

# Complete System Shelter

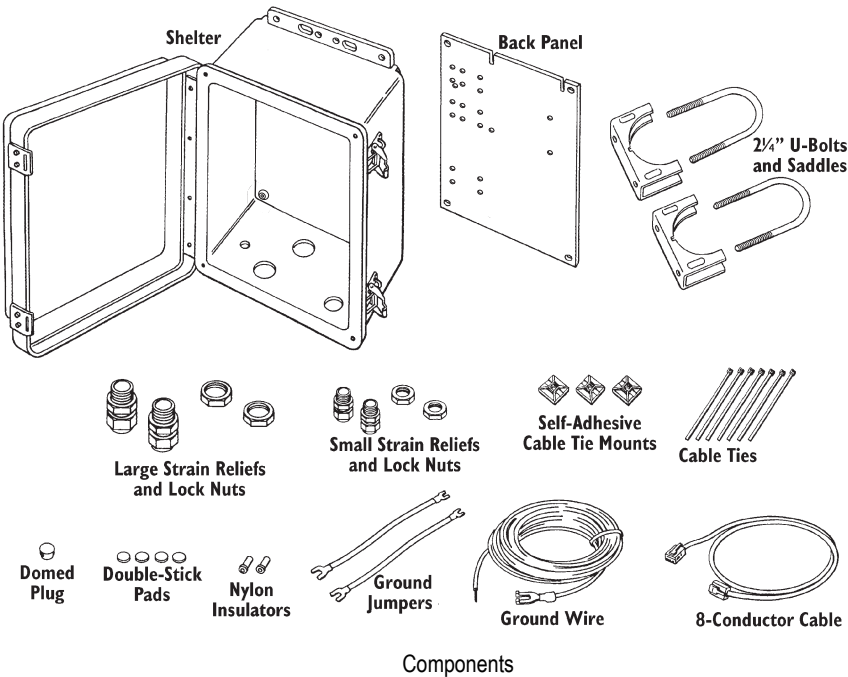
## For Weather Console Installations

The weather-resistant Complete System Shelter (CSS) provides protection from the elements for system components such as the Vantage Pro2 and Vantage Vue consoles.

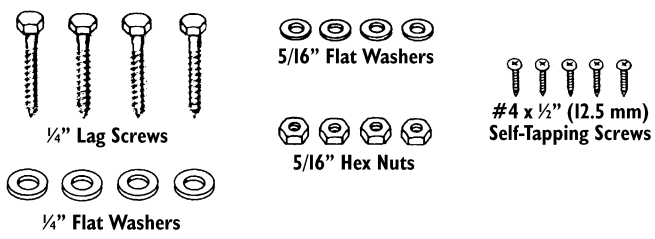
Note: Please note that we have made every attempt to provide a safe product, but Davis Instruments assumes no liability for any injury or damage caused directly or indirectly by the installation or use of this product.

## Components

The CSS includes the following components. Please make sure that you have all the listed components before continuing.

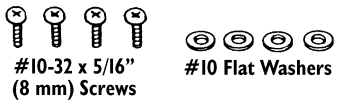


The mounting hardware kit included with the shelter includes the following components. Please make sure that you have all the components before continuing.



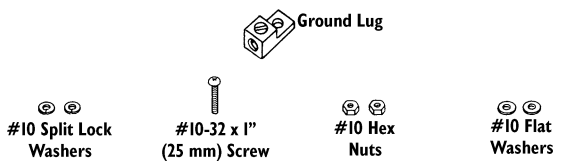
Mounting Hardware Kit Components

The back panel mounting kit included with the shelter includes the following components. Please make sure that you have all the components before continuing.



Back Panel Mounting Kit

The ground lug kit included with the shelter includes the following components. Please make sure that you have all the components before continuing.



Ground Lug Kit Components

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## Tools and Materials Needed for Installation

You may need some of the following tools and materials in order to install the shelter.

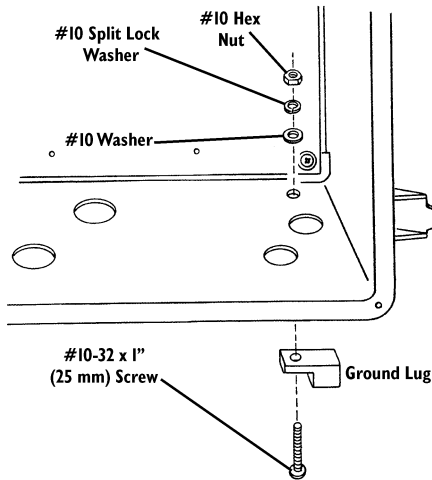
- System Components

You will need the various system components you plan to install inside the shelter. Some sample installation configurations are shown in "Sample CSS Configurations" on page 5.

- Medium Flat Head Screwdriver
- Medium Phillips Head Screwdriver
- Wrench or 3/8" Nut Driver
- Large Adjustable Wrench (1 3/8" Opening)
- Electric Drill with #43 (.089", 2.25 mm) and #36 (.106", 2.70 mm) Drill Bits
- Wire Cutter
- Wire Stripper or Knife
- Pliers
- Electrical Tape and/or Silicone Caulking
- Double-Sided Tape

## Installing Ground Lug

Install the ground lug using a #10-32 screw, #10 washer, #10 split lock washer, and #10 hex nut as shown below.

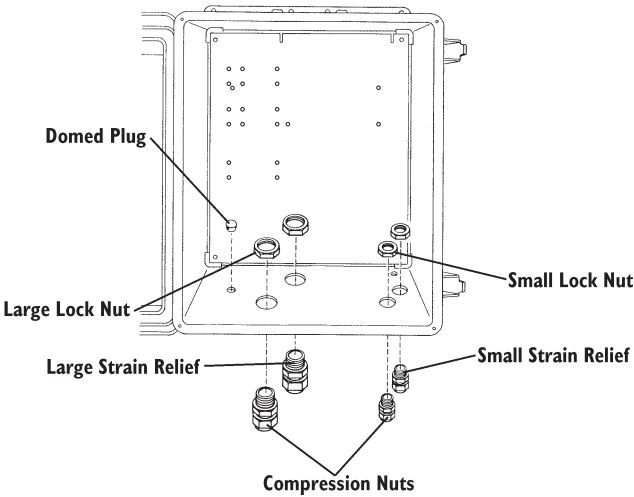


Installing Ground Lug

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# Installing Strain Reliefs and Domed Plug

Install strain reliefs and the domed plug in the CSS as shown below. You will need to install the strain reliefs before running cables into the CSS. Secure the strain reliefs by tightening the lock nuts. Do not tighten the compression nuts until you have completed your installation (see “Securing Cables” on page 10).



Installing Strain Reliefs and Domed Plug

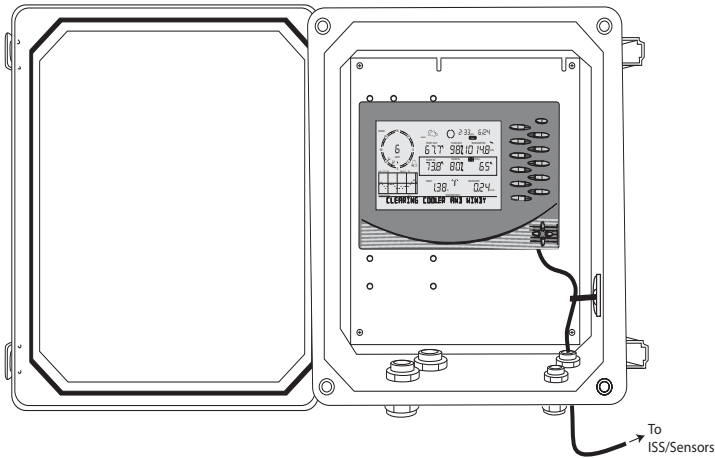
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# Sample CSS Configurations

The illustrations below show sample CSS installations. Consult the installation manuals supplied with system components for wiring instructions.

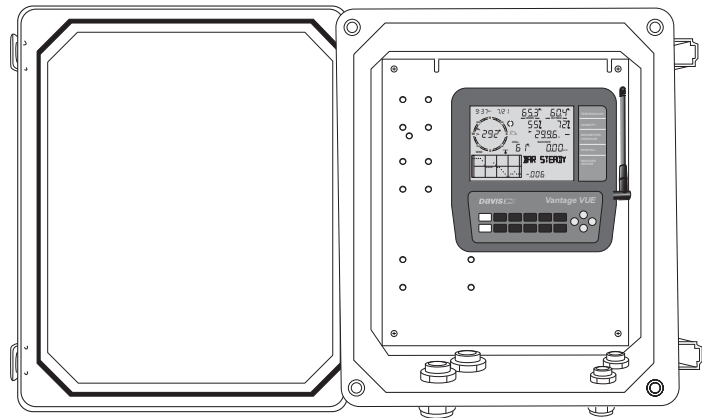
## Console

The illustration below shows a CSS installation which includes a cabled Vantage Pro2 console.



Cabled Vantage Pro2 Console

The illustration below shows an CSS installation which includes a Vantage Vue console installation.



Vantage Vue Console

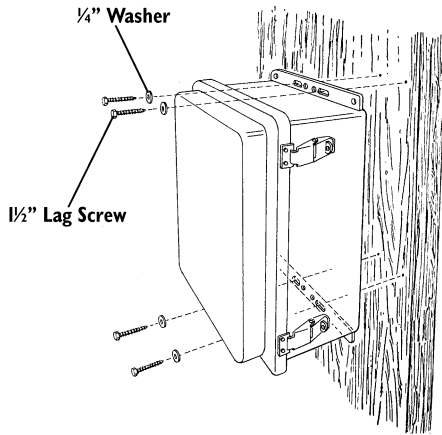
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## Mounting the CSS

The instructions below take you through the procedure necessary to mount the shelter against a wall or post, on a small pipe, or on a large pipe.

### Mounting the Shelter on a Wall or Post

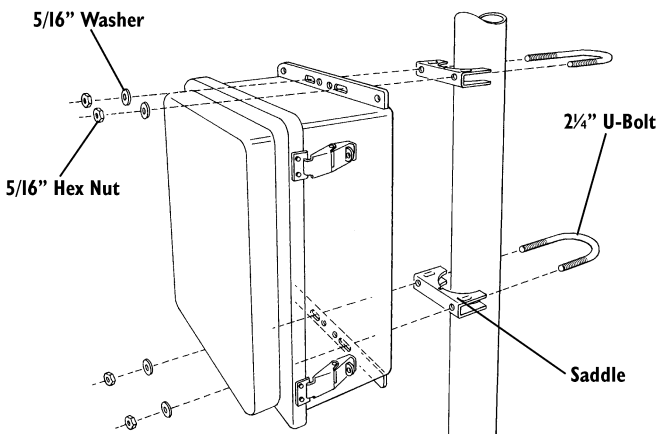
Attach the shelter to the mounting surface in the desired location using the large screws and 1/4" flat washers as shown below. Use a pencil or a center-punch to mark the location of the pilot holes.



Mounting on a Wall or Post

### Mounting On a Pipe

Mount the CSS onto a pipe, outside diameter between 1 1/2" and 2 3/8" (38mm and 60mm), using the 2 1/4" U-bolt, saddles, 5/16" washers, and 5/16" hex nuts as shown below. For a smaller pipe, outside diameter between 3/4" and 1 1/4" (19 mm and 31mm), use 1 1/2" U-Bolts (not provided).



Mounting on a Pipe

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## Installing Components into the CSS

The sections below show where and how the various system components are installed into the CSS.

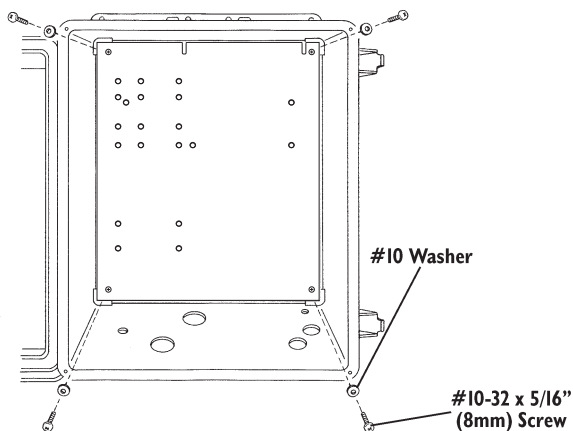
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Note: You will need to consult the various installation manuals supplied with each system component for instructions on wiring your installation.

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### Installing the Back Panel

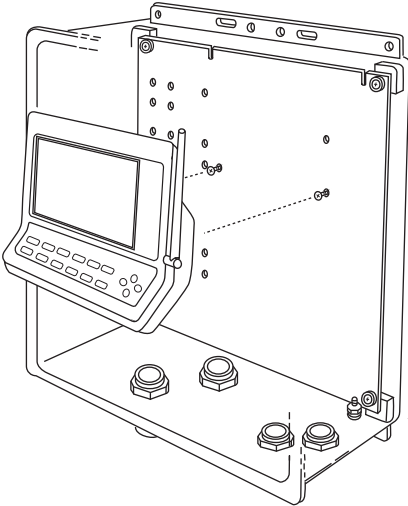
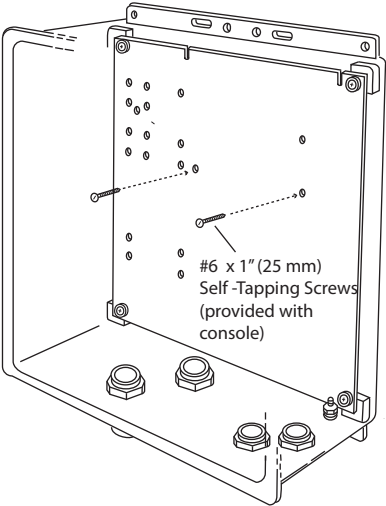
Use a #10-32 x 5/16" (8 mm) screw and #10 washer to attach the back panel to the shelter.



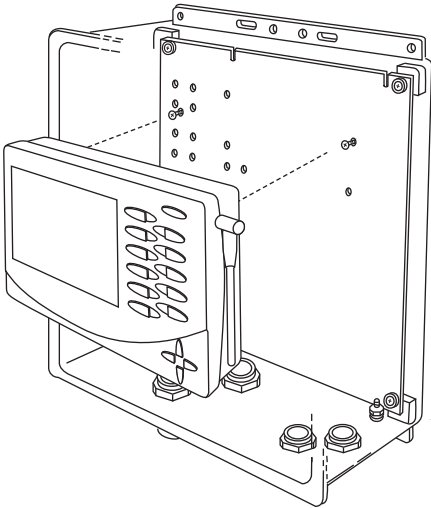
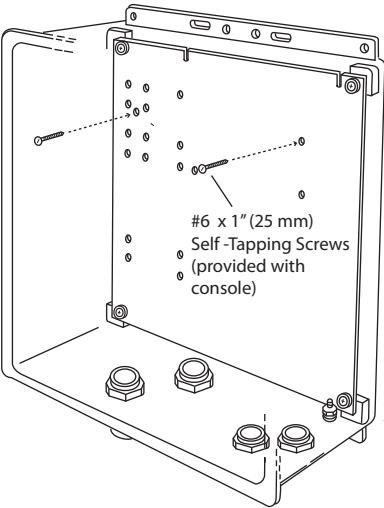
INSTALLING THE BACK PANEL

# Installing a Console

Install a console in the CSS using the #6 x 1" (25 mm) self-tapping screws supplied in the console's hardware kit as shown below.



Installing a Vantage Vue Console

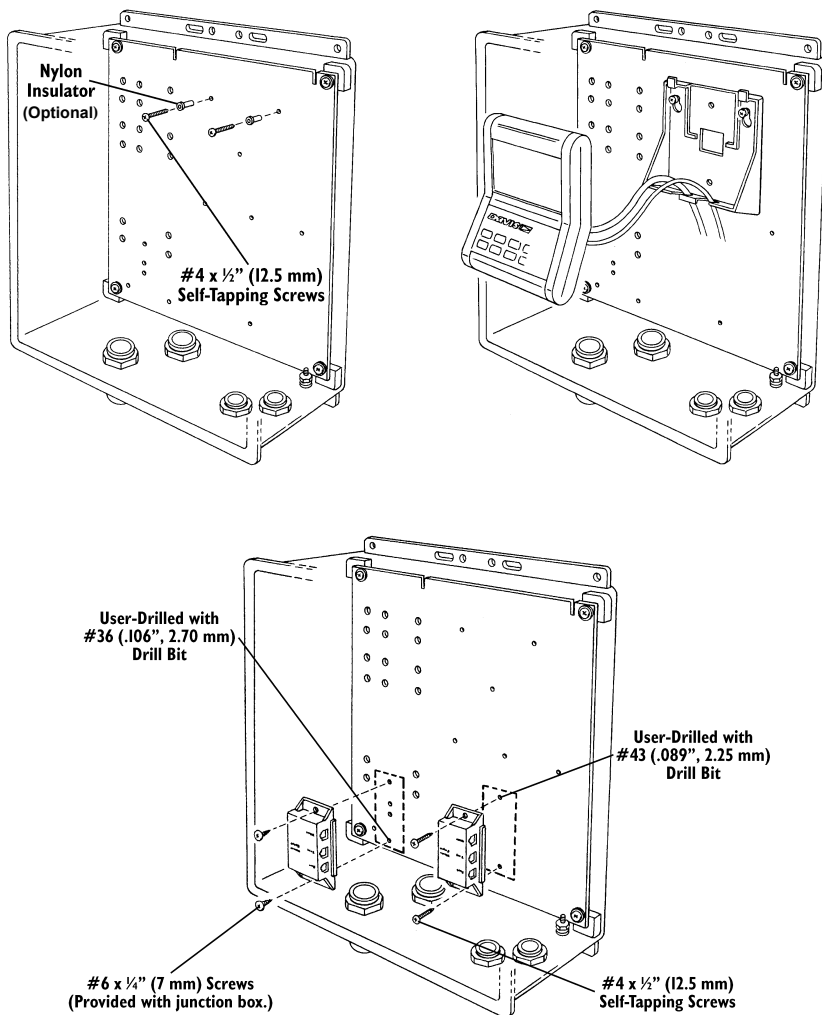


Installing a Vantage Pro2 Console



## Installing a Weather Wizard III Console and Small Junction Box

You may install a Weather Wizard III console and small junction box in the CSS, as shown below, with the nylon insulators and #4 x 1/2" (12.5 mm) self-tapping screws supplied with the hardware kit. You may install the small junction box into the CSS, using double-stick pads, double-sided tape, or the screws shown below. If using the screws, you will have to drill a hole in one of the locations shown below using the indicated drill bit. Use a pencil or a center-punch to mark the location of the hole before drilling.

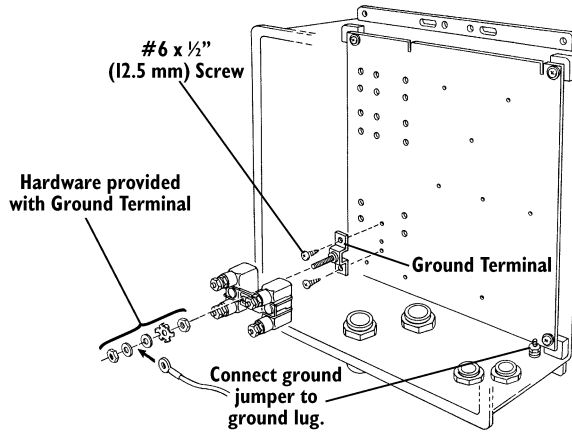


Installing a Weather Wizard III Console and Small Junction Box

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## Installing Surge Protectors

To install 2- or 4-wire Surge Protectors in the CSS, you will need to obtain a ground terminal (available free from Davis). The ground terminal includes all hardware necessary to install the surge protector as shown below. Connect the ground jumper to the surge protectors and the ground lug. Consult the surge protector manual for instructions on wiring the surge protectors.



Installing Surge Protector

## Securing Cables

Secure cable to the inside of the shelter using self-adhesive cable tie mounts and cable ties. When finished installing components, tighten the compression nuts on the strain reliefs to secure the cables and create a weather-resistant seal. If there is a large air space around the cables, fill the space by wrapping the cables in electrical tape and/or sealing with silicone caulking.



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Product Number: 7724  
Davis Instruments Part Number: 7395.113  
Complete System Shelter  
Rev. D Manual (January 13, 2010)

This product complies with the essential protection requirements of the EC EMC Directive 2004/108/EC.

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Vantage Pro2 and Vantage Vue are trademarks of Davis Instruments Corp.



3465 Diablo Avenue, Hayward, CA 94545-2778 U.S.A.

510-732-9229 • Fax: 510-732-9188

E-mail: [info@davisnet.com](mailto:info@davisnet.com) • [www.davisnet.com](http://www.davisnet.com)