

Service and Calibration Kit



FEATURES

- Start-up calibrate and troubleshoot process weighing Systems
- Simultaneous individual load cell measurement
- Pre-calibrated for mV/V, percent of load, and force units
- Includes instrument calibrator
- Remote connection cable assemblies
- Rugged portable suitcase design with shock mounting
- Troubleshooting procedures manual

DESCRIPTION

Start-up, commissioning, routine servicing, and calibration of process weighing systems can be simplified significantly using the FSK-40 Service and Calibration Kit. This complete kit is equipped with a four-channel load cell instrument, an instrument calibrator, a serial communication module, operation and servicing manuals, and a set of 10-foot remote connection cables. The entire assembly is housed in a rugged, portable suitcase with shock mounting.

The core of the kit is the four-channel instrument that makes it possible to measure the output of each of up to four load cells simultaneously and independently. This powerful tool greatly reduces the time needed to identify mechanical restrictions, mechanically

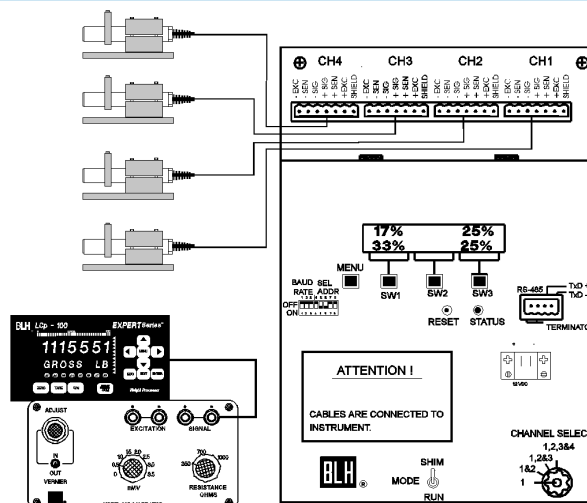
balance the system, and isolate load cells for troubleshooting. The instrument is factory pre-calibrated to provide individual readout in mV/V, and percent of load or conventional units of force. In addition, the instrument is equipped with a serial port and adapter for logging of data on a PC or serial printer.

For troubleshooting and calibration of associated instrumentation, a precision calibrator is included. To facilitate easy remote connection to individual load cell cables inside a summing box, special 10-foot wiring harnesses with spring loaded connectors are included. Finally, a comprehensive manual describing the techniques professions use to properly configure, calibrate and troubleshoot weigh systems is also included.

APPLICATIONS

- Field service
- Calibration
- Test & measurement

CONFIGURATION



SPECIFICATIONS

Performance

Internal Resolution	4,194,304 total counts
Max. Display Resolution	3,000,000 total counts
Max. Resolution/Channel	750,000 counts
Conversion Speed	50msec (20 updates/sec)
Sensitivity (Noise)	0.0011% full scale (max +/-16 counts w/o filter)
Full Scale Range	35mV/channel
Dead Load Range	100%
Input Impedance	10 M-ohms, min. per channel
Load Cell Excitation	10V 2 x 350 ohm load cells, 65mA/channel max
Remote Sense	user configurable - each channel
Linearity	±0.0015% of full scale
Calibration Repeatability	0.3 microvolt per count
Software Filter (Std.)	50 to 6400msec
Dynamic Digital Filter	multi-variable to 64 seconds (opt.)

Temperature Coefficient

Span/Zero	±2ppm/°C
Step Response	one conversion
Common Mode Rej.	100db @ 60Hz
Normal Mode Rej.	100db above 35Hz

Environment

Operating Temperature	-10 to 55°C (12 to 131°F)
Storage Temperature	-20 to 85°C (-4 to 185°F)
Humidity	5 to 90% rh, non-condensing
Voltage	117/230 ± 15% 50/60Hz
Power	12 watts max
Parameter Storage	EEPROM
EMI/RFI	Shielded from typical industrial interference

Enclosure

Dimensions see outline dimensions below

Internal Display/Operator Interface

High-Contrast	2 columns of 20
Vacuum Fluorescent	characters each
Interface	4 'soft buttons'

BLH Digi-System Network

Type	RS 485 Half Duplex (Multi-Drop)
Baud	9.6K, 28.8K, and 56.7k
Data Format	proprietary

Standard Simplex Data Output (Transmit Only)

Type	RS 485 (Simplex)
Baud	1200 or 9600
Data Format (Selectable)	ASCII 7 data bits even parity stop bit

Terminal/Computer Interface

Interface Type	RS 485 Half Duplex (Standard)
Baud	1200 or 9600
Protocol	Duplex Command/Response
Format	ASCII 7 data bits even parity stop bit

Weight

Complete Case approx. 19 lb

Calibration

Indicator	1 Year	Calibrator	1 Year
Recalibration Interval	1 Year		1 Year
Stability	0.005% FS/year		<<0.02% range/year

DIMENSIONS

