

CV41 Vehicle Mounting Kit

Reference Guide

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CV41 Vehicle Mounting Kit Reference Guide

The CV41 Vehicle Mount Computer seamlessly integrates with any forklift for your warehouse operations. Use this reference guide to learn how to mount and power your computer.



Mounting and connecting power to the computer should be performed by trained service personnel only. Additionally, using hardware that is not approved by Intermec may void the warranty of the computer.

This reference guide explains how to:

- mount the smart dock to a vehicle.
- install the 10-60 VDC power cable.
- connect the AC/DC power supply.
- attach the CV41 to the smart dock.

For information on how to connect the 6-96 DC/DC converter kit, use the *Universal Vehicle Power Supply Instructions* that ship in the box with the kit.

About the Mounting Kits

Mount the smart dock to a vehicle with an Intermec mounting kit to restrain and isolate the computer from shocks and vibrations that may potentially damage it. After you mount the smart dock, attach the CV41 to it.

For more information on available mounting kit types or sizes, contact your local Intermec representative.

Safety Information

Before you install the mounting kit on a forklift, make sure you select a mounting location where:

- the computer does not obstruct the driver's vision or safe operation of the vehicle.
- the driver can easily access the comptuer while seated.
- the computer is protected from rain, inclement weather, and high concentrations of dust and debris.

What You Need

Use the following tools and parts to mount the smart dock to a vehicle.

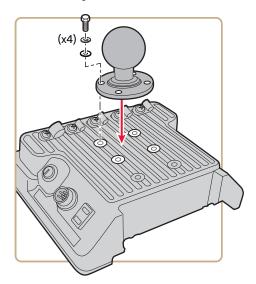
- Phillips screwdriver
- Torque wrench
- Mounting hardware (if attaching a flat base to the vehicle)

Mount the Smart Dock to a Vehicle

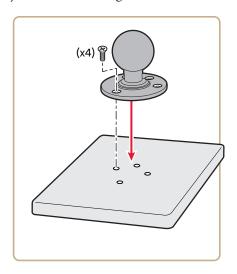
After you purchase the appropriate mounting hardware, secure the smart dock to a vehicle with a mounting kit.

To mount the smart dock to a vehicle

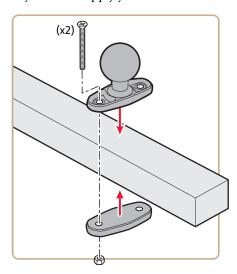
- **1** Select a mounting location.
- **2** Attach a flat base to the smart dock using the four screws and washers provided.



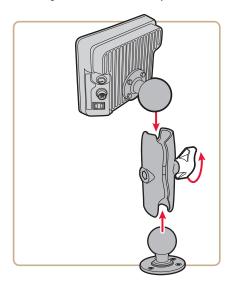
3 If you are attaching a flat base to the vehicle, drill and tap holes to a surface on the vehicle and secure the flat base using your own mounting hardware.



If you are attaching a mounting clamp base to the vehicle, attach the upper and lower clamp to a beam and secure the clamp base using the screws and nuts provided to a torque value of $0.95 - 1.10 \, \text{N/m}$ (17-20 in/lb). For large beams, you may need to supply your own hardware.



4 Place the pivot arm over the two bases and tighten the knob on the pivot arm to securely mount the smart dock.



About the 10-60 VDC Power Cable

The 10-60 VDC power cable is included with your smart dock and allows you to make a powered connection from the smart dock directly to the vehicle.



Note: If you are connecting the 6-96 DC/DC converter kit, use the *Universal Power Supply Instructions* to learn how to connect it to your forklift.

Before you connect the power cable, determine which startup behavior you want to use.

CV41 Startup Behavior Options

Startup Behavior	Description
Manual	The computer is turned on and off manually using the Power button on the computer and smart dock.
Ignition Control	After the ignition is turned on, the computer turns on. The computer goes into Suspend mode when you turn off the ignition to your vehicle.
Auto-On	After vehicle power is applied or when the Power switch on the smart dock is turned on, the computer turns on.

Safety Information

Before you install the 10-60 VDC power cable, make sure that you:

- route cables the shortest way possible so that it does not interfere with the safe operation and maintenance of the vehicle, while removing any excess cable that is left over.
- use cable clamps or wire-ties to secure the cable at least every 46 cm (18 in).
- protect the cable from physical damage or surfaces that may exceed 105 °C (221 °F).
- do not expose any cables to chemicals or oils that may cause the wiring insulation to deteriorate.

What You Need

Use the following parts and tools to install the power cable:

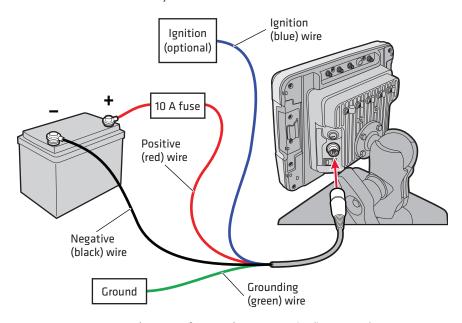
- Common hand tools, such as a wrench
- Cable clamps or wire-ties
- Wire crimping and stripping tools
- 10 A maximum time-delay (slow-blow) high-interrupting rated fuse. For North America, use a UL listed fuse.
- Electric drill and drill bits

Install the 10-60 VDC Power Cable

Before you install the power cable, make sure that the CV41 is not attached to the smart dock, and the power switch on the dock is in the off position.

To install the 10-60 VDC power cable

1 Connect the negative (black) wire to the negative terminal on the battery.



- **2** Attach a 10 A fuse to the positive (red) wire and connect it to the positive terminal on the battery.
- **3** For a manual or Auto-On connection, leave the ignition (blue) wire disconnected, and cut the wire as close to the cable jacket as possible to avoid any short circuits.
 - For an ignition controlled connection, connect the ignition (blue) wire to the ignition circuitry of the forklift.
- **4** Secure the grounding (green) wire to the vehicle chassis of the forklift for electrostatic discharge (ESD) protection. If the vehicle chassis is not a suitable ground, connect the wire to the negative terminal of the power source.
- **5** Attach the CV41 to the smart dock. For help, see "Attach the CV41 to the Smart Dock" on page 10.

- **6** If you have a CV41 running Windows Embedded Standard:
 - a Tap Start > Control Panel > AutoOn.
 - **b** Select a startup behavior.
 - c Tap OK.

If you have a CV41 running Windows CE:

- **a** Tap **Start** > **Control Panel** > the **Misc** tab > **AutoOn**.
- **b** Select a startup behavior.
- c Tap OK.

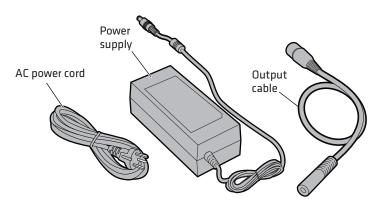
Connect the AC/DC Power Supply

Use the AC/DC power supply if you are not mounting the computer to a forklift. The power supply kit comes with a North American AC power cord. For other countries, you must supply your own power cord.

When you connect this power supply, make sure that you are connected to a properly grounded source with a maximum of 15 A overcurrent protection (10 A for 230 V circuits).



Note: The AC/DC power supply and cables are intended for use in 25 °C (77 °F) maximum ambient temperature environment.



CV41 AC/DC Power Supply Parts

To connect the AC/DC power supply

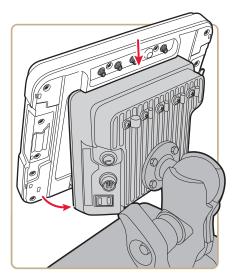
- 1 Connect the one end of the AC power cord to the power supply and the other end to wall plug.
- **2** Connect one end of the output cable to the power supply and the other end to the CV41.
- **3** Fasten the connector by twisting it clockwise.

Attach the CV41 to the Smart Dock

After you mount the smart dock and supply power, you can attach the CV41 and turn on the computer.

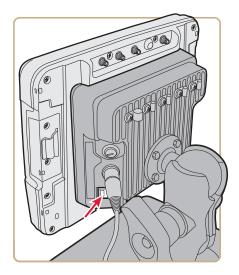
To attach the CV41 to the smart dock

- **1** Make sure that the computer is turned off.
- **2** Locate the protruding lip on the rear of the computer.
- **3** Place the lip of the computer over the top of the dock.

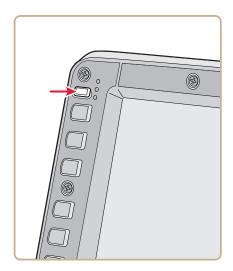


- **4** Slide the computer from side-to-side until it is seated into the smart dock.
- **5** Push the computer down onto the smart dock until you hear a click.
- **6** If necessary, adjust the viewing angle by adjusting the pivot arm.

Press the **Power** button on the smart dock forward (towards the CV41) to turn on the dock.



Press the **Power** button on the CV41 to turn it on.





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