

INSTALLATION

The JH4380W plugs into any standard 8-pin octal relay socket and is pin-compatible with most other 4380 and 4300 products. Refer to the Block Diagram (back page) for pin connections.

QUICK-CHECK LEDS

Red-green Quick-Check LEDs give a quick indication of the relative output. Red is brighter at the low end, green at high, while at mid-scale both are approximately equal. Red-only indicates offscale low while green-only indicates offscale high.

INPUT RANGE SWITCH SETTINGS

Common Input Ranges:

Input Range:	Turn On:	Input Range:	Turn On:
0/100mV	SW3	-10/+10V	SW7, 8
0/1V	(none)	0/100V	SW5, 7
-1/+1V	SW4, 6, 8	0/1mA	SW1, 9, 10
0/2V	SW4, 6	-1/+1mA	SW1, 8, 9, 10
0/5V	SW5, 6	1/5mA	SW2, 9, 10
1/5V	SW5, 6	0/10mA	SW3, 9, 10
-5/+5V	SW6, 8	4/20mA	SW4, 9, 10
0/10V	SW6	10/50mA	SW5, 9, 10

Other Input Ranges (General Instructions):

For Voltage Spans*:	Turn On Switches:	For Current Spans*:	Turn On Switches:
10 to 22mV	SW1	1 to 2.2mA	SW1, 9, 10
22 to 50mV	SW2	2.2 to 5mA	SW2, 9, 10
50 to 100mV	SW3	5 to 10mA	SW3, 9, 10
100 to 220mV	SW4	10 to 22mA	SW4, 9, 10
220 to 500mV	SW5	22 to 50mA	SW5, 9, 10
500mV to 1V	(none)	50 to 100mA	SW9, 10
1 to 2.2V	SW4, 6	Caution: Do not attempt input ranges above 100mA. Damage to the input circuitry may result.	
2.2 to 5V	SW5, 6		
5 to 10V	SW6		
10 to 22V	SW3, 7		
22 to 50V	SW4, 7		
50 to 100V	SW5, 7		
100 to 220V	SW7		

* Span = Full Scale minus Low End. Example: 4/20mA has a 16mA span.

For elevated inputs. The zero control's adjustment is wide enough to cover input offsets up to +25% of span. For example, if your input range is 4/20mA (16mA span), turn on SW4, 9 and 10. Set ZERO with 4mA input and SPAN with 20mA input.

Center Zero (50% suppressed) inputs. Turn on SW8 plus the appropriate span switches. For example, for -2 to +2V input range (4V span) turn on SW5, 6 and 8.

Set ZERO with -2V input and SPAN WITH +2V input.

OUTPUT RANGE SWITCH SETTINGS

Output Range	Turn On DIP Switches	V/I Switch Setting
0/1mA	(none)	I (current)
0.2/1mA	C	I (current)
0/20mA	D	I (current)
4/20mA	C, D	I (current)
0/5V	A	V (voltage)
1/5V	A, C	V (voltage)
0/10V	B	V (voltage)
2/10V	B, C	V (voltage)

No other output ranges are available.

CALIBRATION PROCEDURE

Set the input and output range switches per the insert page. Connect a precision DC voltage or current calibration source to the input and a precision DC voltage or current meter to the output. The source and meter each must be more precise than the required calibration accuracy.

Set the input to the low end of the range. Adjust the *ZERO* trimpot for the required low-end output.

Raise the input to full scale. Adjust the *SPAN* trimpot for the required full scale output.

Repeat as necessary until both readings are correct.

MODEL NUMBERS

AC Power, Model JH4380W-AC. DC Power, Model JH4380W-DC

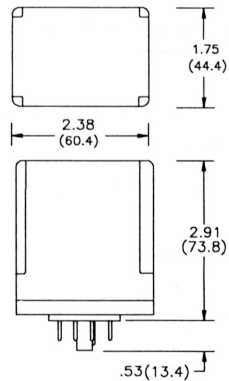
SPECIFICATIONS

Input Range	voltage: any voltage range from 0/10mV to 0/220Vdc.	
Capabilities:	current: any current range from 0/1mA to 0/100mAdc. Range also may be elevated 25% (e.g., 1/5V or 4/20mA) or suppressed 50% (center-zero; e.g., -10/+10V or -1/+1mA).	
Output Range	Standard output ranges are:	
Capabilities:	0/5V	0/1mA
	1/5V	0.2/1mA
	0/10V	0/20mA
	2/10V	4/20mA
	Negative outputs are not available.	
Accuracy:	If properly calibrated, +0.1% of span or +10 microvolts, whichever is greater.	
Linearity:	+0.05% of span or better.	
Response Time:	under 100 milliseconds.	

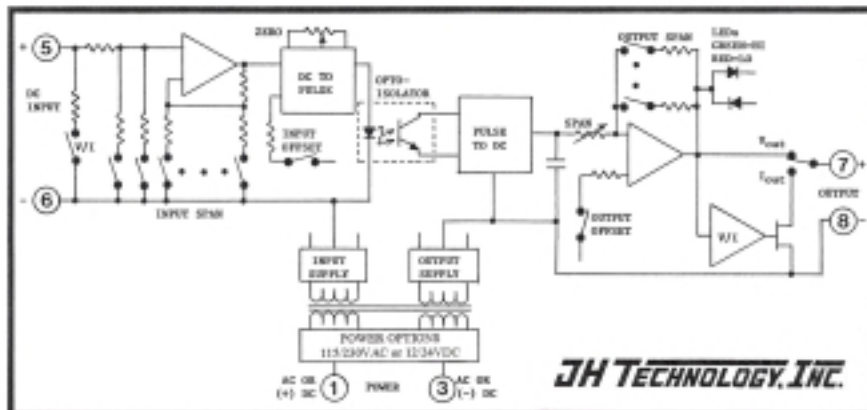
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Specifications (continued)

Output Ripple: 0.05% of span or better.
 Isolation: Input to Output: 1,000Vrms (1,400V peak).
 Power to Input/Output: 1,500Vrms (2,100V peak).
 Operating Temperature: -10 to +60 deg. C.
 Temperature: (14 to 140 deg. F.)
 Stability: 0.02%/deg. C (0/011%/deg. F) or better.
 Power Options: AC: 115 or 230Vac, 50/60Hz, 2.5V-Amax.
 DC: 12 or 24Vdc, 2.5W max.



BLOCK DIAGRAM



WIDE-RANGE ISOLATED DC TRANSMITTER

The Model JH4380W User-Rangeable DC Input Transmitter provides an output proportional to a DC voltage or current input. Input spans run from 10mV to 220V and from 1 to 100mAdc, while the output selections include most common voltage and current ranges. 3-way isolation (input/output/power) guards against ground loops and against shock hazards when using high-voltage inputs.

Linearity is better than 0.05%. A low-drift input amplifier provides superior performance with millivolt-level inputs. Filtering is included to minimize noise and stray pickup. Red-green 'quick-check' LEDs provide a quick indication of the output level.

AC and DC powered models are available

SEVEN-YEAR WARRANTY

The JH4380W will be replaced free if it fails due to defects in material or workmanship within seven years of the date shipped.

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