

# MultiSat Control Panel (MCP) Installation Instructions



These instructions explain how to connect the MCP to a TracVision M5 or M7 system (switchplate configuration). Complete instructions on how to use the MCP are provided in the TracVision M5/M7 User's Guide.

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## IMPORTANT!

These instructions assume that you are adding the MCP to a TracVision M5/M7 system that is already installed on the vessel. If the antenna is not yet installed, follow the detailed instructions in the TracVision M5 or M7 Installation Guide to install the antenna system. Then follow these instructions to connect the MCP.

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## Installation Steps

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## Tools Required

This procedure requires the following tools and materials:

- Flat-head and Phillips screwdrivers
  - Adhesive tape
  - 7/16" open-end wrench
  - Scriber or pencil
  - Electric drill
  - Power cable for connecting power to the MCP from the TracVision switchplate:
  - #29 and 3/32" (2.25 mm) drill bits
  - Light hammer and center punch
- | Cable Length       | Use Cable Gauge             |
|--------------------|-----------------------------|
| <40 ft (12 m)      | 14AWG (2.5mm <sup>2</sup> ) |
| 40-70 ft (12-21 m) | 12AWG (4mm <sup>2</sup> )   |

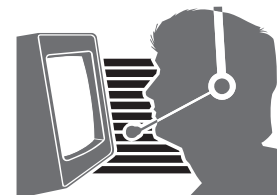
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## Technical Support

If you need technical assistance, please contact KVH Technical Support:

**North/South America, Australia:**  
Phone: +1 401 847-3327  
E-mail: techs@kvh.com

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## Step 1 - Plan the Installation

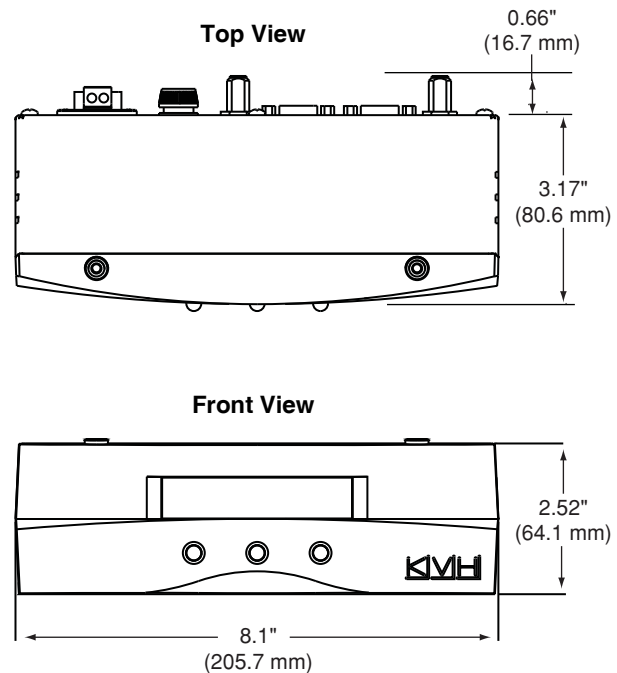
Before you begin, consider the following installation guidelines.

- Select an MCP mounting location in a dry, well-ventilated area belowdecks away from any heat sources or salt spray.
- Be sure the MCP's front panel will be easily accessible to the user.
- Be sure to leave enough room at the MCP's rear panel for connecting the cables and maintaining a service loop (see Figure 1 for MCP dimensions).
- Since the supplied main control cable and RF control cable are 25 ft (7.6 m) long, the MCP must be located within 25 ft (7.6 m) of the switchplate. Later, you will connect the MCP to the switchplate using these special cables.

**NOTE:** The main control cable connects to the front of the switchplate; the RF control cable connects to the back of the switchplate.

- The kitpack contains parts for mounting the MCP either to a horizontal surface (using Velcro) or to a vertical surface (using the supplied flush mount bracket). The MCP mounting template on page 7 shows the size of the hole required for a flush-mount installation.

Figure 1: MCP Dimensions



## Step 2 - Prepare the Mounting Site (Flush Mount only)

*NOTE: Skip this step if you plan to mount the MCP to a horizontal surface instead; proceed to Step 3.*

- Attach the supplied flush mount bracket to the MCP now, before you connect any cables. Simply slide the bracket onto the MCP from behind and position the front edge of the bracket over the seam line between the front bezel and the chassis. Secure the bracket in place using two #6-32 screws and washers (see Figure 2).
- Using the MCP flush mounting template provided on page 7, mark and cut out a hole in the mounting surface to accommodate the flush mount bracket (see Figure 3).
- Using the same template, mark the locations for the four MCP mounting holes.
- Using a #29 drill bit, drill a 0.136" (3.45 mm) hole at the four mounting hole locations. Later, you will mount the MCP using four #8 screws.

Figure 2: MCP Flush Mount Bracket

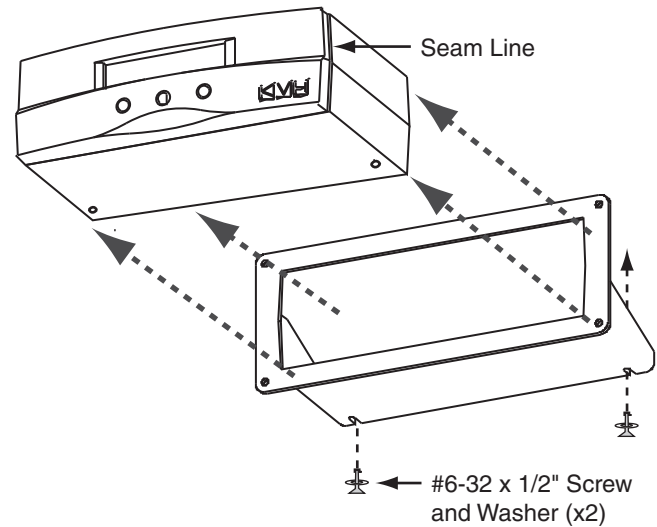
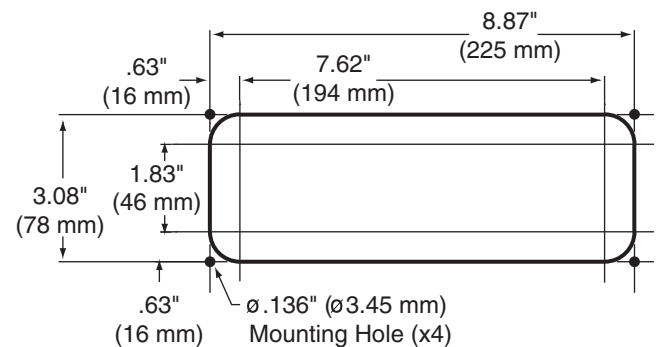



Figure 3: MCP Mounting Holes Layout



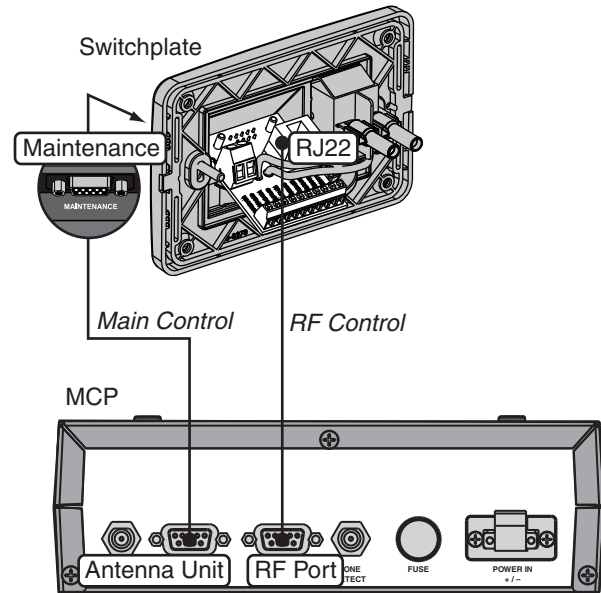
### Step 3 - Connect the Control Cables

- a. Before you begin, disconnect vessel power.

|  |                |
|--|----------------|
|                             | <b>CAUTION</b> |
| For your own safety, disconnect vessel power and make sure the circuit is dead before you connect any wires. |                |

- b. Connect the main control cable (DB9-male to DB9-male) from the “Maintenance” port on the front of the switchplate to the “Antenna Unit” connector on the MCP (see Figure 4).
- c. Connect the RF control cable (RJ22 to DB9-female) from the RJ22 jack on the back of the switchplate to the “RF Port” connector on the MCP.

Figure 4: MCP Control Cables Wiring



### Step 4 - Connect Power

- a. Route a set of power wires from the switchplate’s power output terminals to the MCP (see Figure 5). (For cable specifications, see “Tools Required” on page 1.) Tighten the terminal screws on the switchplate to secure all wires in place.

*NOTE: You should now have two wires connected to each power output terminal on the switchplate: one set of wires to power the antenna and one set to power the MCP.*

- b. Connect the power wires to the plastic power plug supplied in the kitpack (see Figure 6).
- c. Plug the MCP power plug into the “Power In” jack on the MCP. Secure in place with the retaining screws.

Figure 5: MCP Power Wiring

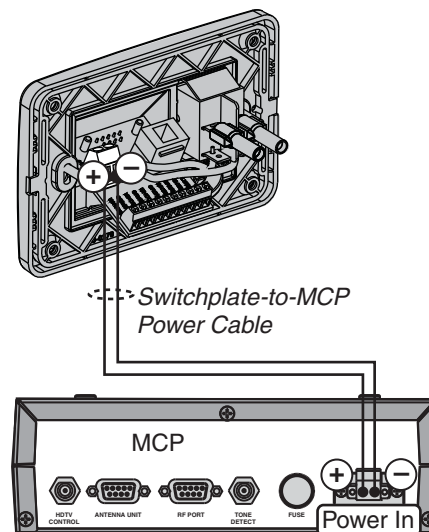
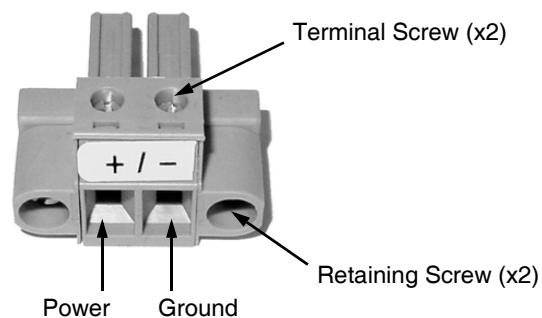


Figure 6: MCP Power Plug



## Step 5 - Mount the MCP

Follow the steps below for your chosen mounting option.

### Velcro Mount Option

- Clean and dry the bottom of the MCP and the mounting surface (use a mild detergent).
- Peel the backing from the two supplied Velcro fabric squares and stick them to the bottom of the MCP (see Figure 7).
- Position the two Velcro hook disks onto the mounting surface. Drill screw holes for the disks and secure in place with #4-24 screws.
- Press the MCP firmly into place so that the fabric's loop material engages the hook disks.

Figure 7: Velcro Mounting the MCP to a Horizontal Surface

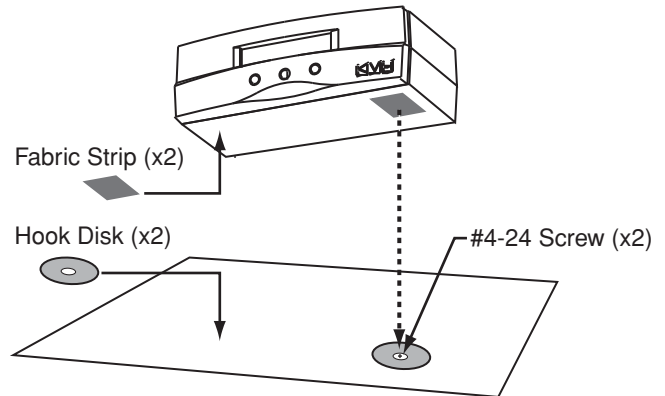
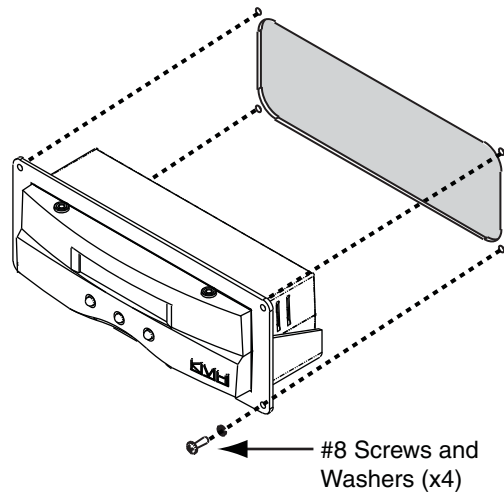


Figure 8: Flush Mounting the MCP to a Vertical Surface



### Flush Mount Option

- Make sure the flush mount bracket is attached to the MCP. If it is not attached, disconnect all of the cables from the MCP, attach the bracket as explained in Step 2 on page 3, then reconnect the cables.
- Insert the MCP and bracket assembly into the mounting hole and secure in place with four #8 screws and washers (see Figure 8).



# MCP Flush Mounting Template

