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

Vs, Supply Voltage: 12-30 VDC
Is, Supply Current: 75 - 120 mA
Input Type/Sensitivity: VRS (Mag): 5, 12, 30, 50 or 100mVpp RF: 4 or 10 Ohms Digital: CMOS, TTL, 0-30V, or PNP
Frequency Input Range: 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)
Max. Frequency Output: 80 KHz
Digital Output Options: NPN: 0-5V (TTL), 0-10V, 0-12V, 0-Vs, or 0-Vs OC PNP: 0-Vs
Multiplier Options*: Range: 2 to 50,000 (Integers only) (only up to 80 kHz max frequency)
Divider Options*: Range: 1 to 999,999,999 (Integers only) Pulse Width: 1 µs 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.

Analog Output Options: FTV Outputs:
0-5V or 0-10V ±0.01 % FSR typ. ±2 ppm/°C output drift FTC Outputs: 4-20mA, 0-20mA, or 0-24mA ±0.01mA (Both Minimum and Maximum frequencies are adjustable)
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
**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

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**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

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**Programmable Signal Converter**

**Digital Signal Input**
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

**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

**ORDER INFORMATION**

**STYLE: OPTIONS:**
4057 - 

**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

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**NPN Output**

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

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Vs

R(3.1 kΩ)