DESCRIPTION:
The iLD46 is a 6-digit master/slave display providing remote readout from instruments such as programmable controllers, digital panel meters and other instruments with serial output. Communication interfaces supported are RS-232 or RS-485 standards. Both RS-232 or RS-485 are programmable through front panel buttons.

The Big Display features a large three color programmable display with the capability to change color every time an Alarm is triggered.

SAFETY:
The instrument is a panel mount device protected in accordance with EN61010-1:2001.

EMC:
• Whenever EMC is an issue, always use shielded cables.
• Never run signal and power wires in the same conduit.
• Use signal wire connections with twisted-pair cables.
• Install Ferrite Beads(s) on signal wire close to the instrument if EMC problems persist.

MOUNTING:
Mounting Big Display on Bail:
1. Mounting Big Display on Bail:

   DESCRIPTION:
   1. Be sure to leave enough room around the bail to allow for removal and rotation of the display.
   2. The display can be rotated for the best viewing angle.

   Disassembly Instruction:
   Warning: Disconnect all ac power from the unit before proceeding.

   1. Remove all wiring connections from the rear of the instrument, by unscrewing the power and input connectors.
   2. Remove eight screws at the back of the display and back cover.
   3. Remove the Big Display from the panel.
   4. To remove the Big Display from the bail, unscrew the two knobs at each end of the mounting brackets.

   Wiring:
   The RS-485 standard (point-to-point) allows a single device to be connected to the Big Display using a three-wire connection (full duplex).

   2. Wiring RS-485 Interface.
   The RS-485 standard (multipoint) allows a computer, one or more devices and Big Displays up to 32 (up to 32) to be connected using a two-wire connection (full duplex) plus a common wire to connect to the shield of the cable. It is recommended to use shielded cable with one twisted pair for EMI noise protection.

   Connections to the computer are optional.

   Mounting Big Display Through Panel:
   1. Using the panel cutout diagram shown above, cut an opening in the panel.
   2. Remove eight screws at the back of Big Display to remove back cover.
   3. Insert the unit into the opening from the front of the panel, so the gasket seats between the bezel and the front of the panel.
   4. Align back cover to Big Display and reinstall screws.

   Computer Card or Converter Box
   Device with RS-485 Pins
   Device with RS-485 Pin
   Function
   Function
   COM
   COM
   A, T+Rx-Rx
   T+Rx-Rx
   B, T+Rx
   T+Rx

   Remote Display
   1
   2
   3
   4

   TB1
   Power
   100 ~ 240 Vac

   OPERATIONS
   1. Peak Value (Display in Host Mode)
   Press a) RS-232 Mode, will send: *X02 (interface DRNT), or *X03 (interface DRNP)
   b) RS-485 Mode, will send: *01X02 (interface DRNT), or *01X03 (interface DRNP)

   Example 1:
   Press a) RS-232 Mode, will send: *X02 (interface DRNT), or *X03 (interface DRNP)
   b) RS-485 Mode, will send: *01X02 (interface DRNT), or *01X03 (interface DRNP)

   2. Valley Value (Display on Host Mode)
   Press a) RS-232 Mode, will send: *X01
   b) RS-485 Mode, will send: *01X01

   3. Process Value (Display on Host Mode)
   Press a) Single Big Display: (RS232) write 6 characters, then
   b) Multiple Big Display: (RS485) write *, device address (2 digit), CR, 6 characters, then CR

   4. Write alphanumeric characters to the Big Display from the computer (Display in Slave Mode)
   a) Single Big Display: (RS232) write 6 characters, then
   b) Multiple Big Display: (RS485) write * device address (2 digit), CR, 6 characters, then CR

   5. Display Color Setup (Alarm Setup)
   This menu allows the user to select the color of the display in normal conditions and when an alarm is triggered. If users wants the Display to change color every time when Alarm 1 and Alarm 2 are triggered, the will send: *01X01

   Example 1:

   Display colors change sequences:
   "NO.CR"=Green

   Example 2:

   Display colors change sequences:
   "AMBER" | "RED" | "GREEN"
   0 | LO-1 = 100 | LO-2 = 300

   Example 3:
   Alarm 1 setup: "ON", Alarm Mode LowHigh "AL1H", Alarm Low Value "LO-1=100", Alarm High Value "HI-1=250", Alarm Color "A1CR"=Amber

   Display colors change sequences:
   "AMBER" | "RED" | "GREEN" | "RED" | "AMBER"
   0 | LO-1 = 100 | LO-2 = 150 | HI-2 = 200 | HI-1 = 250

   CONFIGURATION:
   Button Functions in Configuration Mode
   • To enter the Menu, the user must first press (Button. Use this button to advance/navigate to the next menu item. The user can navigate through all the top level menus by pressing (Button. While a parameter is being modified, press (Button to escape without saving the parameter.
   • Press the up Button to scroll through submenu selections. When a numerical value is displayed press this key to increase value of a parameter that is currently being modified.
   • In the Run Mode pressing (Down causes the display to flash the PEAK value several times before returning to the Run Mode.
   • In the top menu press (Down causes the display to return to the Run Mode.
   • Press the down Button to scroll through submenu selections. When a numerical value is displayed press this key to decrease value of a parameter that is currently being modified.
   • In the Run Mode press (Down causes the display to flash the Valley value several times before returning to the Run Mode.
   • In the top menu press (Down causes the display to return to the Run Mode.
   • Press this button to access the submenus from a Top Level Menu item.
   • Press this button to access a submenu selection or after entering a value – the display will flash a message to confirm your selection.