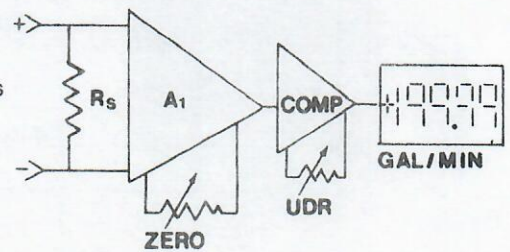




## FEATURES

- Detects Under and Over Signal
- Zero and Span Controls
- Mux or Parallel "3T" BCD
- Run, Hold, Strobe, Busy and Blank Signals
- Flashing Display for Overrange
- 0-2Vdc @ 1mA Conditioned Output
- 10V P/P Common Mode Voltage
- 150 Hour Burn-in Plus 3-100% Tests
- MTBF of 50,000 Hours (calculated)
- Field Failure Rate Below 0.3%

## BLOCK DIAGRAM



## DESCRIPTION

Whether your transducer gives you voltage or current output this unique instrument not only converts the signal to any engineering units such as KG/SQ CM, RPM, MT/SEC, LT/MIN, and many others (including English system) but tells you when something is wrong with the process or transducer. If the transducer fails or there is an open connection or leakage in the system, the display will flash (-) due to the saturation of its internal voltage comparator that has been factory calibrated to 10% of minimum input signal (i.e. 3.6mA for a 4-20mA input). When the signal exceeds 100% of the selected full scale (i.e. 36mA for a 4-20mA input), the display will flash (+) indicating an unusual condition in the system. Of course, since these limits are adjustable, other limits may be either factory or field set.

Scaled and linearized output of the input signal is available at rear connector.

## SPECIFICATIONS @ 25°C

Zero .....	Automatic (see Offset)
Sample Rate .....	3/Sec. Std., Others on Request
Noise Rejection .....	60dB @ 50/60Hz Typical
CMRR .....	90dB Typical

## Accuracy and Linearity

Of Full Scale .....	$\pm 0.01\%$ $\pm 1$ Digit
Total Error .....	$\pm 0.02\%$ $\pm 1$ Digit
Warmup .....	1 Minute

## Outputs

Display .....	LED, Bright Red. 5" (13mm) High
Decimal Point .....	Externally Selectable
Overload .....	Display Flashes
BCD Data & Control .....	One TTL Load (Inputs & Outputs)
Power .....	$\pm 12$ Vdc @ 5mA

## Temperature

Operating .....	0°C to +60°C
Storage .....	-20°C to +80°C
CMV .....	1200V (AC Power)
Power .....	5Vdc $\pm 5\%$ @ 300mA
Analog Output .....	0.1mV per LSD @ 1mA
Offset Control .....	$\pm 5000$ Counts (Internal)
Span (F.S.) Control .....	$\pm 2000$ Counts (Front Panel)
Temperature Coefficient .....	$\pm 50$ PPM/°C
Normal Mode Rejection .....	100dB
Common Mode Rejection .....	90dB @ 50/60 Hz
Common Mode Voltage .....	$\pm 10$ Vdc or P/P (An. to Dig. Gnd.)

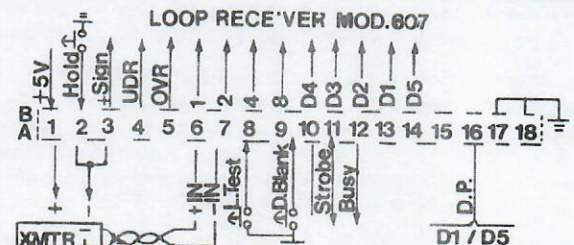
## OPTIONS

See Model 600 Main Frame on Page 10 for "3T BCD" and power supply options and connections.

## TERMINAL DESCRIPTION

**Bottom Row:** 6A Signal Hi; 7A Signal Low; 1A DC Conditioned Signal Out/In (+ Signal Input) also used to drive external instruments such as recorders (1mA Max.). 4A External Reference (optional) for Ratiometric, 0.1 to 2V Range; 8A Lamp Test 9A Display Blank, connect to 18B to enable; 11A Strobe, five negative pulses at EOC, one for each D.S. 5 $\mu$ S Wide; 12A Busy, High during Conversion, Low during Auto Zero 10mS Wide; 16A D.P. connect to appropriate D.S. to light desired D.P.

**Top Row:** 1B + 5Vdc Input; 2B Reading Hold, Open for normal operation, connect to 18B to hold, a positive pulse over 30nS will command the 607 to make one single conversion; 3B Sign, Low for Negative Reading, High for Positive Reading; 4B Underrange, normally low goes high when reading is less than 9% of F.S. (1800 counts); 5B Overrange, normally low, goes high when reading exceeds 19999 counts (F.S.); 6-9 B 1, 2, 4, 8 BCD Output Positive Logic 1 LPTTL Load max. (400mA Sink); 10-14B Digit selects, DS, is LSD, DS5 is MSD 1LPTTL Load max. (400 $\mu$ A Sink); 17 and 18B Digital Ground.



## ORDERING INFORMATION

MODEL 607 X X X

fRange	Input	Zin	Options
0 ...	0-20mAdc	50 ohms	0 ... 5Vdc Power Req'd
1 ...	1-5mAdc	200 ohms	1 ... 115/230AC Power
2 ...	4-20mAdc	50 ohms	2 ... "3T" BCD & 5V dc
3 ...	10-50mAdc	20 ohms	3 ... "3T" BCD & Open Frame
*4 ...	0-5Vdc	100K ohms	4 ... "3T" BCD & Power Pack,
5 ...	1-5Vdc	100K ohms	
6 ...	0-10Vdc	100K ohms	
*7 ...	-10V to +10Vdc	100K ohms	0 ... Standard

Connector(s) Included

\*Note: These ranges do not offer "Below Range" flashing display.

fNote: Standard Display is 0000 to 10000 counts for specified input, specify your calibration if other than standard.