

Review of the new Load Cell Digital Indicator

TD-700T





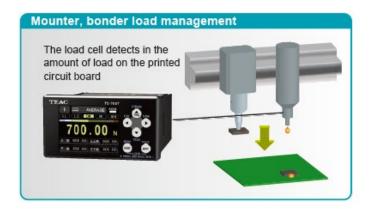


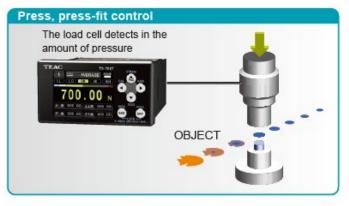


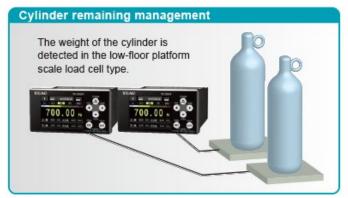




Applications













Introducing the TD-700T

The TD-700T is a digital indicator developed to measure and display load, pressure, and torque inputs from strain gauge-based transducers.







Key Features









Display Options

The TD-700T allows the user to configure the display in 4 different ways.

There are One of Four Display Modes that can be Selected for the "Home Screen":

- Standard
- Bar meter
- Indicated value and
- Graph Display.







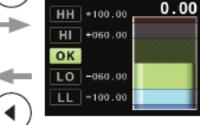


Selecting the Home Screen

By Pressing the Horizontal Arrows on the Front Keypad of the TD-700T, The Display Mode* Changes to:











Indicator Value Only Display







Standard Display

- Numeric Indication
- Small Horizontal Bar Meter Indication
- Alarm Points HH, H, L, LL

Bar Meter Display

Bar meter display

- Numeric Indication
- Large Vertical Bar Meter Indication
- Alarm Points HH, H, L, LL

Numeric Display

- Numeric Indication
- Alarm Points HH, H, L, LL

Waveform Display

- -Numeric Indication at Top
- Chart Recorder Display
- Color Changes at programmed High and Low levels
- Selectable Time Base at Bottom (10,30 or 100Sec.)



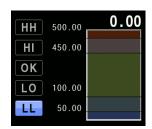
^{*}Note: Default Home Screen is Standard Display. Other Display Modes can be selected From Home Screen Settings. See TD-700T Manual For Instructions.



Visual Information

Each Mode displays immediate level information that is programmed by the user.

The Graph, or Strip Chart, display function shows a signal waveform. The engineering value is shown in the vertical axis and the horizontal axis displays time between the left and right edges of the display screen. The upper and lower set points are shown at the upper right and lower right of the TD-700T's display (0900.0 and 0100.0 respectively). The black band is indicating an acceptable area of operation. Once the signal proceeds outside of this band the signal trace turns from green to red and displays an alarm condition.











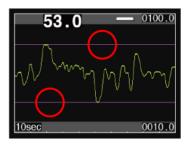


Waveform Display

When the upper or lower limit are exceeded (Left Figure), the respective values display red, allowing the user to clearly see a change from normal operation to an alarm indication at a glance. The Right Figure shows purple lines indicating the Peak and Bottom Hold is active.

This Mode also allows the user to see real-time data within a specific time frame (10sec in this example). The selectable time periods are 10, 30 and 100 seconds.





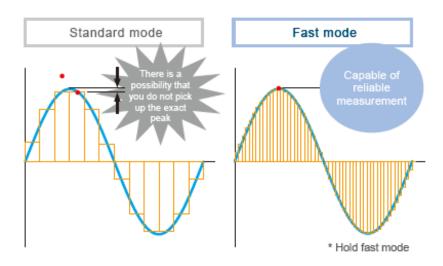


Fast Sampling

To be certain signal level is correctly displayed the TD-700T has a default sampling speed of 4000 times/sec.

If a faster sampling speed is required, 20,000 samples/sec can be selected in the following modes:

- PEAK Hold
- BOTTOM Hold
- PEAK-to-PEAK Hold
- PEAK and BOTTOM Hold

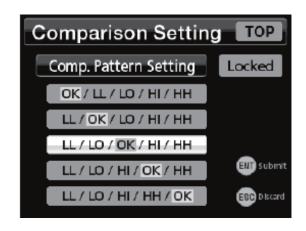




Comparision Setting-Set Points



This TD-700T functions allows the setting of each limit value and compare it to the indicator value.



This functions gives the user versatility to change the limits as needed for respective application.



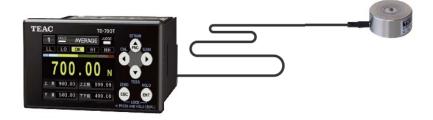


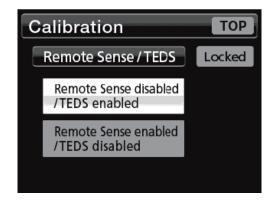
Remote Sense Function

Remote Sense Function*

For those applications with possible voltage changes due to temperature fluctuations or extended cable lengths, using all 6 connector inputs is recommended. The Remote Sense Function enables measurement without lowering the accuracy.

*The Remote Sense Function will disable the TEDS function. Likewise, if TEDS is enabled the Remote Sense Function is disabled.





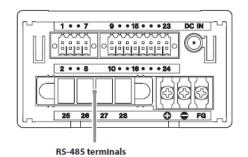




Outputs

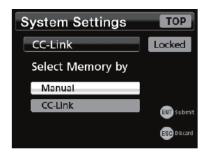
Analog Outputs

- 0-10VDC in 1 Volt Steps
- 4/20mADC (Isolated Output)



Communication Outputs

- CC Link
- RS485





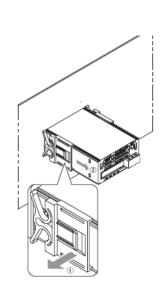
RS-485 is used for many Process Control and SCADA applications. **CC-Link** is an industrial network that enables devices from numerous manufacturers to communicate. Some applications are in manufacturing and production industries, but can also be used in facilities management, process control and building automation.

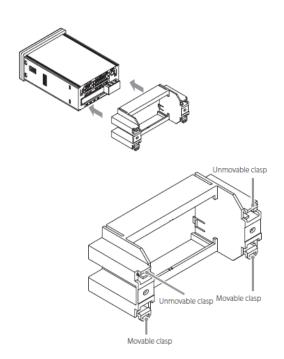


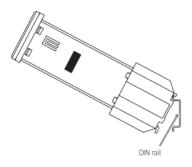


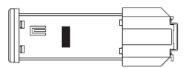
Panel Mounting

Installing the TD-700T is Extremely Easy With Front Panel or DIN Rail Mounting













Supports IEEE 1451.4 TEDS Eliminating Setup Errors

The TD-700T is TEDS Compatible and shows the following sensor information:

- Serial Number
- Rated Capacity Unit
- Rated Capacity
- Bridge Element Impedance
- Max Excitation Level
- Calibration Date

