

Asycube 240

Programming Guide



Document	ACUBE-240_Programming_Guide_EN 000.100.528		
Version	B	Date	23.11.2016

Table of Contents

1. INTRODUCTION	5
1.1. GENERALITIES	5
1.2. RELATED MANUALS	6
2. GENERAL DESCRIPTION OF THE ASYCUBE.....	7
2.1. VIBRATION SETS.....	8
2.2. SEQUENCES	9
2.3. LOAD/SAVE IN MEMORIES.....	9
3. HOW TO USE THE ASYCUBE 240.....	10
3.1. INTEGRATION MODES	10
3.1.1. <i>Direct connection to the Asycube, configuration with Asycube HMI.....</i>	11
3.1.2. <i>Direct connection to the Asycube.....</i>	12
3.1.3. <i>Connection to the Asycube with the Plugin .NET and configuration with Asyrl HMI.....</i>	13
3.1.4. <i>Connection to the Asycube with the Plugin .NET and configuration with the customer user interface using the Plugin .NET</i>	14
3.2. PRODUCTION CYCLE WITH SEQUENCES.....	15
3.3. QUESTIONS AND ANSWERS.....	16
3.3.1. <i>Which vibration set or sequence is currently selected?.....</i>	16
3.3.2. <i>How do I know if some parameters of the current vibration set have been modified?.....</i>	16
3.3.3. <i>What is the duration of a specific sequence?.....</i>	16
3.3.4. <i>How do I know when a vibration or a sequence is finished?.....</i>	16
3.3.5. <i>How do I backup all vibration set on the computer?.....</i>	16
3.3.6. <i>How is the center of mass of the components on the platform transferred to the command ES ?</i>	17
4. COMMUNICATION WITH ASYCUBE	18
4.1. ETHERNET	18
4.2. ASYCUBE COMMUNICATION PROTOCOL.....	18
4.3. COMMUNICATION ERROR CODE (SERIAL BIT)	20
5. COMMANDS.....	21
5.1. DESCRIPTION AND RANGES OF PARAMETERS	21
5.2. LEVEL ACCESS	22
5.3. ACCESS SINGLE PARAMETERS.....	22
5.4. ACCESS TO PARAMETERS	23
5.4.1. <i>Platform Vibration Parameters.....</i>	23
5.4.2. <i>Outputs Activation Parameters</i>	24
5.4.3. <i>Sequence Parameters</i>	25
5.4.3.1. <i>Load</i>	25

5.4.3.2. Save.....	26
5.5. VIBRATION SET AND SEQUENCE SELECTION.....	26
5.6. BACKLIGHT	27
5.7. SYSTEM STATES	27
5.8. PLATFORM VIBRATIONS (C FOR CUBE).....	28
5.9. OUTPUTS ACTIVATION.....	29
5.10. SEQUENCE, CENTERING AND FEEDING EXECUTION.....	30
5.10.1. Sequence.....	31
5.10.1.1. Various formats of the command ES.....	32
5.10.2. Centering.....	34
5.10.3. Feeding.....	35
5.11. FLASH OPERATION.....	36
5.12. STATES.....	37
5.13. GENERAL.....	37
5.14. WARNINGS	38
5.15. ALARMS	38
6. PARAMETERS.....	39
6.1. CONFIGURATION	39
6.2. PLATFORM VIBRATIONS	42
6.3. OUTPUTS ACTIVATIONS	55
6.4. SEQUENCES	60
7. TECHNICAL SUPPORT	99
7.1. FOR BETTER SERVICE	99
7.2. CONTACT.....	99

1. Introduction

1.1. Generalities

The following document is the property of Asyrl S.A. and may not be copied or circulated without permission. The information contained in this document is subject to change without notice for the purpose of product improvement. Before operating your product, please read this document in order to ensure a correct use of the product. Nevertheless, if you meet difficulties during the operation or the maintenance, please, feel free to contact Asyrl customer service.

In this manual, the safety precautions that you must respect are classified as: "Danger", "Warning" and "Note"; the following symbols are used:

**DANGER!**

Failure to observe the instruction may result in death or serious injury.

DANGER!

Failure to observe the instruction may result in electrocution or serious injury due to electric shock

**WARNING!**

Failure to observe the instruction may result in injury or property damage.

NOTE :

The user should read carefully this information to ensure the correct use of the product, although failure to do so would not result in injury.

Refer to ...

For more information on a specific subject, the reader should read other manual, or refer to other paragraph.

WARNING!

Asyrl shall not be liable whatsoever for any loss or damage arising from a failure to observe the items specified in "Safety Precautions" of the OPERATING MANUAL. The customer is responsible to provide the necessary instruction to the persons concerned.

**NOTE :**

All dimensions in this document are expressed in millimeters

1.2. Related manuals

As described in Table 1-1, this manual is an integral part of the Asycube documentation set.

This manual covers the information about how to use and integrate an Asycube 240.

Manual Title	Manual reference	Description of the content
Asycube Unpacking Instructions	ACUBE-240_Unpacking_Instructions	Describes how to unpack your Asycube.
Asycube Operating manual	ACUBE-240_Operating_Manual	Technical description, safety precautions, installation, maintenance and reparation information
Asycube User manual	ACUBE-240_User_Manual	Describes how to configure the Asycube.
HMI manual	HMI_User_Guide	Describes how to use the HMI (simply move the parts, and configure the Asycube's vibrations ...)
Asycube Programming guide	ACUBE-240_Programming_Guide	THIS MANUAL
Asycube Plugin .NET	ACUBE_PLUGIN_.NET_Integration_Guide	Describes the Asycube dll's that are High-level libraries which helps to integrate Asycubes using .Net 3.5 environment.

Table 1-1 : related manuals

2. General description of the Asycube

The Asycube contains its own intelligence and memories (one volatile for working and one flash memory for backup).

To use the Asycube, the user has access to vibrations parameters (called “Vibration Sets” and including the parameters of the outputs activations) and sequences. The Asycube has also global parameters which are general parameters adjusted usually by Asyrl technician.

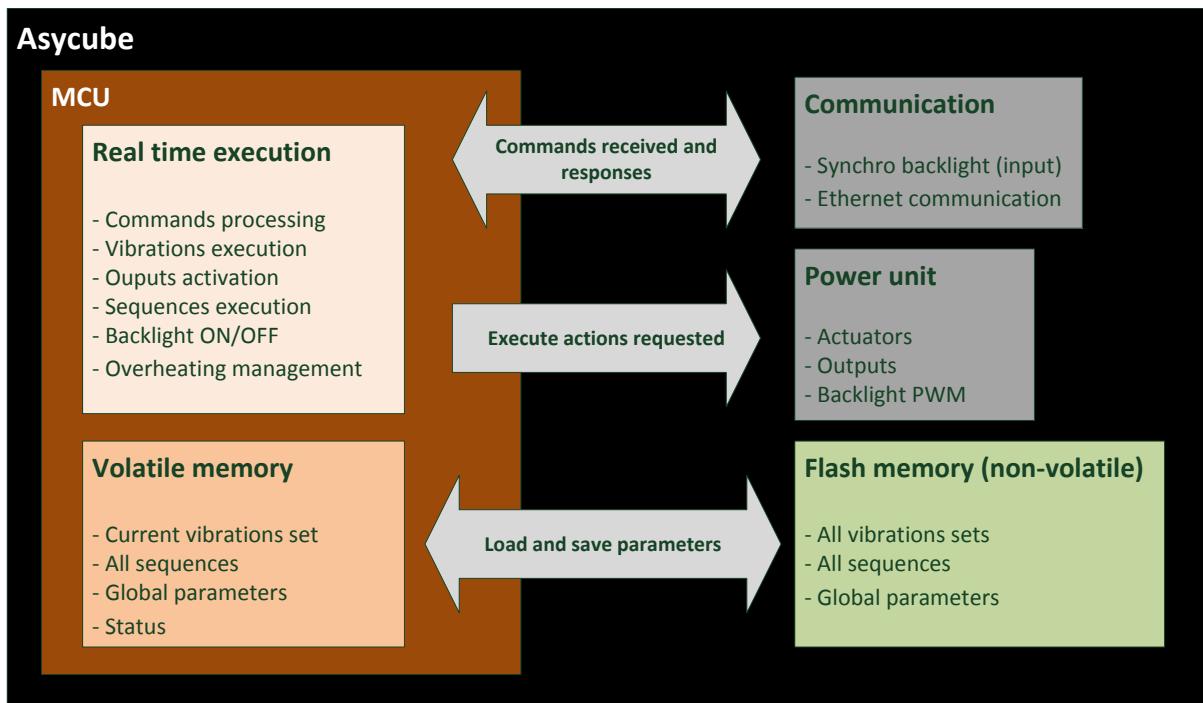


Figure 2-1 : description of Asycube

2.1. Vibration sets

The vibration parameters are organized in vibration sets. There are 26 different vibration sets (the 26th is reserved for Asyri technician).

Each of the vibration set contains 26 vibrations for the platform identified by letters A to Z and 26 outputs activations (to control two hoppers) identified by other letters A to Z.

For the platform, the 11 first vibrations (A to K) are by convention used for standard vibrations (movements forward, backward, left, right, flip, long axis centering, etc).

For the outputs activations, the 2 first activations are by convention used for standard activations (A activate the output 1 and B the output 2).

The table below shows the organization of the vibration sets:

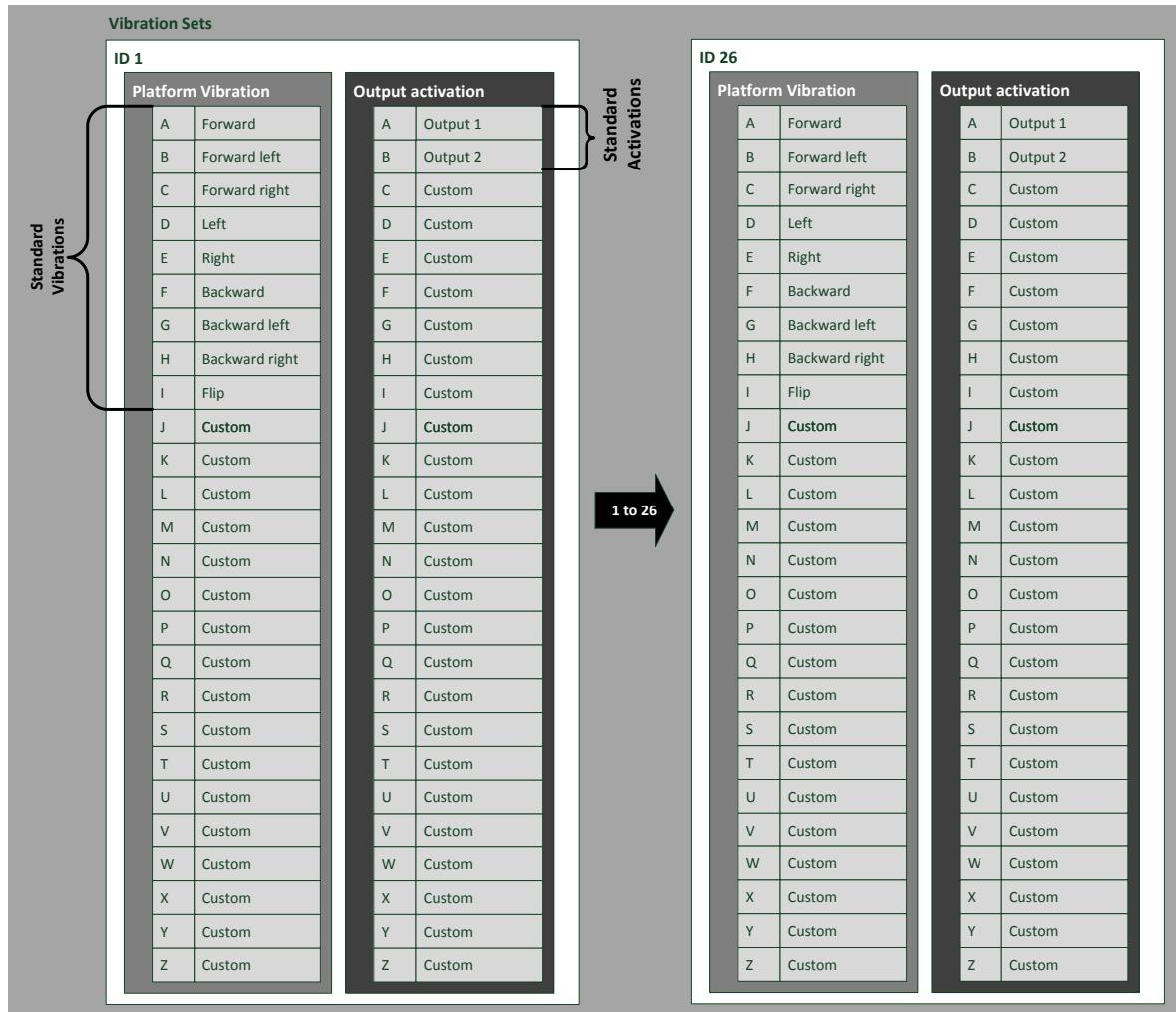


Figure 2-2 : description of vibration sets

2.2. Sequences

The Asycube contains 26 different sequences (the 26th is reserved for Asyrl technician). Each sequence contains 7 customizable actions. It can be none (no action), platform vibration, output activation and stabilization (a delay).

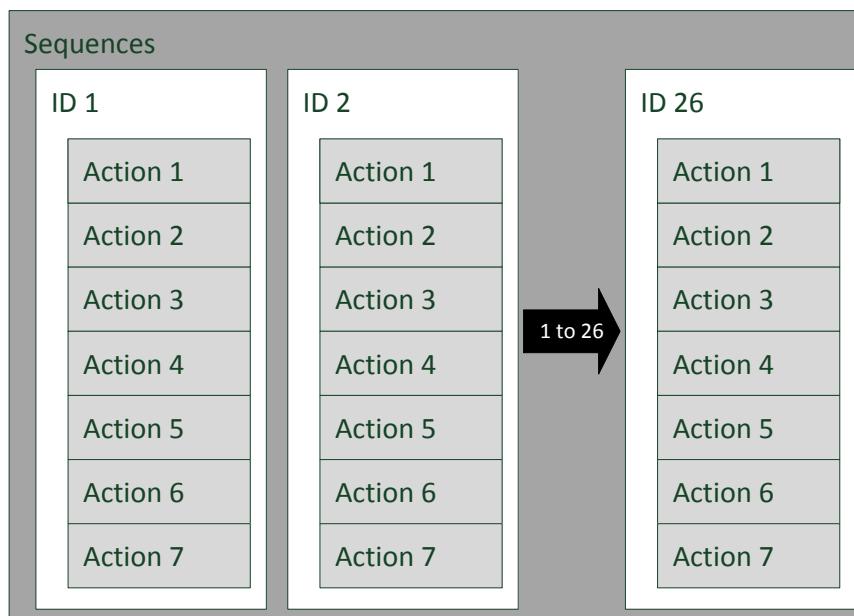


Figure 2-3 : description of sequences

More details in the [commands descriptions](#).Commands

2.3. Load/save in memories

Because of the size of the volatile memory, it can only contain one of the 26 vibration sets. At startup, the Asycube loads from flash memory the last selected vibration set, the 26 sequences and the global parameters.

When the user selects another vibration set, the parameters are loaded from the flash memory and overwrite the previously selected vibration set (all modifications made before selecting another vibration set are lost if the user did not save the vibration set with the command {DV}, which saves the vibration parameters in the flash memory). A status indicates if a value has been modified and can be read with the command {?50}. The time needed to load a new vibration set from the flash memory to the volatile memory is approximatively 0.3 seconds.

Every 20 minutes, the global parameters are automatically saved. If the user tries to save during this ongoing process, his command will be refused until the automatic saving is finished.

3. How to use the Asycube 240

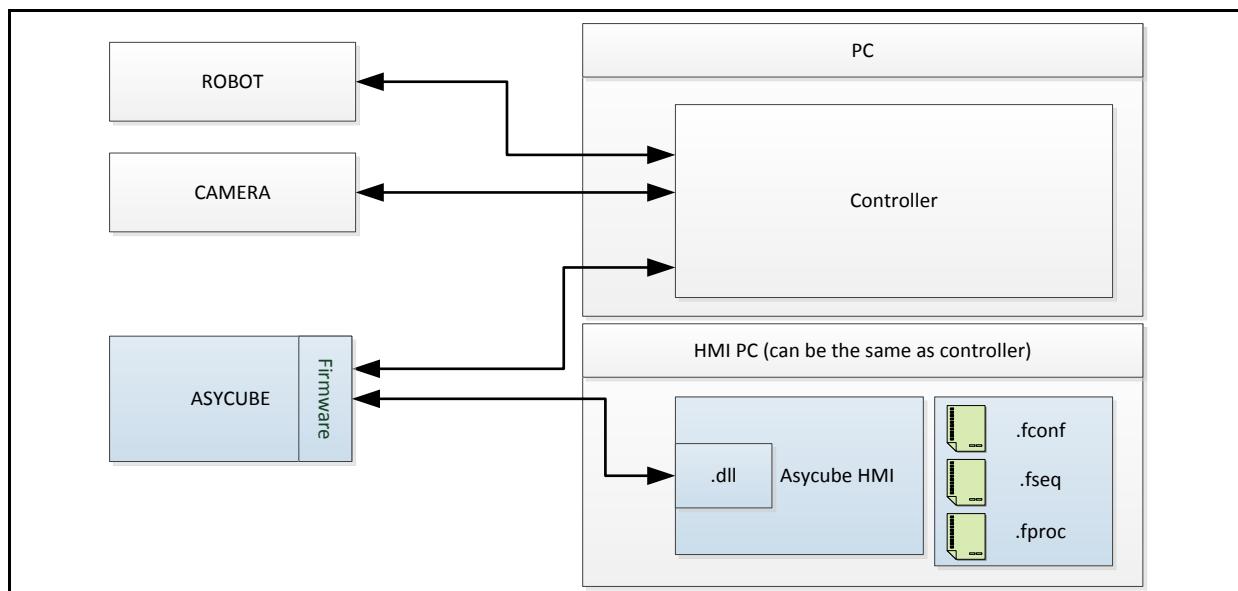
This chapter gives the main information about the use and tuning of the Asycube. It shows general information and behavior, presents the main procedure from setup to running in production with an Asycube 240 and describes then each step. The next chapters will detail the chosen working mode.

3.1. Integration modes

Different ways of integration are available. Here below is a brief description of the main ones. More information is then available in the corresponding section. The main tasks necessary to use, configure and integrate the Asycube are described depending the chosen integration mode. The next tables and figures describe the tasks in charge of the Asycube and the ones due to the integrator. The light blue color represents the levels offered by Asyri, the white one the levels in charge of the integrator.

3.1.1. Direct connection to the Asycube, configuration with Asycube HMI

In this integration mode, the integrator uses the Asycube HMI (installed on a computer, the same as the integrator's system or another one) to configure the Asycube and to communicate with the Asycube from his own system in order to execute the vibrations. All the configurations are made with the Asycube HMI and can be exported in different types of files (fconf, fseq and fproc files).

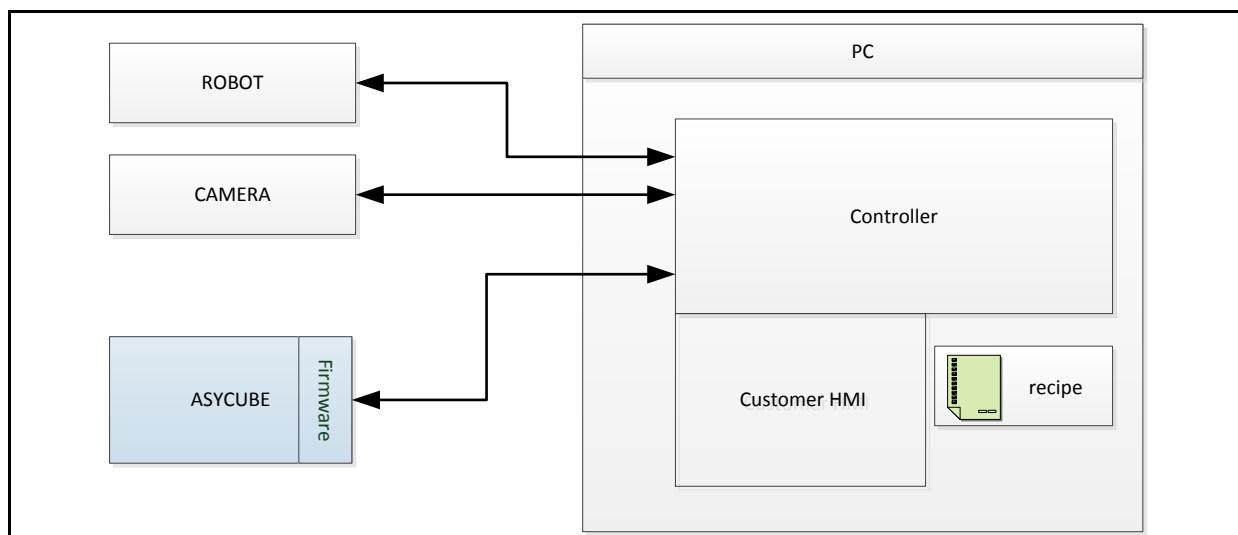


LEVEL	TASKS
Asycube	<ul style="list-style-type: none"> Generation and synchronization of the desired vibration Execute sequences Save and reload 25 vibration sets (26 for the reload) Save and reload 25 sequences (26 for the reload) Activation of the outputs and backlight Choice/Management of the optimal sequence based on the vision feedback
Asycube HMI	<ul style="list-style-type: none"> Configuration and optimization of the feeding (vibration) parameters Configuration and optimization of the sequences
Integrator	<ul style="list-style-type: none"> Communication with the Asycube Recipe management (memorize vibration set ID and sequence ID for each component). Synchronization of the feeder and the machine
Optional	<ul style="list-style-type: none"> Treatment of the recipe (read/write parameters) Configuration of the process (Asycube HMI)

Table 3-1: Integration mode: Asycube only

3.1.2. Direct connection to the Asycube

In this integration mode, the integrator develops his own HMI to configure the Asycube and to communicate with the Asycube from his own system in order to execute the vibrations.

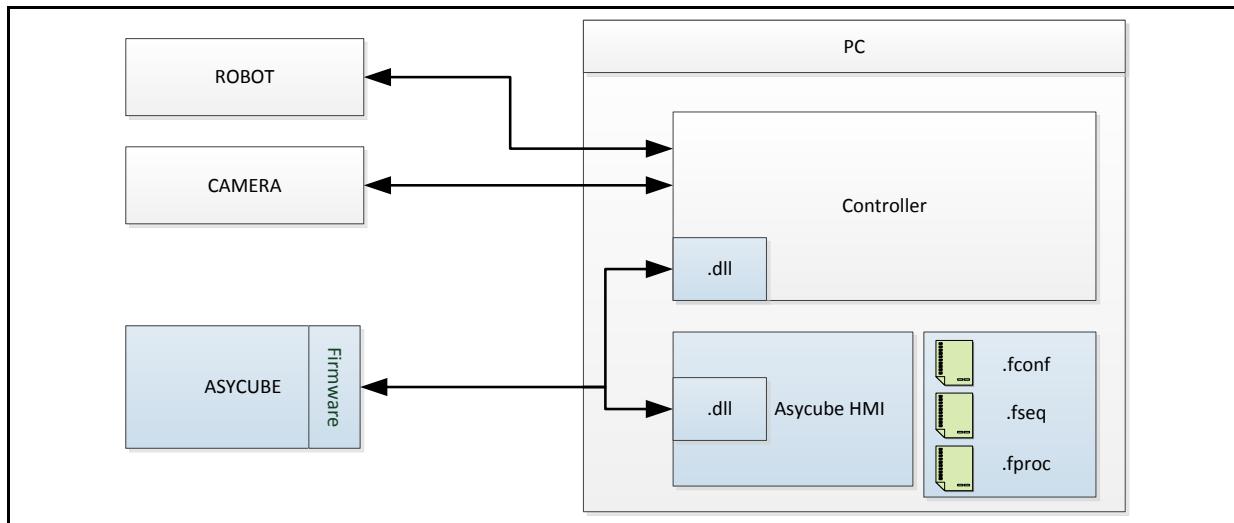


LEVEL	TASKS
Asycube	<ul style="list-style-type: none"> • Generation and synchronization of the desired vibration • Execute sequences • Save and reload 25 vibration sets (26 for the reload) • Save and reload 25 sequences (26 for the reload) • Activation of the outputs and backlight • Choice/Management of the optimal sequence based on the vision feedback
Integrator	<ul style="list-style-type: none"> • Communication with the Asycube • Recipe management (memorize vibration set ID and sequence ID for each component). • Configuration and optimization of the feeding (vibration) parameters (customer HMI) • Configuration and optimization of the sequences (customer HMI) • Synchronization of the feeder and the machine
Optional	<ul style="list-style-type: none"> • Treatment of the recipe (read/write parameters) • Configuration of the process (customer HMI)

Table 3-2: Integration mode: Asycube only

3.1.3. Connection to the Asycube with the Plugin .NET and configuration with Asyri HMI

In this integration mode, the integrator uses the Asycube HMI (installed on a computer, the same as the integrator's system or another one) to configure the Asycube and to communicate with the Asycube from his own system in order to execute the vibrations by using the Asycube Plugin .NET. This Plugin simplifies the development and allows to export and import the same recipe files as in the Asycube HMI.



LEVEL	TASKS
Asycube	<ul style="list-style-type: none"> Generation and synchronization of the desired vibration Execute sequences Save and reload 25 vibration sets (26 for the reload) Save and reload 25 sequences (26 for the reload) Activation of the outputs and backlight Choice/Management of the optimal sequence based on the vision feedback
Asycube Plugin .NET	<ul style="list-style-type: none"> Communication with the Asycube (access to the parameters of the vibrations, sequences and process, vibrations and sequences execution, etc) Treatment of the recipe (read/write parameters)
Asycube HMI	<ul style="list-style-type: none"> Configuration and optimization of the feeding (vibration) parameters Configuration and optimization of the sequences
Integrator	<ul style="list-style-type: none"> Synchronization of the feeder and the machine Recipe management (memorize vibration set ID and sequence ID for each component).
Optional	<ul style="list-style-type: none"> Configuration of the process (HMI)

Table 3-3: Integration mode: Asycube with Plugin .NET and HMI

3.1.4. Connection to the Asycube with the Plugin .NET and configuration with the customer user interface using the Plugin .NET

In this integration mode, the integrator uses the Asycube Plugin .NET to communicate with the Asycube and creates his own HMI to configure the vibrations, the sequences, etc. By choosing this integration mode, the integrator can design his own HMI and benefits from the simplification brought by the Plugin .NET.

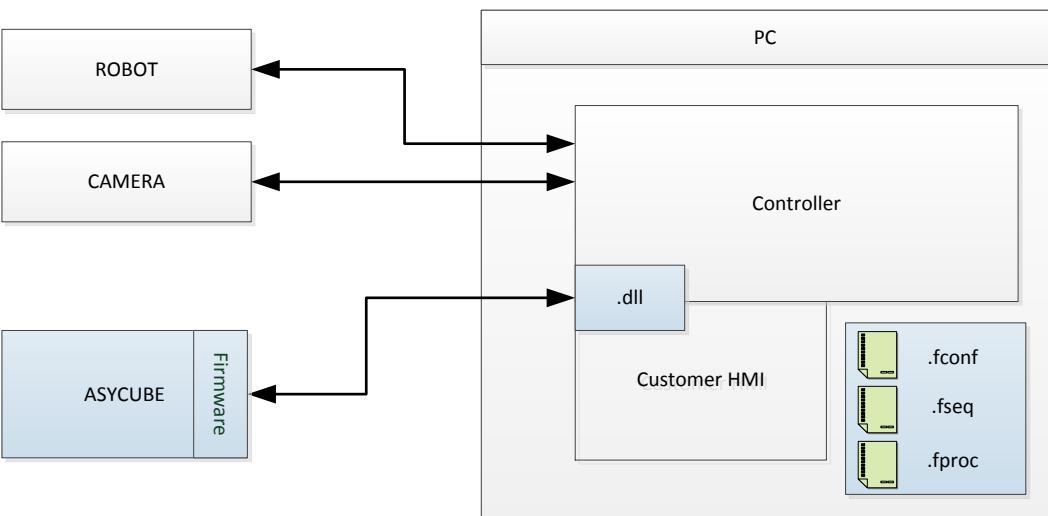
	
LEVEL	TASKS
Asycube	<ul style="list-style-type: none"> • Generation and synchronization of the desired vibration • Execute sequences • Save and reload 25 vibration sets (26 for the reload) • Save and reload 25 sequences (26 for the reload) • Activation of the outputs and backlight • Choice/Management of the optimal sequence based on the vision feedback
Asycube Plugin .NET	<ul style="list-style-type: none"> • Communication with the Asycube (access to the parameters of the vibrations, sequences and process, vibrations and sequences execution, etc) • Treatment of the recipe (read/write parameters)
Integrator	<ul style="list-style-type: none"> • Configuration and optimization of the feeding (vibration) parameters (HMI) • Configuration and optimization of the sequences • Synchronization of the feeder and the machine • Recipe management (memorize vibration set ID and sequence ID for each component).
Optional	<ul style="list-style-type: none"> • Configuration of the process (HMI)

Table 3-4: Integration mode: Asycube Plugin .NET

3.2. Production cycle with sequences

Follow this diagram to work with Asycube and sequences in direct communication.

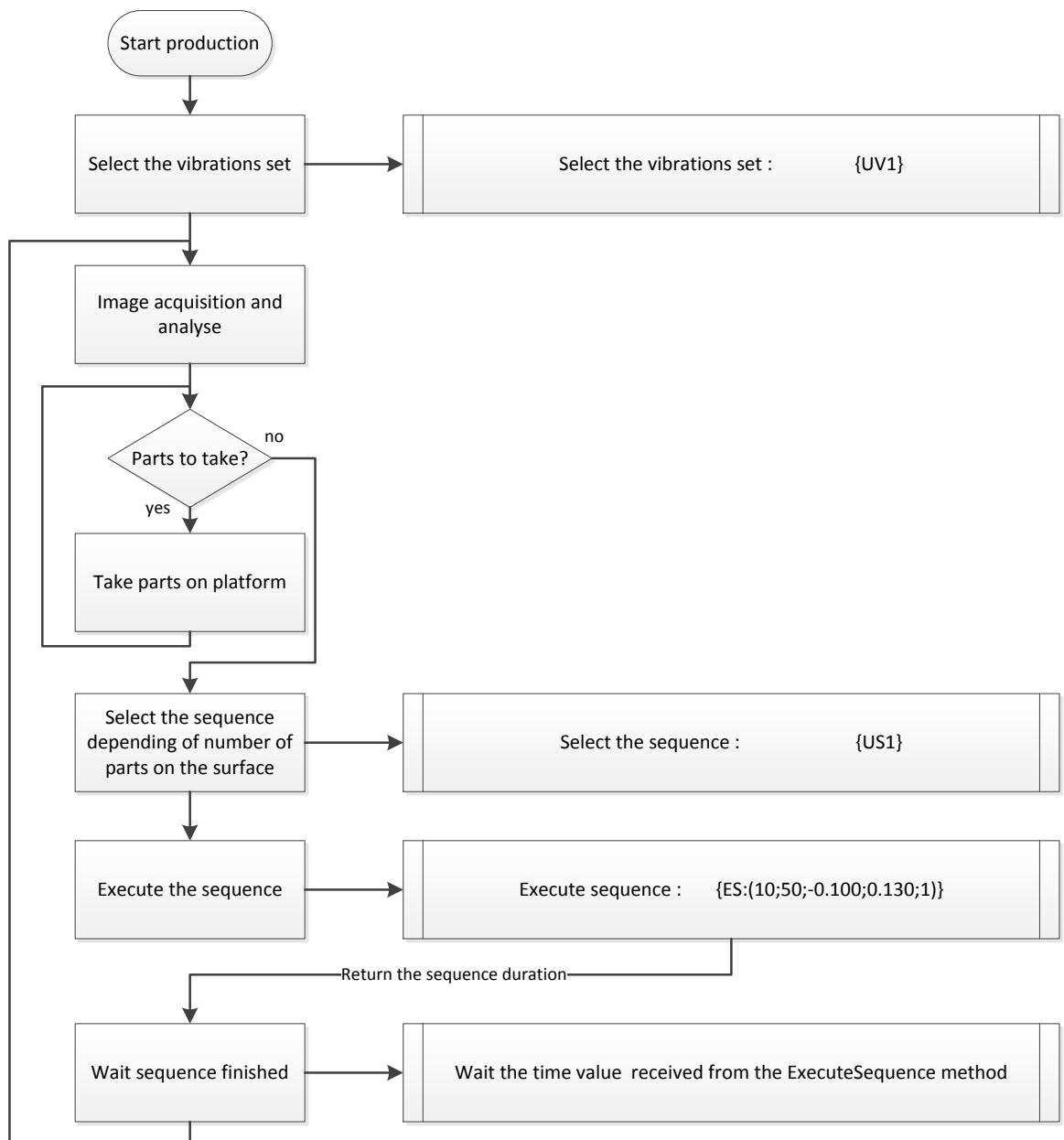


Figure 3-1 : description of sequences

For details of the different parameters, see the complete description of the commands below in this documentation.

3.3. Questions and answers

Here are some recurrent questions and their answers.

3.3.1. Which vibration set or sequence is currently selected?

To know which vibration set is selected, use the command [{UV?}](#).

For the selected sequence, use the command [{US?}](#).

3.3.2. How do I know if some parameters of the current vibration set have been modified?

To obtain the state of the selected vibration set, use the command [{?50}](#). If the returned value is 1, parameters have been modified.

3.3.3. What is the duration of a specific sequence?

The duration of a sequence (or a centering and feeding) is returned by the execution function. For example, the command [{ES:\(10;20;-0.1;0.8;1\)}](#) will receive as answer the string [{ES:\(10;20;-0.1;0.8;1;1830\)}](#) and 1830 is the duration of the sequence in milliseconds.

3.3.4. How do I know when a vibration or a sequence is finished?

For the vibration, the remaining time of the platform vibration is given by the answer of the command [{?42}](#). For the hopper, use the command [{?44}](#) and for the sequence [{?46}](#). The value returned indicates the remaining time in milliseconds.

3.3.5. How do I backup all vibration set on the computer?

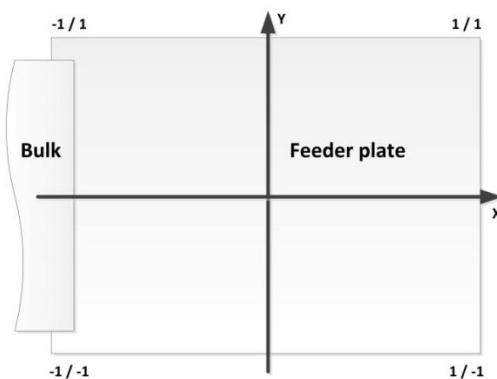
If you do not use the Asycube HMI, you have to read all the vibration parameters vibration by vibration and save the received data in a file. For example, use the command [{LCA}](#) for the vibration A. The returned values correspond to the parameters of this vibration (amplitude of actuator 1, frequency of actuator 1, etc)

For the hopper vibration A, the corresponding command is [{LBA}](#).

3.3.6. How is the center of mass of the components on the platform transferred to the command ES ?

The positions on the platform are normalized between -1 and +1 in both directions in order to be independent of the resolution of the camera or of the choice of the camera manufacturer image orientation and origin.

This figure explains the standardized range:



Check in your camera specifications to find the correspondence between the camera positions and the Asycube standardized range.

4. Communication with Asycube

4.1. Ethernet

The host computer communicates with the Asycube using protocol Ethernet TCP/IP. The Asycube is the tcp server and the host computer is the tcp client. The server (the Asycube) sends packets only in response to a client request.

Default TCP/IP parameters are:

IP Address	192.168.127.254
Subnet Mask	255.255.255.0
TCP port	4001

These parameters can be changed in configuration page of the Asyrl HMI. If parameters are unknown (connection cannot be established), use the “Recover IP address using default IP address” procedure described in Operating Manual. Using this procedure enables the connection to the Asycube with the default parameters and modification of the lost parameters.

4.2. Asycube communication protocol

The host controller communication protocol uses only ASCII characters and is designed for communication networks. The host computer is always the master node. Slave nodes transmit only after receiving a message from the master.

Command / Response Format	<u>Command:</u> Begin , <u>Command</u> , <u>Data</u> , <u>End</u> <u>Response:</u> Begin , <u>Response</u> , <u>Data</u> , <u>End</u> + Return Line
Begin	The ASCII char “{“ must be the first byte of the packet to allow detection of a new packet.
Command	This field will contain two ASCII letter characters followed by the parameter number. These two letters specify the purpose of the message packed (for instance Read or Write Parameter). The value in this field that is sent in response by the Asycube will specify the command to which the Asycube is responding to. The available commands are listed in Chapter 5.
Response	This field contains a fixed format that specifies the validation of the instruction. The Asycube gives a response message for each corresponding instruction.
Data	This field contains from 0 to 5 ASCII chars that will be interpreted in various ways, depending on the parameter that appears in the command field.
End	The ASCII char “}” must be the last byte of the packet
+ Return Line	The ASCII char “carriage return 0x0D” and “line feed 0x0A” are the last two bytes returned by the Asycube to allow the detection of the end of a packet. (Typically using on cursor return line with a remote like “hyper terminal”)

" 0 " to " 9 "	not case sensitive
" a " to " z ", " A " to " Z "	
" { "	begin of packet
" : "	specifies read operation
" = "	specifies write operation
" } "	end of packet
CR	0x0D Carriage Return
LF	0x0A Line Feed

Table 4-1: ASCII Character
Examples:

- 1) In this example we want to know the actual parameter of register 300 (amplitude of first actuator of Platform Vibration A) on the Asycube.

Command: {rp300}

Response: {rp300:00100}CR LF

- 2) In this example we want to modify the amplitude of the first actuator (value=90) of the Platform Vibration A (301) from the Asycube.

Command: {wp301=90}

Response: {wp301=00090} CR LF

4.3. Communication error code (Serial bit)

The serial response gives an error code in the form of an integer value. You have to convert the value to binary to obtain the error bit affected. For example a response {Er00004} means that the system doesn't recognized the first character of the command.

Binary	Error Bit	Message
[00001]	0	Message string syntax error!
[00002]	1	String to integer data convert error! , even/off according to read/write
[00004]	2	Unknown first character of command!
[00008]	3	Unknown second character of command!
[00016]	4	Parameter value error!
[00032]	5	Sequence vibration duration value 0 error !
[00064]	6	Access to the vibration set or sequence ID 26 error!
[00128]	7	« not used »
[00256]	8	Receive buffer is full!
[00512]	9	Receive end of message "}" but receive buffer is full!
[01024]	10	Receive end of message "}" but missing begin of message "{!
[02048]	11	
[04096]	12	Framing error detected!
[08192]	13	Parity error detected!
[16384]	14	Overflow error detected!
[32768]	15	Receive complete message timeout control!

Table 4-2: communication error code

5. Commands

All existing commands are described in the overview below.

5.1. Description and ranges of parameters

The following table describes the parameters used by the different commands and their ranges.

Parameter	Description	Commands	Range	Unit
Amplitude	Amplitude of the vibration	LC, LB, SC, SB	[0...100]	%
Frequency	Frequency of the vibration	LC, LB, SC, SB	[0...255]	Hz
Waveform	Waveform of the vibration	LC, LB, SC, SB	[0...3]	
Phase	Phase of the vibration	LC, SC	[0...360]	°
Duration	Duration of the vibration or output activation	LC, LB, SC, SB	[0...32767]	ms
Action number	Number of the action in the sequence (7 actions in a sequence)	LS, SS	[1...7]	
Type	Type of action in the sequence (None, Platform, Hopper, Wait)	LS, SS	[0...3]	
Vibration	Vibration used by the action in the sequence (for Platform and Hopper types)	LS, SS	[A...Z] 0 for centering	
Duration Mode	Duration mode of the action in the sequence (Fixed, QuantityAdjusted and VibrationRatio)	LS, SS	[0...2]	
Duration Value	Duration value of the action in the sequence	LS, SS	[0...32767] ¹ [0...100] ²	ms %
Nb Parts on the platform	Number of parts on platform used by the Asycube to execute the sequence	ES, EF	[0...32767]	parts
Nb Limit Parts for Vibration	Limit number of parts on platform in the sequence to have a vibration with QuantityAdjusted duration mode (if the number of parts exceeds this value the hopper will not be vibrated)	LS, SS, ES, EF	[0...32767]	parts
Center of mass	Center of mass of the parts on the platform. This value is used by the Centering vibration.	ES, EC	[-1.000...1.000]	
Sequence ID	ID of the sequence	LS, SS, US	[1...26]	
Vibration Set ID	ID of the vibration set	UV	[1...26]	

¹ For all duration modes except the “vibration ratio”

² Only for duration mode “vibration ratio”

5.2. Level access

The system has three different levels to access parameters or to execute some commands.

The actual selected access level can be obtained using the command {?6}.

Level	Description	Response to query	Select the level
User	User access allows to access simple commands and parameters to use the Asycube.	{?6:00001}	{WP7=0}
Integrator	Integrator access allows changing some special parameters for advanced configuration.	{?6:00002}	{WP7=1234}
Developer	Developer access allows to change all parameters but is exclusively used by Asyrl	{?6:00004}	Reserved for Asyrl

Table 5-1: level access description

5.3. Access Single Parameters

Code	Label	Command	Response	Remark
WP	Write Parameter	{WP303=90}	{WP303=90}	
RP	Read Parameter	{RP302}	{RP302:90}	

Table 5-2: read and write commands



NOTE :

The even numbered registers are readable parameters and the odd numbered registers are the writable parameters. E.g. the register 302 and 303 stand for the first actuator frequency of the platform vibration “A”. If the frequency of the first actuator signal needs to be changed, register 303 needs to be overwritten. If the information of the frequency of the first actuator signal needs to be returned, register 302 has to be read.

5.4. Access to parameters

For all explanations below, the parameters ranges are described in this [generic chapter](#).

5.4.1. Platform Vibration Parameters

Code	Label	Command	Response	Remark
SCA..Z	Save Platform Vibration A...Z parameters	{SCA=(p1; p2;etc)}	{SCA=(p1;p2;etc)}	
LCA..Z	Load Platform Vibration A...Z parameters	{LCA}	{LCA:(p1;p2;etc)}	

Table 5-3: platform vibration commands

P1, P2 are parameters given in a specific order and separate with a semicolon. The order of the parameters is as follows:

Amplitude1; Frequency1; Phase1; Waveform1;
Amplitude2; Frequency2; Phase2; Waveform2;
Amplitude3; Frequency3; Phase3; Waveform3;
Amplitude4; Frequency4; Phase4; Waveform4;
Duration

Examples:

- Write platform vibration A :
 - Command : {SCA=(90;70;0;1;88;71;90;2;85;72;180;3;80;73;270;4;1200)}
 - Response: {SCA=(90;70;0;1;88;71;90;2;85;72;180;3;80;73;270;4;1200)}
- Read platform vibration A :
 - Command : {LCA}
 - Response: {LCA :(90;70;0;1;88;71;90;2;85;72;180;3;80;73;270;4;1200)}

NOTE :



To access vibration and activation parameters (platform and outputs), the order of the parameters has to be strictly respected. These commands are useful to access all parameters of a vibration/activation in only one message.

5.4.2. Outputs Activation Parameters

Code	Label	Command	Response	Remark
SBA..Z	Save Outputs Activation A...Z parameters	{SBA=(p1; p2;etc)}	{SBA=(p1;p2;etc)}	
LBA..Z	Load Outputs Activation A...Z parameters	{LBA}	{LBA:(p1;p2;etc)}	

Table 5-4: outputs activation commands

P1, P2 are parameters given in a specific order and separate with a semicolon. The order of the parameters is as follows:

Toggle_Output1; Amplitude_output1; Toggle_Output2; Amplitude_Output2; Duration

Examples:

- Write outputs activation A:
 - Command: {SBA=(1;100;0;20;1200)}
 - Response: {SBA=(1;100;0;20;1200)}
- Read outputs activation A:
 - Command: {LBA}
 - Response: {LBA :(1;100;0;20;1200)}

NOTE :



To access vibration and activation parameters (platform and outputs), the order of the parameters has to be strictly respected. These commands are useful to access all parameters of a vibration/activation in only one message.

5.4.3. Sequence Parameters

Code	Label	Command	Response	Remark
SS	Save a sequence	{SS=(p1; p2;etc)}	{SS=(p1;p2;etc)}	
LS	Load a sequence	{LS=(p1,p2)}	{LS:(p1;p2;etc)}	

Table 5-5: hopper vibration commands

P1, P2 are parameters given in a specific order and separate with a semicolon.



NOTE :

To access sequence parameters, the order of the parameters has to be strictly respected.

5.4.3.1. Load

The order of the parameters for the command is as follows:

Action number; Sequence ID

The order of the parameters for the response is as follows:

*Action number; Type; Vibration; Duration Mode; Duration Value;
 Nb Limit Parts for Vibration; SequenceID*

Example:

Command: {LS:(1;1)}

Response: {LS:(1;2;B;1;1000;120;1)}

NOTE :



The sequenceID is optional, if missing, the Asycube will send back parameters for the currently selected sequence ([command {US?}](#) allows to ask the selected sequence ID).

If no action is used the “Duration Mode” “QuantityAdjusted”, the “Nb Limit Parts for Vibration” value has no impact on the action.

5.4.3.2. Save

The order of the parameters for the command and the response is as follows:

Action number; Type; Vibration; Duration Mode; Duration Value;
Nb Limit Parts for Vibration; Sequence ID

Example:

Command: {SS=(1;2;B;1;1000;120;1)}
 Response: {SS=(1;2;B;1;1000;120;1)}

NOTE :



The sequenceID is optional, if missing, the Asycube will write parameters on the parameters for the selected sequence ([command {US?}](#) allows to ask the selected sequence ID).

The “Nb Limit Parts for Vibration” is optional, if missing, the Asycube will use the value currently in the memory.

5.5. Vibration set and sequence selection

Code	Label	Command	Response	Remark
UV#	Use Vibration Set	{UV1}	{UV1}	UV# command select the vibration set to use
US#	Use Sequence	{US1}	{US1}	US# command select the sequence to use
UV?	Get selected Vibration Set	{UV?}	{UV?:1}	UV? asks for the selected vibration set
US?	Get selected Sequence	{US?}	{US?:1}	US? asks for the selected sequence
U??	Get selected Vibration Set and Sequence	{U??}	{U??:01:01}	U?? asks for the selected vibration set and sequence

Table 5-6: Vibration set and sequence selection commands

5.6. Backlight

Code	Label	Command	Response	Remark
K1	Backlight On	{K1}	{K1}	After response received, the backlight is considered ON, but you must consider a delay to get the maximal intensity.
K0	Backlight Off	{K0}	{K0}	
K?	Backlight State	{K?}	{K?:0} {K?:1}	0: Backlight is off 1: Backlight is on
KF	Backlight is flashing	{KF}	{KF}	Duration = Parameter 100

Table 5-7: backlight commands

5.7. System States

The Asycube has two different working states:

- Service mode is the normal mode, to work with the Asycube.
- Standby mode is a special mode. In this mode the power of vibrations, outputs, backlight, etc. are off. Operator can send commands without any physical action on the Asycube. This mode can be useful for tests and debug.

Code	Label	Command	Response	Remark
HC	Halt Platform Vibrations	{HC}	{HC}	Stop all actuators
HB	Halt Outputs Activation	{HB}	{HB}	Stop outputs
H1	System in service	{H1}	{H1}	Set system in service
H0	System in standby	{H0}	{H0}	Set system in standby
H?	System State	{H?}	{H?:0} {H?:1}	0: System in standby 1: System in service

Table 5-8: system states commands

5.8. Platform Vibrations (C for Cube)

Code	Label	Command	Response	Remark
CA..Z	Platform vibrate for a time [ms]	{CF100}	{CF100}	Vibration F vibrates for 100ms
CA0..Z0	Platform vibrate forever	{CF0}	{CF0}	Vibration F vibrate forever. Stop vibration with command HC.
CA..Z	Platform vibrate for a pre-defined delay	{CF}	{CF}	Delay depends on selected Vibration. In this case the delay is equal the register 950 value. If value = 0 -> forever
C?	Read selected Platform vibration	{C?}	{C?:F}	Vibration F is selected. The selected vibration is the last vibration executed.
C??	Read selected Platform Vibration and state	{C??}	{C???:F3}	Vibration F is selected and the state is 3. States: 0: Actuator disabled 1: Actuator enable but stopped 3: Vibrating 5: Actuator stopped over temperature !: Undefined actuator state
CA..Z ?	Read Platform Vibration state	{CF?}	{CF:0}	State of Vibration F is 0. States: 0: Actuator disabled 1: Actuator enable but stopped 3: Vibrating 5: Actuator stopped over temperature !: Undefined actuator

Table 5-9: platform vibrations commands

The value sent back indicates the duration of the vibration (communication time is not included).

NOTE :

The duration answered can change depending of the conditions when the vibration is requested.



- *If the amplifiers are in the switching OFF process (automatically 5s after the end of the last vibration), the Asycube needs to wait the end of the switching OFF process (max 150ms) before to be able to start a new vibration. Then the time answered to the command will be: the time requested + the 60ms of switching ON amplifiers + max 150ms of switching OFF process. The 150ms is the worst situation, because if the request appears in the middle of the switching OFF process, the delay will be only 75ms. This delay depends of the moment when the request appears during the switching OFF process.*

5.9. Outputs activation

Code	Label	Command	Response	Remark
BA..Z	Outputs activation for a time [ms]	{BF100}	{BF100}	Activation F activate for 100ms
BA0..Z0	Outputs activation forever	{BF0}	{BF0}	Activation F activate forever. Use the command HB to stop the activation.
BA..Z	Outputs activation for a pre-defined delay	{BF}	{BF}	Delay depends on selected Activation. In this case the delay is equal the register 1250 value. If value = 0 -> forever
B?	Read selected Output activation	{B?}	{B?:F}	Activation F is selected. The selected output activation is the last activation executed.
B??	Read selected Output Activation and state	{B??}	{B??:F3}	Activation F is selected and the state is 3. States: 0: Outputs disabled 1: Outputs enabled but stopped 3: Activating !: Undefined actuator state
BA..Z ?	Read Output Activation state	{BF?}	{BF:0}	State of Activation F is 0. States: 0: Outputs disabled 1: Outputs enabled but stopped 3: Activating !: Undefined actuator

Table 5-10: outputs activation commands

5.10. Sequence, centering and feeding execution

Code	Label	Command	Response	Remark
ES	Execute Sequence	{ES:(p1;p2;etc)}	{ES:(p1;p2;etc)}	Execute the sequence depending of given parameters.
EC	Execute Centering	{EC:(p1;p2;etc)}	{EC:(p1;p2;etc)}	Execute centering depending of given parameters.
EF	Execute Feeding	{EF:(p1;p2;etc)}	{EF:(p1;p2;etc)}	Execute feeding depending of given parameters.

Table 5-11: Execute commands

P1, P2 are parameters given in a specific order and separate with a semicolon. The ranges of parameters are described in this [generic chapter](#).



NOTE :

To execute a sequence, a centering or a feeding, the order of the parameters has to be strictly respected.

5.10.1. Sequence

The parameter order for the **command** is as follows:

*Number of parts on the platform; Nb Limit Parts for Vibration; Center of mass X; Center of mass Y;
 SequenceID*

The parameter order for the **response** is as follows:

*Number of parts on the platform; Nb Limit Parts for Vibration;
 Center of mass X, Center of mass Y; SequenceID; Duration of the sequence*

The duration sent back indicates the duration of the sequence (communication time is not included).

NOTE :

The duration answered can change depending of the conditions when the vibration is requested.



- If the amplifiers are in the switching OFF process (automatically 5s after the end of the last vibration), the Asycube needs to wait the end of the switching OFF process (max 150ms) before to be able to start a new vibration. Then the time answered to the command will be: the time requested + the 60ms of switching ON amplifiers + max 150ms of switching OFF process. The 150ms is the worst situation, because if the request appears in the middle of the switching OFF process, the delay will be only 75ms. This delay depends of the moment when the request appears during the switching OFF process.

Example:

Command: {ES:(55;100;0.33;-0.33;1)}

Response: {ES:(55;100;0.33;-0.33;1;1560)}

In this example, the sequence will take 1.56 seconds.

NOTE :



- The 'Sequence ID' is optional, if missing, the Asycube will execute the currently selected sequence ([command {US?} allows to ask the selected sequence ID](#)).
- The 'center of mass' is optional if the sequence doesn't contain a centering vibration.
- The 'number limit of parts for vibration' must have the value 0 to use the value already in the Asycube memory.

5.10.1.1. Various formats of the command ES

Command sent	Command executed	Remark
ES	ES:(0;nbMax;0;0;ID)	nbMax : value in memory previously given. ID : Selected sequence
ES:(nbParts)	ES:(nbParts;nbMax;0;0;ID)	nbParts : number of parts on the platform given in the command. nbMax : value in memory previously given. ID : Selected sequence
ES:(nbParts;nbMax)	ES:(nbParts;nbMax;0;0;ID)	nbParts : number of parts on the platform given in the command. nbMax : max number of parts given in the command. ID : Selected sequence
ES:(nbParts;nbMax;X)	ES:(nbParts;nbMax;X;0;ID)	nbParts : number of parts on the platform given in the command. nbMax : max number of parts given in the command. X : X coordinate of the center of mass given in the command. ID : Selected sequence
ES:(nbParts;nbMax;X;Y)	ES:(nbParts;nbMax;X;Y;ID)	nbParts : number of parts on the platform given in the command. nbMax : max number of parts given in the command. X : X coordinate of the center of mass given in the command. Y : Y coordinate of the center of mass given in the command. ID : Selected sequence
ES:(nbParts;nbMax;X;Y;ID)	ES:(nbParts;nbMax;X;Y;ID)	nbParts : number of parts on the platform given in the command. nbMax : max number of parts given in the command. X : X coordinate of the center of mass given in the command. Y : Y coordinate of the center of mass given in the command. ID : Sequence ID given in the command.

In green, the values given in the command.

In red, the values used by the Asycube when the value is missing in the command.

Special case for nbMax:**ES:(nbParts;0;X;Y;ID)****ES:(nbParts;nbMax;X;Y;ID)**

nbParts : number of parts on the platform given in the command.

nbMax : value in memory previously given.

X : X coordinate of the center of mass given in the command.

Y : Y coordinate of the center of mass given in the command.

ID : Sequence ID given in the command.

NOTE :

If the value 0 is given in the command for the nbMax, the value used for the execution is the value in memory. This use of the 0 value for this parameter can be done in all formats of the command ES.

5.10.2. Centering

The order of the parameters for the **command** is as follows:

Center of mass X; Center of mass Y

The parameters order for the **response** is the following:

Center of mass X, Center of mass Y; Duration of the centering

The duration sent back indicates the duration of the centering (communication time is not included).

NOTE :

The duration answered can change depending of the conditions when the vibration is requested.



- If the amplifiers are in the switching OFF process (automatically 5s after the end of the last vibration), the Asycube needs to wait the end of the switching OFF process (max 150ms) before to be able to start a new vibration. Then the time answered to the command will be: the time requested + the 60ms of switching ON amplifiers + max 150ms of switching OFF process. The 150ms is the worst situation, because if the request appears in the middle of the switching OFF process, the delay will be only 75ms. This delay depends of the moment when the request appears during the switching OFF process.*

Example :

Command: {EC:(0.33;-0.33)}

Response: {EC:(0.33;-0.33;560)}

In this example, the centering will take 0.56 seconds.

5.10.3. Feeding

The parameters order for the **command** is the following:

Vibration; Number of parts on the platform; Nb Limit Parts for Vibration

The parameters order for the **response** is the following:

Vibration; Number of parts on the platform; Nb Limit Parts for Vibration; Duration of the feeding

The duration sent back indicates the duration of the feeding (communication time is not included).

Example :

Command: {EF:(A;55;110)}

Response: {EF:(A;55;110;1210)}

In the example, the feeding will take 1.21 seconds.

5.11. Flash Operation

Code	Label	Command	Response	Remark
DF	Data Flash All in memory	{DF}	{DF}	100'000 Program Cycles
DG	Data Flash Global Parameters	{DG}	{DG}	
DS	Data Flash Sequences	{DS}	{DS}	
DV	Fata Flash Vibration Set	{DV}	{DV}	Save only the current vibration set
DE	Data Erase Memory	{DE}	{DE}	** only developer (Asyri)
DR	Data Restore Memory	{DR}	{DR}	* only integrator
DY	Restore Data with Factory values	{DY}	{DY}	* only integrator
DP	Restore current vibration set data and all sequences data with Factory values	{DP?:}	{DP?:0}	* only integrator
D.?	Data Flash Memory State	{DF?:}	{DF?:0}	States: 0: Operation completed 1: Operation in progress 3: Sector erase timeout 4: Page program timeout 5: Flash erase timeout 6: Checksum error 7: Nothing to flash restore 16: Flash operation busy 128: Operation need password

Table 5-12: flash operations commands

When something is saved in the flash memory, the status led flashes quickly during the whole saving process. If the user tries to save in flash during this time, an error answer is sent (error 80).

The duration of the saving process is 8s or 16s alternating.

During the saving process, the user can use the product, but cannot change any value or select another vibration set.

NOTE :



The Asycube saves automatically the global parameters every 20 minutes (equivalent to {DG} command). This automatic saving process has no impact on the functioning of the Asycube.

5.12. States

Code	Label	Command	Response	Remark
?0	NOP	{?0}	{?0}	
?2	RS485 Node Info	{?2}	{?2:1}	Return node info
?6	Login State	{?6}	{?6}	State: 1: User 2: Integrator 4: Developer (Asyrl)
?8	Soft High Version	{?8}	{?8:2}	Return highest value of the software version.
?10	Soft Middle Version	{?10}	{?10:2}	Return middle value of the software version.
?12	Soft Low Version	{?12}	{?12:0}	Return lowest value of the software version.
?40	Backlight Flash Remain Time	{?40}	{?40:00010}	Answer gives the remaining time until the end of the flash of the backlight. The value is in ms.
?42	Platform Remain Time	{?42}	{?42:00010}	Answer gives the remaining time until the end of the platform vibration. The value is in ms
?44	Outputs Remain Time	{?44}	{?44:00010}	Answer gives the remaining time until the end of the activation of outputs. The value is in ms
?46	Sequence Remain Time	{?46}	{?46:00010}	Answer gives the remaining time until the end of the sequence. This value is in ms.
?50	Vibration Set Changed	{?50}	{?50:00001}	Answer indicates if a parameter of the current selected vibration set has been modified. It is useful for avoiding the loss of modified parameters.

Table 5-13: states commands

5.13. General

Code	Label	Command	Response	Remark
V?	Read Software Version	{V?}	{(c) Asycube VX.X.X}	
#	Change the command timeout to 10 sec	{#}	{}	After that the timeout to enter a manual command is delayed to 10 sec. This is used to work with another software (p.e. hyperterminal)

Table 5-14: general commands

5.14. Warnings

To read the warnings, send {rp2} command.

Define	Value	Comment
WARNING_PLATFORM	0x0001	Above max temperature platform
WARNING_2	0x0002	Not used
WARNING_3	0x0004	Not used
WARNING_4	0x0008	Not used
WARNING_5	0x0010	Not used
WARNING_6	0x0020	Not used
WARNING_7	0x0040	Not used
WARNING_FLASH	0x0080	Flash operation fail

Table 5-15: warnings list

5.15. Alarms

To read the alarms, send {rp4} command.

Define	Value	Comment
ALARM_1	0x0001	
ALARM_2	0x0002	
ALARM_3	0x0004	
ALARM_4	0x0008	
ALARM_5	0x0010	
ALARM_6	0x0020	
ALARM_BACK_LT	0x0040	Backlight timeout reached
ALARM_8	0x0080	

Table 5-16: alarms list

6. Parameters

6.1. Configuration

*: integrator write; **: developer write

Register	Parameters	Command	Comment
0	NOP	rd/wr	
2	warning	rd & clear	
4	alarm	rd & clear	
6	password	wr	
...			
22	life time [day]	**	if auto-flashing enabled
24	life time [hour]	**	if auto-flashing enabled
26	life time [second]	**	if auto-flashing enabled
28	auto-flashing 20Min.	*	default: enable
30	actuators life time [hour]	**	
32	actuators life time [sec]	**	
34	actuators life time [msec]	**	
36	Actuators number of vibrations [nb] – 0-32767	**	first 2 bytes
38	Actuators number of vibrations [nb] – i*32768	**	bytes 3 and 4
40	IP address first byte	*	default: 192
42	IP address second byte	*	default: 168
44	IP address third byte	*	default: 127
46	IP address fourth byte	*	default: 254
48	IP subnet mask first byte	*	default: 255
50	IP subnet mask second byte	*	default: 255
52	IP subnet mask third byte	*	default: 255
54	IP subnet mask fourth byte	*	default: 0
56	TCP port	*	default: 4001
...			
60	number of flash in ROM [nb] – 0-32767	**	number of flashing data in ROM
62	number of flash in ROM [nb] – i*32768	**	number of flashing data in ROM for more than 32767
64	average number of flash in ROM [nb/day]	**	number of flashing data in ROM per day
...			
72	Synchro backlight logic	*	0 : logic positive / 1 : logic negative

...			
80	DIP switch 1 ON	**	switch state: 1 : IP default value
82	DIP switch 2 ON	**	
84	DIP switch 3 ON	**	
86	DIP switch 4 ON	**	
...			
92	Type 1: Asycube	**	0 : Unknown 1: Asycube 50 2: Asycube 80 3: Asycube 130 4: Asycube 240
94	Type 2: Asycube	**	
96	Color of Backlight	*	0: Green 1: Red 2: Blue 3: IR 4: UV 5: White 99: None
...			
100	Backlight Flash Time	[ms]	
102	Backlight PWM	[%]	
...			
110	Vibration Set ID	**	Selected Vibration Set ID [1...26]
112	Sequence ID	**	Selected Sequence ID [1...26]
...			
122	Cube integral limit time	**	Default 60 [sec]
...			
130	Sequence ID Input 1		Sequence ID [1...26]
132	Sequence ID Input 2		Sequence ID [1...26]
...	WW		
144	UART1 rx timeout Ethernet	*	Default: 1'000 [ms]
146	UART2 rx timeout RS232		Default: 1'000 [ms]
148	UART1 tx timeout Ethernet	*	Default: 2 [ms]
150	UART2 tx timeout RS232	*	Default: 0 [ms]
152	Backlight timeout	**	0= disable timeout function 30 = 30 sec with PWM 100%, 60 sec with PWM 50%, etc. 0 for Asycube 240 backlight because there is no risk to keep it switched on permanently.
...			

158	Gain amplitude actuator 1	*	(int) [2.55]
160	Gain amplitude actuator 2	*	(int) [2.55]
162	Gain amplitude actuator 3	*	(int) [2.55]
164	Gain amplitude actuator 4	*	(int) [2.55]
166	Offset amplitude actuator 1	*	(int) +/- n 1/256
168	Offset amplitude actuator 2	*	(int) +/- n 1/256
170	Offset amplitude actuator 3	*	(int) +/- n 1/256
172	Offset amplitude actuator 4	*	(int) +/- n 1/256
174	Offset frequency actuator 1	*	(int) +/- n 0.25 Hz
176	Offset frequency actuator 2	*	(int) +/- n 0.25 Hz
178	Offset frequency actuator 3	*	(int) +/- n 0.25 Hz
180	Offset frequency actuator 4	*	(int) +/- n 0.25 Hz
182	Gain amplitude output 1	*	(int) [2.55]
184	Gain amplitude output 2	*	(int) [2.55]
186	Offset amplitude output 1	*	(int) +/- n 1/256
188	Offset amplitude output 2	*	(int) +/- n 1/256
190	Output 1 logic	*	0 : logic positive / 1 : logic negative
192	Output 2 logic	*	0 : logic positive / 1 : logic negative
194	Input 1 logic	*	0 : logic positive / 1 : logic negative
196	Input 2 logic	*	0 : logic positive / 1 : logic negative

Table 6-1: configuration parameters

6.2. Platform Vibrations

Register	Define	Vibration	Units	Range
300	Amplitude 1	Platform "A"	[%]	0 to 100 %
302	Frequency 1		[Hz]	0 to 350 Hz
304	Phase 1		[°deg.]	0 to 360 degrees
306	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
310	Amplitude 2		[%]	0 to 100 %
312	Frequency 2		[Hz]	0 to 350 Hz
314	Phase 2		[°deg.]	0 to 360 degrees
316	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
320	Amplitude 3		[%]	0 to 100 %
322	Frequency 3		[Hz]	0 to 350 Hz
324	Phase 3		[°deg.]	0 to 360 degrees
326	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
330	Amplitude 4		[%]	0 to 100 %
332	Frequency 4		[Hz]	0 to 350 Hz
334	Phase 4		[°deg.]	0 to 360 degrees
336	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
362	Duration		[ms]	
364	Amplitude 1	Platform "B"	[%]	0 to 100 %
366	Frequency 1		[Hz]	0 to 350 Hz
368	Phase 1		[°deg.]	0 to 360 degrees
370	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
374	Amplitude 2		[%]	0 to 100 %
376	Frequency 2		[Hz]	0 to 350 Hz
378	Phase 2		[°deg.]	0 to 360 degrees
380	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
384	Amplitude 3		[%]	0 to 100 %
386	Frequency 3		[Hz]	0 to 350 Hz
388	Phase 3		[°deg.]	0 to 360 degrees
390	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
394	Amplitude 4		[%]	0 to 100 %
396	Frequency 4		[Hz]	0 to 350 Hz
398	Phase 4		[°deg.]	0 to 360 degrees
400	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
426	Duration		[ms]	

Register	Define	Vibration	Units	Range
428	Amplitude 1	Platform "C"	[%]	0 to 100 %
430	Frequency 1		[Hz]	0 to 350 Hz
432	Phase 1		[°deg.]	0 to 360 degrees
434	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
438	Amplitude 2		[%]	0 to 100 %
440	Frequency 2		[Hz]	0 to 350 Hz
442	Phase 2		[°deg.]	0 to 360 degrees
444	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
448	Amplitude 3		[%]	0 to 100 %
450	Frequency 3		[Hz]	0 to 350 Hz
452	Phase 3		[°deg.]	0 to 360 degrees
454	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
458	Amplitude 4		[%]	0 to 100 %
460	Frequency 4		[Hz]	0 to 350 Hz
462	Phase 4		[°deg.]	0 to 360 degrees
464	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
490	Duration		[ms]	
492	Amplitude 1	Platform "D"	[%]	0 to 100 %
494	Frequency 1		[Hz]	0 to 350 Hz
496	Phase 1		[°deg.]	0 to 360 degrees
498	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
502	Amplitude 2		[%]	0 to 100 %
504	Frequency 2		[Hz]	0 to 350 Hz
506	Phase 2		[°deg.]	0 to 360 degrees
508	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
512	Amplitude 3		[%]	0 to 100 %
514	Frequency 3		[Hz]	0 to 350 Hz
516	Phase 3		[°deg.]	0 to 360 degrees
518	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
522	Amplitude 4		[%]	0 to 100 %
524	Frequency 4		[Hz]	0 to 350 Hz
526	Phase 4		[°deg.]	0 to 360 degrees
528	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
554	Duration		[ms]	

Register	Define	Vibration	Units	Range
556	Amplitude 1	Platform "E"	[%]	0 to 100 %
558	Frequency 1		[Hz]	0 to 350 Hz
560	Phase 1		[°deg.]	0 to 360 degrees
562	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
566	Amplitude 2		[%]	0 to 100 %
568	Frequency 2		[Hz]	0 to 350 Hz
570	Phase 2		[°deg.]	0 to 360 degrees
572	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
576	Amplitude 3		[%]	0 to 100 %
578	Frequency 3		[Hz]	0 to 350 Hz
580	Phase 3		[°deg.]	0 to 360 degrees
582	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
586	Amplitude 4		[%]	0 to 100 %
588	Frequency 4		[Hz]	0 to 350 Hz
590	Phase 4		[°deg.]	0 to 360 degrees
592	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
618	Duration		[ms]	
 	 	 	 	
620	Amplitude 1	Platform "F"	[%]	0 to 100 %
622	Frequency 1		[Hz]	0 to 350 Hz
624	Phase 1		[°deg.]	0 to 360 degrees
626	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
630	Amplitude 2		[%]	0 to 100 %
632	Frequency 2		[Hz]	0 to 350 Hz
634	Phase 2		[°deg.]	0 to 360 degrees
636	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
640	Amplitude 3		[%]	0 to 100 %
642	Frequency 3		[Hz]	0 to 350 Hz
644	Phase 3		[°deg.]	0 to 360 degrees
646	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
650	Amplitude 4		[%]	0 to 100 %
652	Frequency 4		[Hz]	0 to 350 Hz
654	Phase 4		[°deg.]	0 to 360 degrees
656	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
682	Duration		[ms]	

Register	Define	Vibration	Units	Range
684	Amplitude 1	Platform "G"	[%]	0 to 100 %
686	Frequency 1		[Hz]	0 to 350 Hz
688	Phase 1		[°deg.]	0 to 360 degrees
690	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
694	Amplitude 2		[%]	0 to 100 %
696	Frequency 2		[Hz]	0 to 350 Hz
698	Phase 2		[°deg.]	0 to 360 degrees
700	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
704	Amplitude 3		[%]	0 to 100 %
706	Frequency 3		[Hz]	0 to 350 Hz
708	Phase 3		[°deg.]	0 to 360 degrees
710	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
714	Amplitude 4		[%]	0 to 100 %
716	Frequency 4		[Hz]	0 to 350 Hz
718	Phase 4		[°deg.]	0 to 360 degrees
720	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
746	Duration		[ms]	
 				
748	Amplitude 1	Platform "H"	[%]	0 to 100 %
750	Frequency 1		[Hz]	0 to 350 Hz
752	Phase 1		[°deg.]	0 to 360 degrees
754	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
758	Amplitude 2		[%]	0 to 100 %
760	Frequency 2		[Hz]	0 to 350 Hz
762	Phase 2		[°deg.]	0 to 360 degrees
764	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
768	Amplitude 3		[%]	0 to 100 %
770	Frequency 3		[Hz]	0 to 350 Hz
772	Phase 3		[°deg.]	0 to 360 degrees
774	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
778	Amplitude 4		[%]	0 to 100 %
780	Frequency 4		[Hz]	0 to 350 Hz
782	Phase 4		[°deg.]	0 to 360 degrees
784	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
810	Duration		[ms]	

Register	Define	Vibration	Units	Range
812	Amplitude 1	Platform "I"	[%]	0 to 100 %
814	Frequency 1		[Hz]	0 to 350 Hz
816	Phase 1		[°deg.]	0 to 360 degrees
818	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
822	Amplitude 2		[%]	0 to 100 %
824	Frequency 2		[Hz]	0 to 350 Hz
826	Phase 2		[°deg.]	0 to 360 degrees
828	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
832	Amplitude 3		[%]	0 to 100 %
834	Frequency 3		[Hz]	0 to 350 Hz
836	Phase 3		[°deg.]	0 to 360 degrees
838	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
842	Amplitude 4		[%]	0 to 100 %
844	Frequency 4		[Hz]	0 to 350 Hz
846	Phase 4		[°deg.]	0 to 360 degrees
848	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
874	Duration		[ms]	
876	Amplitude 1	Platform "J"	[%]	0 to 100 %
878	Frequency 1		[Hz]	0 to 350 Hz
880	Phase 1		[°deg.]	0 to 360 degrees
882	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
886	Amplitude 2		[%]	0 to 100 %
888	Frequency 2		[Hz]	0 to 350 Hz
890	Phase 2		[°deg.]	0 to 360 degrees
892	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
896	Amplitude 3		[%]	0 to 100 %
898	Frequency 3		[Hz]	0 to 350 Hz
900	Phase 3		[°deg.]	0 to 360 degrees
902	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
906	Amplitude 4		[%]	0 to 100 %
908	Frequency 4		[Hz]	0 to 350 Hz
910	Phase 4		[°deg.]	0 to 360 degrees
912	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
938	Duration		[ms]	

Register	Define	Vibration	Units	Range
940	Amplitude 1	Platform "K"	[%]	0 to 100 %
942	Frequency 1		[Hz]	0 to 350 Hz
944	Phase 1		[°deg.]	0 to 360 degrees
946	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
950	Amplitude 2		[%]	0 to 100 %
952	Frequency 2		[Hz]	0 to 350 Hz
954	Phase 2		[°deg.]	0 to 360 degrees
956	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
960	Amplitude 3		[%]	0 to 100 %
962	Frequency 3		[Hz]	0 to 350 Hz
964	Phase 3		[°deg.]	0 to 360 degrees
966	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
970	Amplitude 4		[%]	0 to 100 %
972	Frequency 4		[Hz]	0 to 350 Hz
974	Phase 4		[°deg.]	0 to 360 degrees
976	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1002	Duration		[ms]	
 	 	 	 	
1004	Amplitude 1	Platform "L"	[%]	0 to 100 %
1006	Frequency 1		[Hz]	0 to 350 Hz
1008	Phase 1		[°deg.]	0 to 360 degrees
1010	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1014	Amplitude 2		[%]	0 to 100 %
1016	Frequency 2		[Hz]	0 to 350 Hz
1018	Phase 2		[°deg.]	0 to 360 degrees
1020	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1024	Amplitude 3		[%]	0 to 100 %
1026	Frequency 3		[Hz]	0 to 350 Hz
1028	Phase 3		[°deg.]	0 to 360 degrees
1030	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1034	Amplitude 4		[%]	0 to 100 %
1036	Frequency 4		[Hz]	0 to 350 Hz
1038	Phase 4		[°deg.]	0 to 360 degrees
1040	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1066	Duration		[ms]	

Register	Define	Vibration	Units	Range
1068	Amplitude 1	Platform "M"	[%]	0 to 100 %
1070	Frequency 1		[Hz]	0 to 350 Hz
1072	Phase 1		[°deg.]	0 to 360 degrees
1074	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1078	Amplitude 2		[%]	0 to 100 %
1080	Frequency 2		[Hz]	0 to 350 Hz
1082	Phase 2		[°deg.]	0 to 360 degrees
1084	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1088	Amplitude 3		[%]	0 to 100 %
1090	Frequency 3		[Hz]	0 to 350 Hz
1092	Phase 3		[°deg.]	0 to 360 degrees
1094	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1098	Amplitude 4		[%]	0 to 100 %
1100	Frequency 4		[Hz]	0 to 350 Hz
1102	Phase 4		[°deg.]	0 to 360 degrees
1104	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1130	Duration		[ms]	
 				
1132	Amplitude 1	Platform "N"	[%]	0 to 100 %
1134	Frequency 1		[Hz]	0 to 350 Hz
1136	Phase 1		[°deg.]	0 to 360 degrees
1138	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1142	Amplitude 2		[%]	0 to 100 %
1144	Frequency 2		[Hz]	0 to 350 Hz
1146	Phase 2		[°deg.]	0 to 360 degrees
1148	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1152	Amplitude 3		[%]	0 to 100 %
1154	Frequency 3		[Hz]	0 to 350 Hz
1156	Phase 3		[°deg.]	0 to 360 degrees
1158	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1162	Amplitude 4		[%]	0 to 100 %
1164	Frequency 4		[Hz]	0 to 350 Hz
1166	Phase 4		[°deg.]	0 to 360 degrees
1168	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1194	Duration		[ms]	

Register	Define	Vibration	Units	Range
1196	Amplitude 1	Platform "O"	[%]	0 to 100 %
1198	Frequency 1		[Hz]	0 to 350 Hz
1200	Phase 1		[°deg.]	0 to 360 degrees
1202	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1206	Amplitude 2		[%]	0 to 100 %
1208	Frequency 2		[Hz]	0 to 350 Hz
1210	Phase 2		[°deg.]	0 to 360 degrees
1212	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1216	Amplitude 3		[%]	0 to 100 %
1218	Frequency 3		[Hz]	0 to 350 Hz
1220	Phase 3		[°deg.]	0 to 360 degrees
1222	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1226	Amplitude 4		[%]	0 to 100 %
1228	Frequency 4		[Hz]	0 to 350 Hz
1230	Phase 4		[°deg.]	0 to 360 degrees
1232	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1258	Duration		[ms]	
 	 	 	 	
1260	Amplitude 1	Platform "P"	[%]	0 to 100 %
1262	Frequency 1		[Hz]	0 to 350 Hz
1264	Phase 1		[°deg.]	0 to 360 degrees
1266	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1270	Amplitude 2		[%]	0 to 100 %
1272	Frequency 2		[Hz]	0 to 350 Hz
1274	Phase 2		[°deg.]	0 to 360 degrees
1276	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1280	Amplitude 3		[%]	0 to 100 %
1282	Frequency 3		[Hz]	0 to 350 Hz
1284	Phase 3		[°deg.]	0 to 360 degrees
1286	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1290	Amplitude 4		[%]	0 to 100 %
1292	Frequency 4		[Hz]	0 to 350 Hz
1294	Phase 4		[°deg.]	0 to 360 degrees
1296	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1322	Duration		[ms]	

Register	Define	Vibration	Units	Range
1324	Amplitude 1	Platform "Q"	[%]	0 to 100 %
1326	Frequency 1		[Hz]	0 to 350 Hz
1328	Phase 1		[°deg.]	0 to 360 degrees
1330	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1334	Amplitude 2		[%]	0 to 100 %
1336	Frequency 2		[Hz]	0 to 350 Hz
1338	Phase 2		[°deg.]	0 to 360 degrees
1340	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1344	Amplitude 3		[%]	0 to 100 %
1346	Frequency 3		[Hz]	0 to 350 Hz
1348	Phase 3		[°deg.]	0 to 360 degrees
1350	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1354	Amplitude 4		[%]	0 to 100 %
1356	Frequency 4		[Hz]	0 to 350 Hz
1358	Phase 4		[°deg.]	0 to 360 degrees
1360	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1386	Duration		[ms]	
1388	Amplitude 1	Platform "R"	[%]	0 to 100 %
1390	Frequency 1		[Hz]	0 to 350 Hz
1392	Phase 1		[°deg.]	0 to 360 degrees
1394	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1398	Amplitude 2		[%]	0 to 100 %
1400	Frequency 2		[Hz]	0 to 350 Hz
1402	Phase 2		[°deg.]	0 to 360 degrees
1404	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1408	Amplitude 3		[%]	0 to 100 %
1410	Frequency 3		[Hz]	0 to 350 Hz
1412	Phase 3		[°deg.]	0 to 360 degrees
1414	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1418	Amplitude 4		[%]	0 to 100 %
1420	Frequency 4		[Hz]	0 to 350 Hz
1422	Phase 4		[°deg.]	0 to 360 degrees
1424	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1450	Duration		[ms]	

Register	Define	Vibration	Units	Range
1452	Amplitude 1	Platform "S"	[%]	0 to 100 %
1454	Frequency 1		[Hz]	0 to 350 Hz
1456	Phase 1		[°deg.]	0 to 360 degrees
1458	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1462	Amplitude 2		[%]	0 to 100 %
1464	Frequency 2		[Hz]	0 to 350 Hz
1466	Phase 2		[°deg.]	0 to 360 degrees
1468	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1472	Amplitude 3		[%]	0 to 100 %
1474	Frequency 3		[Hz]	0 to 350 Hz
1476	Phase 3		[°deg.]	0 to 360 degrees
1478	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1482	Amplitude 4		[%]	0 to 100 %
1484	Frequency 4		[Hz]	0 to 350 Hz
1486	Phase 4		[°deg.]	0 to 360 degrees
1488	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1514	Duration		[ms]	
1516	Amplitude 1	Platform "T"	[%]	0 to 100 %
1518	Frequency 1		[Hz]	0 to 350 Hz
1520	Phase 1		[°deg.]	0 to 360 degrees
1522	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1526	Amplitude 2		[%]	0 to 100 %
1528	Frequency 2		[Hz]	0 to 350 Hz
1530	Phase 2		[°deg.]	0 to 360 degrees
1532	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1536	Amplitude 3		[%]	0 to 100 %
1538	Frequency 3		[Hz]	0 to 350 Hz
1540	Phase 3		[°deg.]	0 to 360 degrees
1542	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1546	Amplitude 4		[%]	0 to 100 %
1548	Frequency 4		[Hz]	0 to 350 Hz
1550	Phase 4		[°deg.]	0 to 360 degrees
1552	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1578	Duration		[ms]	

Register	Define	Vibration	Units	Range
1580	Amplitude 1	Platform "U"	[%]	0 to 100 %
1582	Frequency 1		[Hz]	0 to 350 Hz
1584	Phase 1		[°deg.]	0 to 360 degrees
1586	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1590	Amplitude 2		[%]	0 to 100 %
1592	Frequency 2		[Hz]	0 to 350 Hz
1594	Phase 2		[°deg.]	0 to 360 degrees
1596	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1600	Amplitude 3		[%]	0 to 100 %
1602	Frequency 3		[Hz]	0 to 350 Hz
1604	Phase 3		[°deg.]	0 to 360 degrees
1606	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1610	Amplitude 4		[%]	0 to 100 %
1612	Frequency 4		[Hz]	0 to 350 Hz
1614	Phase 4		[°deg.]	0 to 360 degrees
1616	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1642	Duration		[ms]	
1644	Amplitude 1	Platform "V"	[%]	0 to 100 %
1646	Frequency 1		[Hz]	0 to 350 Hz
1648	Phase 1		[°deg.]	0 to 360 degrees
1650	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1654	Amplitude 2		[%]	0 to 100 %
1656	Frequency 2		[Hz]	0 to 350 Hz
1658	Phase 2		[°deg.]	0 to 360 degrees
1660	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1664	Amplitude 3		[%]	0 to 100 %
1666	Frequency 3		[Hz]	0 to 350 Hz
1668	Phase 3		[°deg.]	0 to 360 degrees
1670	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1674	Amplitude 4		[%]	0 to 100 %
1676	Frequency 4		[Hz]	0 to 350 Hz
1678	Phase 4		[°deg.]	0 to 360 degrees
1680	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1706	Duration		[ms]	

Register	Define	Vibration	Units	Range
1708	Amplitude 1	Platform "W"	[%]	0 to 100 %
1710	Frequency 1		[Hz]	0 to 350 Hz
1712	Phase 1		[°deg.]	0 to 360 degrees
1714	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1718	Amplitude 2		[%]	0 to 100 %
1720	Frequency 2		[Hz]	0 to 350 Hz
1722	Phase 2		[°deg.]	0 to 360 degrees
1724	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1728	Amplitude 3		[%]	0 to 100 %
1730	Frequency 3		[Hz]	0 to 350 Hz
1732	Phase 3		[°deg.]	0 to 360 degrees
1734	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1738	Amplitude 4		[%]	0 to 100 %
1740	Frequency 4		[Hz]	0 to 350 Hz
1742	Phase 4		[°deg.]	0 to 360 degrees
1744	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1770	Duration		[ms]	
1772	Amplitude 1	Platform "X"	[%]	0 to 100 %
1774	Frequency 1		[Hz]	0 to 350 Hz
1776	Phase 1		[°deg.]	0 to 360 degrees
1778	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1782	Amplitude 2		[%]	0 to 100 %
1784	Frequency 2		[Hz]	0 to 350 Hz
1786	Phase 2		[°deg.]	0 to 360 degrees
1788	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1792	Amplitude 3		[%]	0 to 100 %
1794	Frequency 3		[Hz]	0 to 350 Hz
1796	Phase 3		[°deg.]	0 to 360 degrees
1798	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1802	Amplitude 4		[%]	0 to 100 %
1804	Frequency 4		[Hz]	0 to 350 Hz
1806	Phase 4		[°deg.]	0 to 360 degrees
1808	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1834	Duration		[ms]	

Register	Define	Vibration	Units	Range
1836	Amplitude 1	Platform "Y"	[%]	0 to 100 %
1838	Frequency 1		[Hz]	0 to 350 Hz
1840	Phase 1		[°deg.]	0 to 360 degrees
1842	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1846	Amplitude 2		[%]	0 to 100 %
1848	Frequency 2		[Hz]	0 to 350 Hz
1850	Phase 2		[°deg.]	0 to 360 degrees
1852	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1856	Amplitude 3		[%]	0 to 100 %
1858	Frequency 3		[Hz]	0 to 350 Hz
1860	Phase 3		[°deg.]	0 to 360 degrees
1862	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1866	Amplitude 4		[%]	0 to 100 %
1868	Frequency 4		[Hz]	0 to 350 Hz
1870	Phase 4		[°deg.]	0 to 360 degrees
1872	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1898	Duration		[ms]	
1900	Amplitude 1	Platform "Z"	[%]	0 to 100 %
1902	Frequency 1		[Hz]	0 to 350 Hz
1904	Phase 1		[°deg.]	0 to 360 degrees
1906	Waveform 1		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1910	Amplitude 2		[%]	0 to 100 %
1912	Frequency 2		[Hz]	0 to 350 Hz
1914	Phase 2		[°deg.]	0 to 360 degrees
1916	Waveform 2		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1920	Amplitude 3		[%]	0 to 100 %
1922	Frequency 3		[Hz]	0 to 350 Hz
1924	Phase 3		[°deg.]	0 to 360 degrees
1926	Waveform 3		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1930	Amplitude 4		[%]	0 to 100 %
1932	Frequency 4		[Hz]	0 to 350 Hz
1934	Phase 4		[°deg.]	0 to 360 degrees
1936	Waveform 4		[0..3]	0=no signal, 1=sinus, 2=rp up, 3= rp dn
1962	Duration		[ms]	

Table 6-2: platform vibrations parameters

6.3. Outputs Activations

Register	Define	Activation	Units	Range
2000	Toggle output 1	Outputs "A"	[bool]	0=no signal, 1=signal
2002	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2004	Toggle output 2		[bool]	0=no signal, 1=signal
2006	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2014	Duration		[ms]	
2016	Toggle output 1	Outputs "B"	[bool]	0=no signal, 1=signal
2018	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2020	Toggle output 2		[bool]	0=no signal, 1=signal
2022	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2030	Duration		[ms]	
2032	Toggle output 1	Outputs "C"	[bool]	0=no signal, 1=signal
2034	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2036	Toggle output 2		[bool]	0=no signal, 1=signal
2038	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2046	Duration		[ms]	
2048	Toggle output 1	Outputs "D"	[bool]	0=no signal, 1=signal
2050	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2052	Toggle output 2		[bool]	0=no signal, 1=signal
2054	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2062	Duration		[ms]	
2064	Toggle output 1	Outputs "E"	[bool]	0=no signal, 1=signal
2066	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2068	Toggle output 2		[bool]	0=no signal, 1=signal
2070	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2078	Duration		[ms]	
2080	Toggle output 1	Outputs "F"	[bool]	0=no signal, 1=signal
2082	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2084	Toggle output 2		[bool]	0=no signal, 1=signal
2086	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2094	Duration		[ms]	

Register	Define	Activation	Units	Range
2096	Toggle output 1	Outputs "G"	[bool]	0=no signal, 1=signal
2098	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2100	Toggle output 2		[bool]	0=no signal, 1=signal
2102	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2110	Duration		[ms]	
2112	Toggle output 1	Outputs "H"	[bool]	0=no signal, 1=signal
2114	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2116	Toggle output 2		[bool]	0=no signal, 1=signal
2118	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2126	Duration		[ms]	
2128	Toggle output 1	Outputs "I"	[bool]	0=no signal, 1=signal
2130	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2132	Toggle output 2		[bool]	0=no signal, 1=signal
2134	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2142	Duration		[ms]	
2144	Toggle output 1	Outputs "J"	[bool]	0=no signal, 1=signal
2146	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2148	Toggle output 2		[bool]	0=no signal, 1=signal
2150	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2158	Duration		[ms]	
2160	Toggle output 1	Outputs "K"	[bool]	0=no signal, 1=signal
2162	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2164	Toggle output 2		[bool]	0=no signal, 1=signal
2166	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2174	Duration		[ms]	
2176	Toggle output 1	Outputs "L"	[bool]	0=no signal, 1=signal
2178	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2180	Toggle output 2		[bool]	0=no signal, 1=signal
2182	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2190	Duration		[ms]	

Register	Define	Activation	Units	Range
2192	Toggle output 1	Outputs "M"	[bool]	0=no signal, 1=signal
2194	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2196	Toggle output 2		[bool]	0=no signal, 1=signal
2198	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2206	Duration		[ms]	
2208	Toggle output 1	Outputs "N"	[bool]	0=no signal, 1=signal
2210	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2212	Toggle output 2		[bool]	0=no signal, 1=signal
2214	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2222	Duration		[ms]	
2224	Toggle output 1	Outputs "O"	[bool]	0=no signal, 1=signal
2226	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2228	Toggle output 2		[bool]	0=no signal, 1=signal
2230	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2238	Duration		[ms]	
2240	Toggle output 1	Outputs "P"	[bool]	0=no signal, 1=signal
2242	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2244	Toggle output 2		[bool]	0=no signal, 1=signal
2246	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2254	Duration		[ms]	
2256	Toggle output 1	Outputs "Q"	[bool]	0=no signal, 1=signal
2258	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2260	Toggle output 2		[bool]	0=no signal, 1=signal
2262	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2270	Duration		[ms]	
2272	Toggle output 1	Outputs "R"	[bool]	0=no signal, 1=signal
2274	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2276	Toggle output 2		[bool]	0=no signal, 1=signal
2278	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2286	Duration		[ms]	

Register	Define	Activation	Units	Range
2288	Toggle output 1	Outputs "S"	[bool]	0=no signal, 1=signal
2290	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2292	Toggle output 2		[bool]	0=no signal, 1=signal
2294	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2302	Duration		[ms]	
2304	Toggle output 1	Outputs "T"	[bool]	0=no signal, 1=signal
2306	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2308	Toggle output 2		[bool]	0=no signal, 1=signal
2310	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2318	Duration		[ms]	
2320	Toggle output 1	Outputs "U"	[bool]	0=no signal, 1=signal
2322	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2324	Toggle output 2		[bool]	0=no signal, 1=signal
2326	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2334	Duration		[ms]	
2336	Toggle output 1	Outputs "V"	[bool]	0=no signal, 1=signal
2338	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2340	Toggle output 2		[bool]	0=no signal, 1=signal
2342	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2350	Duration		[ms]	
2352	Toggle output 1	Outputs "W"	[bool]	0=no signal, 1=signal
2354	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2356	Toggle output 2		[bool]	0=no signal, 1=signal
2358	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2366	Duration		[ms]	
2368	Toggle output 1	Outputs "X"	[bool]	0=no signal, 1=signal
2370	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2372	Toggle output 2		[bool]	0=no signal, 1=signal
2374	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2382	Duration		[ms]	

Register	Define	Activation	Units	Range
2384	Toggle output 1	Outputs "Y"	[bool]	0=no signal, 1=signal
2386	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2388	Toggle output 2		[bool]	0=no signal, 1=signal
2390	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2398	Duration		[ms]	
<hr/>				
2400	Toggle output 1	Outputs "Z"	[bool]	0=no signal, 1=signal
2402	Amplitude output 1		[%]	0 to 100% (0 to 10V)
2404	Toggle output 2		[bool]	0=no signal, 1=signal
2406	Amplitude output 2		[%]	0 to 100% (0 to 10V)
2414	Duration		[ms]	

Table 6-3: outputs activations parameters

6.4. Sequences

Register	Define	Action nb	Sequence ID	Range	Comment
2500	Type	1	1	[0..3]	0=None, 1=Platform 2=Hopper, 3=Stabilisation
2502	Vibration			[A..Z + 0]	0 = Centering
2504	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2506	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2508	Type	2	1	[0..3]	0=None, 1=Platform 2=Hopper, 3=Stabilisation
2510	Vibration			[A..Z + 0]	0 = Centering
2512	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2514	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2516	Type	3	1	[0..3]	0=None, 1=Platform 2=Hopper, 3=Stabilisation
2518	Vibration			[A..Z + 0]	0 = Centering
2520	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2522	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2524	Type	4	1	[0..3]	0=None, 1=Platform 2=Hopper, 3=Stabilisation
2526	Vibration			[A..Z + 0]	0 = Centering
2528	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2530	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2532	Type	5	1	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2534	Vibration			[A..Z + 0]	0 = Centering
2536	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
2538	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2540	Type	6	1	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2542	Vibration			[A..Z + 0]	0 = Centering
2544	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2546	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2548	Type	7	1	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2550	Vibration			[A..Z + 0]	0 = Centering
2552	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2554	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2556	Nb Limit Parts	1		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
2558	Type	1	2	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2560	Vibration			[A..Z + 0]	0 = Centering
2562	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2564	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2566	Type	2	2	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2568	Vibration			[A..Z + 0]	0 = Centering
2570	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2572	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2574	Type	3	2	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2576	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
2578	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2580	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2582	Type	4	2	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2584	Vibration			[A..Z + 0]	0 = Centering
2586	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2588	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2590	Type	5	2	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2592	Vibration			[A..Z + 0]	0 = Centering
2594	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2596	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2598	Type	6	2	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2600	Vibration			[A..Z + 0]	0 = Centering
2602	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2604	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2606	Type	7	2	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2608	Vibration			[A..Z + 0]	0 = Centering
2610	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2612	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2614	Nb Limit Parts		2	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.

Register	Define	Action nb	Sequence ID	Range	Comment
2616	Type	1	3	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2618	Vibration			[A..Z + 0]	0 = Centering
2620	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2622	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2624	Type	2	3	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2626	Vibration			[A..Z + 0]	0 = Centering
2628	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2630	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2632	Type	3	3	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2634	Vibration			[A..Z + 0]	0 = Centering
2636	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2638	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2640	Type	4	3	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2642	Vibration			[A..Z + 0]	0 = Centering
2644	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2646	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2648	Type	5	3	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2650	Vibration			[A..Z + 0]	0 = Centering
2652	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2654	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
2656	Type	6	3	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2658	Vibration			[A..Z + 0]	0 = Centering
2660	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2662	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2664	Type	7	3	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2666	Vibration			[A..Z + 0]	0 = Centering
2668	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2670	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2672	Nb Limit Parts	3		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
2674	Type	1	4	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2676	Vibration			[A..Z + 0]	0 = Centering
2678	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2680	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2682	Type	2	4	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2684	Vibration			[A..Z + 0]	0 = Centering
2686	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2688	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2690	Type	3	4	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2692	Vibration			[A..Z + 0]	0 = Centering
2694	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
2696	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2698	Type	4	4	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2700	Vibration			[A..Z + 0]	0 = Centering
2702	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2704	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2706	Type	5	4	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2708	Vibration			[A..Z + 0]	0 = Centering
2710	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2712	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2714	Type	6	4	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2716	Vibration			[A..Z + 0]	0 = Centering
2718	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2720	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2722	Type	7	4	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2724	Vibration			[A..Z + 0]	0 = Centering
2726	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2728	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2730	Nb Limit Parts	4		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
2732	Type	1	5	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2734	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
2736	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2738	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2740	Type	2	5	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2742	Vibration			[A..Z + 0]	0 = Centering
2744	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2746	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2748	Type	3	5	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2750	Vibration			[A..Z + 0]	0 = Centering
2752	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2754	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2756	Type	4	5	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2758	Vibration			[A..Z + 0]	0 = Centering
2760	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2762	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2764	Type	5	5	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2766	Vibration			[A..Z + 0]	0 = Centering
2768	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2770	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2772	Type	6	5	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2774	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequen ce ID	Range	Comment
2776	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2778	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2780	Type	7	5	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2782	Vibration			[A..Z + 0]	0 = Centering
2784	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2786	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2788	Nb Limit Parts		5	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
2790	Type	1	6	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2792	Vibration			[A..Z + 0]	0 = Centering
2794	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2796	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2798	Type	2	6	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2800	Vibration			[A..Z + 0]	0 = Centering
2802	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2804	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2806	Type	3	6	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2808	Vibration			[A..Z + 0]	0 = Centering
2810	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2812	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
2814	Type	4	6	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2816	Vibration			[A..Z + 0]	0 = Centering
2818	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2820	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2822	Type	5	6	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2824	Vibration			[A..Z + 0]	0 = Centering
2826	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2828	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2830	Type	6	6	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2832	Vibration			[A..Z + 0]	0 = Centering
2834	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2836	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2838	Type	7	6	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2840	Vibration			[A..Z + 0]	0 = Centering
2842	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2844	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2846	Nb Limit Parts	6		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
2848	Type	1	7	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2850	Vibration			[A..Z + 0]	0 = Centering
2852	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
2854	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2856	Type	2	7	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2858	Vibration			[A..Z + 0]	0 = Centering
2860	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2862	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2864	Type	3	7	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2866	Vibration			[A..Z + 0]	0 = Centering
2868	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2870	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2872	Type	4	7	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2874	Vibration			[A..Z + 0]	0 = Centering
2876	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2878	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2880	Type	5	7	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2882	Vibration			[A..Z + 0]	0 = Centering
2884	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2886	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2888	Type	6	7	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2890	Vibration			[A..Z + 0]	0 = Centering
2892	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequen ce ID	Range	Comment
2894	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2896	Type	7	7	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2898	Vibration			[A..Z + 0]	0 = Centering
2900	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2902	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2904	Nb Limit Parts	7		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
2906	Type	1	8	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2908	Vibration			[A..Z + 0]	0 = Centering
2910	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2912	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2914	Type	2	8	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2916	Vibration			[A..Z + 0]	0 = Centering
2918	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2920	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2922	Type	3	8	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2924	Vibration			[A..Z + 0]	0 = Centering
2926	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2928	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2930	Type	4	8	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2932	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequen ce ID	Range	Comment
2934	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2936	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2938	Type	5	8	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2940	Vibration			[A..Z + 0]	0 = Centering
2942	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2944	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2946	Type	6	8	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2948	Vibration			[A..Z + 0]	0 = Centering
2950	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2952	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2954	Type	7	8	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2956	Vibration			[A..Z + 0]	0 = Centering
2958	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2960	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2962	Nb Limit Parts		8	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
2964	Type	1	9	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2966	Vibration			[A..Z + 0]	0 = Centering
2968	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2970	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
2972	Type	2	9	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2974	Vibration			[A..Z + 0]	0 = Centering
2976	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2978	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2980	Type	3	9	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2982	Vibration			[A..Z + 0]	0 = Centering
2984	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2986	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2988	Type	4	9	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2990	Vibration			[A..Z + 0]	0 = Centering
2992	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
2994	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
2996	Type	5	9	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
2998	Vibration			[A..Z + 0]	0 = Centering
3000	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3002	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3004	Type	6	9	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3006	Vibration			[A..Z + 0]	0 = Centering
3008	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3010	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3012	Type	7	9	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3014	Vibration			[A..Z + 0]	0 = Centering
3016	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3018	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3020	Nb Limit Parts	9		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3022	Type	1	10	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3024	Vibration			[A..Z + 0]	0 = Centering
3026	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3028	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3030	Type	2	10	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3032	Vibration			[A..Z + 0]	0 = Centering
3034	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3036	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3038	Type	3	10	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3040	Vibration			[A..Z + 0]	0 = Centering
3042	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3044	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3046	Type	4	10	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3048	Vibration			[A..Z + 0]	0 = Centering
3050	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3052	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3054	Type	5	10	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3056	Vibration			[A..Z + 0]	0 = Centering
3058	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3060	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3062	Type	6	10	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3064	Vibration			[A..Z + 0]	0 = Centering
3066	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3068	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3070	Type	7	10	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3072	Vibration			[A..Z + 0]	0 = Centering
3074	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3076	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3078	Nb Limit Parts		10	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3080	Type	1	11	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3082	Vibration			[A..Z + 0]	0 = Centering
3084	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3086	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3088	Type	2	11	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3090	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3092	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3094	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3096	Type	3	11	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3098	Vibration			[A..Z + 0]	0 = Centering
3100	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3102	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3104	Type	4	11	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3106	Vibration			[A..Z + 0]	0 = Centering
3108	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3110	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3112	Type	5	11	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3114	Vibration			[A..Z + 0]	0 = Centering
3116	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3118	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3120	Type	6	11	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3122	Vibration			[A..Z + 0]	0 = Centering
3124	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3126	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3128	Type	7	11	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3130	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3132	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3134	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3136	Nb Limit Parts	11		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3138	Type	1	12	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3140	Vibration			[A..Z + 0]	0 = Centering
3142	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3144	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3146	Type	2	12	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3148	Vibration			[A..Z + 0]	0 = Centering
3150	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3152	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3154	Type	3	12	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3156	Vibration			[A..Z + 0]	0 = Centering
3158	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3160	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3162	Type	4	12	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3164	Vibration			[A..Z + 0]	0 = Centering
3166	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3168	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3170	Type	5	12	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3172	Vibration			[A..Z + 0]	0 = Centering
3174	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3176	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3178	Type	6	12	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3180	Vibration			[A..Z + 0]	0 = Centering
3182	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3184	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3186	Type	7	12	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3188	Vibration			[A..Z + 0]	0 = Centering
3190	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3192	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3194	Nb Limit Parts		12	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3196	Type	1	13	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3198	Vibration			[A..Z + 0]	0 = Centering
3200	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3202	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3204	Type	2	13	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3206	Vibration			[A..Z + 0]	0 = Centering
3208	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3210	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3212	Type	3	13	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3214	Vibration			[A..Z + 0]	0 = Centering
3216	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3218	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3220	Type	4	13	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3222	Vibration			[A..Z + 0]	0 = Centering
3224	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3226	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3228	Type	5	13	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3230	Vibration			[A..Z + 0]	0 = Centering
3232	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3234	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3236	Type	6	13	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3238	Vibration			[A..Z + 0]	0 = Centering
3240	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3242	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3244	Type	7	13	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3246	Vibration			[A..Z + 0]	0 = Centering
3248	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3250	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3252	Nb Limit Parts		13	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3254	Type	1	14	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3256	Vibration			[A..Z + 0]	0 = Centering
3258	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3260	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3262	Type	2	14	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3264	Vibration			[A..Z + 0]	0 = Centering
3266	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3268	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3270	Type	3	14	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3272	Vibration			[A..Z + 0]	0 = Centering
3274	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3276	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3278	Type	4	14	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3280	Vibration			[A..Z + 0]	0 = Centering
3282	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3284	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3286	Type	5	14	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3288	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3290	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3292	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3294	Type	6	14	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3296	Vibration			[A..Z + 0]	0 = Centering
3298	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3300	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3302	Type	7	14	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3304	Vibration			[A..Z + 0]	0 = Centering
3306	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3308	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3310	Nb Limit Parts		14	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3312	Type	1	15	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3314	Vibration			[A..Z + 0]	0 = Centering
3316	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3318	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3320	Type	2	15	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3322	Vibration			[A..Z + 0]	0 = Centering
3324	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3326	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3328	Type	3	15	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3330	Vibration			[A..Z + 0]	0 = Centering
3332	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3334	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3336	Type	4	15	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3338	Vibration			[A..Z + 0]	0 = Centering
3340	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3342	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3344	Type	5	15	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3346	Vibration			[A..Z + 0]	0 = Centering
3348	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3350	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3352	Type	6	15	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3354	Vibration			[A..Z + 0]	0 = Centering
3356	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3358	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3360	Type	7	15	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3362	Vibration			[A..Z + 0]	0 = Centering
3364	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3366	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3368	Nb Limit Parts		15	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3370	Type	1	16	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3372	Vibration			[A..Z + 0]	0 = Centering
3374	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3376	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3378	Type	2	16	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3380	Vibration			[A..Z + 0]	0 = Centering
3382	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3384	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3386	Type	3	16	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3388	Vibration			[A..Z + 0]	0 = Centering
3390	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3392	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3394	Type	4	16	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3396	Vibration			[A..Z + 0]	0 = Centering
3398	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3400	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3402	Type	5	16	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3404	Vibration			[A..Z + 0]	0 = Centering
3406	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3408	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3410	Type	6	16	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3412	Vibration			[A..Z + 0]	0 = Centering
3414	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3416	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3418	Type	7	16	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3420	Vibration			[A..Z + 0]	0 = Centering
3422	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3424	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3426	Nb Limit Parts		16	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3428	Type	1	17	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3430	Vibration			[A..Z + 0]	0 = Centering
3432	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3434	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3436	Type	2	17	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3438	Vibration			[A..Z + 0]	0 = Centering
3440	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3442	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3444	Type	3	17	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3446	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3448	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3450	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3452	Type	4	17	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3454	Vibration			[A..Z + 0]	0 = Centering
3456	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3458	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3460	Type	5	17	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3462	Vibration			[A..Z + 0]	0 = Centering
3464	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3466	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3468	Type	6	17	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3470	Vibration			[A..Z + 0]	0 = Centering
3472	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3474	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3476	Type	7	17	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3478	Vibration			[A..Z + 0]	0 = Centering
3480	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3482	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3484	Nb Limit Parts		17	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.

Register	Define	Action nb	Sequence ID	Range	Comment
3486	Type	1	18	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3488	Vibration			[A..Z + 0]	0 = Centering
3490	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3492	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3494	Type	2	18	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3496	Vibration			[A..Z + 0]	0 = Centering
3498	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3500	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3502	Type	3	18	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3504	Vibration			[A..Z + 0]	0 = Centering
3506	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3508	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3510	Type	4	18	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3512	Vibration			[A..Z + 0]	0 = Centering
3514	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3516	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
<hr/>					
3518	Type	5	18	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3520	Vibration			[A..Z + 0]	0 = Centering
3522	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3524	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3526	Type	6	18	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3528	Vibration			[A..Z + 0]	0 = Centering
3530	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3532	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3534	Type	7	18	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3536	Vibration			[A..Z + 0]	0 = Centering
3538	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3540	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3542	Nb Limit Parts		18	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3544	Type	1	19	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3546	Vibration			[A..Z + 0]	0 = Centering
3548	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3550	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3552	Type	2	19	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3554	Vibration			[A..Z + 0]	0 = Centering
3556	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3558	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3560	Type	3	19	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3562	Vibration			[A..Z + 0]	0 = Centering
3564	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3566	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3568	Type	4	19	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3570	Vibration			[A..Z + 0]	0 = Centering
3572	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3574	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3576	Type	5	19	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3578	Vibration			[A..Z + 0]	0 = Centering
3580	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3582	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3584	Type	6	19	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3586	Vibration			[A..Z + 0]	0 = Centering
3588	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3590	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3592	Type	7	19	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3594	Vibration			[A..Z + 0]	0 = Centering
3596	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3598	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3600	Nb Limit Parts		19	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3602	Type	1	20	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3604	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3606	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3608	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3610	Type	2	20	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3612	Vibration			[A..Z + 0]	0 = Centering
3614	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3616	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3618	Type	3	20	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3620	Vibration			[A..Z + 0]	0 = Centering
3622	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3624	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3626	Type	4	20	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3628	Vibration			[A..Z + 0]	0 = Centering
3630	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3632	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3634	Type	5	20	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3636	Vibration			[A..Z + 0]	0 = Centering
3638	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3640	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3642	Type	6	20	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3644	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3646	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3648	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3650	Type	7	20	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3652	Vibration			[A..Z + 0]	0 = Centering
3654	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3656	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3658	Nb Limit Parts	20		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3660	Type	1	21	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3662	Vibration			[A..Z + 0]	0 = Centering
3664	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3666	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3668	Type	2	21	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3670	Vibration			[A..Z + 0]	0 = Centering
3672	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3674	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3676	Type	3	21	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3678	Vibration			[A..Z + 0]	0 = Centering
3680	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3682	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3684	Type	4	21	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3686	Vibration			[A..Z + 0]	0 = Centering
3688	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3690	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3692	Type	5	21	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3694	Vibration			[A..Z + 0]	0 = Centering
3696	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3698	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3700	Type	6	21	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3702	Vibration			[A..Z + 0]	0 = Centering
3704	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3706	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3708	Type	7	21	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3710	Vibration			[A..Z + 0]	0 = Centering
3712	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3714	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3716	Nb Limit Parts	21		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3718	Type	1	22	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3720	Vibration			[A..Z + 0]	0 = Centering
3722	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3724	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3726	Type	2	22	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3728	Vibration			[A..Z + 0]	0 = Centering
3730	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3732	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3734	Type	3	22	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3736	Vibration			[A..Z + 0]	0 = Centering
3738	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3740	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3742	Type	4	22	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3744	Vibration			[A..Z + 0]	0 = Centering
3746	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3748	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3750	Type	5	22	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3752	Vibration			[A..Z + 0]	0 = Centering
3754	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3756	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3758	Type	6	22	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3760	Vibration			[A..Z + 0]	0 = Centering
3762	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3764	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3766	Type	7	22	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3768	Vibration			[A..Z + 0]	0 = Centering
3770	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3772	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3774	Nb Limit Parts		22	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3776	Type	1	23	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3778	Vibration			[A..Z + 0]	0 = Centering
3780	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3782	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3784	Type	2	23	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3786	Vibration			[A..Z + 0]	0 = Centering
3788	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3790	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3792	Type	3	23	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3794	Vibration			[A..Z + 0]	0 = Centering
3796	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3798	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3800	Type	4	23	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3802	Vibration			[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3804	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3806	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3808	Type	5	23	[0..3]	0=None, 1=Platform 2= Hopper Hopper, 3=Stabilisation
3810	Vibration			[A..Z + 0]	0 = Centering
3812	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3814	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3816	Type	6	23	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3818	Vibration			[A..Z + 0]	0 = Centering
3820	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3822	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3824	Type	7	23	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3826	Vibration			[A..Z + 0]	0 = Centering
3828	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3830	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3832	Nb Limit Parts		23	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3834	Type	1	24	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3836	Vibration			[A..Z + 0]	0 = Centering
3838	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3840	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3842	Type	2	24	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3844	Vibration			[A..Z + 0]	0 = Centering
3846	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3848	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3850	Type	3	24	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3852	Vibration			[A..Z + 0]	0 = Centering
3854	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3856	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3858	Type	4	24	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3860	Vibration			[A..Z + 0]	0 = Centering
3862	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3864	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3866	Type	5	24	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3868	Vibration			[A..Z + 0]	0 = Centering
3870	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3872	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3874	Type	6	24	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3876	Vibration			[A..Z + 0]	0 = Centering
3878	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3880	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode

Register	Define	Action nb	Sequence ID	Range	Comment
3882	Type	7	24	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3884	Vibration			[A..Z + 0]	0 = Centering
3886	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3888	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3890	Nb Limit Parts	24		[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3892	Type	1	25	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3894	Vibration			[A..Z + 0]	0 = Centering
3896	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3898	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3900	Type	2	25	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3902	Vibration			[A..Z + 0]	0 = Centering
3904	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3906	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3908	Type	3	25	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3910	Vibration			[A..Z + 0]	0 = Centering
3912	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3914	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3916	Type	4	25	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3918	Vibration			[A..Z + 0]	0 = Centering
3920	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio

Register	Define	Action nb	Sequence ID	Range	Comment
3922	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3924	Type	5	25	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3926	Vibration			[A..Z + 0]	0 = Centering
3928	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3930	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3932	Type	6	25	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3934	Vibration			[A..Z + 0]	0 = Centering
3936	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3938	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3940	Type	7	25	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3942	Vibration			[A..Z + 0]	0 = Centering
3944	Duration Mode			[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3946	Duration Value			[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3948	Nb Limit Parts		25	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.
3950	Type	1	26 **	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3952	Vibration		**	[A..Z + 0]	0 = Centering
3954	Duration Mode		**	[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3956	Duration Value		**	[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3958	Type	2	26 **	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3960	Vibration		**	[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequence ID	Range	Comment
3962	Duration Mode		**	[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3964	Duration Value		**	[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3966	Type	3	26 **	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3968	Vibration		**	[A..Z + 0]	0 = Centering
3970	Duration Mode		**	[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3972	Duration Value		**	[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3974	Type	4	26 **	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3976	Vibration		**	[A..Z + 0]	0 = Centering
3978	Duration Mode		**	[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3980	Duration Value		**	[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3982	Type	5	26 **	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3984	Vibration		**	[A..Z + 0]	0 = Centering
3986	Duration Mode		**	[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3988	Duration Value		**	[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3990	Type	6	26 **	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
3992	Vibration		**	[A..Z + 0]	0 = Centering
3994	Duration Mode		**	[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
3996	Duration Value		**	[0..32767ms] [0..100%]	Unit change depending of selected duration mode
3998	Type	7	26 **	[0..3]	0=None, 1=Platform 2= Hopper, 3=Stabilisation
4000	Vibration		**	[A..Z + 0]	0 = Centering

Register	Define	Action nb	Sequen ce ID	Range	Comment
4002	Duration Mode		**	[0..2]	0=Fixed, 1=QuantityAdjusted, 2=VibrationRatio
4004	Duration Value		**	[0..32767ms] [0..100%]	Unit change depending of selected duration mode
4006	Nb Limit Parts		26 **	[0..32767ms]	Nb limit of parts for the QuantityAdjusted vibration.

**: developer write

Table 6-4: sequences parameters

7. Technical support

7.1. For better service ...

You have read the the related manuals without finding answers to your questions? Before calling the support service, note the following information for your system:

- serial number and product key of your material
- software version
- alarm or error message displayed on the screen

7.2. Contact

You can find lot of information on our website: www.asyrl.com

You can also contact us by mail or call our support service:

support@asyrl.com

+41 26 653 71 90

Review history

Rev.	Date	Author	Comments
A	02.09.2014	DaM	Initial Version
A1	17.10.2014	DaM	Add easy-tuning information in the Library section and modification of sequencer diagrams.
A1	28.10.2014	HsJ	Correct bug in general commands : ?V to V?
A2	11.11.2014	DaM	Add information in Asycube Library section: architecture, feeding data, process
A3	30.06.2016	HsJ	Change from Largo A5 to 240
B	23.11.2016	HsJ	Add elements for vibration sets and sequences

This document is the property of Asyril S.A. and may not be copied or circulated without permission. The information contained in this document is subject to change without notice for the purpose of product improvement.



Experts in
Flexible Feeding Systems

asyril sa
z.i. le vivier 22
ch-1690 villaz-st-pierre
switzerland
tel. +41 26 653 71 90
fax +41 26 653 71 91
info@asyril.com
www.asyril.com