MURPHY®

by ENOVATION CONTROLS

C E

PowerView™
Model PV350 and PV380

Installation Manual

In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time. The latest version of this manual can be found at www.fwmurphy.com.

WARNING

Please read the following information before installing.

BEFORE BEGINNING INSTALLATION OF THIS MURPHY PRODUCT:

Read and follow all installation instructions.

Please contact Enovation Controls immediately if you have any questions.

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Table of Contents

Hardware Installation

The following instructions will guide you through installing the PowerView display.

Inspecting Package Contents

Before attempting to install the product, it is recommended that you ensure all parts are accounted for and inspect each item for damage (which sometimes occurs during shipping). The items included in the box are:

- PV350 or the PV380 unit

- Dash gasket

- Installation manual – P/N 00-02-0880

- Operations manual – P/N 00-02-0879

Dash-Mounted Installation

Tools needed.

- Jig Saw, or
- 3.5" Hole saw, or
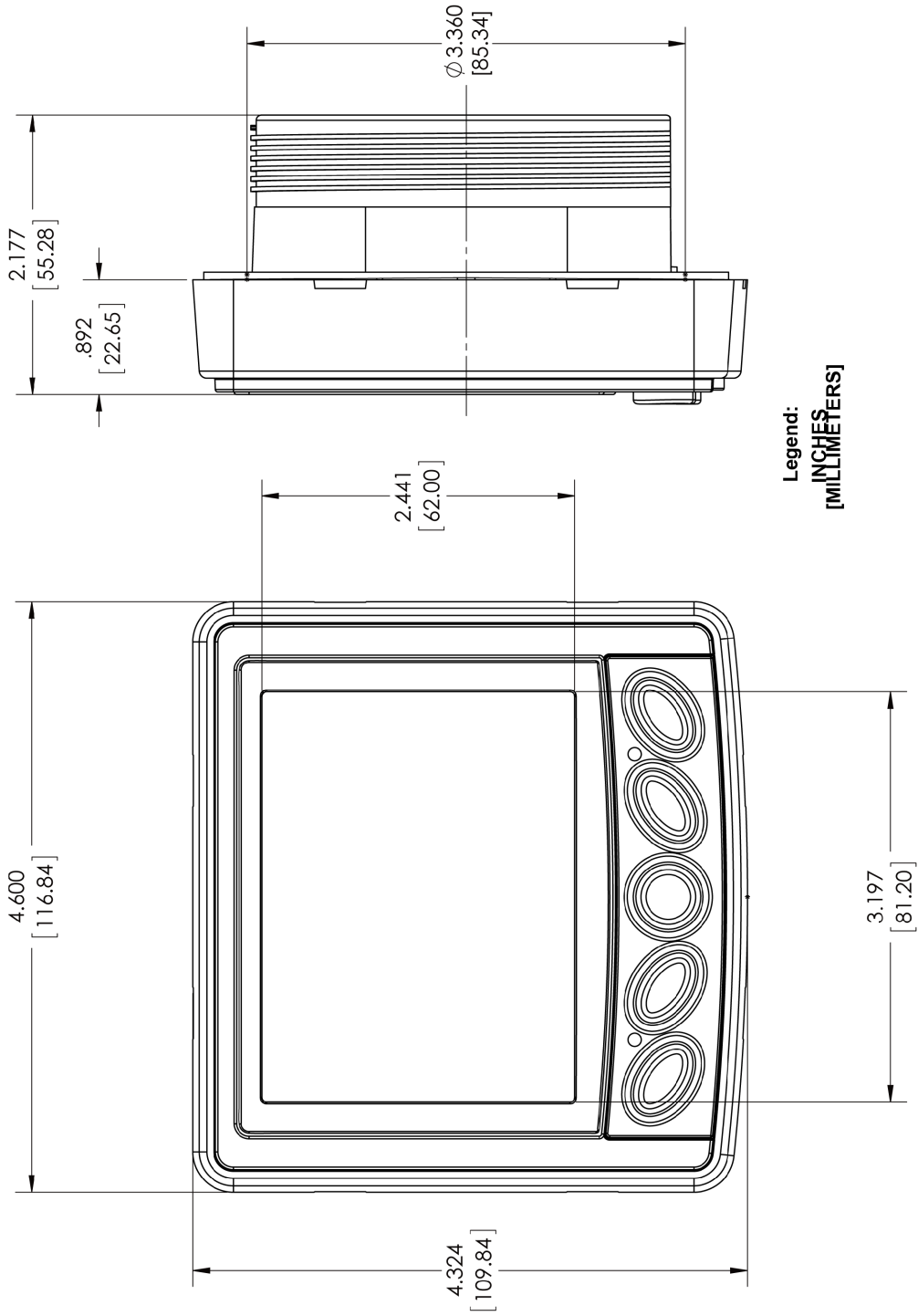- 3.5" knockout (chassis) punch

Preparing the Dash

Determine the location of the PowerView in the dash. Refer to the Mounting Hole Options sheet at the end of this document for the appropriate opening sizes.
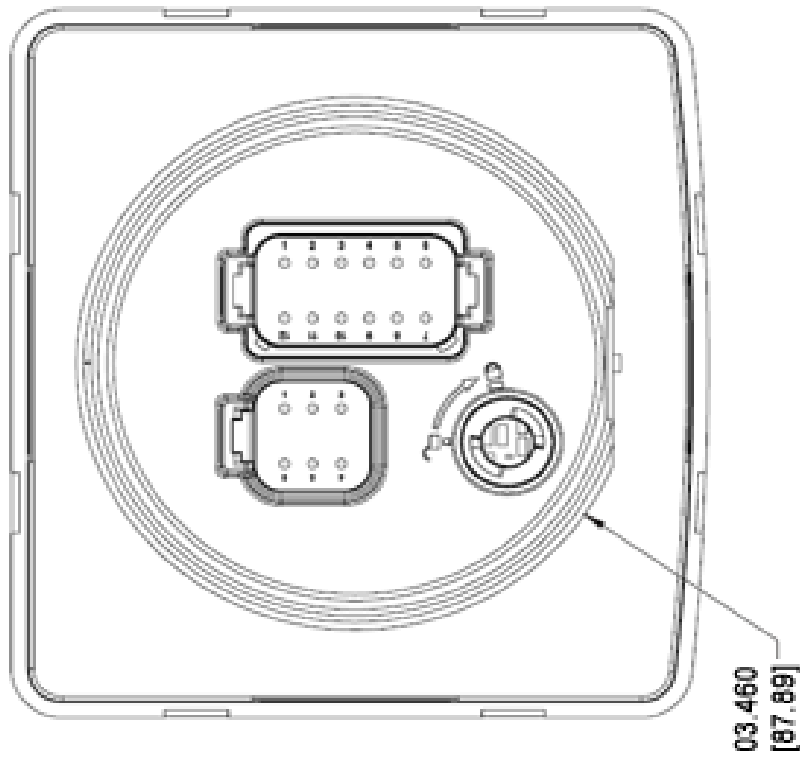
Mounting the Unit

1. Place the dash gasket over the prepared dash opening.

2. Place the back side of the display through the opening in the dash.

3. Push the unit through the opening until the case is flush.

4. Place the screw on type mounting clamp behind the dash and install on the unit until it is hand tight.

Dimensions

Ø 3.360
[85.34]

2.177
[55.28]

.892
[22.65]

Legend:
INCHES
[MILLIMETERS]

2.441
[62.00]

4.600
[116.84]

3.197
[81.20]

4.324
[109.84]

Dimensions, cont.

Note: Pinout depicted is the PV380

03.460
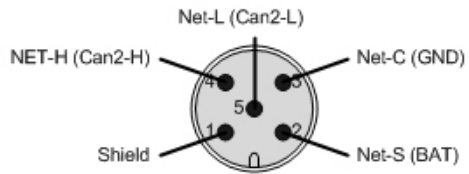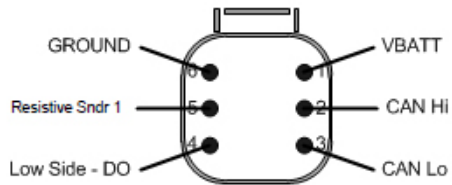[87.89]

Legend:
Inches
[Millimeters]

Wiring Information

Pin Specifications for PV350

PV350

PV350 Back View

Mating Connector Part Numbers:

- Deutsch DT06-12SA plug housing
- Deutsch DT06-6S plug housing
- W6S and W12S wedge locks
- Deutsch 0462-201-16141 contact (socket)
- M12 (Micro-C) 5-pin male plug compatible with NMEA 2000 thin backbones (light cable)
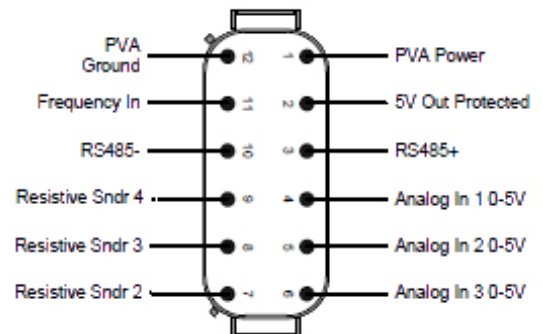
PV380

PV380 Connector Pin Outs

PV380 Back View
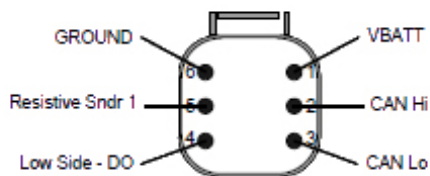
Mating Connector Part Numbers:

- Deutsch DT06-12SA plug housing
- Deutsch DT06-6S plug housing
- W6S and W12S wedge locks
- Deutsch 0462-201-16141 contact (socket)

PV350

KEY SW

ECU

BATT + 1

CAN H 2

CAN L 3

+ LOAD − DIGITAL OUT 500mA 4

SENDER RESISTIVE SENDER IN 5

BATT − 6
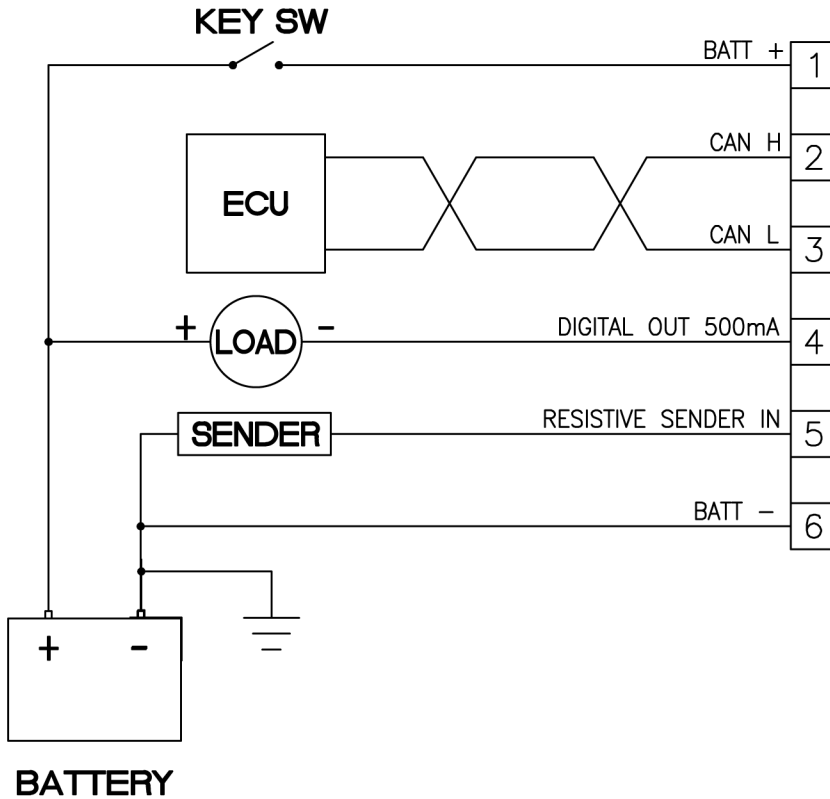
MATING CONNECTOR
DEUTSCH DT06−6S
w/ WEDGELOCK W6S

BATTERY

+ −

NMEA 2000

SHIELD 1

NET−S
(BATT) 2

NET−C
GND 3

NET−H
(CAN H) 4

NET−L
(CAN L) 5

KEY SW
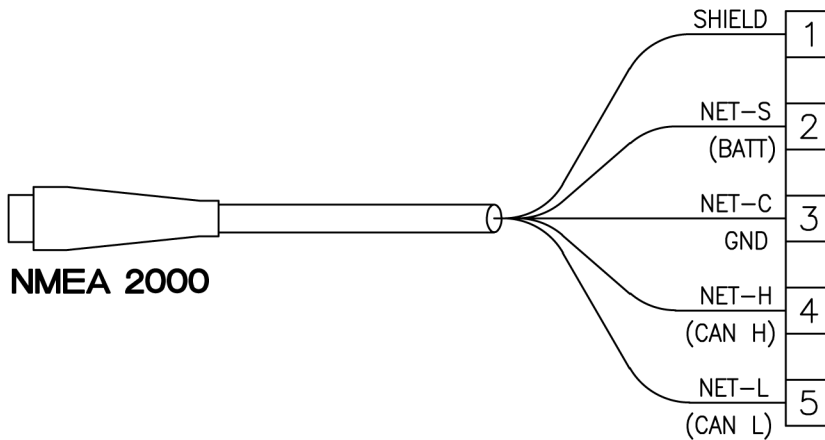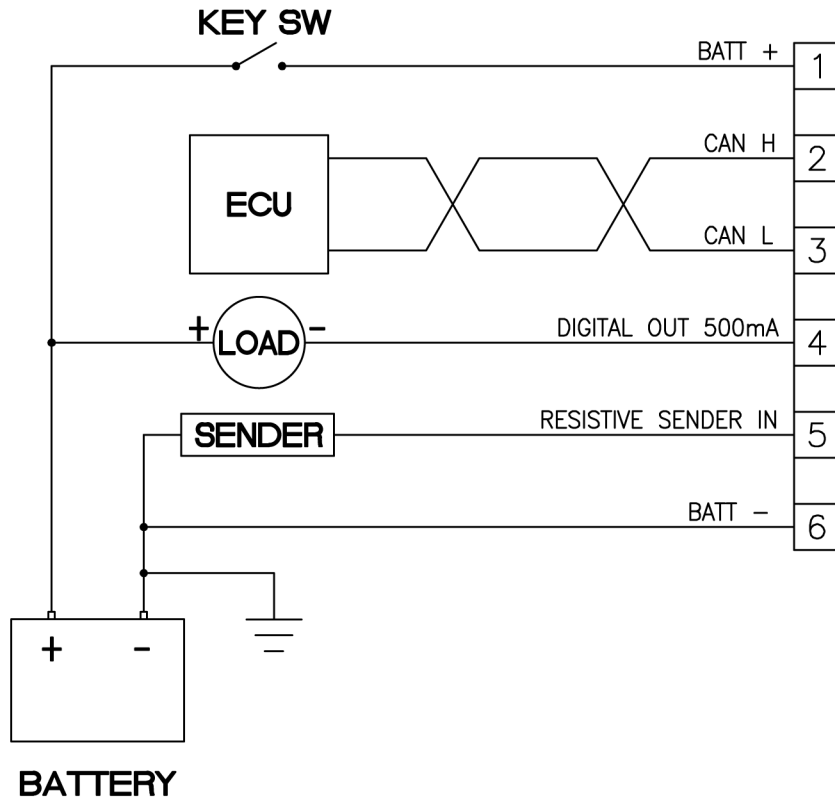
ECU

+ (LOAD) −

SENDER

BATTERY

BATT +	1
CAN H	2
CAN L	3
DIGITAL OUT 500mA	4
RESISTIVE SENDER IN	5
BATT −	6

PV380

MATING CONNECTOR
DEUTSCH DTO6−6S
w/ WEDGELOCK W6S

PVA GAUGE

3	RS485 +	3	
4	RS485 −	10	
1	PVA POWER	1	
6	PVA GND	12	
	5V OUT	2	
	ANALOG IN 1	4	
	ANALOG IN 2	5	
	ANALOG IN 3	6	
	RESISTIVE SENDER 2	7	
	RESISTIVE SENDER 3	8	
	RESISTIVE SENDER 4	9	
	FREQ IN	11	
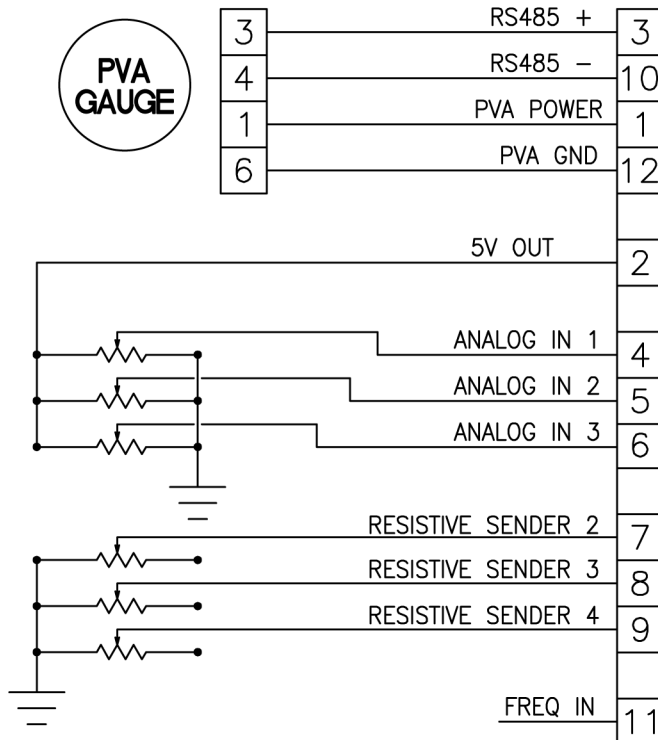
MATING CONNECTOR
DEUTSCH DTO6−12SA
w/ WEDGELOCK W12S

PV350 and 380 Features and Operations

Flat Screen Display

A 3.8" QVGA monochrome LCD screen displays gauges, soft key commands, and fault messages, as well as menu options for setup and configuration.

Soft Keys and Commands

The five tactile push buttons on the bottom of the display correspond to the options available for the screen being displayed.

MENU

Pressing any Soft Key will display the list of menu options.

Alarms

Red and amber warning LEDs; Setpoint triggered output for external piezo buzzer or shutdown relay.

Specifications

Electrical

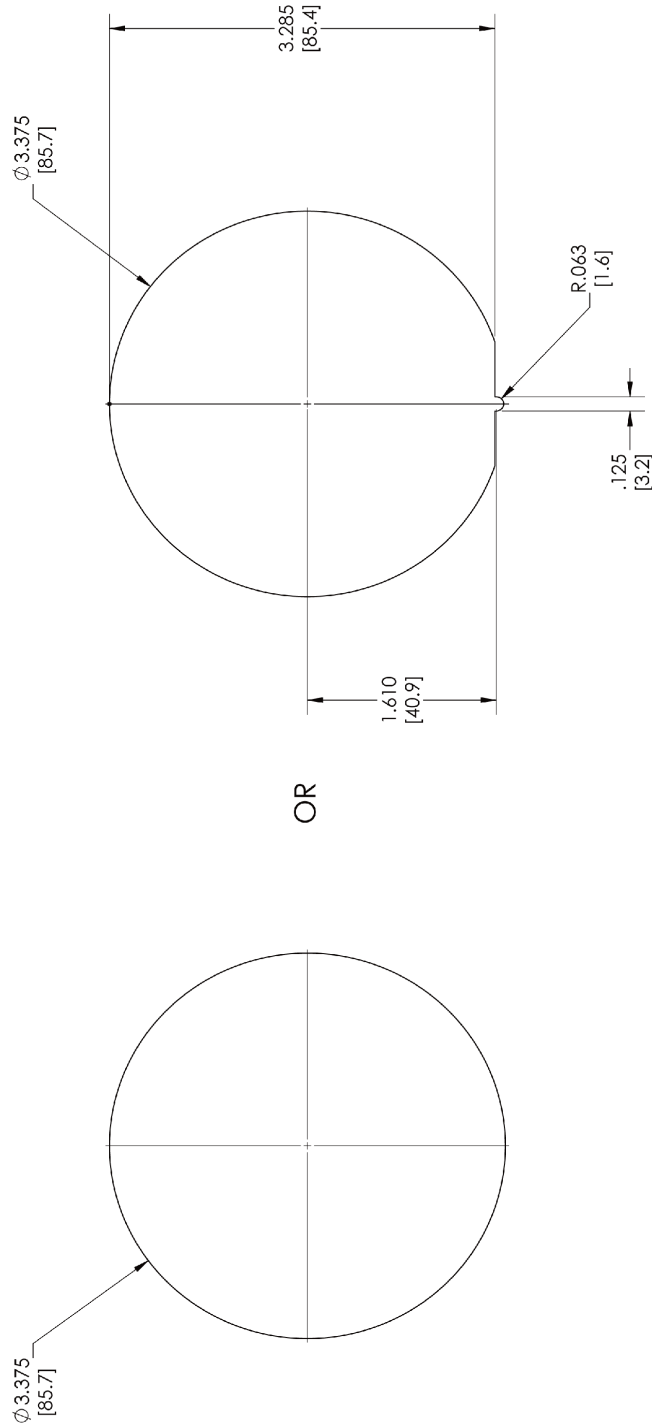|	
Display	3.8" monochrome LCD
Resolution	QVGA, 320 x 240 pixels
Orientation	Landscape
Backlighting	LED, white
Flash Memory	512kb
RAM	96kb
Operating Voltage	6 - 36 VDC, protected against reverse polarity and load-dump
Power Consumption	10 W max
CAN	CAN 2.0B
Protocols	J1939, FreeForm CAN
Connection	PV350: 6 pin Deutsch connector and 5 pin M12 connector PV380: 6 pin and 12 pin Deutsch DT series connectors
Keyboard	5 tactile buttons
Inputs	PV350: (1) resistive analog (backlight control) PV380: (4) resistive analog, (3) analog, 0-5V analog or digital, (1) frequency, 2-10,000 Hz, 3.6-120 VAC
Output	PV350: (1) 500 mA; switched low-side PV380: (1) 500 mA; switched low-side, (1) 5V supply, 70 mA, protected

Environmental

Operating Temperature	-40º C to +85º C
Storage Temperature	-40º C to +85º C
Protection	IP67, front and back, IP66 panel seal
Emissions	SAE J1113 or customer-specified
Immunity	SAE J1113 or customer-specified
Vibration	Random vibration, 7.86 Grms (5.2000 Hz), 3 axis
Shock	+/- 50G in 3 axis

Mechanical

Case Material	PC/ABS

Mounting Hole Options

PV350/380

$\emptyset$3.375 [85.7]

3.285 [85.4]

R.063 [1.6]

.125 [3.2]

1.610 [40.9]

OR

$\emptyset$3.375 [85.7]

MOUNTING HOLE OPTIONS

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