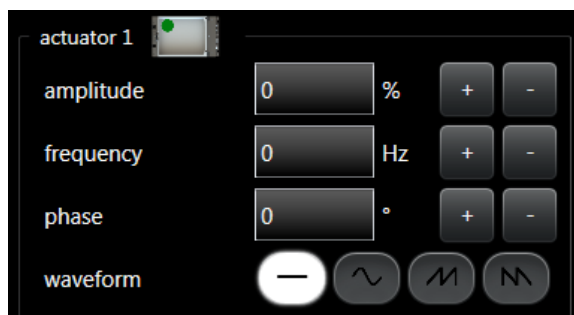
## 6 Frequencies lock option



Select this option will locked frequencies of all actuators. It is usefull to modify all frequencies in the same time for a vibration because usually frequencies are the same for all actuators for a specific component.








## 7 Actuator 1



This group allows to parametrize one actuator (the first one in this case). There is one group for each actuator of the Asycube.


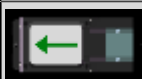




Parameter	Description	Level
amplitude	Vibration amplitude of the actuator signal. The range value is from 0% to 100%. Amplitude value can be changed by using +/- buttons by step of 1%. The amplitude set will be automatically distributed to actuator.	
frequency	Vibration frequency of the actuator signal. The range value is from 0Hz to 250Hz. Frequency value can be changed by using +/- buttons. The frequency set will be automatically distributed to actuator. <b>NOTE:</b>  If <a href="#">Lock Frequencies</a> option is selected, the frequency is applied to all actuators.	
phase	Vibration phase of the actuator signal. The range value is from 0° to 359°. Phase value can be changed by using +/- buttons. <b>NOTE:</b>  For Asycube 50, Asycube 80 and Asycube 130, the third actuator has no phase parameter, because it's the vertical actuator and disphase this signal make no sens.	
waveform	Vibration signal can have four different waveforms which can be selected with these four buttons. The signals can be (by order of appearance) : None signal, sinus signal, saw tooth up signal and saw tooth down signal. <b>NOTE:</b>  Usual waveform is sinus signal. Waveform is setted to none when no vibration is needed on this actuator.	

The icon represents:

- the position of the actuator for Asycube 240.
- the direction of the actuator for Asycube 50, Asycube 80 and Asycube 130.

More details :

Icon	Description
	For Asycube 240, the red point indicates the position of the actuator. The actuator vibrates in vertical direction.
	For Asycube 50, Asycube 80 and Asycube 130, the arrow indicates the direction of horizontal actuators movements with a phase of 0 degrees. With a phase of 180 degrees, the movement is opposite to the arrow direction.
	

 <b>Experts in Flexible Feeding Systems</b>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Platform	Document version : D	31.03.2017



For Asycube 50, Asycube 80 and Asycube 130, the circles indicate that the direction of the actuator is vertical.

8

## Actuator 2

See description of [Actuator 1 group](#)

9

## Actuator 3

See description of [Actuator 1 group](#)



### NOTE:

*This actuator for Asycube 50, Asycube 80 and Asycube 130 is the vertical one and doesn't need any phase parameter.*

10

## Actuator 4

See description of [Actuator 1 group](#)



### NOTE:

*This actuator exists only for Asycube 240.*



## Outputs

This page provides access to the outputs activation parameters. There is 26 activations available, but 2 activations have predefined functions. The goal of this page is to adjust activations parameters and to try it using "play" button. In this window, you can also import or export the activations parameters.



### NOTE:

This page is only available for an Asycube 240.

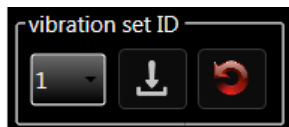


The screenshot shows the 'Outputs' page of the Asyri! HMI. It is divided into several sections:

- 1 Set of activations management:** Located at the top left, it includes a 'vibration set ID' dropdown menu (currently showing '1'), a download icon, and a refresh icon.
- 2 Outputs activation selection:** Located at the top center, it features a large green 'play' button and a section titled 'activate selected outputs' with a 'with duration' label.
- 3 Activation execution:** This section contains three radio buttons: 'parameter' (selected), 'continuous', and 'test'. The 'test' option is accompanied by a numeric input field showing '20' and a unit 'ms', along with '+' and '-' buttons.
- 4 Parameters:** This section is titled 'parameters (to control the vibration of the external hoppers)'. It includes a 'duration' input field set to '1500' ms with '+' and '-' buttons. Below this are four controls: 'digital output 1' with a checked 'toggle' switch, 'digital output 2' with an unchecked 'toggle' switch, 'analog output 1' with an 'amplitude' input field set to '0' %, and 'analog output 2' with an 'amplitude' input field set to '0' %.
- 5 Import/Export activations set:** Located at the bottom left, it includes a 'copy/paste' section with icons for copying and pasting, and an 'import/export' section with icons for importing (folder) and exporting (document with arrow).

On the left side of the interface, there is a vertical panel labeled 'outputs act. [Output01]' containing a numeric keypad (0-9) and a QWERTY keyboard layout.

## 1 Set of activations management



This group gives access to the management of the set of outputs activations.

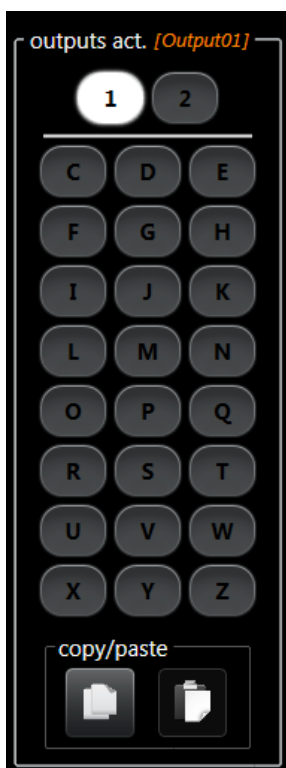
- The combobox allows to select the set of activations to use.
- The flash button allows to save the modifications to the current set of activations.
- The reload button allows to cancel the modifications and take back the old saved parameters.



### NOTE:

When a parameter have been modified, the user has to choose if he want to save or cancel the modifications done before to be able to select another set of activations.

## 2 Outputs activation selection



This group gives access to the 26 outputs activations configurations. The buttons without letters are standard activations and others are activations which can be customized for special activations. Selecting one of them will display its parameters. For the standard activations, a description is given in the title of the groupbox in orange color (non standard activations are called custom).



### NOTE:

The non-standard activations are only accessible from technician access level.

The copy/paste group allows to copy an activation and paste it on another. The procedure is the following :

1. Select the activation to copy on Output act. selection group.
2. Click on copy button.
3. Select the activation that you want to replace.
4. Click on past button.



### IMPORTANT!

*All values of the activation will be copied (digital output 1, analog output 1, digital output 2, analog output 2 and duration).*

### 3 Activation execution



This group allows to start and stop the outputs depending of activation parameters. The user can choose which duration must be used when pressing the start button and to modify these values :

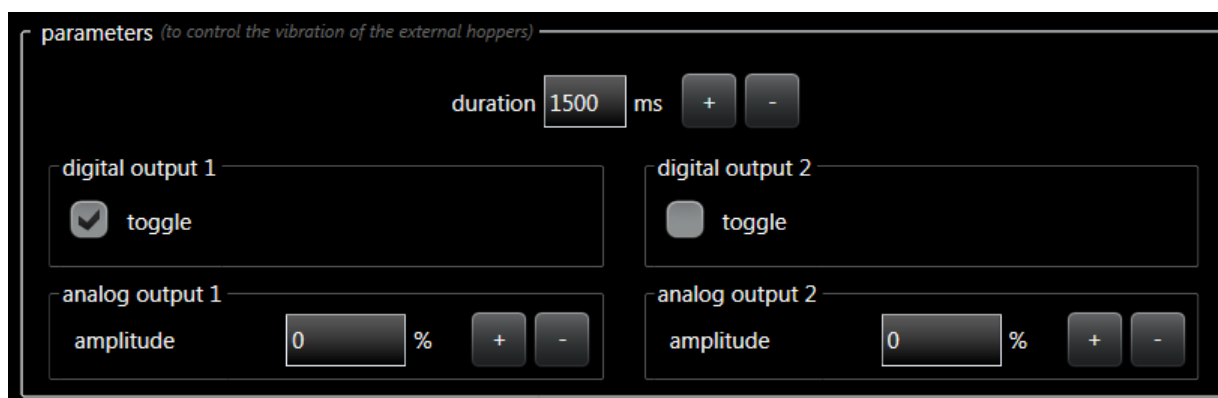
- Parameter select the activation duration and the value can be adjusted in the field or modified by +/- buttons.
- Test select a custom duration that can be adjusted in the field or modified by +/- buttons (it's usefull if you don't want to modify the activation duration when doing some tests).
- Continuous indicates that the outputs activation will ends only when you will press the stop button.



#### NOTE:

The maximum value of the duration is 32767 ms.


### 4 Parameters



This group allows to parametrize the outputs activations and the duration of the activation. It is usually used to control the external hoppers vibration.

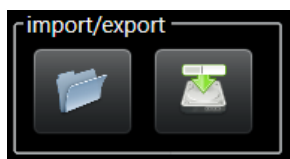


Parameter	Description
<b>duration</b>	Duration of the activation. This value is used in the Asycube process and in the sequence. The value must be the time needed to put the perfect number of parts on the platform.
<b>digital output 1 toggle</b>	This parameter allows to parametrize the digital output 1. If this option is selected, the output 1 will switch on when the activation is activated.
<b>analog output 1 amplitude</b>	Analog output 1 amplitude allows to choose the intensity of the output signal. The range value is from 0% to 100% and correspond to 0 to 10V signal. Amplitude value can be changed by using +/- buttons by step of 1%.
<b>digital output 2 toggle</b>	This parameter allows to parametrize the digital output 2. If this option is selected, the output 2 will switch on when the activation is activated.
<b>analog output 2 amplitude</b>	Analog output 2 amplitude allows to choose the intensity of the output signal. The range value is from 0% to 100% and correspond to 0 to 10V signal. Amplitude value can be changed by using +/- buttons by step of 1%.

 <b>Experts in Flexible Feeding Systems</b>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Outputs	Document version : D	31.03.2017

5

## Import/Export activations set



In this group, you can find all buttons to load and save your activations configurations.

Default file import and export allow to import or export a standard configuration (import to restart with a standard configuration and export to be able to overwrite the manufacturer standard configuration).



### NOTE:



The import and export of a standard set of activations are only available in firmware version under 2.4.0 for Asycube 240. In more recent versions, the set of activations 26 is the standard set of activations and can be only modified by Asyri! technician.

## Hopper

This page provides access to the hopper vibration parameters. There is 26 vibrations available, but 2 vibrations have predefined functions. The goal of this page is to adjust vibrations parameters and to try it using "play" button. In this window, you can also import or export the vibrations parameters (the vibration set).



### NOTE:

This page is only available for an Asycube 50, Asycube 80 or Asycube 130.

The screenshot shows the Hopper vibration control interface with the following components and callouts:

- 1** Vibration sets management: Located at the top left, containing a dropdown menu for 'vibration set ID' (set to 1), a download icon, and a refresh icon.
- 2** Vibration selection: Located in the middle left, containing a list of vibrations (A-Z) and a 'copy/paste' section with copy and paste icons.
- 3** Vibration execution: Located at the top center, containing a large green play button and a section for 'execute selected vibration' with radio buttons for 'parameter', 'continuous', and 'test' (selected), and a duration input field (20 ms).
- 4** Parameters of vibration: Located on the right, containing a section for 'parameters' with a duration input field (50 ms), a section for 'actuator 1' with a slider, and a section for 'amplitude' (40 %), 'frequency' (120 Hz), and 'waveform' (sine wave).
- 5** Import/Export vibration set: Located at the bottom left, containing an 'import/export' section with an import icon (folder) and an export icon (printer).

## 1 Vibration sets management



This group gives access to the management of the vibration set.

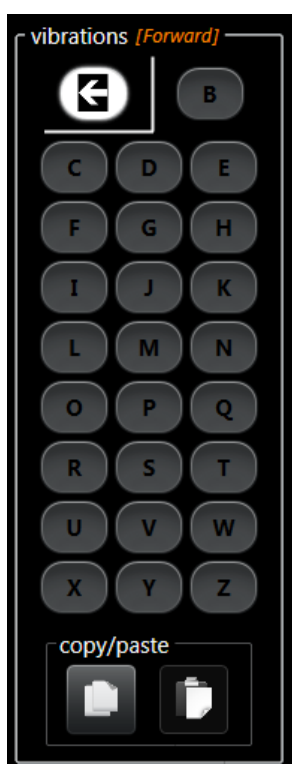
- The combobox allows to select the vibration set to use.
- The flash button allows to save the modifications to the current vibration set.
- The reload button allows to cancel the modifications and take back the old saved parameters.

### NOTE:



When a parameter have been modified, the user has to choose if he want to save or cancel the modifications done before to be able to select another vibration set.

## 2 Vibration selection



This group gives access to the 26 vibrations. The buttons without letters are standard vibrations and others are vibrations which can be customized for special vibrations. Selecting one of them will display its parameters. For the standard vibrations, the motion is described in the title of the groupbox in orange color (non standard vibrations are called custom).



### NOTE:

The non-standard vibrations are only accessible from technician access level.

The copy/paste group allows to copy a vibration and paste it on another. The procedure is the following :

1. Select the vibration to copy on Vibration selection group.
2. Click on copy button.
3. Select the vibration that you want to replace.
4. Click on past button.



### IMPORTANT!

*All values of the vibration will be copied (amplitude, frequency, waveform and duration).*

### 3 Vibration execution



This group allows to execute the selected vibration. The user can choose which duration must be used when pressing the start button and to modify these values :



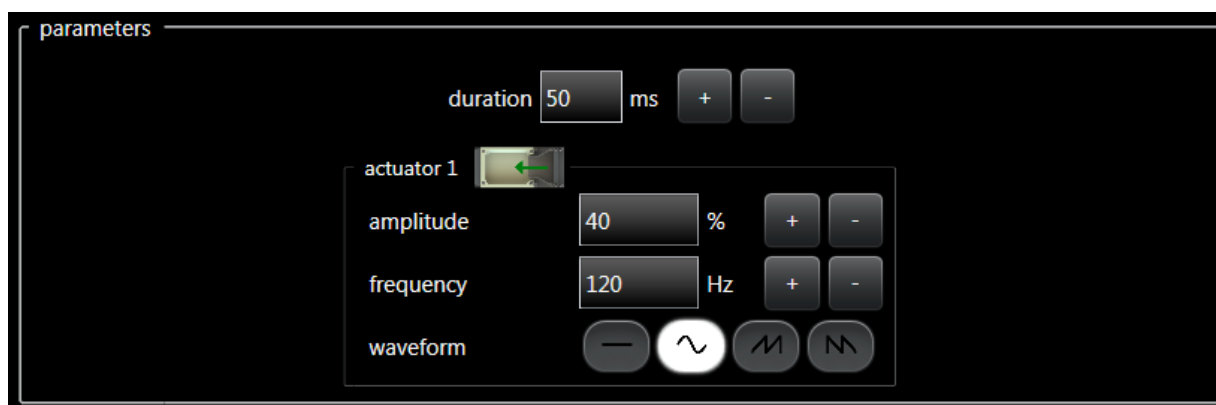
- Parameter select the duration of the vibration specified in the parameter of the vibration. The value can be adjusted in the parameter group using the field or modified by +/- buttons.
- Test select a custom duration that can be adjusted in the field or modified by +/- buttons (it's usefull if you don't want to modify the vibration duration when doing some tests).
- Continuous indicates that the vibration will ends only when you will press the stop button (or when actuator will be to hot and system will stop it for security). The stop button appears when the user starts the vibration.



**NOTE:**



*The maximum value of the duration is 32767 ms.*

## 4 Parameters of vibration

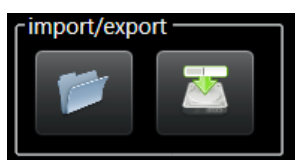


This group allows to parametrize the hopper actuator and the duration of the vibration.



Parameter	Description	Level
<b>duration</b>	Duration of the vibration. This value is used in the Asycube process and in the sequence. The value must be the time needed to put the perfect number of parts on the platform.	
<b>amplitude</b>	Vibration amplitude of the actuator signal. The range value is from 0% to 100%. Amplitude value can be changed by using +/- buttons by step of 1%. The amplitude set will be automatically distributed to actuator.	
<b>frequency</b>	Vibration frequency of the actuator signal. The range value is from 0Hz to 250Hz. Frequency value can be changed by using +/- buttons. The frequency setted will be automatically distributed to actuator.	
<b>waveform</b>	Vibration signal can have four different waveforms which can be selected with these four buttons. The signals can be respecting order : None signal, sinus signal, saw tooth up signal and saw tooth down signal. <div>  <b>NOTE:</b>  <i>Usual waveforms are saw tooth up or down signals. Waveform is set to none when no vibration is needed on this actuator.</i> </div>	

## 5 Import/Export vibration set



In this group, you can find all buttons to import and export the vibration set parameters.

Default file import and export allow to import or export a standard vibration set (import to restart with a standard vibration set and export to be able to overwrite the manufacturer standard vibration set).

### NOTE:



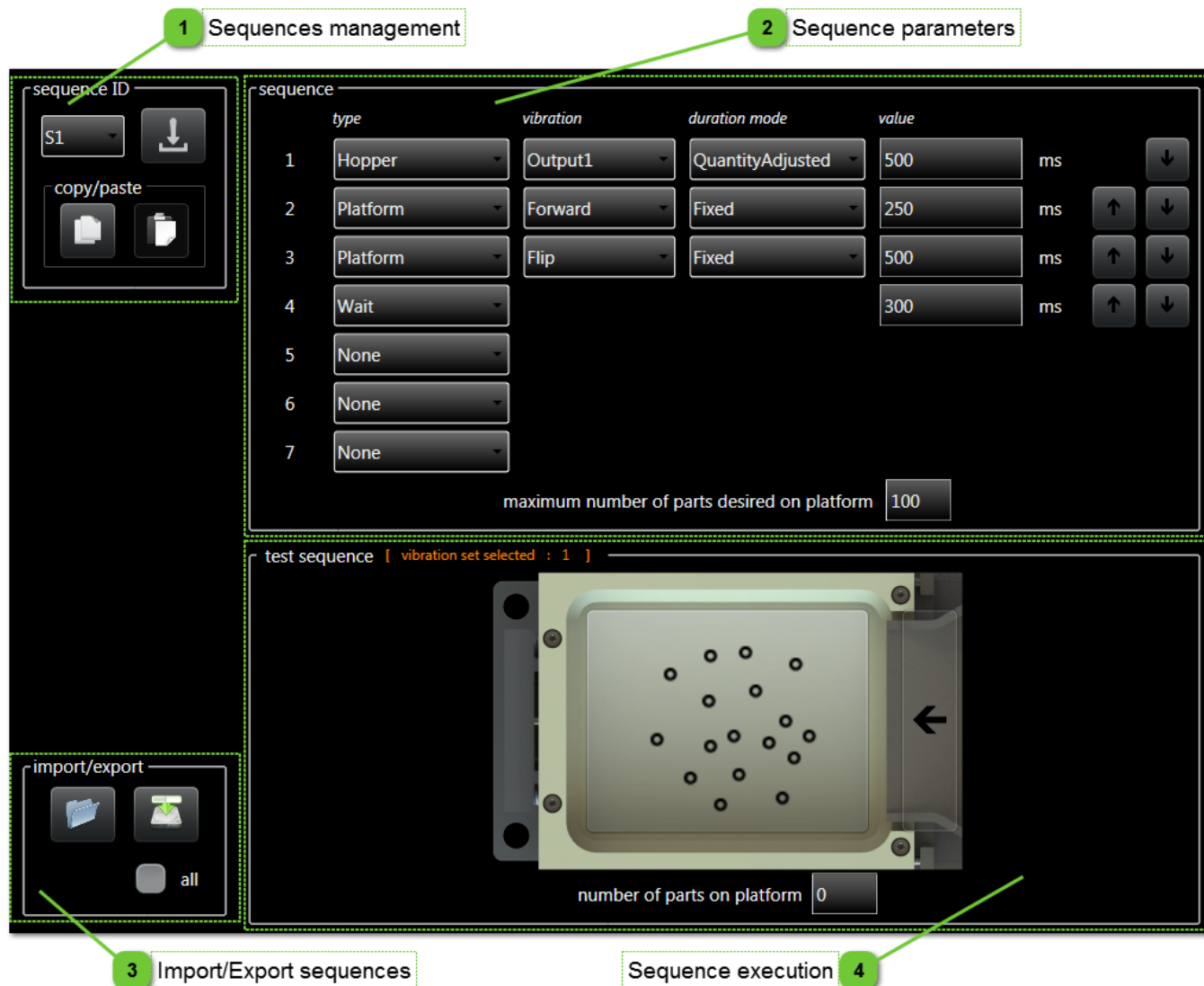
The import and export of a standard vibration set are only available in firmware version under 3.1.0 for Asycubes 50 and 80. In more recent versions, the vibration set 26 is the standard vibration set and can be only modified by Asyri! technician.





## Scripting

This page provides access to the sequences. There is 26 sequences available, but the 26th is a standard sequence locked for Asyрил technicians. The goal of this page is to adjust the sequences parameters and to try it using the simulation part of the page. In this window, you can also import or export the sequences parameters.



The screenshot shows the 'Scripting' interface with four numbered callouts:

- 1 Sequences management:** Points to the 'sequence ID' dropdown (showing 'S1') and the 'copy/paste' buttons.
- 2 Sequence parameters:** Points to the table of sequence parameters.
- 3 Import/Export sequences:** Points to the 'import/export' section with folder and document icons, and an 'all' button.
- 4 Sequence execution:** Points to the 'test sequence' section, which includes a 3D simulation of a platform with parts and a 'number of parts on platform' display.

	type	vibration	duration mode	value		
1	Hopper	Output1	QuantityAdjusted	500	ms	↓
2	Platform	Forward	Fixed	250	ms	↑ ↓
3	Platform	Flip	Fixed	500	ms	↑ ↓
4	Wait			300	ms	↑ ↓
5	None					
6	None					
7	None					

maximum number of parts desired on platform 100

test sequence [ vibration set selected : 1 ]

number of parts on platform 0

## 1 Sequences management



This group gives access to the management of the sequences.

The combobox allows to select the sequence to use.

The flash button allows to save all the sequences in the Asycube (the old values are overwritten).

The copy/paste group allows to copy a sequence and paste it on another. The procedure is the following :

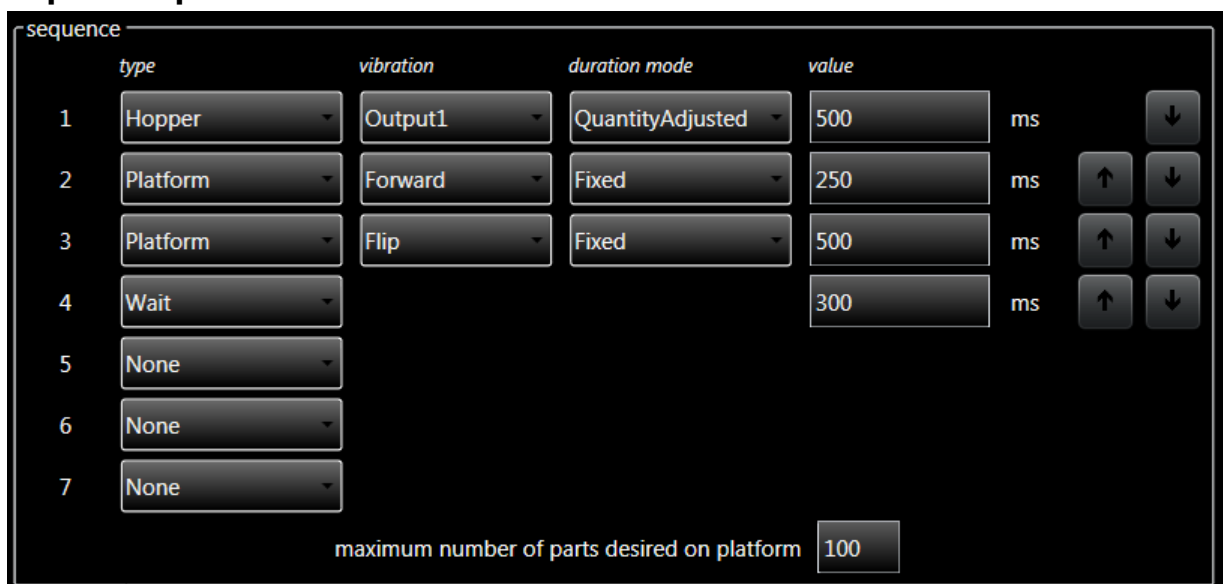
1. Select the sequence to copy
2. Click on copy button
3. Select the sequence that you want to replace
4. Click on past button.



### IMPORTANT!

*All values of the sequence will be copied.*

## 2 Sequence parameters

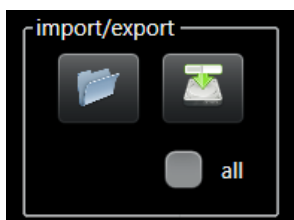


This group allows to parametrize the selected sequence. The sequence is composed of 7 actions. Each action can be a platform vibration, a hopper vibration or a waiting time. Depending of the type of action, some parameters have to be chosen :



Parameter	Description
<b>vibration</b>	Define which vibration has to be done. It is only available for platform and hopper action.
<b>duration mode</b>	<p>The duration mode defines how the duration will be computed. The value can be :</p> <ul style="list-style-type: none"> <li>• Fixed : the duration is given and never changes depending of the parts positions or the number of parts on the platform.</li> <li>• Quantity Adjusted : the duration changes depending of the number of parts on the platform. The given duration is the duration to execute when no parts are on the platform. When the maximum is reached, there is no more vibration for this action.</li> <li>• VibrationSetRatio : the duration is a ratio related to the duration given in the vibration set. This value is in %.</li> </ul> <p>For more explanations, see the operating manual documentation.</p>
<b>value</b>	The value is the duration value. Depending of the duration mode, the value to enter has to be in ms or in %.

### 3 Import/Export sequences



In this group, you can find all buttons to import and export the sequences parameters.



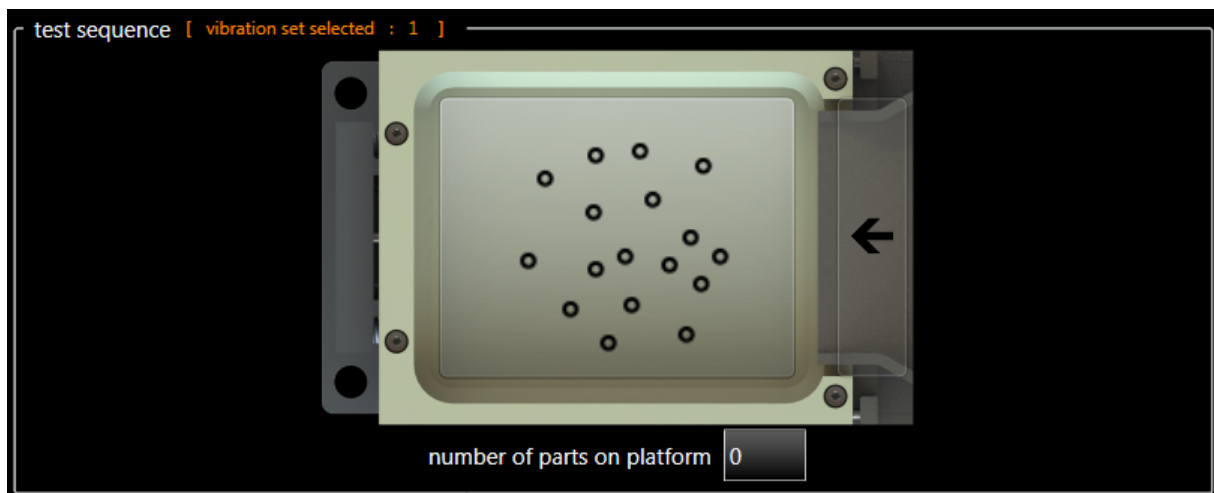
For the loading :

- If the file contains many sequences, the sequences will be loaded depending of the sequence ID given in the file.
- If the file contains only one sequence, the sequence will be loaded on the selected sequence regardless of the sequence ID given in the file.

For the saving :

- If the user want to save only the selected sequence, do not check the checkbox.
- If the user want to save all the sequences, check the checkbox.

### 4 Sequence execution



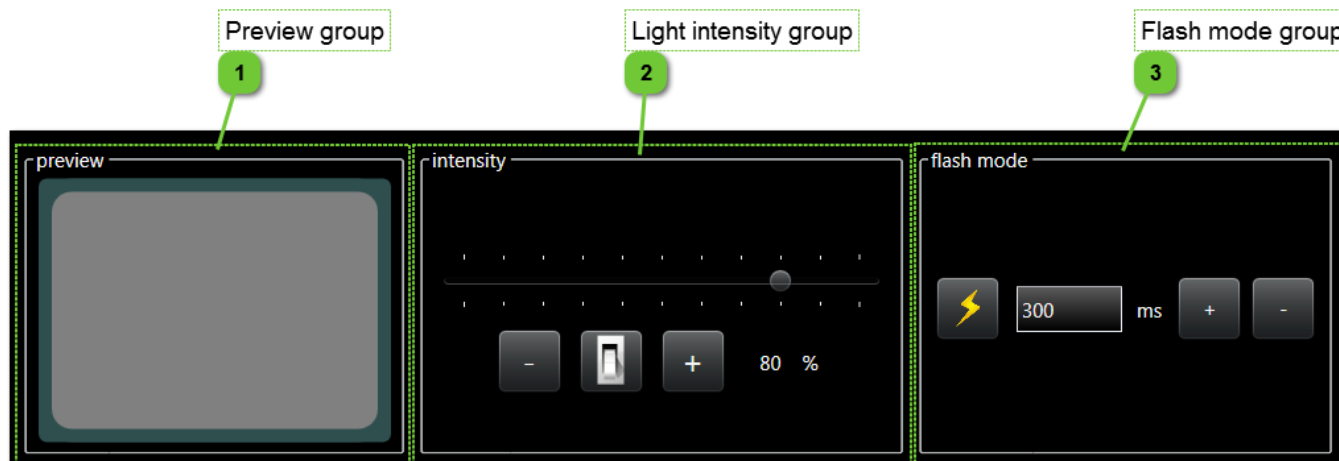
This group allows to execute the selected sequence depending of many parameters :

- If the sequence has no action defined with the vibration "centering", only one button is displayed.
- If the sequence has an action defined with the vibration centering, nine buttons are displayed. They give informations to the sequence about the position of the parts on the plate and allow to test the sequence with many parts arrangement.
- The number of parts on platform is usefull when using a vibration with a duration mode "Quantity Adjusted" because the Asycube will change the duration of the vibration depending of the number of the parts on the platform. Like for the nine buttons, it is usefull to test the sequence with many number of parts on the platform.
- In the title of the test sequence part of the page, the vibration set is written.



## Backlight

This page gives access to the backlight adjustment parameters (intensity and flash time). This page is visible only if Asycube has a backlight defined in the [configuration page](#).



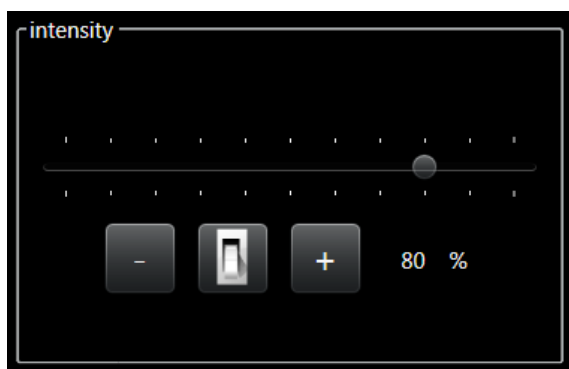
### 1 Preview group



The preview group contains a display where you can see the effect of the adjustment of backlight parameters.



### 2 Light intensity group



The light intensity group contains controls to adjust intensity of backlight.

The value can be changed by using slider or +/- buttons.

The range value is from 0% to 100% (on Asycube 240, backlight switches on from 20%).

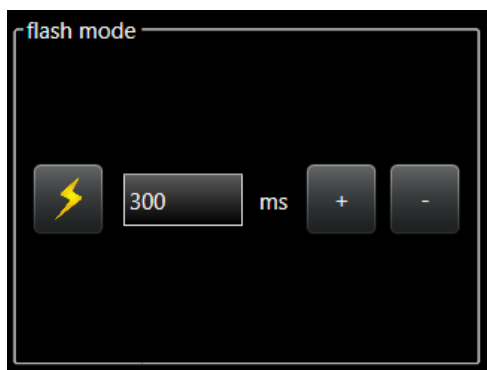
The switch button allows to test the value set.



<b>asyril</b> <small>Experts in Flexible Feeding Systems</small>	Human-Machine Interface - Asyrl SA User Guide	© Copyright Asyrl S.A.
Backlight	Document version : D	31.03.2017

3

## Flash mode group



The flash mode group contains controls to adjust flash duration of backlight.

Flash duration value can be changed by using +/- buttons.

The range value is from 0 to 10000ms.



## Process

This page gives access to the process of the Asycube.

As described in the User Guide of the Asycube, the process has 3 different parts (feeding, working and recirculation). Each of these parts contains some sequences of vibrations. You can manage these 3 parts and their sequences in this page and test them using the simulation part.

The screenshot shows the 'manage process' interface. It is divided into several sections:



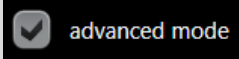
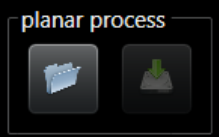
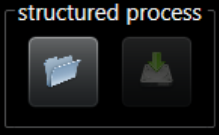
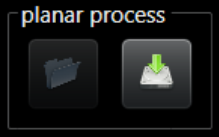
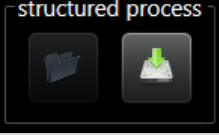
- manage process (1):** The top section containing icons for folder management, a download icon, and a checkbox for 'advanced mode'. It also has sub-sections for 'planar plate' and 'structured plate'.
- edit process:** The central section for configuring the process parts.
  - Feeding (2):** A section with a '+' icon and the label 'feeding'.
  - Working (3):** A section with a '-' icon and the label 'working'. It includes a 'sequence parts' dropdown set to 20, a 'remove' button, and a 'synchronize by' dropdown set to 'None'. Below this is a table of vibration sequences:
 

location	function	vibration	duration [ms]
Reservoir	Output01	A	1000
Platform	Forward	A	40
Platform	Calculated	Variable	0
Platform	Flip	I	150
None	Stabilization	None	500
  - Recirculation (4):** A section with a '+' icon and the label 'recirculation'.
- simulation (5):** A section on the right showing a 3D simulation of the Asycube with a grid of vibration points. It includes a 'nb simulation parts' input field set to 50.

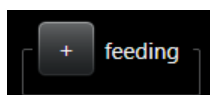
## 1 Manage process



In this group, you can manage your processes (load, save, default files and advanced mode).

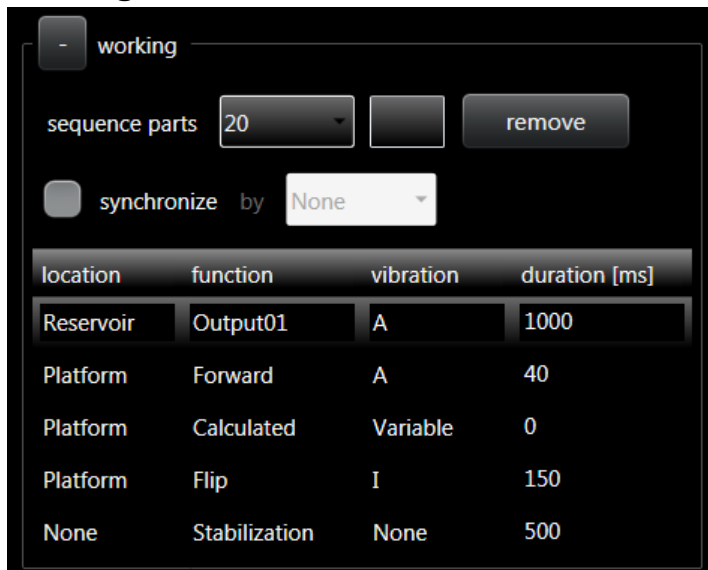
Control	Description
	Load button allows to load a *.fproc file.
	Save button allows to save actual process to a *.fproc file.
	Advanced mode allows to edit the feeding part of the process and the recirculation part. See User Guide for more explanations.
	Load default planar process button allow to load a standard process for a planar plate.
	Load default structured process button allow to load a standard process for a structured plate.
	Save default planar process button allow to save the actual process as a standard process for a planar plate.
	Save default structured process button allow to save the actual process as a standard process for a structured plate.

## 2 Feeding



This section of the process configuration is used to modify the feeding sequences. See User Guide for more explanations.

### 3 Working



location	function	vibration	duration [ms]
Reservoir	Output01	A	1000
Platform	Forward	A	40
Platform	Calculated	Variable	0
Platform	Flip	I	150
None	Stabilization	None	500

This section of the process configuration is used to modify the working sequences. See User Guide for more explanations.

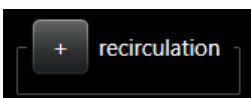
Control	Description
<b>sequence parts</b>	Select the sequence by its number of parts (new value allows to add a new sequence). The textbox allows to enter the parts number for the new sequence or to edit the number of parts of the selected sequence. The remove button allows to remove the selected sequence, this button becomes edit button to modify number of parts of selected sequence and add button to add new sequence.
<b>synchronize by</b>	Synchronize option activates the synchronization between reservoir and platform sequences.
<b>table of vibrations</b>	The vibrations in the table can be modified by double clicking on the parameter. By a right click on a vibration, remove, add, move and delete vibration can be executed.



#### NOTE:

*The feeding and the recirculation section on the process can be modified by the same way than the working section.*

### 4 Recirculation

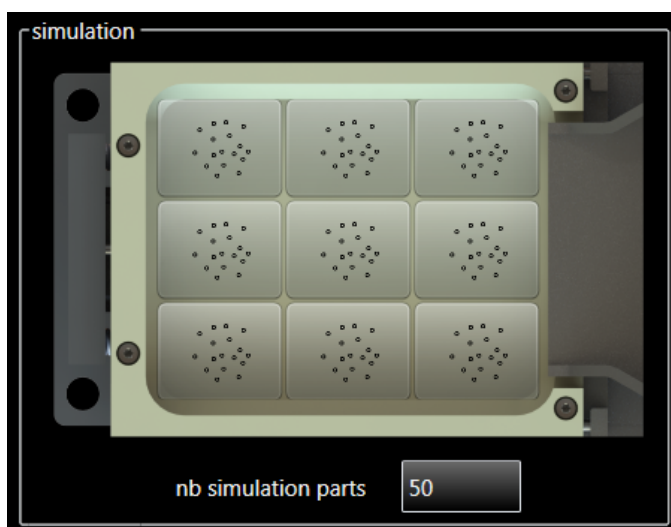


This section of the process configuration is used to modify the recirculation sequences. See User Guide for more explanations.



<b>asyril</b> Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri SA User Guide	© Copyright Asyri S.A.
Process	Document version : D	31.03.2017

## 5 Simulation



In this group, you can find a process simulator :

Press one of the nine buttons to give the positions of simulated parts to the process. Then the process is executed.

The number of parts is used to test the different sequences of the process.

## HMI Scripting

This page gives access to the scripting test tool of the HMI. This tool allows to program little sequences of vibrations and/or output activation and /or backlight activation/deactivation. Those scripts are not saved in the Asycube but can be used to do some tests.



### NOTE:

All this page can be used only with Advanced Technician or Integrator level access.

Common terms:

Term	Description
<b>add</b>	Add a new script line signifies that the line is stacked at the end of the script.
<b>insert before/ after</b>	Insert a script line before or after the selected line.
<b>replace</b>	Replace a script line will remove the selected script line and place a new one in the same place.

The screenshot shows the HMI Scripting tool interface. It is divided into several sections:

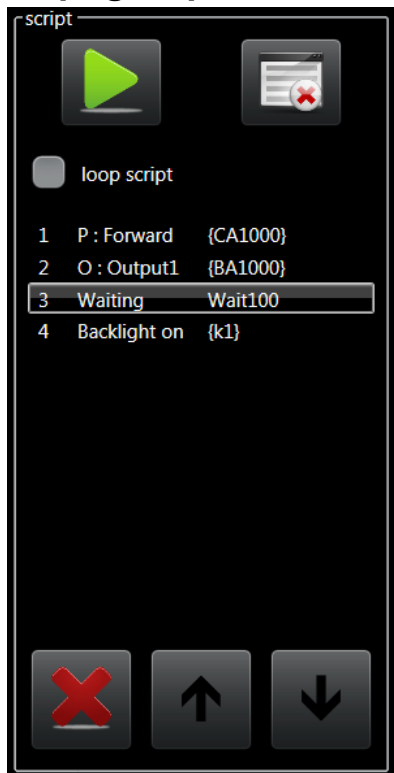
- Script group (2):** A list of script lines on the left side of the interface.
- save as bouton (1):** A button in the top right corner of the 'manage scripts' section.
- Platform motion (3):** A section for configuring platform motion with a dropdown menu, a unit selector, a time value, and buttons for 'add', 'insert before', 'insert after', and 'replace'.
- Outputs activation (4):** A section for configuring output activation with a dropdown menu, a unit selector, a time value, and buttons for 'add', 'insert before', 'insert after', and 'replace'.
- Hopper motion (5):** A section for configuring hopper motion with a dropdown menu, a unit selector, a time value, and buttons for 'add', 'insert before', 'insert after', and 'replace'.
- Waiting option (6):** A section for configuring waiting time with a text input, a unit selector, and buttons for 'add', 'insert before', 'insert after', and 'replace'.
- Backlight option (7):** A section for configuring backlight with radio buttons for 'on' and 'off', and buttons for 'add', 'insert before', 'insert after', and 'replace'.
- Custom command (8):** A section for entering a manual command with a text input and buttons for 'add' and 'edit'.

### 1 save as bouton





This group allows to manage (load and save) your scripts files (\*.asc).

## 2 Script group

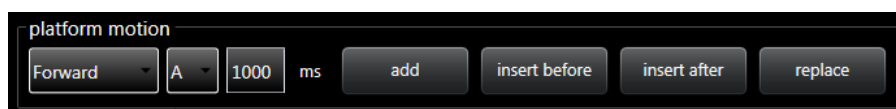


This group allows to execute the script with many options, to display the script and to edit the content of the script.

Control	Description
	Play button allows to start the script.
	Clear button allows to clear the complete script.
<input checked="" type="checkbox"/> loop script	Loop script option allows to execute the script in loop.
<input type="checkbox"/> duration	When loop script is selected, the duration option can be activated. If not, the duration is unlimited. Stop button (instead of start button) allows to stop the script.
<input checked="" type="checkbox"/> duration 0 min	When loop script and duration options are selected, the duration value can be entered in this field.
1 P : Forward {#1,CA1000} 2 O : Output1 {#1,BA1000} 3 Waiting Wait100 4 Backlight on {#1,K1}	The script contains three columns: <ul style="list-style-type: none"> <li>• The first one is the line number.</li> <li>• The second one is the explanation of the function.</li> <li>• The third one is the command to send to the Asycube (the presence of the address #1 depends of the firmware version)</li> </ul>
	This button allows to delete the selected script line.

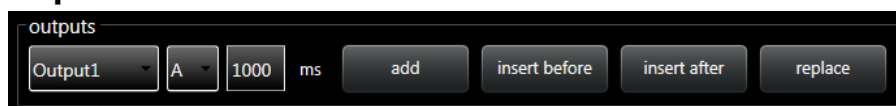
	This button allows to move the selected line up.
	This button allows to move the selected line down.

### 3 Platform motion



This group allows to add or insert a platform vibration motion, or replace the selected line with the platform motion.

### 4 Outputs activation



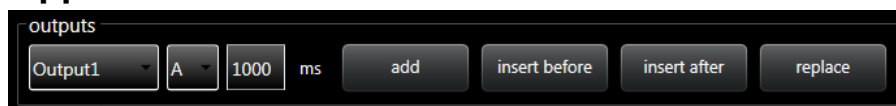
This group allows to add or insert an output activation, or replace the selected line with the output activation.



**NOTE:**

*This group is visible only with Asycube 240.*

### 5 Hopper motion



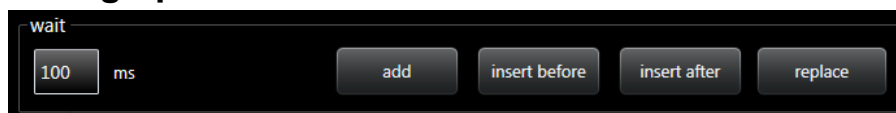
This group allows to add or insert a hopper vibration motion, or replace the selected line with the hopper motion.



**NOTE:**

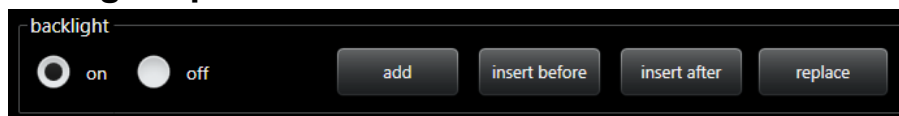
*This group is visible only with Asycube 50, Asycube 80 and Asycube 130.*

### 6 Waiting option



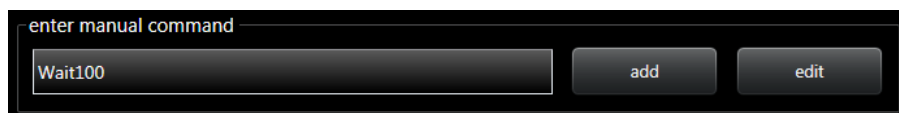
This group allows to add or insert a waiting time, or replace the selected line with the waiting time.

## 7 Backlight option



This group allows to add or insert a backlight activation/deactivation, or replace the selected line with the backlight activation/deactivation.

## 8 Custom command



This group allows to add a custom command, or edit the selected script line.

## Terminal

This page gives access to the terminal mode. In this page, you can execute commands manually.



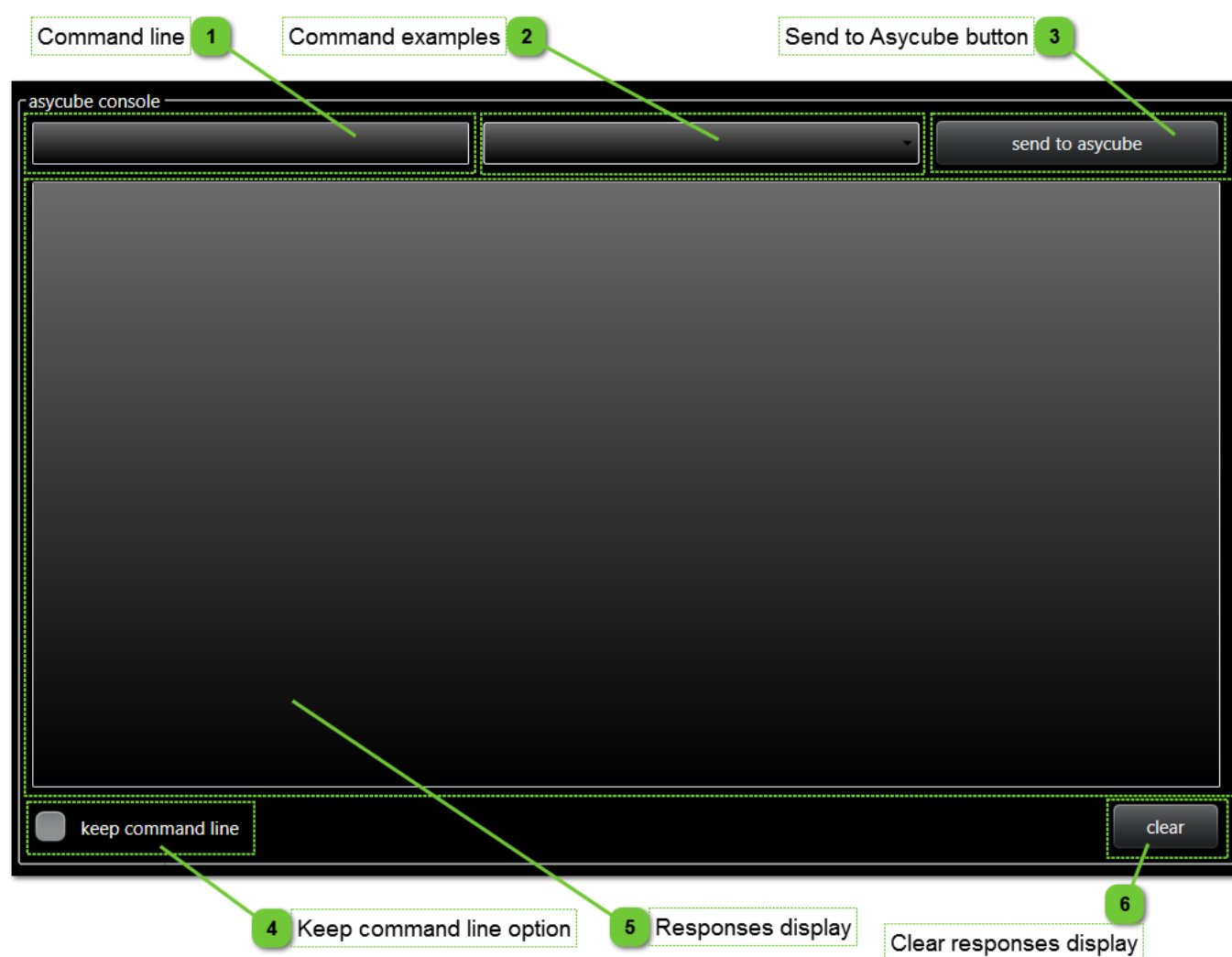
### NOTE:

All this page can be used only with Integrator level access.



### NOTE:

The commands are described in the User Guide of the each Asycube.



1

## Command line

Enter the command in this text box.

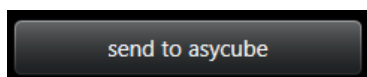
Executed commands can be bring back using arrow keys.

## 2 Command examples



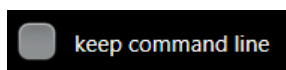
Some examples of commands can be found in this list. When selected, the command is entered in the command line. For some examples, the values of the parameters have to be modified before to execute the command.

## 3 Send to Asycube button



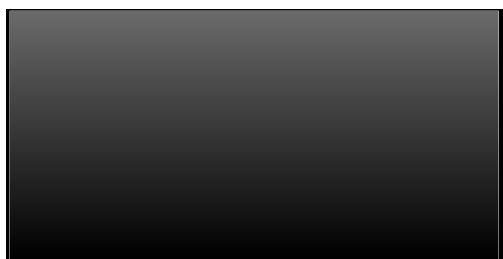
This button allows to execute the command.

## 4 Keep command line option



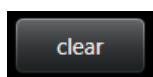
This checkbox allows to select if command must be kept in the command line after execution. This option is usefull to execute several times the same command.

## 5 Responses display



This group displays the responses to the previous commands.

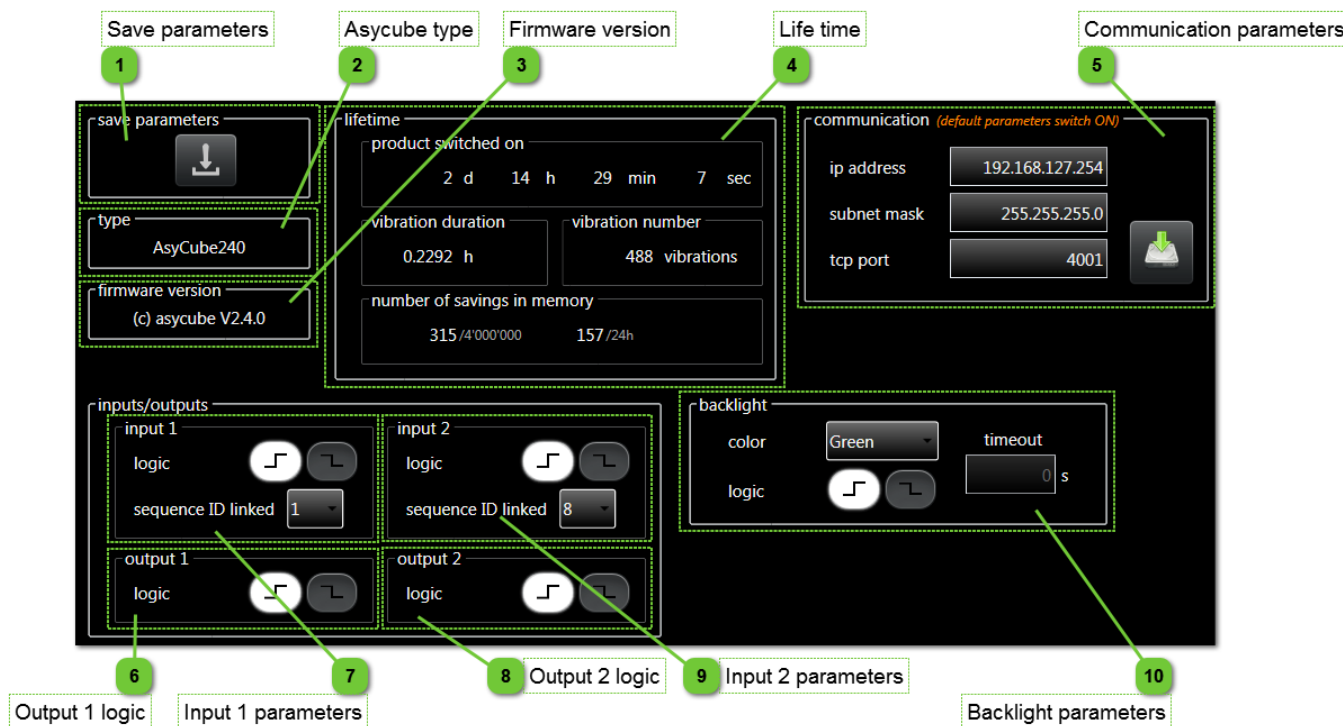
## 6 Clear responses display



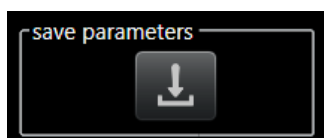
This group allows to clear the responses display.

## Configuration

This page gives access to the configuration of the Asycube. All these parameters are saved in the Asycube Firmware but in none of the configuration file on your computer.



### 1 Save parameters



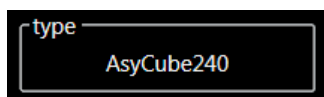
This button allows to save the global parameters to the flash memory.



#### IMPORTANT!

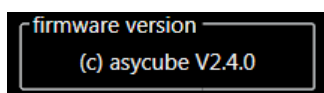
*The Asycube save automatically the global parameters every 20 minutes. If the user press on this button during the automatic save, a message is displayed to inform that the saving is not possible.*

### 2 Asycube type



In this group, you can find the type of Asycube. The value is read in the Asycube firmware.

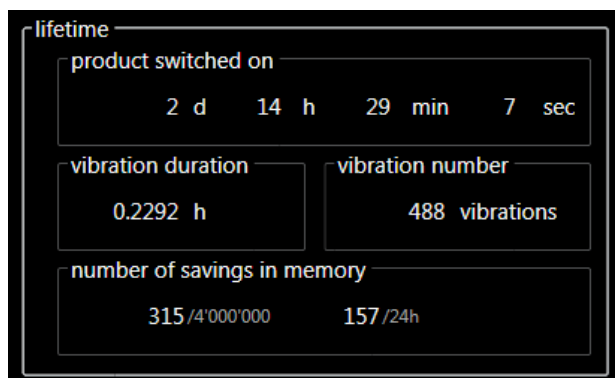
### 3 Firmware version






In this group, you can find the firmware version.



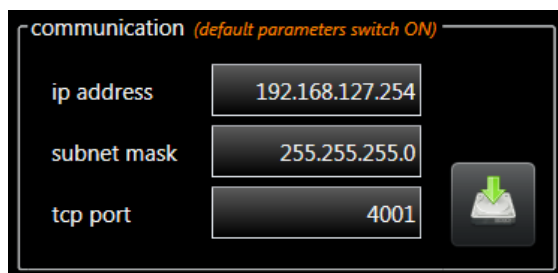
## 4 Life time



In this group, you can find some informations about life time of Asycube.

Info	Description
product switched on	Indicates the time of activity of the Asycube (power on time).
vibration duration	Indicates the total vibration time of the Asycube platform.  <b>NOTE:</b> <i>This value is visible only for Asycube 240 and other Asycubes since firmware version 1.5.0.</i>
vibration number	Indicates the total number of vibration executed on the Asycube platform.  <b>NOTE:</b> <i>This value is visible only for Asycube 240 and other Asycubes since firmware version 1.5.0.</i>
flash memory	Indicates the number of save data in flash memory. The first number indicates the total number and the next one the average per day.  <b>NOTE:</b> <i>Those values are visible only since version 2.4.0 for Asycube 240 and 3.1.0 for Asycubes 50 and 80.</i>

## 5 Communication parameters



In this group, you can change IP address, subnet mask and tcpport of Asycube electronic. Click on the button to apply the modifications.



### NOTE:

*This parameter is visible only for Asycube 240.*

*If Asycube is not in default parameters mode (switch 1 in OFF position) : the parameters are applied in the firmware, the HMI will reconnect automatically and the configuration of HMI is modified. The ethernet interface of the computer is not modified. Do it manually if needed (if the new subnet is different than actual one).*



*If Asycube is in default parameters mode (switch 1 in ON position) : the parameters are applied in the firmware but the HMI keep connected on default parameters and the configuration of HMI is not modified. The ethernet interface configuration of the computer is not modified. When you will restart the Asycube not in default parameters mode (switch 1 in OFF position), you will have to configure the HMI and if needed to modify the ethernet interface configuration of the computer.*



*See more explanations in Operating Manual of the Asycube.*

## 6 Output 1 logic



In this group, you can select the logic of the digital output 1.



Icon	Description
	Logic positive, the output change from 0V to 24V when activated.
	Logic negative, the output change from 24V to 0V when activated.



### NOTE:

*This parameter is visible only for Asycube 240.*

## 7 Input 1 parameters



In this group, you can select the logic of the digital input 1 and the sequence linked to this input. Those parameters are visible only for Asycube 240.



Icon	Description
	Logic positive, the input change from 0V to 24V has to be detected.
	Logic negative, the input change from 24V to 0V has to be detected.

When a signal on this input is detected, the selected sequence ID linked is executed.



### NOTE:

*This parameter is visible only for Asycube 240.*

## 8 Output 2 logic



In this group, you can select the logic of the digital output 2. This parameter is visible only for Asycube 240.



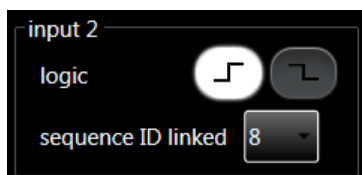
Icon	Description
	Logic positive, the output change from 0V to 24V when activated.
	Logic negative, the output change from 24V to 0V when activated.



### NOTE:

*This parameter is visible only for Asycube 240.*

## 9 Input 2 parameters



In this group, you can select the logic of the digital input 2 and the sequence linked to this input. Those parameters are visible only for Asycube 240.



Icon	Description
	Logic positive, the input change from 0V to 24V has to be detected.
	Logic negative, the input change from 24V to 0V has to be detected.

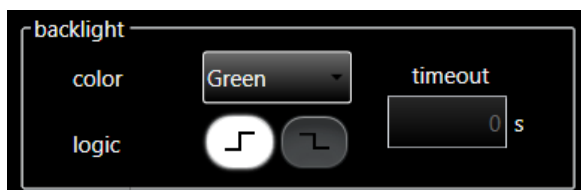
When a signal on this input is detected, the selected sequence ID linked is executed.



### NOTE:


*This parameter is visible only for Asycube 240.*


## 10 Backlight parameters



In this group, you can change parameters for backlight.



Parameter	Description
color	<p>Change this parameter allows to save in the firmware the backlight color used in the Asycube. This value is used to auto adapt HMI display.</p> <p><b>i</b> <b>NOTE:</b> If none color is selected, switch buttons in many pages and backlight page disappears.</p>
logic	<p>This parameter allows to select the logic of the backlight synchronization input.</p> <p><b>i</b> <b>NOTE:</b> Positive : 24V on input switch on the backlight. Negative : 0V on input switch on the backlight.</p>
timeout	<p>This value is the timeout of the backlight. After this duration with backlight at 100%, the backlight switch automatically off. With backlight at 50%, the timeout is the double of the parameter value.</p> <p><b>IMPORTANT!</b> The timeout of the backlight is used to protect the backlight against the overheating. If the timeout is reached, don't restart it directly, let the system cool down.</p> <p> The system is not intended to be switched on permanently. Switch on the backlight on only when picture is needed and switch it off directly when picture is acquired. This protection is disabled (timeout set to 0) for Asycube 240 because its backlight cannot be damaged in case of backlight switched on permanently.</p> <p><b>i</b> <b>NOTE:</b> This parameter is only indicative and can only be modified by Asyri.</p>

 <b>Experts in Flexible Feeding Systems</b>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
AsyView	Document version : D	31.03.2017

## AsyView

This chapter describes pages related to the AsyView.

AsyView is the name of the Smartsight software. It is able to manage cameras and Asycubes.

The architecture of this system has the granularity of a machine :

Machine --> Cells --> Modules --> Cameras and/or Asycubes

For more explanations about the AsyView architecture and functionalities, see the SmartSight specific documentation (SmartSight Programming Manual).

## Pages list

Main page .....	98
Cell .....	100
Module .....	102
Vision .....	104
Home .....	105
Live .....	109
Image configuration.....	112
Calibration .....	116
Calibration pixel/mm.....	118
Calibration of linked devices .....	122
Teaching .....	125
Process calibration.....	130
Asycube .....	133

## Controls disabled

Some pages, tabs, buttons, textboxes, etc can be disabled depending of the following parameters :

- AsyView connection state (disabled when not connected).
- The function is not possible for the moment (another function is processing).
- The level access is not correct to access to the parameter.

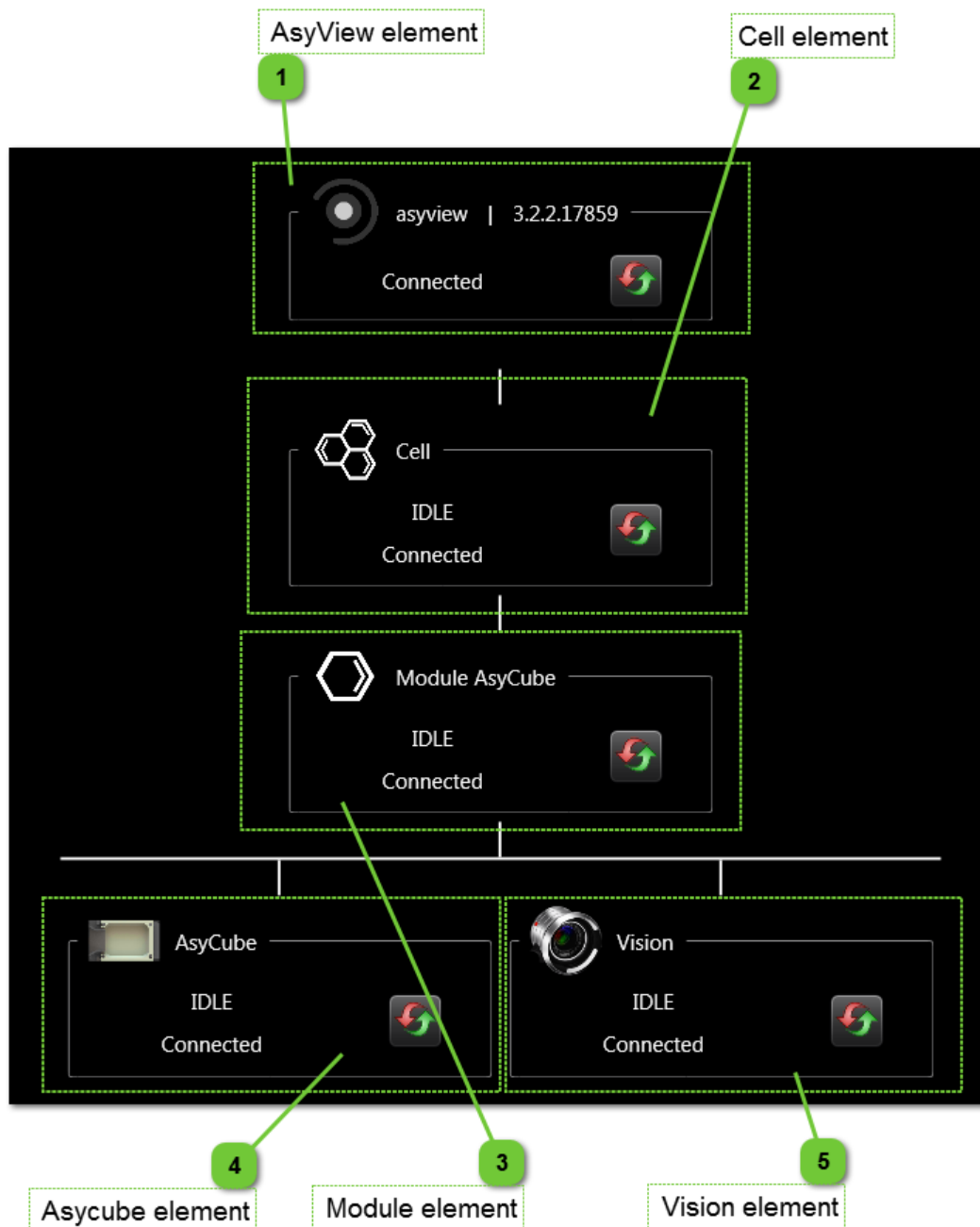
## Controls not visible

Some pages, tabs, buttons, textboxes, etc can be not visible depending of following parameters :

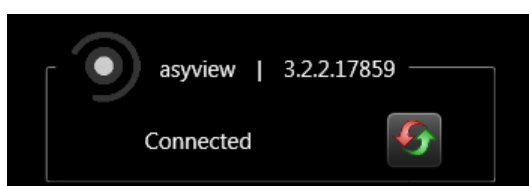
- The AsyView does not have this hardware element in its architecture (i.e. camera, Asycube, backlight, frontlight, etc).
- Option is not valid for your product.
- The level access is not correct to access to the parameter.

## Main page

The main page displays the architecture of the AsyView and the state of every elements in the architecture. A reset button allows to reset each element of the AsyView.

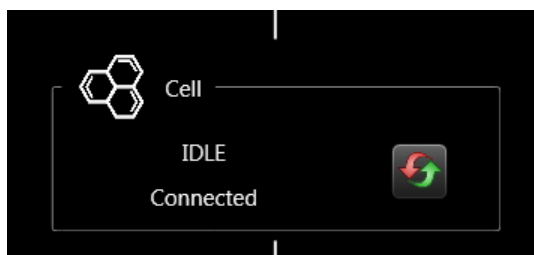


### 1 AsyView element



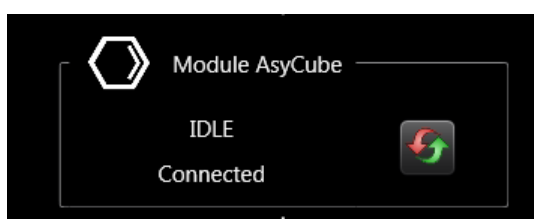
This display indicates the state and connection state of the complete AsyView. The reset button allows to reset the complete AsyView.

## 2 Cell element



This display indicates the state and connection state of a cell. The reset button allows to reset the cell and all elements below.

## 3 Module element



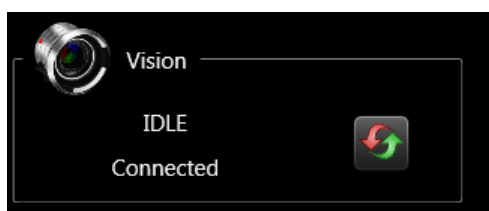
This display indicates the state and connection state of a module. The reset button allows to reset the module and all elements below.

## 4 Asycube element



This display indicates the state and connection state of an Asycube. The reset button allows to reset the Asycube.

## 5 Vision element



This display indicates the state and connection state of a vision. The reset button allows to reset the vision.



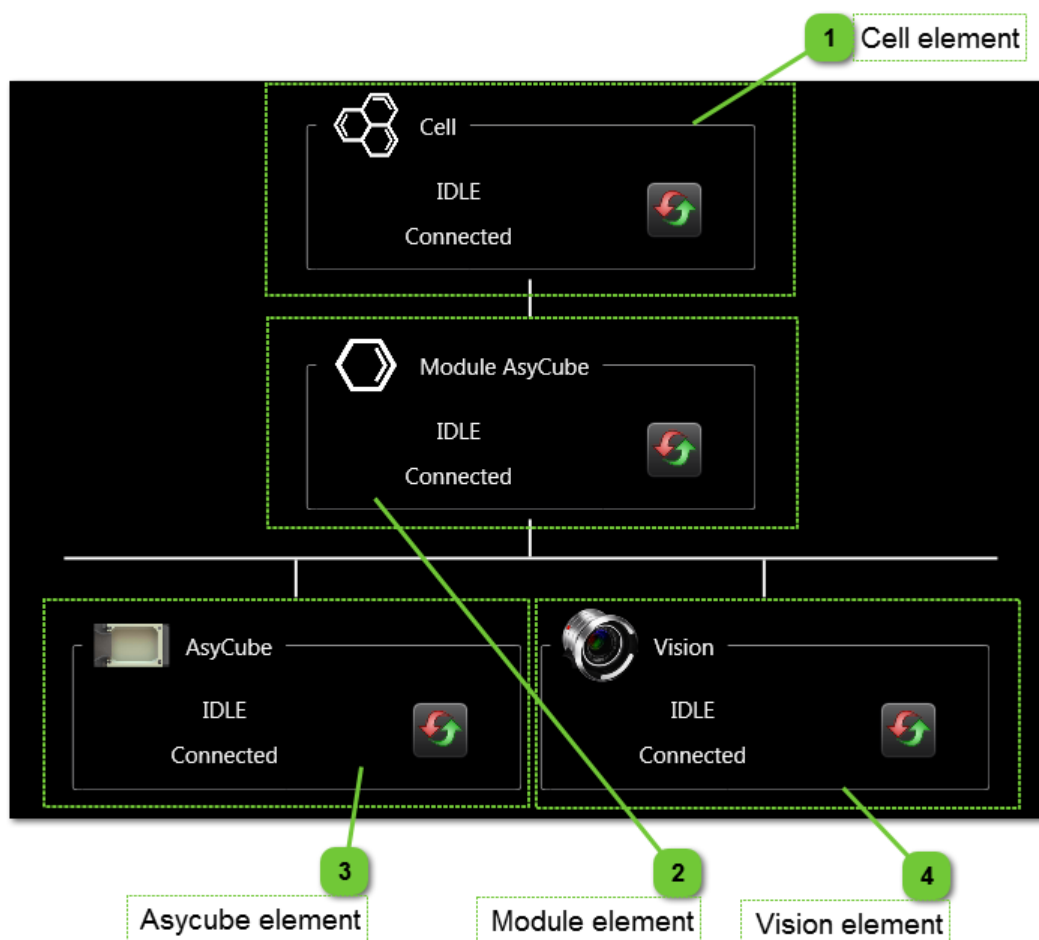
## Cell

The cell page displays the architecture of a cell in the AsyView and the states of every element below in the architecture. A reset button allows to reset each element of the cell.

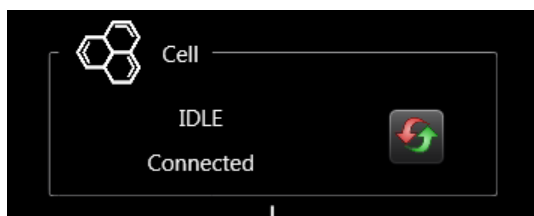


### NOTE:

*This page is only available if there is more than one cell in the AsyView architecture.*

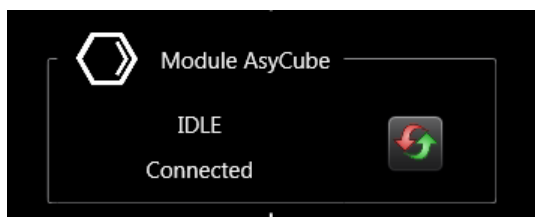


### 1 Cell element



This display indicates the state and connection state of a cell. The reset button allows to reset the cell and all elements below.

## 2 Module element



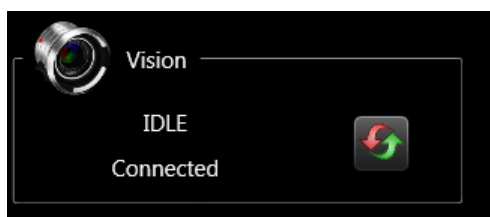
This display indicates the state and connection state of a module. The reset button allows to reset the module and all elements below.

## 3 Asycube element



This display indicates the state and connection state of an Asycube. The reset button allows to reset the Asycube.

## 4 Vision element



This display indicates the state and connection state of a vision. The reset button allows to reset the vision.

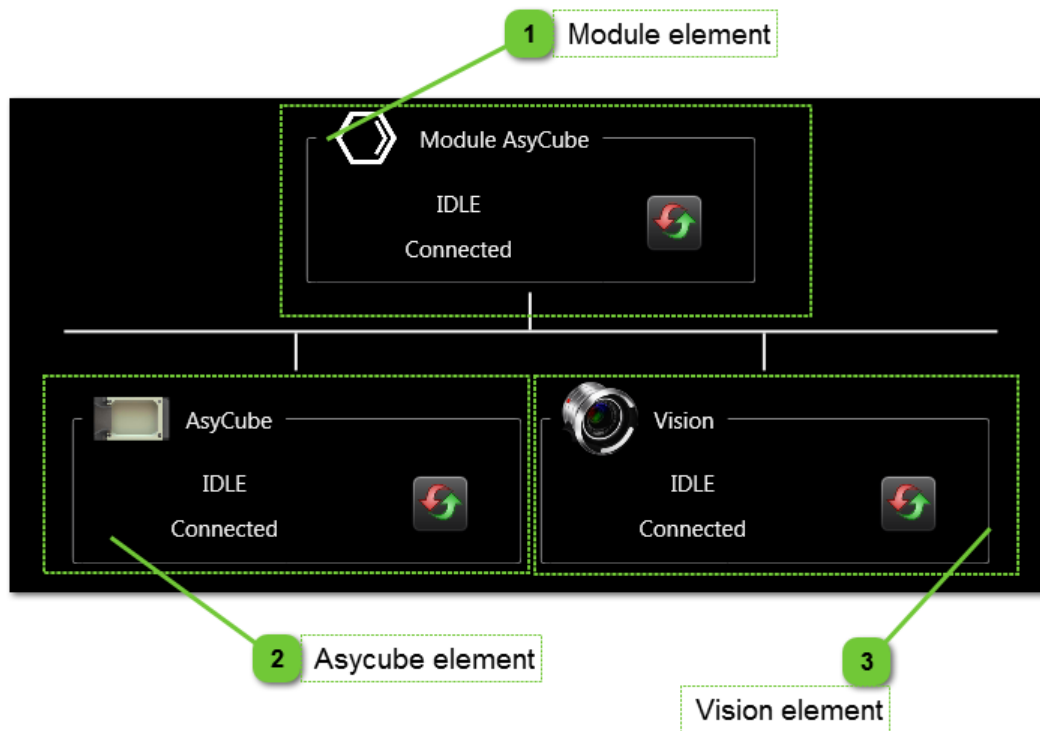
## Module

The module page displays the architecture of a module in a cell of the AsyView and the states of every element below in the architecture. A reset button allows to reset each element of the module.

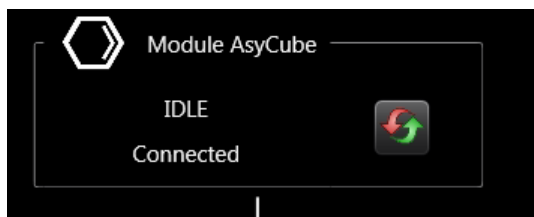


### NOTE:

*This page is only available if there is more than one module in the cell architecture.*

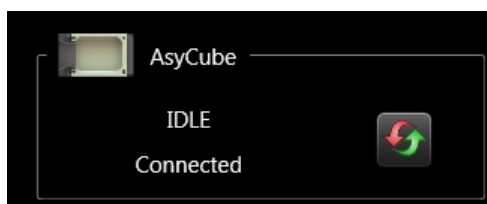


### 1 Module element



This display indicates the state and connection state of a module. The reset button allows to reset the module and all elements below.

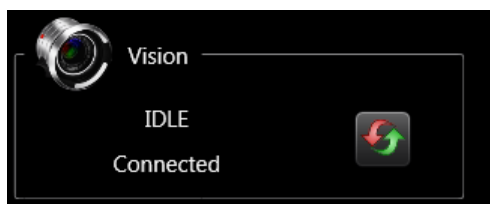
### 2 Asycube element




This display indicates the state and connection state of an Asycube. The reset button allows to reset the Asycube.

<b>asyril</b> <small>Experts in Flexible Feeding Systems</small>	Human-Machine Interface - Asyrl SA User Guide	© Copyright Asyrl S.A.
Module	Document version : D	31.03.2017

### 3 Vision element



This display indicates the state and connection state of a vision. The reset button allows to reset the vision.

 <b>Experts in Flexible Feeding Systems</b>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Vision	Document version : D	31.03.2017

## Vision

This chapter describes pages related to the vision part of the AsyView.

### Pages list

Home .....	105
Live .....	109
Image configuration.....	112
Calibration .....	116
Calibration pixel/mm.....	118
Calibration of linked devices.....	122
Teaching .....	125
Process calibration.....	130

### Controls disabled

Some pages, tabs, buttons, textboxes, etc can be disabled depending of following parameters :

- The connection state of the vision part of the AsyView (disabled when not connected).
- The function is not possible for the moment (another function is processing)
- The level access is not correct to access to the parameter.

### Controls not visible

Some pages, tabs, buttons, textboxes, etc can be not visible depending of following parameters :

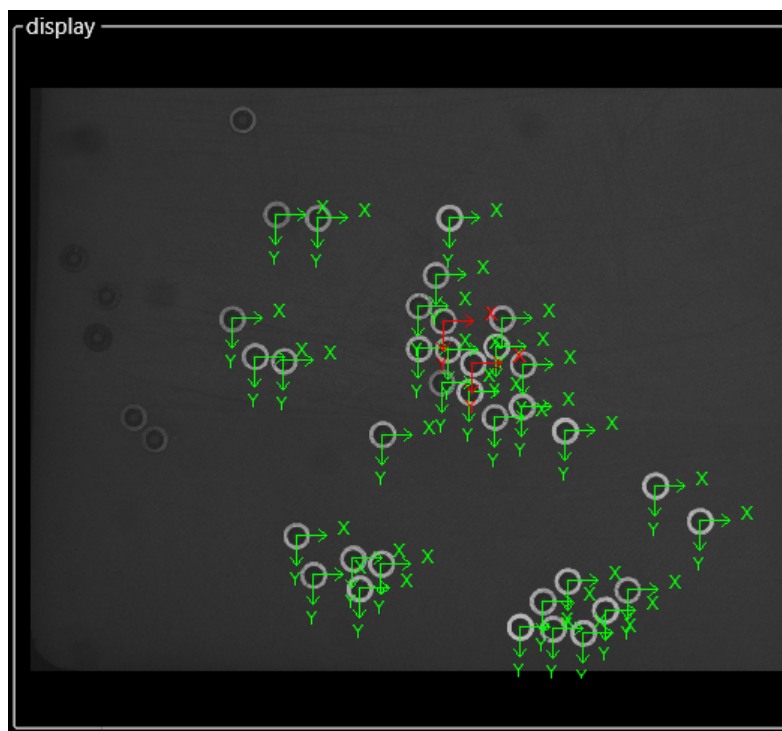
- The vision part of AsyView does not have this hardware element in its architecture (i.e. backlight, frontlight, etc).
- Option is not valid for your product.
- The level access is not correct to access to the parameter.

## Home

Home page gives access to the results of the vision analysis and to the possibility to execute an acquisition and analyze. Some parameters allows to select which kind of results have to be displayed.

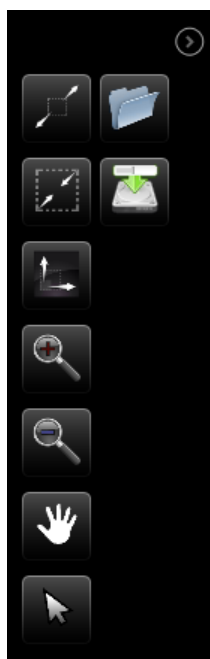


## 1 Display images and results



This zone displays the images received from AsyView and the kind of results selected in the result selection group.

## 2 Tools for images



This zone gives access to options to navigate in the image (zoom in/out, move, fit image, etc).

### 3 Results group



results				
33 accepted parts		2 rejected parts		38 feeding information
id	x	y	angle [°]	rejected reason
1470	1041.218102	674.908351	0	
1471	1132.079359	726.596089	0	
1472	1037.18054	1142.01884	0	
1473	1217.370222	1106.509508	0	

This group displays the list of the good parts found and/or the rejected parts depending of the selection in the results selection group.

A specific result can be selected and only this overlay will be displayed on the image. Multi-selection is possible.

Some additional informations are displayed :

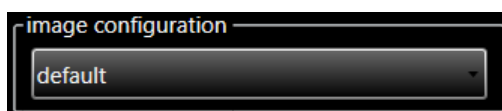
- accepted parts number is the total amount of good parts detected.
- rejected parts number is the total amount of refused parts.
- feeding information is the number of parts found by the feeding information tool.



#### NOTE:

*When one or many results are selected, click on a checkbox in the results selection group to display again all the results.*

### 4 Image configuration group



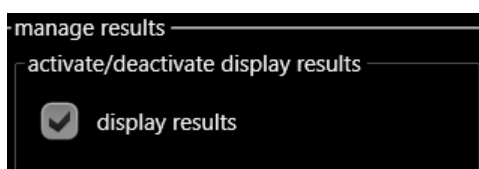
This group allows to select the image configuration to use.



#### NOTE:

*This combobox is not visible if there is only one image configuration (default situation).*

### 5 General display option



This display allows to activate or deactivate the display of all results.



## 6 Acquisition group

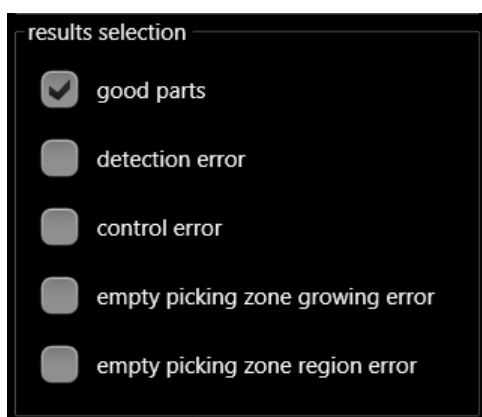


This group is related to the acquisition and images. Click on the play button to execute an acquisition and an analysis.

The combobox and the arrows buttons allows to select the image to display (i.e. backlight image or frontlight image).

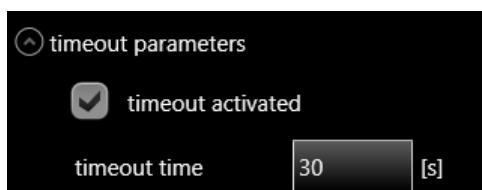
The lock checkbox allows to choose which image will be always displayed (check the box when the requested image is displayed).

## 7 Results selection group



This group allows to select which type of results to display in the display and in the result list.

## 8 Timeout group



This group allows to choose if a timeout is needed and the duration of the timeout.

This timeout indicates the time limit when no part are found.

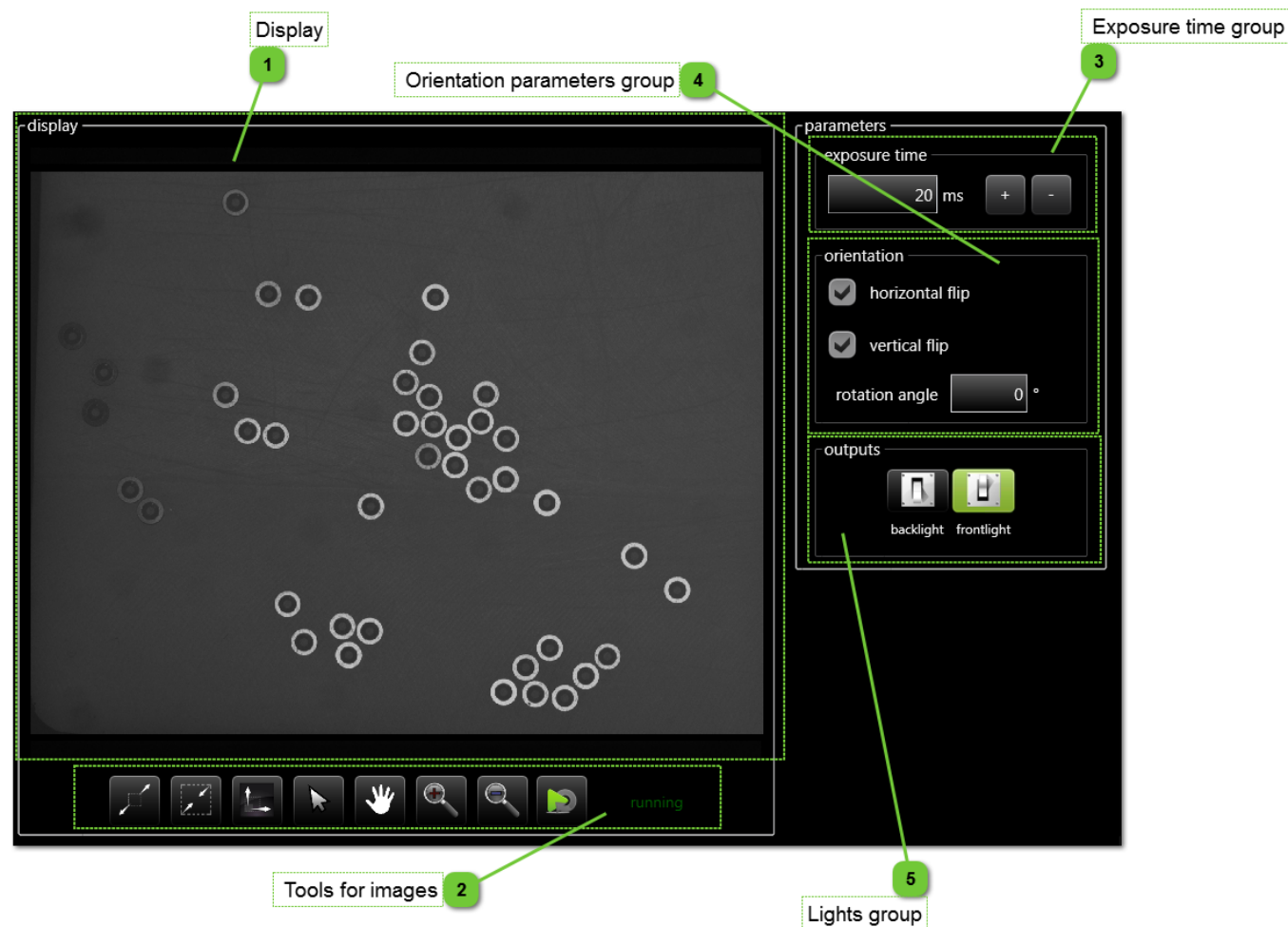
### NOTE:



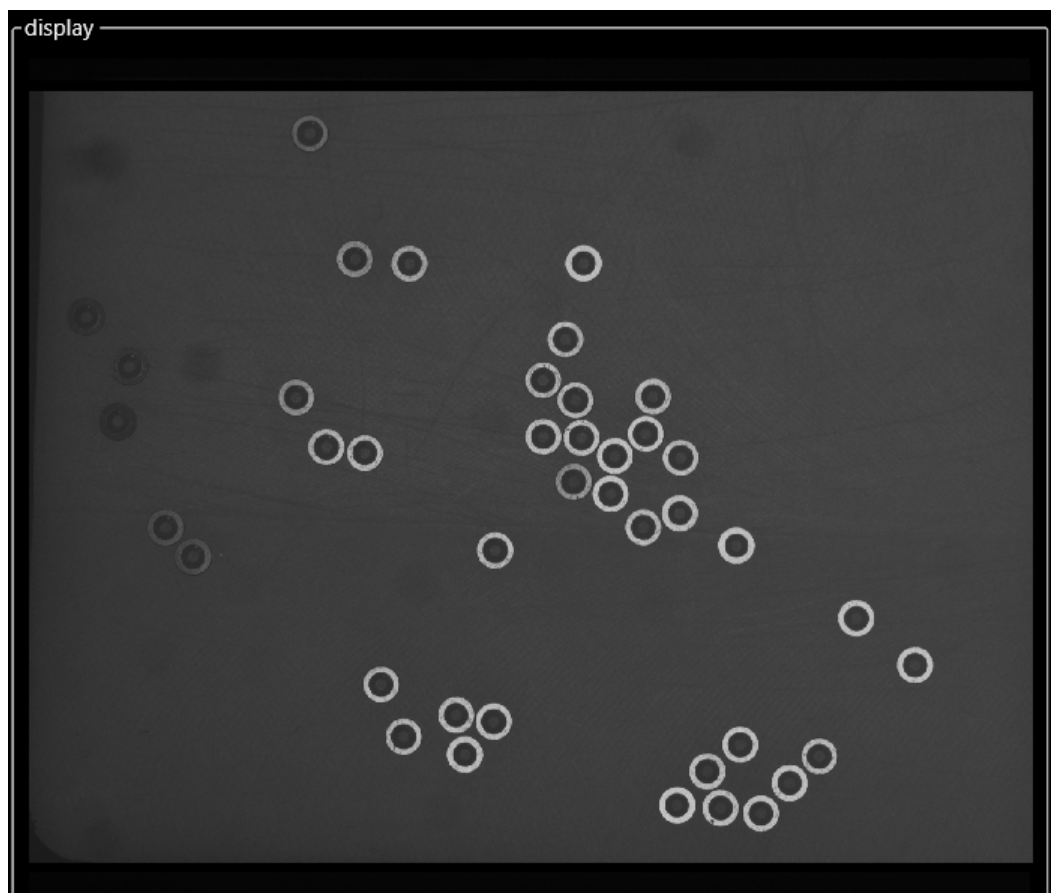
*The system will vibrate, take an image, analyze the image until a part is found or until the timeout.*  
*If the timeout is deactivated, the system will continue to search parts indefinitely until a manual stop of the operator.*

## Live

Live page gives access to the live functionality and to the orientation parameters of the image.



## 1 Display



This zone displays the images received from AsyView.

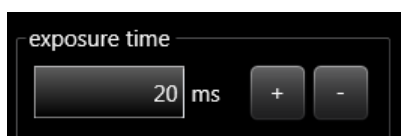
## 2 Tools for images



This zone gives access to options to navigate in the image (zoom in/out, move, fit image, etc).

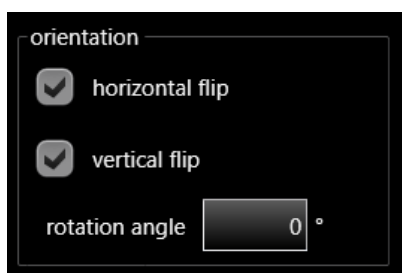
The play-loop button allows to activate and deactivate the live. The state of the live is displayed on the right of this group.

## 3 Exposure time group



This display allows to change the exposure time for the live.

## 4 Orientation parameters group



This group are related to the orientation of the image.



### NOTE:

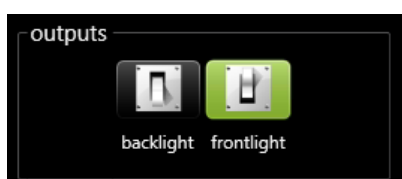
*Those parameters have to be set in the beginning of the setting up of the machine.*




### IMPORTANT:

*Every modification of those parameters will break the calibrations and the recipes.*

## 5 Lights group



This group allows to switch on and off the lights.

 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Image configuration	Document version : D	31.03.2017

## Image configuration

Image configuration page gives access to the image configuration and image region parameters.



This configuration is useful only for complex configurations like :

- One camera on two Asycubes
- Two parts on the same Asycube
- Two cameras on an Asycube

An image region specifies an acquisition region (X min, Y min, width and height) and is set to the camera.

An image configuration contains the name of the image region to use and the information of on which Asycube the camera is mounted.

Each image configuration has one analysis process for one part (therefore one vision teaching).

For standard configuration (one camera looking on one Asycube for one part) :

- a default image region in full resolution exists and its name is "default".
- a default image configuration using default image region and the Asycube exists and its name is "default".

For control camera :

- Modify the default image configuration by removing the linked device Asycube in the default image configuration.

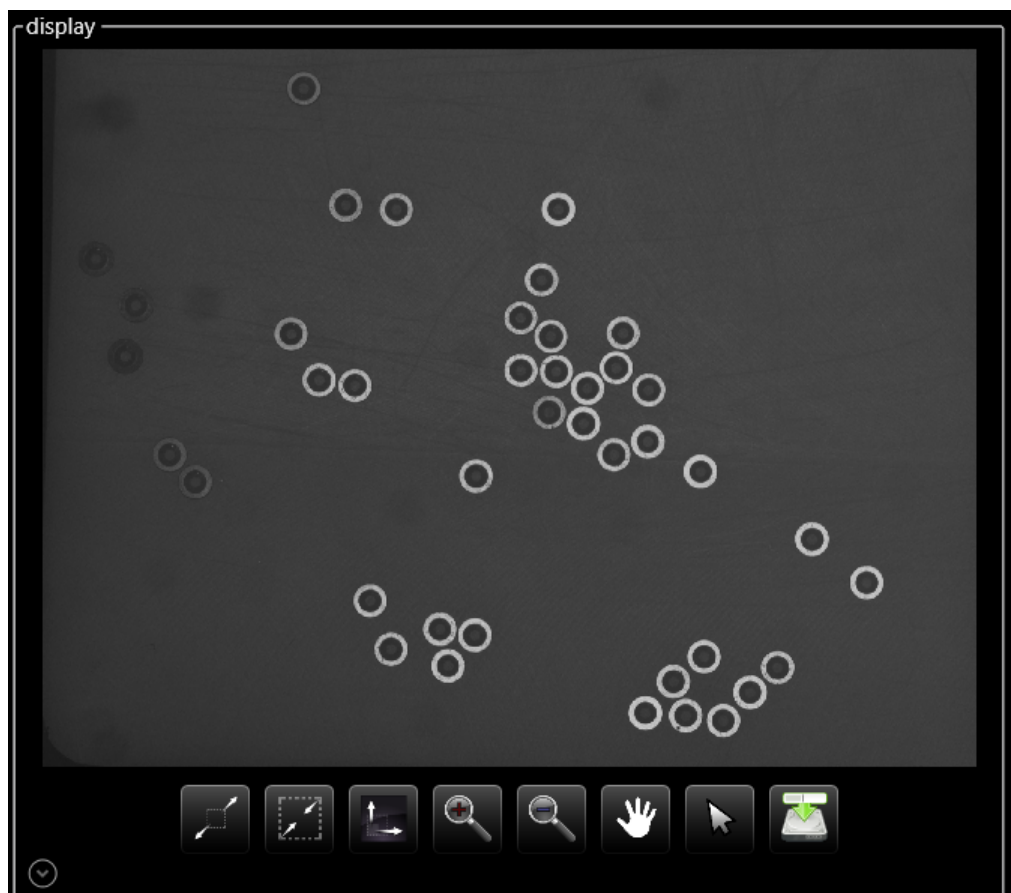


### NOTE:

*All this page can be used only with Integrator level access.*

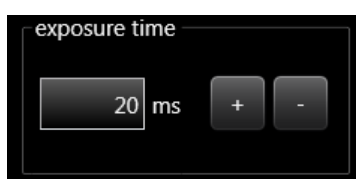


## 1 Display



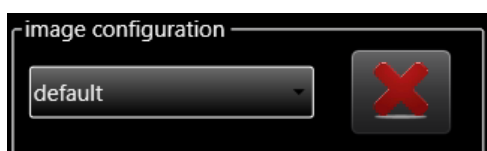
This zone displays the images received from AsyView.

## 2 Exposure time



This display allows to change the exposure time for the test of the image configuration.

## 3 Image configuration group



This group allows to select the image configuration to modify. If new is selected, a text box appears and allows to enter the name of the new image configuration.

The button allows to delete the image configuration selected or to add a new one if new is selected.

## 4 Parameters group



This group allows to configure the image configuration and modify image regions.



The linked devices part allows to select the linked device to use in the selected image configuration (the list is automatically adapted depending of the architecture of the AsyView).

In the image region part, the image region can be selected.

If new is selected, a text box appears and allows to enter the name of the new image region.

The button allows to delete the image region selected or to add a new one if new is selected.

In the image region, the values can be modified. X min, Y min, width and height can only be modified if full resolution checkbox is unchecked.



### NOTE:

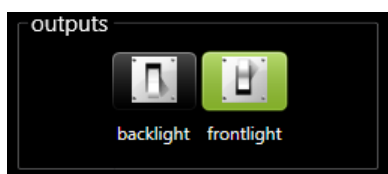
*Those parameters have to be set in the beginning of the setting up of the machine.*

### IMPORTANT:



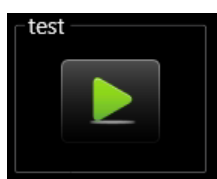
*Every modification of the image configuration or image region will break the calibrations and the recipes. The best way to not modify the existing recipes is to create a new image configuration or image region if needed.*

## 5 Lights group



This group allows to switch on and off the lights.

## 6 Test buttons



This button allows to acquire a new image with the image configuration and image region selected.



## Calibration

Calibration page gives access to the image calibration.



There is two types of calibrations provides by this page :

### 1. Calibration of linked devices

In this calibration, the goal is to match the field of view of the camera (depend of the resolution of the camera) to the normalized workspace of the Asycube (values in X and Y between -1 and +1).

The table (filled automatically for standard configuration) indicates the mapping between the camera and the Asycube. The button in the display allows to indicate where is the hopper comparing to the orientation of the camera. By clicking on it, the values in the table will change automatically.

In case of complex configurations, you have to enter the values manually in the table.

The parameters of this calibration are explained in the [Calibration of linked devices page](#).

### 2. Calibration pixel/mm

In this calibration, the goal is to match the field of view of the camera to the normalized unit mm. With this calibration, the calibration of the linked devices will be automatically executed.

For this calibration, only parameters of the calibration is needed and will be explained in the [Calibration Pixel/mm page](#).



**NOTE:**

*All this page can be used only with Technician level access or higher, but the parameters of calibrations can be edited only with Integrator level access.*



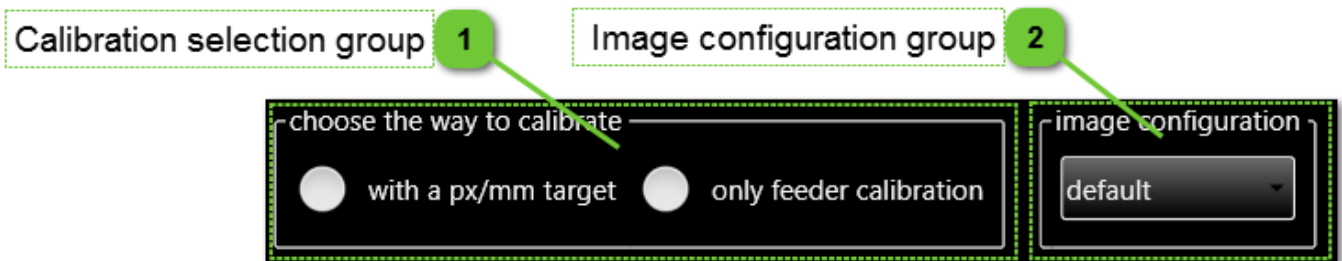
**NOTE:**

*Each image configuration has its own calibrations.*

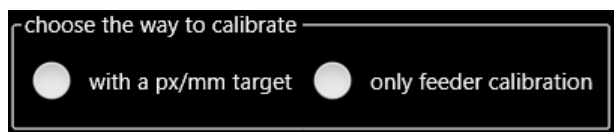


**NOTE:**

*The system is unable to work without at least a calibration of the linked devices.*



## 1 Calibration selection group



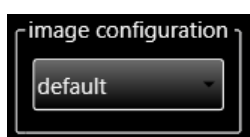
This group allows to select the calibration type.



### NOTE:

The "only feeder calibration" option is enabled only for a camera linked to an Asycube. For example, it is disabled for a control camera.

## 2 Image configuration group



This group allows to select the image configuration to calibrate.

The combobox is not visible if there is only one image configuration.

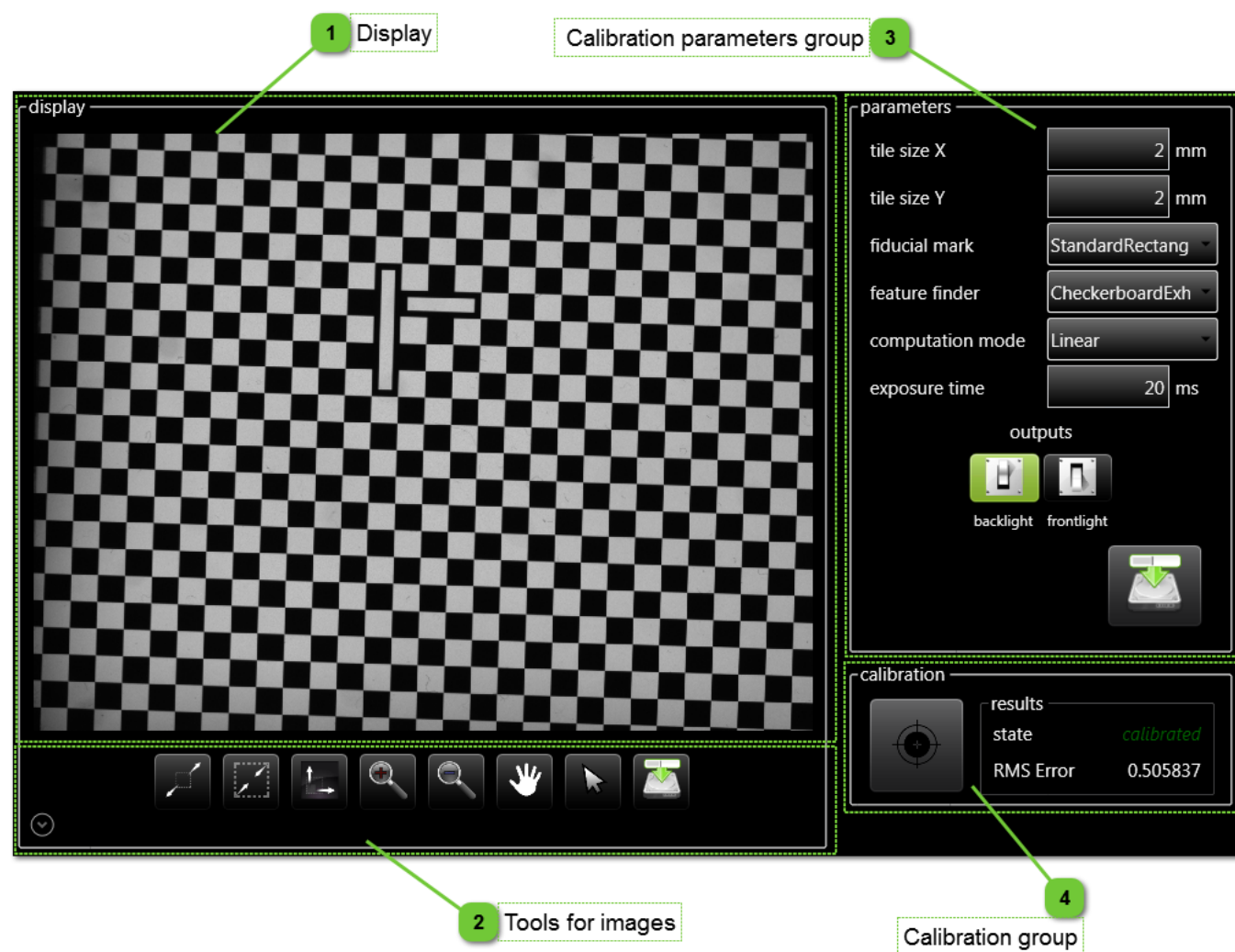
## Calibration pixel/mm

Calibration pixel/mm page gives access to the calibration of vision sensor with a pixel/mm target.



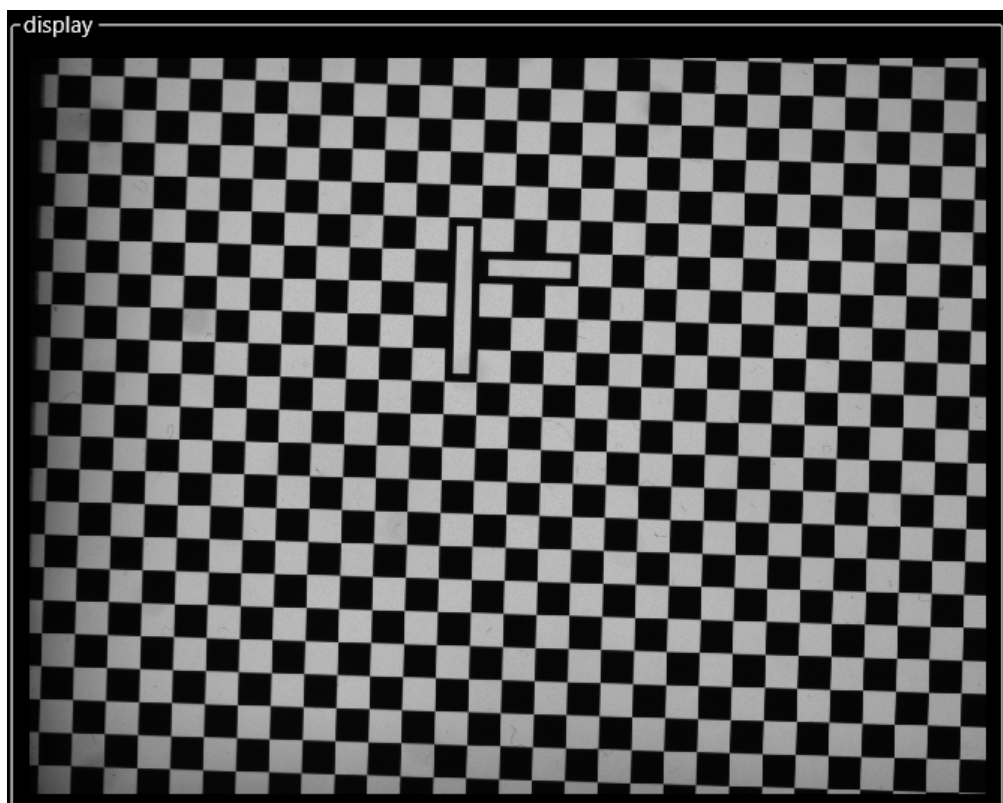
### NOTE:

All this page can be used only with *Technician level access or higher*.



<b>asyril</b> <small>Experts in Flexible Feeding Systems</small>	Human-Machine Interface - Asyril SA User Guide	© Copyright Asyril S.A.
Calibration pixel/mm	Document version : D	31.03.2017

## 1 Display



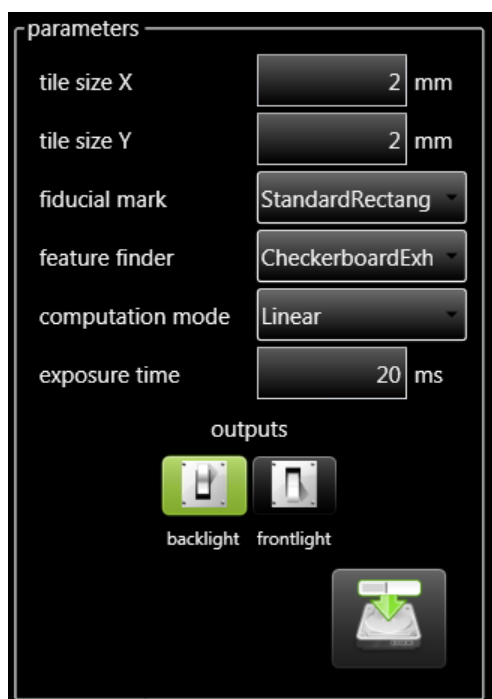
This zone displays the images received from the camera for calibration.

## 2 Tools for images



This zone gives access to options to navigate in the image (zoom in/out, move, fit image, etc).

### 3 Calibration parameters group



This group allows to configure the calibration.

The parameters are the following :




Parameter	Description	Default value
tile size x	Enter the grid spacing x for the calibration plate. For a checkerboard-style plate, this is the tile size. For a grid-of-dots calibration plate, this is the spacing between dot centers in the X-direction.	2mm
tile size y	Enter the grid spacing y for the calibration plate. For a checkerboard-style plate, this is the tile size. For a grid-of-dots calibration plate, this is the spacing between dot centers in the Y-direction.	2mm
fiducial mark	Select the correct type of fiducial mark for the type of plate (StandardRectangle for checkerboard or DotGridAxis for dot grid).	StandardRectangle
feature finder	Select the type of calibration plate that you are using. If you are using a checkerboard calibration plate, Cognex recommends that you select <b>CheckerboardExhaustive</b> . <b>CheckerboardExhaustive</b> provides the most accurate calibration results. If you are using a grid-of-dots plate, select <b>DotGrid</b> .	CheckerBoardExhausted
computation mode	This value specifies how the best-fit transformation between the uncalibrated points and the raw calibrated points will be computed.	Linear
exposure time	Exposure time for calibration depending of the power of the light used.	20 ms



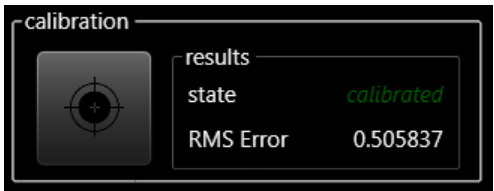
#### NOTE:

For more explanations about the calibration parameters, see Cognex documentation on Cognex website.

 <div> <div>Experts in</div> <div>Flexible Feeding Systems</div> </div>	<div>Human-Machine Interface - Asyri! SA</div> <div>User Guide</div>	<div>© Copyright Asyri! S.A.</div>
<div>Calibration pixel/mm</div>	<div>Document version : D</div>	<div>31.03.2017</div>

4

Calibration group



The group gives access to the calibration execution and to the result of the calibration.



**NOTE:**  
*The calibration result RMS Error has to be closer to 0.*

## Calibration of linked devices

Calibration of linked devices page gives access to the calibration of Asycubes to match the field of view of the camera to the workspace of the Asycube.



Linked device calibration enables the feeder directions to be referenced, as well as those of the image, in order to manage the movements issued to the feeder via commands, based on the state measured by the vision system.

Depending on the position of the feeder under the camera and whether the layout and order of the 4 points may vary. The simplest way to facilitate this adjustment is to mark the different feeder points and observe their respective positions in the image. The 4 pairs of points are therefore easily constructed using the image and feeder coordinates described below.

The World coordinates correspond to the feeder values and must be normalized (1 to -1). The corresponding Images coordinates have a value of 0 or the number of pixels per line/column of the camera, depending on the orientation of the system.



### NOTE:

All this page can be used only with Technician level access or higher.

**Asycube representation**

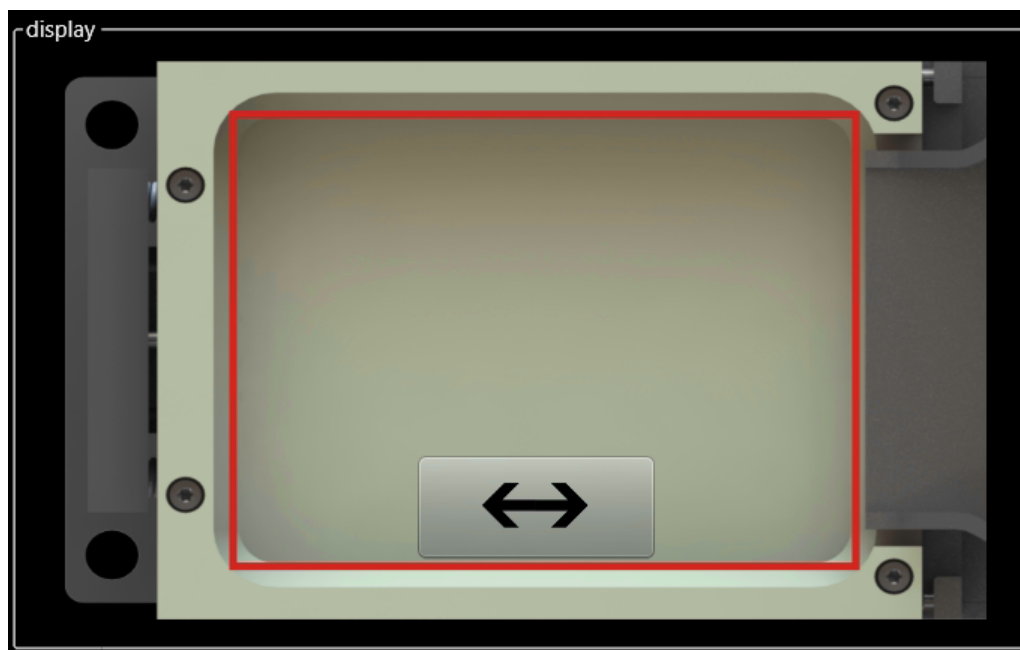
**Calibration group**

**point pairs**

id	position X	position Y	vision position X	vision position Y
0	1	-1	-17.44534	-23.3149
1	-1	-1	-17.91013	21.20939
2	1	1	19.91341	-22.92904
3	-1	1	19.44863	21.59525

**Corresponding points**

## 1 Asycube representation




This zone displays a representation of the Asycube position.



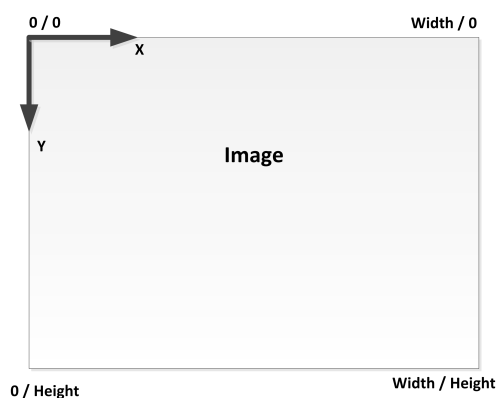
### NOTE:

*Before to execute this calibration, be sure that the orientation of the image is correctly defined in live page.*



The  button allows to change the hopper position from one side to other side.

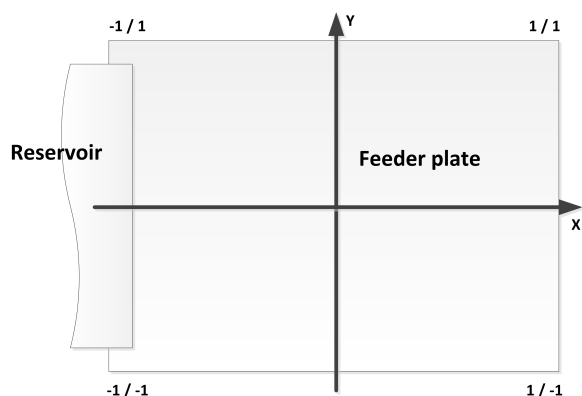
In this case, the hopper position can simply define the values in the table of corresponding points because it can be only two possibilities.



Width = number of pixels / line  
Height = number of pixels / column

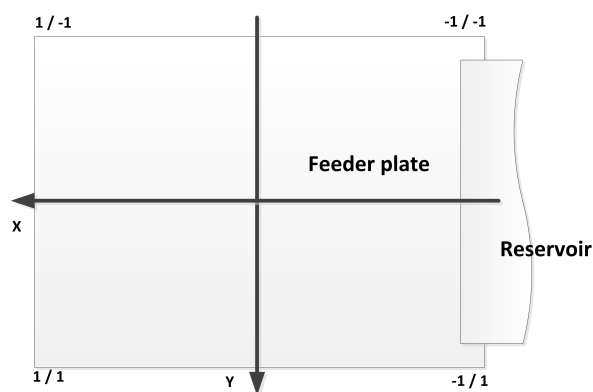
The camera 0,0 position is always at the top left of this representation.





For example for a camera 2MPx :

points pair				
id	position X	position Y	vision position X	vision position Y
0	-1	1	0	0
1	-1	-1	0	1040
2	1	1	1392	0
3	1	-1	1392	1040

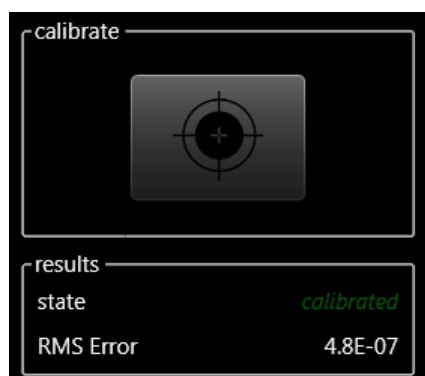


For example for a camera 2MPx :

points pair				
id	position X	position Y	vision position X	vision position Y
0	1	-1	0	0
1	1	1	0	1040
2	-1	-1	1392	0
3	-1	1	1392	1040

2

## Calibration group



The group gives access to the calibration execution and to the result of the calibration.



### NOTE:

*The calibration result RMS Error has to be closer to 0.*

3

## Corresponding points

point pairs				
id	position X	position Y	vision position X	vision position Y
0	1	-1	-17.44534	-23.3149
1	-1	-1	-17.91013	21.20939
2	1	1	19.91341	-22.92904
3	-1	1	19.44863	21.59525

This zone gives access to the calibration corresponding points.

In default configuration, the values are automatically put in the table (full resolution of the camera correspond to full normalized workspace of the Asycube).

## Teaching

Teaching page gives access to the vision teaching and the management of the timesets.



There are two different kind of teaching available :

- control : for control cameras.
- localisation : for localisation of parts, for example on an Asycube.

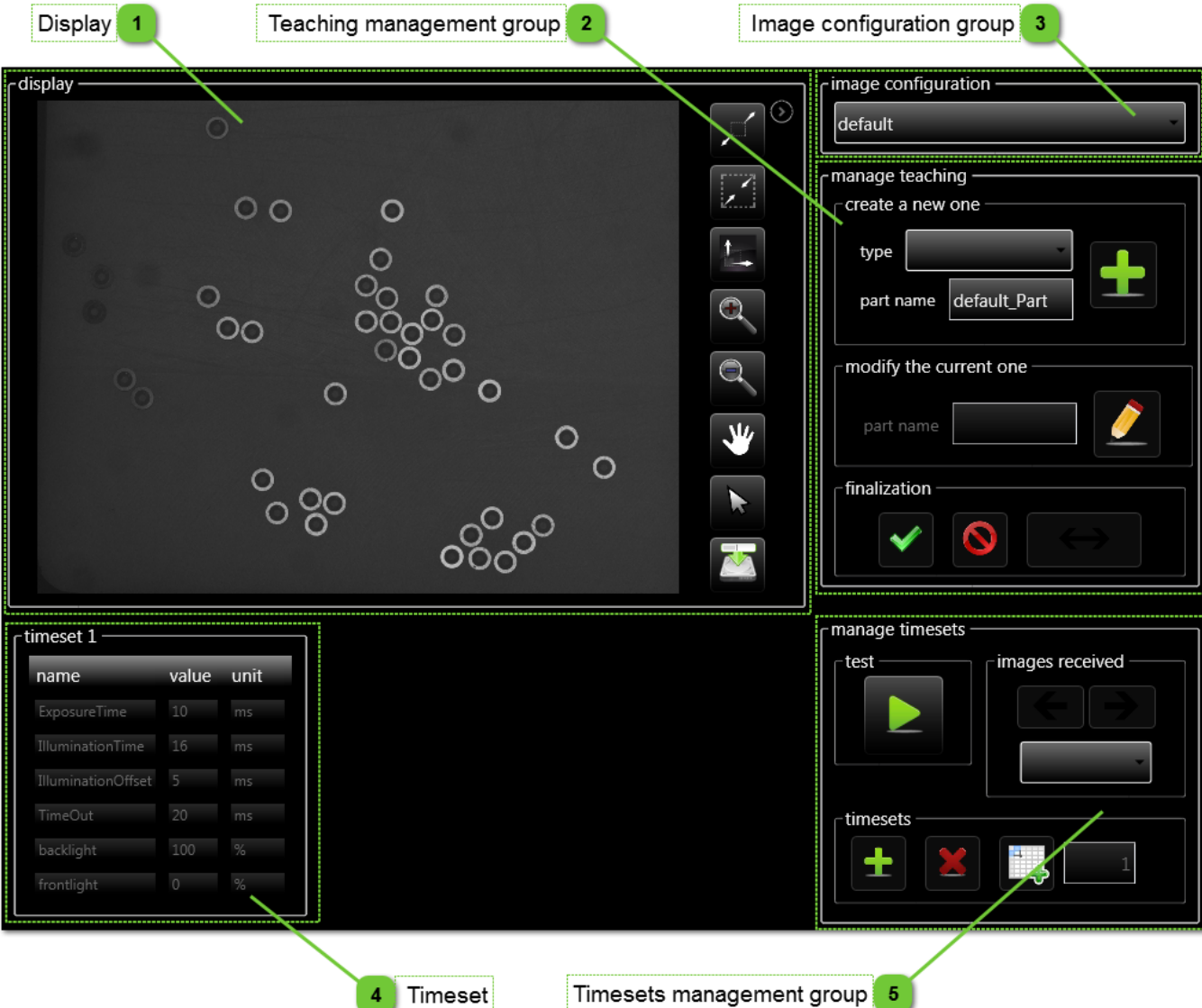
Each teaching is related to one image configuration and needs to have one part name.

The part name is useful for complexe configuration to be able to request a part position depending of the name of the part. This parameter is visible only if there is many image configurations and with Integrator level access.



### NOTE:

*All this page can be used only with Technician or higher level access.*

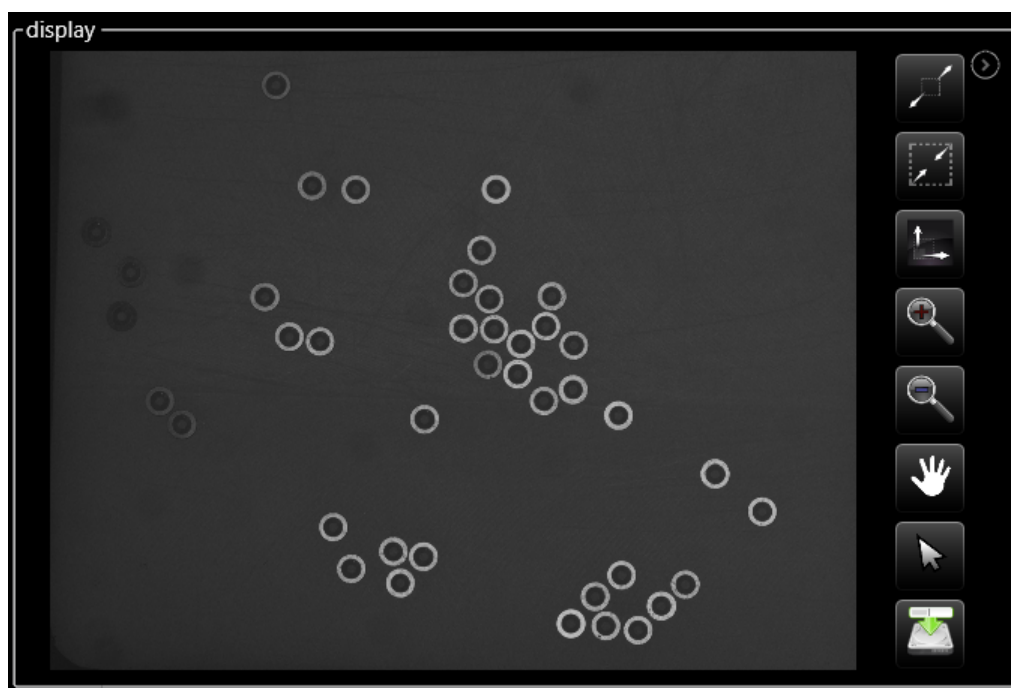


The screenshot shows the Teaching HMI interface with the following components labeled:

- 1 Display:** A large central area showing a dark background with several white circles representing detected parts. To the right of the display is a vertical toolbar with icons for zooming, panning, and other functions.
- 2 Teaching management group:** A panel on the right side containing controls for managing teaching, including a 'create a new one' section with 'type' and 'part name' fields, and a 'modify the current one' section with a 'part name' field.
- 3 Image configuration group:** A panel on the right side containing a dropdown menu for selecting an image configuration (currently set to 'default').
- 4 Timeset:** A table at the bottom left showing parameters for 'timeset 1':
 

name	value	unit
ExposureTime	10	ms
IlluminationTime	16	ms
IlluminationOffset	5	ms
TimeOut	20	ms
backlight	100	%
frontlight	0	%
- 5 Timesets management group:** A panel at the bottom right containing a 'test' button (green play icon), 'images received' controls (left and right arrows), and a 'timesets' section with a '+' button, a '-' button, a grid icon, and a numeric input field set to '1'.

## 1 Display



This zone displays the images received from AsyView.

## 2 Teaching management group

The interface for the 'manage teaching' group is divided into three main sections:

- create a new one:** Contains a 'type' dropdown menu, a 'part name' text box (pre-filled with 'default\_Part'), and a green '+' button.
- modify the current one:** Contains a 'part name' text box and a yellow pencil icon button.
- finalization:** Contains three buttons: a green checkmark (apply), a red circle with a slash (abort), and a double-headed arrow (reset).

This group allows to create or modify and finalize the teaching.

Create :

Type combobox allows to select between "control" and "localisation".

The part name textbox is displayed only with Integrator level access. This parameter is important only for complexe configurations.

The create button is enable only if a type is selected. The button will open the teaching window.

Modify :

The part name textbox is displayed only with Integrator level access. This parameter is important only for complexe configurations.

The modify button is enable only if a teaching has already be done (teached before or recipe loaded). The button will open the teaching window.

Finalization :

The apply button allows to validate the teaching and will close the teaching window.

The abort button will cancel all modifications done since the last opening and will close the teaching window.



### NOTE:

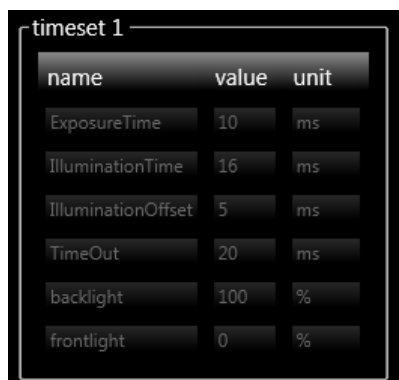
*The explanation of the teaching is explained in the SmartSight user guide.*

## 3 Image configuration group

The 'image configuration' group consists of a single dropdown menu currently showing 'default'.

This group allows to select the image configuration to use to edit or create teaching.

## 4 Timeset



The timeset display gives access to the timeset parameters :




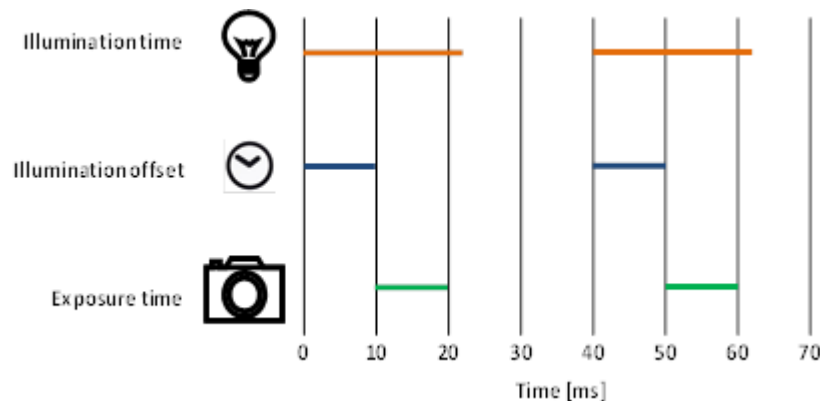
Parameter	Description	Unit	Level
<b>exposure time</b>	Exposure time is the real acquisition time of the camera to take the picture.	ms	
<b>illumination time</b>	Illumination time is the time in which the light is on. <b>NOTE:</b> <i>The illumination time must be longer than the exposure time. In fact, in order to ensure that the lightning (DOAL or backlight) is at full power when the photo is taken, it is necessary to provide an offset. Similarly, it is preferable to switch off the lightning one to two milliseconds after image acquisition is complete.</i>	ms	
<b>illumination offset</b>	Illumination offset is the time before to take the picture (see diagram below). <b>NOTE:</b> <i>The standard value is 5 ms.</i>	ms	
<b>timeout</b>	The timeout is the minimum time between two acquisitions (between end of illumination time and start of the next one). This time is useful to prevent the case of camera is not ready to start acquisition after an older acquisition (because camera do not communicate when the acquisition is finished). <b>NOTE:</b> <i>The standard value is 20 ms.</i>	ms	
<b>Backlight</b>	Backlight represent the light intensity of the backlight (if exists). <b>NOTE:</b> <i>The value can only be 0 or 100%, adjust the exposure time to vary the intensity on the image.</i>	%	
<b>Frontlight</b>	Frontlight represent the light intensity of the frontlight (if exists).	%	

Diagram :

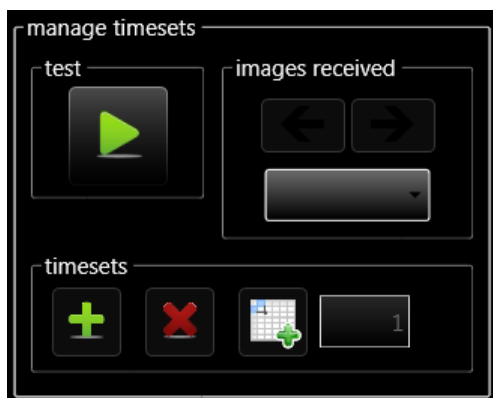


**NOTE:**

To validate a parameter, press **ENTER** button on your keyboard or select another parameter in the timeset.

5

## Timesets management group



This group allows to manage the timesets. A timeset is a set of parameters which allows to acquire an image. Thereby, if several images are needed, add a new timeset.

The test button allows to test the timesets.

The combobox and the arrows buttons allows to choose which image have to be displayed. A click on the timeset will also display the related image.

The "add timeset" button allows to add a new timeset after the last timeset.

The "remove timeset" button allows to delete the selected timeset.

The "insert timeset" button allows to insert a timeset in the given position number.



**NOTE:**

The "add", "remove" and "insert" timeset functions are enable only when teaching is opened.

## Process calibration

Process calibration page gives access to the calibration of the process (robot). This calibration allows to reference the field of view of the camera to the robot workspace.



The goal of this calibration is to give the parts positions directly in the workspace of the robot.

To do that, the system needs 4 positions measured with the camera and the same 4 positions "measured" by the process (the positions of the robot for example).

Then the system can be calibrated.



### NOTE:

All this page can be used only with Technician level access or higher.



The screenshot shows the Process Calibration HMI interface. It includes a main display area (1) showing a camera view with green crosshairs and points. To the right is the 'Acquire image group' (2) section with a play button. Further right is the 'Image configuration group' (3) with a dropdown menu. Below the main display is the 'Define positions group' (4) with a table of results and point pairs. To the right of the table is the 'Tools for images' (5) section with various icons. At the bottom right is the 'Calibration group' (6) showing the state and RMS Error.

**1 Display**

**2 Acquire image group**

**3 Image configuration group**

**4 Define positions group**

**5 Tools for images**

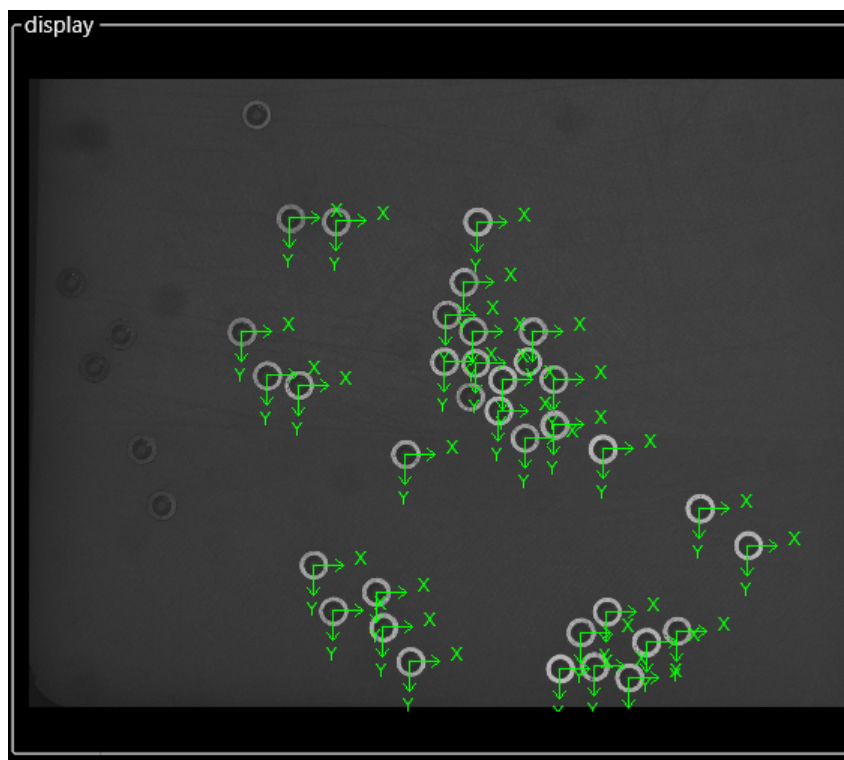
**6 Calibration group**

results		
id	x	y
68	1032.57	680.884
69	1127.15	728.323
70	1043.42	1160.37
71	1212.89	1107.90
72	695.799	1079.25

point pairs				
id	vision X	vision Y	process X	process Y
0	301.8846	340.1263	0	0
1	307.4158	1689.088	1	0
2	2189.058	335.4708	0	1
3	2192.580	1685.487	1	1

Calibration results:  
state: **calibrated**  
RMS Error: 0.011292

## 1 Display



This zone displays the images received with results.

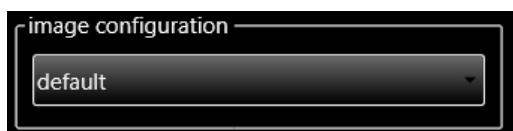
## 2 Acquire image group



This group and its button allows to execute the image analysis to find some calibration positions.

The results of this analysis will be displayed in the display and in the results list.

## 3 Image configuration group



This group allows to select the image configuration to calibrate.



## 4 Define positions group

results			point pairs				
id	x	y	id	vision X	vision Y	process X	process Y
68	1032.57	680.884	0	301.8846	340.1263	0	0
69	1127.15	728.323	1	307.4158	1689.088	1	0
70	1043.42	1160.37	2	2189.058	335.4708	0	1
71	1212.89	1107.90	3	2192.580	1685.487	1	1
72	695.799	1079.25					

This group allows to select 4 positions in the list of positions measured by the camera and to place it in the corresponding points pair.


First select a vision result and its corresponding points pair ID before to be able to transfer it.

The process positions have to be entered manually depending on the position of the process (robot positions for example).

When the four positions are filled, the system can be calibrated.

### IMPORTANT !



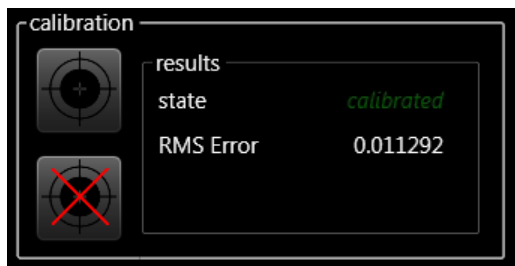
The  icon indicates that the position in the column is the calibrated value. Uncalibrate and execute a new analysis to have uncalibrated values. The calibrate function needs the uncalibrated values.

## 5 Tools for images



This zone gives access to options to navigate in the image (zoom in/out, move, fit image, etc).

## 6 Calibration group



The group gives access to the calibration execution and to the result of the calibration.

The uncalibrate button allows to uncalibrate the system to have uncalibrated values returned by the vision system. The system needs uncalibrated values to calibrate correctly.



### NOTE:

*The calibration result RMS Error has to be closer to 0.*

## Asycube

The pages of Asycube are already described in [Asycube part](#).

## Process

This chapter describes pages related to Process.



## Pages list

Home .....	135
Programming .....	137
Statistics .....	142

## Controls disabled

Some pages, tabs, buttons, textboxes, etc can be disabled depending of the following parameters :

- Process connection state (disabled when not connected).
- The function is not possible for the moment (another function is processing).
- The level access is not correct to access to the parameter.

## Controls not visible

Some pages, tabs, buttons, textboxes, etc can be not visible depending of following parameters :

- The Process does not have this element.
- Option is not valid for your product.
- The level access is not correct to access to the parameter.

## Home

Home page gives access to the parameters of all programs of the process.

**dynamic data**

execute apply refresh

name	value
p7_positions_nb_x[nb]	5
p7_positions_nb_y[nb]	6
p0_tool[n°]	1
p1_high_speed[%]	100
p2_approach_pick_speed[%]	1
p3_pick_speed[%]	1
p4_after_pick_speed[%]	1
p6_approach_place_speed[%]	5
p7_place_speed[%]	10
p0_part_height[mm]	3
p1_trajectory_pick_height[mm]	7.0
p2_approach_pick_height[mm]	4.0
p4_after_pick_height[mm]	7.0
p3_pick_height[mm]	-1
p5_trajectory_place_height[mm]	12.0
p6_approach_place_height[mm]	2
p7_place_height[mm]	-1
p7_blowing_time[ms]	5

1 List of programs

2 Apply button

3 Refresh button

4 Table of program parameters

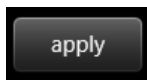
1

### List of programs



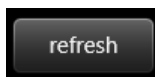
This dropdown list allows to access to the list of all of the programs created from the "programming" tab. Selecting another program will change the parameters displayed in the table.

## 2 Apply button



This button applies all the modifications made to the table.

## 3 Refresh button



This button refresh the content of the table. The previous parameters saved on the process will be loaded.

## 4 Table of program parameters

name	value
p7_positions_nb_x_[nb]	5
p7_positions_nb_y_[nb]	6
p0_tool_[n°]	1
p1_high_speed_[%]	100
p2_approach_pick_speed_[%]	1
p3_pick_speed_[%]	1
p4_after_pick_speed_[%]	1
p6_approach_place_speed_[%]	5
p7_place_speed_[%]	10
p0_part_height_[mm]	3
p1_trajectory_pick_height_[mm]	7.0
p2_approach_pick_height_[mm]	4.0
p4_after_pick_height_[mm]	7.0
p3_pick_height_[mm]	-1
p5_trajectory_place_height_[mm]	12.0
p6_approach_place_height_[mm]	2
p7_place_height_[mm]	-1
p7_blowing_time_[ms]	5

This table contains all the parameters as well as the values associated with them.



### NOTE:

*When a value is edited, the "apply" button must be pressed so that the modifications are registered.*

## Programming

Programming page gives access to the programs of the process. The programs are written in ARL language (see ARL language description in the specific documentation).



### NOTE:

All this page can be used only with Integrator level access.



### Reference:

For more information about the programming of the process in ARL language, see *Asyrl\_ROBOT\_Programming\_Guide* and *Asyrl\_XFEED\_Programming\_Guide*.

1 Edit program
Manage programs
2
3 Table of program parameters

**program**

execute apply refresh

```

1 (**Description : Execute Pick'n'Place**)
2 (**Author : MaL**)
3 (**Date : 18.09.2015**)
4 (**Version: 1.0**)
5
6 (*---Slow Speed---*)
7 SlowSpeed:=LoadData '1_Slow_Speed_[T/F]';
8 IF SlowSpeed=True THEN
9   SetSlowSpeed True;
10 ELSE
11   SetSlowSpeed False;
12 END_IF
13
14 (*---Dynamic Variables Definition---*)
15 WorkTool:= LoadData 'p0_tool_[n]';
16 NoTool:=0;
17
18 (*---Blend Definition---*)
19 TrajectoryBlend:= 0.5;
20 TrajectoryBlend:= TrajectoryBlend/1000;
21 NoBlend:=0;
22
23 (*---Speed Definition---*)
24 HighSpeed:= LoadData 'p1_high_speed_[%]';
25 HighSpeed:= HighSpeed/100;
26 ApproachPickSpeed:= LoadData 'p2_approach_pick_speed_[%]';
27 ApproachPickSpeed:= ApproachPickSpeed/100;
28 PickSpeed:= LoadData 'p3_pick_speed_[%]';
29 PickSpeed:= PickSpeed/100;
30 AfterPickSpeed:= LoadData 'p4_after_pick_speed_[%]';
31 AfterPickSpeed:= AfterPickSpeed/100;

```

zoom + -

**advanced program handling**

add remove

**dynamic data**

remove unused variables

name	value	shortcut
p7_positions_nb_x_[nb]	5	None
p7_positions_nb_y_[nb]	6	None
p0_tool_[n]	1	None
p1_high_speed_[%]	100	None
p2_approach_pick_speed_[%]	1	None
p3_pick_speed_[%]	1	None
p4_after_pick_speed_[%]	1	None
p6_approach_place_speed_[%]	5	None
p7_place_speed_[%]	10	None
p0_part_height_[mm]	3	None
p1_trajectory_pick_height_[mm]	7.0	None
p2_approach_pick_height_[mm]	4.0	None
p4_after_pick_height_[mm]	7.0	None
p3_pick_height_[mm]	-1	None
p5_trajectory_place_height_[mm]	12.0	None
p6_approach_place_height_[mm]	2	None
p7_place_height_[mm]	-1	None
p7_blowing_time_[ms]	5	None
p3_before_pick_waiting_time_[ms]	50	None

## 1 Edit program



This zone gives access to the programs.

- The dropdown list contains all the programs.
- The apply button applies all the modifications made to the program and to the table of parameters.
- The refresh button refresh the content of the program and the table of parameters.
- The program zone displays the selected program in the dropdown list.
- The zoom buttons (+ and -) allows to zoom in and out on the program code.



### IMPORTANT !

*The apply button will only apply the modifications but does not save them permanently. See chapter on Recipes for such.*



### IMPORTANT !

*Applying the edition/modification can occur only when no execution is running. Press the "stop" button before making any modification.*

## 2 Manage programs



The zone gives access to the management of the programs.

- The text box allows to enter a name for a new program.
- The add button allows to add a new program with the given name.



### NOTE:

*If the name of the new program starts with "\_", a shortcut to this program will be displayed in [the shortcut part of the banner](#).*

- The remove button removes the selected program permanently.



### IMPORTANT !

*Programs names corresponding to any OMAC state are reserved. Any modification or creation of one of these programs might rise undesired machine behavior.*



### 3 Table of program parameters

dynamic data

remove unused variables

name	value	shortcut
p7_positions_nb_x[nb]	5	None
p7_positions_nb_y[nb]	6	None
p0_tool[n°]	1	None
p1_high_speed[%]	100	None
p2_approach_pick_speed[%]	1	None
p3_pick_speed[%]	1	None
p4_after_pick_speed[%]	1	None
p6_approach_place_speed[%]	5	None
p7_place_speed[%]	10	None
p0_part_height[mm]	3	None
p1_trajectory_pick_height[mm]	7.0	None
p2_approach_pick_height[mm]	4.0	None
p4_after_pick_height[mm]	7.0	None
p3_pick_height[mm]	-1	None
p5_trajectory_place_height[mm]	12.0	None
p6_approach_place_height[mm]	2	None
p7_place_height[mm]	-1	None
p7_blowing_time[ms]	5	None
p3_before_pick_waiting_time[ms]	50	None

This table contains the name of the dynamic variables as well as their values.

To add a new dynamic variable, use the LoadData command in the program like this : `MyVariable:=LoadData 'MyVariableDisplayName';` Then press the apply button. The variable will be automatically created and added to the list.

`MyVariable:= LoadData 'MyVariableDisplayName';` → myvariablename True None




#### Reference:

For more explanation, see Asyri\_XFEED\_Programming\_Guide.

The shortcut column in the table allows to create a shortcut in [the shortcut part of the banner](#). To set the variable, double-click on the value (None for example), select boolean and click outside of this cell. The shortcut is now visible.



 <b>asyri!</b> <small>Experts in Flexible Feeding Systems</small>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Programming	Document version : D	31.03.2017


**NOTE:**

*The creation of shortcuts is only possible for boolean variables.*

The remove unused variables button is useful to remove old parameters which are not used anymore in the selected program.


**NOTE:**

*The unused parameters are displayed in a different color as the used parameters.*

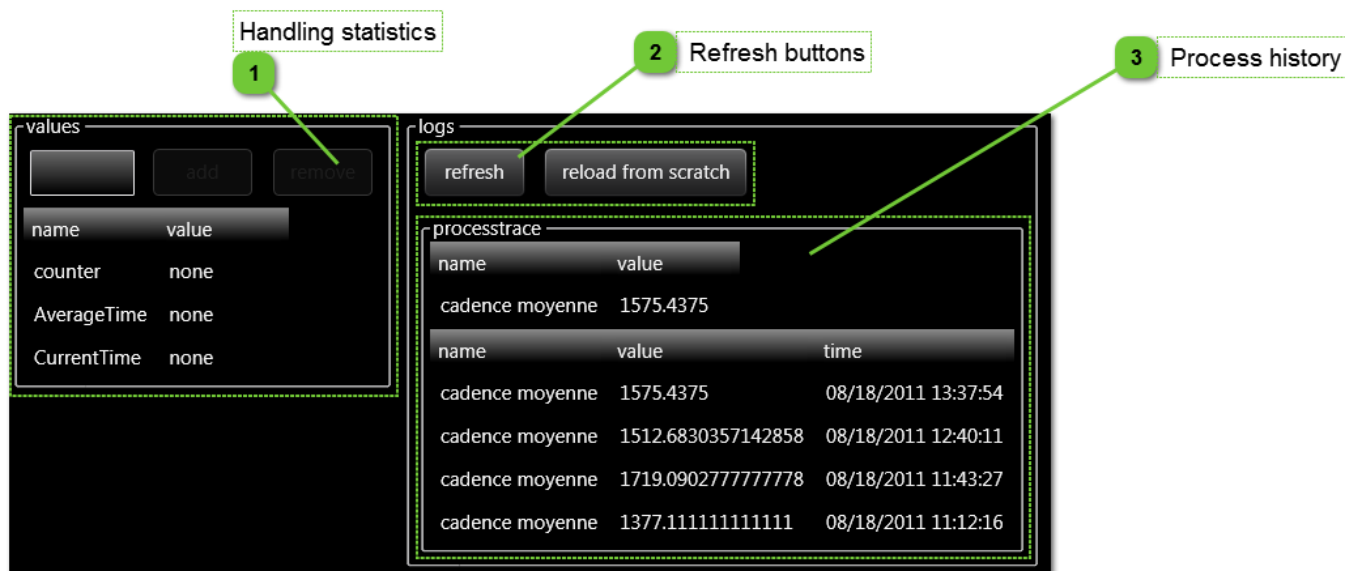
## Statistics

Statistics page gives access to the statistics part of the process.



### NOTE:

All this page can be used only with Integrator level access.



The screenshot shows the Statistics page interface. It is divided into two main sections: 'values' on the left and 'logs' on the right. The 'values' section contains a table with columns 'name' and 'value', and buttons 'add' and 'remove'. The 'logs' section contains a 'refresh' button, a 'reload from scratch' button, and a 'processtrace' table. The 'processtrace' table has columns 'name', 'value', and 'time'. Three green callout boxes with numbers 1, 2, and 3 point to specific elements: 1 points to the 'values' table, 2 points to the 'refresh' and 'reload from scratch' buttons, and 3 points to the 'processtrace' table.

1

### Handling statistics



The screenshot shows the 'values' section of the Statistics page. It features a table with two columns: 'name' and 'value'. The table contains the following data:

name	value
counter	none
AverageTime	none
CurrentTime	none

Below the table are two buttons: 'add' and 'remove'.

Add or delete statistics in this zone.

Enter the name of one of the variables defined in the ARL program and click on "add" button to add it in the list.

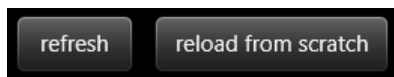


### NOTE:

If the name of the variable begins with "\_", during the next production process, the value of this variable will be displayed on the header screen ([statistics tab](#)).

2

### Refresh buttons



The screenshot shows two buttons: 'refresh' and 'reload from scratch'.

Those buttons allow to refresh the content of the table :

- The "Refresh" button is used to refresh the average rate obtained in the table.
- The "Reload from scratch" button is used to refresh the content of the list.

### 3 Process history

processtrace		
name	value	
cadence moyenne	1575.4375	
name	value	time
cadence moyenne	1575.4375	08/18/2011 13:37:54
cadence moyenne	1512.6830357142858	08/18/2011 12:40:11
cadence moyenne	1719.0902777777778	08/18/2011 11:43:27
cadence moyenne	1377.1111111111111	08/18/2011 11:12:16

- The first table in this history area indicates the last average rate.
- The second table indicates the complete history of all rates since the machine was commissioned.

## Robot

This chapter describes pages related to the Robot.



### Pages list

Home .....	145
Advanced.....	149
Collection .....	152
Frames .....	154
Tools .....	160
Points.....	163
Settings.....	165
Display settings .....	169

### Controls disabled

Some pages, tabs, buttons, textboxes, etc can be disabled depending of following parameters :

- Robot connection state (disabled when not connected).
- The function is not possible for the moment (another function is processing).
- The level access is not correct to access to the parameter.

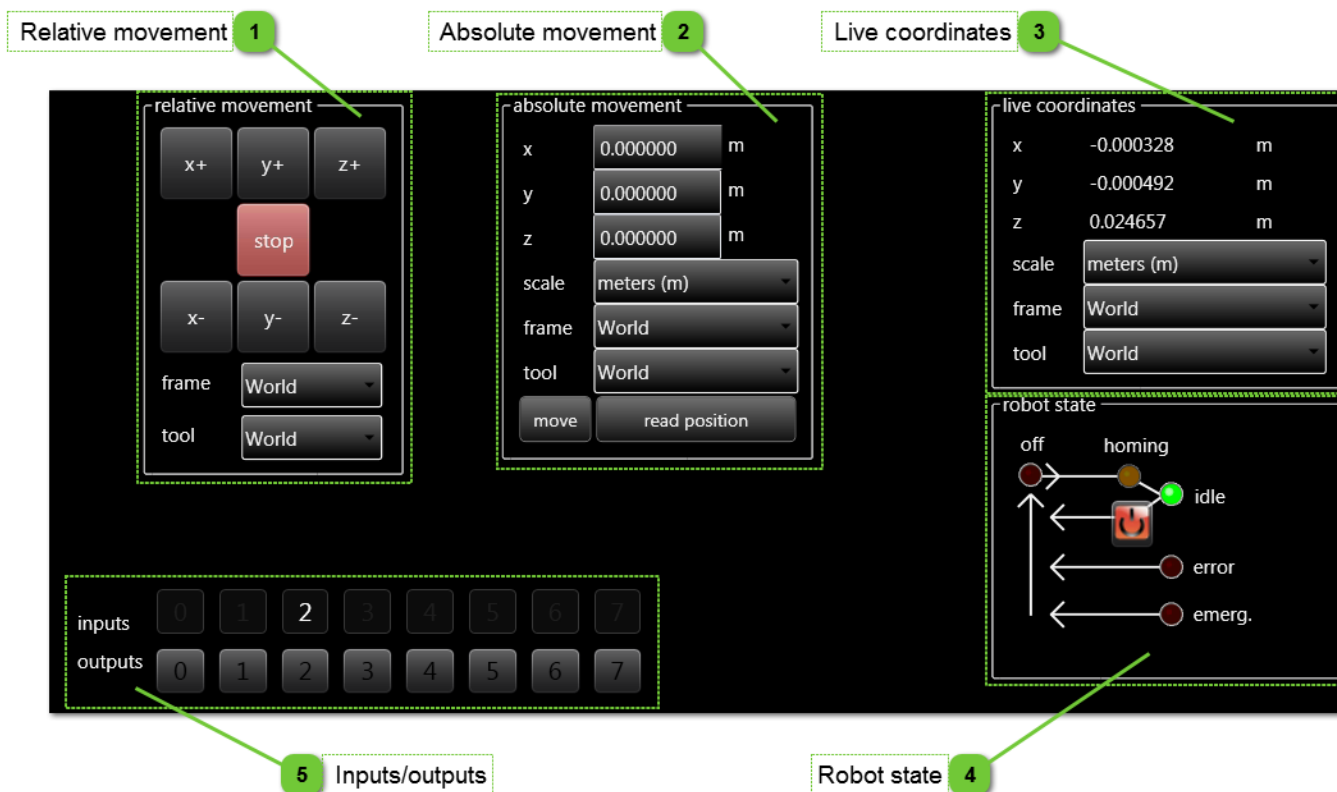
### Controls not visible

Some pages, tabs, buttons, textboxes, etc can be not visible depending of following parameters :

- The Robot does not have this element.
- The option is not valid for your product.
- The level access is not correct to access to the parameter.

## Home

Home page gives access to all standard functions of the robot (relative move, absolute move, inputs/outputs, state management and position indications).



### 1 Relative movement



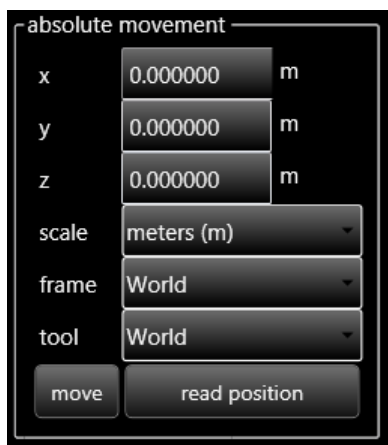
The buttons in this zone are used to move the robot relative to the current position in a given frame and using a specified tool.



#### NOTE:

*Press and hold the button to perform a continuous mouvement.*

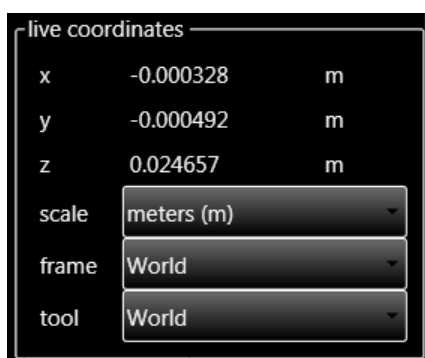
## 2 Absolute movement



The buttons in this zone are used to move the robot to an absolute position in a given frame and using a specified tool.

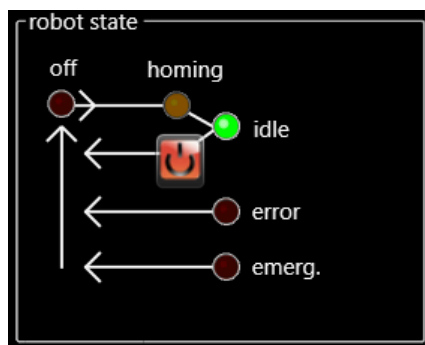
The "read position" button is used to get the current position in the selected frame and with the selected tool.

## 3 Live coordinates



This field indicates the position of the robot in real time. By default, the position is sent in the basic reference (world: frame 0 tool 0, in meters). The dropdown lists make it possible to select which frame and which tool should be used to read the current position of the robot.

## 4 Robot state

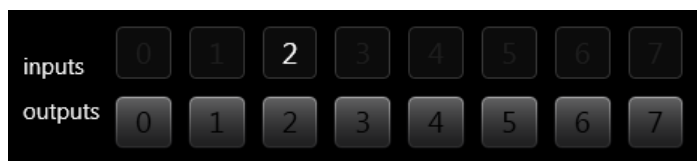


The robot states are described in the following table :

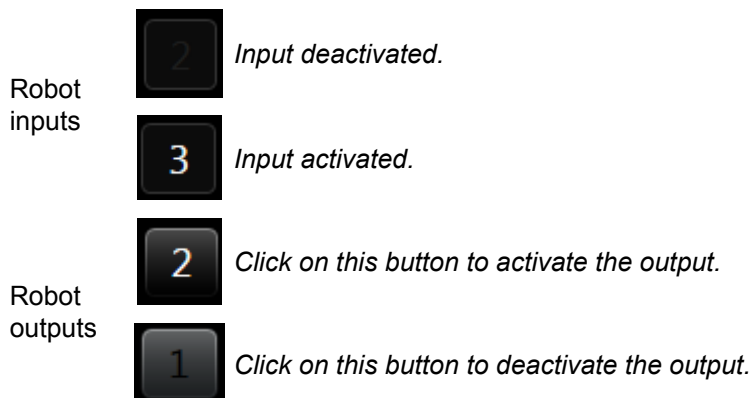
Display	Robot state	Next action
	The robot is in the "off" state.	Press on the button to change to the "homing" then "idle" state.
	The robot is in the "homing" state.	Wait...
	The robot is in the "idle" state (the robot is ready to start a program).	Press on the button to switch to the "off" state.
	The robot is in the "error" state.	Press the button to clear the error and switch to the "off" state.
	The robot is in the "emergency" state.	Release the emergency stop button then press the button to switch to the "idle" state.



## 5 Inputs/outputs



This zone gives access to the inputs/outputs of the robot.



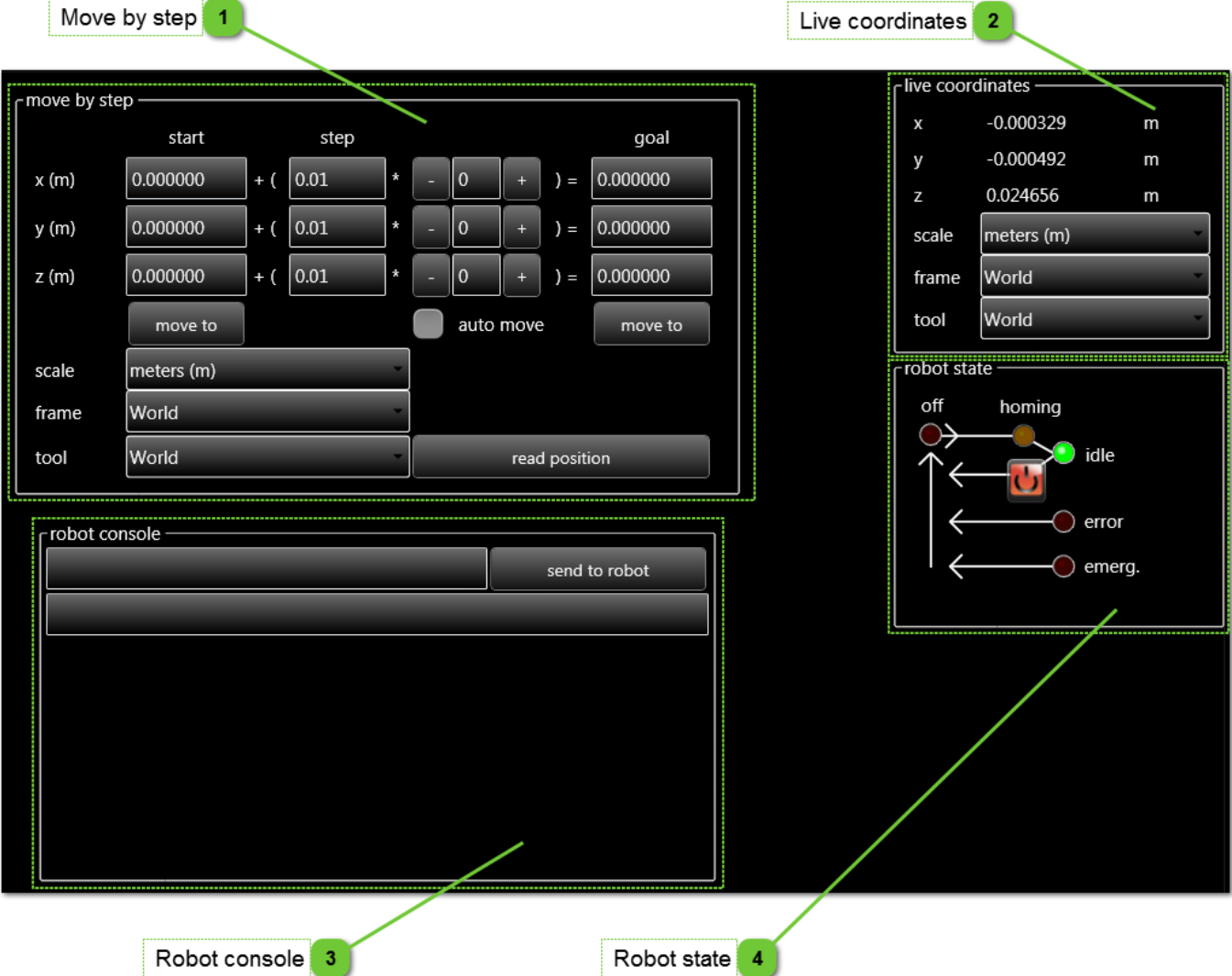
## Advanced

Advanced page gives access to advanced usages of the robot (move by steps, send commands with a console).



### NOTE:

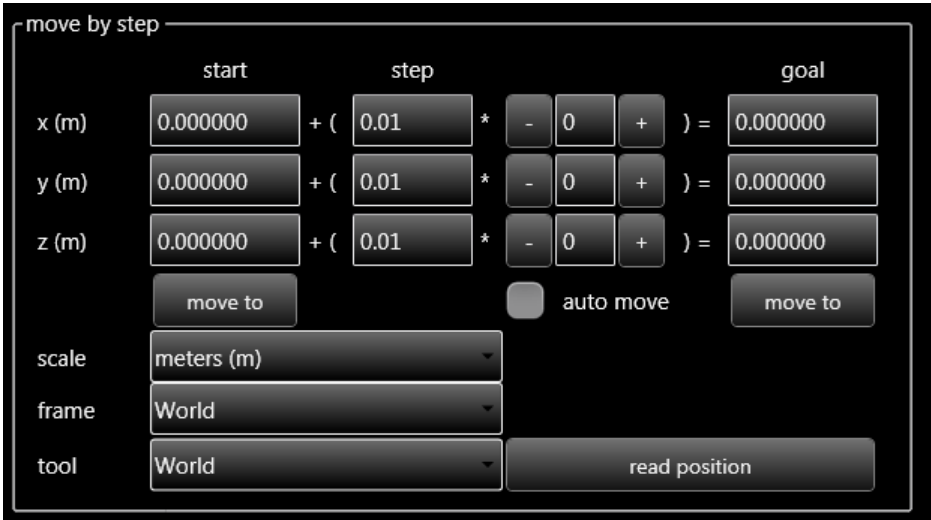
All this page can be used only with Technician level access.



The screenshot shows the Advanced HMI interface with four numbered callouts:

- 1 Move by step:** Points to the 'move by step' section, which includes input fields for x, y, and z coordinates (start, step, goal), a 'move to' button, an 'auto move' checkbox, and dropdown menus for 'scale' (meters (m)), 'frame' (World), and 'tool' (World). A 'read position' button is also present.
- 2 Live coordinates:** Points to the 'live coordinates' section, which displays real-time x, y, and z values (e.g., x: -0.000329 m, y: -0.000492 m, z: 0.024656 m), along with dropdown menus for 'scale' (meters (m)), 'frame' (World), and 'tool' (World).
- 3 Robot console:** Points to the 'robot console' section, which features a text input field and a 'send to robot' button.
- 4 Robot state:** Points to the 'robot state' section, which shows a state transition diagram with states: off, homing, idle (highlighted with a green dot), error, and emerg. Arrows indicate transitions between these states.

## 1 Move by step



	start		step		goal
x (m)	0.000000	+	( 0.01 )	* - 0 + ) =	0.000000
y (m)	0.000000	+	( 0.01 )	* - 0 + ) =	0.000000
z (m)	0.000000	+	( 0.01 )	* - 0 + ) =	0.000000

☐ auto move

scale:

frame:

tool:

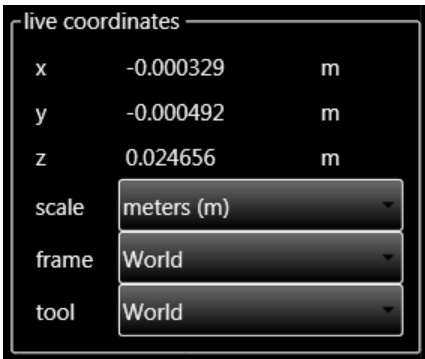
The buttons in this zone make it possible to move the robot in a step by step manner. The size of the step and the starting setpoint must be specified.



### NOTE:

The "auto move" box is used to move the robot each time the "+" or "-" buttons are pressed without having to press the "move to" button.

## 2 Live coordinates



x	-0.000329	m
y	-0.000492	m
z	0.024656	m

scale:

frame:

tool:

This field indicates the position of the robot in real time. By default, the position is sent in the basic reference (world: frame 0 tool 0, in meters). The dropdown lists make it possible to select which frame and which tool should be used to read the current position of the robot.

### 3 Robot console



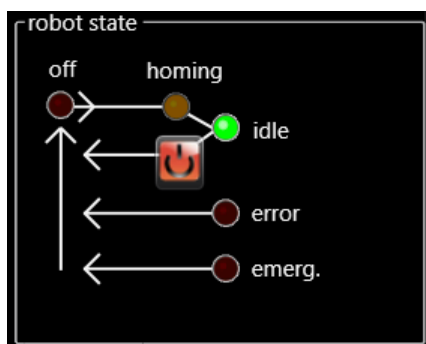
The console is used to send a TCP command directly to the robot from the text zone. The response sent by the robot is transcribed in the bottom area.



#### Reference:

For more information about the programming language and TCP/IP communication with the robot, please consult the programming manual supplied with your product.

### 4 Robot state



The robot states are described in the [robot home page description](#).

## Collection

Collection page gives access to the collection of points management tools (import, create, etc).



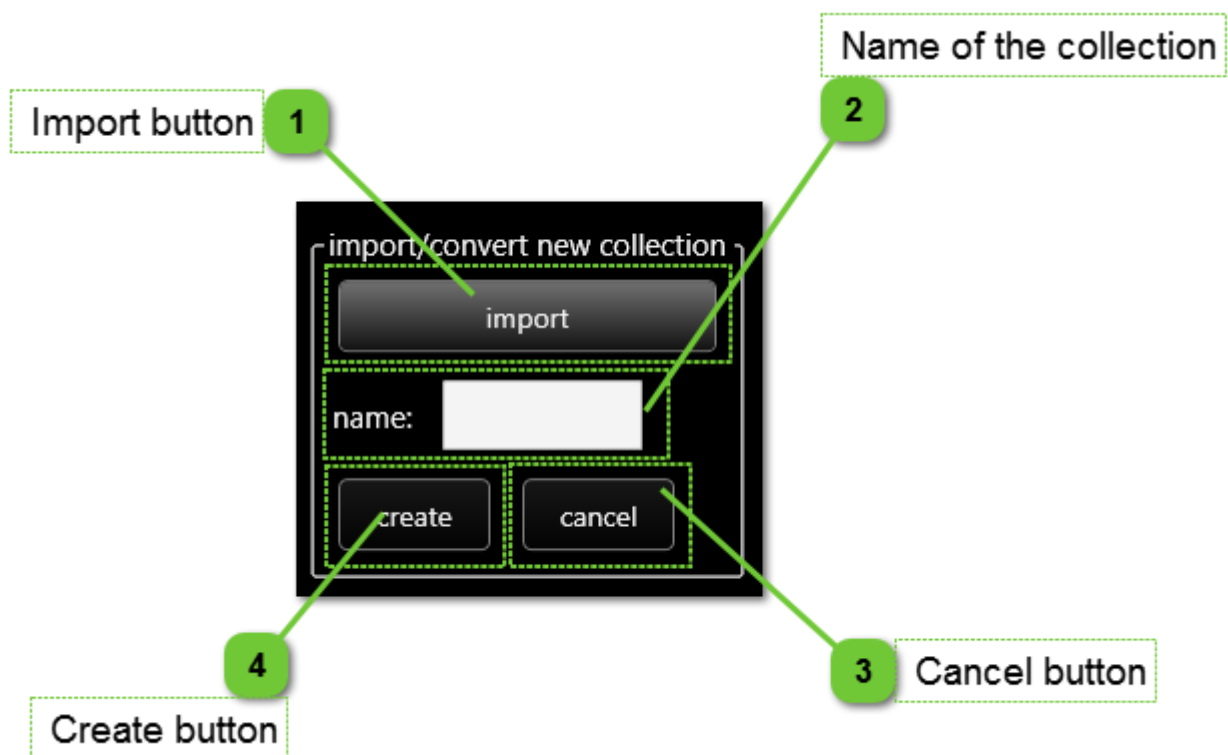
### NOTE:

All this page can be used only with Technician level access.

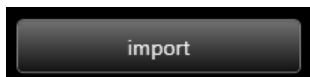


### Reference:

For more information about the programming language specific to using the points files, please consult the programming manual supplied with your product.



### 1 Import button



Click on this button to import a new collection of points



### NOTE:

A collection of points is a text file containing the coordinates of points on each line (X, Y, Z) separated by a space, tab or semicolon.

### 2 Name of the collection




Type the name to be given to the collection of points translated in a format suited to Asyrl robots.



### NOTE:

You must refer to this name in the ARL program in order to obtain the coordinates of a point distinguished by a unique identifier.

 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Collection	Document version : D	31.03.2017

3

## Cancel button

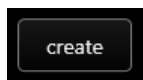
Click on this button to cancel the conversion.



4

## Create button

After having selected a name for your points file, create the file converted into a suitable format by clicking on this button.



## Frames

Frames page gives access to all frames of the robot.



### NOTE:

*Before changing tabs, save your modifications otherwise the changes will be lost.*



### NOTE:

*All this page can be used only with Technician level access.*



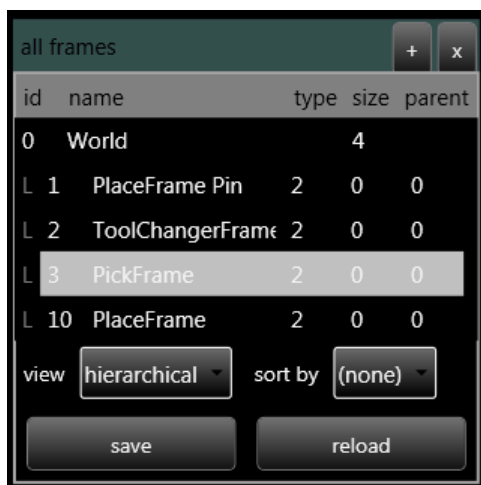
The screenshot shows the 'Frames' page in the AsyriL HMI. It is divided into several sections:

- 1 Manage frames:** A table listing all frames. The 'PickFrame' (id 3) is selected.
 

id	name	type	size	parent
0	World		4	
L 1	PlaceFrame Pin	2	0	0
L 2	ToolChangerFrame	2	0	0
L 3	PickFrame	2	0	0
L 10	PlaceFrame	2	0	0
- 2 Edit frame:** A form for editing the selected 'PickFrame'. It shows configuration points and calibration points.
 

configuration points				calibration points			
id	x	y	z	x	y	z	
0	0.048344	-0.048550	0.001947	0	0	0	move delete
1	0.035978	-0.026861	0.001900	1	0	0	move delete
2	0.017774	-0.065917	0.002015	0	1	0	move delete
3	0.005415	-0.044193	0.001964	1	1	0	move delete
- 3 Frame type description:** A 3D diagram showing the coordinate system (X, Y, Z) and the position of the 'PickFrame' relative to the 'World' frame.
- 4 Robot state:** A state machine diagram showing the robot's current state and possible transitions.
  - States: off, homing, idle, error, emerg.
  - Transitions: off to homing, homing to idle, idle to error, error to emerg, emerg to error, error to off.

## 1 Manage frames



id	name	type	size	parent
0	World		4	
L 1	PlaceFrame Pin	2	0	0
L 2	ToolChangerFrame	2	0	0
L 3	PickFrame	2	0	0
L 10	PlaceFrame	2	0	0

view: hierarchical sort by: (none)

save reload

This zone is used to view all of the frames created, as well as any possible parent.

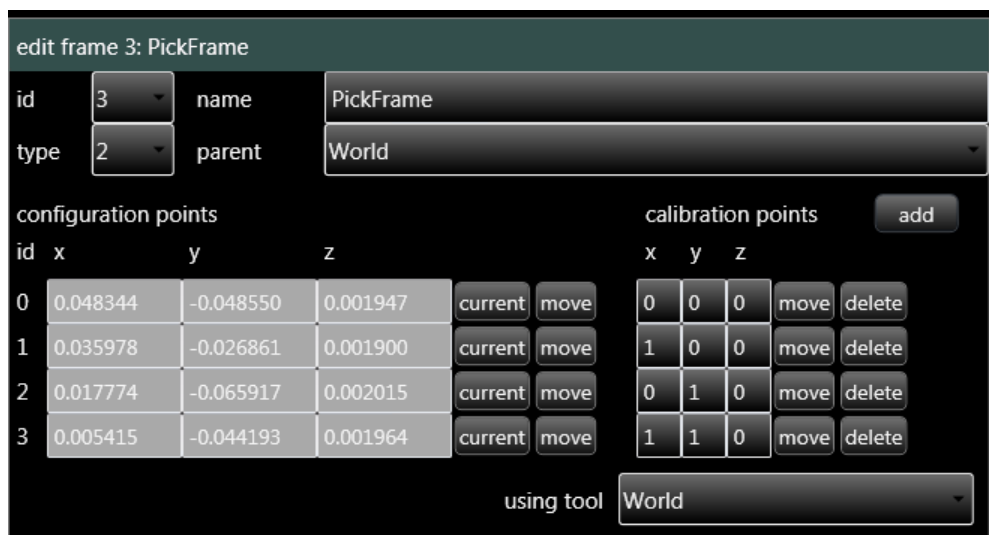
- The "+" button enables a new frame to be created.
- The "x" button enables a frame to be deleted.
- The "save" button enables all of the modifications made in the robot to be saved.

### NOTE:



Until the "save" button is not pressed, it is possible to go back by clicking on the "reload" button which will reload the values contained in the robot.

## 2 Edit frame



edit frame 3: PickFrame

id: 3 name: PickFrame

type: 2 parent: World

configuration points				calibration points			
id	x	y	z	x	y	z	
0	0.048344	-0.048550	0.001947	0	0	0	move delete
1	0.035978	-0.026861	0.001900	1	0	0	move delete
2	0.017774	-0.065917	0.002015	0	1	0	move delete
3	0.005415	-0.044193	0.001964	1	1	0	move delete

using tool: World

Enter all of the information required to create a frame here:

- Identifier from 1 to 99
- Type
- Name [optional]
- Parent, by default: world
- Configuration points
- Calibration points if type 1 or 2 frame

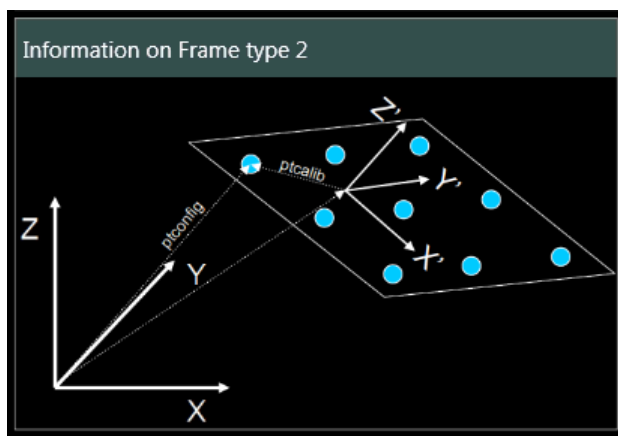


### Reference:

For more information about the types of frames, and their operation, please refer to the programming guide supplied with your equipment.

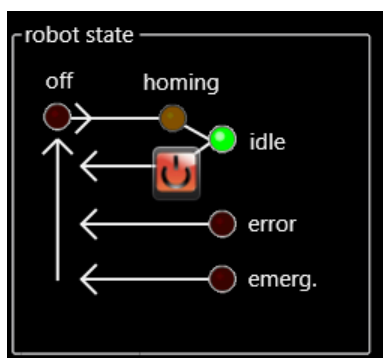


### 3 Frame type description



An explanatory drawing makes it possible to view which type of frame has been used.

### 4 Robot state



The robot states are described in the [robot home page description](#).

## Frame type 3

When a frame of type 3 is selected, the frame page has the aspect below.



### NOTE:

The frame of type 3 is a mesh frame which can be activated only by Asyрил.



### NOTE:

All this page can be used only with Technician level access.

1 Edit frame

2 Node parameters

Frame type 3 representation 3

edit frame 66: mesh

id

name

type

parent

nb points

correction limit

node parameters and values

x

y

z

target position	-0.0455	-0.0105	0
corrected position	-0.045435	-0.010511	0.011085
correction vector	6.5E-05	-1.1E-05	0.011085
correction distance	6.6E-05	<input checked="" type="checkbox"/> teached	

mesh frame graphic

display :

☒ target positions

☐ corrected positions

correction distance :

< 1E-05

< 1.9E-05

< 2.9E-05

< 3.9E-05

< 4.8E-05

< 5.8E-05

< 6.7E-05

> 7.7E-05

outside of correction limit

position :

not teached

## 1 Edit frame

edit frame 66: mesh

id	66	name	mesh
type	3	parent	World
nb points	2241	correction limit	0.0001

Enter all of the information required to create a frame of type 3 here:

- Identifier from 1 to 99
- Type (3)
- Name [optional]
- Parent, by default: world
- Number of points
- Correction limit (used for calibration and the graphic display)



### Reference:

For more information about the types of frames, and their operation, please refer to the programming guide supplied with your equipment.

## 2 Node parameters

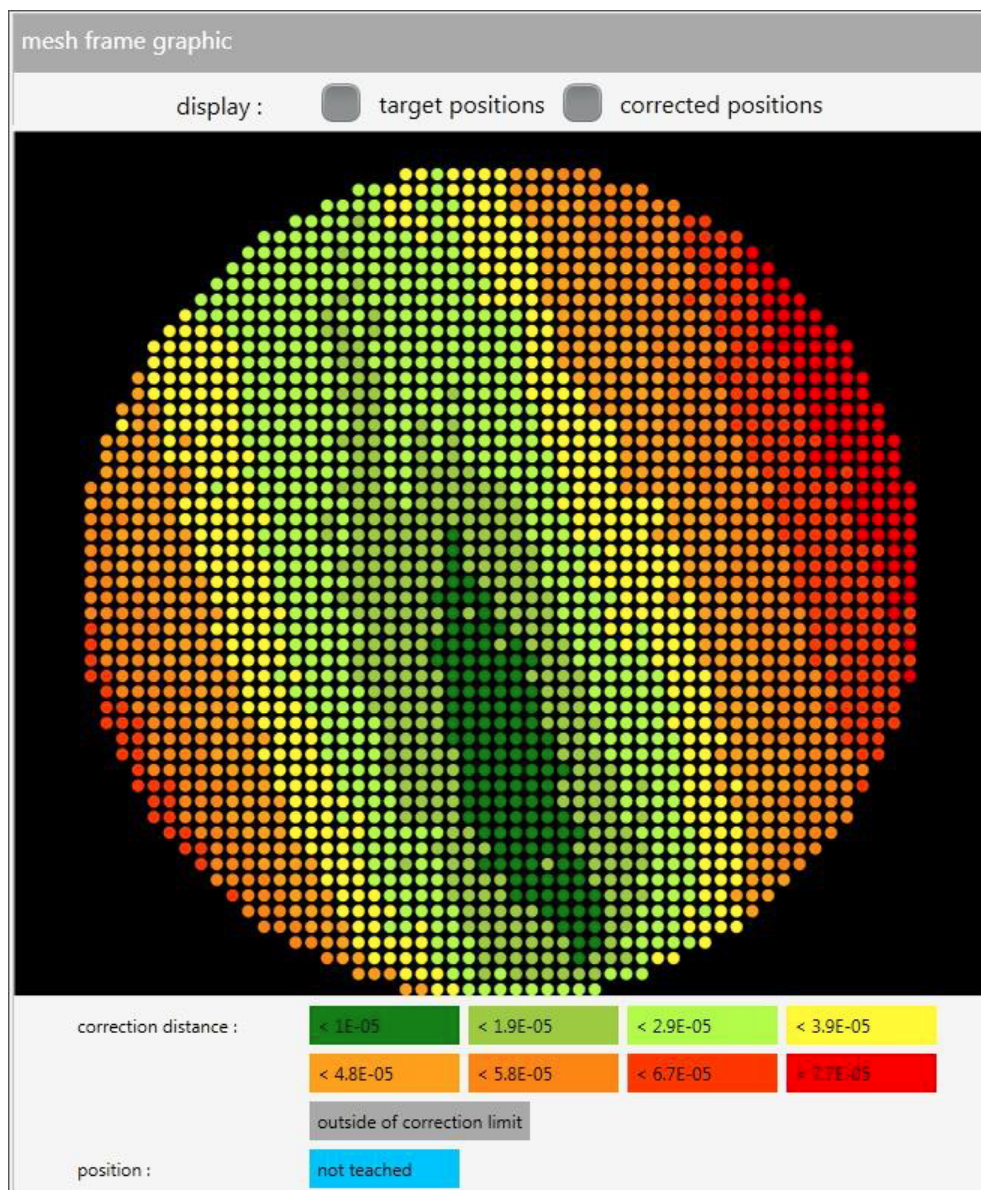
node parameters and values

0	x	y	z
target position	-0.0455	-0.0105	0
corrected position	-0.045435	-0.010511	0.011085
correction vector	6.5E-05	-1.1E-05	0.011085
correction distance	6.6E-05	<input checked="" type="checkbox"/> taught	

This area enables the data for each point of the frame to be read:

- Target position (x, y, z, rz)
- Corrected position (x, y, z, rz)
- Correction vector (x, y, z, rz)
- Distance correction
- The state of the point (programmed or otherwise)

### 3 Frame type 3 representation



This area is used to display a graph of the results obtained during the calibration of this frame. The colours represent the correction distance between the setpoint position and the position given by the robot.

## Tools

Tools page gives access to all tools of the robot.



### NOTE:

Before changing tabs, save your modifications otherwise the changes will be lost.



### NOTE:

All this page can be used only with Technician level access.

Manage tools **1**
Edit tools **2**

all tools

id	name	size	parent
0	World	5	
L 1	CalibTool	0	0
L 91	CalibTool PickFrame	0	0
L 92	CalibTool PlaceFrame	0	0
L 93	CalibTool ToolChanger	0	0
L 11	01--03-22-09-03	0	0

view: hierarchical sort by: (none)

save reload

edit tool 1: Calibration Tool

id	name	parent
1	CalibTool	World

x

0.000000

y

0.000000

z

0.011549

calculate

calculate from two positions:

without tool

0.000000

0.000000

0.000000

current

with tool

0.000000

0.000000

0.000000

current

Robot state **3**

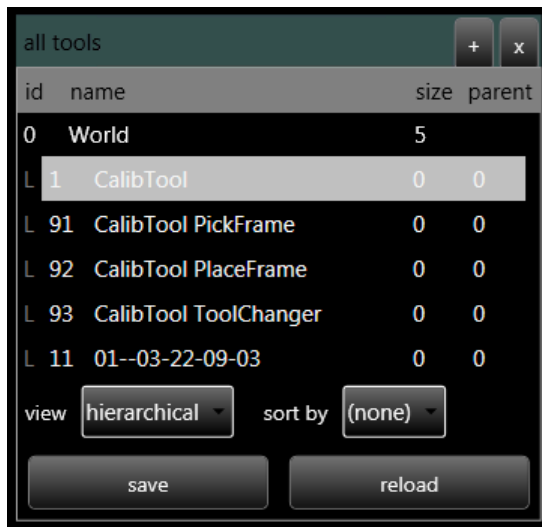
robot state

```

graph LR
    off((off)) --> homing((homing))
    homing --> idle((idle))
    idle --> error((error))
    error --> emerg((emerg.))
    emerg --> off
    idle --> off
    error --> off
    emerg --> off
  
```



## 1 Manage tools



id	name	size	parent
0	World	5	
1	CalibTool	0	0
91	CalibTool PickFrame	0	0
92	CalibTool PlaceFrame	0	0
93	CalibTool ToolChanger	0	0
11	01-03-22-09-03	0	0

view: hierarchical sort by: (none)

save reload

This zone is used to view all of the tools created, as well as any possible parent.

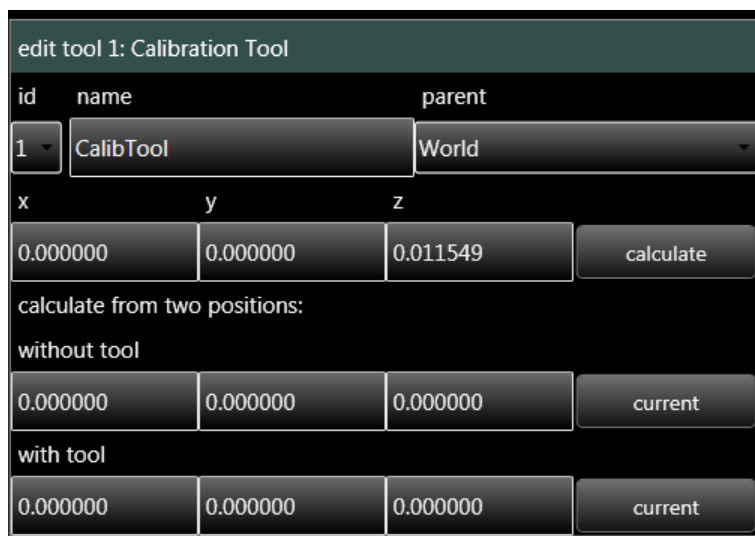
- The "+" button enables a new tool to be created.
- The "x" button enables a tool to be deleted.
- The "save" button enables all of the modifications made in the robot to be saved.

### NOTE:



*Until the "save" button is not pressed, it is possible to go back by clicking on the "reload" button which will reload the values contained in the robot.*

## 2 Edit tools



edit tool 1: Calibration Tool

id	name	parent
1	CalibTool	World

x: 0.000000 y: 0.000000 z: 0.011549 calculate

calculate from two positions:

without tool

0.000000	0.000000	0.000000	current
----------	----------	----------	---------

with tool

0.000000	0.000000	0.000000	current
----------	----------	----------	---------

Enter all of the information required to create a tool here:

- Identifier from 1 to 99
- Name [optional]
- Parent, by default: world
- Tool lengths (x,y,z)



### NOTE:

*You can insert the current position of the robot with and without the tool then automatically calculate the difference for X, Y and Z.*

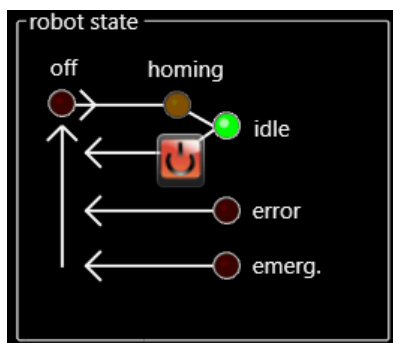


### NOTE:

*The X and Y values are only needed for special tools with decentered tool. Most of tools are concentric and need to have X=0 and Y=0.*

### 3

## Robot state



The robot states are described in the [robot home page description](#).



## Points

Points page gives access to all points of the robot.



If you are using a large number of points, consider using a collection of points that can be imported in the form of a text file containing the coordinates of points on each line (X, Y, Z) separated by a space, tab or semicolon.



### NOTE:

*Before changing tabs, save your modifications otherwise the changes will be lost.*



### NOTE:

*All this page can be used only with Technician level access.*

Manage points **1**
Edit point **2**

all points

id	name	size	parent
0	World	6	
L 3	OutOfVision (World WorkTool 2)	0	0
L 2	Trash (World WorkTool 2)	0	0
L 1	TrashHigh (World WorkTool 2)	0	0
L 4	OverAsyCube( Pick Frame Wor	0	0
L 5	OverBulk (PickFrame WorkTool	0	0
L 6	KamerPunkt	0	0

view hierarchical sort by (none)

save reload

edit point 3: OutOfVision (World WorkTool 2)

id	name	parent
3	OutOfVision (World WorkTool 2)	World

x y z

0.011222 -0.017183 0.015854 current move

frame World tool World

robot state

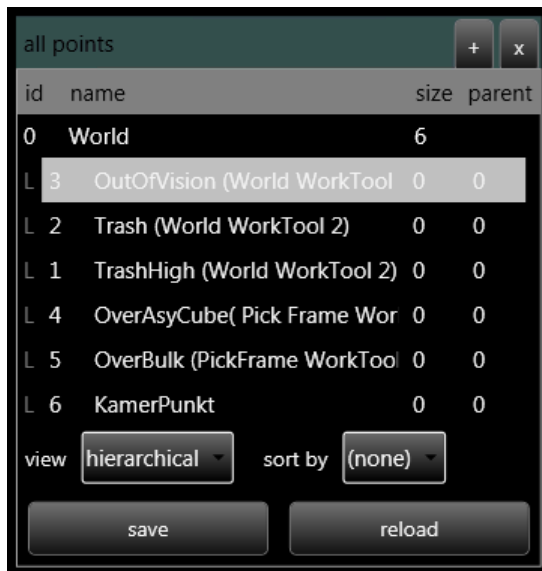
```

graph LR
    off((off)) --> homing((homing))
    homing --> idle((idle))
    idle --> error((error))
    error --> emerg((emerg.))
    emerg --> off
            
```

Robot state **3**



## 1 Manage points



This zone is used to view all of the points created, as well as any possible parent.

- The "+" button enables a new point to be created.
- The "x" button enables a point to be deleted.
- The "save" button enables all of the modifications made in the robot to be saved.

### NOTE:



*Until the "save" button is not pressed, it is possible to go back by clicking on the "reload" button which will reload the values contained in the robot.*

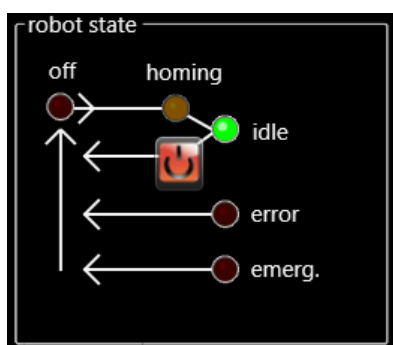
## 2 Edit point



Enter all of the information required to create a point here:

- Identifier from 1 to 99
- Name [optional]
- Parent, by default: world
- Coordinates for the point (x,y,z,rz)

## 3 Robot state



The robot states are described in the [robot home page description](#).

## Settings

Settings page allows to access to very specific parameters which can make the robot unusable.

Asyri!  
only



### NOTE:

Before changing tabs, save your modifications otherwise the changes will be lost.



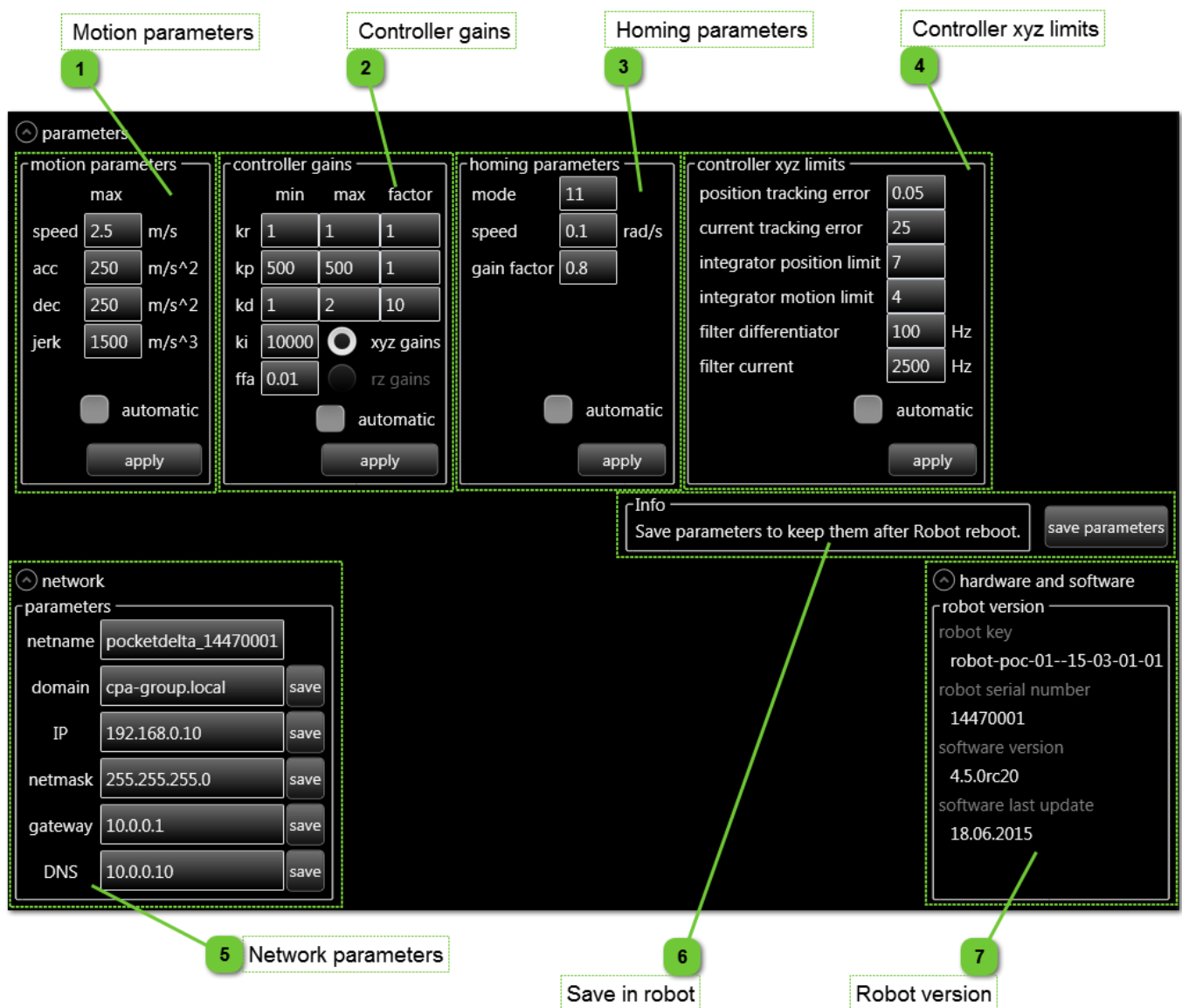
### NOTE:

All this page can be modified only by Asyri!.



### IMPORTANT !

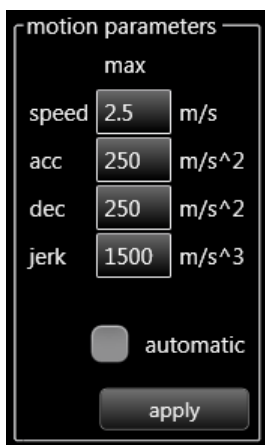
Those parameters are very important. A bad value can make the robot unusable.



The screenshot shows the Settings page with the following sections and callouts:

- 1 Motion parameters:** Includes fields for speed (2.5 m/s), acc (250 m/s<sup>2</sup>), dec (250 m/s<sup>2</sup>), jerk (1500 m/s<sup>3</sup>), and an automatic checkbox.
- 2 Controller gains:** Includes fields for min, max, and factor for kr, kp, kd, ki, and ffa, along with xyz and rz gain checkboxes.
- 3 Homing parameters:** Includes mode (11), speed (0.1 rad/s), gain factor (0.8), and an automatic checkbox.
- 4 Controller xyz limits:** Includes fields for position tracking error (0.05), current tracking error (25), integrator position limit (7), integrator motion limit (4), filter differentiator (100 Hz), and filter current (2500 Hz).
- 5 Network parameters:** Includes fields for netname (pocketdelta\_14470001), domain (cpa-group.local), IP (192.168.0.10), netmask (255.255.255.0), gateway (10.0.0.1), and DNS (10.0.0.10), each with a save button.
- 6 Save in robot:** A checkbox labeled "Save parameters to keep them after Robot reboot."
- 7 Robot version:** A section showing robot key, robot-poc-01--15-03-01-01, robot serial number (14470001), software version (4.5.0rc20), and software last update (18.06.2015).

## 1 Motion parameters



motion parameters

max

speed 2.5 m/s

acc 250 m/s<sup>2</sup>

dec 250 m/s<sup>2</sup>

jerk 1500 m/s<sup>3</sup>

☐ automatic

apply

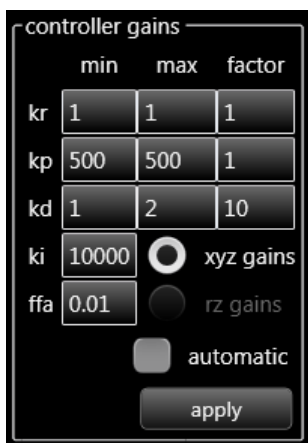
The fields for this zone make it possible to adjust the motion speed, acceleration, deceleration and jerk parameters.



### IMPORTANT !

*Modifying these parameters may result in serious machine malfunctions or even cause the machine to crash.*

## 2 Controller gains



controller gains

	min	max	factor
kr	1	1	1
kp	500	500	1
kd	1	2	10
ki	10000	<input type="radio"/>	xyz gains
ffa	0.01	<input type="radio"/>	rz gains

☐ automatic

apply

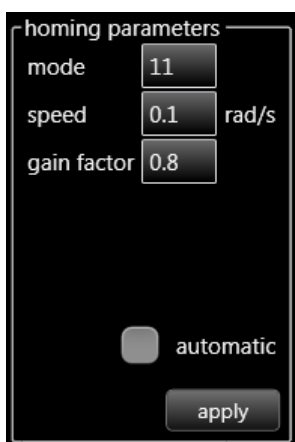
The fields for this zone make it possible to adjust the regulation parameters.



### IMPORTANT !

*Modifying these parameters may result in serious machine malfunctions or even cause the machine to crash.*

## 3 Homing parameters



homing parameters

mode 11

speed 0.1 rad/s

gain factor 0.8

☐ automatic

apply

The fields for this zone make it possible to adjust the homing mode, speed and gain factor parameters.



### IMPORTANT !

*Modifying these parameters may result in serious machine malfunctions or even cause the machine to crash.*

## 4 Controller xyz limits

The fields for this zone make it possible to adjust the controller limits parameters.



### IMPORTANT !

*Modifying these parameters may result in serious machine malfunctions or even cause the machine to crash.*

## 5 Network parameters

This area is used to modify the domain name, or IP address of the robot.



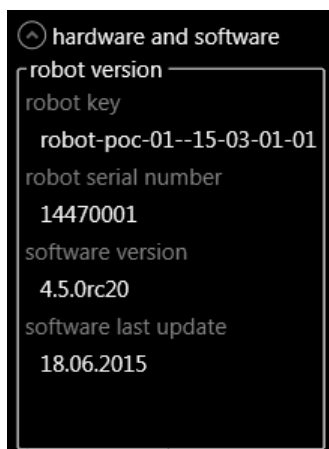
### IMPORTANT !

*Modifying these parameters may cause serious machine malfunctions.*

## 6 Save in robot

Click on this button after having clicked on "set" to save the parameters in the robot.

## 7 Robot version



This area contains the robot version number, serial number and the date of the last update. This data is provided for information purposes only; it cannot be modified.

## Display settings

Display settings page allows to access to display parameters.



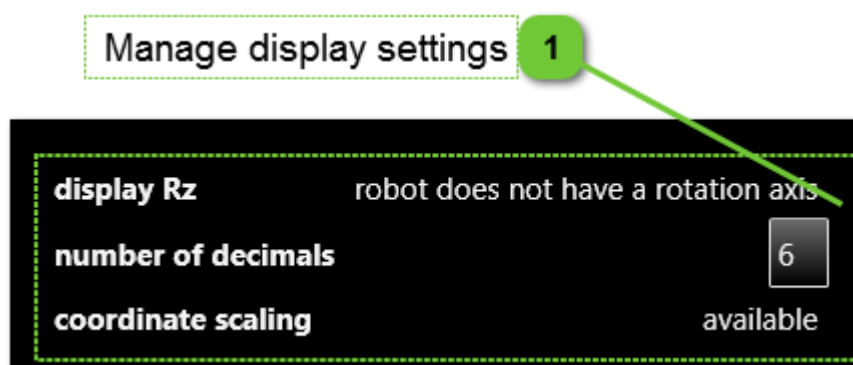
### NOTE:

*Before changing tabs, save your modifications otherwise the changes will be lost.*

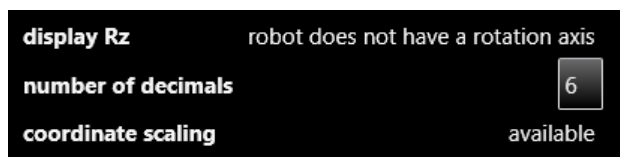


### NOTE:

*All this page can be used only with Technician level access.*



### 1 Manage display settings




The "display Rz" field allows to select whether you want to display the coordinates of the RZ rotation axis. If you do not have an RZ axis on your robot, the choice is not available and indicates "robot does not have a rotation axis".

The "number of decimals" field allows to choose the number of decimals to be displayed in the "home" and "advanced" tabs. The figure entered must be between 0 and 9.

The "coordinate scaling" indicates if the scaling of coordinates is available or not.

The "apply changes" button allows to save the parameters. This button can be not visible if not applicable.

 <b>Experts in Flexible Feeding Systems</b>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Recipes	Document version : D	31.03.2017

## Recipes

This chapter describes pages related to the management of recipes.

### Pages list

Home .....	171
AsyView .....	174
Cell .....	177
Module .....	178
Asycube .....	179
Process .....	181

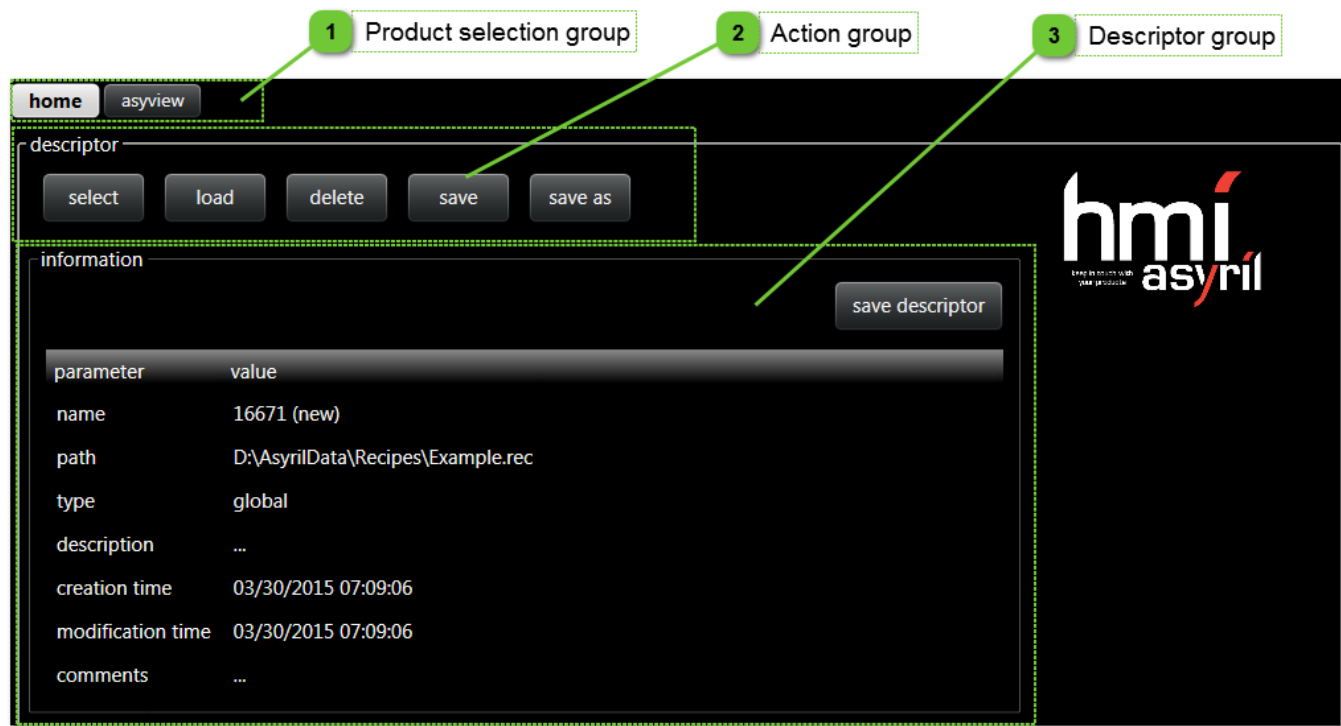
### Controls disabled

Some pages, tabs, buttons, textboxes, etc can be disabled depending of the following parameters :

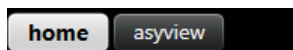
- Product connection state (disabled when not connected).
- The function is not possible for the moment (another function is processing)
- The level access is not correct to access to the parameter.

## Home

Home page gives access to the global recipes management (.rec files).



### 1 Product selection group

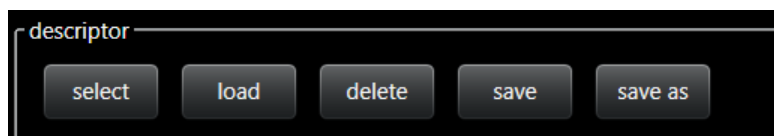


Those buttons allow to navigate between products recipes.

The home button allows to manage the recipe which included the recipes of all products.



## 2 Action group



This group contains few buttons which allow to manage global recipes.

Button	Description
<b>select</b>	Allows to select the recipe to load (*.rec file). Select the recipe will display the descriptor.
<b>load</b>	Allows to load the selected recipe. The led on the top right of the HMI indicates the loading state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the loading, the led will change in Idle (green) state.
<b>delete</b>	Allows to delete the selected recipe.
<b>save</b>	Allows to save the selected recipe (overwrite the selected recipe). The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the saving, the led will change in Idle (green) state.
<b>save as</b>	Allows to save the selected recipe on a new file. The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the saving, the led will change in Idle (green) state.

### 3 Descriptor group

information

save descriptor

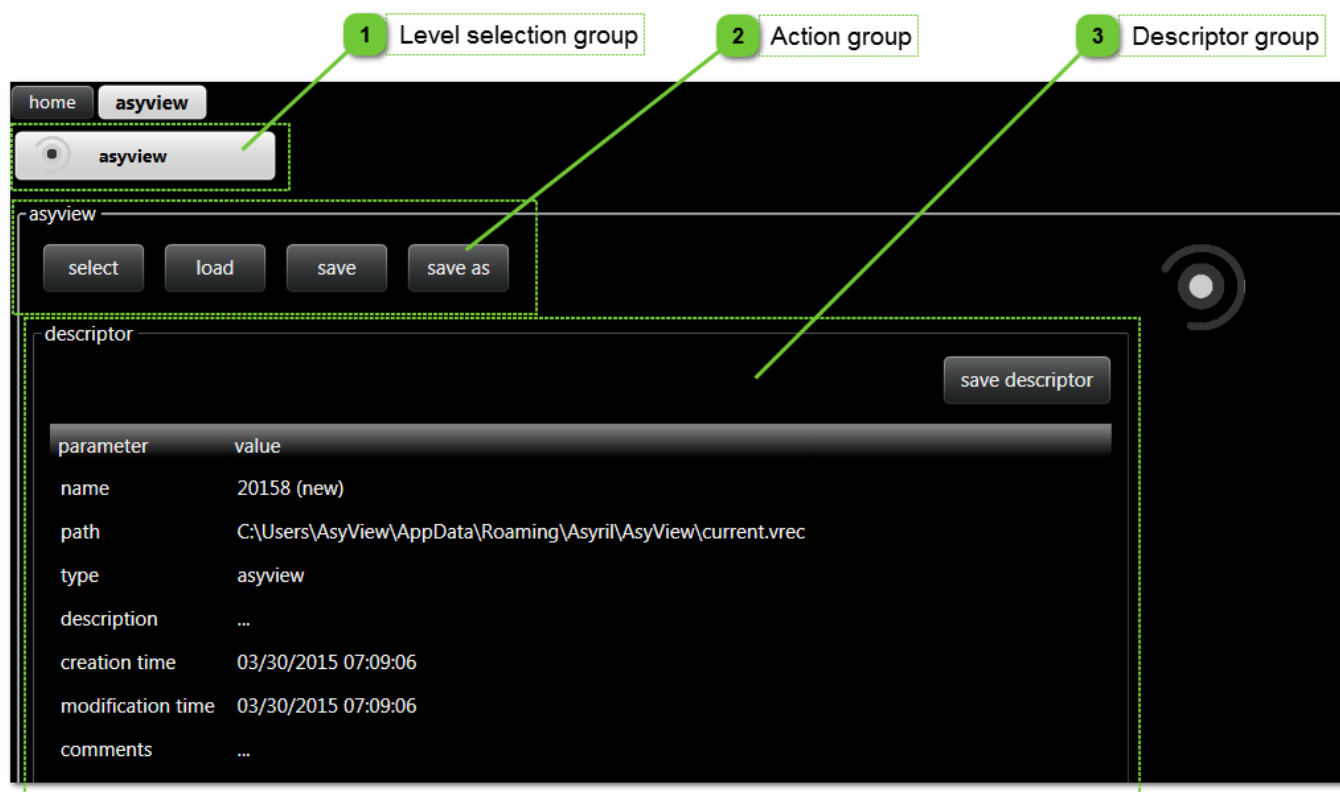
parameter	value
name	16671 (new)
path	D:\AsyriData\Recipes\Example.rec
type	global
description	...
creation time	03/30/2015 07:09:06
modification time	03/30/2015 07:09:06
comments	...

This group displays the descriptor of the recipe. The descriptor gives some informations about the recipe. The "save descriptor" button allows to save the modifications done in the descriptor.

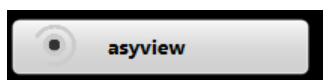
Field	Description
<b>name</b>	Name of the recipe. A default name (a randomized number) is given and can be changed if desired.
<b>path</b>	Path of the recipe.
<b>type</b>	Type of the recipe (can be global, AsyView, process).
<b>description</b>	Description of the recipe (for user description).
<b>creation time</b>	Date and time of the creation of the recipe. This value is created at the first save of the recipe.
<b>modification time</b>	Date and time of the last modification of the recipe. The value change at every save of the recipe.
<b>comments</b>	Comments about the recipe (for user comments).

## AsyView

AsyView recipe page gives access to the AsyView recipes management (.vrec files) and to the lower levels of recipes (cell, module and Asycube).

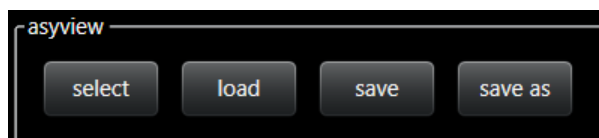


### 1 Level selection group



This button allows to select the AsyView level of recipe.

## 2 Action group



This group contains few buttons which allow to manage AsyView recipes.

Button	Description
<b>select</b>	Allows to select the recipe to load (*.vrec file). Select the recipe will display the descriptor.
<b>load</b>	Allows to load the selected recipe. The led on the top right of the HMI indicates the loading state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the loading, the led will change in Idle (green) state.
<b>save</b>	Allows to save the selected recipe (overwrite the selected recipe). The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the saving, the led will change in Idle (green) state.
<b>save as</b>	Allows to save the selected recipe on a new file. The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the saving, the led will change in Idle (green) state.

### 3 Descriptor group

descriptor
 save descriptor

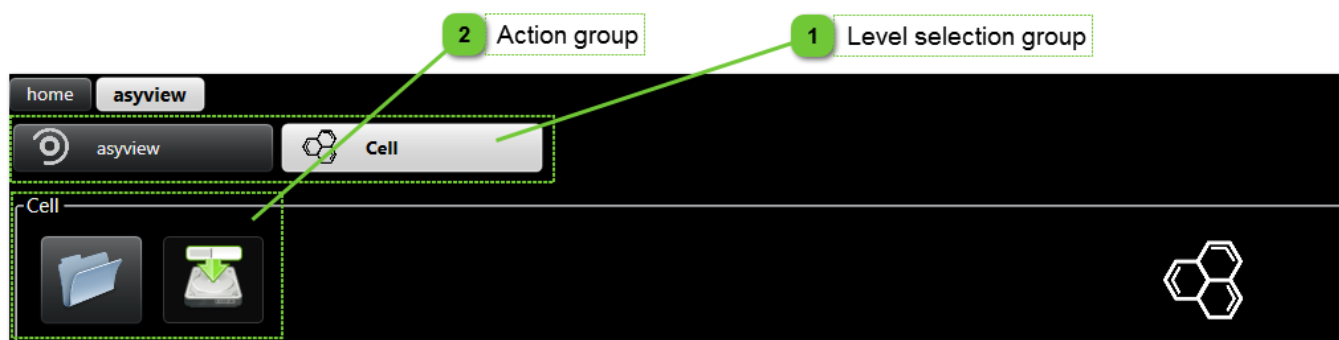
parameter	value
name	20158 (new)
path	C:\Users\AsyView\AppData\Roaming\Asyрил\AsyView\current.vrec
type	asyview
description	...
creation time	03/30/2015 07:09:06
modification time	03/30/2015 07:09:06
comments	...

This group displays the descriptor of the recipe. The descriptor gives some informations about the recipe. The "save descriptor" button allows to save the modifications done in the descriptor.

Field	Description
name	Name of the recipe. A default name (a randomized number) is given and can be changed if desired.
path	Path of the recipe.
type	Type of the recipe (can be global, AsyView, process).
description	Description of the recipe (for user description).
creation time	Date and time of the creation of the recipe. This value is created at the first save of the recipe.
modification time	Date and time of the last modification of the recipe. The value change at every save of the recipe.
comments	Comments about the recipe (for user comments).

## Cell

AsyView cell recipe page gives access to the AsyView cell recipes management (.cavaf files) and to the lower levels of recipe (module and Asycube).



### 1 Level selection group





This button allows to select the AsyView cell level of recipe.

### 2 Action group

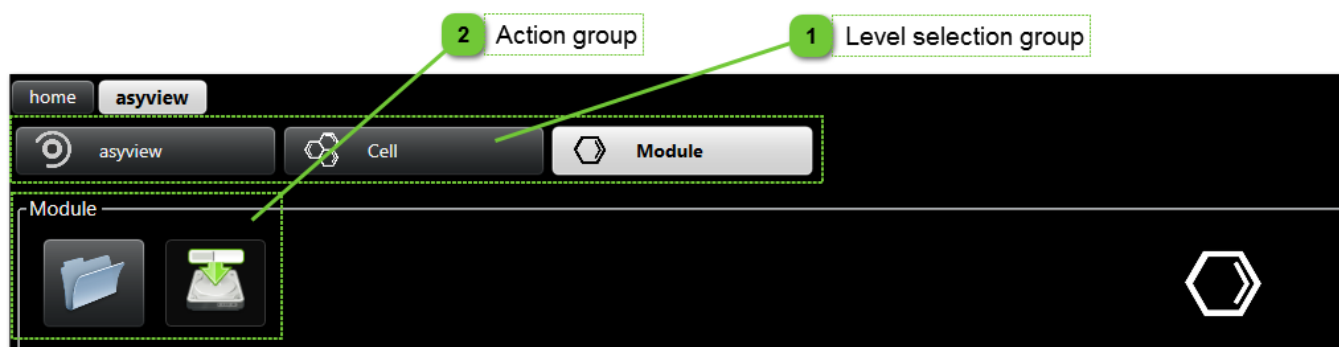


This group contains few buttons which allow to manage AsyView cell recipes.

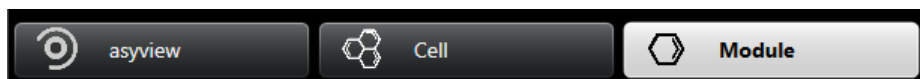
Button	Description
	<p>Allows to load a cell recipe.</p> <p>The led on the top right of the HMI indicates the loading state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI.</p> <p>At the end of the loading, the led will change in Idle (green) state.</p>
	<p>Allows to save the current recipe on a new file.</p> <p>The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI.</p> <p>At the end of the saving, the led will change in Idle (green) state.</p>

## Module

AsyView module recipe page gives access to the AsyView module recipes management (.mavaf files) and to the lower levels of recipe (Asycube).

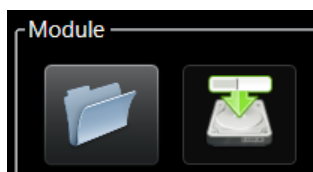


### 1 Level selection group





This button allows to select the AsyView module level of recipe.

### 2 Action group

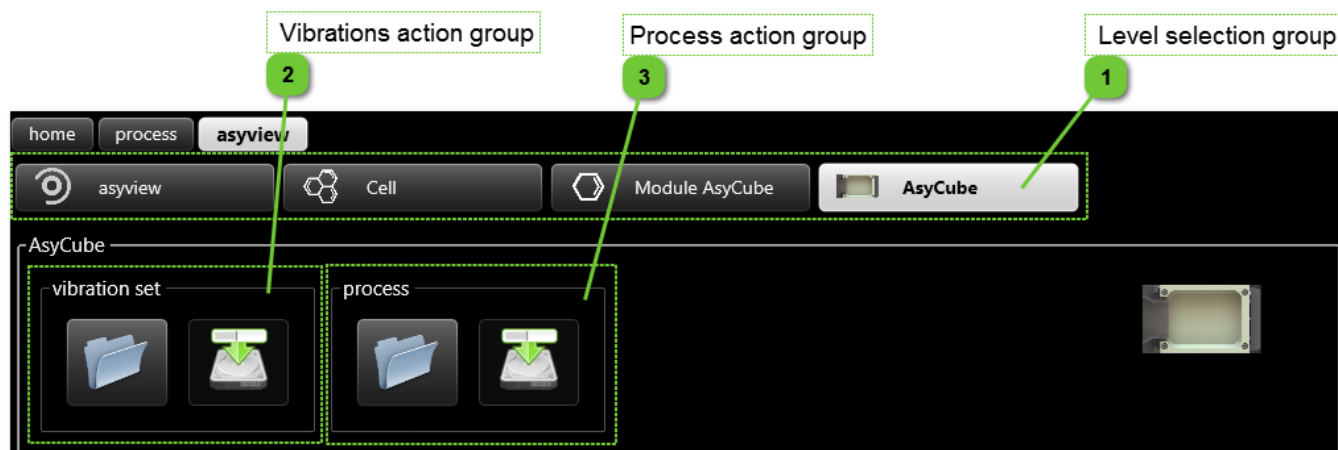


This group contains few buttons which allow to manage AsyView module recipes.

Button	Description
	Allows to load a module recipe. The led on the top right of the HMI indicates the loading state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the loading, the led will change in Idle (green) state.
	Allows to save the current recipe on a new file. The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the saving, the led will change in Idle (green) state.

## Asycube

AsyView - Asycube recipe page gives access to the Asycube vibrations recipes management (.fconf files) and to the Asycube process recipes management (.fproc files). Those functions are also available on Asycube pages (Platform, Hopper, Process pages).

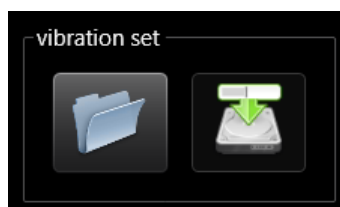


### 1 Level selection group





This button allows to select the AsyView Asycube level of recipe.

### 2 Vibrations action group

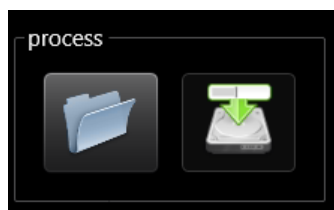


This group contains few buttons which allow to manage AsyView Asycube vibrations recipes.



Button	Description
	<p>Allows to load an Asycube vibrations recipe.</p> <p>The led on the top right of the HMI indicates the loading state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI.</p> <p>At the end of the loading, the led will change in Idle (green) state.</p>
	<p>Allows to save the current vibrations recipe on a new file.</p> <p>The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI.</p> <p>At the end of the saving, the led will change in Idle (green) state.</p>



### 3 Process action group

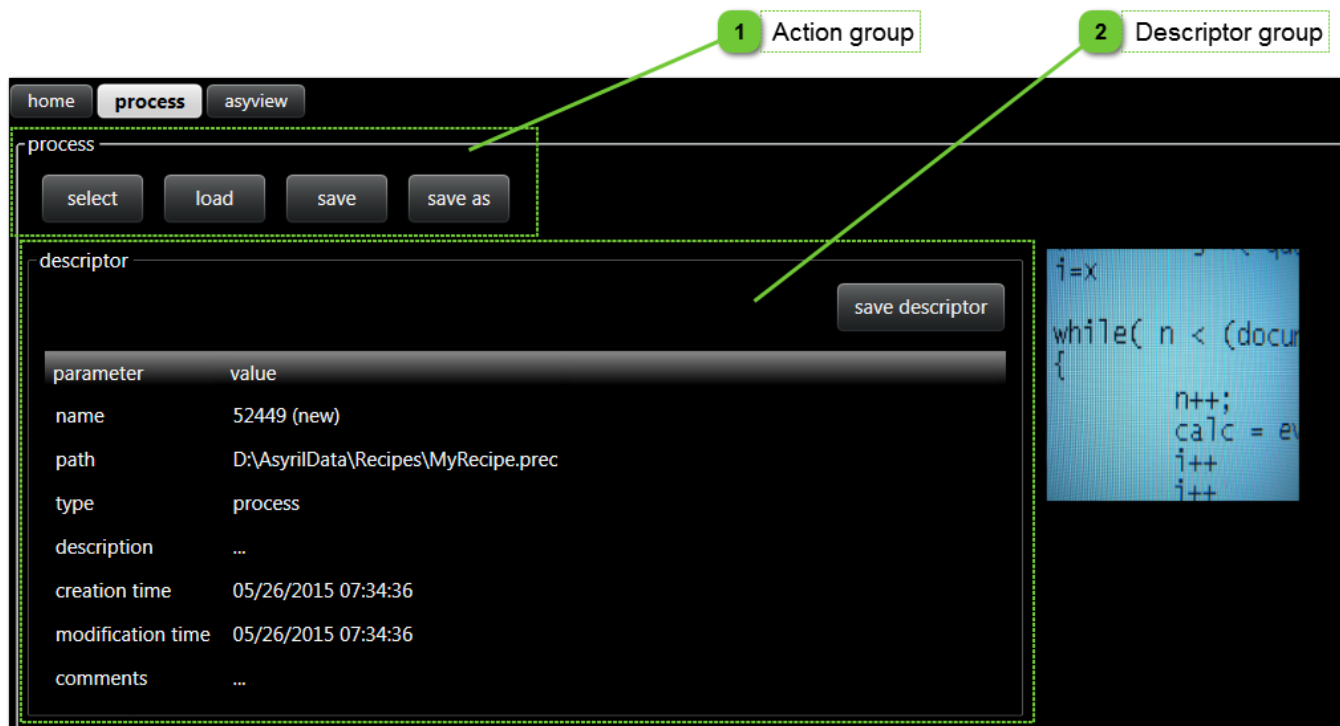


This group contains few buttons which allow to manage AsyView Asycube process recipes.

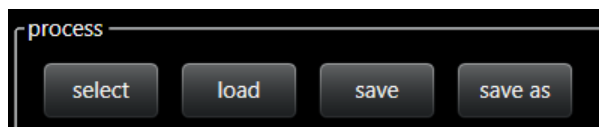
Button	Description
	<p>Allows to load an Asycube process recipe.</p> <p>The led on the top right of the HMI indicates the loading state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI.</p> <p>At the end of the loading, the led will change in Idle (green) state.</p>
	<p>Allows to save the current process recipe on a new file.</p> <p>The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI.</p> <p>At the end of the saving, the led will change in Idle (green) state.</p>

## Process

Process recipe page gives access to the Process recipes management (.prec files).



### 1 Action group



This group contains few buttons which allow to manage Process recipes.

Button	Description
<b>select</b>	Allows to select the recipe to load (*.prec file). Select the recipe will display the descriptor.
<b>load</b>	Allows to load the selected recipe. The led on the top right of the HMI indicates the loading state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the loading, the led will change in Idle (green) state.
<b>save</b>	Allows to save the selected recipe (overwrite the selected recipe). The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the saving, the led will change in Idle (green) state.
<b>save as</b>	Allows to save the selected recipe on a new file. The led on the top right of the HMI indicates the saving state (working (yellow) state). During this time, it is not allowed to use other functions of the HMI. At the end of the saving, the led will change in Idle (green) state.


## 2 Descriptor group

descriptor
save descriptor

parameter	value
name	52449 (new)
path	D:\Asyri!Data\Recipes\MyRecipe.prec
type	process
description	...
creation time	05/26/2015 07:34:36
modification time	05/26/2015 07:34:36
comments	...


This group displays the descriptor of the recipe. The descriptor gives some informations about the recipe. The "save descriptor" button allows to save the modifications done in the descriptor.

Field	Description
<b>name</b>	Name of the recipe. A default name (a randomized number) is given and can be changed if desired.
<b>path</b>	Path of the recipe.
<b>type</b>	Type of the recipe (can be global, AsyView, process).
<b>description</b>	Description of the recipe (for user description).
<b>creation time</b>	Date and time of the creation of the recipe. This value is created at the first save of the recipe.
<b>modification time</b>	Date and time of the last modification of the recipe. The value change at every save of the recipe.
<b>comments</b>	Comments about the recipe (for user comments).

 Experts in Flexible Feeding Systems	Human-Machine Interface - Asyri SA User Guide	© Copyright Asyri S.A.
Troubleshooting	Document version : D	31.03.2017

## Troubleshooting

Ref.	Problem	Solution
1	<i>HMI crashes on starting</i>	Try to start HMI with administrator access (right-click on shortcut, Properties/Compatibility, select "Run this program as an administrator").
2	<i>HMI starts but no button are displayed</i>	The SurfaceToolKit is missing or improperly installed.
3	<i>The command is refused by AsyView</i>	Execute a reset of the AsyView to correct the default and set all states to IDLE. If it does not work, the problem have to be corrected manually (for example if connection is not established).
4	<i>The HMI configuration cannot be saved</i>	<p>You don't have write access in the C:\ProgramData\Asyri\Hmi. There is many solutions to correct this problem:</p> <ol style="list-style-type: none"> <li>1. Start HMI with administrator rights (<a href="#">see procedure</a>).</li> <li>2. Contact your IT department to have full access to this folder.</li> <li>3. Copy the AsyriData folder to the D:\ (the HMI will check first if the AsyriData folder exists on D:\ before to search on the C disc).</li> <li>4. Copy the AsyriData folder in another folder where you have full access. In the configuration page of the HMI, in AsyriData path group, click on select and choose the folder where you copied the AsyriData folder.</li> </ol>

 <b>asyri!</b> <small>Experts in Flexible Feeding Systems</small>	Human-Machine Interface - Asyri! SA User Guide	© Copyright Asyri! S.A.
Technical support	Document version : D	31.03.2017

## Technical support

### For a better service...

Before contacting us, please note down the following information concerning your product:

- Serial number and product key for your equipment
- Software version(s) used
- Error message, alarm, or visual signals displayed by the interface.


## Contact

You can find extensive information on our website: [www.asyril.com](http://www.asyril.com)

You can also contact our Customer Service department:

[support@asyril.com](mailto:support@asyril.com)  
+41 26 653 7190



 Experts in Flexible Feeding Systems	Human-Machine Interface - AsyriL SA User Guide	© Copyright AsyriL S.A.
Revision table	Document version : D	31.03.2017

This document is the property of AsyriL S.A.; it may not be reproduced, modified or communicated, in whole or in part, without our prior written authorisation. AsyriL S.A. reserves the right to modify any information contained in this document for reasons related to product improvements without prior notice.



AsyriL SA  
 Z.I. le Vivier  
 Ch-1690 Villaz-St-Pierre  
 Switzerland  
 Tel. +41 26 653 71 90  
 Fax +41 26 653 71 91  
[info@asyril.com](mailto:info@asyril.com)  
[www.asyril.com](http://www.asyril.com)