

# SPECTEC

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4057D  
 PULSE MULTIPLIER  
 FOR DECIMAL VALUES  
 PA-50

## PRODUCT DESCRIPTION

The 4057D is a user programmable pulse multiplier capable of multiplying by a decimal value up to three decimal places (e.g. X.xxx). The multiplier value is quickly selected via a backlit LCD screen and push-button dial.

Models are available for inputs from magnetic VRS, RF, digital amplified pickups, proximity sensors/switches, and other square wave sources. Removable terminal blocks can be factory configured for back panel or control panel mounting.

## SPECIFICATIONS

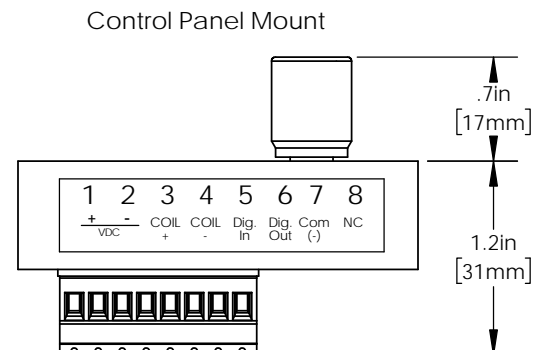
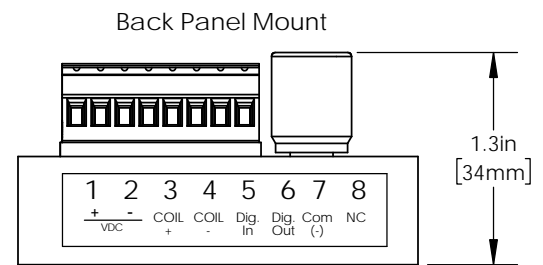
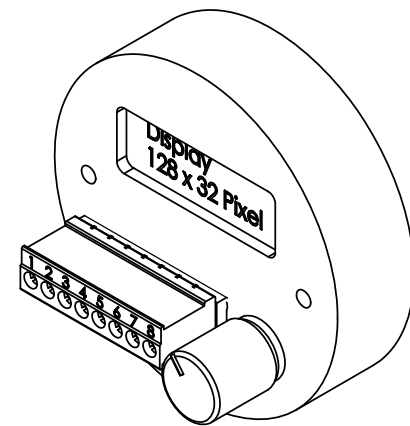
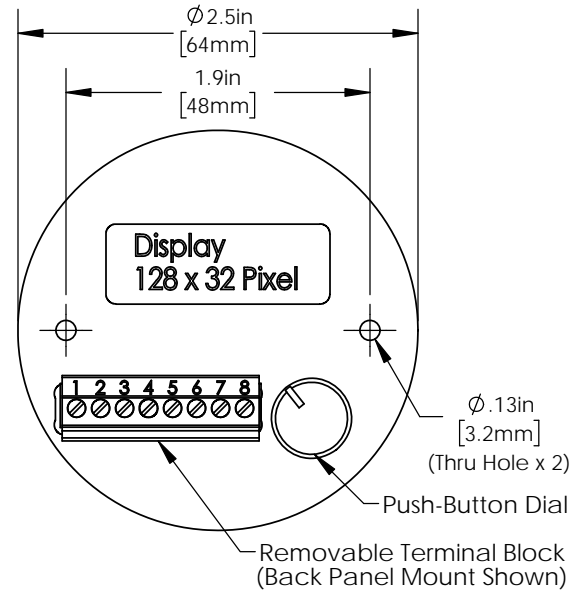
<b>Vs, Supply Voltage:</b>	12-30 VDC (Standard Models)
<b>Is, Supply Current:</b>	75 - 120 mA
<b>Input Type/Sensitivity:</b>	VRS (Mag): 5, 12, 30, 50 or 100mVpp RF: 4 or 10 Ohms Digital: CMOS, TTL, 0-30V, PNP
<b>Frequency Input Range:</b>	VRS (Mag): 3 Hz to ~35 KHz* RF: 0.5 Hz to ~7 KHz Digital: 0.3 Hz to ~80 KHz (*Depending on signal strength)
<b>Max. Frequency Output:</b>	80 KHz
<b>Digital Output Options:</b>	NPN: 0-5V (TTL), 0-10V, 0-12V, 0-Vs, or 0-Vs OC PNP: 0-Vs Zero Crossing: +8.5V to -8.5V
<b>Multiplier Range*:</b>	0.001 to 100 (0.001 increments) (only up to 80 kHz max frequency)

### \*NOTE:

Not suitable for timing or synchronization applications with current Revision D Firmware. This is due to repeatability limitations with pulse width fluctuations from regular VRS/Mag, Hall Effect, and Digital sensors. Revision E Firmware is in development. Please contact factory.

**Operating Temp. Range:** -20° to 75°C (-4° to 167°F) with Vs=12V  
 -20° to 55°C (-4° to 131°F) with Vs=30V

**Terminal Connections:** See Page 2



## ORDER INFORMATION

STYLE:

4057D -

OPTIONS:



## Programmable Decimal Signal Multiplier

Digital Output Type:

- 1 - 0 - 5V, NPN [TTL]
- 2 - 0 - 10V, NPN
- 3 - 0 - 12V, NPN
- 4 - 0 - Vs, NPN
- 5 - 0 - Vs, NPN (OC), Open Collector
- 6 - PNP
- 7 - Zero Crossing +8.5V to -8.5V ( $\pm 0.5V$ )

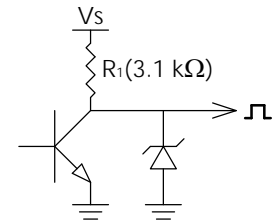
Input Type(s):

- 1 - Digital Signal Input only
- 2 - VRS (Mag) 100mVpp Sensitivity
- 3 - VRS (Mag) 50mVpp Sensitivity
- 4 - VRS (Mag) 30mVpp Sensitivity
- 5 - VRS (Mag) 12mVpp Sensitivity
- 6 - VRS (Mag) 5mVpp Sensitivity
- 7 - RF4
- 8 - RF10

Digital Signal Input Included on All Models

- Mounting Type: 1 - Back Panel Mount (Available on all configurations)  
 2 - Control Panel Mount (Please contact sales for configuration availability)

### NPN Output



## VRS (Mag) or RF Sensor Wiring:

### Power

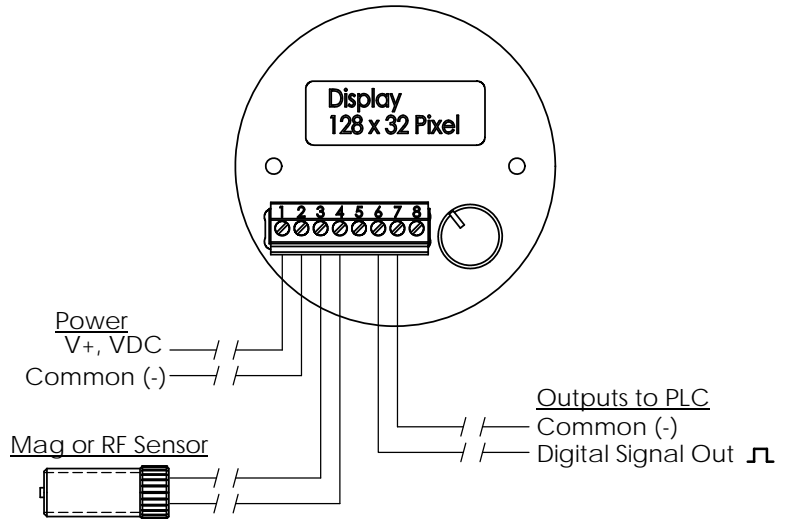
- 1 - V+, 12-30 VDC
- 2 - Common (-)

### Inputs

- 3 - Mag or RF Pickup Coil
- 4 - Mag or RF Pickup Coil
- 5 - NC (Not Connected)

### Outputs

- 6 - Digital Frequency Output
- 7 - Common (-)
- 8 - NC (Not Connected)



## Active Sensor or other Digital Input Wiring:

### Power

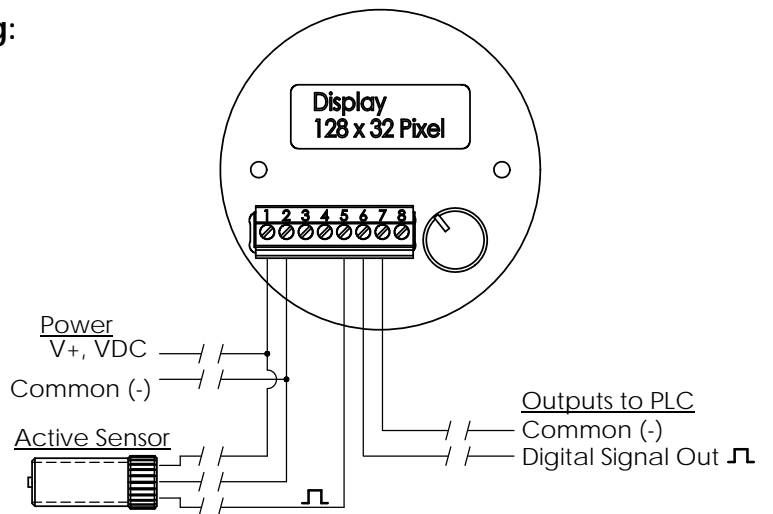
- 1 - V+, 12-30 VDC
- 2 - Common (-)

### Inputs

- 3 - NC (Not Connected)
- 4 - NC (Not Connected)
- 5 - Digital Signal Input

### Outputs

- 6 - Digital Frequency Output
- 7 - Common (-)
- 8 - NC (Not Connected)



For PNP input signal, connect a 2.2k axial resistor between Terminals 2 and 5