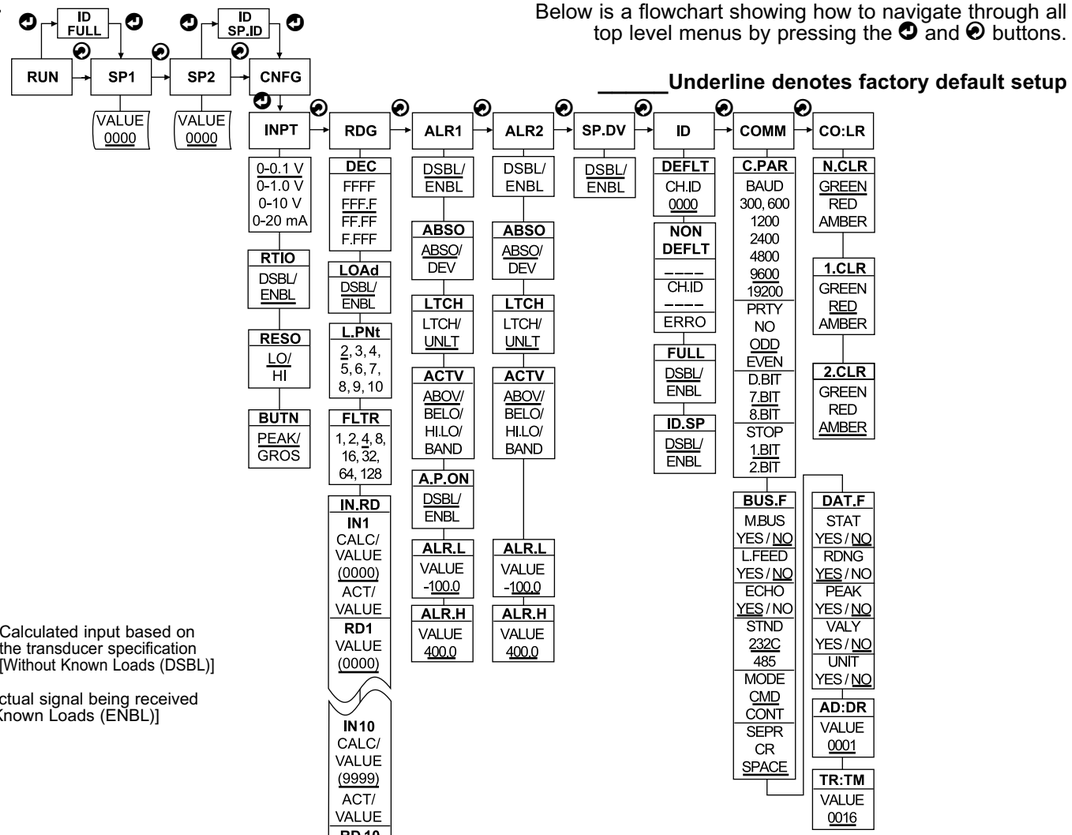
FLOW CHART

Below is a flowchart showing how to navigate through all top level menus by pressing the ◀ and ▶ buttons.

_____Underline denotes factory default setup

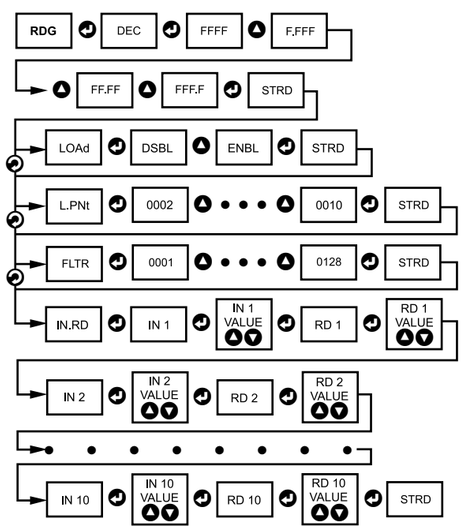


†Where:
CALC/VALUE = Calculated input based on the transducer specification [Without Known Loads (DSBL)]

ACT/VALUE = Actual signal being received [Known Loads (ENBL)]

READING CONFIGURATION SETUP (operation example)

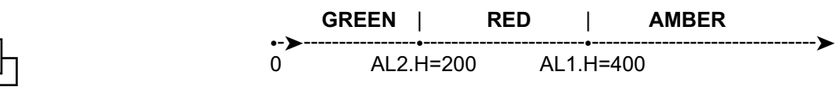
Below is a flowchart showing how to navigate through the submenus of the Reading Configuration menu item by pressing the front buttons.



DISPLAY COLOR SETUP (examples)

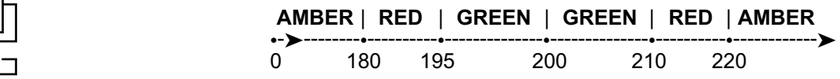
Example 1:
Output 1 & Output 2: SSR
Alarm setup: Absolute, Above, Alarm 2 HI Value "ALR.H" =200, Alarm 1 HI Value "ALR.H"=400
Color Display setup: Normal Color "N.CLR"=Green, Alarm 1 Color "1.CLR"=Amber, Alarm 2 Color "2.CLR"=Red

Display colors change sequences:



Example 2:
Output 1: Relay, Set Point 1 = 200,
Output 2: Relay, Set Point 2 = 200
Alarm 1 setup: Deviation, Band, "ALR.H" = 20
Alarm 2 setup: Deviation, Hi/Low, "ALR.H = 10", "ALR.L = 5"
Color Display setup: "N.CLR"=Green, "1.CLR"=Amber, "2.CLR"=Red

Display colors change sequences:



SPECIFICATION

Accuracy:
0.03% rdg.

Resolution:
10 / 1 µV process

Linearization Points:
10 points

Temperature Stability:
50 ppm/°C process

Display:
4-digit, 7-segment LED,
101.6mm (4.00") with red, green and amber programmable colors.

Input Types:
Analog Voltage and Current

Voltage:
0 to 100 mV, 0 to 1 V (±100 mV), 0 to 10 Vdc

Input Impedance:
10 MΩ for 100 mV
1 MΩ for 1 or 10 Vdc

Current:
0 to 20 mA (5 Ω load)

Options: Communication
RS-232 / RS-485 or
Excitation 5Vdc @40mA, 10Vdc @60mA

Power Supply:
100-240 Vac ±10%, 50/60 Hz, 22.5 W

Operating Temperature: 0 to 40°C

Storage Temperature: -20 to 60°C

Relative Humidity: 0 to 85%

Protection:
NEMA-4x (IP65)

Dimensions:
480.0 L x 210.8 W x 95.4 D mm (18.11" x 8.31" x 3.76")

Panel Cutout:
414.3 L x 179.4 W mm
(16.31" L x 7.06" W)

Weight:
2,495 g (5.5 lbs)

Approvals:
per EN61010-1

MQS2551/1005

QUICK START

5 YEAR WARRANTY

iSeries

iLD44-SP Big Display Universal Strain & Process Monitor

omega.com info@omega.com

Servicing North America:

U.S.A. Headquarters: Omega Engineering, Inc.
Toll-Free: 1-800-826-6342 (USA & Canada only)
Customer Service: 1-800-622-2378 (USA & Canada only)
Engineering Service: 1-800-872-9436 (USA & Canada only)
Tel: (203) 359-1660 Fax: (203) 359-7700
e-mail: info@omega.com

For Other Locations Visit omega.com/worldwide

Note This Quick Start Reference provides information on setting up your instrument for basic operation. The latest complete Communication and Operational Manual as well as free Software and ActiveX Controls are available at ***www.omega.com*** **or on the CD-ROM enclosed with your shipment**.

SAFETY CONSIDERATION

This device is marked with the international Caution symbol.

The instrument is a panel mount device protected in accordance with EN61010-1:2001. Remember that the unit has no power-on switch. Building installation should include a switch or circuit-breaker that must be compliant to IEC 947-1 and 947-3.

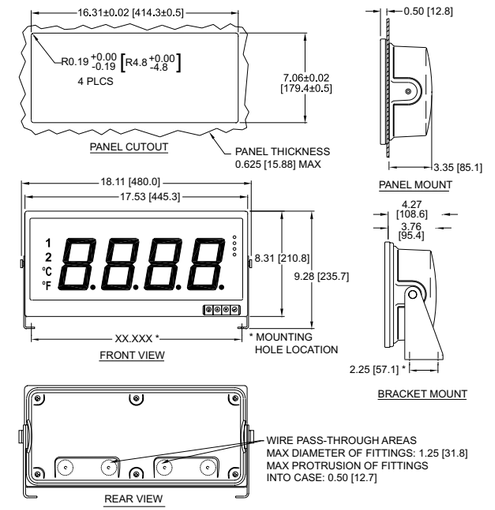
SAFETY:

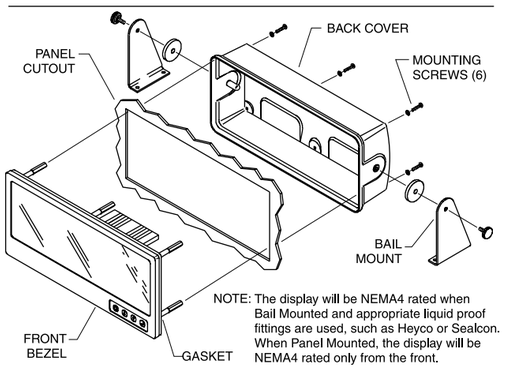
- Do not exceed voltage rating on the label located on the back of the instrument housing.
- Always disconnect power before changing signal and power connections.
- Do not use this instrument on a work bench without its case for safety reasons.
- Do not operate this instrument in flammable or explosive atmospheres.

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 Bead(s) on signal wire close to the instrument if EMC problems persist.

MOUNTING





Mounting Big Display Through Panel:

1. Using the panel cutout diagram shown above, cut an opening in the panel.
2. Remove six 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 seals between the bezel and the front of the panel.
4. Align back cover to Big Display and reinstall screws.

Mounting Big Display on Bail:

1. Mark the location of mounting screws on the flat surface.
2. Be sure to leave enough room around the bail to allow for removal and rotation of the display.
3. The display can be rotated for the best viewing angle.

Disassembly Instruction:

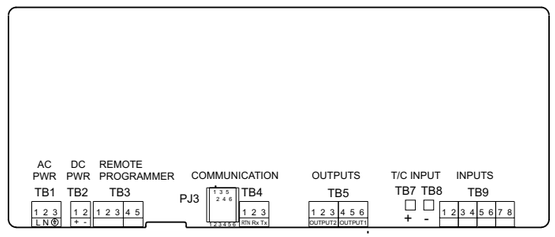
Warning: Disconnect all ac power from the unit before proceeding.

1. Remove all wiring connections from the rear of the instrument, by unscrewing the power and input connectors.
2. Remove six 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.

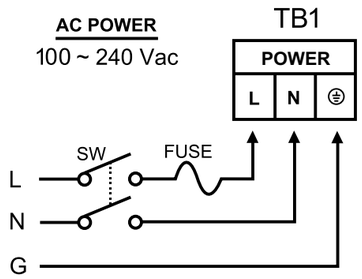
WIRING

Wire the instrument according to the Input Wiring Connections described in your Operator's Manual.

Warning: Do not connect ac power to your device until you have completed all input and output connections. This device must only be installed by a specially trained electrician with corresponding qualifications. Failure to follow all instructions and warnings may result in injury!



Connect the Main ac Power Connections as shown in the figure below.



CONFIGURATION

MENU Mode:
Flashing display in MENU Mode means you can make your selection by pressing ▲ button. If the flashing display is not a four digit value, pressing ▼ button will always direct the instrument one step backward of the top menu item. The second push on the ▼ button will reset the instrument except after the setpoint and the alarms, that will go to the RUN Mode without resetting the instrument. The ◉ button will always sequence the instrument thru the menu items.

The ◉ button has two functions:

1. To save a selected flashing display
2. To direct the instrument to the next submenu level

RUN Mode:

- ▲ causes the display to flash the PEAK with the corresponding value. Press again to go back to RUN Mode.
- ▼ causes the display to flash VALLEY with the corresponding value. Press again to go back to RUN Mode.
- ◉ causes flashing PEAK or VALLEY to reset corresponding values. Pressing ◉ twice will cause the display to flash `Stby` and put the instrument into standby, which disables all outputs and alarms. Press ◉ one more time to go back to RUN Mode.

Button Functions in Configuration Mode

◉ **MENU**	• 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 ◉. • While a parameter is being modified, press ◉ to escape without saving the parameter.
▲ **PK/GRS (UP)**	• Press the up ▲ button to scroll through "flashing" selections. When a numerical value is displayed press this key to increase value of a parameter that is currently being modified. • Holding the ▲ button down for approximately 3 seconds will speed up the rate at which the setpoint value is incremented. • In the Run Mode pressing ▲ causes the display to flash the PEAK or GROSS value – press again to return to the Run Mode.
▼ **TARE (DOWN)**	• Press the down ▼ button to go back to a previous Top Level Menu item. • Press this button twice to reset the controller to the Run Mode. • When a numerical value is flashing (except setpoint value) press ▼ to scroll digits from left to right allowing the user to select the desired digit to modify. • When a setpoint value is displayed press ▼ to decrease value of a setpoint that is currently being modified. Holding the ▼ button down for approximately 3 seconds will speed up the rate at which the setpoint value is decremented. • In the Run Mode pressing ▼ causes the display to flash TARE value to tare your reading (zeroing).
◉ **ENTER**	• Press the enter ◉ button to access the submenus from a Top Level Menu item. • Press ◉ to store a submenu selection or after entering a value — the display will flash a `StRd` message to confirm your selection. • To reset flashing PEAK or GROSS press ◉. • In the Run Mode, press ◉ twice to enable Standby Mode with flashing `Stby`.

Note Reset: Except for Alarms, modifying any settings of the menu configuration will reset the meter prior to resuming Run Mode.

DISPLAY ABBREVIATIONS

SP1	Set Point 1 Value	**SP2**	Set Point 2 Value
CNFG	Configuration Menu	**INPt**	Input Type (Range)
INPt	Input Type (range)	**0 - 0.1**	100 mV Input Voltage
0 - 1.0	1 V Input Voltage	**0 - 10**	10 V Input Voltage
0 - 20	20 mA Input Current		
Rtio	Ratiometric Operation	**RESO**	Display Resolution
bUtN	Button Peak/Gross	**PEAk**	Peak Value
GROS	Gross Value		
RdG	Reading Configuration		
dEC	Decimal Point	**F.FFF ..FFFF**	Decimal Point Position
LOAd	Input Load	**EnbL**	Scaling with Known Loads (Actual Value)
DSbL	Scaling without Known Loads (Calculated Value)	**L.PNt**	Linearization Points
0002.. ..0010	Number of Linearization Points	**FLtR**	Filter Constant
0001.. ..0128	Filter Constant Value	**IN.Rd**	Input/Reading Scale and Offset Menu
IN 1	Input 1	**Rd 1**	Reading 1
IN 2	Input 2	**Rd 2**	Reading 2
. . . .	. . . . .	**. . . .**	. . . . .
IN 10	Input 10	**Rd 10**	Reading 10
ALR1	Alarm 1 Menu	**AbSo**	Absolute Mode
_dEV	Deviation Mode	**LtcH**	Latched Mode
UNLt	Unlatched Mode	**Ct.CL**	Contact Closure
N.o.	Normally Open	**N.c.**	Normally Closed
ActV	Active Type	**AboV**	Active Above
bELo	Active Below	**Hi.Lo**	Above High/Below Low
bANd	Above or Below Band	**A.P.oN**	AlarmEnable/Disable at Power On
ALR.L	Alarm Low Value	**ALR.H**	Alarm High Value
ALR.2	Alarm 2 Menu		
SP.dN	Set Point Deviation		
Id	ID Code Menu	**CH.Id**	Change ID Code
FULL	Full ID	**SP.Id**	Set Point ID
COMM	Communication Option*	**NONE**	Communication is Not Installed
C.PAR	Communication Parameters	**bAUd**	Baud Rate
PRtY	Parity	**odd_**	Odd
EVEN	Even	**_No_**	No
dAtA	Data Bit	**7.bit**	7 Data Bit
8.bit	8 Data Bit	**StOP**	Stop Bit
1.bit	1 Data Bit	**2.bit**	2 Stop Bit
bus.F	Bus Format	**M.bus**	Modbus Protocol
_LF_	Line Feed	**ECHO**	Echo
StNd	Communication Standard	**232C**	RS-232
485_	RS-485	**ModE**	Data Flow Mode
CMd_	Command Mode	**CoNt**	Continuous Mode
SEPR	Data Separation Character	**SPCE**	Space
_cR_	Carriage Return	**dAt.F**	Data Format
stAt	Alarm Status	**RdNG**	Transmit Reading Value
PEAk	Transmit Peak Value	**GROS**	Transmit Gross Value
UNit	Units of Measurement	**AddR**	Multipoint Address
tR.tM	Transmit Color Selection		
COLR	Display Color Selection	**N.CLR**	Normal Color Display
1.CLR	Alarm 1 Color Display	**2.CLR**	Alarm2 Color Display
REd	Display Color is Red	**AMbR**	Display Color is Amber
GRN	Display Color is Green		
dSbL	Disable	**ENbL**	Enable
ERRO	Error	**+ OL**	Input (+) Overload

*** For abbreviations of Communication Option see Communication Manual.**