



**PowerView<sup>®</sup> U35**  
**U35C-T-E-A0-QA &**  
**U35C-T-E-A0-QB (with mounting kit)**

*Installation Manual*

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 [support.enovationcontrols.com](http://support.enovationcontrols.com).

**Warranty** - A limited warranty on materials and workmanship is given with this Enovation Controls product. A copy of the warranty may be viewed or printed by going to [www.enovationcontrols.com/warranty](http://www.enovationcontrols.com/warranty)



# WARNING

**BEFORE INSTALLING THIS ENOVATION CONTROLS PRODUCT:**

Read and follow all installation instructions.

Please contact Enovation Controls immediately if you have any questions.



This product can expose you to chemicals including lead, which is known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

-Revision Table			
Date	Description	Date	Description
2025-09-05	Initial Draft		
2025-12-05	Updated title of M12 connector		
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## Hardware Installation

The following instructions will guide you through installing the PowerView® U35 display.

### Inspecting Package Contents

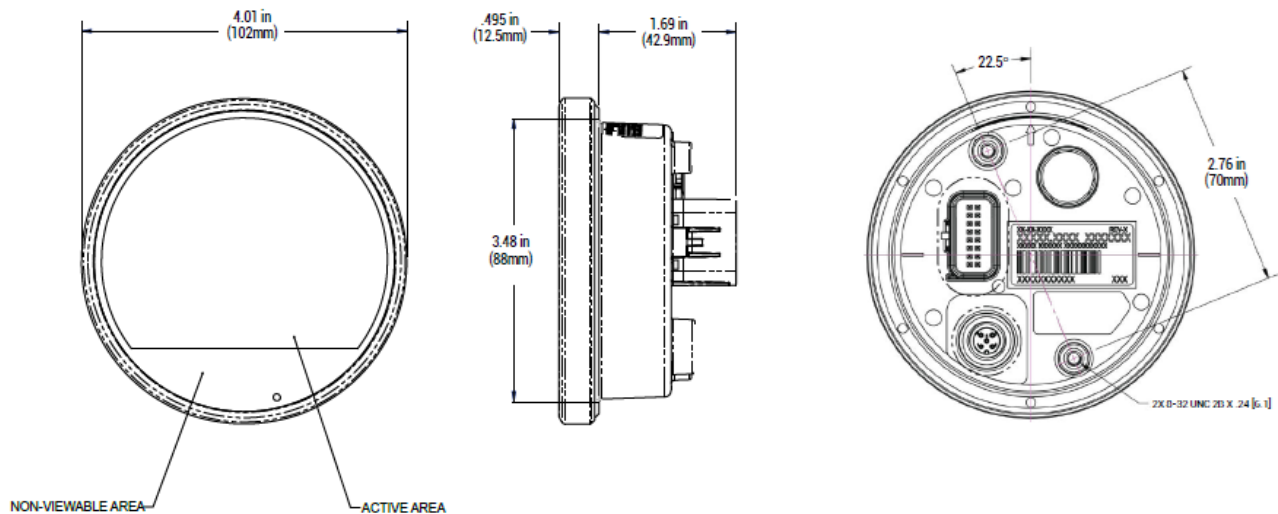
Before installing the product, it is recommended that you ensure all parts are accounted for and inspect each item for damage (which sometimes occurs during shipping). The items included in the box are:

- PowerView U35 3.5" unit

### Surface-Mounted Installation

To properly mount the display, first prepare the dashboard:

1. Use the measurement diagram shown below to create a clearance cutout for the connectors.
2. Using the provided measurements drill two locating holes for the fasteners.
3. Secure the display to the panel using 8-32 fasteners. Thread depth on the display's brass inserts is 0.24". Do not use a locking adhesive that may be chemically incompatible with the plastic.



Hardware needed

- Two (2) 8-32 Fasteners

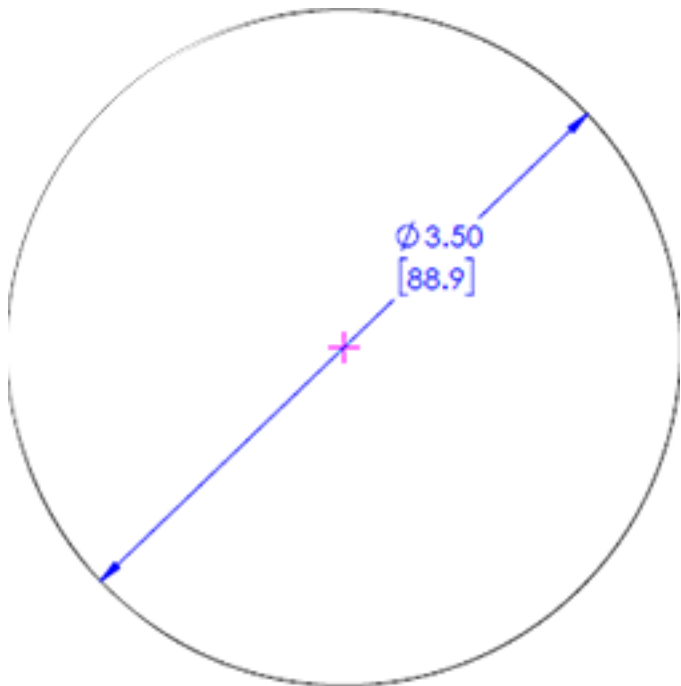
Tools needed:

- Rotating drill with a bit size of 18 (0.169).

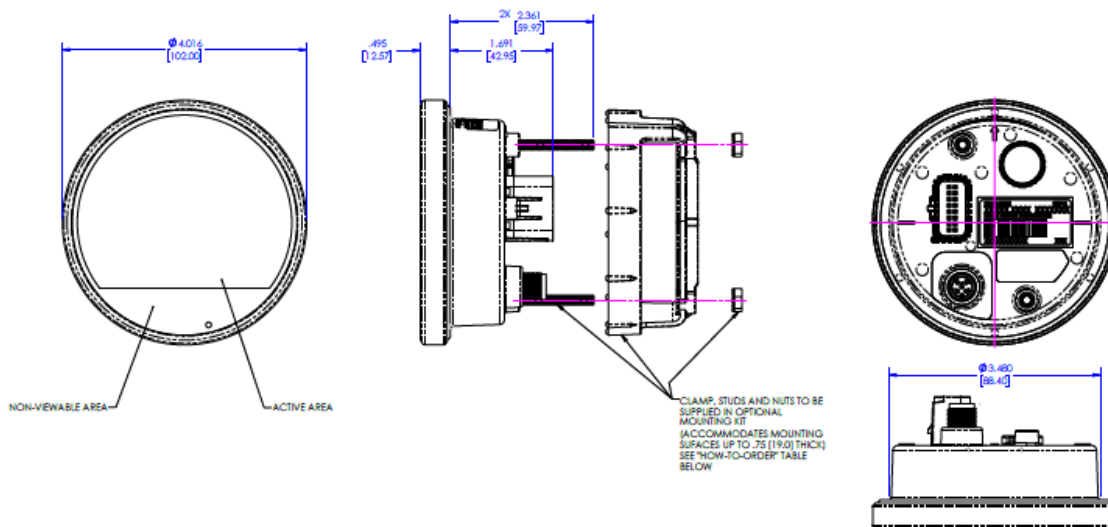
## Flush-mounted Installation

Follow these instructions to install the display using the optional mounting kit (Bracket, Mounting Studs, Lock Nuts): Part Number 78001531, available through Enovation Controls.

1. Cut a mounting hole in the panel with the diameter shown in the true-to-size diagram shown below.



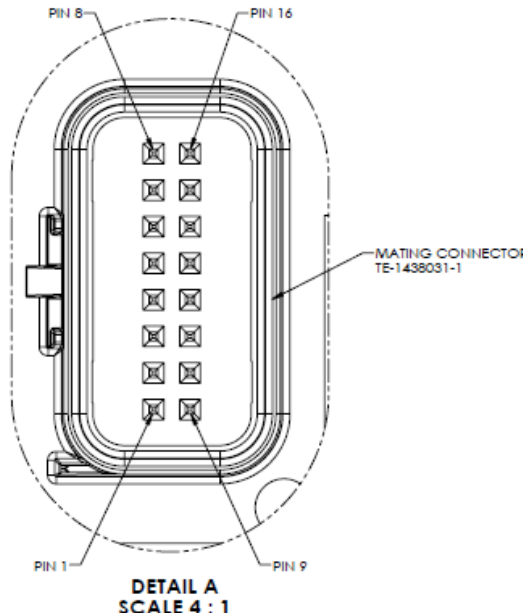
2. Insert the display from the front of the panel and use the mounting bracket with 8-32 locknuts to secure the display from the backside of the panel. These parts are supplied in the mounting kit.



## Pinout Specifications

### 16Pin Connector A (Mating Connector AMP 770680-1 Black)

Pin	Function
1	N.C.
2	CAN Lo
3	CAN Hi
4	USB_N
5	USB_P
6	USB_VBUS
7	USB_GND
8	Battery
9	N.C.
10	N.C.
11	N.C.
12	N.C.
13	N.C.
14	USB_Shield
15	Ignition
16	GND



The diagram shows a top-down view of the 16-pin connector. The pins are arranged in a 4x4 grid. Pin 1 is at the top-left, Pin 16 at the top-right, Pin 9 at the bottom-right, and Pin 1 at the bottom-left. A mating connector, TE-1438031-1, is shown on the right side of the connector. The diagram is labeled 'DETAIL A SCALE 4 : 1'.

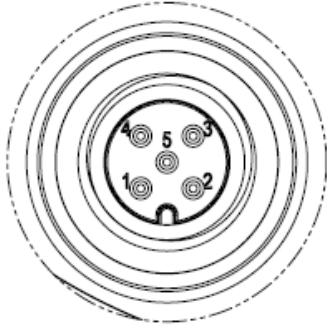
#### IMPORTANT NOTE:



Use a suitably sized fuse or circuit breaker to protect the wiring and display/controller in the event of an overcurrent fault condition. Consult the product specifications to obtain maximum power consumption during normal operating conditions.

## 5-Pin M12 Connector, A-Coded, Male Threads (back of display view shown)

Pin	Function
1	Ethernet TX_P
2	Ethernet RX_P
3	Ethernet TX_N
4	Ethernet RX_N
5	GND



**DETAIL B**  
**SCALE 4 : 1**

### Software Platform

Display is shipped with a bootloader only. The customer must create their own custom applications using PowerVision Configuration Studio®.

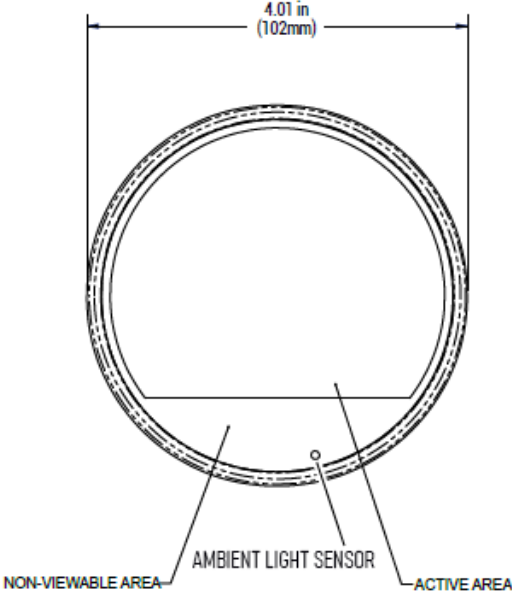

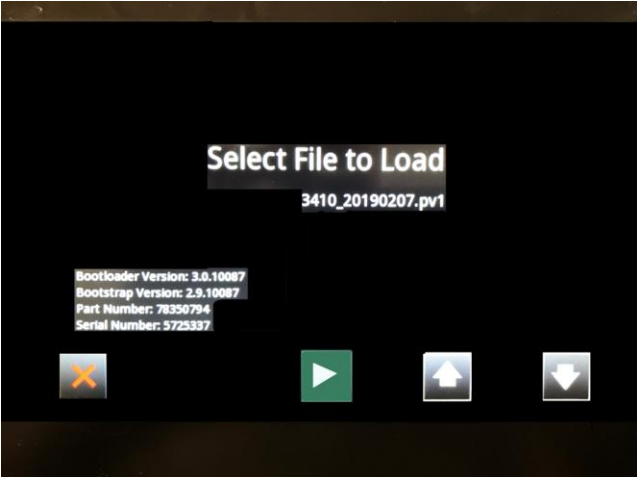
Demo Configurations / Examples available at [support.enovationcontrols.com](http://support.enovationcontrols.com)

### Configuration Information

Follow these steps to download a custom configuration to the U35 display using a USB flash drive connected to the USB connector on the harness:

Step	Action
1	Turn off the display.
2	Insert the USB drive that contains the new configuration file into the USB pigtail on the harness.

Continued

Step	Action
3	<p>Place a strong magnet directly over the Ambient Light Sensor (ALS) depicted below and hanging slightly over the bottom of the display:</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
4	Power the display back on, continually holding the magnet in place.
5	<p>Remove the magnet when the display shows the utility for loading new software.</p> 
6	Touch the up or down arrow keys on the screen until the appropriate configuration file from the USB to be loaded into the display is shown on the screen.
7	Press the right arrow/green arrow key on the screen twice to load the selected configuration.
8	Once completed, the unit will reboot into the loaded application.

## Specifications

Computing	
<b>Processor</b>	Dual-Core A7 Processor at 1.0 GHz
<b>Operating System</b>	QNX® Realtime Operating System
<b>Storage</b>	8 GB Flash Memory
<b>RAM</b>	512 MB DDR3-SDRAM
Material & Finish	
<b>Bezel</b>	Stainless Steel – Black Powder Coat
<b>Cover Glass</b>	Soda Lime Glass, AG Etch
<b>Housing</b>	Plastic – Black
Display / HMI	
<b>Screen</b>	3.5-inch round, 24-bit color
<b>Resolution</b>	640 x 516
<b>Contrast Ratio/Brightness</b>	600:1 1000 cd/m <sup>2</sup>
<b>Touch Panel</b>	Projected capacitive (PCAP) with glove touch
<b>Surface</b>	Anti-glare finish
<b>Ambient Light Sensor</b>	Yes
Interface	
<b>CAN</b>	(1) CAN
<b>USB</b>	(1) USB 2.0
<b>Ethernet</b>	(1) Ethernet

Continued

<b>Electrical/Environmental</b>	
<b>Operating Voltage</b>	6-36 VDC, reverse polarity protected
<b>Operating Temperature</b>	-22°F TO +158°F [-30°C TO +70°C]
<b>Storage Temperature</b>	-40°F TO +185°F [-40°C TO +85°C]
<b>Protection</b>	IP67
<b>Vibration</b>	Swept Sine (10-2000-10Hz) 10g Peak, 3 Axis, Random (10-2000Hz) 8.17g RMS, 3 Axis
<b>Shock</b>	±50G IN 3 Axis
<b>EMC/EMI</b>	(2014/30/EU)

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