

Application Note

EXTENDED DISPLAY

Part Number 212-2010-XL

Extended Display

Introduction

At times, it may be necessary to view Analyzer messages from a distance. Even though each Analyzer is equipped with an effective and legible display, the standard character height may not be suitable for viewing from a distance. The Extended Display solves this problem. The Extended Display provides a means of making important Analyzer messages visible from a distance. The Extended Display provides 2 lines of character information. Each line displays 20 characters, each character is 0.7 inches high and is displayed using bright red LEDs. This results in a display that can be easily viewed at a significant distance from the Analyzer.

Compatibility

The Extended Display is designed to work with Dynalab XL-Series Analyzers equipped with EPROM Version 7.033 or later.

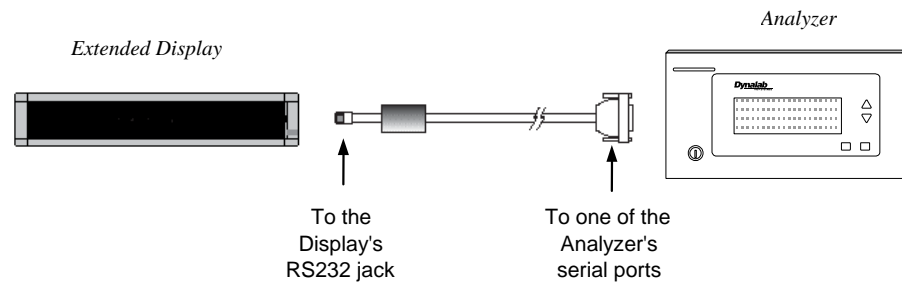
Setup

Connections

The Extended Display is shipped with the following parts:

- The display unit
- A power supply
- A 25' cable assembly with a female DB9 connector on one end and a 6-conductor RJ-12 connector on the other end.
- Two L-shaped mounting brackets

The following shows how the Extended Display is connected to the Analyzer:



In addition to the connections show above, the power supply's low voltage output cable connects to the power jack on the back of the Extended Display.

Analyzer Setup

Note in the diagram above, the cable connects to one of the Analyzer's serial ports. The serial port to which the Extended Display connects must be configured according to the following procedure:

The serial ports are configured through the Analyzer's Setup Menus. The Setup Menus are accessed by turning the Analyzer OFF, inserting a DynaCard, then turning the Analyzer back ON while depressing the STOP button.

In the SETUP MENU, use the DOWN and/or UP buttons to place the cursor next to the PORTS menu item. Press the START button to select the PORTS menu item.

SETUP	MENUS
FORMATS	DIAG
RESTRICT	>PORTS
CONFIG	

```

PORT SETTINGS
>SERIAL 1
SERIAL 2
CONTROL

```

In the PORT SETTINGS menu, use the DOWN and/or UP buttons to place the cursor next to the menu item corresponding to the serial port to which the Extended Display will be connected. Press the START button to select the desired menu item

```

SERIAL PORT 1
>MODE
SETTINGS

```

In the SERIAL PORT menu, use the DOWN and/or UP buttons to place the cursor next to the MODE menu item. Press the START button to select the MODE menu item.

```

SERIAL PORT 1 MODE
RS-232      LED DISP
DYNA-IR    >EXT DISP
IrDA

```

In the SERIAL PORT MODE menu, use the DOWN and/or UP buttons to place the cursor next to the EXT DISP menu item. Press the STOP button to select the EXT DISP menu item.

To exit the SETUP mode, turn the Analyzer OFF and then turn the Analyzer back ON.

Adding a Second Extended Display

Two methods are available for connecting two extended displays to a Dynalab Analyzer.

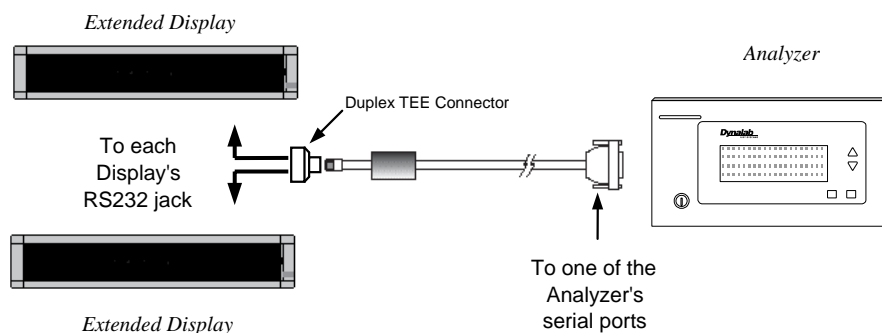
Method 1

If both serial ports on the Analyzer are available, connect each extended display to a separate serial port on the Analyzer, and setup each serial port as shown in the previous section.

Method 2

If only one serial port on the Analyzer is available, the optional Extended Display Duplex Connection Kit (Part Number 212-2012) is required. This kit consists of a specially wired tee connector and two additional cables each with one RJ-12 connector. Connections are as shown below.

Warning: Failure to use the specially wired TEE connector from Dynalab may result in damage to the Extended Display.



Operation

Sequence Messages

```
THIS IS AN EXAMPLE  
OF A LONG MESSAGE  
WHICH CONTAINS 65  
CHARACTERS
```

Analyzer Display

```
THIS IS AN EXAMPLE  
OF A LONG MESSAGE
```

Extended Display

With the Analyzer set up and with the Extended Display connected as described in the previous section, the Extended Display will automatically display Analyzer messages. It is important to note that the Analyzer display contains 4 lines, 20 characters per line; however, the Extended Display contains 2 lines, 20 characters per line. For this reason, the information presented on the Extended Display is formatted differently than on the Analyzer's display. Furthermore, not all information shown on the Analyzer's display will appear on the Extended Display, as illustrated in the example shown at left.

Error Messages

```
OPEN  
C1-PIN2 RED/YEL  
C2-PIN5 GRN/RED
```

Analyzer Display

The example at left shows how an error message is typically displayed on the Analyzer. The first line of the display conveys the error type. The next two lines of the display convey the connector-pin names and the color/stripe information.

Error Code →

```
C1-PIN2 RED/YEL  O  
C2-PIN5 GRN/RED
```

Extended Display

This same error is displayed on the Extended Display as shown here. Since only 2 lines are available, not all the information can be shown on the Extended Display. The error type is conveyed by the single character located in the upper right hand corner. This is the error code. In this example, the error code is O, indicating an OPEN.

The following table shows the Error Codes that are used to convey error information on the Extended Display:

XL Display Name	Extended Display Error Code
OPEN	O
SHORT	S
MISWIRE (display as open)	O
RESISTOR (all error types)	R
CAPACITOR (all error types)	C
DIODE (all error types)	D

Features Not Supported On The Extended Display

It is important to note that the following features are not supported with the Extended Display:

- **PMESSAGE:** The output of the PMESSAGE Sequence item is not shown on the Extended Display.
- **MENU:** The output of the MENU Sequence item is not shown on the Extended Display.
- **REPORT:** The output of the REPORT Sequence item is not shown on the Extended Display.
- **OPERATOR:** The output of the OPERATOR Sequence item is not shown on the Extended Display.
- **Color/Wire Toggle:** If the WIRES method is used, the Extended Display will not toggle between the color and wire information. Instead, only the color information will be shown.