Printer Interface (6370) Setup

Replaces discontinued Printer Interface (4370)

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Printer Interface (6370)

The Printer Interface (6370) is a communication gateway that allows XL200 Series controllers to interface with a wide range of printers.

The Printer Interface translates a signal from the XL200 controller and transmits it to a compatible printer, including, but not limited to, many Matthews, Videojet and Zebra models. Printer models are added frequently, so please contact AMS Controls Technical Support to see if your printer is compatible.

The Printer Interface (6370) replaces the discontinued Printer Interface (4370).

Functions

- **Facilitates both bundle ticket and inkjet printing from the XL200 Series controller**
- **Only works with XL200 Series controllers**

Specifications

Power:

Voltage = 24 VDC
Current = 250mA

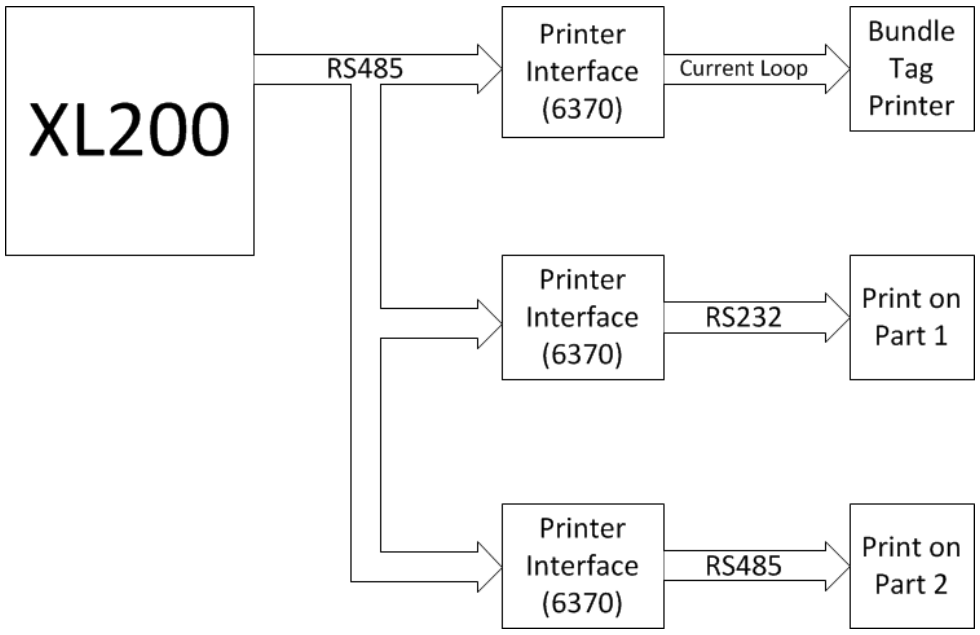
Communication:

Options: Bundle Print (Part 61), Print on Part (Part 71)
Communication Types: RS232, RS485, Current Loop
Baud Rates: 300, 1200, 9600, 19200, 28800, 38400, 57600
Data Bits: 5, 6, 7, 8
Stop Bits: 1, 1.5, 2
Parity: None, Even, Odd

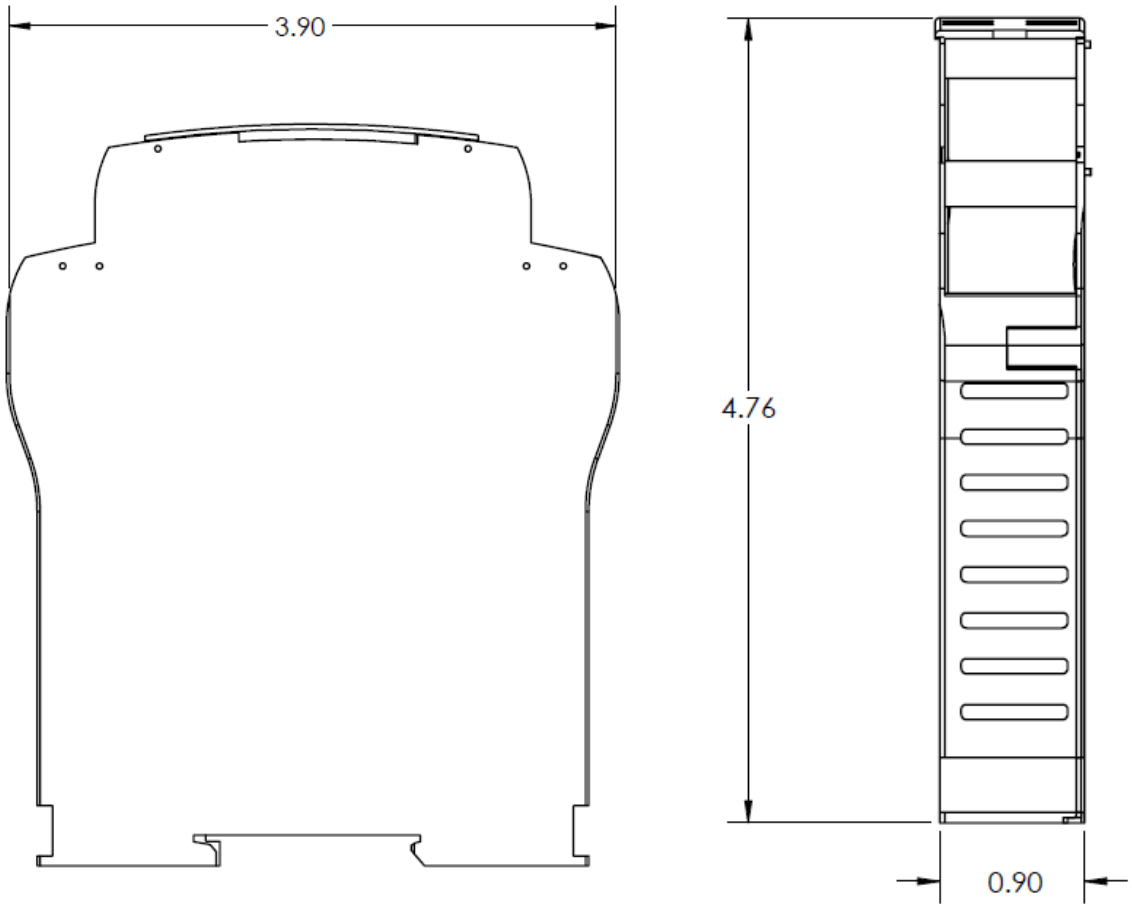
Pin Assignment

Pin	Assignment
A1	Printer TX Current +
A2	Printer TX Current – or RS GND
A3	Printer RS232RX or RS485A
A4	Printer RS232TX or RS485B
B1	Reserved
B2	Reserved
B3	Printer RX Current +
B4	Printer RX Current -
C1	24 VDC +
C2	24 VDC -
C3	Reserved
C4	Reserved
D1	Can -
D2	Can +
D3	XL200 RS485B
D4	XL200 RS485A

Interface Drawing



Dimensional Drawings



Equipment Needed for Replacing a Printer Interface (4370)

If you are replacing a 4370 Printer Interface with the updated 6370 Printer Interface, it is recommended that the following items be available:

1. Ethernet Cross-Over (Patch) Cable
2. Laptop
3. 6370 Wiring Diagram
4. Wire Strippers
5. Terminal Screwdriver
6. XL200 Series controller with “B,” “P,” or both “B” and “P” as a software model option.

Location and Wiring for Replacing a Printer Interface (4370)

The 6370 Printer Interface is located inside the junction box included with the Printer Integration Kit sold and provided by AMS Controls. Use the schematic provided with the kit for wiring instructions. If this manual serves as an upgrade from the 4370 Printer Interface, follow the steps below for connecting the 24 VDC supply and AMS RS485 communication wires.

1. With power disconnected, located the Printer Integration Junction box and the 4370 Printer Interface board.
2. Remove the wire from Terminal 1 of the 4370 board and terminate to C1 of the 6370 board.
3. Remove the wire from Terminal 2 of the 4370 board and terminate to C2 of the 6370 board.
4. Remove the wire from Terminal 3 of the 4370 board and terminate to D4 of the 6370 board.
5. Remove the wire from Terminal 4 of the 4370 board and terminate to D3 of the 6370 board.

If you are not using a Matthews 2001 printer, please follow these instructions for connecting the printer to the 6370 Printer Interface board.

1. Remove the 9-pin connector from the 4370 board.
2. Take the connector apart to locate the three wires and their terminals.
3. Disconnect the wire from Pin 5 and terminate to A2 of the 6370 board.
4. Disconnect the wire from Pin 3 and terminate to A3 of the 6370 board.
5. Disconnect the wire from Pin 2 and terminate to A4 of the 6370 board.

If you are using a Matthews 2001 printer, contact AMS Controls for wiring instructions.

Standard XL200 to Printer Interface (6370) Board Wiring

There must be a daisy chained or direct connection between the pins on the XL200 and the 6370 as described in the following table. Daisy chained connections may occur when multiple 6370’s or Auxiliary Controllers need to be connected on the same RS485 communication bus.

XL200	6370
D14	D3
D15	D4

Equipment Needed for Standard Installation

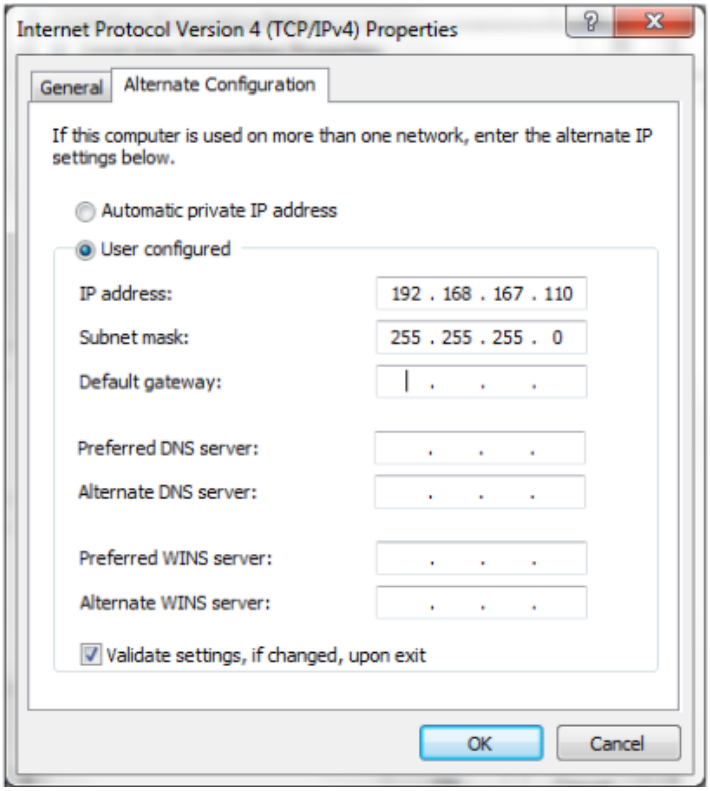
In order to effectively install and setup the Printer Interface, it is recommended that the following items be available:

1. Ethernet Cross-Over (Patch) Cable
2. Laptop
3. 6370 Wiring Diagram
4. XL200 Series controller with “B,” “P,” or both “B” and “P” as a software model option.

Setting Up the Printer Interface (6370) Board

Connecting to the Printer Interface for Configuration

1. Boot up the laptop.
2. Click Start/Control Panel.
3. Click Network Connections.
4. Right click the Local Area Connection and select Properties.
5. Click Internet Protocol (TCP/IP) then choose Properties.
6. Click the tab for Alternate Configuration.
7. Click User Configured and set as follows:



8. Click OK.

Connecting Communication Cables

Connect a standard Ethernet Patch cable from the laptop's Ethernet port to the 6370 and power it up.

Commissioning the Printer Interface

On the laptop, open your browser and type the following address in the address bar:

192.168.167.100/default.html (this is also written on the side of the unit)

The following screen will appear:

Description	Value	Select
Printer 6370	REV	
Serial Number	NO S/N	
Software Version	3.0	
Rs485 To Controller		
Unit ID	61	Unit_ID
Baud Rate	14400	Baud_Rate
Receive	>61B32300A1	
Tramsmit	>61TBB	
Rs232 Printer		
Type	RS232	Type
Data Bits	8	Data_Bits
Stop Bits	1	Stop_Bits
Parity	NON	Parity
Baud Rate	9600	Baud_Rate
Tramsmit		
Receive		
Printer I/O		
Input	0	
Output	0	
Web Page Hit	5415	Clear

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Setting the Unit ID

The Unit ID (pictured below) will determine what type of printer we are setting up. The options are below.

1. Unit ID: 61
   This will be selected for **Bundle Tag Printers**.
2. Unit ID: 71
   This will be select for **Part Printers**.
3. Unit ID: 72
   This is a special driver only used in special projects. Contact AMS Controls for further details.
4. Unit ID: 81
   This is a special driver only used in special projects. Contact AMS Controls for further details.

Description	Value	Select
Printer 6370	REV	
Serial Number	NO S/N	
Software Version	3.0	
Rs485 To Controller		
Unit ID	61	Unit_ID
Baud Rate	14400	Baud_Rate
Receive	>61B32300A1	
Tramsmit	>61TBB	
Rs232 Printer		
Type	RS232	Type
Data Bits	8	Data_Bits
Stop Bits	1	Stop_Bits
Parity	NON	Parity
Baud Rate	9600	Baud_Rate
Tramsmit		
Receive		
Printer I/O		
Input	0	
Output	0	
Web Page Hit	5415	Clear

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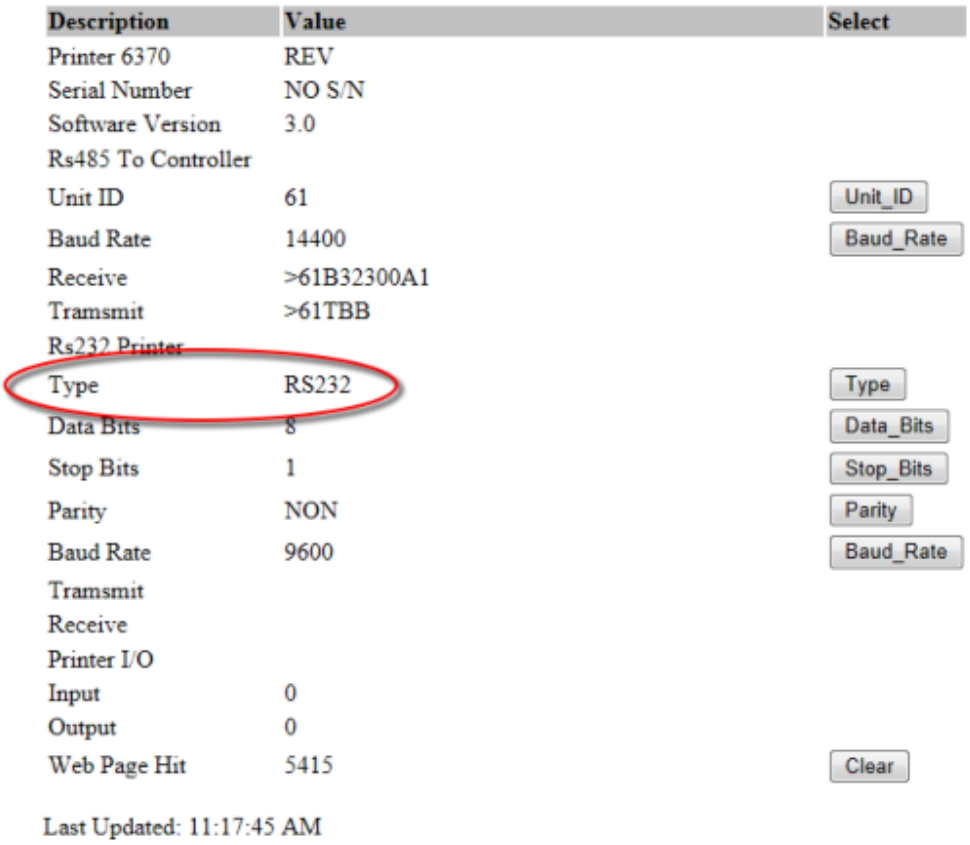
Setting the Type

The Type (pictured below) will determine the type of communication protocol the printer uses. This must also match the printer wiring at the board. All printers except for the Matthews 2001 will use RS232. The Matthews 2001 will use Current Loop output. The options are as follows:

1. RS232
2. RS485
3. Current Loop



Description	Value	Select
Printer 6370	REV	
Serial Number	NO S/N	
Software Version	3.0	
Rs485 To Controller		
Unit ID	61	Unit_ID
Baud Rate	14400	Baud_Rate
Receive	>61B32300A1	
Tramsmit	>61TBB	
Rs232 Printer		
Type	RS232	Type
Data Bits	8	Data_Bits
Stop Bits	1	Stop_Bits
Parity	NON	Parity
Baud Rate	9600	Baud_Rate
Tramsmit		
Receive		
Printer I/O		
Input	0	
Output	0	
Web Page Hit	5415	Clear

Last Updated: 11:17:45 AM

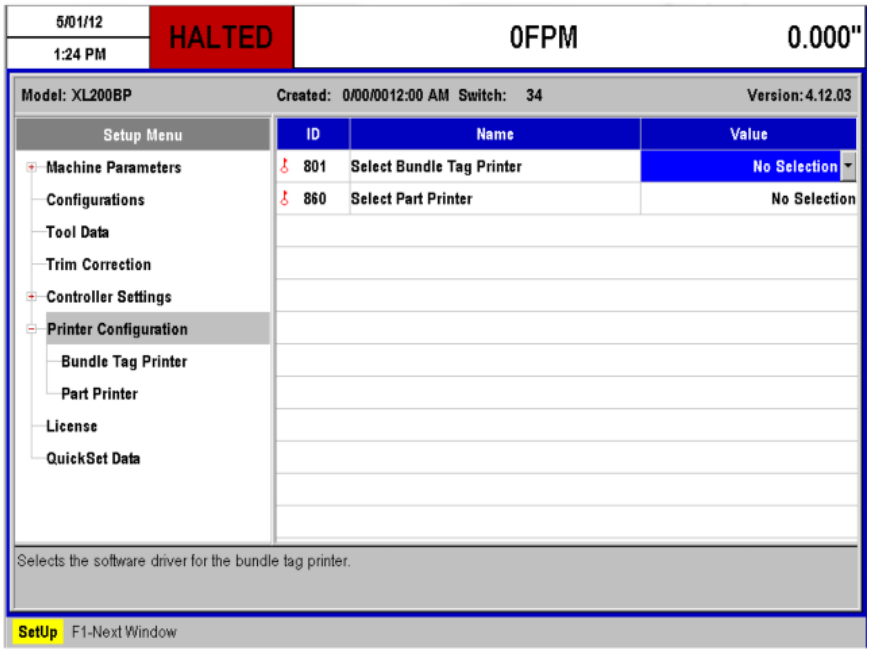
All Other Values

The rest of the parameters will be set automatically once the correct driver is selected in the XL200 Series controller, and communication is successful (see below). This includes Baud Rate, Parity, Stop Bits, and Data Bits.

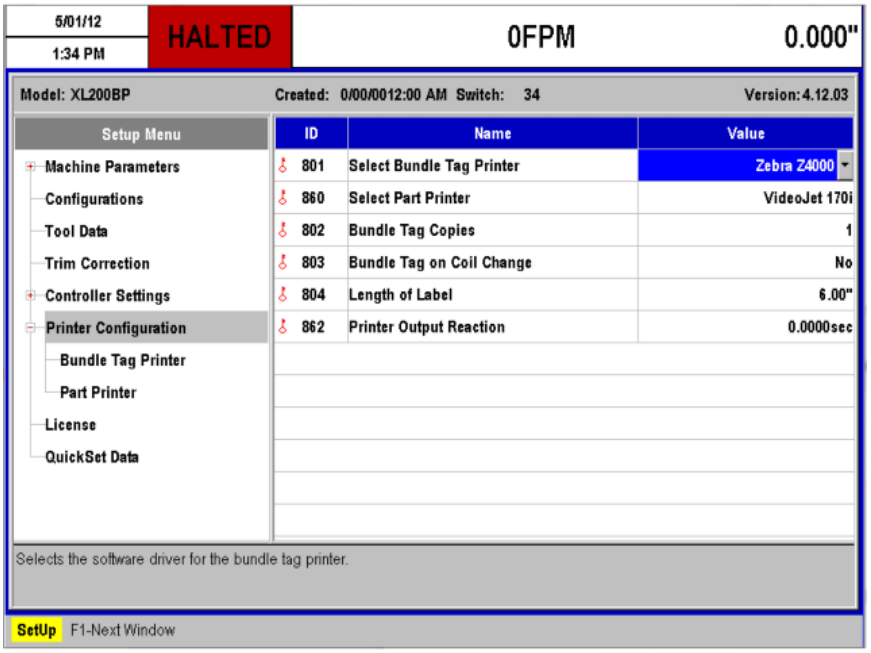
Setting up the XL200 to Use the Printer Interface

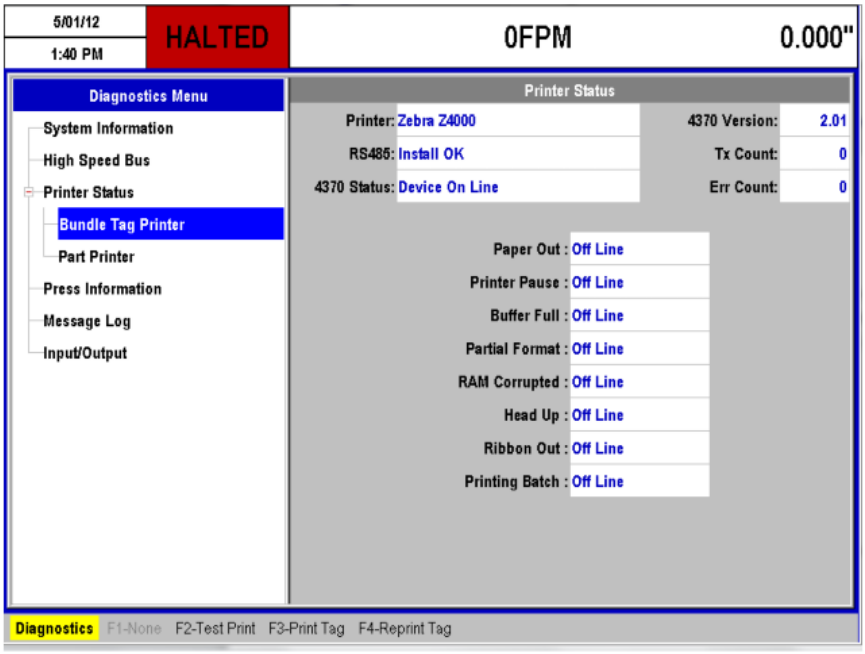
Selecting the Printer Driver in the XL200

At the XL200 Series controller, press the Setup key and use the arrows or touchscreen to navigate to Printer Configuration. If you have both a Bundle Tag Printer and Part Printer, you can press the right arrow key to expand out the menu to see the sub-options.



Use the drop down arrow, and select the correct printer.



Printer Diagnostics

Once you have the correct driver selected, you want to make sure that you are communicating. On the XL200 Series controller, press the Diagnostics key. Navigate down to Printer Status and expand it out to see the sub-options. You want to make sure the 4370 Status is “Device On Line” (see below). The Printer status will be below, and should be “On Line”. If not, go back and check the wire connections, or Printer Interface settings.