

IMMS-CCC

IMMS-CCC Hardwire Central Interface

Installation Instructions



Hunter[®]

TABLE OF CONTENTS

Choose a Location	1
Connections	2
Operations	3
Software Configuration	4
Troubleshooting	5
Loopback Test	6

CHOOSE A LOCATION

Choose a cool, dry, safe, indoor location. The IMMS-CCC central interface must be located within 6 ft. (2 m) of the computer itself. It may be positioned on or under a desktop, but the indicator lights on the front panel should be visible to the operator. NOT FOR OUTDOOR USE.

CONNECTIONS.....

There are 3 cables to connect to the rear of the CCC.

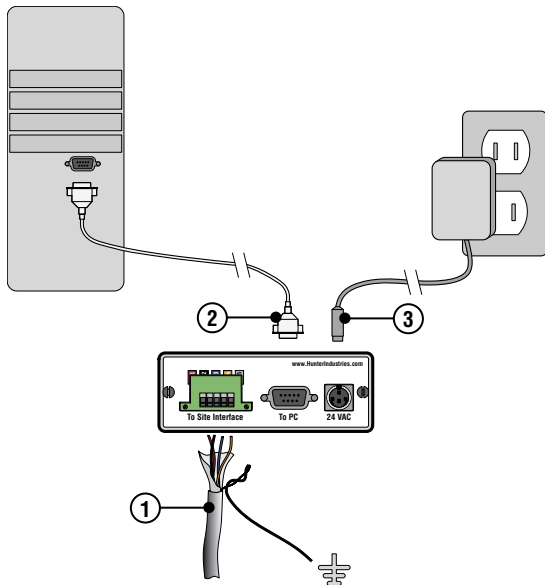
1. **GCBL Cable:** Route the GCBL communications cable (leading to the Site Interface) to the rear panel of the CCC.

Strip the black outer jacket of the GCBL cable, and excess foil shield, back approximately 2" (50 mm).

Strip approximately $\frac{3}{16}$ " (4.5 mm) from each individual wire and connect to the green communications terminals, in the area labeled "From CCC", observing the color codes.

Color	Terminal
Red	SI1
Black	SI2
Blue	SI3
Orange	SI4

GCBL Cable Grounding: Twist a length of bare copper wire together with the bare silver ground wire in the GCBL cable, and connect them together to the gray SI5 terminal. Route the other end of the bare copper wire to an approved earth ground (recommended impedance of 10 Ohms or less).



2. **Serial Cable:** Connect the male end of the included DB-9 serial cable to the back of the CCC and secure with the captive screws on the connector.

Connect the other (female) end of the cable to a working serial port on the computer. Serial cable should be 6 ft. (2 m) or less for best results.

3. **Power Transformer:** Connect the power cable from the transformer to the “24 VAC” plug on the rear of the CCC.

The connector has a pin to position it correctly, and should only be connected one way.

Rotate the connector until the pin engages the receptacle, and gently push the connector in.

Plug the transformer into AC power, or through a surge-protected power outlet (not included).

OPERATIONS

The CCC has no controls of its own. No operations are possible directly from the CCC.



SOFTWARE CONFIGURATION

To complete the IMMS-CCC installation, the computer must be connected with the IMMS software installed. The computer must have the IMMS hardware key installed (USB or parallel port) in order to communicate.

From the Home screen in the IMMS™ software, go to the Hardware tab for the IMMS System, and locate the System Synchronization section of the screen. Select a Com Port (1-4) for “CCC Port” and click the “Test button”.

Observe the LED lights on the front of the CCC. The “Transmit” light is active when the CCC is sending a signal out, and the “Receive” LED is active whenever the CCC is receiving a response.

In normal communications, these activities occur very quickly, so you may observe both lights blinking very rapidly.

IMMS will indicate whether the test passed or failed after a few seconds. You may try another port if the test fails, until all ports have been tried. If none of the ports is successful, troubleshoot the CCC or contact Hunter Technical Services.

TROUBLESHOOTING

The “Power” LED should light when the transformer is plugged into the primary AC power source (if not, check power source).

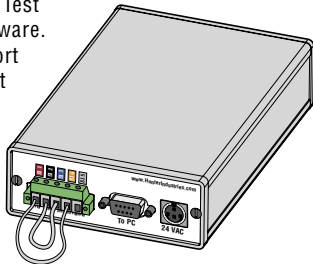
Power light, but no Transmit or Receive lights during communications, may indicate bad serial cable, bad serial port, or incorrect software communications configuration (Synchronization Settings).

Power light and Transmit light, but no Receive light, indicates correct software settings but may indicate bad serial cable, GCBL communications cable fault, or SI problem. Perform Loopback Test at both locations (CCC and SI).

LOOPBACK TEST

To perform this test at the CCC, you will need two short (4 in./10 cm) pieces of insulated 18 AWG (1 mm) wire, or a very short piece of GCBL cable.

1. Connect terminals 1 and 4 together with one piece of wire.
2. Connect terminals 2 and 3 together with another length of wire.
3. Perform the CCC Port Test from the IMMS™ software. If successful, the report will be “Loopback Test Passed”. This verifies that the CCC is operating correctly.



You can also use this function to check the GCBL communications cable in the field:

1. At the SI location, disconnect the GCBL from the SI.
2. Connect the Red and Orange wires together.
3. Connect the Black and Blue wires together. Do not let them touch the Red and Orange wires. Perform the CCC Port Test again from the IMMS software. If successful, this test verifies that the wire run to the field location is intact. If the test passes at the CCC, but fails at the SI location, there is most likely a fault in the communications cable itself.