Intermec

Installation Instructions

Trakker Antares® 2475 Vehicle-Mount Terminal

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Preparing to Install the Terminal

The Trakker Antares® 2475 vehicle-mount terminal is designed to be mounted on a vertical or horizontal surface on a vehicle such as a forklift truck. You can also use the rail mount accessory to mount the terminal to a rail on the vehicle. You use a DC power supply that is connected to the vehicle's battery to power the 2475.

You can also mount the 2475 in an office location to program, develop, and test applications. You use an external power supply and adapter cable to power the 2475.

Make sure you have the necessary equipment to install the 2475 and connect it to your network. You need the following equipment that ships with the terminal:

- 2475 terminal
- Antenna
- Mounting bracket and hardware
- 2475 DC power supply cable

You may also need the following equipment (sold and ordered separately) to install the terminal:

- DC power supply kit (10 to 36 VDC kit or 15 to 96 VDC kit)
- External power supply and power supply adapter cable
- Rail mount accessory and hardware
- Scanner and scanner cables
- RS-232 serial communications cable

Before you install the terminal, you should follow the guidelines for mounting the terminal.

Guidelines for Mounting the Terminal

Before you install the mounting bracket, read these guidelines:

- Mount the 2475 where the operator can easily see the screen and use the keypad. If possible, you should mount the terminal in a location that avoids glare from overhead lighting and sunlight.
- Route all cables to minimize exposure to damage. Make sure the cables will not be pinched or rubbed by any moving parts on the vehicle. In some applications, you may need to sheath the cable to prevent it from being pinched.
- Secure the power cables at least every 45 cm (18 in) throughout the length of the cable run—use adjustable clamps or tie-wraps to secure the cables.

Required Tools and Materials

You need the tools and materials listed next to install your 2475. These tools and materials are not supplied with the terminal.

- Common hand tools and mounting hardware
- Electric drill and drill bits
- Wire crimping and stripping tool
- Heatshrink tubing
- Heat gun

Installing the Terminal and Connecting Devices

The steps to install your 2475 depend on the mounting location and the accessories you want to attach to the terminal.

To install the 2475

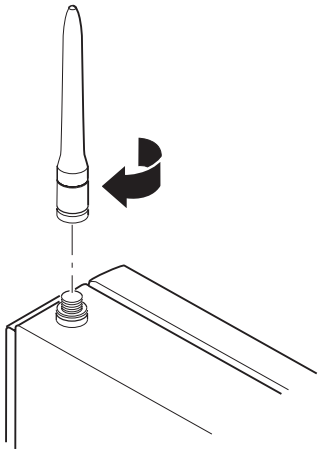
1. Attach the antenna to the 2475.
2. Install the terminal on a vehicle or on a surface in an office environment.
3. Install and connect the DC power supply or the external power supply (office location only).
4. Attach a scanner.
5. Connect to serial devices.
6. Fully charge the backup battery.

These procedures are described in detail in the next sections.

Attaching the Antenna

The antenna is shipped with the terminal. Remove the antenna from the shipping box and attach the antenna as shown.

You can also use an Intermec-approved accessory antenna to improve RF communications. For more information, see your Intermec sales representative.



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CAUTION

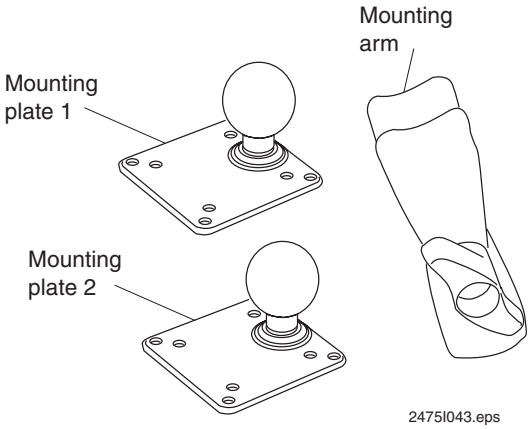
Caution
Make sure all components with antennas are at least 0.3 m (1 ft) apart when power is applied. Failure to comply could result in equipment damage.

Conseil
Assurez-vous que la distance entre tous les éléments avec antennes soit d'au moins 0.3 mètres (un pied) avant de faire la connexion avec l'alimentation électrique, faute de quoi vous risquez d'endommager votre installation.

Installing the Terminal

Before you install the terminal, read the "Guidelines for Mounting the Terminal" on page 5. You can use the mounting bracket to mount the 2475 on a vertical or horizontal surface.

The mounting bracket ships in three separate pieces: two identical mounting plates and one mounting arm.



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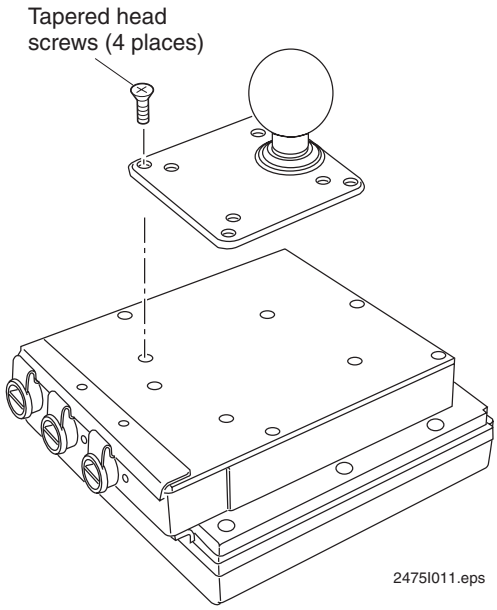
To install the mounting bracket, you must complete these steps:

1. Attach one of the mounting plates to the 2475.
2. Install the other mounting plate and the mounting arm on a mounting surface.
3. Attach the 2475 to the mounting arm.

Each of these steps is described in the following procedures. You can also use the rail mount accessory to mount the terminal to a rail on a vehicle. For help, see "Using the Rail Mount" on page 10.

To attach a mounting plate to the 2475

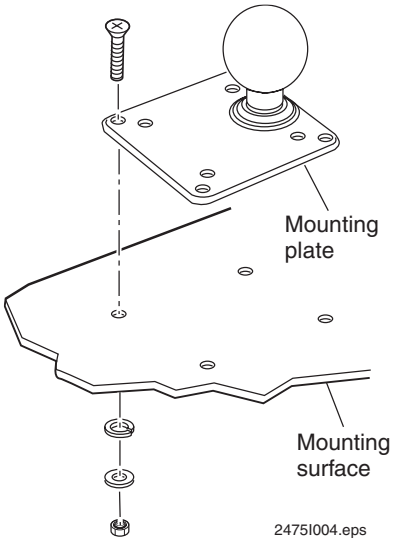
1. Position the mounting plate so that the holes on the mounting plate align with the holes on the back plate of the terminal. Make sure that the mounting plate ball is oriented toward the top of the 2475 as shown.



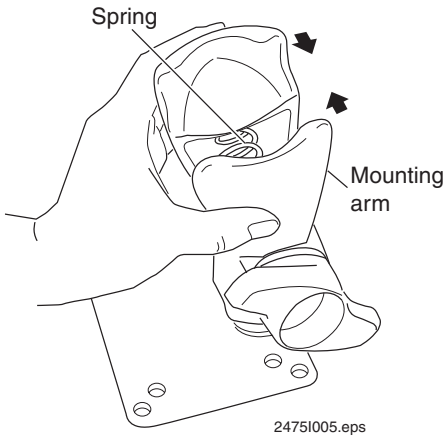
2. Insert the four tapered head screws to attach the mounting plate to the terminal. Tighten the tapered head screws with a Phillips #3 screwdriver.

To install the other mounting plate and the mounting arm on the mounting surface

1. Using the mounting plate as a template, mark and drill the holes in the vertical or horizontal mounting surface.



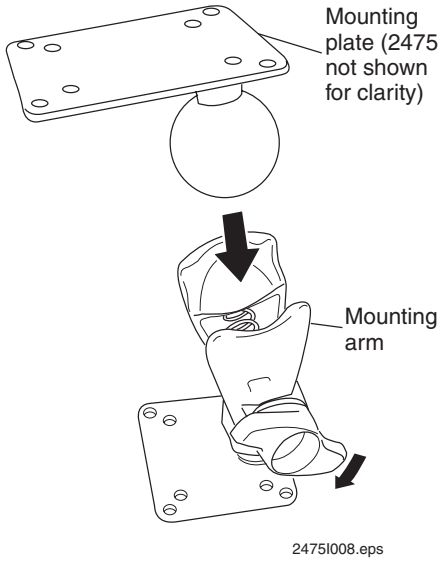
2. Attach the mounting plate using appropriate hardware (not provided) through each of the holes in the mounting plate and the mounting surface.
3. Attach the mounting arm to the mounting plate on the vehicle.
   a. Squeeze the top of the mounting arm. The top of the mounting arm contains the spring.



   b. Position the bottom of the mounting arm over the ball on the mounting plate, and release the mounting arm.

To attach the 2475 to the mounting arm

1. Attach the terminal and mounting plate assembly to the mounting arm, and adjust the terminal to the best-possible viewing angle for the vehicle operator.
2. Tighten the knob to secure the terminal to the mounting arm.



3. Periodically inspect the knob on the mounting arm to make sure it is still tight. Check the mounting bracket assembly for any signs of fatigue, such as cracking, which may develop over extended use in extreme (vibration) environments. Replace any damaged hardware immediately to ensure continued, safe operation.

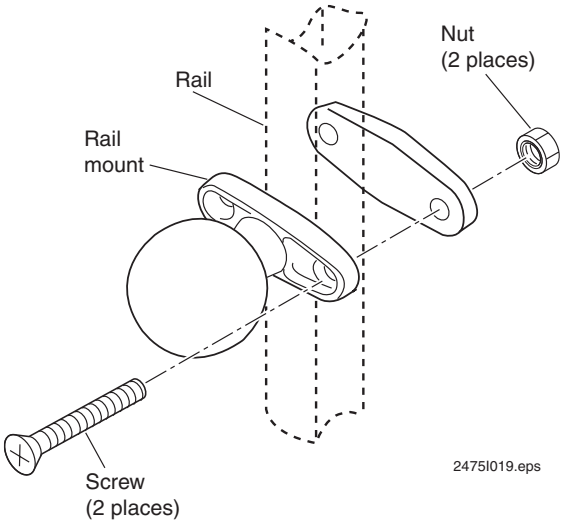
Using the Rail Mount

You can use the rail mount accessory (Part No. 072363) to attach the 2475 to a square or rectangular rail on a vehicle.

Note: The rail mount can be installed on a rail that is up to 5 x 3.8 cm (2 x 1.5 in). Do **not** install the rail mount on a rail that is larger than 5 x 3.8 cm (2 x 1.5 in).

To install the mounting bracket on the vehicle using the rail mount

1. Attach the mounting plate to the 2475. For help, see the procedure "To attach a mounting plate to the 2475" on page 8.
2. Install the rail mount on a rail on the vehicle as shown.



3. Attach the mounting arm to the rail mount on the vehicle.
   a. Squeeze the top of the mounting arm. The top of the mounting arm contains the spring.
   b. Position the bottom of the mounting arm over the ball on the rail mount, and release the mounting arm.
4. Attach the 2475 to the mounting arm. For help, see the procedure "To attach the 2475 to the mounting arm" on page 10.

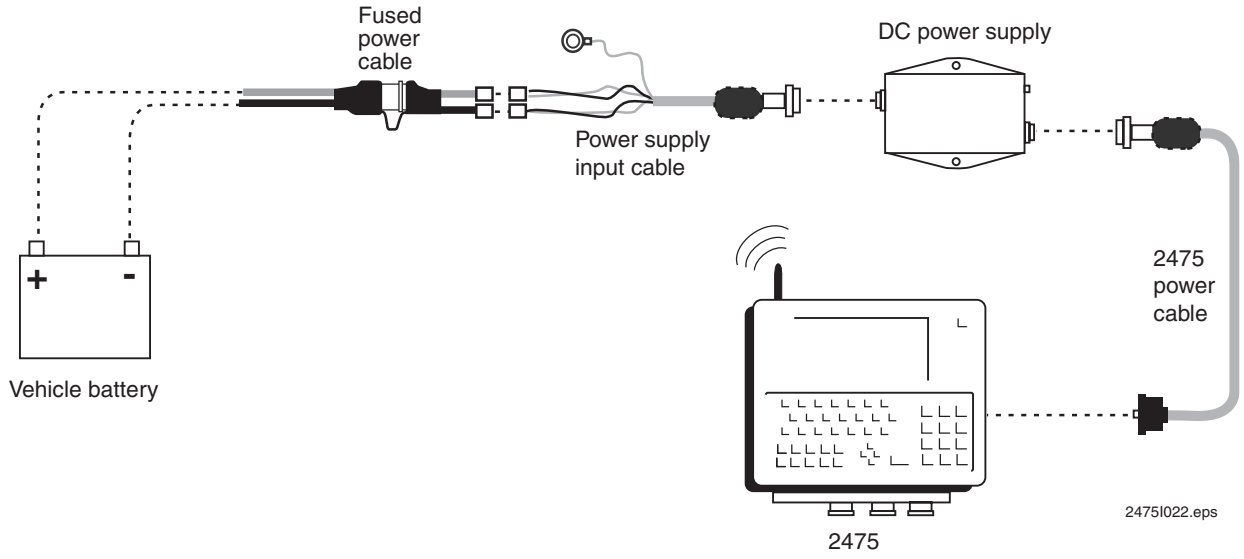
Installing and Connecting the DC Power Supply

You need to install the DC power supply and connect the power supply to the vehicle battery and to the 2475. You need one of these DC power supply kits:

- Low-input voltage kit (10 to 36 VDC) (Part No. 067698)
- High-input voltage kit (15 to 96 VDC) (Part No. 067699)

The next illustration shows how the DC power supply and cables are installed with your vehicle battery and the 2475.

Installing the DC Power Supply



To install and connect the DC power supply

1. Disconnect the vehicle battery cables.
2. (Optional) Wire or add a remote disconnect for the DC power supply on combustion-powered vehicles that have smaller capacity batteries.
3. Connect the fused power cable to the vehicle battery or terminal block.
4. Mount the DC power supply.
5. Install terminators on the power supply input cable.
6. Connect the power supply input cable to the power supply.
7. Attach the power supply input cable to the fused power cable.
8. Attach the 2475 power cable to the power supply and to the terminal.
9. Reconnect the vehicle battery cables.

For detailed instructions on installing the DC power supply, see the *Trakker Antares 2455/2475 DC Power Supply Installation Instructions* (Part No. 067362).

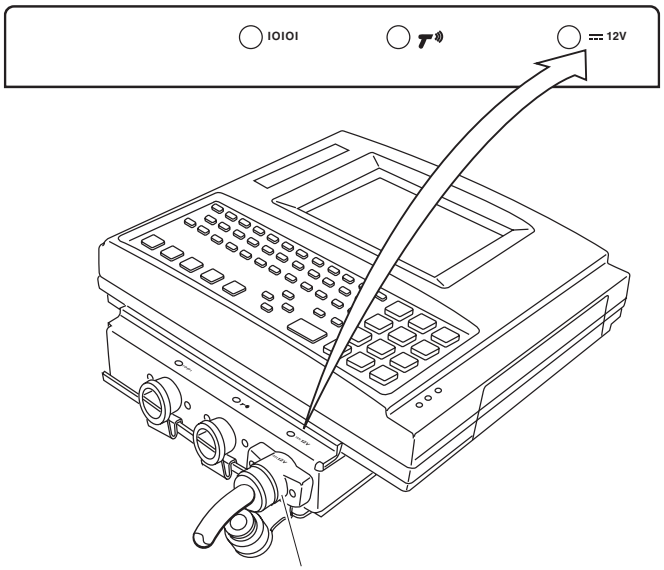
Connecting the External Power Supply

Use the external power supply (Part No. 065236) and the external power supply adapter cable (Part No. 066842) to power the 2475 in an office location.

To install and connect the external power supply

1. Unplug the rubber plug from the Power Supply port on the terminal.
2. Insert the external power supply adapter cable connector straight into the Power Supply port on the terminal. The icon on the power supply adapter cable connector should align with the same icon on the 2475. See the next illustration.

Note: Firmly push the external power supply adapter cable connector straight into the Power Supply port. The Power Supply port is a keyed connection. If the connector doesn't fit, do not force it. Do not wiggle or twist the scanner cable connector—you may damage the connector.



3. Use a 3/16 slotted (flat-head) screwdriver to tighten the two screws in the external power supply adapter cable connector and secure the cable to the 2475.
4. Attach the other end of the external power supply adapter cable to the external power supply. Connect the power cord from the external power supply to a powered electrical outlet.

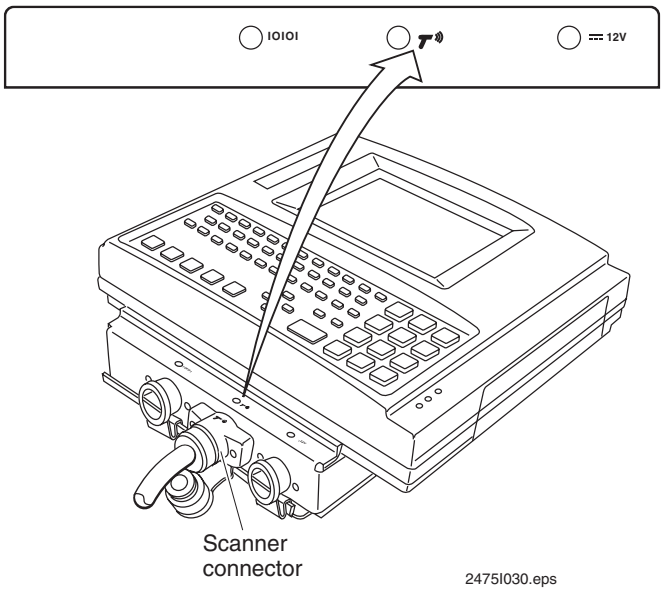
Attaching a Scanner

You can attach a scanner to scan and input bar code data.

To connect a scanner to the Scanner port

1. Unplug the rubber plug from the Scanner port on the terminal.
2. Insert the scanner cable connector straight into the Scanner port on the terminal. The icon on the scanner cable connector should align with the same icon on the 2475. See the next illustration.

Note: Firmly push the scanner cable connector straight into the Scanner port. The Scanner port is a keyed connection. If the connector doesn't fit, do not force it. Do not wiggle or twist the scanner cable connector—you may damage the connector.



3. Use a 3/16 slotted (flat-head) screwdriver to tighten the two screws in the scanner cable connector and secure the cable to the 2475.
4. Attach the other end of the scanner cable to your scanner.
5. Make sure the cable will not be pinched or rubbed by any moving parts on the vehicle.

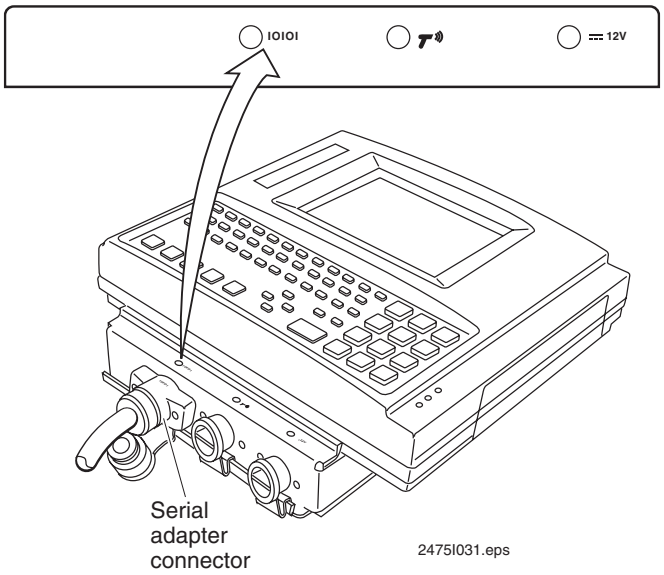
Connecting to Serial Devices

You can use the terminal's serial port (COM1) to transfer data between the terminal and a serial device, such as a host computer or printer, using RS-232 communications.

To connect a serial device to COM1

1. Unplug the rubber plug from the COM1 port on the terminal.
2. Insert the serial adapter cable connector straight into the COM1 port on the terminal. The icon on the serial adapter cable connector should align with the same icon on the 2475. See the next illustration.

Note: Firmly push the RS-232 adapter cable connector straight into the COM1 port. The COM1 port is a keyed connection. If the connector doesn't fit, do not force it. Do not wiggle or twist the RS-232 adapter cable connector—you may damage the connector.



3. Use a 3/16 slotted (flat-head) screwdriver to tighten the two screws in the serial adapter cable connector and secure the cable to the 2475.
4. Attach the other end of the serial adapter cable to the 9-pin RS-232 connector on your serial device.Make sure the cable will not be pinched or rubbed by any moving parts on the vehicle.

The default serial port parameters for the 2475 are: Protocol, Configurable; Baud Rate, 19200; Parity, Even; Data Bits, 7; Stop Bits, 1; and Flow Control, None. You may need to change the serial port parameters on the 2475 or on your serial device to use serial communications.

Charging the Backup Battery

The backup battery is shipped inside the terminal, but it may not be fully charged. You must fully charge the backup battery after you install the terminal.

Note: The backup battery charger operates from 0°C to 40°C (32°F to 104°F). If you continuously use the terminal in an environment that is outside this temperature range, the backup battery will not charge. You may need to protect the terminal and create an environment that is within the charging temperature range for a few hours every week to keep the backup battery charged.

To charge the backup battery

1. Make sure the 2475 is connected to either the vehicle battery with the DC power supply or a powered electrical outlet with the external power supply. For help, see “Installing and Connecting the DC Power Supply” on page 11 or “Connecting the External Power Supply” on page 13.
2. Let the power supply charge the backup battery for 14 hours to fully charge the backup battery.

You can operate the terminal while the backup battery is charging.

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