It's Under Control®

CB-8

Connecting Block

Installation and Operation Guide

LIMITED WARRANTY AND DISCLAIMER

Remote Technologies Incorporated warrants its products for a period of one (1) year from the date of purchase from Remote Technologies Incorporated or an authorized Remote Technologies Incorporated distributor.

This warranty may be enforced by the original purchaser and subsequent owners during the warranty period, so long as the original dated sales receipt or other proof of warranty coverage is presented when warranty service is required. Except as specified below, this warranty covers all defects in material and workmanship in this product. The following are not covered by the warranty:

Damage resulting from:

1. Accident, misuse, abuse, or neglect.
2. Failure to follow instructions contained in this Guide.
3. Repair or attempted repair by anyone other than Remote Technologies Incorporated.
4. Failure to perform recommended periodic maintenance.
5. Causes other than product defects, including lack of skill, competence or experience of user.
6. Shipment of this product (claims must be made to the carrier).
7. Being altered or which the serial number has been defaced, modified or removed.

Remote Technologies Incorporated is not liable for any damages caused by its products or for its failure of its products to perform, including any lost profits, lost savings, incidental damages, or consequential damages.

Remote Technologies Incorporated is not liable for damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made by you for a third party.

Remote Technologies Incorporated's liability for any defective product is limited to repair or replacement of the product, at our option.

If your CB-8 Connecting Block needs service, please contact Remote Technologies Incorporated by telephone, fax or E-mail for return information. **Please do not return products to Remote Technologies Incorporated without return authorization**.

The information contained in this document is subject to change without notice. Remote Technologies Incorporated shall not be liable for errors or omissions contained herein or for consequential damages in connection with the furnishing, performance, or use of this guide.

CB-8 and the RTI logo are registered trademarks of Remote Technologies Incorporated.

SAFETY SUGGESTIONS

Read Instructions. Read all safety and operating instructions before operating the unit.

Retain Instructions. Keep the safety and operating instructions for future reference.

Heed Warnings. Adhere to all warnings on the unit and in the operating instructions.

Follow Instructions. Follow operating instructions and instructions for use.

Heat. Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.

Power Sources. Connect the unit only to a power supply of the type described in the operating instructions, or as marked on the unit.

Power Cord Protection. Route power supply cords so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to the cords at plugs, at convenient receptacles, and at the point at which they exit from the unit.

Water and Moisture. Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.

Object and Liquid Entry. Do not allow objects to fall or liquids to be spilled into the enclosure through openings.

Servicing. Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.

Damage Requiring Service. The unit should be serviced by qualified service personnel when:

- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

WARNING!

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE.

TABLE OF CONTENTS

CHAPTER 1 | WELCOME

Thank you for using the CB-8 Connecting Block.

The CB-8 is an installation accessory designed to provide convenient and reliable power connections for up to eight (8) RTI in-wall keypads*, touchpanels and other devices. In addition to providing power, the CB-8 combines and routes the infrared outputs from the touchpanels to a single output for connection to an RTI control processor. Multiple CB-8 units can be daisy-chained for connecting more than eight devices. A 12VDC 4.0Amp power supply is included.

* NOTE: Maximum number depends on keypad model. See chapter 3.

IMPORTANT NOTES

Please read these important notes about the CB-8:

- The CB-8 should be placed in an area where it is around normal room temperature (between 60°F to 90°F).
- Avoid installing the CB-8 in a location where it can come in contact with direct sunlight.
- Do not let the CB-8 get wet. It should not be handled with wet hands or placed in an area where it could get wet.
- Do not subject the CB-8 to smoke, dust, or vibrations.
- Only use the power supply that is specified for the CB-8. Using the wrong type of power supply may result in damage.
- Do not disassemble the unit. Service of the CB-8 should be performed by authorized personnel only.

CHAPTER 1 | PRODUCT CONTENTS

Contents within the box include the following items:

- One (1) CB-8 connecting block
- One (1) Installation and Operation Guide
- One (1) Power supply
- One (1) Power cord
- One (1) Cat-5 patch cable

UNPACKING AND INSPECTION

After unpacking your new CB-8 Connecting Block, save all of the packing materials in case you ever have to ship the unit.
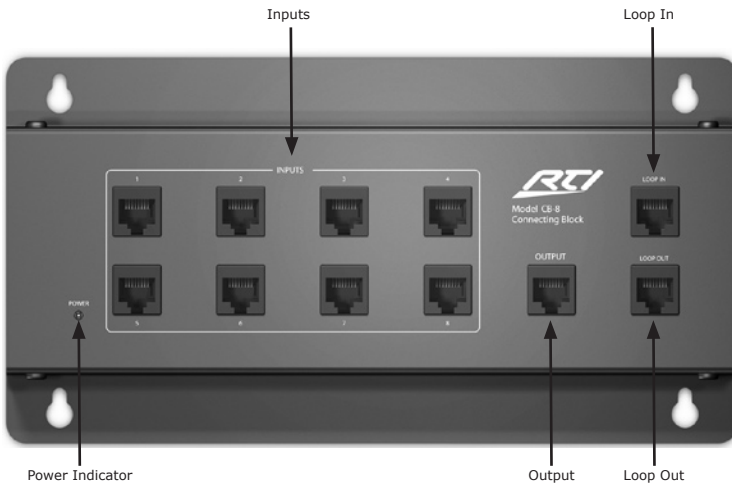
Thoroughly inspect the CB-8 and packing materials for signs of damage. Report any damage to the carrier immediately. Report any equipment malfunctions to RTI or an authorized RTI distributor.

CHAPTER 2 | FEATURES

The CB-8 provides superior quality and reliability as well as these specific features:

- Provides power connections for up to eight (8) RTI devices* such as in-wall touchpanels and certain RS-485 controllable devices.
- Combines and routes infrared outputs from touchpanels to a single output.
- Enables communication between RTI Control Processors and devices via RS-485.
- Multiple CB-8 units can be daisy-chained to connect more than eight RTI in-wall touchpanels or devices.

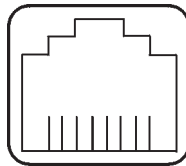* NOTE: Maximum number depends on keypad model. See chapter 3.

CHAPTER 3 | INSTALLATION

MOUNTING PATTERN

RJ-45 WIRING STANDARD

All RJ-45 plugs should be attached to Cat-5 able using the EIA/TIA 568B standard.

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RJ-45 Connector Pin Out

Pin #	Color
1	White with orange stripe
2	Solid orange
3	White with green stripe
4	Solid blue
5	White with blue stripe
6	Solid green
7	White with brown stripe
8	Solid brown

CONTROL PORT PIN OUT CONFIGURATION

Pin 8 Ground
Pin 7 Ground
Pin 6 Infrared
Pin 5 +16VDC
Pin 4 +16VDC
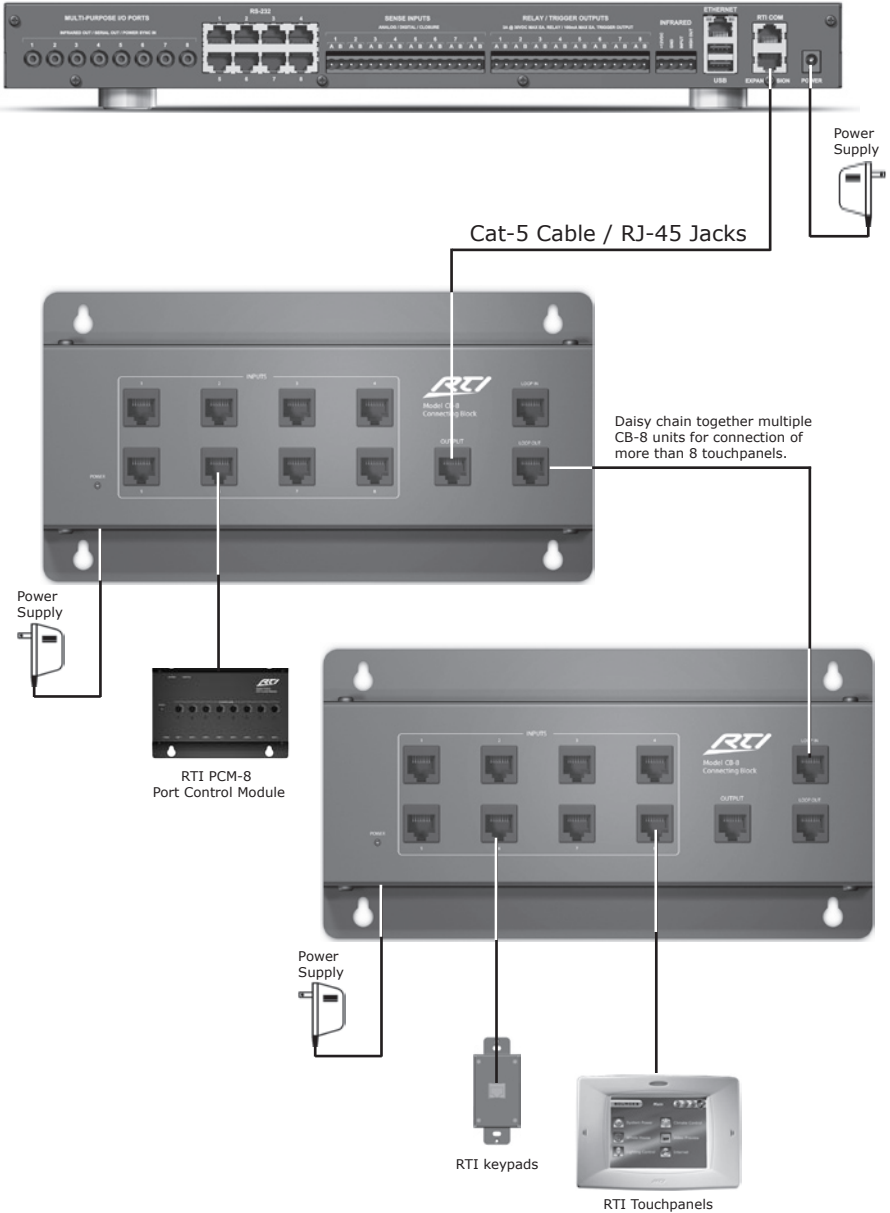Pin 3 Infrared
Pin 2 RS-485+
Pin 1 RS-485-

MAXIMUM NUMBER OF DEVICES AND CABLE DISTANCES

Each CB-8 provides power and control for the following devices up to the distances listed (distances are for each device plugged into a CB-8):
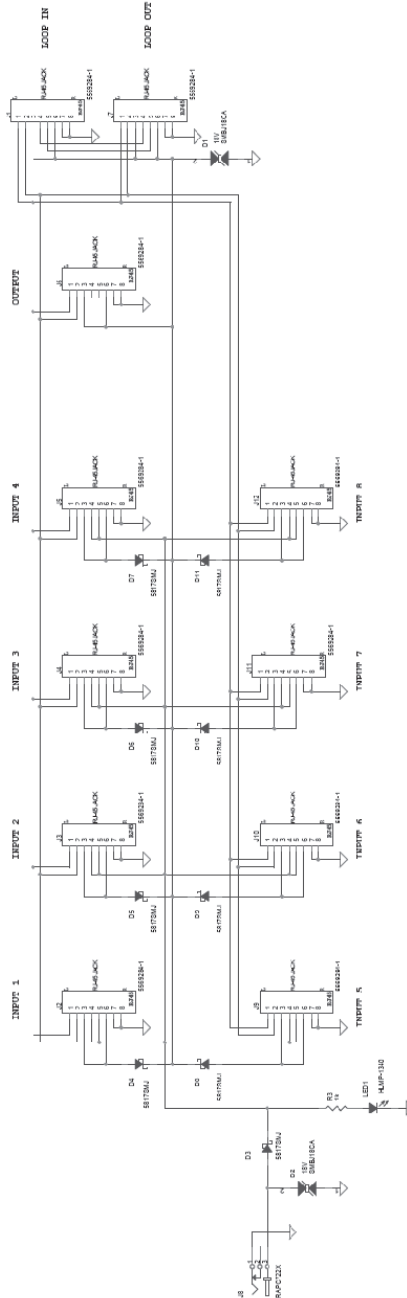
- **K4** - 4 maximum - Up to 150 feet away.
- **RK3/RK3-V** - 8 maximum - Up to 500 feet away.
- **All other keypads** (RK-2, RK-1, RKM-1) - 8 maximum - Up to 1000 feet away.
- **Expansion Modules** (PCM-8) - 8 maximum - Up to 1000 feet away.

CHAPTER 3 | INSTALLATION

CONNECTION OPTIONS

Power Supply

Cat-5 Cable / RJ-45 Jacks

Daisy chain together multiple CB-8 units for connection of more than 8 touchpanels.

Power Supply

RTI PCM-8
Port Control Module

Power Supply

RTI keypads

RTI Touchpanels

CB-8 Connecting Block

SCHEMATIC

CHAPTER 4 | SPECIFICATIONS

Power Supply	12 VDC, 4.0A
Maximum Current per Port	1.5A
Enclosure	Formed steel, black powder coating.
Dimensions	Height: 5.0in. (127mm) Width: 9.4in. (239mm) Depth: 1.0in. (25.4mm)
Mounting	Wall-mount or free standing.
Weight	24.7 oz (700g)
Warranty	One Year (Parts & Labor)

All specifications subject to change without notice.

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DECLARATION OF CONFORMITY (DOC)

The Declaration of Conformity for this product can be found on the RTI website at: www.rticorp.com/declaration

CHAPTER 5 | TROUBLESHOOTING

If you are having problems with your CB-8 Connecting Block, please read the information below before contacting technical support.

If you continue to have problems, see Chapter 6 for more information on contacting RTI technical support.

DEVICE DOES NOT POWER ON OR COMMUNICATE WITH PROCESSOR

- Make sure the external power supply is properly connected to the CB-8 and it is functioning properly.
- Make sure the RJ-45 plug is attached properly to the Cat-5 cable.

CHAPTER 6 | SERVICE AND SUPPORT

For news about the latest updates, new product information, and new accessories, please visit our web site at:

www.rticorp.com

CONTACTING RTI

For general info, you can contact RTI at:

Tel. (952) 253-3100
Fax (952) 253-3131
info@rticorp.com

RTI TECHNICAL SUPPORT

At RTI, customer service and satisfaction is an utmost priority. If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance.

RTI provides technical support by telephone, fax or e-mail. For the highest quality service, please have the following information ready, or provide it in your fax or e-mail.

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.

If you are having a problem with software, please note what version you have installed, the operating system on your PC, a description of the problem, and any troubleshooting you have already tried.

If you are calling about a software or programming question or problem, please be at you computer when you place your call. This will considerably speed up the troubleshooting process.

For technical support or assistance with your CB-8 or accessories, contact RTI at:

(952) 253-3137
support@rticorp.com
www.rticorp.com

For questions regarding service or repair of your CB-8, contact RTI at:

(952) 253-3136
service@rticorp.com
www.rticorp.com

Please do not return products to RTI without return authorization.

CHAPTER 6 | SERVICE AND SUPPORT

Shipment of CB-8 for Service

RTI will pay all labor and material expenses for all repairs covered by this product's warranty. If necessary repairs are not covered by warranty, or if a unit is examined which is not in need of repair, you may be charged for the repairs or examination.

If it is necessary to ship the CB-8 for service:

- Please pack it securely (we suggest that it be insured).
- Do not include accessories such as power cords or manuals unless instructed to do so.

You must pay any shipping charges incurred in getting your CB-8 to RTI. RTI will pay reasonable return shipping charges via a carrier of our choice to any destination within the United States if the repairs are covered under warranty.

A copy of the original dated sales receipt must be provided whenever warranty service is required. You will need this receipt to establish the date of purchase.

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