Safety and Compliance

This document provides instructions on how to install the SemaConnect 620 Charging Station only. This product must be installed in accordance with the National Electrical Code (NEC) or the Canadian Electrical Code (CEC), whichever is applicable. Consult a licensed contractor and/or electrician before installation to ensure compliance with local building practices, climate conditions, safety standards, and state and local codes. Under no circumstances will compliance with the information in this guide relieve the installer of responsibility to comply with all applicable codes and safety standards.

This document describes the most common installation and mounting methods. Contact SemaConnect Customer Support when it is not possible to perform an installation using the procedures provided in this document. SemaConnect is not responsible for damages that may occur during or as a result of installation.

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This guide assumes that the appropriate wiring, conduit, and circuit protection are in place at the installation site. Review this entire document to ensure you understand the installation process before installing the SemaConnect 620 Charging Station.

**Key Electrical Requirements**

Each charging station shall be on a dedicated electrical circuit.
Each station shall be protected with a **40-amp two-pole common trip circuit breaker** (non-GFCI type).
Each station is designed to draw a maximum of 30-amps.
Each station can operate on either a 240V or 208V circuit.
Each station requires three electrical supply wires (two hot, one ground, no neutral).

Note: Data communications are wireless, so there is no data cabling.

**Wiring Diagram**

Connect the SemaConnect 620 station to any one of the power sources as shown:
- 208 VAC three phase, Delta system, center tap grounded
- 208 VAC three phase, Wye system, center tap grounded
- 240 VAC single phase, bonded neutral.

In a Delta system, connect the SemaConnect 620 station only to a center-tapped grounded transformer as shown above. Connect the station to the side where the ground is bonded (in figure 3, line B and C). This allows voltage to remain constant regardless of other loads that may be using the lines. Please do not connect to any of the other types of power sources shown below.
SemaConnect 620 Single- & Dual-Pedestal Mount Installation

Mount and Parts List

Tools Required

Electrical Tools:
- Wire stripper, wire nut, and insulation tape

Mechanical Tool:
- Spirit level

Anchor Plate J-bolt:
- 3/8” inch wrench

Allen Driver Set:
- For Pedestal levelling – key size 3 (metric)
- For Pedestal Mounting – key size 10 (metric)
- For Head Unit Mounting Screw – key size 3 (metric)
- For Cable Rack – key size 2 (metric)
- For Access Panel – key size 2.5 (metric)

Parts List

<table>
<thead>
<tr>
<th>Part #1</th>
<th>Part #2</th>
<th>Part #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Unit with J1772 Cable (20ft)</td>
<td>Single Pedestal</td>
<td>Dual Pedestal</td>
</tr>
<tr>
<td>Qty Single: 1</td>
<td>Qty Single: 1</td>
<td>Qty Single: 0</td>
</tr>
<tr>
<td>Qty Double: 2</td>
<td>Qty Double: 0</td>
<td>Qty Double: 1</td>
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</tbody>
</table>

access panel(s)
## Mount and Parts List

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Qty Single</th>
<th>Qty Double</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Head Unit Mounting Screws (M5x10 Socket Flat Head)</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Pedestal Mounting Screw (M12x25 Socket Head)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Cable Hanger</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Anchor Plate</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Sacrificial Bolts</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>Anchor J-bolt set—3/8” (3 nuts, 2 washers, 1 spring washer, 1 J-bolt)</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
SemaConnect 620 Single- & Dual-Pedestal Mount Installation

Mount and Parts List
SemaConnect 620 Single- & Dual-Pedestal Mount Installation

Follow the same procedure for both single- and dual-pedestal mount installation.

Anchor Plate Installation into Concrete

Step 1: Install the circuit breaker.

Caution: After the circuit breaker is installed, make sure it’s turned off.

Step 2: Prepare the site and construct a concrete form (typical footprint: 24”x24”). Run the electrical conduit through the form. Please make sure that the electrical conduit does not get in the way of the J bolts when installing the anchor plate.

Step 3: Place the wet concrete into the form and smooth it out.

Step 4: Attach all four anchor bolts (J-bolts) and four sacrificial bolts to the anchor plate (Figure 2).

Note 1: The nuts in the anchor plate should face downward.

Note 2: Make sure that only one thread is coming out of the top nut when the J bolt is assembled to the anchor plate. If more thread is coming out of the top nut, then the installer will face problems while mounting the pedestal.
SemaConnect 620 Single- & Dual-Pedestal Mount Installation

Step 5: Insert the anchor plate into the wet concrete. Vibrate the concrete to get rid of any air bubbles.

Note: The anchor plate surface should provide a level surface for the pedestal.

Figure 3

Step 6: Smooth out the concrete around the anchor plate.

Note: Make sure anchor plate sits on top of the concrete (Figure 3).

Step 7: Once the concrete has fully set, remove the sacrificial bolts (Figure-4) from the anchor plate. Then place the pedestal on top of the anchor plate and screw in four pedestal-mounting screws (Figure 5). Do not tighten fully.

Note 1: Make sure the electrical wire is passed through the pedestal.

Note 2: Ensure that the access panel is to your right when its viewed from the front end.
SemaConnect 620 Single- & Dual-Pedestal Mount Installation

Step 8: Align the pedestal for plumb with the help of a set screw on the pedestal (Figure 4). Once the pedestal is level, fully tighten the pedestal-mounting screw.

![Figure 4](image-url)

Preparing the SemaConnect 620 Head Unit

Step 9: Loosen the set screws in the head unit(s) and attach the cable rack to the charging station (Figure 5).

Step 10: Remove the access panel from the head unit.

Step 11: Place the J1172 in the holder and hang the cable in the cable rack.

Assembly of SemaConnect 620 onto Pedestal

Step 12: Now slide the head unit onto the pedestal and attach it with four mounting screws (Figure 6).

Note: Make sure that the wires are not crushed between the pedestal and charging station.

Step 13: Connect the three electrical supply wires.

Note: Strictly adhere to the wire color codes to ensure proper installation (green-green). Make sure to use wire nuts and insulation tape for safety.

Step 14: Carefully push the wires in and attach the access plate (Figure 7).
Step 15: Power up the charging station by turning on the circuit breaker(s). The station will automatically communicate with the network and initialize itself using a cellular signal. A successful power-up is indicated by a steady blue LED light and welcome message on the LCD screen.

Step 16: Call (800) 663-5633 to finalize and complete the set-up and installation. Please have the station serial number ready. The station serial number can be found on the left-hand side of the station.
SemaConnect Wall/Pole Mount Installation

Tools Required

- Electrical Tools
  - Wire stripper, wire nut, insulation tape
- Mechanical Tools
  - Power drill, level
- Driver Set
  - Head unit mounting screw, key size 3
  - Cable rack, key size 2
  - Access panel, key size 2.5

Wall mount bolt and pole mount strap are not supplied.

Parts List

<table>
<thead>
<tr>
<th>Part #1</th>
<th>Part #2</th>
<th>Part #3</th>
<th>Part #4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head Unit</td>
<td>Wall/Pole Mount</td>
<td>Head Unit Mounting Screws</td>
<td>Cable Hanger</td>
</tr>
<tr>
<td>Wall Mount: 1</td>
<td>Wall Mount: 1</td>
<td>(M4x10) flat head</td>
<td>Wall Mount: 1</td>
</tr>
<tr>
<td>Pole Mount: 1</td>
<td>Pole Mount: 1</td>
<td>Wall Mount: 4</td>
<td>Pole Mount: 1</td>
</tr>
</tbody>
</table>
SemaConnect Wall- and Pole-Mount Installation

Follow the same procedure for both wall and pole mount installation.

Wall/Pole Mount Installation

Step 1: Install the circuit breaker and run the electrical conduit.
   Caution: After the circuit breaker is installed, make sure it’s turned off.

Step 2: Attach the wall/pole mount bracket. If a wall mount: Attach the Wall Mount Bracket to the wall with four bolts. If a pole mount: Attach the Pole mount bracket with three straps. In both cases, the electrical conduit can run from the back or the side. Make sure that the wall mount is level.

Preparing the SemaConnect 620 Head Unit

Step 3: Loosen the set screws in the head unit and attach the cable rack to the charging station (Figure 1).

Step 4: Remove the access panel.

Step 5: Place the J1172 in the holder and hang the cable in the cable rack (Figure 1).
Assembly of the SemaConnect 620 onto a Wall/Pole Mount

Step 6: Now slide the head unit onto the wall/pole mount and attach it with four mounting screws (Figure 2).
   Caution: Make sure that the wires are not crushed between the pedestal and charging station.

Step 7: Connect the three electrical supply wires.
   Caution: Strictly adhere to the wire color codes to ensure proper installation. Make sure to use wire nuts and insulation tape for safety.

Step 8: Carefully push the wires in and attach the access plate (Figure 3).

Step 9: Power up the charging station by turning on the circuit breaker(s). The station will automatically communicate with the network and initialize itself using a cellular signal. A successful power-up is indicated by a steady blue LED light and welcome message on the LCD screen.

Step 16: Call (800) 663-5633 to finalize and complete the set-up and installation. Please have the station serial number ready. The station serial number can be found on the left-hand side of the station.