



# Home Controller HC-200 Installation Guide



## Supported Model

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

## Introduction

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 items 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 in the Products pages.

## 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 and keep these instructions.
2. Heed all warnings and follow all instructions for this product in this and other Control4® documents included with or related to this product.
3. Improper use of this product may result in potential electric shock.
4. Do not use this product near water.
5. Never spill liquid of any kind on this product.
6. Clean this product only with a damp or dry cloth. Do not use liquid cleaners or aerosol cleaners to clean the product.
7. Install this product according to the manufacturer's instructions.
8. Install this product according to the National Electrical Code ANSI/NFPA 70 and the prevailing local codes and requirements.
9. This product should be operated with the type of power indicated on the marked label. If you are not sure of the type of power available, consult your Control4 dealer or local power company.
10. Slots and openings on a cabinet rack, and components used with this product are provided for ventilation, reliable operation, and protection from overheating of the product. These slots and openings must not be blocked or covered.
11. This product should never be placed near or over a radiator or heat register, or in a built-in installation unless proper ventilation is provided.
12. Never push objects of any kind into this product through cabinet slots because they may touch dangerous voltage points or short out parts that could result in a fire or electric shock.
13. Only use the attachments and accessories included with this product or recommended by Control4.
14. Do not allow anything to rest on the power cord. Do not install or place this product where people will walk on the cord.

15. Do not use extension cords with any products in a Control4 system.
16. If applicable, unplug this product during lightning storms or when unused for long periods of time.
17. Do not exceed the maximum wire size (if specified) in this guide.
18. This product must be installed by qualified professionals only.
19. Do not attempt to service this product yourself except as noted in this guide. Opening or removing covers of internal components may expose you to dangerous voltage points or other risks.
20. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged or frayed in any way; for example, a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into this product, this product has been exposed to rain or moisture, this product does not operate normally, or this product 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, tabletop, and in-wall, or 10", 7", 5", and mini)
- LCD Keypads
- Wireless 2, 3, & 6 Button Keypads
- Wireless Thermostats
- Speaker Points®
- Audio Matrix Switch
- Multi Channel Amplifiers
- 4-Zone Amplifiers
- Multi Tuners (V1 or V2)
- Wireless Dimmers
- Wireless Switches
- Wireless Outlet Dimmers
- Wireless Outlet Switches

For a more information, refer to the Products pages at [www.control4.com](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 are:

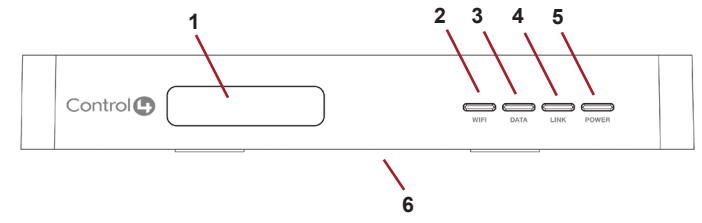
<b>Model Number</b>	C4-HC200B-E-B-NR-1
<b>Network Support</b>	Ethernet—required (included) WiFi—optional, requires a WiFi adapter (sold separately)
<b>Media Recognition</b>	Online CD/DVD recognition and media information service
<b>Audio Playback Formats</b>	MP3: 32kbps to 320kbps, CBR and VBR
<b>Display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

## Additional Resources

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

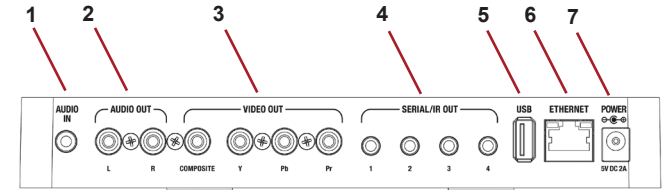
- Your Control4 Reseller
- Control4 Web Site: <http://www.control4.com>
- Composer online help

## 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 disc 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.

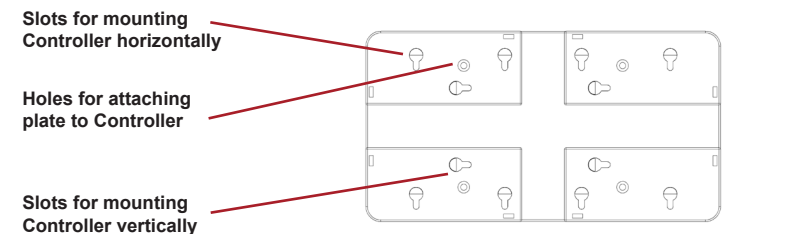
## Mount the HC-200 on a Wall (Optional)

1. **Mount the HC-200 horizontally using one (1) standard single-gang wall box:** The wall mounting plate has four (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 one (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 four (4) screws (not provided) placed directly into a wall stud or studs:** Using the mounting plate as a template, screw four (4) screws into a stud to align with the four (4) center slots for vertical positioning or into two (2) studs to align with the four (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.



2. Use the four (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. Connections Options

<b>Audio In (1)</b> —3.5 mm jacks for stereo channel input (line level) for 1 stereo analog source.	
<b>Audio Out (1 left-right pair)</b> —RCA jacks for stereo channel line output (line level) for amplifiers or audio switches.	
<b>Video Out Options</b> —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.	
<b>Serial Port (up to 2) or IR Out (up to 4)</b> —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 disc changers. See "Set Up IR Emitters or IR Blaster" for more information.	
<b>USB (1 port)</b> —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.	
<b>Ethernet</b> —RJ-45 for a 10/100 BaseT Ethernet connection.	
<b>Power plug port</b> —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 disc changer using the special serial cable (optional). Serial ports support many different baud rates. The table below shows the serial communication values.

Table 2. IR/Serial Ports

	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.

## Limited Warranty

For complete warranty information, including details on consumer legal rights as well as warranty exclusions, visit [www.control4.com/warranty](http://www.control4.com/warranty).

## About this Document

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