JDD Series

High Resolution Digital Displays

The JDD Series of high resolution digital display can be paired with a wide variety of remote sensors and boast extremely high precision and a simple user interface.

Its simple five button user interface makes the JDD Series intuitive and streamlined. Directly from the keypad, the operator can select: units of measure; peak, valley, or track modes; zero / tare the display; initialize a data export command; and cycle power. The default values for these settings can be selected in the system configuration.

A JDD-based measurement system delivers a higher degree of precision than ordinary displays by using more advanced mathematics to establish its calibration curve. Typically, sensor nonlinearity is the most significant contributor of error in a mechanical measurement system. The proprietary JDD firmware mathematically analyzes a series of calibration points to formulate a higher-order response curve that considers and corrects for the nonlinear nature of its sensor. This reduces errors from nonlinearity by as much as an entire order of magnitude leaving the (significantly smaller) non-repeatability, hysteresis, and temperature sensitivity errors of a sensor as the primary contributors to system inaccuracy.

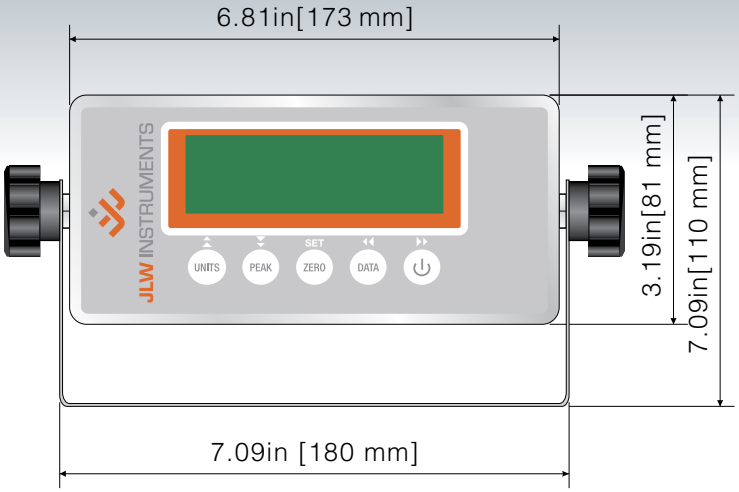
The JDD advanced calibration curve technology also accommodates bidirectional loading modes: tension and compression for force; CW and CCW for torque; gauge and vacuum for pressure. Many digital displays only consider one loading mode when characterizing the response of a sensor and then simply invert that equation when loaded in the opposite direction. This remedial method ignores the asymmetry of the sensor, introducing additional error when taking measurements in the secondary loading mode.

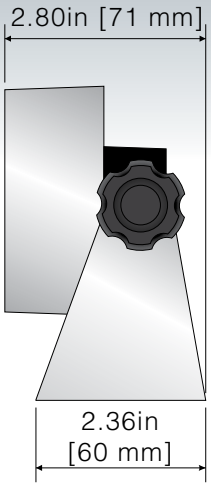
JLW INSTRUMENTS

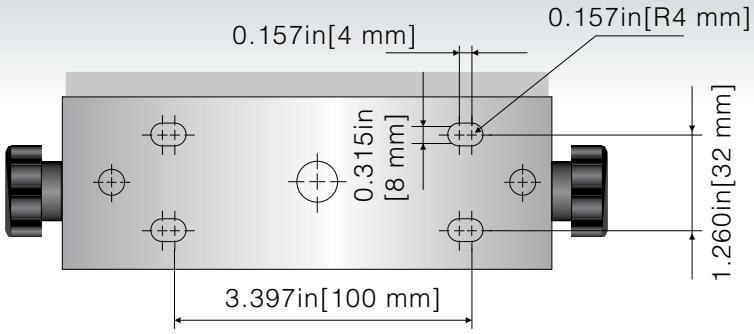
14 North Peoria St, Suite B-101 | Chicago, IL 60607-2755
Phone 312.666.0595 | Fax 312.733.0009

JDD Series: High Resolution Digital Displays

Model Number	Max Resolution	Sampling Rate
JDD-SC20K	Full Scale / 20,000	10 or 80 Hz
JDD-SC50K	Full Scale / 50,000	1 or 1200 Hz

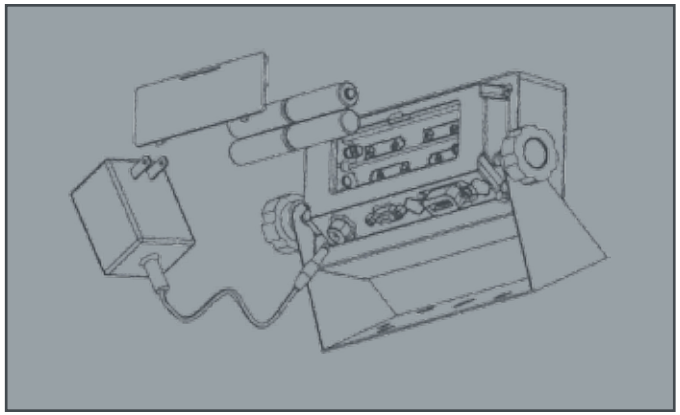






GENERAL SPECIFICATIONS:

Accuracy	±0.005% of Full Scale
Display Mode(s)	Real Time (track), Peak Tension, Peak Compression
Standard Outputs	RS232
Standard Accessories	AC power supply and 20ft [6m] sensor connection cable with input terminal



COMMUNICATION OPTIONS:

JDD-ANALOG	Analog Output: Active is 0 to 5 DCV; Passive is 4 to 20 mA
JDD-BT	Bluetooth wireless connection between sensor and display
JDD-RELAY	6 DCV relay triggered by an adjustable force limit

JLW INSTRUMENTS

14 North Peoria St, Suite B-101 | Chicago, IL 60607-2755
Phone 312.666.0595 | Fax 312.733.0009