TC7X

Vehicle Cradle

Installation Guide
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**Warranty**

For the complete Zebra hardware product warranty statement, go to: http://www.zebra.com/warranty.
Introduction
This guide describes how to install and use a CRD-TC7X-DCVH-01 Vehicle Cradle with a TC75 touch computer.

Install the cradle into a vehicle. Once installed, the cradle:
• holds the TC75 securely in place
• provides power for operating the TC75 when connected to the optional USB I/O Hub.

Requirements
For mounting on a flat surface:
• four M3 screws, flat washers and four nuts (included)
• four wall anchors (not included).

For mounting onto a RAM Mount®:
• RAM Mount (sold separately)
• Two M4 screws, lock washers and flat washers (included).
Parts

Release Latch

Power Input Cable

Mounting Holes

FRONT VIEW

REAR VIEW
Mounting the Cradle to a Flat Surface

1. Select a mounting location for the cradle. It should be flat, and must provide adequate support for the cradle.

2. Prepare the mounting surface, using the mounting template below, with wall anchors that support the weight of the cradle and device. The anchors should accept four M3 screws.
3. Align the mounting holes on the mounting plate with the holes on the vehicle cradle.
4. Fasten the mounting plate using four M3 screws (provided).

![CAUTION] Do not install a Vehicle Cradle on or near an air bag cover plate or within an aerobic zone. Also, do not install it in a location that affects vehicle safety or driveability.

5. Align the mounting plate screws with the screw holes in the surface.

6. Tighten the screw to secure the cradle to the mounting plate.
Mounting the Cradle to a RAM Mount

To mount the cradle onto a RAM Mount:

1. Follow the instructions that are provided with the RAM Mount for RAM Mount mounting instructions.

2. Align the vehicle cradle with the RAM Mount ball base.

3. Secure the vehicle cradle to the ball base using M4 screws, lock washers and flat washers (provided).

**CAUTION** Only mount the Vehicle Cradle in a vertical position. Never mount the vehicle cradle on the side or upside down or on a wall that can be subject to impact or collision of greater than 10Gs, in accordance with SAE J1455 Section 4.10.3.5.

**CAUTION** Do not install a Vehicle Cradle on or near an air bag cover plate or within an aerobic zone. Also, do not install it in a location that affects vehicle safety or driveability.
4. Secure the RAM Mount to the vehicle depending upon the type of RAM Mount. See instructions provided with RAM Mount.

5. Tighten the screw to secure the cradle to the mounting plate.

6. Adjust RAM Mount according to RAM Mount instructions.

**USB I/O Hub Power**

To connect the USB I/O Hub to the vehicle cradle:

1. Connect the Power Input Connector to the USB I/O Hub Power Output connector.

2. Tighten thumb screws.
TC75 Insertion and Removal
To ensure the TC75 was inserted correctly, listen for the audible click that signifies that the TC75 locking mechanism was enabled and the TC75 was locked into place.

**CAUTION** Ensure that the TC75 is fully inserted into the cradle. Lack of proper insertion may result in property damage or personal injury. Zebra Technologies Corporation is not responsible for any loss resulting from the use of the products while driving.

To remove the TC75 from the cradle, press the release latch, grasp the TC75 and lift out of the vehicle cradle.

**TC75 Battery Charging**

Ensure the vehicle cradle is connected to a power source. See *USB I/O Hub Power on page 9*.

Insert the TC75 into the cradle. The TC75 starts to charge through the cradle as soon as it is inserted. This does not deplete the vehicle battery significantly. The battery charges in approximately four hours. See *LED Indicators on page 12* for all charging indications.

**Charging Note**

The Vehicle Cradle operating temperature is -40°C to +85°C. When in the cradle, the TC75 will only charge when its temperature is between 0°C to +40°C.
LED Indicators

<table>
<thead>
<tr>
<th>LED</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC75 Battery Charging (LED is on TC75)</td>
<td></td>
</tr>
<tr>
<td>Off</td>
<td>TC75 is not in cradle, TC75 is not placed correctly, or cradle is not powered.</td>
</tr>
<tr>
<td>Fast Blinking Red (twice a second)</td>
<td>Error in charging (not within battery charging temperature or charging for too long without completion). Check placement of TC75.</td>
</tr>
<tr>
<td>Slow Blinking Amber (once every two seconds)</td>
<td>TC75 is charging.</td>
</tr>
<tr>
<td>Solid Green</td>
<td>Charging is complete.</td>
</tr>
</tbody>
</table>

Care and Cleaning

Avoid getting oils, grease or gasoline on the cradle, and do not let debris gather in the bottom of the cradle slot. When necessary, clean the cradle with a mild cleaner. If you are not sure whether or not to use a particular cleaner, contact Zebra for advice.
## Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>TC75 charging LED does not light up.</td>
<td>Cradle is not receiving power.</td>
<td>Ensure the Power Input cable is securely connected to the cradle's Power Port.</td>
</tr>
<tr>
<td>TC75 battery is not charging.</td>
<td>TC75 was removed from the cradle too soon.</td>
<td>Replace the TC75 in the cradle; you may have removed it before it was recharged. If a TC75 battery is fully depleted, it can take six hours to fully recharge the battery.</td>
</tr>
<tr>
<td>Battery is faulty.</td>
<td></td>
<td>Replace the battery.</td>
</tr>
<tr>
<td>TC75 was not placed correctly in the cradle.</td>
<td></td>
<td>Remove the TC75 from the cradle, and re-insert correctly. If the battery still does not charge, contact system administrator. The TC75 battery charging LED slowly blinks amber when the TC75 is correctly inserted and charging.</td>
</tr>
<tr>
<td>Ambient temperature is too high or too low.</td>
<td></td>
<td>Ambient temperature within the vehicle may be too high or too low. Charging will begin when temperature within the vehicle is within the TC75 charging temperature range (0 °C to 40 °C).</td>
</tr>
</tbody>
</table>
## CMM Disclosure

<table>
<thead>
<tr>
<th>部件名称 (Parts)</th>
<th>有害物质</th>
<th>铅 (Pb)</th>
<th>汞 (Hg)</th>
<th>镉 (Cd)</th>
<th>六价铬 (Cr(VI))</th>
<th>多溴联苯 (PBB)</th>
<th>多溴二苯醚 (PBDE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>金属部件 (Metal Parts)</td>
<td>X</td>
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<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
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<tr>
<td>电路模块 (Circuit Modules)</td>
<td>X</td>
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<td>O</td>
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<tr>
<td>电缆及电缆组件 (Cables and Cable Assemblies)</td>
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<td>塑料和聚合物部件 (Plastic and Polymeric Parts)</td>
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<td>光学和光学组件 (Optics and Optical Components)</td>
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<td>O</td>
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<td>O</td>
<td></td>
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本表格依据SJ/T 11364的规定编制。

0: 表示该有害物质在该部件所有均质材料中的含量均在 GB/T 26572 规定的限量要求以下。

X: 表示该有害物质至少在该部件的某一均质材料中的含量超出GB/T 26572规定的限量要求。（企业可在此处，根据实际情况对上表中打“×”的技术原因进行进一步说明。）

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