

(406) 333-4967 FAX: (406) 3334259 www.spectecsensors.com

# 4057D QUICK START GUIDE





### **Device Pinout**

- Pin 1: VDC input (12V-24V)
- Pin 2: Ground (GND)
- Pin 3: Coil + (Mag or RF input)
- Pin 4: Coil (Mag or RF input)
- Pin 5: Digital Input
- Pin 6: Pulse output
- Pin 7: Ground (GND)
- Pin 8: No connection

### **FIRST TIME STARTUP**

- 1. Connect 12 to 24V to pin 1
- 2. Connect a ground wire to pin 2
- 3. Input connections:
  - a. If using the Digital input, Connect a 0-5V signal to pin 5.
  - b. If using a Mag or RF input, Connect the sensor leads to Pins 3 & 4
- 4. Connect an oscilloscope or other frequency measuring device to pin 6.
- 5. Apply power to the 4057D

When the device is first turned on it will be in factory reset mode, and the message in Figure 3 will be shown.

> Please configure the device

Figure 2: Configuration message.

6. Press the push button dial to clear this message and enter program mode. You will see the menu below:

#### Multiplied By: <⊐⊏> 000,000.00

Figure 3: Multiplier menu.

## **USER INTERFACE**

Rotate the push button dial to move the cursor (an arrow in most cases) on screen. Rotating clockwise moves the cursor to the next on screen option, rotating counter clockwise moves the cursor to the previous option.

Press the push button to make a selection.

A diamond next to a selection means that is the currently selected mode.

**Note:** The LCD screen will not turn off while in programming mode. When not in program mode, the LCD screen will turn off after 2 minutes of inactivity. To turn the LCD on, simply press the push button.

**Note:** Do not disconnect the power from the device while programming it. This will erase all settings and return the device to factory reset mode.

### SELECTING A Frequency Multiplier

**Note:** The multiplier has a range of 0.001 to 100, and can output a maximum of 80 KHz.

#### Multiplied By: <⊐=> 000,000.00

#### Figure 4: Multiplier menu

This menu uses a black cursor that can be moved by rotating the push button dial. Simply move the cursor over a number that is to be changed, and press the push button. The screen will invert, (as seen in Figure 13.) the number can now be incremented by rotating the dial clock wise, and decremented by rotating the dial counter clockwise. When finished inputting a new number, press the push button.

#### Multiplied By: <⊐⊏>000,000.00[]

#### Figure 5: Multiplier menu inverted

The arrow facing the left represents "Back", and the arrow facing right represents "Next".

Select the left arrow to go to the "Input Selection Menu."

Select the right arrow to exit program mode.

## **INPUT SELECTION MENU**

- 1) Enter program mode
- 2) Use the push button dial to select the left pointing arrow. (Figure 4)



#### Figure 6: Input menu.

- "Coil" corresponds with a RF or Mag input (Depending on board type) on pins 3&4.
- "Digital" allows the 4057 to use the Digital input on pin 5 (default)
- ✤ "Exit" will exit program mode
- "Next" lets the user select a multiplier.

# **ENTERING PROGRAM MODE**

### **Entering Program mode**

- 1) Apply power to the 4057D
- 2) Hold the push button dial for 5 seconds
- 3) After 5 seconds the menu in Figure 2 will appear.



Figure 7: Multiplier menu.