



Home Controller HC-200 Installation Guide



Supported Model

C4-HC200B-E-B-NR-1 Home Controller HC-200

Introduction to Home Controller HC-200

The Control4® Home Controller HC-200 provides options for controlling lights, home theaters, distributed audio systems, distributed video systems, and other devices controlled using various protocols, such as Infra Red (IR) and Serial (see IR Out description). This version comes with an improved processor, new Factory Restore button, and Flash support for the On-Screen Navigators.

It provides extensive media management services for audio and video sources, such as CDs and DVDs stored in connected devices. It also allows you to use an external storage device with USB support for media storage. It also includes multi-zone audio capabilities, sending music to rooms throughout the home.

When the Controller and other system components are installed and configured, users can control the system using a number of interfaces, such as: On-Screen Navigator (included) or a System Remote Control (sold separately).

What's in the Box

The following are included in your Home Controller box:

- Home Controller HC-200
- AC to DC power adapter with power cord
- IR emitters (4)
- Universal Mounting Plate
- Screws (4)
- *Home Controller HC-200 Installation Guide* (this document). Note: You can find this and other related documents online also at the Dealer portal: <http://www.control4.com/dealer/dealer-login/> under Support > Product Information.

Accessories Available for Purchase

- USB WiFi Adapter (C4-NWA-11G-USB)
- Rack-Mount Kit (C4-1URMK1-B)
- Serial Cable Kit (C4-CBL3.5MM-DB9)

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Only use attachments/accessories specified by the manufacturer.
11. Unplug this apparatus during lightning storms or when unused for long periods of time.
12. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING! To reduce the risk of electrical shock, do not expose this apparatus to rain or moisture.

AVERTISSEMENT! Pour réduire le risque de choc électrique, n'exposez pas cet appareil à la pluie ou à l'humidité.

WARNUNG! Um das Risiko des elektrischen Schlages zu verringern, setzen Sie diesen Apparat nicht Regen oder Feuchtigkeit aus.

Control4® Supported Devices

Control4 devices that communicate with this Controller include:

- | | |
|---|--------------------------|
| Touch Screens—All types and sizes (such as portable, table top, and wall-mounted, or 10", 7", and mini) | Multi Channel Amplifiers |
| LCD Keypads | 4-Zone Amplifiers |
| Wireless 2, 3, & 6 Button Keypads | Multi Tuners (V1 or V2) |
| Wireless Thermostats | Wireless Dimmers |
| Speaker Points® | Wireless Switches |
| Audio Matrix Switch | Wireless Outlet Dimmers |
| | Wireless Outlet Switches |

For a more information, refer to Support > Product Information in the Dealer portal at <http://www.control4.com>.

Requirements and Specifications

- If you are using the Ethernet networking option, the Ethernet network should be in place prior to starting the installation.
- If you are using the WiFi networking option, you must install and set up the WiFi adapter (sold separately) in order to complete the installation.
- Software required for configuration is Composer Pro.

The Home Controller HC-200 specifications include:

- | | |
|-------------------------------|--|
| Model Number | • C4-HC200B-E-B-NR-1 |
| Network Support | • Ethernet—required (included) |
| | • WiFi—optional, requires a WiFi adapter (sold separately) |
| Media Recognition | • Online CD/DVD recognition and media information service |
| Audio Playback Formats | • MP3: 32kbps to 320kbps, CBR and VBR |
| Display | • LED indicators |
| Power Requirements | • 100-240 VAC, 60/50 Hz, 0.50 A MAX |
| Dimensions | • H x W x D: 1.44" (36.5 mm) x 8.55" (217 mm) x 5" (127 mm) (with connectors and mounting plate) |
| Weight | • 1.8 lbs/0.82 kg |

Additional Resources

The following resources are available to provide you with additional support.

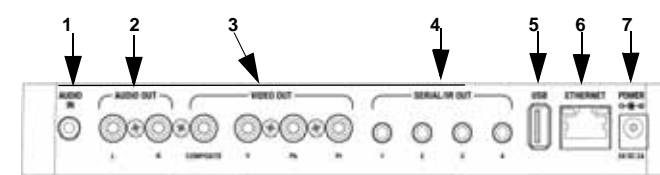
- Your Control4 Reseller
- Control4 Web Site: <http://www.control4.com>
- Composer online help

Front View



1. **IR Window / IR Blaster**—For capturing third-party IR codes from hand-held devices (such as remote controls) or blasting IR codes. The WiFi LED blinks red when capturing IR codes.
2. **WiFi LED**—This LED blinks orange and then blue during the boot process. When the operating system is running, the WiFi driver changes the LED color depending on the signal strength of its connection to its associated access point. Colors and signal strength are as follows: orange = Fair to Good, blue = Excellent, and no light = No connection.
3. **Data LED**—This blue LED indicates streaming audio is received.
4. **Link LED/Identification button**—Blue LED light indicates that the Home Controller has been identified in a Control4 Composer project. Press this button to identify this device in Composer.
5. **Power LED**—Blue LED light indicates AC power is present. It turns on immediately after the power is applied to the device.
6. **Factory Restore Button** (bottom of device)—Restores the Controller.

Back View



1. **Audio In (1)**—3.5 mm jacks for stereo channel input (line level) for one stereo analog source.
2. **Audio Out (1 left-right pair)**—RCA jacks for stereo channel line output (line level) for amplifiers or audio switches.
3. **Video Out**—Composite RCA and Component RCA jacks.
4. **Serial Port (up to 2) or IR Out (up to 4)**—3.5 mm jacks for up to 4 IR emitters or for a combination of IR emitters and serial devices (up to 2). Jacks 1 and 2 can be configured independently for serial devices, such as receivers or disk changers (requires serial cable, sold separately.)
5. **USB (1 port)**—For external storage device with USB support (such as FAT32 formatted devices) or WiFi adapter (C4-NWA-11G-USB).
6. **Ethernet**—RJ-45 jack for a 10/100 Base T Ethernet connection.
7. **Power plug port**—DC power supply port.

Install the HC-200

To install this controller:

1. **Ensure that your home network is in place before starting your system setup:** The Home Controller HC-200 requires a network connection (wired or WiFi) to use all features as designed. When connected, the Home Controller can access Web-based media databases and Control4® system updates.
2. **Connect the HC-200 controller to the network:** To connect using an Ethernet connection, plug the data cable from the home network connection into the Home Controller RJ-45 port (labeled "Ethernet") and the network port on the wall or at the network switch.

NOTE: To connect using the optional USB WiFi adapter (C4-NWA-11G-USB), refer to the installation instructions shipped with the adapter.

Only use the power supply included in this box.

3. **Power up the controller:** Plug the DC power supply into the Home Controller power plug port and an electrical outlet.
4. **Connect system devices:** As described in the "Connect Devices" section that follows.

Mount the HC-200 on a Wall (Optional)

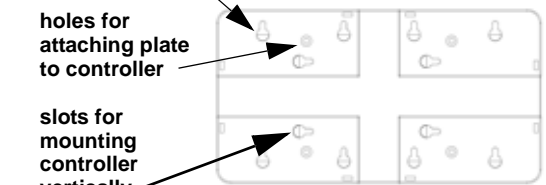
1. **Mount the HC-200 horizontally using 1 standard single-gang wall box:** The wall mounting plate has 4 horizontal sets of slots. Install a single-gang wall box. Leave the screws protruding .08" from the wall.

Mount the HC-200 horizontally or vertically using 1 standard double-gang box: Install a standard double-gang box. Leave the screws protruding .08" from the wall.

Mount the HC-200 horizontally or vertically using 4 screws (not provided) placed directly into a wall stud or studs: Using the mounting plate as a template, screw 4 screws into a stud to align with the 4 center slots for vertical positioning or into 2 studs to align with the 4 corner slots for horizontal positioning. Leave the screws protruding .08" from the wall.

NOTE: To quickly check the fit of the screws, place the wall mounting plate over the screws before attaching it to the bottom of the Controller.

slots for mounting controller horizontally



2. Use the 4 screws (provided) to attach the mounting plate to the bottom of the Controller. Ensure that the narrow end of the slots will be on top when the device is installed.
3. Arrange the wires to fit in the wire channels on the mounting plate.
4. Line the slots on the mounting plate up with the screws.
5. Press the device onto the screws and slide down until the screws are in the narrow end of the slots.

Configure the HC-200

Configure Video Output Mode

The default video output mode is NTSC over composite. In this mode, some bleed-through of the NTSC signal on the component video output connections occurs. However, the video image will not appear correctly in this mode. The HC-200 can be configured to output over component using NTSC (standard definition) or 720p (high definition). To configure the video mode to use the component video outputs, make the appropriate bindings for the desired video output mode in Composer.

Connect Devices

NOTE: You can use the Composer software to step through the connection process before or after the physical connections are completed.

Connect all applicable devices to the Home Controller HC-200 using one of the connection options described in the following table.

Table 1. Connection Options

Audio In (1) —3.5 mm jacks for stereo channel input (line level) for 1 stereo analog source.	
Audio Out (1 left-right pair) —RCA jacks for stereo channel line output (line level) for amplifiers or audio switches.	
Video Out Options —Composite or Component port for displaying navigation menus on a monitor or TV. The Component jack is used for displaying standard or high-definition video. To display standard definition video, use the Composite port.	
Serial Port (up to 2) or IR Out (up to 4) —3.5 mm jacks for up to 4 IR emitters or for a combination of IR emitters and serial devices (up to 2). Jacks 1 and 2 can be configured independently for serial devices, such as receivers or disk changers. See "Set Up IR Emitters or IR Blaster" for more information.	
USB (1 port) —For external storage device with USB support (such as FAT32 formatted devices). See "Using External Storage Devices" for more information or for connecting the optional WiFi adapter C4-NWA-11G-USB.	
Ethernet —RJ-45 for a 10/100 BaseT Ethernet connection	
Power plug port —For use with the DC power supply (provided)	

Connect the IR Ports/Serial Ports (Optional)

The HC-200 provides 4 IR ports; Jacks 1 and 2 can be reconfigured independently for serial communication. Any jack not used for serial can be used for IR. Connect a device to the HC-200, like a receiver or disk changer using the special serial cable (optional). Serial ports support many different baud rates. The table below shows the serial communication values.

	Hardware Flow Control	Odd Parity	Even Parity	No Parity	Other
Serial Port 1		X	X	X	
Serial Port 2		X	X	X	
Serial Port 3				X	8 bits/char; 1 stop bit
Serial Port 4				X	8 bits/char; 1 stop bit

To configure a port for serial or for IR, make the appropriate connections in your project using Composer.

Set Up IR Emitters or IR Blaster

Your system may contain third-party products that are controlled with IR commands (usually through remote controls). To provide a way for the Home Controller to control a device that only recognizes IR commands, complete one of the following setups: IR Emitters or IR Blaster.

IR Emitters

1. Plug the 3.5 mm connector end of one of the 4 IR stick-on emitters provided into an IR Out port on the HC-200.
2. Place the stick-on emitter end over the IR receiver on the media player, TV, or other target device to drive IR signals from the HC-200 to the target.

IR Blaster

In addition to IR emitters, the HC-200 is also equipped with an IR blaster, which is located just left of the front LEDs. To use the blaster instead of an IR emitter:

1. In Composer, connect the Front IR Out of the Home Controller to the IR In of the device you want to control.
2. Test and verify that the HC-200 is positioned in such a way that the blaster can reach the device you want to control.

Set Up External Storage Device

You can store and access media from an external storage device, such as a network hard drive or USB memory device by plugging the USB drive into the USB port and configure or scan the media from Composer.

Troubleshooting


Factory Restore Button

1. To restore the HC-200 for system recovery to the factory default image, on the bottom of the device insert the end of a paper clip into the small hole.
2. Power cycle the device while pressing and holding the Factory Restore button for about 5-7 seconds and the Status LED blinks orange. This action starts the recovery process.

Identification Button

1. To reset the HC-200 to the network defaults, on the front of the device power cycle the device and hold the Identification button until the Data, Link, and Power LEDs are solid blue; immediately release the button.
2. If during the boot sequence, the Status LED stays Orange, press and hold the Identification button until the LED blinks Blue, and then release it.

Regulatory Compliance

 **IMPORTANT!** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IMPORTANT! Tous les changements ou modifications pas expressément approuvés par la partie responsable de la conformité ont pu vider l'autorité de l'utilisateur pour actionner cet équipement.

FCC/Industry Canada

FCC ID: R33C4HC2001/Canadian ID IC:7848A-C4HC200E

This device complies with Part 15 of the FCC Rules Sub-Part B and also with Canada ICES-003 and RSS-Gen. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Australian / New Zealand

- AS/NZS CISPR 22:2006 / A1:2007.



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Z703

Recycling

For recycling information, please go to www.control4.com/recycling.



Limited Warranty

Limited 2-year Warranty. Refer to <http://www.control4.com/warranty>.

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