

## 4-Source Multi-Zone Central Audio Controller/Amplifiers

# CA-Series

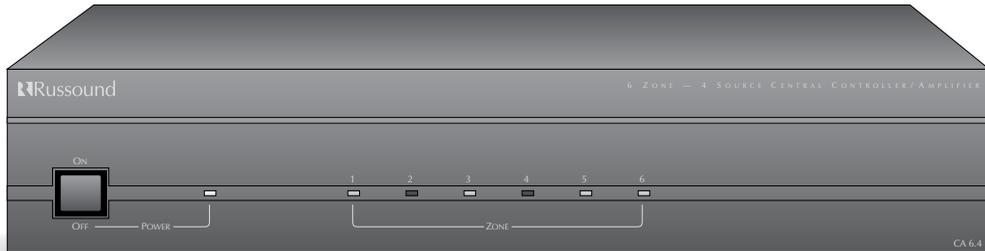
## Instruction Manual



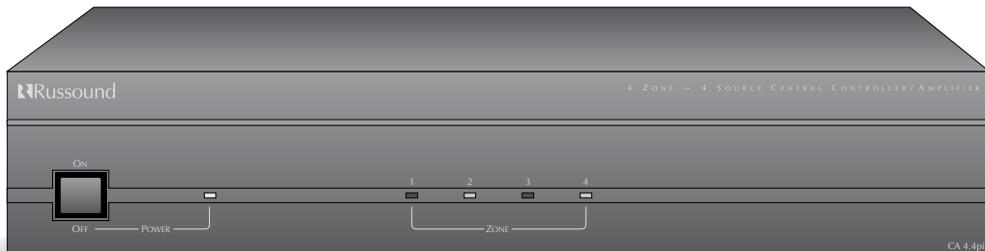
CA-KP.2

CA-LCD

CA 6.4 6-Zone, 4-Source Central Controller/Amplifier



CA 4.4pi 4-Zone, 4-Source Central Controller/Amplifier



# IMPORTANT SAFEGUARDS



"WARNING" " TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE."



"CAUTION" " TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER - SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**POWER CORD NOTICE FOR INTERNATIONAL OPERATION**-Please note that for 230V 50Hz operation please select the power cord for your area. Select the plug for your area at one end and a IEC320 connector at the other. It is not necessary to make any other changes. If you have any questions please call Russound Inc. 1800-638-8055 or 603-659-5170

## Safety Instructions:

1. Read Instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain Instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance in the operating instructions should be adhered to .
4. Follow Instructions - All operating and user instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.
7. Wall or ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings or, placed in a built - in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances ( including amplifiers ) that produce heat.
10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated .



12. Power - Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, receptacles, and the point where they exit from the appliance.
13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
14. Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
16. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
  - A. The power - supply cord or the plug has been damaged; or
  - B. Objects have fallen, liquid has been spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally; or
  - E. The appliance has been dropped or the enclosure is damaged.
17. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

## Precautions:

1. Power - WARNING, BEFORE TURNING ON THE POWER FOR THE FIRST TIME , READ THE FOLLOWING SECTION CAREFULLY. All models are designed for use only with the power supply voltage of the region where they are sold. USA and Canadian: AC 120c, 60Hz.
2. Voltage Label ( Rear Panel ) - A label located at the rear panel power connection indicates the AC power input for the unit. For use in the USA and Canada the label will read AC120V, 60 Hz.
3. Do Not Touch The CA With Wet Hands. Do not handle the CA or power cord when your hands are wet or damp. If water or any other liquid enters the CA cabinet, take the CA to qualified service personal for inspection.
4. Location of CA Place the CA in a Well - Ventilated Location. Take special care to provide plenty of ventilation on all sides of the CA especially when it is placed in an audio rack. If ventilation is blocked, the CA may over heat and malfunction. Do not expose the CA to direct sun light or heating units as the CA internal components temperature may rise and shorten the life of the components. Avoid damp and dusty places .
5. Care - From time to time you should wipe off the front and side panels and the cabinet with a soft cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since this may damage the finish or remove the panel lettering.

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# PRODUCT OVERVIEW

Congratulations on your recent purchase of a Russound CA-Series multi-room controller. This four/six-zone, four-source, multi-room controller is the heart of an affordable whole-house audio distribution system. High-current, stereo, power amplifiers are built into the Russound CA allowing simple connections to each speaker in the system. Each zone is operated by an intuitive, easy-to-use keypad that controls all the functions of the CA. The keypads also have a built-in infrared receiver that allows remote commands for your source equipment to be routed through the CA.

The Russound CA is built with pride. Fidelity, Reliability and Quality are the primary objectives. Russound products are guaranteed to provide years of enjoyment. The CA is UL listed and CSA approved for your protection and peace of mind.

## POSSIBLE SYSTEM CONFIGURATIONS

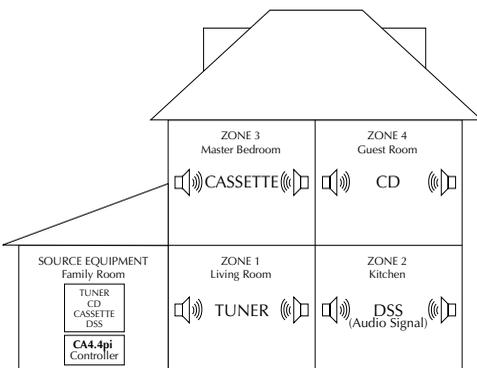


Figure 1 - Four-Zones of CA4.4pi

## UNPACKING

Carefully unpack the unit and keep the original carton and packing materials for future moving, shipment or long-term storage. After opening the box, please check for any visible signs of damage that were not apparent from the outside of the box. If you do encounter what appears to be concealed damage, please consult your Russound dealer before proceeding to further unpack or install the unit.

Make sure to save your sales receipt. Your receipt is extremely important to establish the duration of your limited Warranty, and for insurance purposes.

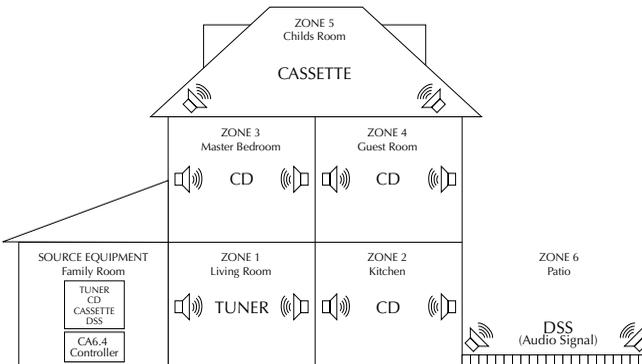


Figure 2 - Six-Zones of CA6.4

# GETTING STARTED

## TOOLS NEEDED

The following information will indicate some tools and materials necessary for a complete installation:

- 4 twisted pair communication wire (commonly referred to as CAT-5). This wire will be used to connect the keypads in each zone to the controller. 16 Gauge minimum, 2 conductor CL3 rated wire. (Russound AW162CL3) This wire is used for direct connection between the CA and your speakers.
- 110 Punchdown tool (included)
- A small jewelers flat-head screwdriver (included)
- A medium sized flat-head screwdriver.
- Wire strippers and cutters
- Electric drill and a 1/2" x 6" drill bit
- A steel-wire fish tape
- A keyhole saw
- Electrical junction boxes (6)
- A stud finder
- A screwdriver (cordless recommended)
- Misc. hand tools, nails & screws
- Cable staples

If you have problems or you are not absolutely comfortable with what you are doing, consult a professional carpenter, electrician, or system installer.

## BASIC PLANNING AND LAYOUT CONSIDERATIONS

- Where will the speakers be located?
- Where will the keypads be located?
- How will the wiring be routed to each location?
- Where is the source equipment located?
- Where is the CA controller going to be located?

Speaker Wire Length	Gauge of Speaker Wire
10-100 feet	16 AWG
100-150 feet	14 AWG
Over 150 feet	12 AWG

Keypad Control Wire Type	Max Recommended Wire Length
CAT-5	100 feet
Russound MCW2418	200 feet

## CONNECTION TIPS

- Disconnect all power cords before connecting to the CA.
- Verify that all connections and polarity are correct.
- Keep all power cords away from all signal cables to prevent noise or humming.
- Choose reliable signal cables / patch cords.
- Label all wires with room location at both ends of the wire.
- Take your time!!! Don't panic about the number of wires; simply connect one at a time.

# REAR PANEL CONNECTIONS

Figure 3 - CA6.4 Rear Panel Connections

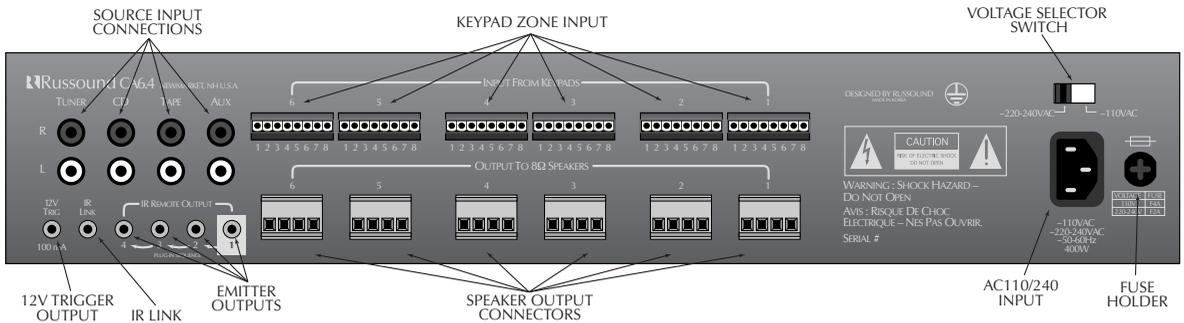
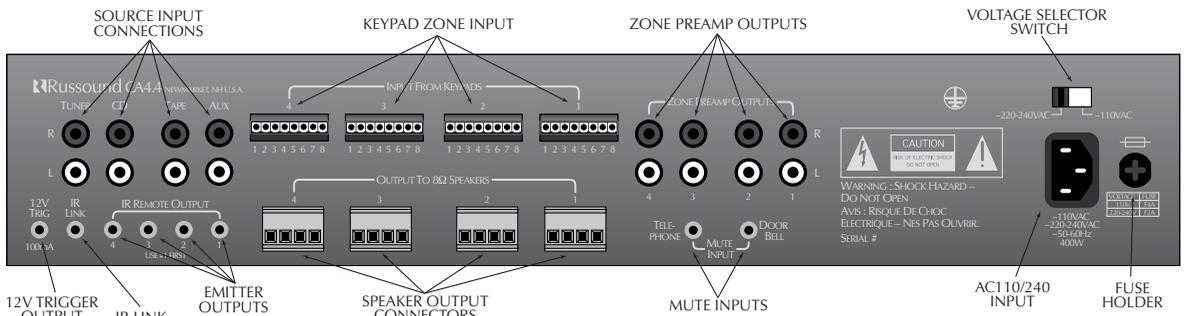


Figure 4 - CA4.4pi Rear Panel Connections



## SOURCE INPUT CONNECTIONS

Your source inputs are located at the top left corner of the back panel. Although the source input names are silk screened on the back of the CA, these names are for reference only. Any type of source equipment can be connected to any input. Connect each source output, left and right, using quality signal cables / patch cables. Label each cable the name of your source and the input number of the CA you have selected. Repeat until all sources are connected. List them down below.

List 1 – Source names should be written below

Input 1 (TUNER) \_\_\_\_\_ Input 2 (CD) \_\_\_\_\_

Input 3 (TAPE) \_\_\_\_\_ Input 4 (AUX) \_\_\_\_\_

## SPEAKER CONNECTIONS

Each speaker connection on the back panel corresponds to one room/zone. Wire your speakers by first removing the connector for the chosen zone. Using wire strippers, strip back 1/4" of the end of the wire. Insert the proper polarity, left + to left +, left- to left- etc., until all wires are connected in each zone output. Label each wire with the room name and zone number. Write down the room name to the zone number below. Note: We recommend 8 Ohm minimum speakers for each zone. However, speakers as low as 4 Ohm can be safely used in up to two zones, if necessary.

List 2 – Wire color should be written below

(Color) Left + \_\_\_\_\_ Left - \_\_\_\_\_

Right + \_\_\_\_\_ Right - \_\_\_\_\_

List 3 – Room names should be written below

Zone 1 \_\_\_\_\_ Zone 2 \_\_\_\_\_

Zone 3 \_\_\_\_\_ Zone 4 \_\_\_\_\_

# REAR PANEL CONNECTIONS

## ZONE PRE-AMP OUTPUTS (CA4.4PI ONLY)

In applications where more power than the 20 watts per channel is desired, connect one or more zones of the CA4.4pi to an external amplifier. Using standard RCA connectors, wire from the pre-amp outputs of the CA4.4pi to the amplifier's inputs. A typical application for more power is when connecting an outside zone where the audio power requirements would be much greater than an inside zone.

Figure 5 - Zone Pre-amp Output Connection



## 12-VOLT TRIGGER OUTPUT

The 12 volt trigger is engaged when any of the zones are on and disengaged when the last zone is turned off. The trigger can be used to engage any 12 volt triggered accessory, such as a triggered AC outlet or audio amplifier. The connection for the trigger is made through an 1/8" male mini-plug jack. The tip is (+) and sleeve is (-).

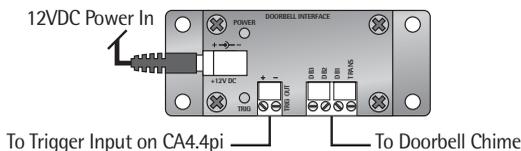
Figure 6 - 12-Volt Trigger Output Connection



## MUTE INPUT (CA4.4PI ONLY)

When used with the optional Doorbell or Telephone interface, the Mute Input mutes the audio to the speakers for six seconds when either the doorbell is used or when the telephone rings. The connection for the Mute Input is made through a 1/8" male mini-plug. The tip is (+) and the sleeve is (-).

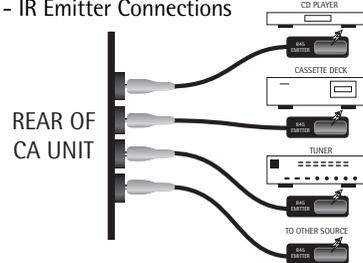
Figure 7 - DIM-1 Doorbell Interface Module



## CONNECTING THE INFRARED COMPONENTS

- In order for your CA to transmit the IR signal from the keypads to a source, an emitter must be connected from the IR outputs marked 1-4. Each of these outputs is wired in series and must be connected in consecutive order. For example, the #1 emitter output must be connected in order for the #2 emitter output to transmit the IR command. **NOTE:** All IR outputs are common
- Connect each 845.1 mini-emitter to the IR output.
- Remove the adhesive back and position the IR receiver on the product you wish to control. Stick the 845.1 emitter directly over the source components IR window.

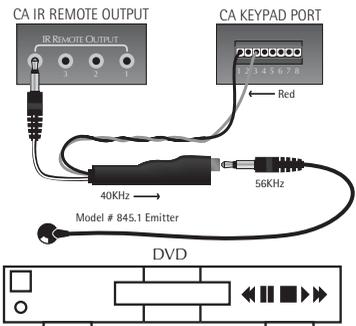
Figure 8 - IR Emitter Connections



## IR REMODULATOR 56K (INCLUDED ACCESSORY)

The IR Remodulator 56K converts 40KHz IR signals to 56KHz. The IR Remodulator takes a 40KHz IR signal that comes from the IR remote output of the CA system and remodulates it at 56KHz.

This allows some components that may only accept 56KHz to be remotely controlled with optimum performance. Refer to IR 56K Remodulator Instruction Manual for full connection instructions.



## CONNECTING THE IR LINK

When two CA Controllers are to be used in an installation, the IR Link connection is used to pass IR signal between the two units. Use a 1/8" mini-plug, male-to-male cable (included) connected from the IR Link on the first CA Controller to the IR Link on the second CA. When connected, you may connect your IR emitters to either CA unit's IR Remote Output jacks.

# KEYPAD CONNECTIONS AT CONTROLLER

- Each keypad connection on the back panel of the CA-Series Master Controller corresponds to the room / zone number chosen for your speakers. Each zone operates independently, so it is very important to connect the keypad to the correct zone keypad input.
- On List 4 (opposite) copy down the room name to the zone number from List 3 on pg 6. NOTE: the keypad and the speakers in each room must be hooked to the corresponding numbered zone.
- Remove the connector and strip 1/8" off each end of the wire insulation. Connect each wire 1 thru 8 using a small jewelers screwdriver.

List 4 – Room names should be written below.

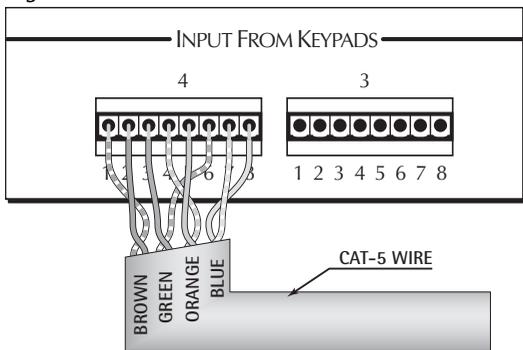
- Zone 1 \_\_\_\_\_
- Zone 2 \_\_\_\_\_
- Zone 3 \_\_\_\_\_
- Zone 4 \_\_\_\_\_

## WIRING RUNS UP TO 100 FEET

For wiring runs of up to 100 feet in length, we recommend the use of CAT-5 wire. It is inexpensive and color coded for ease of installation. Due to the qualities of CAT-5 wire, when using it for keypad control wire with the CA-Series, it is recommended to use the following color code for maximum performance.

CAT-5	Number	Type
Brown/White	1	Ground
Brown	2	IR Signal
Green	3	12VDC+
Orange/White	4	Source Select
Orange	5	Source Select
Green/White	6	Channel Select
Blue/White	7	Volume
Blue	8	Balance

Figure 9 – Connections with CAT-5 wire



## WIRING RUNS FROM 100-200 FEET

For wiring runs exceeding 100 feet and extending up to 200 feet, we recommend the use of 8-conductor 22 AWG stranded wire such as Russound MCW2418.

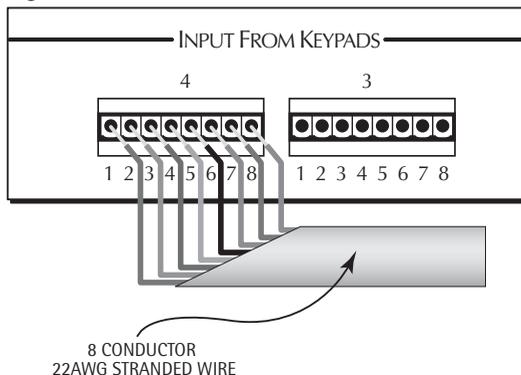
If using 22 AWG wire, the order in which you wire is not important as long as you wire in the same order at both the CA unit as well as the keypad. Use List 5 (below) to write down the wire you use for each pin number.

NOTE: Wiring runs longer than 200 feet are not recommended for the CA-Series Keypads.

List 5 –Wire color should be written below.

- Pin 1 \_\_\_\_\_ Pin 2 \_\_\_\_\_
- Pin 3 \_\_\_\_\_ Pin 4 \_\_\_\_\_
- Pin 5 \_\_\_\_\_ Pin 6 \_\_\_\_\_
- Pin 7 \_\_\_\_\_ Pin 8 \_\_\_\_\_

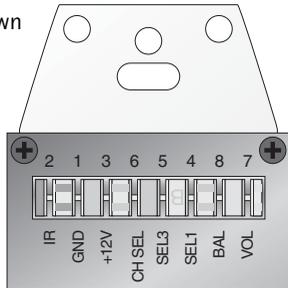
Figure 10 – Connections with 22AWG wire



# INSTALLING KEYPADS

## PUNCHDOWN TERMINALS

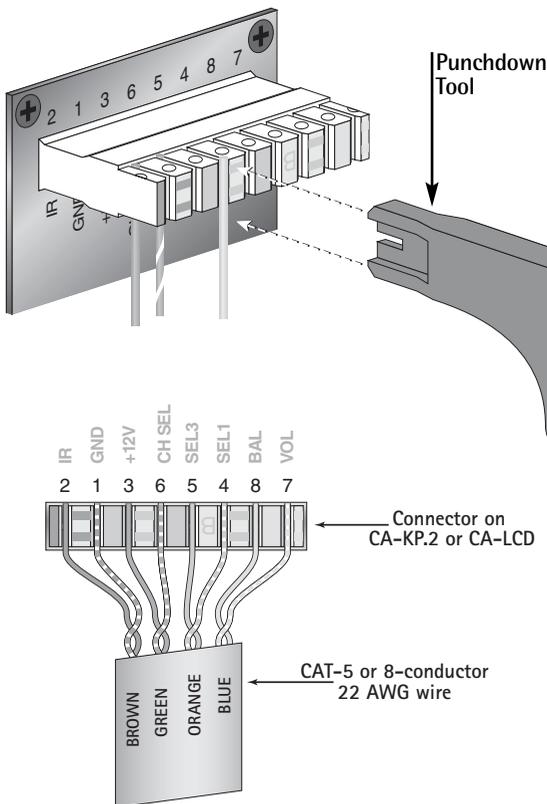
Figure 11 – Punchdown Terminal on CA-KP.2 and CA-LCD



The CA-KP.2 and CA-LCD come with 110 punchdown terminals. These terminals are quick, easy to install and provide a strong connection. Punchdown terminals require the use of a punchdown tool. One has been provided with this kit.

Press wires into punchdown terminal with punchdown tool as shown in Figure 12.

Figure 12 – Punching Down Wires



## INSTALLING THE KEYPADS

- The best infrared remote performance is achieved with the keypad away from any direct sunlight. Also consider convenience when choosing a location.
- Choose a place that is easily seen from the position where a person is most likely to be located.
- Check whether or not you can route the wire to the location you have chosen.
- Purchase retro-fit plastic junction boxes (min. 20 cubic inches) or p-rings and cut in the boxes using a key-hole saw or sheetrock knife/hand saw.
- If you are installing the optional DSC keypad you will need to use a double-gang electrical box. If you are installing the CA-LCD, DSC and the optional DAN keypad you will need to install a triple-gang electrical box.
- If you feel uncomfortable cutting into your walls and running wire through the walls, seek help from a professional installer or an electrician.
- Route the wire to the junction box from the CA location.
- If using 22 AWG wire, connect each wire to the correct position 1 thru 8 using the included punchdown tool. Refer to List 5.
- If using CAT-5 wire, connect each wire to its corresponding color labeled on the punchdown terminal.
- Mount the keypad in the junction box and attach the Decora plate.
- The CA-KP.2 keypad has source labels for your convenience. Insert the label in the keypad keeping the input number in sequence with the source selected.
- Repeat the above steps until all keypads are installed.

# INSTALLING KEYPADS

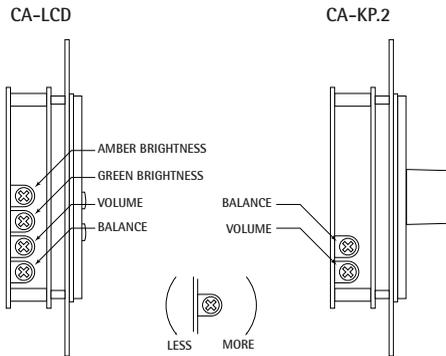
## SETTING THE KEYPADS

Before a keypad is installed into the j-box, turn on the power so that you can operate the keypad.

**CA-LCD Only:** The amber and the green backlight brightness can be individually set. Note the brightness controls are located on the side of the keypad. Adjust to the desired brightness the backlight that first comes on. Press and hold the lamp button on the front of the keypad until the backlight switches to the other color. Adjust the brightness for the selected color.

**Both CA-LCD and CA-KP.2:** The maximum volume and the balance should also be set at this time.

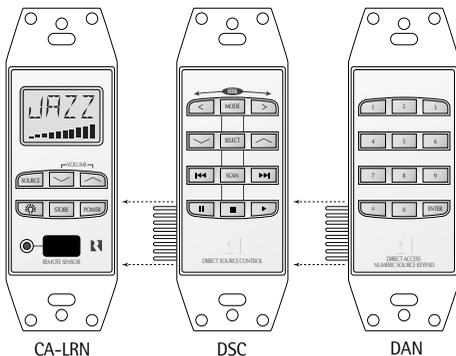
Figure 13 - Keypad Adjustments



## SOURCE CONTROL KEYPADS OPTION

The optional DSC and DAN source control keypads simply dock into the side of either the CA-KP.2 or CA-LCD keypads via a 16 prong jack. See DSC and/or DAN instruction manuals for programming instructions.

Figure 14 - Installing the DSC or DAN

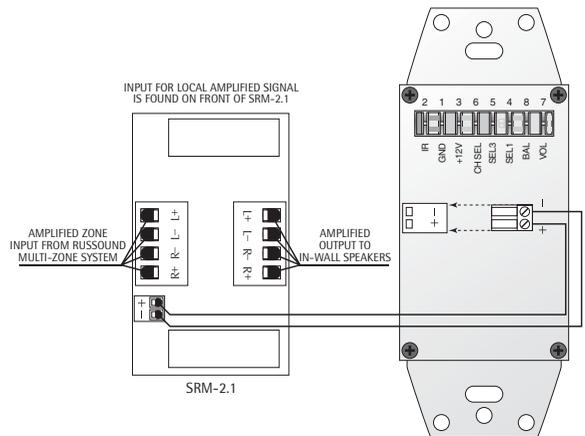


## SRM-2.1 SPEAKER RELAY MODULE OPTION

The optional SRM-2.1 module works with CA-LCD keypad's 12V trigger output. This unobtrusive wall-mount device allows you to automatically switch to whole house audio in a zone containing existing audio equipment. Example: In a bedroom with a stereo system, the stereo system would be the default. When you turn on the bedroom's zone at the keypad the whole house audio system takes control of the existing stereo speakers.

If you are using the optional SRM-2.1 speaker relay module, wire the +, - terminals of the CA-LCD to the SRM-2.1 +, - terminals.

Figure 15 - SRM-2.1 connection to CA-LCD



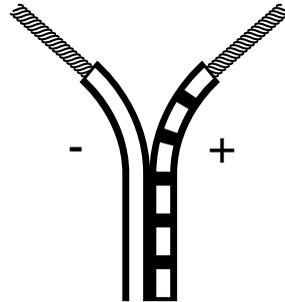
Refer to the SRM-2.1 Instruction Manual for complete wiring directions.

# SPEAKER INSTALLATION

## SPEAKER INSTALLATION

- If you are installing in-wall speakers, follow the instructions provided with your speakers for mounting.
- Connect each speaker wire to the correct polarity (+,-).

Figure 16 - Wire Polarity



## FINALLY!!!

- Make sure that the voltage selector, located on the rear panel of the CA, is on the correct current for your country, either 110V or 220V
- Power up by plugging in all power cords and turning the CA and sources on.

# OPERATION

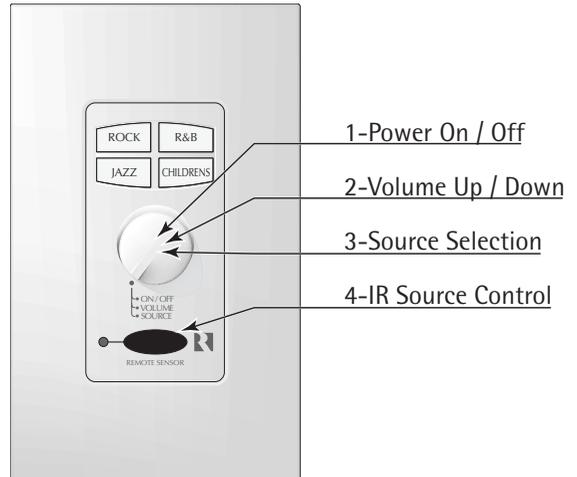
## OPERATING THE MAIN UNIT

- **Power switch:** When the power switch is engaged, the CA power indicator will be lit an amber color. The CA should be left on at all times. The unit will consume very little power unless the zones are on and active. The unit has a stand-by mode when the zones are inactive.
- **Zone Indicators:** The zone indicator will light either red for off or green for on. The zones can only be turned on from the keypads. All functions are accessed through the keypad only.

## OPERATING THE CA KP.2 KEYPAD

- 1) **Power On / Off:** This knob on the CA KP.2 keypad controls all functions except for the IR management. To turn the unit on, simply turn the control knob clockwise. You will feel and hear a click verifying that the unit has been activated. The lights on the keypad will also illuminate to verify the zone is now on. Note - The CA front panel zone-management lights also informs you which zones are On or Off.
- 2) **Volume Up / Down:** Once the unit is on, the knob can be used to adjust the volume. To adjust the volume up, turn the knob clockwise, and to turn the volume down, turn counter-clockwise.
- 3) **Source Selection:** By pressing the knob, the zone will scroll through the four sources connected to the CA. The keypad has four backlit windows that indicate the source selected.
- 4) **IR Source Control:** The IR window repeats all source commands from the source component's remote (or optional DSC/DAN keypads) through the CA and 845.1 emitters. Most IR remotes have a range of 20' at an angle of 60-65 degrees.

Figure 17 - CA-KP.2 Keypad Functions



## OPERATING THE CA-LCD KEYPAD

- 1) **Display:** The LCD panel displays the name of the source selected and the volume level.
- 2) **Source:** The source button is pressed to select one of the four sources to listen to. Press the source button until the desired source is selected. The source will be displayed on the LCD display panel.
- 3) **Volume Up / Down:** The UP / DOWN arrows for volume are used to select the volume level and to select a different source name after the store button is pressed. If the button is pressed and held the volume will ramp up or down.
- 4) **Lamp:** The lamp button when pressed and released will turn on and off the backlight lamp. The backlight color can be set to amber or green by pressing and holding the button. The backlight will change from one color to the other.
- 5) **Power:** Turn on or off any zone by pressing the power button on the front of the corresponding keypad. When the keypad comes on, it will automatically select the source that was previously selected and set the volume to minimum.
- 6) **Store:** The store function is used to select and store one of the 23 preset source names for each of the four sources. Select the source name that you want to change by selecting source. Press and hold the store button for approximately 3 seconds, and the display begins to flash. Immediately press the UP/ DOWN volume buttons to select the different source names. After you have selected the name, press the store button again or wait for it to stop flashing.
- 7) **IR Receiver:** The IR receiver is used to receive commands from an IR remote control. Remote controls used for the source equipment will pass through to the main controller and on to the source equipment. It will receive IR signals from 38KHz to 56KHz. To control the functions of the CA-LCD keypad, use the CA Remote control (see Figure 6). The CA remote control will operate the lamp, source selection, volume up / down and room on / off.
- 8) **IR Confirmation LED:** This LED will flash to confirm the reception of an IR signal from a remote control through the IR receiver.

Figure 18 - CA-LCD Keypad Functions

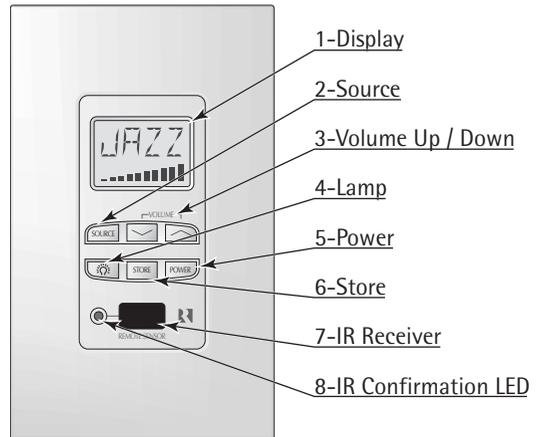
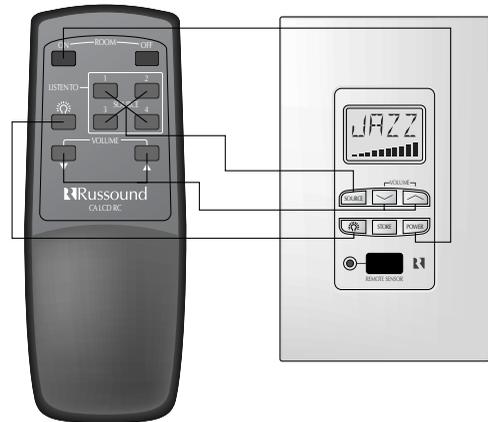


Figure 19 - CA-LCD RC Remote Control Functions



# SPECIFICATIONS

## CA6.4

- Frequency Response: 20 Hz to 20 KHz ( +/- 1 dB )
- 20 Watts RMS / Channel @ 8Ω
- 12 Channels / 6 Stereo Amplifiers
- Total Harmonic Distortion: .01%
- Signal to Noise Ratio: 89 dB min, "A" weighted
- Power Supply: 110/220V High Current Torroidal
- ETL listed. Conforms to UL Standard UL1492 and CSA Standard C22-2 No. 1-M94
- Fully Functional Keypad with IR Receiver Centered at 40 kHz and 56K kHz

## CA4.4pi

- Frequency Response: 20 Hz to 20 KHz ( +/- 1 dB )
- 20 Watts RMS / Channel @ 8Ω
- 8 Channels / 4 Stereo Amplifiers
- Total Harmonic Distortion: .01%
- Signal to Noise Ratio: 89 dB min, "A" weighted
- Power Supply: 110/220V High Current Torroidal
- ETL listed. Conforms to UL Standard UL1492 and CSA Standard C22-2 No. 1-M94
- Fully Functional Keypad with IR Receiver Centered at 40 kHz and 56K kHz

# TROUBLESHOOTING

## KEYPAD WIRING PROTECTION CIRCUIT

To provide protection for incorrect keypad wiring, this CA-Series product is equipped with a short circuit protection device. In the event of a keypad cable short, or incorrect keypad wiring, this device will automatically interrupt power to all keypad ports.

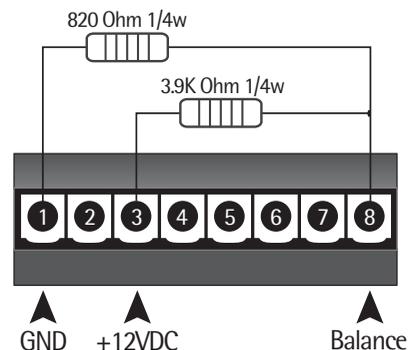
Once installed, if the keypads connected to your CA-Series product will not turn on, the short circuit protection device may have been activated. Please take the following steps to troubleshoot the system.

- 1) Turn off the power switch on the front of the CA-Series controller.
- 2) Disconnect all keypad connections from the rear of the controller.
- 3) Check the wiring configuration for each keypad, checking both ends (the CA unit and the CA keypads) of the CAT-5 keypad cable.
- 4) If incorrect connections were found, correct the wiring and reconnect the keypads to the controller. After the controller has been powered off for at least 15 seconds, turn on the power switch of the CA-Series controller.
- 5) If the problem persists, repeat steps above trying each keypad consecutively.
- 6) Inadequate ventilation can allow normal heat to build up and trip the protection circuit.

## ELIMINATION OF BALANCE LINE

The following diagram shows how resistors may be used at the Keypad connection on the rear of the CA master control unit, to provide 2.5VDC to the balance control line for centering. This circuit will stabilize the balance line input and keep it centered. They can be used to free up one of the 8 required conductors if one is open, shorted or if an extra conductor is needed for a secondary IR receiver's signal in that zone. Position #1 is GND, #3 is 12VDC, #8 is Balance.

### CA Keypad Connector @ Rear of Processor



# TROUBLESHOOTING

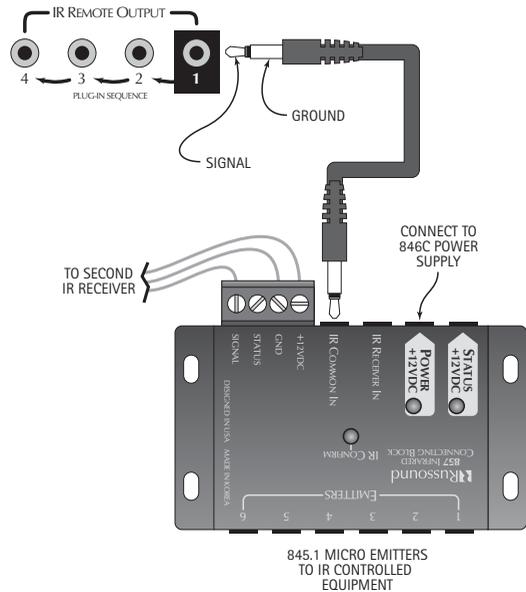
## COMBINING ADDITIONAL IR RECEIVERS

When combining a CA Series multi-source controller and a secondary IR system together, it needs to be done after the CA System. The IR information from the keypad is on Pin #2. This signal is demodulated at the keypad and is re-modulated at the processor then sent to the emitter out-puts. Combining a modulated IR signal to this lead (#2) will not work because it is already modulated. The following method should be used to assure correct integration with such components.

The emitter outputs on the CA Series are wired in series, so #1 must be used first in order to obtain a signal. Simply plug the IR linking cable supplied with the CA product into emitter port #1. and plug the other end into the Russound 857 IR Connecting Block's "IR Common In". The secondary IR receiver can either be wired to the terminal block as shown or plugged into the "IR Receiver In" via a 1/8" mini-plug. The emitters that would have been connected directly to the CA system will now be plugged into the connecting block.

This method combines the modulated IR signal at the connecting block then distributes it to the four emitter ports. The power supply shown (846C) would only be required if the second IR receiver(s) needed it.

This method would also be used when connecting multiple CA systems together. The IR Link is only designed for two CA systems being that it conveys demodulated IR data between the systems.



# WARRANTY

The Russound CA-Series Controllers are fully guaranteed for Two (2) years from the date of purchase against all defects in materials and workmanship. During this period Russound will replace any defective parts and correct any defect in workmanship without charge for either parts or labor. For this warranty to apply, the unit must be installed and used according to its written instructions. If service is necessary, it must be performed by Russound. The unit must be returned to Russound at the owners expense and with prior written permission. Accidental damage and shipping damage are not considered defects under the terms of the warranty. Russound assumes no responsibility for defects resulting from abuse or servicing performed by an agency or person not specifically authorized in writing by Russound. Damage to or destruction of components due to improper use voids the warranty. In these cases the repair will be made at the owners expense. To return for repairs, the unit must be shipped to Russound at the owners expense, along with a note explaining the nature of the service required. Be sure to pack in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.

# Russound

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