

DPI200

Installation Manual



DP1200

INSTALLATION MANUAL





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DP1200 Installation Manual

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GUIDE TO INSTALLATION

The following can be used as a checklist to verify all of the steps necessary for complete installation of the DP1200 decoder.

- 1) Read all information in the section "Safety Precautions" at the beginning of this manual.
- 2) Correctly position and mount the decoder within the reach of the barcode reader cable, according to the information in paragraphs 2.3, 2.5.
- 3) Provide correct system cabling according to the signals necessary for your application (see the applicable sub-paragraphs under 2.4).
- 4) Install the Configuration Disk.
Upon successful completion of the installation, the readme.hlp file is opened, giving details about how to get started configuring your decoder.
See also the [Guide to Rapid Configuration](#) link.
Specific parameter details are available in the Help On Line.



NOTE

Fine tuning of the scanner position for barcode reading can be accomplished using the Test Mode as described in WinHost.

The installation is now complete.

GENERAL VIEW

DP1200



Figure A

①

②

③

- ① 15-pin reader connector
- ② Cover screws (4)
- ③ Compression connector panel

DP1200

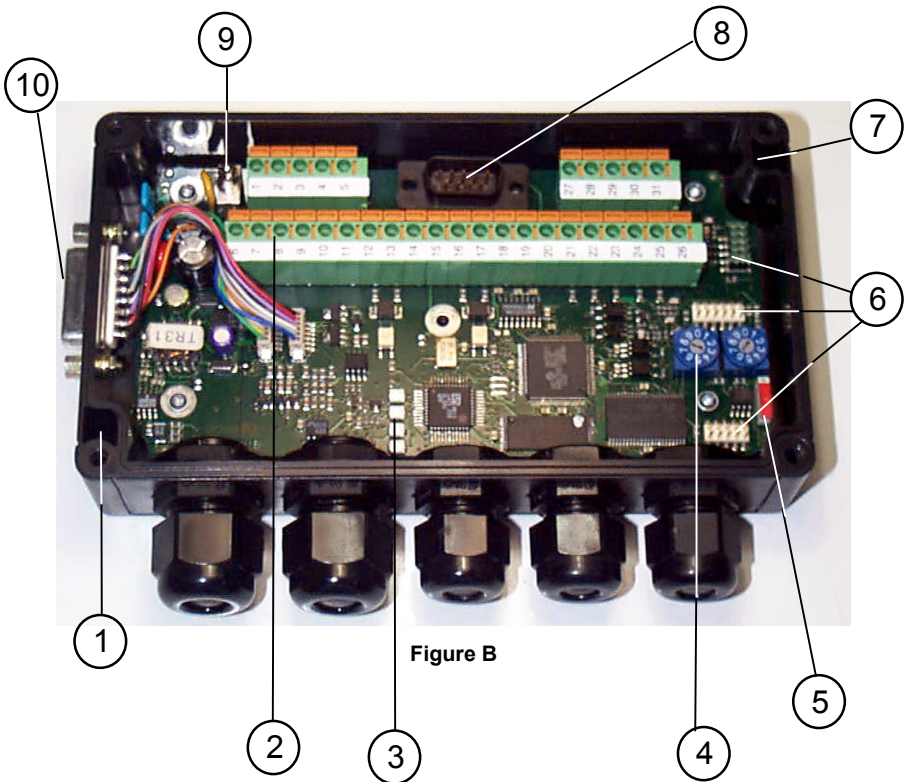


Figure B

- ① ⑦ Mounting screw holes (2)
- ② Spring clamp terminal blocks
- ③ LEDs
- ④ Multidrop address switches
- ⑤ Termination resistance switch

- ⑥ Main interface selectors
- ⑧ Auxiliary interface connector
- ⑨ Power switch (ON/OFF)
- ⑩ Reader connector

SAFETY PRECAUTIONS

POWER SUPPLY

ATTENTION: READ THIS INFORMATION BEFORE INSTALLING THE PRODUCT

- This product is intended to be installed by Qualified Personnel only.

This device is intended to be supplied by an NEC Class 2 power source, rated 10-30 V, minimum 0.50 A.

See par. 2.4.2 for correct power supply connections.

1 GENERAL FEATURES

1.1 INTRODUCTION

The DP1200 is an high performance industrial decoder for high speed barcode readers combining real time decoding and easy installation in a very flexible solution.

Standard Application Program

A Standard Application Program is factory-loaded onto the DP1200. This program controls barcode reading, serial port interfacing, data formatting and many other operating and control parameters.

It is completely user configurable from a host computer using the WinHost interface utility program provided on diskette with the decoder or using the Host Mode programming procedure, by ESC sequences via the serial interface.

There are four different programmable operating modes to suit various barcode reading system requirements. Included in these is a test mode to verify the reading features and exact positioning of the scanner without using external tools.

Programmability

If your requirements are not met by the Standard Application Program, Custom Application Programs can be developed by your local Datalogic distributor.

1.2 DESCRIPTION

Some of the main features of this decoder are given below:

- Built-in real time RISC decoder
- Dual high speed serial interface (up to 115.2 KBAud)
- Fast cabling system through terminal strips
- Easy connection to the auxiliary serial port (9-pin male, D-sub connector on board)
- 4 useful LED indicators and Power On/Off switch on board
- Rugged industrial housing
- Compatible with Datalogic Laser Readers (LS2200, LS4100, LS50, LS6100)
- Compatible with Datalogic 1000/2000/4000 series scanners (Connections, SW features and WinHost)
- Supply voltage from 10 to 30 Vdc

DP1200 mechanical dimensions are 167 x 115 x 40 mm (6.57 x 4.52 x 1.57 in.). It weighs about 310 g. (10.93 oz).

Electrical connection is provided through spring clamp terminal blocks inside the decoder.

The external reader is connected to the decoder through a 15-pin connector placed on the left side of the housing.

1.3 ACCESSORIES

The following accessories are available on request for the DP1200:

Name	Description	Part Number
CAB-518	LS50/LS6100 Connection Cable	91A001000
PG110/DVE-1212A	Power block 110 Vac	B9751057
PG220/DVE-1212A	Power block 220 Vac	B9751027
MEP-542/543	Photocell Kit NPN/PNP	93ACC1727, 93ACC1728

2 INSTALLATION

2.1 PACKAGE CONTENTS

Verify that the DP1200 decoder and all the parts supplied with the equipment are present and intact when opening the packaging; the list of parts includes:

- DP1200 decoder
- Installation manual
- DP1200 communication and utility program disk
- Mounting screws (2)

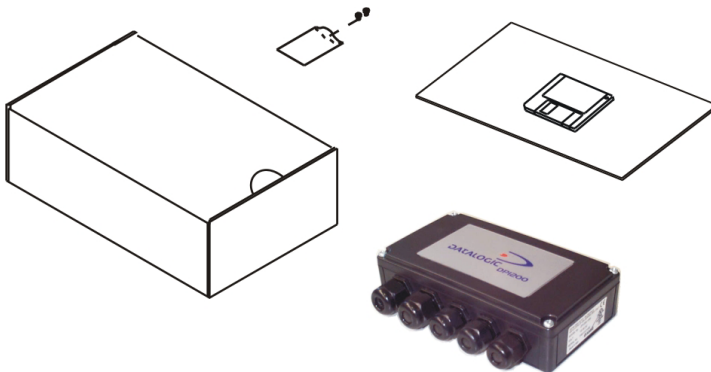


Figure 1 - DP1200 package contents

2.2 OPENING THE DEVICE

Before installing the DP1200 or during normal maintenance, it is necessary to open it by unscrewing the four cover screws as shown in the figure below:



WARNING

The decoder must be disconnected from the power supply during this operation.

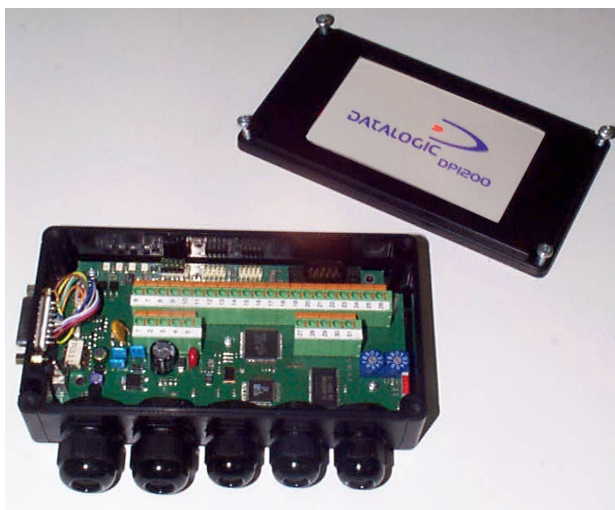


Figure 2 - Opening the DP1200

It is possible to perform the following operations:

- Select the desired main serial interface type. (see "Main Interface Selection" under paragraph 2.4.3)
- Set the multiplexer address selection on the rotary switches if the main serial interface is RS485 Half-Duplex. (see "RS485 Half-Duplex Interface" under paragraph 2.4.3)
- Proceed with the cable connections. (see paragraph 2.4)

2.3 MECHANICAL INSTALLATION

The diagram below gives the overall dimensions of the decoder and may be used for its installation.

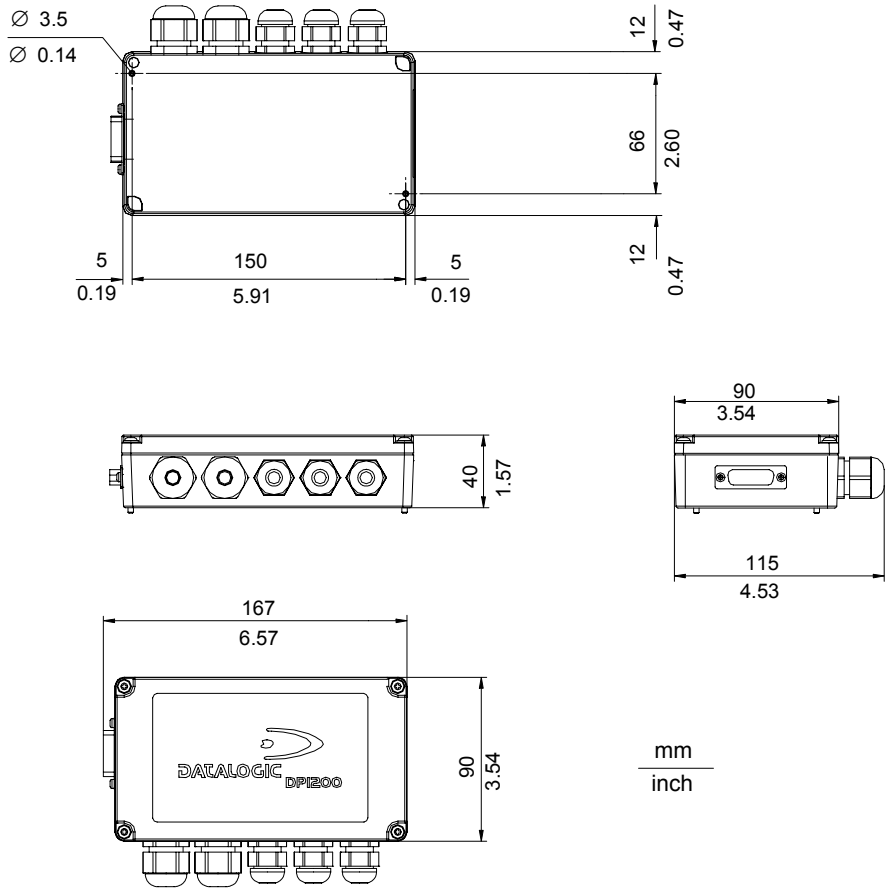


Figure 3 - Overall dimensions

DP1200 can be installed to operate in different positions. The two screw holes inside the housing of the decoder are for mechanical fixture (Figure 4).

To do this:

- 1) Open the DP1200 by unscrewing the 4 cover screws. If necessary, using the two mounting holes inside the decoder as a pattern, mark the panel with an appropriate object and then drill two small pilot holes in the panel.
- 2) Align the DP1200 and insert the two self-threading screws and screw them into the panel until tight (see Figure 4).

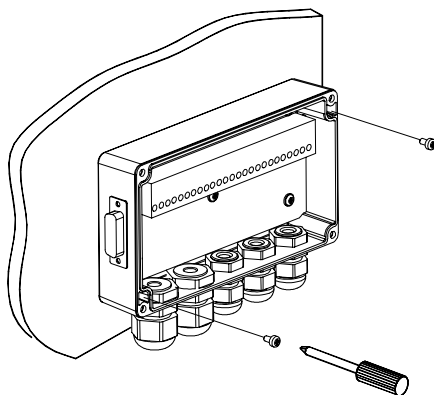


Figure 4 - Mounting DP1200

2.4 ELECTRICAL CONNECTIONS

2.4.1 System Wiring

The connection and wiring procedure for DP1200 is described as follows:

- 1) Open the DP1200 as described in paragraph 2.2.
- 2) Verify that the DP1200 power switch is off (see Figure 6).
- 3) Unscrew the compression connectors and pass all the system cables through them in the device housing.
- 4) To connect the power and input/output signals:
 - Prepare the individual wires of the system cables by stripping the insulation back approximately 1 cm.
 - Using a device such as a screwdriver, push down on the lever directly next to the clamp (see Figure 5).
 - Insert the wire into the clamp and release the lever.

The wire will now be held in the spring clamp.

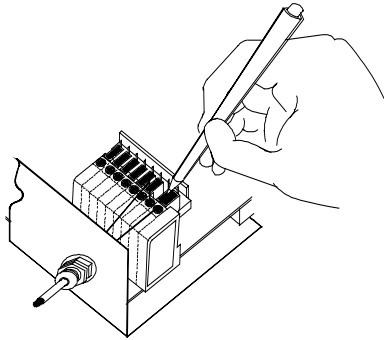


Figure 5 - System cable connections

The wiring used can be solid or stranded but must meet the following specifications.

All the positions:	24 - 16 AWG	0.2 - 1.5 mm ²
--------------------	-------------	---------------------------

The DP1200 spring clamp connector pinouts are indicated in the following table:

Pin	Name	Function
1	VS	Power supply input voltage +
2	GND	Power supply input voltage -
3	VS	Power supply input voltage +
4	GND	Power supply input voltage -
5	Shield	Reader shield
6	VS	Power supply input voltage +
7	GND	Power supply input voltage -
8	EXT TRIG+	External Trigger +
9	EXT TRIG-	External Trigger -
10	IN1+	Input +
11	IN1-	Input -
12	OUT1+	Output +
13	OUT1-	Output -
14	OUT2+	Output +
15	OUT2-	Output -
16	OUT3+	Output +
17	OUT3-	Output -
27	TXAUX	Auxiliary RS232
28	RTSAUX	Auxiliary handshake RS232
29	RXAUX	Auxiliary RS232
30	CTSAUX	Auxiliary handshake RS232
31	SGND	Signal Ground

Pin	RS232	RS485 Full-Duplex	RS485 Half-Duplex	20 mA CL
* 18, 21	TX232	TX485+	RTX485+	CLOUT+
* 19, 22	RTS232	TX485-	RTX485-	CLOUT-
* 20, 23		GNDRS485	GNDRS485	
24	RX232	RX485+		CLIN+
25	CTS232	RX485-		CLIN-
26	SGND			

* The signals on pins 18, 19 and 20 are repeated on pins 21, 22 and 23 to facilitate network connections (i.e. Multiplexer connections using the RS485 half-duplex Interface). In this way the network bus can enter and exit the DP1200 from different spring clamps but be physically connected together.

**NOTE**

The reader shield signal is internally connected to pin 5 of the DP1200 spring clamp connector (the user should connect pin 5 to earth ground).

**CAUTION**

Do not connect GND and SGND to different (external) ground references. GND and SGND are internally connected through filtering circuitry which can be permanently damaged if subjected to voltage drops over 0.8 Vdc.

- 5) Switch ON the DP1200 power switch (see Figure 6).
- 6) Close the DP1200 using the 4 cover screws making sure the rubber seal is fitted correctly between the parts of the housing.
- 7) Connect the reader to the 15-pin connector on the left side of the DP1200 housing.

The electrical connections for your scanning system are now complete.

2.4.2 Power Supply

Power can be supplied to the decoder through the pins provided on the spring clamp connector.

The power switch (see Figure 6) switches ON or OFF the power supply for both the decoder and the connected reader.

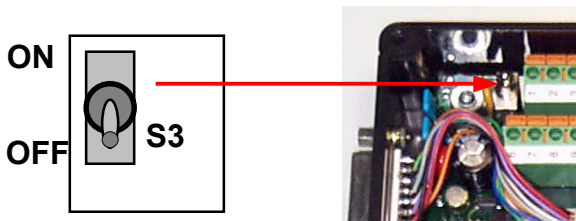


Figure 6 - Power switch ON/OFF positions

To allow connection of an NEC Class 2 Power Unit, use a correct female plug adapter as shown in the figure below.

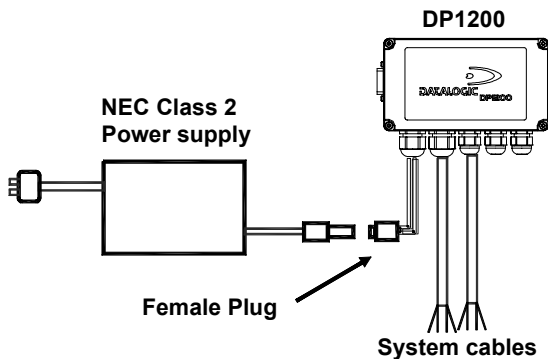


Figure 7 - NEC Class 2 power unit connections

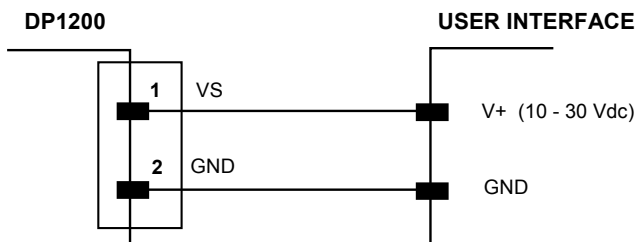


Figure 8 - Power supply connections



NOTE

Pin 1 is also electrically connected to pins 3 and 6 just as pin 2 is electrically connected to pins 4 and 7. This is useful for external trigger connections (see paragraph 2.4.5).

The power must be between 10 and 30 Vdc only. There is a current peak during power on that depends on the type of barcode reader connected.

If DP1200 is connected to the Datalogic LS6100 barcode reader, the minimum supply voltage is 12 Vdc.

2.4.3 Main Interface Selection

The user can select one of the following four serial interface types:

RS232

RS485 FULL-DUPLEX

RS485 HALF-DUPLEX

20 mA CURRENT LOOP

The relative signals are available on the spring clamp connector.

To select the interface type, position the jumper block as indicated in the figure below:

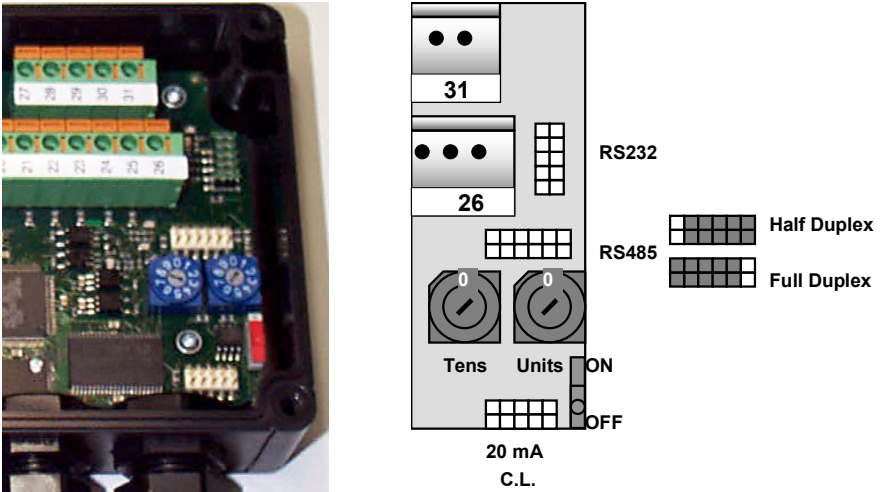


Figure 9 - Main interface selection

The RS232 interface type is factory set.

The relative parameters of the main serial interface (baud rate, data bits, etc.) are selected via software either using the WinHost utility program or Host Mode programming. For more details refer to the section "Main Interface Menu" in the WinHost Help On Line.

Details regarding the connections and use of the main interface selection are given in the next paragraphs.

RS232 Interface

The serial interface is used in this case for point-to-point connections; it handles communication with the host computer and allows both transmission of code data and the configuration of the decoder. This is the default interface.

The following pins of the spring clamp connector are used for RS232 interface connection:

Pin	Name	Function
18, 21	TX232	RS232 transmitted data
24	RX232	RS232 received data
19, 22	RTS232	RS232 request to send
25	CTS232	RS232 clear to send
26	SGND	RS232 signal ground

It is always advisable to use shielded cables. The maximum overall cable length must be less than 15 m (49.2 ft).

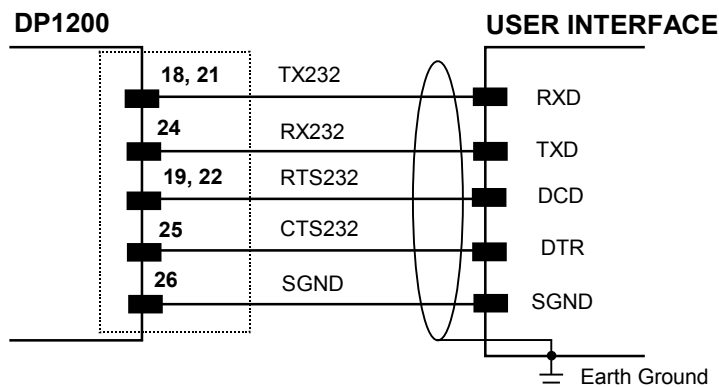


Figure 10 - RS232 main interface connections

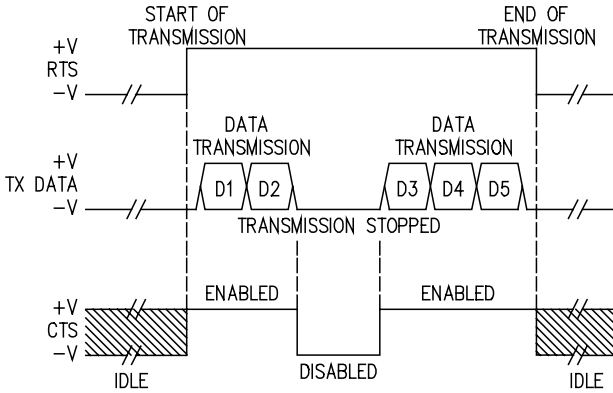


Figure 11 - RS232 control signals

The RTS232 and CTS232 signals control data transmission and synchronize the connected devices.

If the RTS/CTS handshaking protocol is enabled, the DP1200 activates the RTS232 output to indicate a message is to be transmitted. The receiving unit activates the CTS232 input to enable the transmission.

RS485 Full-Duplex Interface

The optocoupled RS485 full-duplex (5 wires + shield) interface is used for non-pollled communication protocols in point-to-point connections over longer distances (max 1200 m / 3940 ft) than those acceptable for RS232 communications or in electrically noisy environments.

The following pins of the spring clamp connector are used for RS485 full-duplex communications:

Pin	Name	Function
18, 21	TX485+	RS485 transmitted data +
19, 22	TX485-	RS485 transmitted data -
24	RX485+	RS485 received data +
25	RX485-	RS485 received data -
20, 23	GNDRS485	RS485 reference

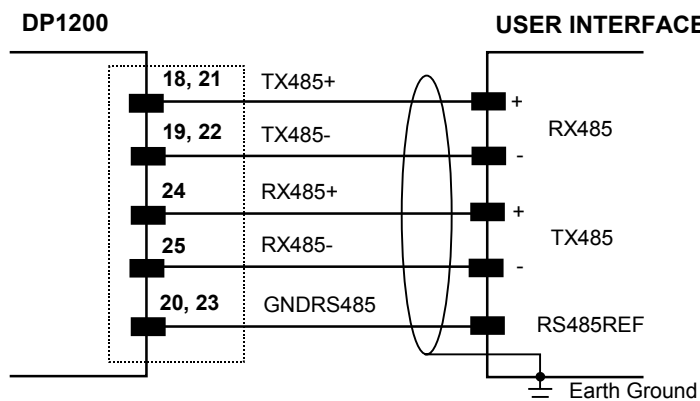


Figure 12 - RS485 full-duplex connections

RS485 Half-Duplex Interface

The optocoupled RS485 half-duplex (3 wires + shield) interface is used for polled communication protocols.

It can be used in a master/slave layout or for Multidrop connections with a Datalogic Multiplexer, (see par. 2.5.4 and 2.5.5) exploiting a proprietary protocol based on polled mode called MUX32 protocol, where a master device polls slave devices to collect data.

The following pins of the spring clamp connector are used for RS485 half-duplex communications:

Pin	Name	Function
*18, 21	RTX485+	RS485 transmitted/received data +
*19, 22	RTX485-	RS485 transmitted/received data -
*20, 23	GNDRS485	RS485 Reference

* The signals on pins 18, 19 and 20 are repeated on pins 21, 22 and 23 to facilitate network connections. In this way the network bus can enter and exit the DP1200 from different spring clamps but be physically connected together.

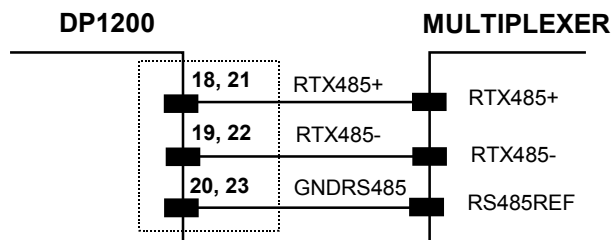


Figure 13 - RS485 half-duplex connections

The user can assign an address to the device for RS485 Half-Duplex Multidrop applications, by using the two rotary switches S1 and S2, placed on the right side of the board: S1 defines the Tens, S2 defines the Units.

In Multiplexer applications this address is in the range 00 - 31; in RS485 Master/Slave applications the address is in the range 00 - 04.

The address can also be assigned through WinHost. In this case the rotary switches have no effect.

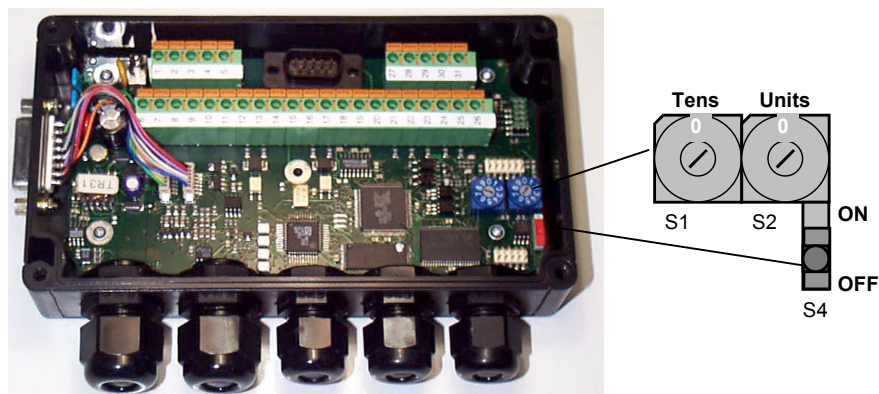


Figure 14 - Address selection and bus termination

The switch S4 enables or disables the insertion of the bus termination resistor for RS485 Half-Duplex Multidrop applications.



CAUTION

*In Multiplexer applications the termination resistor must be enabled **ONLY** on the last device of the chain, the farthest away from the Multiplexer (assuming the Multiplexer is the first device of the chain). On all the other devices this resistor **MUST NOT** be enabled (S4 = OFF).*

Normally it is not necessary to enable the termination resistor (S4 always OFF); it is suggested only in applications where the communication speed or the bus length are critical parameters.

The figure below shows a multidrop configuration with DP1200 decoders connected to a Multiplexer.

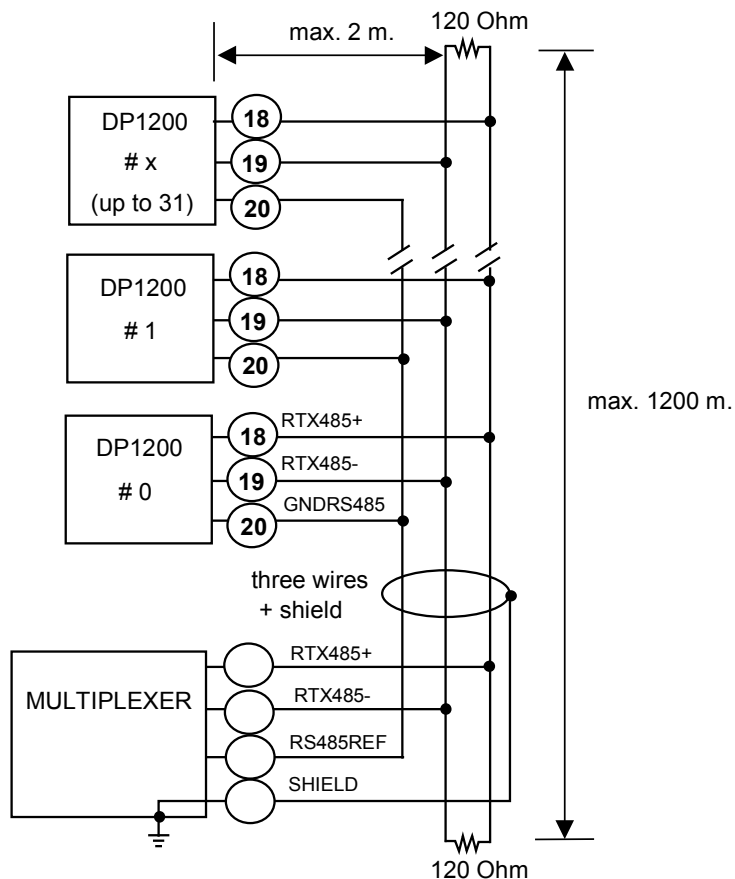


Figure 15 - DP1200 multidrop connection to a Multiplexer

20 mA Passive Current Loop Interface

The DP1200 only supports passive type current loop connections. The wires of the external cable must be connected to the internal socket pins as indicated in Figure 16:

Pin	Name	Function
25	C.L. IN-	Current loop input -
24	C.L. IN+	Current loop input +
19, 22	C.L. OUT-	Current loop output -
18, 21	C.L. OUT+	Current loop output +

For the 20 mA current loop interface, a ferrite (type Stewart 28A2029-0A0) must be applied on the user interface side of the cable to reduce electrical noise. Also the shield must be referenced to GND at both ends.

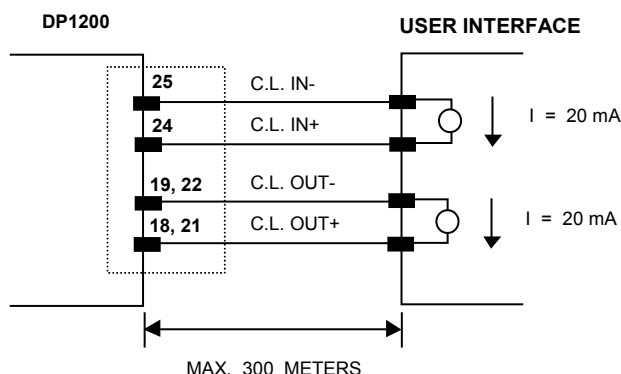


Figure 16 - 20 mA C.L. connections

2.4.4 Auxiliary RS232 Interface

The auxiliary serial interface is used exclusively for RS232 point-to-point or RS232 Master/Slave connections.

The parameters relative to the aux interface (baud rate, data bits, etc.) as well as particular operating modes such as LOCAL ECHO can be defined using the WinHost utility program or "Host Mode" programming installed from the diskette.

The following pins of the spring clamp connector are used to connect the RS232 auxiliary interface:

Pin	Name	Function
29	RXAUX	RS232 received data
27	TXAUX	RS232 transmitted data
30	CTSAUX	RS232 clear to send
28	RTSAUX	RS232 request to send
31	SGND	RS232 signal ground

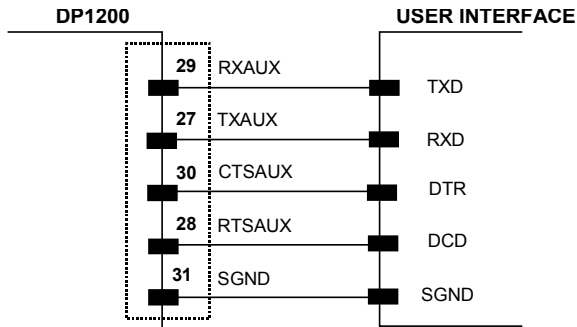


Figure 17 - RS232 auxiliary interface connections using hardware handshaking

When the auxiliary interface is permanently connected as part of the system cabling, it is recommended to connect the cable shield to earth ground.

The RS232 Auxiliary Interface lines are also available on the 9-pin D-sub male connector placed inside the housing for a fast and easy connection of a PC to set up the decoder. The pinout is illustrated in the table below:

Pin	Name	Function
3	TXAUX	Transmitted Data
7	RTSAUX	Request To Send
2	RXAUX	Received Data
8	CTSAUX	Clear To Send
5	SGND	Signal Ground

The RTSAUX and CTSAUX signals control data transmission and synchronize the connected devices. If the RTS/CTS handshaking protocol is enabled, the DP1200 activates the RTSAUX output to indicate a message is to be transmitted. The receiving unit activates the CTSAUX input to enable the transmission.

2.4.5 Inputs

There is an input available on the DP1200 decoder relative to the External Trigger.

There is also one more general purpose input, IN1. It can be used in Code Verifier mode of the Standard Application program, to store the code to be verified (see "Store verifier HW" in the Winhost Help On Line).

The pinouts are indicated below:

Pin	Name	Function
8	EXT TRIG+	External Trigger +
9	EXT TRIG-	External Trigger -
10	IN1+	Input 1 +
11	IN1-	Input 1 -

The EXT TRIG inputs are used in the ON-Line Operating mode and tells the system to scan for a code. The active state of this input is selected in software. Refer to the WinHost Help On Line.

The yellow LED (Figure B, 2 and Figure 30) is on when the External Trigger forces a current flow through the EXT TRIG+ and EXT TRIG- pins.

These inputs are optocoupled and can be driven by both an NPN or PNP type command. The connections are indicated in the following diagrams:

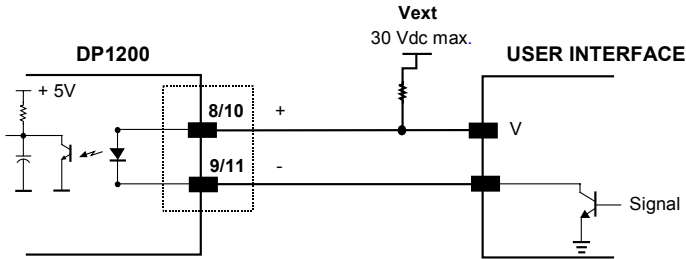


Figure 18 - Input NPN command using external power

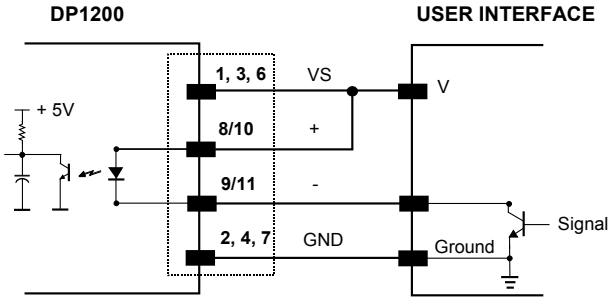


Figure 19 - Input NPN command using DP1200 power

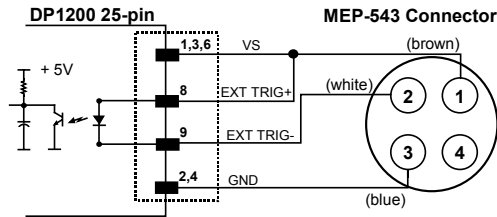


Figure 20 - Input NPN command using MEP-543 Photocell

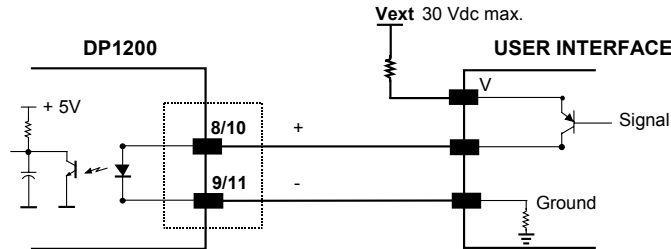


Figure 21 - Input PNP command using external power

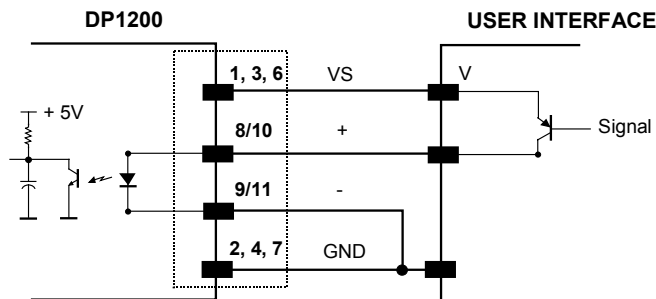


Figure 22 - Input PNP command using DP1200 power

The electrical features of the inputs are:

Maximum voltage = 30 Vdc

Maximum current = 25 mA.

An anti-disturbance hardware filter is implemented on the External Trigger input (about 1 millisecond delay).

An additional 15 ms (typical) delay can be implemented through a dedicated software parameter (refer to WinHost Help On Line).

2.4.6 Outputs

The following pins are present on the spring clamp connector of the decoder:

Pin	Name	Function
12	OUT1+	Output 1 +
13	OUT1-	Output 1 -
14	OUT2+	Output 2 +
15	OUT2-	Output 2 -
16	OUT3+	Output 3 +
17	OUT3-	Output 3 -

The meaning of the outputs OUT1, OUT2 and OUT3 can be defined by the user (No Read, Right or Wrong or a combination thereof). Refer to WinHost Help On Line.

By default, OUT1 is associated with the No Read event, which activates when the code signalled by the External Trigger is not decoded.

OUT2 is associated with the Right event, which activates when the code is decoded correctly.

OUT3 is associated to the Wrong event, which activates when a code is successfully decoded but does not match the Verifier code. Therefore it is meaningful only if the Verifier mode is enabled.

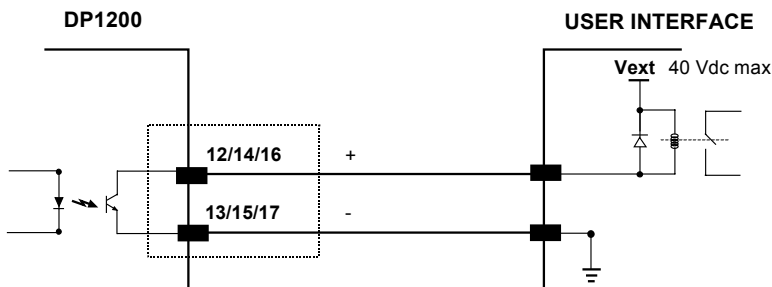


Figure 23 - Open collector output connection

$V_{CE} \text{ max} = 40 \text{ Vdc}$

$I \text{ max} = 40 \text{ mA continuous}$

These outputs are all level or pulse configurable.

2.4.7 Connection to a Barcode Reader

The DP1200 can be connected to the following barcode readers: LS2200, LS4100, LS50 or LS6100 through the 15-pin connector illustrated in the figure below.

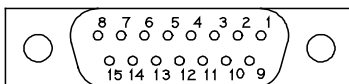


Figure 24 - 15 pin female connector

Pin	Name	Function	Pin	Name	Function
1	GND	ground	9	I.U.	internal use - do not connect
2	VDC	operating voltage	10	I.U.	internal use - do not connect
3	-VIDEO	complementary of video signal	11	RR	right read signal
4	+VIDEO	video signal representing code	12	N.C.	not connected
5	+SCAN	scan start	13	RESOL	resolution signal
6	-SCAN	complementary of scan start	14	BS	laser off signal
7	SPEED	scanner speed	15	PWR OFF	scanner power off
8	SHIELD	reader shield			

2.5 TYPICAL LAYOUTS

The following typical layouts refer to system hardware configurations. Dotted lines in the figures refer to optional hardware configurations within the particular layout.

These layouts also require the correct setup of the software configuration parameters. Complete software configuration procedures can be found in the **Guide To Rapid Configuration** in the WinHost Help On Line.

2.5.1 Point-to-Point

In this layout the data is transmitted to the Host on the main serial interface. Host Mode programming can be accomplished either through the main interface or the auxiliary interface.

In Local Echo communication mode, data is transmitted on the RS232 auxiliary interface independently from the main interface selection.

When On-Line Operating mode is used, the system is activated by an External Trigger (photoelectric sensor) when the object enters its reading zone.

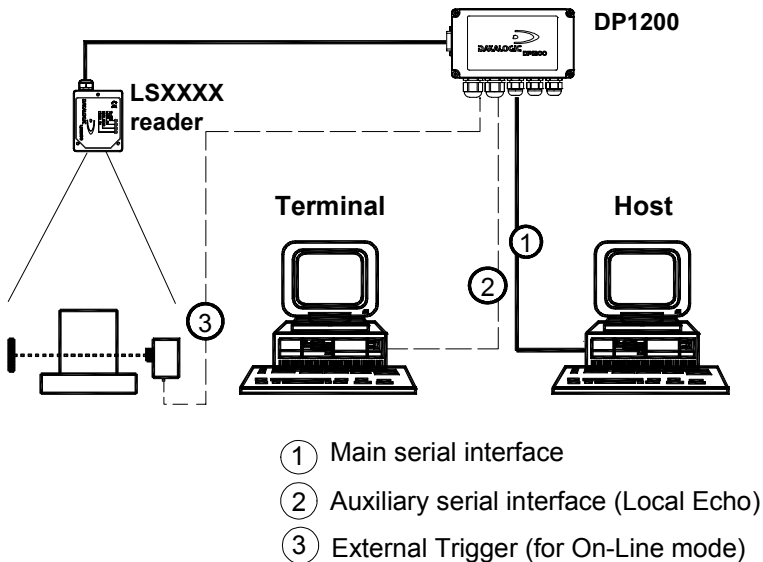


Figure 25 - Point-to-point layout

2.5.2 Pass Through

Pass through mode allows two or more devices to be connected to a single external serial interface to build multi-point reading systems.

Each DP1200 transmits the messages received by the auxiliary interface onto the main interface. All messages will be passed through this chain to the host.

When On-Line Operating mode is used, the system is activated by an External Trigger (photoelectric sensor) when the object enters its reading zone.

The main and auxiliary ports are connected as shown in the figure below:

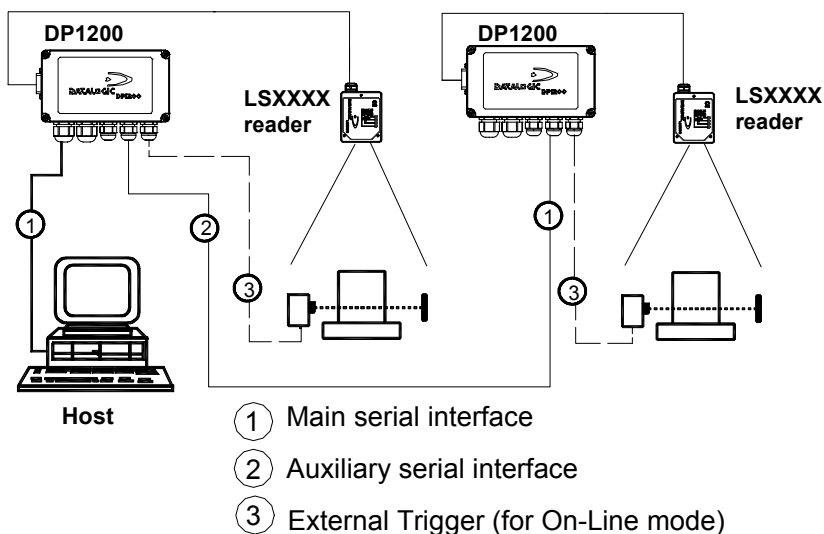


Figure 26 - Pass through layout

2.5.3 RS232 Master/Slave

The RS232 master/slave connection is used to collect data from several decoders to build a multi-sided reading system; there can be one master and up to 9 slaves connected together.

The slave decoders are connected to the main and auxiliary serial interfaces. Each slave DP1200 transmits the messages received by the auxiliary interface onto the main interface. All messages will be passed through this chain to the master.

The master decoder is connected to the Host on the main serial interface. The possible main interface types for the Master decoder are RS232, RS485 or 20 mA C.L..

Either On-Line or Serial On-Line Operating modes can be used in this layout.

When On-Line Operating mode is used, the external trigger signal is unique to the system however it is not necessary to bring the external trigger signal to the Slave decoders.

The main and auxiliary ports are connected as shown in the figure below.

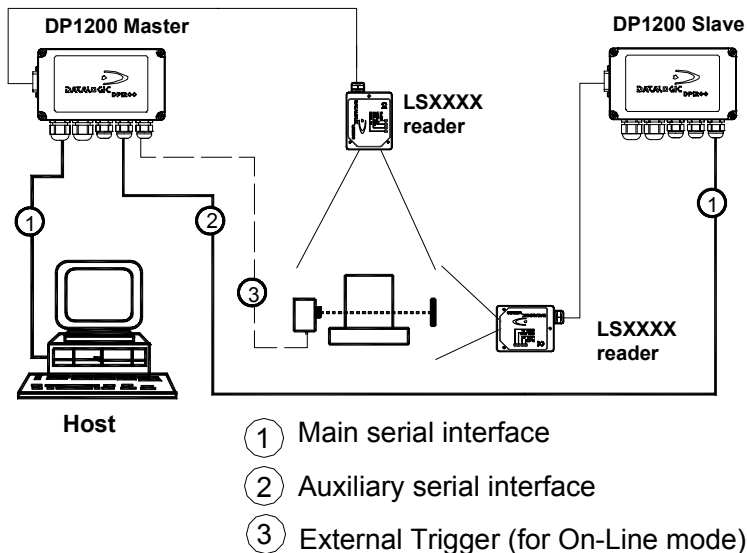


Figure 27 - RS232 Master/Slave layout

2.5.4 RS485 Master/Slave

The RS485 master/slave connection is used to build a multi-sided reading system; there can be one master and up to 5 slaves connected together.

The slave decoders are connected together using RS485 half-duplex on the main serial interface. Every slave decoder must have a multidrop address in the range 0-4.

The master decoder is also connected to the Host on the RS232 auxiliary serial interface.

The External Trigger signal is unique to the system; there is a single reading phase and a single message from the master decoder to the Host computer.

It is necessary to bring the External Trigger signal to all the decoders.

The main and auxiliary ports are connected as shown in the figure below.

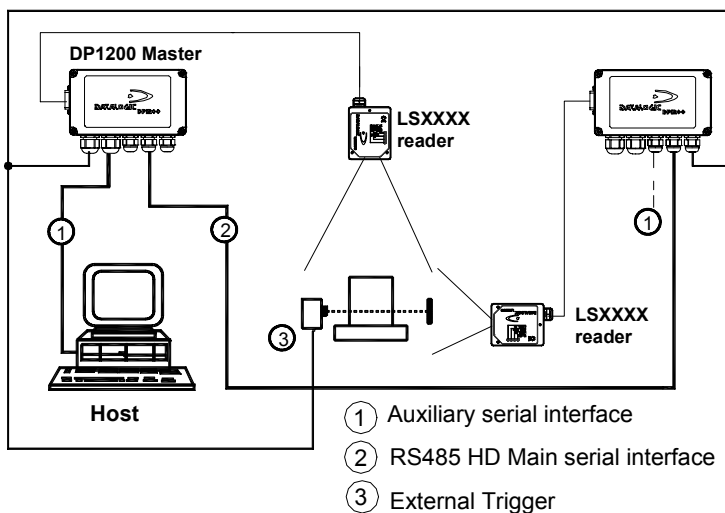


Figure 28 - RS485 Master/Slave layout



NOTE

The auxiliary serial interface of the slave decoders can be used in Local Echo communication mode to control any single decoder (visualize collected data) or to configure it using the WinHost utility or Host Mode Programming procedure.

The termination resistors of the RS485 bus must not be installed.

2.5.5 Multiplexer

Each decoder is connected to a Multiplexer (for example MX4000) with the RS485 half-duplex main interface.

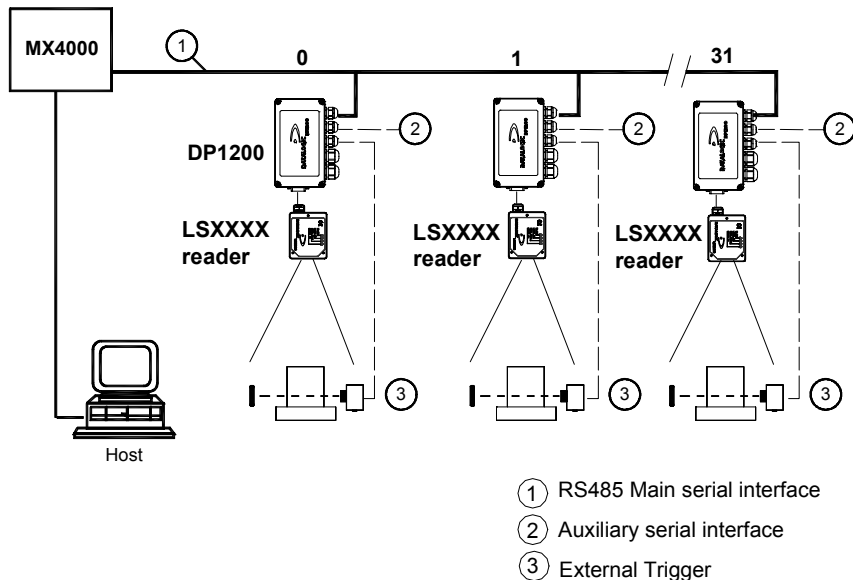


Figure 29 - Multiplexer layout

The auxiliary serial interface of the slave decoders can be used in Local Echo communication mode to control any single decoder (visualize collected data) or to configure it using the WinHost utility or Host Mode Programming procedure.

When On-Line Operating mode is used, each reader is activated by its External Trigger (photoelectric sensor) when the object enters its reading zone.

3 TROUBLESHOOTING

3.1 LED INDICATORS

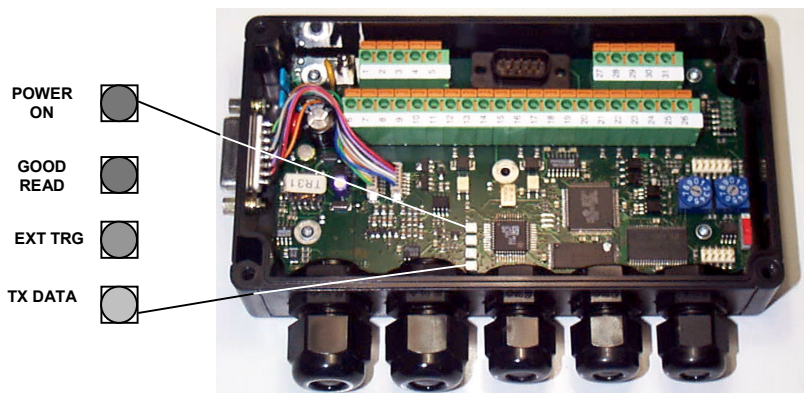


Figure 30 - Led Indicators

The four LEDs inside the decoder (see Figure 30) indicate the following:

- | | |
|------------------|--|
| POWER ON | (red), indicates the decoder is connected to the power supply and the power switch is ON. |
| GOOD READ | (red), is used to signal successful barcode decoding. It is also used in Test mode to signal the decoding percentage (for details refer to the section "Test Mode" in the WinHost Help On Line). |
| EXT TRIG | (yellow), indicates external trigger activity (for details refer to paragraph 2.4.5). |
| TX DATA | (green), indicates data transmission on the serial interfaces. |

4 TECHNICAL FEATURES

ELECTRICAL FEATURES	
Power	
Supply voltage (Note 1)	10 to 30 Vdc
Power consumption max.	2 W
Serial Interfaces	
Main	RS232, optocoupled RS485 half and full-duplex, 20 mA C.L.
Auxiliary	RS232
Baud rates	150 to 115200
Inputs	
	External Trigger, IN1 (optocoupled NPN or PNP)
Voltage max.	30 Vdc
Input current max.	25 mA
Outputs	
	User-defined OUT1, OUT2 and OUT3 (optocoupled open emitter, open collector)
V_{CE} max.	40 Vdc
Collector current max.	40 mA continuous; 130 mA pulsed
V_{CE} saturation	1V at 10 mA max.
Power dissipation max.	90 mW at 40 °C (Ambient temp.)
USER INTERFACE	
LED indicators	Power ON, Good Read, External Trigger , Data Transmission

SOFTWARE FEATURES	
READABLE CODE SYMBOLOGIES	
<ul style="list-style-type: none"> • EAN/UPC • 2/5 Interleaved • Code 39 • Codabar 	<ul style="list-style-type: none"> • Code 93 • Code 128 • EAN 128 • Pharmacode
CODE SELECTION	up to six codes during one reading phase
DECODING SAFETY	can enable multiple good reads of same code
HEADERS AND TERMINATORS	up to four headers and four terminators
OPERATING MODES	ON LINE, AUTOMATIC, SERIAL ON LINE, TEST
CONFIGURATION MODES	<ul style="list-style-type: none"> • through menus using WinHost utility
	<ul style="list-style-type: none"> • receiving commands from one of the serial ports (HOST MODE)
PARAMETER STORAGE	Non-volatile internal memory
ENVIRONMENTAL FEATURES	
Operating temperature	0 to 50 °C (32 to 122 °F)
Storage temperature	-20 to 70 °C (-4 to 158 °F)
Humidity max.	90% non condensing
Vibration resistance	IEC 68-2-6 test FC 1.5 mm; 10 to 55 Hz; 2 hours on each axis
Shock resistance	IEC 68-2-27 test EA 30G; 11 ms; 3 shocks on each axis
PHYSICAL FEATURES	
Mechanical dimensions	167 x 115 x 40 mm (6.57 x 4.53 x 1.57 in.)
Weight	about 310 g. (10.93 oz.)

Note 1: If DP1200 is connected to the Datalogic LS6100 barcode reader, the minimum supply voltage is 12 Vdc.

Note 2: The features given are typical at a 25 °C ambient temperature (if not otherwise indicated).

DATALOGIC S.p.A.,
Via Candini, 2
40012 - Lippo di Calderara
Bologna - Italy



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declares that the
déclare que le
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declare que el

DP1200-XXXX, High Performance Decoder

e tutti i suoi modelli
and all its models
et tous ses modèles
und seine modelle
y todos sus modelos

sono conformi alle Direttive del Consiglio Europeo sottoelencate:
are in conformity with the requirements of the European Council Directives listed below:
sont conformes aux spécifications des Directives de l'Union Européenne ci-dessous:
der nachstehend angeführten Direktiven des Europäischen Rats:
cumple con los requisitos de las Directivas del Consejo Europeo, según la lista siguiente:

89/336/EEC Directive	e	92/31/EEC, 93/68/EEC	emendamenti successivi
	and		further amendments
	et		et ses successifs amendements
	und		späteren Abänderungen
	y		sucesivas enmiendas

Basate sulle legislazioni degli Stati membri in relazione alla compatibilità elettromagnetica ed alla sicurezza dei prodotti.

On the approximation of the laws of Member States relating to electromagnetic compatibility and product safety.

Basée sur la législation des Etats membres relative à la compatibilité électromagnétique et à la sécurité des produits.

Über die Annäherung der Gesetze der Mitgliedsstaaten in bezug auf elektromagnetische Verträglichkeit und Produktsicherheit entsprechen.

Basado en la aproximación de las leyes de los Países Miembros respecto a la compatibilidad electromagnética y las Medidas de seguridad relativas al producto.

Questa dichiarazione è basata sulla conformità dei prodotti alle norme seguenti:

This declaration is based upon compliance of the products to the following standards:

Cette déclaration repose sur la conformité des produits aux normes suivantes:

Diese Erklärung basiert darauf, daß das Produkt den folgenden Normen entspricht:

Esta declaración se basa en el cumplimiento de los productos con la siguientes normas:

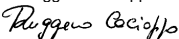
EN 55022, August 1994:

LIMITS AND METHODS OF MEASUREMENTS OF RADIO DISTURBANCE CHARACTERISTICS OF INFORMATION TECHNOLOGY EQUIPMENT (ITE)

EN 61000-6-2, April 1999:

ELECTROMAGNETIC COMPATIBILITY (EMC).
PART 6-2: GENERIC STANDARDS - IMMUNITY FOR INDUSTRIAL ENVIRONMENTS

Lippo di Calderara, 21.03.2002

Ruggero Cacioppo

Quality Assurance Supervisor