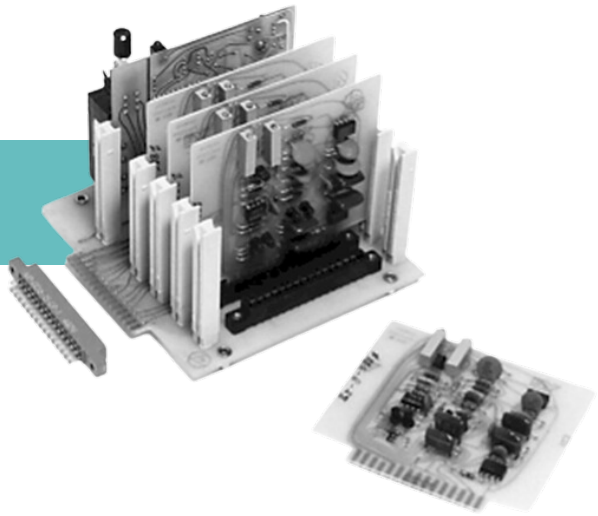
CD72 CARRIER DEMODULATOR



FEATURES:

- ✓ 10 Vdc Output
- ✓ Carrier Excitation for Variable Reluctance and Variable Differential Transformer Transducers
- ✓ 2 or 4 Channel Operation
- ✓ Regulated Against Power Variations

The CD72 Carrier Demodulator is a compact, multichannel system for OEM applications, offering 5-volt, 5 kHz carrier excitation for Variable Reluctance and Variable Differential Transformer transducers. It demodulates and amplifies transducer outputs to provide a ±10 VDC signal for static and dynamic measurements.

Available in two- or four-channel configurations, the CD72 includes an interconnecting “motherboard” and three or five plug-in circuit boards. One circuit card contains the oscillator power supply, which supplies the carrier excitation to the transducers and ±15 Vdc to power the carrier demodulators. The remaining circuit cards are the carrier demodulator boards.

The Carrier Demodulator Card amplifies and demodulates the transducer output signal to ±10 Vdc which is proportional to the stimulus applied to the transducer. Each card has a screwdriver adjustment for zero and span control.

Low input impedance allows for operation with transducers at over a thousand (1000) feet from the carrier demodulator with no degradation of signal.

An active filter on the output provides the CD72 with a flat frequency response from steady state to 1000 Hz.

Both input and output are protected against short circuit.

CD72 CARRIER DEMODULATOR

SPECIFICATIONS

GENERAL SPECIFICATIONS

INPUT SENSITIVITY:
Min. 12 mV/V for ±10 Vdc output continuously adjustable by span control

MAXIMUM INPUT:
2.5 Vrms, 5 kHz

BRIDGE EXCITATION:
5 Vrms, 5 kHz

BRIDGE CONFIGURATION:
2 arm variable reluctance transducers – LVDT

ZERO CONTROL:
±10 mV/V

OUTPUT:
0 to ±10 Vdc; 10 mA into 1 kΩ load, protected against short circuit

OUTPUT RIPPLE:
Less than 10 mV peak to peak, max

OUTPUT IMPEDANCE:
10 Ω maximum

FREQUENCY RESPONSE:
Flat to 1000 Hz

LINEARITY:
±0.05%

STABILITY:
±0.1% long term

TEMPERATURE RANGE:
0 to 185°F

THERMAL EFFECTS:
Zero: 0.5% / 100°F
Span: 1% / 100°F

OSCILLATOR POWER SUPPLY:
5 Vrms, ±1%, 5 kHz

D.C. POWER:
±15 Vdc to operate either the 2 or 4 channel system

A.C. POWER REQUIRED:
95 to 125 Vac, 50 to 400 Hz, 3 VA (205 to 250 Vac by internal connection change)

Ordering Information

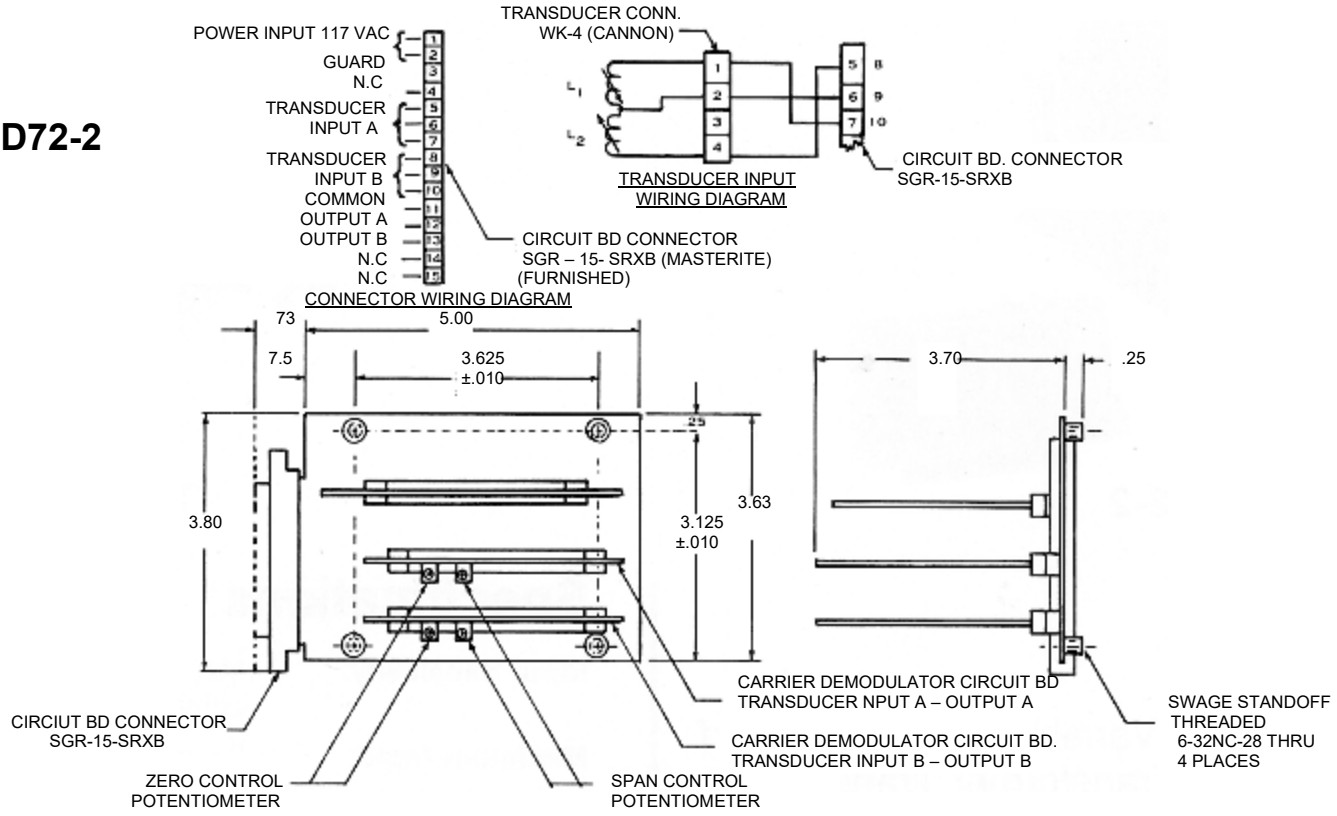
CD72-2	For two channel system consisting of: 1 Mother Board 1 Oscillator Power Supply Board 2 Carrier Demodulator Boards
CD72-4	For four channel system consisting of: 1 Mother Board 1 Oscillator Power Supply Board 4 Carrier Demodulator Boards

Spare Parts Information

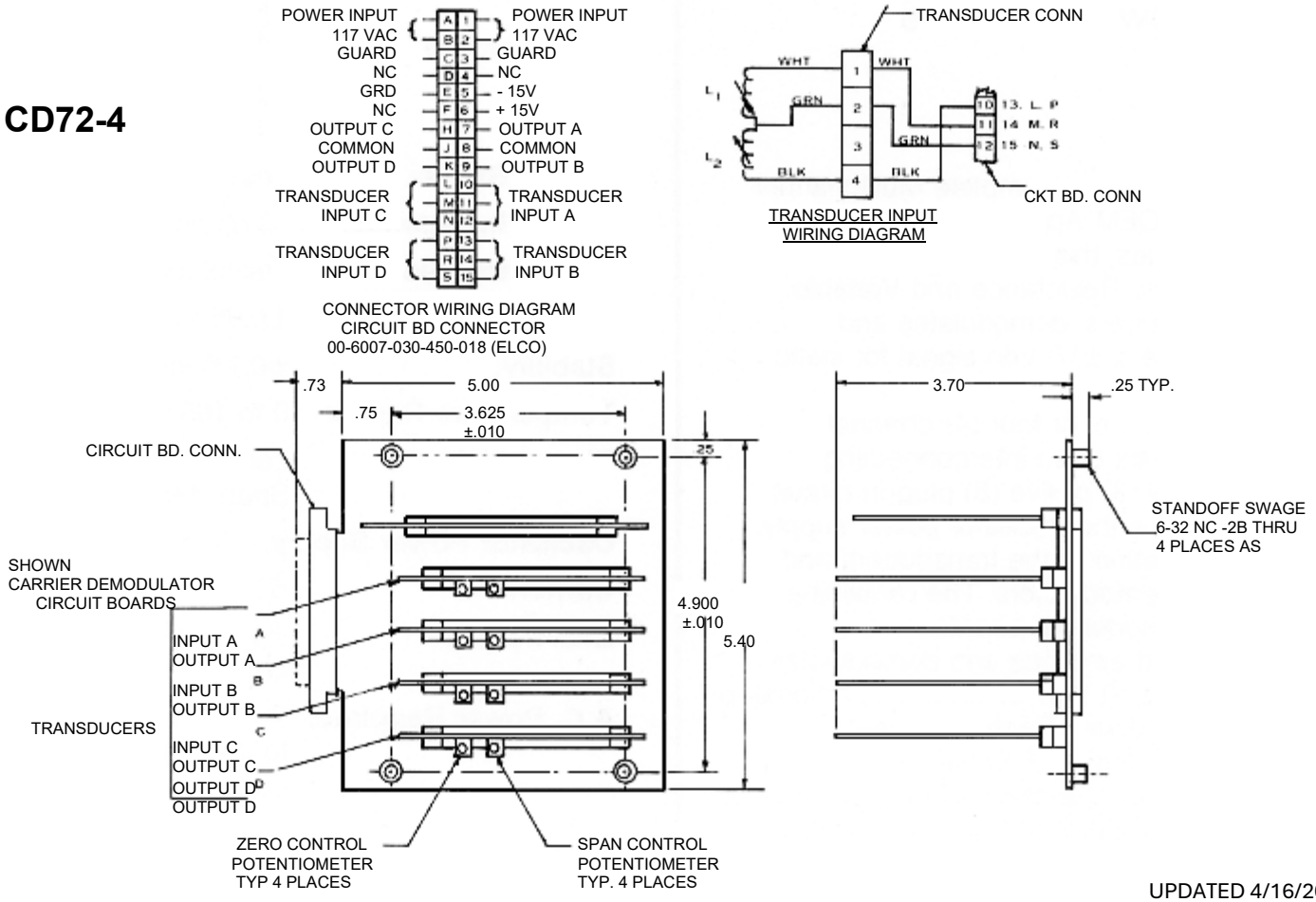
Mother Board:	CD72-2 – P/N 7347 CD72-4 – P/N 7775
Carrier Demodulator Boards: P/N 7344-1 Oscillator Power Supply: P/N 9617	

CD72-2 AND 4 SCHEMATIC TYPICAL CONNECTION

CD72-2



CD72-4



UPDATED 4/16/2025