

## PRODUCT DESCRIPTION

The 4057 is a user programmable pulse multiplier, divider, or K-factor scaler. An optional analog output converter can be included, which requires no external test equipment for setup. Output modes are 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.

The input frequency can be either multiplied or divided by a user selectable integer. The optional analog output can provide either a voltage or current signal with both minimum and maximum set points adjustable.

To multiply by a decimal value (e.g. 10.123) please see the 4057D Bulletin.

## SPECIFICATIONS

<b>Vs, Supply Voltage:</b>	12-30 VDC
<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, or 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
<b>Multiplier Options*:</b>	<b>Range:</b> 2 to 50,000 (Integers only) (only up to 80 kHz max frequency)
<b>Divider Options*:</b>	<b>Range:</b> 1 to 999,999,999 (Integers only) <b>Pulse Width:</b> 1 $\mu$ s to 10s (frequency dependent)

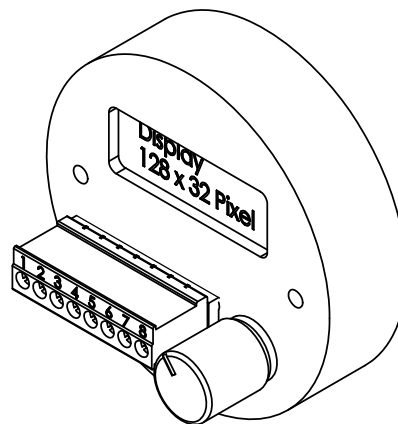
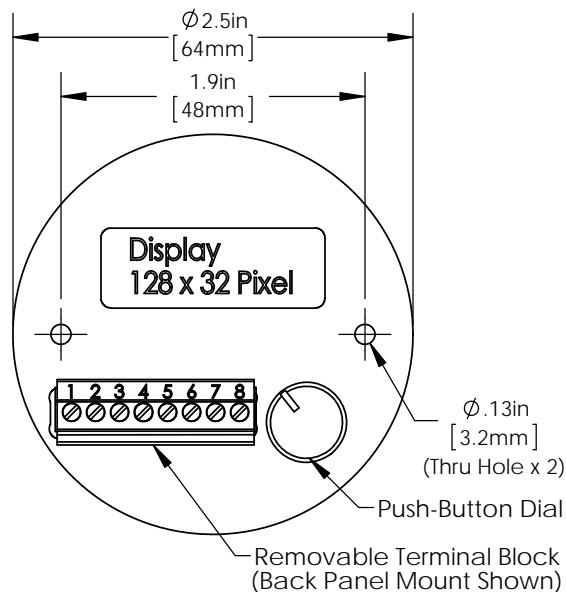
### \*NOTE:

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.

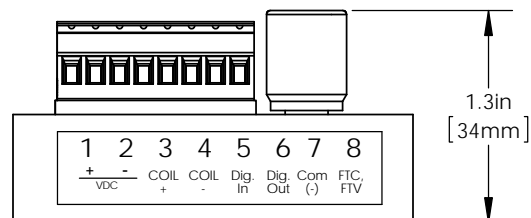
<b>Analog Output Options:</b>	<b>FTV Outputs:</b> 0-5V or 0-10V $\pm 0.01$ % FSR typ. $\pm 2$ ppm/ $^{\circ}$ C output drift
	<b>FTC Outputs:</b> 4-20mA, 0-20mA, or 0-24mA $\pm 0.01$ mA (Both Minimum and Maximum frequencies are adjustable)

**Operating Temp. Range:** -20 $^{\circ}$  to 75 $^{\circ}$ C (-4 $^{\circ}$  to 167 $^{\circ}$ F) with Vs=12V  
 -20 $^{\circ}$  to 55 $^{\circ}$ C (-4 $^{\circ}$  to 131 $^{\circ}$ F) with Vs=30V

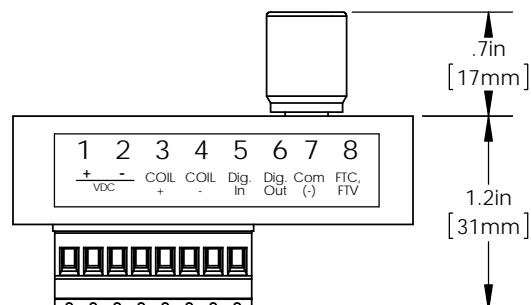
**Terminal Connections:** See Page 2



Back Panel Mount



Control Panel Mount



## ORDER INFORMATION

STYLE:

OPTIONS:

4057 -     Programmable Signal Converter

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

Output Options:

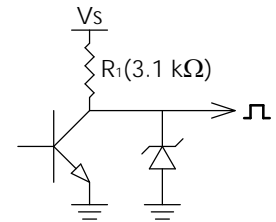
- 1 - Digital Frequency Output (Standard Model: Multiplied/Divided/K-Factor Scaled Output Only)
- 2 - Same as above with added Analog FTV/FTC Outputs

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

NPN Output



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

## VRS (Mag) or RF Sensor Wiring:

Power

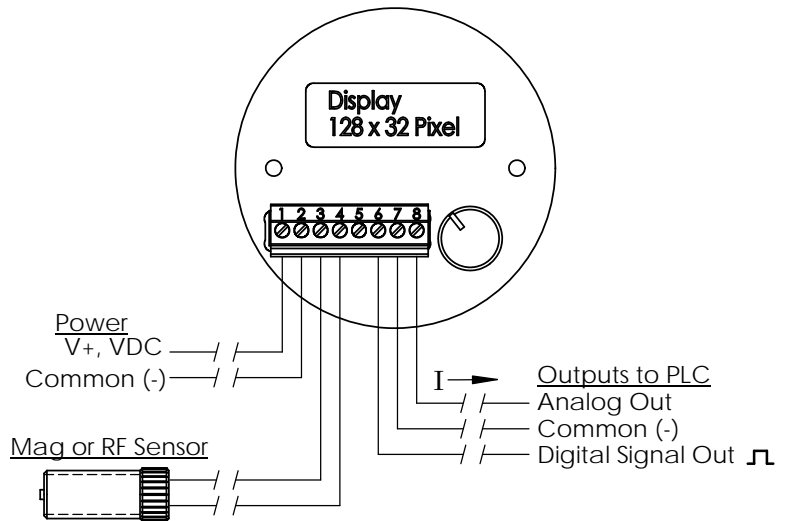
- 1 - V+, 12-30 VDC
- 2 - Common (-)

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 (Standard Models) or Analog Output



## Active Sensor or other Digital Input Wiring:

Power

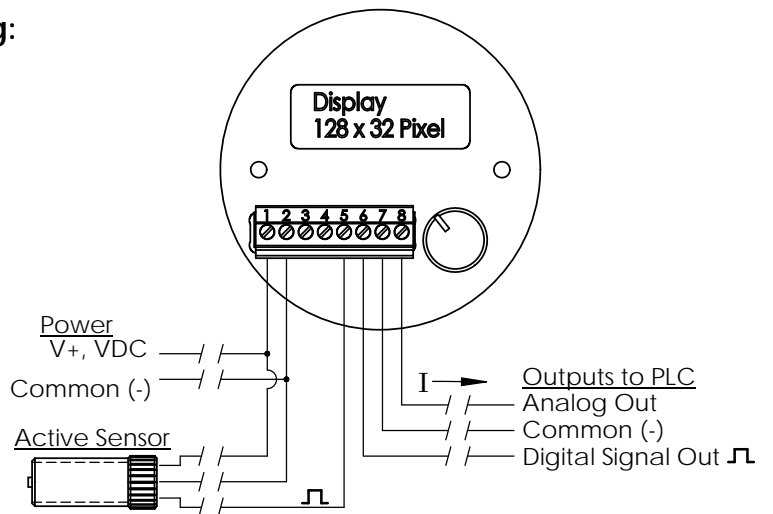
- 1 - V+, 12-30 VDC
- 2 - Common (-)

Inputs

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

Outputs

- 6 - Digital Frequency Output
- 7 - Common (-)
- 8 - NC (Standard Models) or Analog Output



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