

Quick Reference Guide for HE-RCC6512

BUILT IN I/O: 12 DIGITAL INPUTS, 10 DIGITAL OUTPUTS, 2 ANALOG INPUTS, 4 ANALOG OUTPUTS

GETTING STARTED

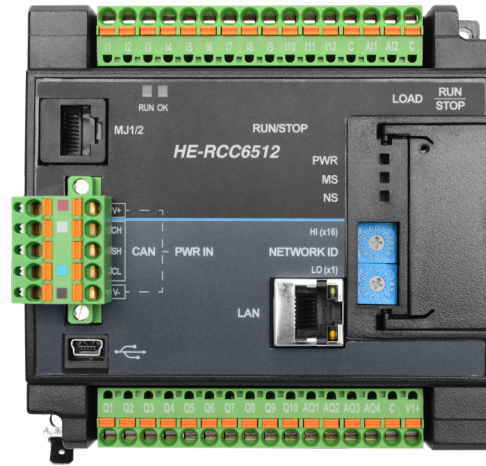
- 1 Read this document to fully understand the RCC6512 and safety requirements.
- 2 Connect 24VDC power and I/O according to the quick start guide and datasheet.
- 3 Refer to the Horner website for the current user manual [MAN1133] and datasheet [MAN1134].

North America

<http://www.hornerautomation.com>

Europe

<http://www.horner-apg.com>



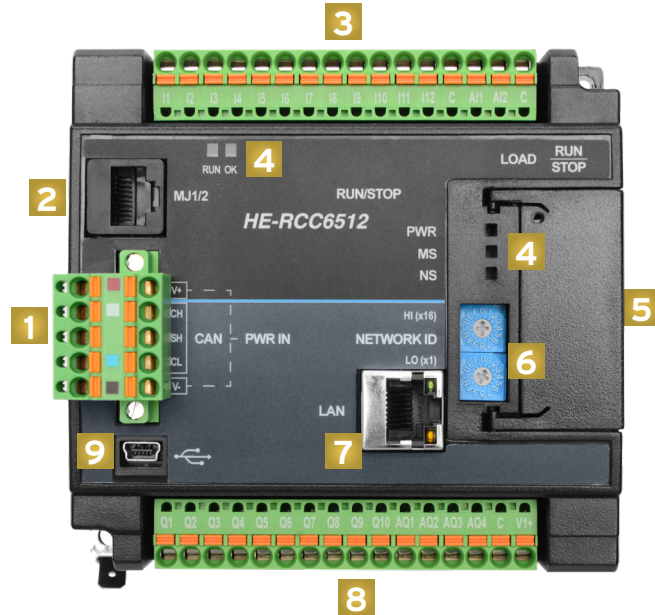
1 - General Specifications

1.1 General	
Primary Pwr. Range	10-28VDC
Required Pwr. (Steady-State)	120mA @ 24VDC
Required Pwr. (Inrush Current)	25A for 1ms @ 24VDC switched
Real Time Clock	Battery-backed
Clock Accuracy	+/- 60 Secs/Month @ 24°C
Relative Humidity	5 to 95% Non-condensing
Operating Temp.	-10°C to +60°C
Storage Temp.	-10°C to +60°C
Weight	12.5 oz (354.37g)
Max. Altitude	2000m
Included in Box	Controller, 2 x I/O connectors, 1 x power connector, Quick Reference Guide
Certifications (UL/CE)	USA: https://hornerautomation.com/certifications/ Europe: http://www.horner-apg.com/en/support/certification.aspx

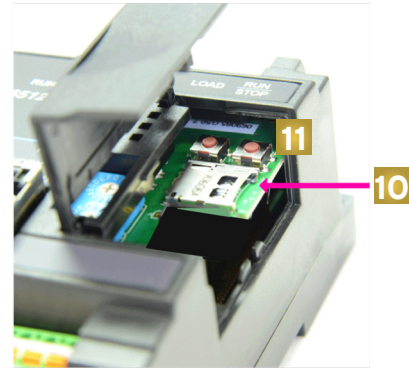
1.2 Connectivity	
Serial Ports	1 x 232, 1 x RS485 (Full/Half Duplex - Software Selectable)
CAN	1 x 125 kbps - 1 Mbps
Ethernet	1 x 10 Mbps/100Mbps
microSD	1 x uSD, SDHC, SDXC in FAT32 format
USB	USB Mini-B Slave (Configuration and Application Programming only)
Communication Support	CsCAN, Modbus, EGD

1.3 User Interface / Control & Logic	
Control Language Support	Advanced Ladder Logic
Logic Size & Scan Rate	16kb, 0.7ms/kB
Programming	Supported in Advanced Ladder
PID Support	Up to 6

2 - Port Connectors



1. Power/CAN Connector
2. Serial Port
3. Input Connector - J2
4. Status LEDs
5. Door
6. Network ID Switches
7. Ethernet Port
8. Output Connector -J1
9. Mini USB Port
10. microSD Slot
11. LOAD / RUN|STOP buttons



3 - Installation Procedure

The RCC6512 conveniently mounts on a DIN rail.

Be sure the DIN rail is in a horizontal position before installing the unit.

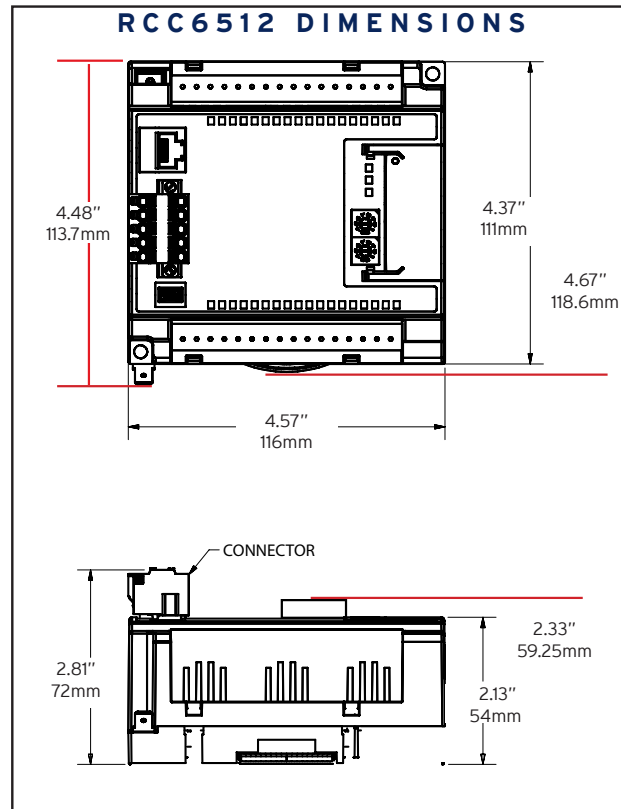
The orientation shown to the right is necessary to prevent the unit from slipping off the DIN rail.

Align the unit on the DIN rail then push the DIN rail clip until it clicks into place. Check to ensure that the unit is secure on the DIN rail.

Do NOT mount the unit on its side as this may cause the unit from slipping off the DIN rail.

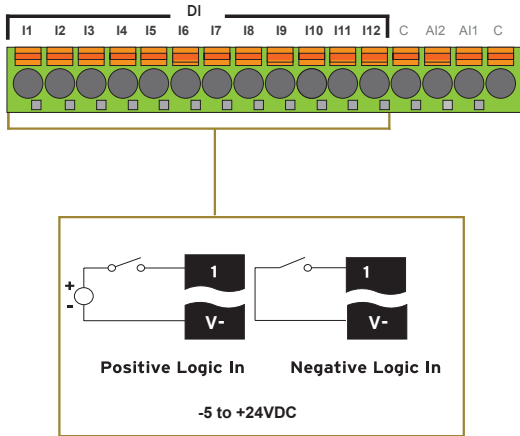
NOTE: The spade connector for grounding and the DIN rail clip add to the overall measurements. The CAN/PWR and LAN connectors also add to the measurements.

NOTE: Screw holes and a spade connector are available for a mounting option.



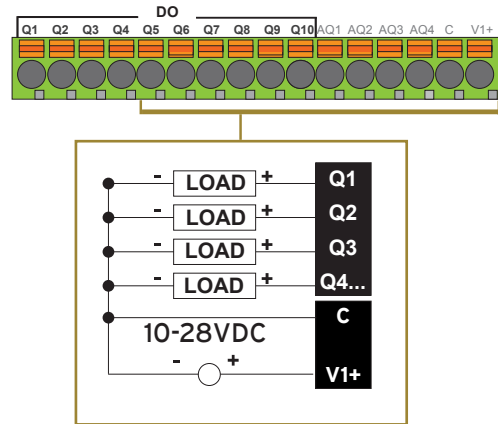
4.1 - Wiring Connectors: Digital In

J2 Wiring - Digital Input



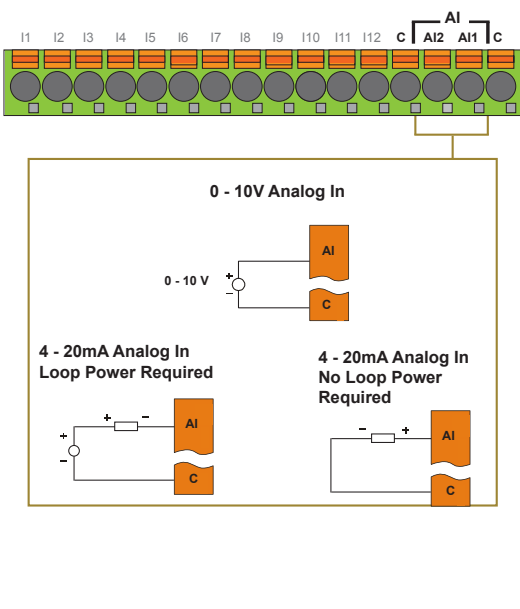
4.2 - Wiring Connectors: Digital Out

J1 Wiring - Digital Output



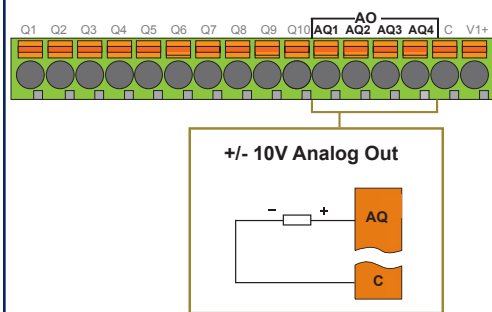
4.3 - Wiring Connectors: Analog In

J2 Wiring - Analog Input



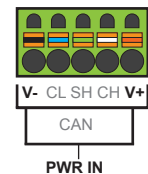
4.4 - Wiring Connectors: Analog Out

J1 Wiring - Analog Output



6.5 - Wiring Connectors: Power

To power up the RCC6512, supply 10-28VDC to the V- and V+ connections on the Power/CAN Analog Connector.



5 - Warnings

Precautions

All applicable codes and standards need to be followed in the installation of this product. Adhere to the following safety precautions whenever any type of connection is made to the module:

1. Connect the safety (earth) ground on the power connector first before making any other connections.
2. When connecting to the electric circuits or pulse-initiating equipment, open their related breakers.
3. Do NOT make connection to live power lines.
4. Make connections to the module first; then connect to the circuit to be monitored.
5. Route power wires in a safe manner in accordance with good practice and local codes.
6. Wear proper personal protective equipment including safety glasses and insulated gloves when making connections to power circuits.
7. Ensure hands, shoes, and floor are dry before making any connection to a power line.
8. Make sure the unit is turned OFF before making connection to terminals.
9. Make sure all circuits are de-energized before making connections.
10. Before each use, inspect all cables for breaks or cracks in the insulation. Replace immediately if defective.
11. Use copper conductors in Field Wiring only, 60/75° C.
12. Do not disconnect while circuit is live unless area is known to be non-hazardous.
13. Do not remove or replace jumpers or connectors while circuit is live unless the area is known to be free of ignitable concentrations of flammable gases or vapors.
14. EXPLOSION HAZARD - substitution of components may impair suitability for Class I, Division 2.
15. Use caution when making connections to the controller

to protect against static discharge. Special care must be taken when replacing the battery or inserting or adjusting I/O or communication boards.

16. Use caution when connecting controllers to PCs via serial or USB. PCs and especially laptops may use "floating power supplies" what are ungrounded. This could cause a voltage potential between the laptop and controller. Make sure the controller and laptop are grounded for maximum protection.
17. For protection of USB devices the part number HE-USBISO is available to purchase from our website or your local distributor.
18. Failure to follow these guidelines can damage the controller and/or controller.

Hazardous Location Notice

Power, input and output (I/O) wiring must be in accordance with Class 1, Division 2 wiring methods [Article 501-4(b) of the National Electrical Code, NFPA 70] for installations in the U.S. or as specified in Section 18-1J2 of the Canadian Electrical Code for installations within Canada and in accordance with the authority having jurisdiction.

1. THIS EQUIPMENT IS SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C & D HAZARDOUS or NON-HAZARDOUS LOCATIONS ONLY.
2. WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS.
AVERTISSEMENT - RISQUE D'EXPLOSION - NE DECONNECTEZ PAS L'EQUIPEMENT A MOINS QUE L'ALIMENTATION AIT ETE COUPEE OU QUE LA ZONE NE SOIT PAS DANGEREUSE.
3. DEVICES SHALL BE INSTALLED INTO AN ENCLOSURE THAT IS ONLY ACCESSIBLE WITH THE USE OF A TOOL.

FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference
2. This device must accept any interference received, including interference that may cause undesired operation

Technical Support

For further details, please refer to the Datasheet, MAN1134. For assistance and manual updates, contact Technical Support at the following locations:

North America
+1 (317) 916-4274
www.hornerautomation.com
techsppt@heapg.com

Europe
+353 (21) 4321-266
www.horner-apg.com
technical.support@horner-apg.com

6 - Connecting the RCC6512 to a PC

The RCC6512 can communicate with Cscape using USB to USB, USB to serial adapters, serial port communications via MJI Port, CAN (CsCAN), or Ethernet.

To communicate with the RCC6512 via USB, you will need the Automated Driver Installer located on our website. The drivers may be loaded from the HE-XEC Ethernet Utility -> HTTP Web Server Demo -> Communications Driver section of the support files page found at : <https://hornerautomation.com/support-files> .

Next, connect a PC's (Personal Computer running a Windows Microsoft operating system) USB port via USB cable to the USB mini B port on the RCC6512.

Now that the RCC6512 is plugged in, go to the Cscape menu Controller -> Connection Wizard, choose your connection method. If you're connecting for the first time, we suggest connecting via USB.

If communication is established, the target indicator will show the mode of the controller Target: yy(R).

If the controller is not communicating, you may need to set the Target ID of the controller in Cscape or change the controllers ID on the unit itself. The Target ID allows directing communications to a particular unit when multiple units are connected via a CsCAN network. Units without CsCAN network ports respond to any network ID and do not require the ID to be configured.

For more information, review the Cscape Configuration chapter of the RCC6512 User Manual, MAN1133.