



# Home Controller HC-200 Installation Guide



## Supported Model

C4-HC200-E-B 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, and other devices controlled using various protocols, such as Infra Red (IR) and Serial.

It provides extensive media management services for audio 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.

Once the controller and other system components are installed and configured (using Control4 Composer software or another Control4 setup program), your users can control the system using one of the two user interfaces included with this controller: On-screen Navigator or System Remote Control or any other Control4 user interface device (available separately).

## What's in the Box

The following are included in your Home Controller box:

- Home Controller HC-200
- System Remote Control with LCD Navigator display and 4 AAA batteries
- AC to DC power adapter with power cord
- IR emitters (4)
- CD containing Control4 user documentation
- *Home Controller HC-200 Installation Guide* (this document)

## Accessories Available for Purchase

- USB WiFi Adapter (C4-NWA-11G-USB)
- Rack-Mount Kit (C4 - 3URMK - B)
- Serial Cable Kit ( )

## 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.

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

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

## Control4 Supported Devices

Control4 devices that can be controlled by this controller include:

- |   |                         |
|---|-------------------------|
| Touch Screen (Wireless or Wall-Mounted) | Wireless Dimmer         |
| Mini Touch Screen                       | Wireless Switch         |
| LCD Keypad                              | Wireless Outlet Dimmer  |
| Wireless 2, 3, & 6 Button Keypads       | Wireless Outlet Switch  |
| Wireless Thermostat                     | Multi Channel Amplifier |
| Speaker Point™                          | Audio Matrix Switch     |
| Supported Third-Party devices           | Multi Tuner             |

For a more information see "Products" at <http://www.control4.com>.

## Requirements and Specifications

Prior to installing this product, ensure that: Ethernet network wiring is in place.

The Home Controller HC-200 specifications include:

- |                               |   |
|-------------------------------|---|
| <b>Model Number</b>           | • C4-HC200-E-B  |
| <b>Network Support</b>        | • Ethernet—required (included)  |
|                               | • WiFi—optional, requires a WiFi adapter (sold separately)                                      |
| <b>Media Recognition</b>      | • AMG 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 pounds  |

## Additional Resources

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

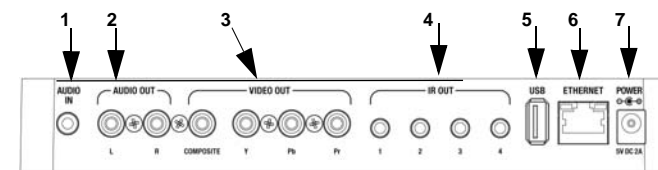
- Your authorized Control4 reseller
- Control4 Web Site: <http://www.control4.com>
- Composer online help

## Front View



1. **IR Window / IR Blaster**—For capturing third-party IR codes from handheld devices (such as remote controls) or blasting IR codes. The WiFi LED blinks red when capturing IR codes.
2. **WiFi LED**—This LED blinks first red, then orange, and then blue during the boot process. Once 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 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.

## Back View



1. **Audio In (1 left-right pair)**—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. **IR Out (4 sets)/Serial (optional, 2 sets)**—3.5 mm jacks for up to four IR output transmitters or for up to two optional serial devices, such as a receiver or disk changer. Jacks 1 and 2 are configurable.
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 BaseT 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) in order 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. **To connect using the optional USB WiFi adapter (C4-NWA-11G-USB), refer to the installation instructions shipped with the adapter.**
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 HC-200 horizontally using 2 standard single-gang wall boxes:** The wall mounting plate has four horizontal sets of slots. Install two single-gang wall boxes so that they will align with set 1 and set 4, using the wall mounting plate as a template. Leave the screws protruding [ ] 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 [ ] 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 four screws into a stud (for vertical positioning) or two studs (for horizontal positioning) to align with slots 1 and 4. Leave the screws protruding [ ] from the wall.

2. Use the four 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 (not applicable to mounting device directly into wall vertically).
3. Arrange the wires in the wire paths on the mounting plate. [How do they need to be arranged?]
4. Line the slots on the mounting plate up with the screws.
5. Press the device onto the screws and slide down (or over if mounting device directly into wall vertically) until the screws are in the narrow end of the slots.

## Configure the HC-200

### Set Up Media Storage

To set up media storage on the controller or using an external device, use Control4 Easy Importer on a connected computer. (Install Easy Importer from the installation CD included with your controller.) See Easy Importer Help for more information.

### Configure Video Output Mode

The default video output mode is NTSC over composite. In this mode, there is some bleed-through of the NTSC signal on the component video output connections. 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, in Composer, make the appropriate bindings for the desired video output mode.

## Connect Devices

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

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

<b>Audio In (1 left-right pair)</b> —3.5 mm jacks for stereo channel input (line level) for one 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>IR Out (4 sets)/Serial (optional, 2 sets)</b> —3.5 mm jacks for up to four IR output transmitters or serial devices, such as a receiver or disk changer. 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 "Set up External Storage Device" 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 four IR ports, two of which can be reconfigured for serial communication. Connect a device to the HC-200, like a receiver or disk changer using the special serial cable (optional). Serial ports support many different band rates but do not support hardware flow control.

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

- Plug the 3.5 mm connector end of one of the four IR stick-on emitters provided into an IR Out port on the HC-200.
- 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:

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

## Troubleshooting

To reset the HC-200, press and hold the identify button until the WiFi LED blinks orange, signaling the start of the boot process.

To reset to network defaults (wired connection), power cycle the HC-200 and hold the identify button until the Data, Link, and Power LEDs are solid blue, then immediately release.

If during the boot sequence, the WiFi LED stays orange, press and hold the identify button until the LED blinks blue, then release.

## Regulatory Compliance

This product has been designed and tested to the following U.S., Canadian, European, Australian, and New Zealand standards:

**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.

**WICHTIG!** Alle mögliche Änderungen oder Änderungen nicht ausdrücklich genehmigt von der Partei, die für Befolgung verantwortlich ist, konnten die Berechtigung des Benutzers aufheben, um diese Ausrüstung zu betreiben.

## North America

### Federal Communications Commission (FCC)

FCC ID: R33C4HC2001—This device complies with Part 15 of the FCC Rules. 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.

### Edison Test Lab (ETL)

This product has been tested by ETL and has been found to be in compliance with:

UL60065, 7th Edition, 2006 + A1; 2006—Audio video and similar electronic apparatus - safety requirements

CSA C22.2 No. 60065-03 1st Edition—Audio video and similar electronic apparatus - safety requirements



### Industry Canada

This Class B digital apparatus complies with Canada ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

CAN/CSA-C22.2 No. 60065-03 1st ed., 2006-04 +A1: 2006 (Audio, video, and similar electronic apparatus)

Canadian ID 7848A-C4HC200E

## Europe: CE Declaration of Conformity



European Contact Information	United States Contact Information
Control4 UK Limited Unit 3, Green Park Business Centre Sutton-on-the-Forest, York YO61 IET, United Kingdom +44 (0) 134781 2300 c4@control4-UK.com	Control4 Corporation 11734 S. Election Road, Suite 200 Salt Lake City, UT 84020-6432, USA Tel (801) 523-3100

Product: **Home Controller HC-200**

The undersigned hereby declares, on behalf of Control4 Corporation, that the above-referenced product, to which this declaration relates, is in conformity with the provisions of:

- Council Directive 89/336/EEC (May 3, 1989) on Electromagnetic Compatibility
- Council Directive 1999/5/EC (Mar 9, 1999) on Radio & Telecommunication Terminal Equipment (R&TTE)
- Council Directive 73/23/EEC (Feb. 19, 1973) on Low Voltage Equipment Safety
- Council Directive 93/68/EEC (Jul. 22, 1993) Amending Directives 89/336/EEC and 73/23/EEC

and has been tested to the requirements of, and shown to be in compliance with, the following requisite standards:

- IEC 60065/EN 60065 - 2002 Audio Video and similar electronic apparatus
- EN 55022: 2006 Information Technology Equipment
- EN 55024: 1998 + A1: 2001 Information Technology Equipment—Immunity characteristics—limits and methods of measurement.

This product is susceptible to RF interference.

The Technical Construction File required by these Directives is maintained at the corporate headquarters of Control4, Salt Lake City, Utah, U.S.A.



Signed,

Brett Molen—Vice President, July \_\_\_\_, 2008

Norsk: Apparatet må tilkoples jordet stikkontakt.

Suomi: Laitte on liitettävä suojamaadoituskoskettimilla varustettuun pistorasiaan.

Svensk: Apparatens skall anslutas till jordat uttag.

Dansk: Vigtigt! Lederen med grøn/gul isolation må kun tilsluttes en klemme mærket  eller .

### Australian / New Zealand

- AS/NZS CISPR 22: 2002—Information Technology Equipment—Radio disturbance characteristics.

## Recycling

For recycling information, please go to [www.control4.com/recycling](http://www.control4.com/recycling).



## Warranty

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

## About This Document

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