C4630 SE Keypad Installation Instructions

Introduction

The C4630 SE Main and Numeric Keypads were designed specifically to be used with the C4630 SE Home Audio System.

Box Contents

Your C4630 SE Keypad box should contain the following items:

• (1) C4630 SE Main or Numeric Keypad

• (1) Decora wallplate with mounting screws

• (1) Membrane sheet with 66 extra Source buttons (C4630 SE Main Keypad only)

• (1) 14-Pin ribbon cable (C4630 SE Numeric Keypad only)

C4630 SE Main Keypad (see *Figure 1*)

The C4630 SE Main Keypad lets you control the zone volume, muting and select the active source, as well as providing buttons for controlling the source component that's active in the zone. A ZONE OFF button is also provided. The ZONE OFF button's LED color indicates the zone's status:

Red: Zone is OFF (C4630 SE is receiving power)

Green: Zone is ON

Orange: (flashing) Connected IR receiver is receiving IR commands or a keypad button is being pressed. This occurs even if the Zone is turned OFF.

Each keypad button has three different actions: PRESS, PRESS-AND-HOLD and DOUBLE-PRESS. This allows each button to issue three distinct commands or macros.

Out-of-the-box the following button functions are available on the Main Keypad:

VOLUME UP/DOWN buttons: PRESS = Volume UP/Down

MUTE button: PRESS = Mute/un-Mute the local zone; PRESS-AND-HOLD = Mute/un-Mute all zones designated for PARTY MODE.

Zone SOURCE SELECTOR buttons: PRESS = Select that source in the local zone; PRESS-AND-HOLD = Select that source in all zones designated for PARTY MODE. Pressing a Source Select button in a zone that is OFF will turn that zone ON.

Zone OFF button: Turns the local zone OFF

Additional PRESS, PRESS-AND-HOLD, DOUBLE-PRESS, source component control and macro trigger functions require programming with the Sonance Control Manager software included with the C4630 SE. The Sonance Control Manager can also be used to change any of the above out-of-the-box button functions.
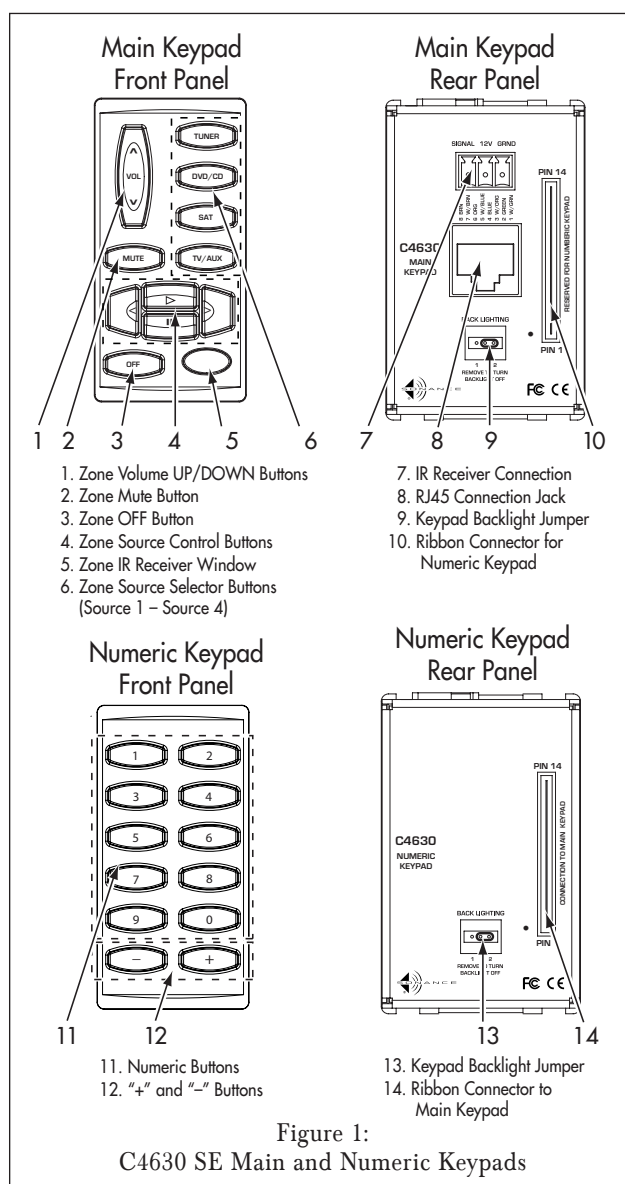

Main Keypad Front Panel

Main Keypad Rear Panel

1. Zone Volume UP/DOWN Buttons
2. Zone Mute Button
3. Zone OFF Button
4. Zone Source Control Buttons
5. Zone IR Receiver Window
6. Zone Source Selector Buttons (Source 1 – Source 4)

7. IR Receiver Connection
8. RJ45 Connection Jack
9. Keypad Backlight Jumper
10. Ribbon Connector for Numeric Keypad

Numeric Keypad Front Panel

Numeric Keypad Rear Panel

11. Numeric Buttons
12. "+" and "–" Buttons

13. Keypad Backlight Jumper
14. Ribbon Connector to Main Keypad

Figure 1:
C4630 SE Main and Numeric Keypads

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C4630 SE Numeric Keypad (see *Figure 1*, on page 1)

The C4630 SE Numeric Keypad incorporates ten numeric buttons labeled "0" through "9", and two buttons labeled "+" and "–". Like the C4630 SE Main Keypad, each of these buttons has PRESS, PRESS-AND-HOLD and DOUBLE-PRESS functions. Unlike the C4630 SE Main Keypad, the Numeric Keypad has no "out-of-the-box" functions — it must first be programmed with the Sonance Control Manager software.

The Numeric Keypad connects to the Main Keypad with the included 14-pin ribbon cable. See *Mounting the C4630 SE Keypads*, on page 3 for details.

Keypad Location

The C4630 SE keypads should typically be located near the entrance to a room, similar in height and location to a light switch (see Note, above). If an IR receiver is installed in the Main Keypad (see below), care should be taken to avoid placing the keypad near windows or areas that get direct sunlight that could interfere with the operation of the optional IR receiver. If this is not possible, you should locate the IR receiver away from the keypad.

Avoid mounting keypads in locations that will be exposed to moisture, such as near sinks, showers or bathtubs. If you want to install keypads outdoors, only install them in a covered area with an appropriate weather-proof box.

Main Keypad IR Receiver Holster

The Main Keypad does not feature a built-in IR receiver: it has a holster designed to receive a Sonance OptiLinQ FSMR1 Full-Spectrum IR Receiver (part #92222) or MR1 Micro IR Receiver (part #91344), both available separately (see Figure 2). A window on the front of the keypad allows the IR receiver to function. IR talkback is through the Zone OFF button.

If the Main Keypad is mounted in a location that creates interference from sunlight when the IR receiver is installed in its holster, you can move the IR receiver to another location in the room and still wire it to the keypad.

NOTE: IR receivers must be connected to the keypads to allow the optional IR remote to control the C4630 SE and to allow source component remotes to control their respective source components from inside the listening zones.

Installing an IR Receiver into the Keypad

1. Insert the IR receiver into the keypad holster as shown in *Figure 2A*. Feed the ribbon cable through the opening in the holster.

2. Insert the holster into the keypad as shown in *Figure 2B*. The IR receiver's photodiode should be directly behind the keypad's IR window.

3. Connect the IR receiver's 3-conductor ribbon cable to the keypad's rear-panel IR Receiver Connection as shown in *Figure 3*. The connection features a 3-pin removable connector similar to the ones used for the speaker connectors. Insert the wires into the openings at the rear of the connector and secure them by tightening the screws at the top of the connector.

   • The gray wire on the ribbon cable is the Data wire, the center wire is +12V and the remaining wire is Ground.
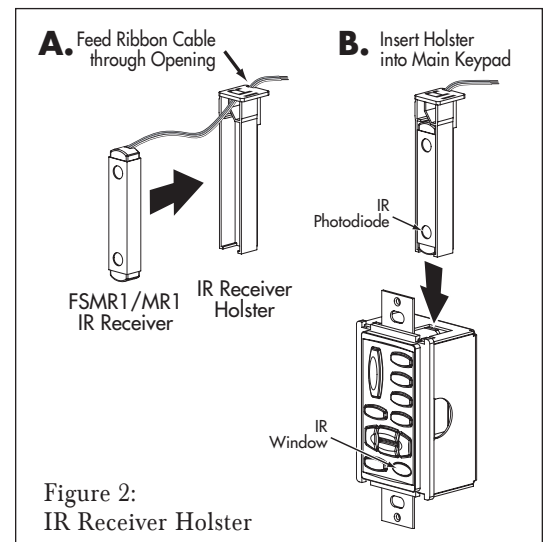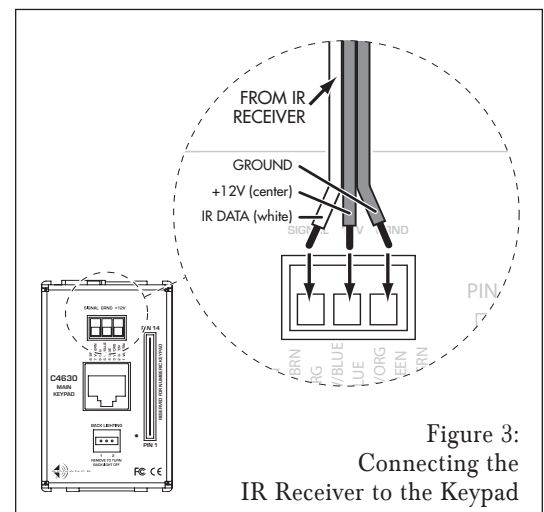

Figure 2:
IR Receiver Holster

Figure 3:
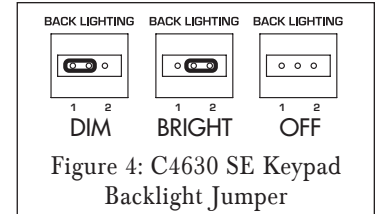Connecting the
IR Receiver to the Keypad

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Keypad Backlighting Jumper

The C4630 SE Main and Numeric Keypads have rear-panel Backlight Jumpers (*Figure 4*) that allow you to adjust the amount of keypad backlighting to suit room lighting conditions and user preference. Position 1 = DIM; Position 2 = BRIGHT; remove the jumper to turn the backlight OFF.

Using needle-nose pliers, tweezers or a similar tool, carefully insert the jumper in the desired position (see *Figure 4*). The factory default is BRIGHT.

NOTE: Unless the backlight jumper is removed, the keypad backlighting is always ON, even if the local zone and all zones are OFF.

Figure 4: C4630 SE Keypad
Backlight Jumper

C4630 SE Keypad Connections

1. In direct runs from keypad to controller, pull a length of CAT5 wire from every keypad mounting location to the C4630 SE location. The maximum length of any single CAT5 cable is 1000'.

2. Terminate each CAT5 cable with RJ45 connectors on each end. Follow the TIA568B wiring standard. (See *Figure 5*)

3. We strongly recommend testing your connections with an RJ45 network cable tester to check for cable continuity, miswiring, open connections, shorted connections or cross-pinning.
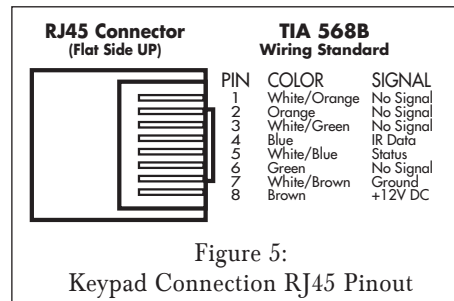

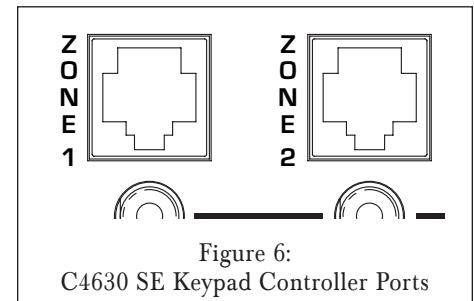Figure 5:
Keypad Connection RJ45 Pinout

Figure 6:
C4630 SE Keypad Controller Ports

4. Connect the CAT5/RJ45 cable to the RJ45 Connection Jack on the back of the Main Keypad (see *Figure 1,* on page 1) and to the zone's Keypad Controller Port on the C4630 SE (see *Figure 6*).

Mounting the C4630 SE Keypads

NOTE: Do NOT mount the C4630 SE keypads in the same electrical box with AC house wiring, light switches, or any other high-voltage device or control. The keypads can share gang boxes with each other, or with other controls such as A/B speaker switches, infrared receivers and Volume Controls, if these other devices are rated as Class 2 devices according to the National Electrical Code.

1. If you are using both a Main and Numeric Keypad, connect the Numeric Keypad's 14-pin ribbon cable between both keypads.

 • Connect the ribbon cable so that the wire with the red stripe connects to Pin 1 on both keypads (see *Figure 7*).

2. Mount the keypad(s) in an appropriate J-box or P-ring as described in *Keypad Location* on page 2.

 • The ribbon cable is long enough to allow a Main and Numeric Keypad to be mounted side-by-side in a double J-box. Either keypad can be mounted left or right.
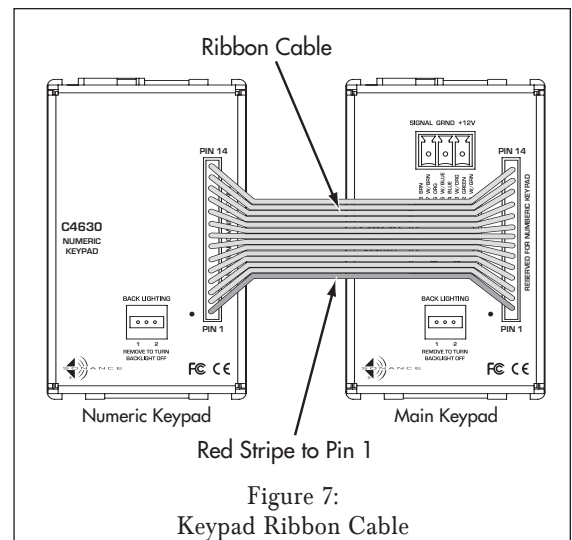
NOTE: If the ribbon cable is connected incorrectly the Numeric Keypad (including its backlighting) will not function.

Figure 7:
Keypad Ribbon Cable

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External Keypad Power (see *Figure 8*)

If you're connecting 6 or fewer sets of C4630 SE Main and Numeric Keypads to the C4630 SE (one set in each zone), leave the Zone 4 – 6 Keypad Power Switch in the INT (internal) position. No external keypad power is required.

If you're connecting more than 6 sets of C4630 SE Main and Numeric Keypads to the C4630 SE, set the Zone 4 – 6 Keypad Power Switch to the EXT (external) position. Connect a 12VDC 1A external power supply (Sonance PS2 Power Supply, part #91352, available separately) to the Zone 4 – 6 Keypad External Power connection to provide adequate power for the keypads in Zones 4 – 6.
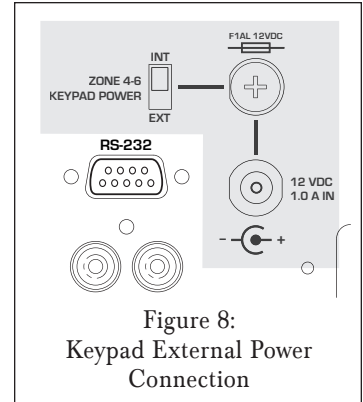
Figure 8:
Keypad External Power
Connection

Changing the Main Keypad Source Buttons

The Source buttons on the C4630 SE Main Keypad are labeled to indicate the specific sources in use on the system. The keypad comes with the following buttons already installed: Tuner, CD/DVD, Sat, TV/Aux. The keypad also comes with a sheet of replacement Source buttons that are labeled for a wide variety of common source components.

To change the Main Keypad Source buttons:

1. If the keypad is connected, disconnect it from the C4630 SE and from the Numeric Keypad.

2. Use a screwdriver or similar tool to release the keypad bezel tabs (see *Figure 9*).

3. Remove the keypad bezel and Source buttons from the keypad as shown in *Figure 9*.

Important: Do not touch the exposed portion of the keypad circuit board.

4. The four Source buttons are a single unit. Use a razor knife or similar tool to remove the button(s) you want to replace.

5. Use a razor knife or similar tool to separate the desired Source button(s) from the included sheet of replacement buttons.

6. Place all four of the desired Source buttons into the keypad bezel. The tabs on the buttons will fit-into the depressions adjacent to the openings on the back of the bezel (see *Figure 10*).

7. Snap the keypad bezel back into place on the keypad.

8. Test all buttons for free movement. If any of the buttons are tight or hang up, carefully remove, realign and replace the bezel.
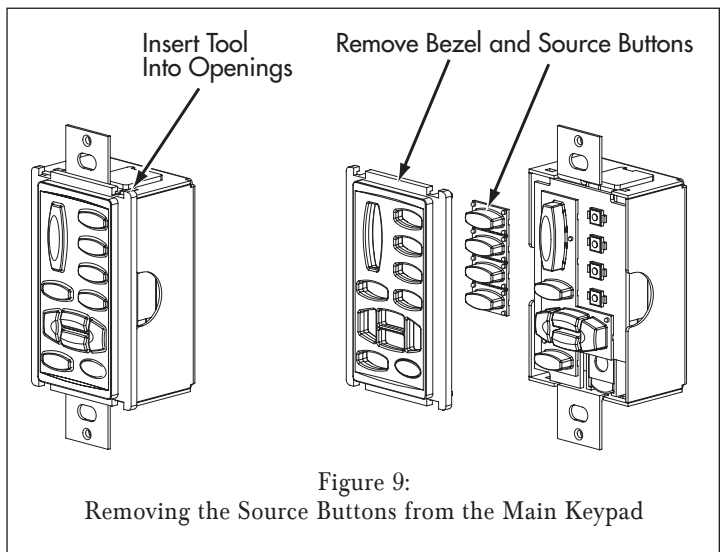

Insert Tool Into Openings

Remove Bezel and Source Buttons

Figure 9:
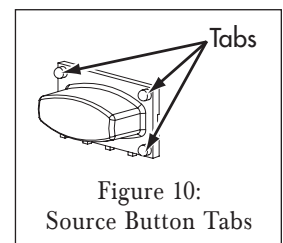Removing the Source Buttons from the Main Keypad

Tabs

Figure 10:
Source Button Tabs

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System Notes:

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Technical Assistance and Service

If you have any questions about the operation or installation of this product, please call our Technical Assistance Department on any business day at (800) 582-0772 or (949) 492-7777; from 7 a.m. to 5 p.m., Pacific Time.

If your product should need repair or service, contact your Sonance Authorized Dealer for help, or use the following procedure:

1. Prior to calling Sonance, note the product's model number, serial number, purchase date, and the name and address of the dealer where you purchased the product.

2. Contact our Technical Assistance Department at the above number(s) and describe the problem the unit is experiencing. If they determine that the product requires service, they will transfer you to our Customer Service Department, who will issue you a Return Authorization (RA) Number.

Important: You must have prior authorization to return your product to Sonance!

3. If you're directed to return the unit to Sonance for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. Note: it is best if you place the box into an additional outer "overcarton" before shipment to minimize a chance of theft in shipment. Please include a copy of the original bill of sale inside the package.

4. Contact a package delivery service such as United Parcel Service or Federal Express to arrange prepaid (not collect) shipping. Do not use the U.S. Postal Service.

Important: Freight collect shipments will be refused.

5. Write the Return Authorization Number on the outside of the shipping carton.

6. Ship the packaged unit to:

> Quality Assurance Department
> Sonance
> 212 Avenida Fabricante
> San Clemente, CA 92672-7531

Limited Warranty Coverage (U.S.A. Only)

Sonance warrants to the original retail purchaser only that this Sonance product will be free from defects in materials and workmanship for a period of five (5) years, provided the product was purchased from a Sonance Authorized Dealer.

Defective products must be shipped, together with proof of purchase, prepaid insured to the Authorized Sonance Dealer from whom they were purchased, or to the Sonance factory at the address listed on this instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or damage in transit is to be borne by the purchaser. If, upon examination at the factory or Authorized Sonance Dealer, it is determined that the unit was defective in materials or workmanship at any time during this warranty period, Sonance or the Authorized Sonance Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below.

If this model is no longer available and can not be repaired effectively, Sonance, at is sole option, may replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, Sonance assumes no responsibility or liability for such modification. All replaced parts and product become the property of Sonance. Products replaced or repaired under this warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by Sonance. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions. This Warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will Sonance be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if Sonance or a Authorized Sonance Dealer has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply. All implied warranties on the product are limited to the duration of this expressed Warranty. Some states do not allow limitation on the length of an implied warranty. If the original retail purchaser resides in such a state, this limitation does not apply.

EXCLUSIONS AND LIMITATIONS

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose, or otherwise. The warranty is limited to Sonance products registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product. Sonance shall, in no event, be liable for incidental or consequential damages arising from any breach of this warranty or otherwise. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

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