Hardware Installation

In this chapter....

Custom Labels

Create Custom Labels

You may create custom labels for the EZText Panel Function Pushbuttons and Annunciator Lamps that are particular to their function within your application. The labels slide into an existing slot in the panel overlay so that the text or numbers you have printed will rest over the pushbuttons or annunciator lamps.

A Microsoft Word® document (EZ-TEXT_INSERTS.doc) was installed in the EZText Program folder on your computer when you installed your programming software. You must have Word installed on your computer to open this document. This document will help you create your labels. Two sheets of cover stock and a sheet of transparent film have also been shipped with your panel.
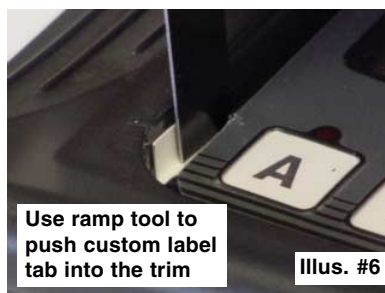
Install Custom Labels

A 1/2-inch x 4-inch flat metal tool (ramp tool) is shipped with each unit to aid in the installation of the label inserts.

To install the pushbutton or annunciator lamp labels into the slots, perform the following steps.

1. Carefully remove rubber trim mold from panel front to access label slots. (The trim has a barbed retaining rib that is pressed securely into a channel in the front panel housing.) The ramp tool can be used to help lift the trim (see illustration #1).

Remove trim, using ramp tool.

Illus. #1

Gently pull trim from the molding.

Illus. #2

Use ramp tool to lift overlay.

Illus. #3

Use ramp tool to start custom label into slot.

Illus. #4

Use tool as a guide, and position label over buttons.

Illus. #5

Use ramp tool to push custom label tab into the trim

Illus. #6

2. The recessed slot(s) where the labels are inserted should now be visible.

3. Remove the factory installed label insert.

4. Use the corner of the ramp tool to lift the top layer of the overlay (shown in illustration #3), just enough to start the custom label into the slot. Hold the overlay up with the ramp tool and start the custom label into the slot (illustration #4).

5. Once the label has been started into the slot, move the ramp tool behind the label insert and use as a ramp to guide the label insert into the slot until properly positioned (illustration 5).

6. Push label tab down into trim channel with the ramp tool (illustration 6).

7. Repeat this procedure for the annunciator lamp label, if required.

8 Replace the rubber trim by firmly pressing the barbed rib into the molded channel in the front panel housing.
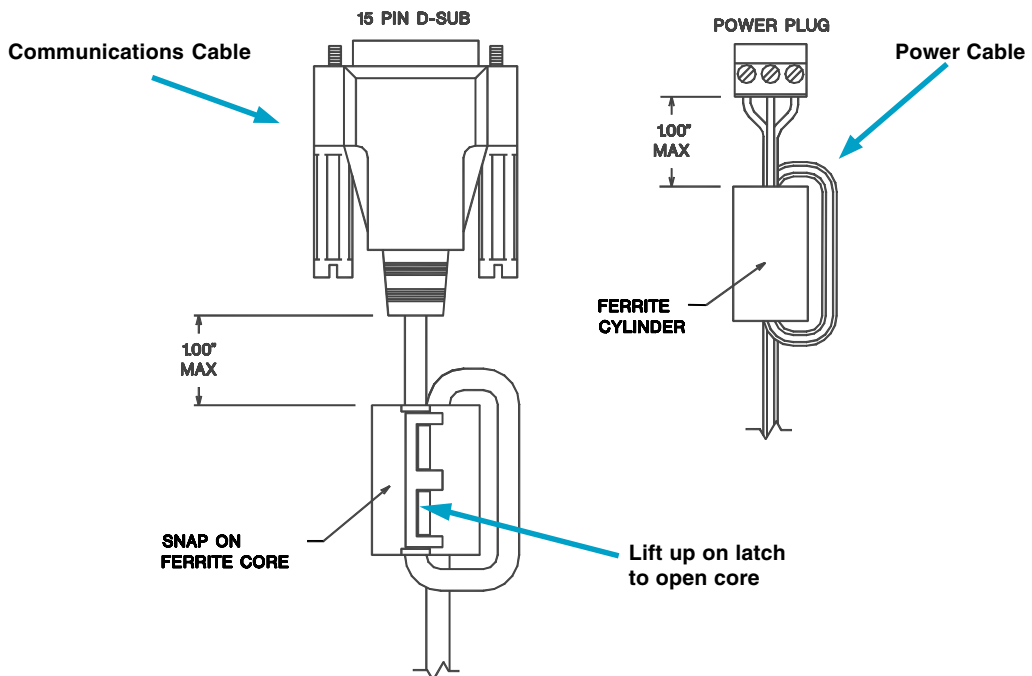
New Function Key Label installed

EMI Noise Filter Installation

EZText Panels are supplied with two ferrite cores that should be attached to the cables prior to installation of the EZText Panel. These cores are *required to suppress EMI emissions* that are conducted through the Power Cable and the Communications Cable. The figure, below, shows the ferrite cores properly installed. Attach the cores within one inch of the EZText connector. The cable should be snugly wrapped once around the core, providing two passes through the core.

The **Power Cable Core** is a solid ferrite cylinder. The Power Cable should pass once through the core, be looped around and pass through a second time. Pull the excess cable so that it rests snugly against the outside of the core.
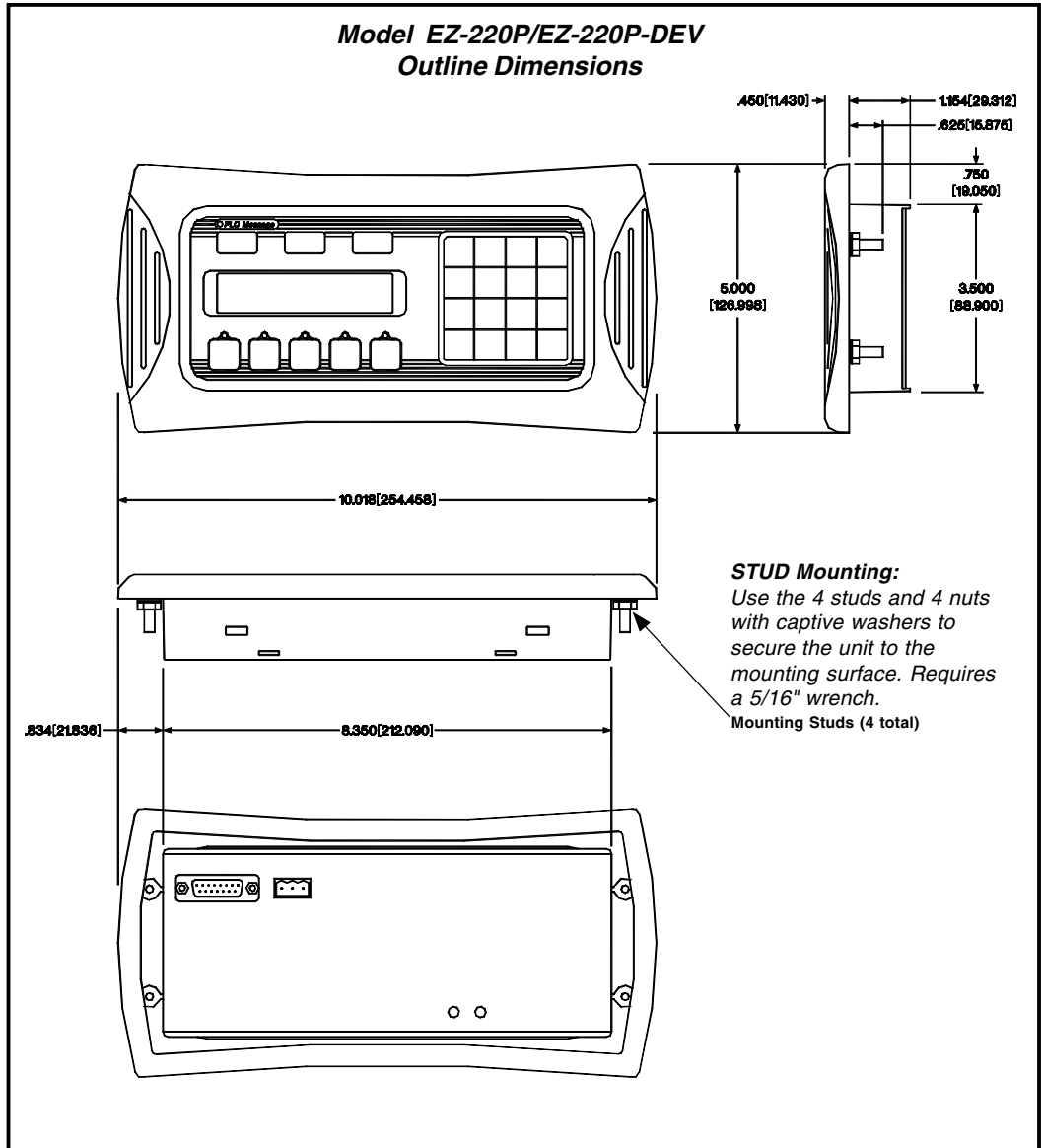
The **Communications Cable Core** is a snap-together, split, ferrite core. This core can be installed on a finished cable. Lift the latch to open the core. Wrap the wire through the core center, snugly around the outside, and again through the center. Close the core until the latch snaps. Ensure that the cable jacket is not pinched between the two halves of the core. The finished cable should look similar to the drawing shown below.

Communications Cable

15 PIN D-SUB

1.00" MAX

SNAP ON FERRITE CORE

Lift up on latch to open core

POWER PLUG

Power Cable

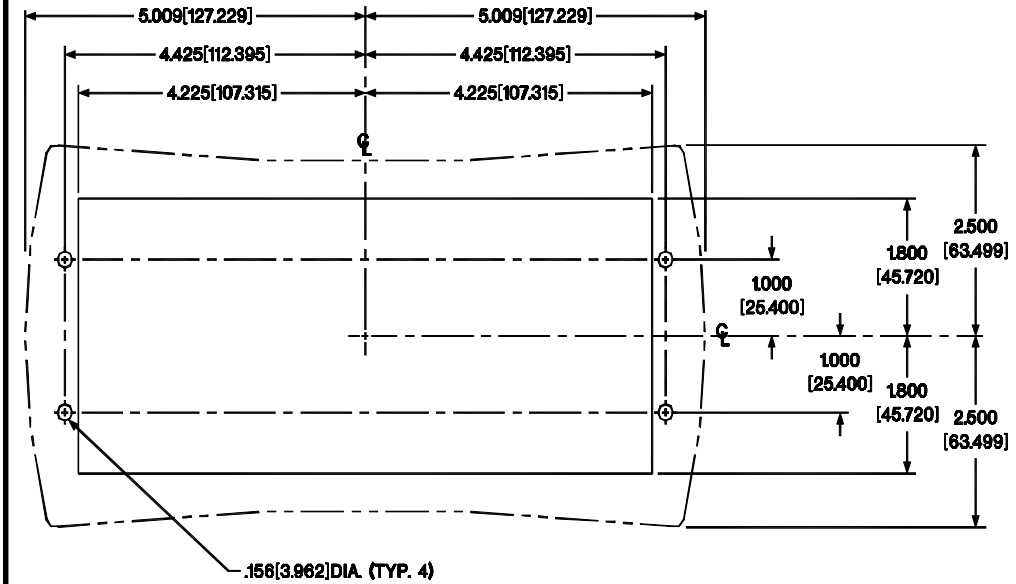1.00" MAX

FERRITE CYLINDER

EZ-TEXT-P-M

Mounting

EZText Panels can be mounted in two different ways: 1) Stud Mounting, and 2) DIN Clip Mounting. The panel comes with all the necessary mounting hardware required for stud mounting. DIN Clips (P/N EZ-BRK-2) must be ordered separately.   For DIN Clip mounting instructions, see page 21.
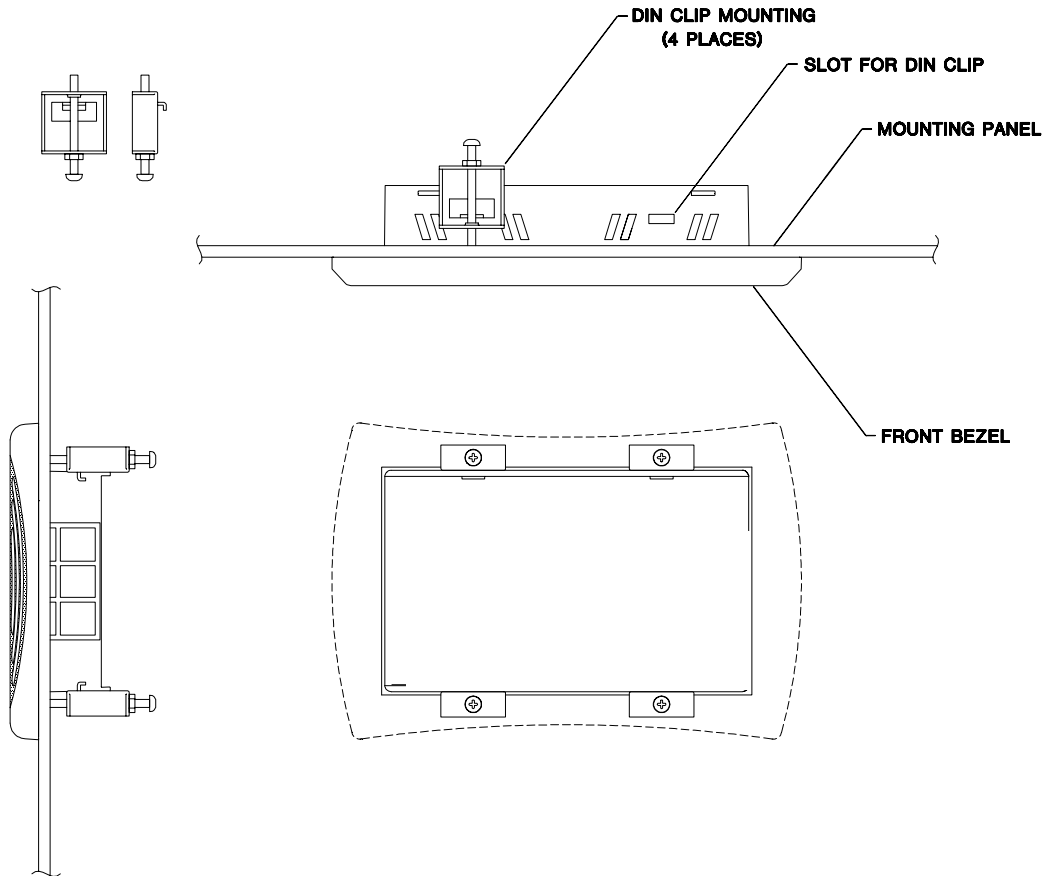
STUD Mounting:

Model EZ-220P/EZ-220P-DEV
Outline Dimensions

.450[11.430]

1.154[29.312]

.625[15.875]

.750
[19.050]

5.000
[126.998]

3.500
[88.900]

10.018[254.458]

STUD Mounting:
Use the 4 studs and 4 nuts with captive washers to secure the unit to the mounting surface. Requires a 5/16" wrench.
Mounting Studs (4 total)

.834[21.836]

8.350[212.090]

Model EZ-220P/EZ-220P-DEV
Cutout Dimensions (MountingTemplate)

5.009[127.229] 5.009[127.229]

4.425[112.395] 4.425[112.395]

4.225[107.315] 4.225[107.315]

2.500 [63.499]

1.800 [45.720]

1.000 [25.400]

1.000 [25.400]

1.800 [45.720]

2.500 [63.499]
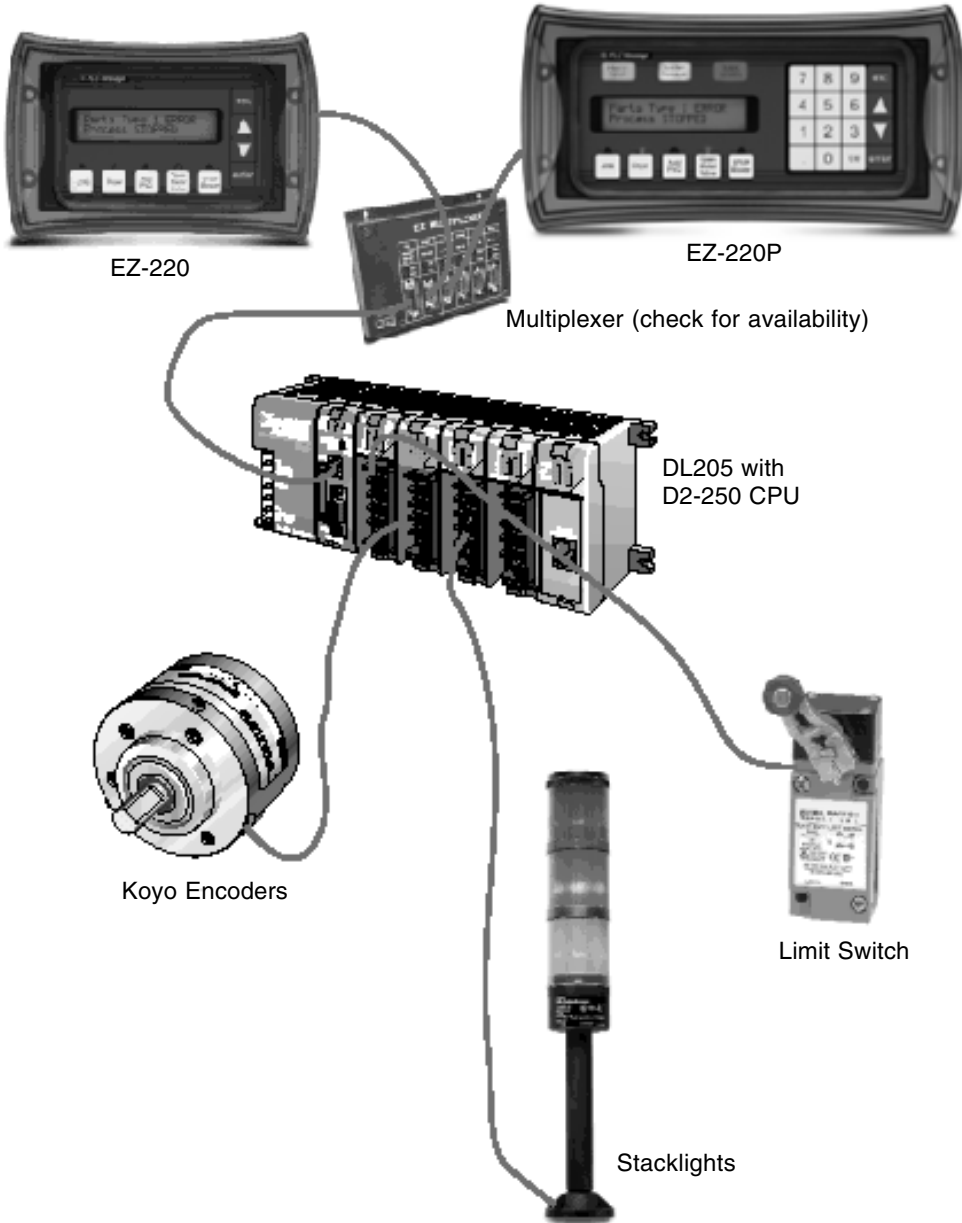
.156[3.962]DIA. (TYP. 4)

EZ-TEXT-P-M

DIN CLIP Mounting

DIN Clips (P/N EZ-BRK-2) are metal brackets that attach to the panel housing and secure the front bezel to a mounting surface with a screw. They provide an alternative to bolting the panel into the mounting surface. There are 4 square holes in the chassis (two on the top and two on the bottom). Insert the clip flanges into the holes and secure the EZText Panel by tightening the DIN CLIP screws until the front bezel is firmly pressed to the mounting surface.

Connections and Wiring

Example of an EZText Panel Application

EZ-220

Multiplexer (check for availability)

EZ-220P

DL205 with
D2-250 CPU

Koyo Encoders

Stacklights

Limit Switch

## EZ-220P and EZ-220P-DEV Rear Panel CONNECTIONS and WIRING

REAR VIEW

Serial Port Communication LEDs
These LEDs illuminate to show whether the unit is sending or receiving data. (See page 87.)

24 VDC Power Source

Power Connector
Block style connector is used to connect an external 24 VDC power supply. See Power Connector Pinout on page 24.


TXD   RXD

SERIAL PORT COMMUNICATION
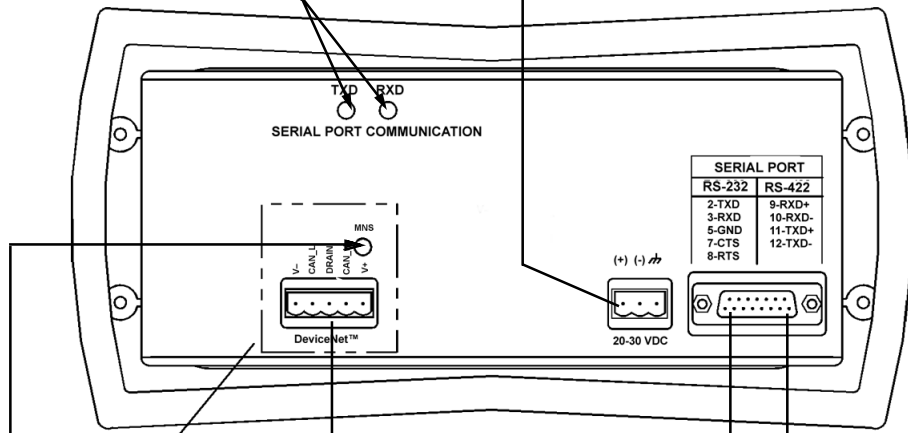
SERIAL PORT	
RS-232	**RS-422**
2-TXD	9-RXD+
3-RXD	10-RXD-
5-GND	11-TXD+
7-CTS	12-TXD-
8-RTS	

MNS

V– CAN_L DRAIN CAN_H V+

DeviceNet™

(+) (-)

20-30 VDC

Optional*

OR

Programming PC Cable ⟷ PLC Cable

*MNS LED (Optional)
If connected to a DeviceNet network, this LED indicates Module Network Status.

*DeviceNet Port
This is an optional port that can be used to connect to a DeviceNet network. See page 25.

PC

PLC
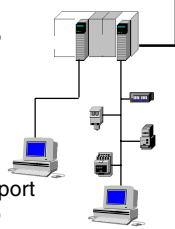
Serial Port
This port may be used to connect the programming computer or a PLC (see page 24). Use Programming Cable P/N EZTEXT-PMGCBL to connect the PC. See PLC Cable Part Number table, page 25, for the appropriate PLC cable type used by your application.

Power Connector

This block style connector is used to connect an external 24 VDC power supply. The connector with screw terminals is provided with your EZText Panel and allows you to plug into the power receptacle. A pinout is shown below. An external power supply is adapted to supply operating voltage to the EZText Panel. The power supply must deliver a range of 20 to 30 VDC.

In multi-panel applications, if separate power supplies are used, please ensure the electrical ground common does not have a great potential difference. In a multi-panel application, the power supply must maintain the specified voltage and current consumption under all conditions (this includes powerup) for each of the individual units. Please refer to the specifications on page 14 for the individual units.

Pin #	Connection	
1	+V	24VDC (20–30 VDC)
2	–V	
3	Chassis Ground	

Connect (+) on the unit to the (+) lead of your power source; (-) on the unit is connected to the (-) lead; and chassis GND (on the unit) is connected to the chassis ground of the cabinet. It is recommended you use a regulated power source isolated from relays, valves, etc.

Serial Port

The Serial Port may be used to connect your panel to a programming computer (PC) or a Programmable Logic Controller (PLC). You will only need to connect to a PC when you initially configure and program the EZText Panel. The Serial Port is then available for connection to the PLC. When you power up the EZText Panel, it will come up in RUN Mode. While in RUN Mode the Serial Port will only communicate with a PLC. To program the panel and have the Serial Port communicate with a PC, you will have to enter the SETUP Mode (see following paragraph).

Connect a Programming PC
To program the EZText Panel, you must put the panel into SETUP Mode. When the panel is powered up, it will be operating in RUN Mode. (The panel will go through "Self Initialization" before it enters Run Mode — you must wait until this is accomplished before entering Setup Mode.) To enter SETUP Mode, you must press and hold the UP Arrow button while simultaneously pressing the DOWN Arrow button. While in SETUP Mode you may also adjust the screen contrast by pressing the UP/DOWN Arrows.

The EZText Panel is configured using a PC running the EZText Panel Programming Software. When you are ready to download the program, connect the programming cable (EZTEXT-PGMCBL) to the serial port of the panel and the serial port of the PC. A wiring diagram for the programming cable follows.

P/N EZTEXT-PGMCBL
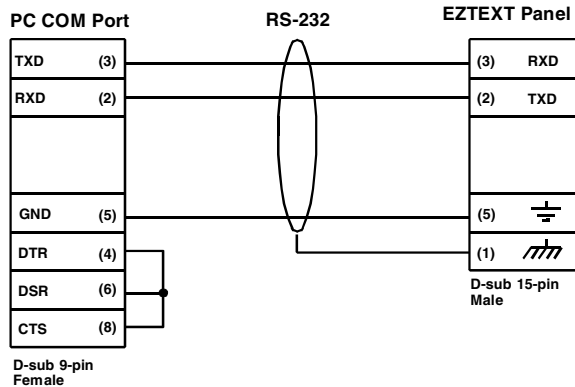
Connect a PLC
Connect your PLC to the EZText Panel one of the cables listed below.

Part Number	Cable Description
EZ-2CBL	*Direct* Logic PLC RJ12 port, DL05, DL105, DL205, DL350 & DL450 (RS-232C)
EZ-2CBL-1	*Direct* Logic (VGA Style) 15-pin port, DL250 (RS-232C)
EZ-3CBL	*Direct* Logic PLC RJ11 port, DL340 (RS-232C)
EZ-4CBL-1	*Direct* Logic PLC 15-Pin Dsub port, DL405 (RS-232C)
EZ-4CBL-2	*Direct* Logic PLC 25-Pin Dsub port, DL405, DL350, DL305 DCU, and all DCM's (RS-232C)
EZ-90-30-CBL	GE 90/30 and 90/70 15-pin Dsub port (RS-422A)
EZ-SLC-232-CBL	AB SLC 5/03/04/05 DF1 port (RS-232C)
EZPLC5-232-CBL	AB PLC5 DF1 port (RS-232C)
EZ-MLOGIX-CBL	AB MicroLogix 1000, 1200 & 1500 (RS-232C)
EZ-MITSU-CBL	Mitsubishi FX Series 25-pin port (RS-422A)
EZ-MITSU-CBL-1	Mitsubishi FX Series 8-pin (RS-422A)
EZ-OMRON-CBL	Omron C200, C500 (RS-232C)

DeviceNet Port

This is an optional port that can be used to connect to a DeviceNet network. For more information about the connection, see the DeviceNet Module manual.

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