

# NeoTV Streaming Player (NTV200)

User Manual



350 East Plumeria Drive San Jose, CA 95134 USA

February 2012 202-10841-03 v1.0

#### **NeoTV Streaming Player (NTV200)**

© 2012 NETGEAR, Inc. All rights reserved

No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means without the written permission of NETGEAR, Inc.

#### **Technical Support**

Thank you for choosing NETGEAR. To register your product, get the latest product updates, get support online, or for more information about the topics covered in this manual, visit the Support website at

http://support.netgear.com

Phone (US & Canada only): 1-888-NETGEAR

Phone (Other Countries): Check the list of phone numbers at

http://support.netgear.com/app/answers/detail/a\_id/984

#### **Trademarks**

NETGEAR, the NETGEAR logo, and Connect with Innovation are trademarks and/or registered trademarks of NETGEAR, Inc. and/or its subsidiaries in the United States and/or other countries. Information is subject to change without notice. Other brand and product names are registered trademarks or trademarks of their respective holders. © 2012 NETGEAR, Inc. All rights reserved.

HDMI, the HDMI Logo, and HighDefinition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Manufactured under license from Dolby laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

#### **Statement of Conditions**

To improve internal design, operational function, and/or reliability, NETGEAR reserves the right to make changes to the products described in this document without notice. NETGEAR does not assume any liability that may occur due to the use, or application of, the product(s) or circuit layout(s) described herein.

## Contents

6
7
7
7
7
8
8
8 9
e 10
10 11
13
15
16
19
20
21
22
24
25
27
27
28
30
31
31
32
33
33

#### **NeoTV Streaming Player (NTV200)**

	110011 Oliodining Playor (1111200)
Appendix A	Supplemental Information
Factory De	efault Settings
Appendix B	Notification of Compliance

## Getting Started

1

This chapter covers the following topics:

- Streaming Media Basics
- Hardware Features
- What You Need to Use Your NeoTV Player
- Installation
- Onscreen Quick Setup
- Remote Control
- Watch NeoTV Channels

For more information about the topics covered in this manual, visit the support website at <a href="http://support.netgear.com">http://support.netgear.com</a>.

## **Streaming Media Basics**

For the optimal media streaming experience with the NeoTV Streaming Player, NETGEAR recommends the following:

• **Broadband Internet service**. You need at least a 1.2 Mbps connection to watch movies instantly on the NeoTV Streaming Player. The faster your connection, the better the quality. For high-quality video and audio, a connection of least 2.5 Mbps is required, and for HD 1080p movies 4.5 Mbps is recommended.

**Note:** Streaming quality also depends on the Internet connection quality, sometimes higher bandwidth is required to accommodate the network packet lost.

You can test your bandwidth at one of the following sites:

www.speakeasy.net/speedtest

www.speedtest.net

Or you can sign up for VUDU services and run Network Speed Test under setting.

- Network connections. You can connect your NeoTV Streaming Player to your broadband Internet connection using a wired or wirelessly (Wi-Fi) connection. You might need a network router or access point if your cable or DSL modem does not have free ports or wireless support.
- Internet access through your network. The NeoTV Streaming Player connects to the
  Internet through your home network using either a wireless connection orif you prefer, an
  Ethernet cable. For wireless connections, the NeoTV Streaming Player follows the Wi-Fi
  standard and is compatible with 802.11b, 802.11g, and 802.11n networks—the most
  common Wi-Fi networks, depending on your specific model. The NeoTV Streaming
  Player also supports wireless security, including WEP, WPA, and WPA2.

## **Hardware Features**

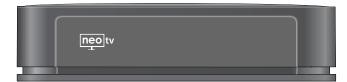
#### What Is Included in the Box





Remote control with batteries

#### Front and Rear Views





## What You Need to Use Your NeoTV Player

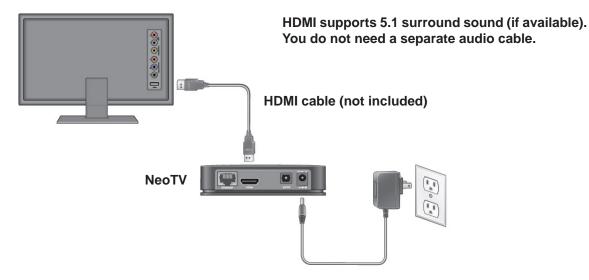
- TV with HDMI port
- HDMI cable
- Broadband Internet connection
- A wireless or wired network

#### Installation

To install your NeoTV Streaming Player, you connect it to the TV and to your home network. When you turn on the TV, the NeoTV Quick Setup screen displays.

#### Connect to the TV

- 1. Make sure that your TV is on and set to display the correct video input.
- 2. Connect an HDMI cable (sold separately) to the HDMI port on your player and to the HDMI IN port on your TV.



3. Connect the power adapter to your player, and plug it into an electrical outlet.

#### **Remote Control Batteries**

To use the remote control, remove the plastic strip beneath the batteries as shown.



Figure 1. Remove the plastic strip that is under the batteries

#### Connect to Your Home Network

To use your player, you need to connect it to your home network with either a wireless or a wired connection. After you get your network ready, the onscreen guided setup helps you connect your player to your network.



#### **IMPORTANT:**

Do not place anything on top of your NeoTV player. Placing objects on top of your player can interfere with the wireless signal or cause the player to overheat.

#### Wired Connection

Use an Ethernet cable (sold separately) to connect your player to a LAN port on your router.

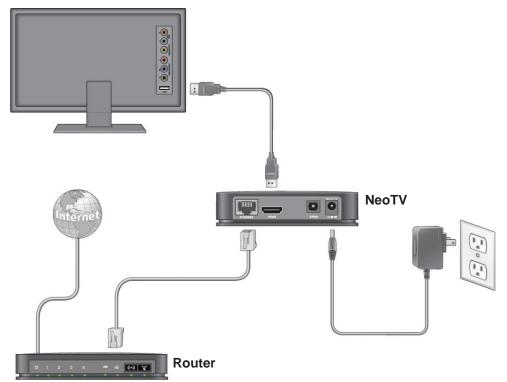


Figure 2. Wired LAN connection

#### Wireless Connection

If you are using a wireless connection, place your player within range of your wireless network. For best wireless reception, avoid enclosing your player in a cabinet.

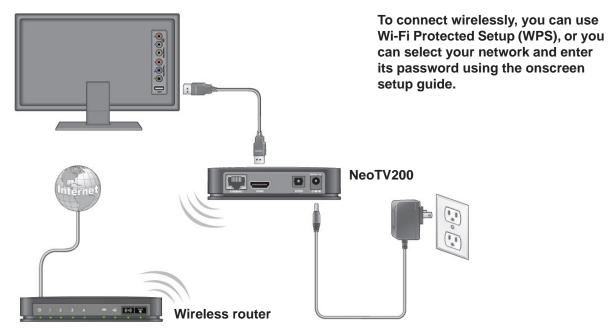


Figure 3. Wireless network connection

If you do not receive a strong signal during the onscreen setup, rotate your player or move it closer to your router.

#### **Reset Button**

There is a Reset button on the bottom of the NeoTV Streaming Player. You can use the Reset button to go to standby mode.

- Press Reset once and the NeoTV Streaming Player goes to standby mode. Press Reset again to wake up the NeoTV Streaming Player.
- To reboot, press and hold Reset for 6 seconds. The unit power cycles.

## **Remote Control**

The remote control buttons are described in the following figure:



Figure 4. Remote control

Table 1. Remote control buttons

Button	Description
Power	Wake up the NTV200, or make the NTV200 go to standby.
Home	Exit the current streaming channel to go to the Home screen.
Up	Navigate up.
Down	Navigate down.
Left	Navigate left.
Right	Navigate right

Table 1. Remote control buttons (continued)

Button	Description
ОК	Select.
Return	Return to the previous menu. Some services do not use this button.
Menu	Additional options. Some channels might not use this button.
Play/Pause	Play or pause media.
Stop	Stop playing media.
Fast Forward	Fast forward.
Rewind	Rewind.
Next	Skip to next. Some services do not use this button.
Previous	Previous movie chapter. Some services do not use this button.
• • •	These color-coded buttons are used only in certain screens. Those screens display instructions for their use.

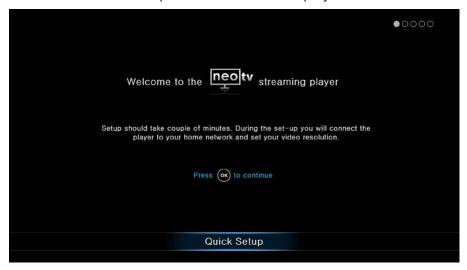
## **Onscreen Quick Setup**

Onscreen Quick Setup makes it easy to get started with the NeoTV Streaming Player.

#### > To use Quick Setup:

- 1. After you connect your NeoTV Streaming Player, press **Power** on the NeoTV remote control to turn it on.
- 2. You might need to use your TV remote control to select the HDMI input on your TV where you connected the NeoTV Streaming Player.

The NeoTV Quick Setup Welcome screen displays.



- 3. Follow the onscreen setup instructions to select the following:
  - TV resolution. This is the output resolution to the TV.
  - **Standby timing**. Select the number of minutes that the NeoTV Streaming Player waits to display a screen saver when media is not playing.
  - WiFi network. Select your home network. If you connected an Ethernet LAN cable, you are not prompted to select a WiFi network. You can use one of the following methods.
    - **Select your WiFI network**. The NTV200 displays a list of networks in your area. Select the one that you want to join.
    - Connect using WPS. When prompted, press the WPS button on your router to join your network without typing the network password.
    - **Connect manually**. Use the onscreen keyboard to type the name of the network and its WiFl password.
  - The NeoTV Streaming Player checks for software updates.

**4.** If an update is available press the yellow, button on the lower part of the remote control:



The NeoTV Streaming Player might restart after upgrading. Then the Home screen displays:

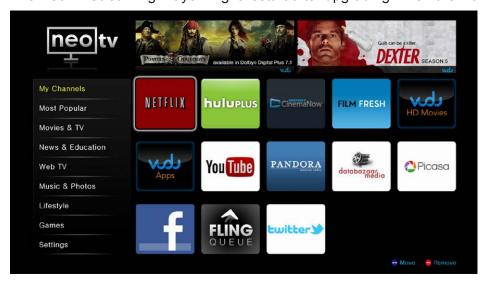
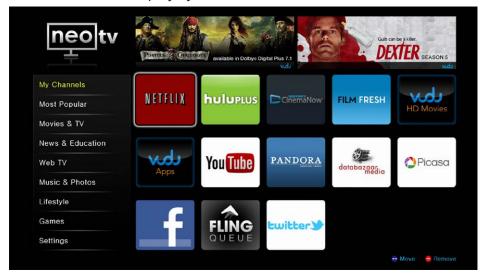


Figure 5. NeoTV Streaming Player Home screen

## Watch NeoTV Channels

The Home screen displays your channel selections:



If you want to play HD movies and TV shows, note that Netflix, HuluPlus, CinemaNow, and VUDU offer high-definition (HD) content. VUDU also provides 1080p full HD and 5.1 surround sound content.

#### > To manage My Channels:

You can control the My Channel display on the Home screen.

- To move a channel, select it and press the blue button on the remote control. Use the arrow button on the remote control to go to the new position and press **OK**.
- To remove a channel from the display, press the red button on the remote control and press OK.

#### > To add channels:

- 1. Navigate to a screen such as Most Popular that displays a selection of channels.
- 2. Use the arrow buttons on the remote control to select a channel that you want to add to My Channels.
- Press the green button on the remote control.
   The next time you go to the My Channels screen, the new channel will be included.

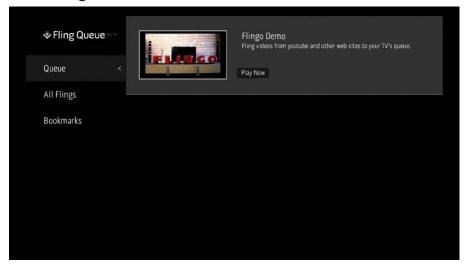
#### > To play media:

- 1. Select a menu item in the left pane on the Home screen.
- **2.** Select the service or channel, and press **OK**.

#### Fling Queue

Flingo is a free app that lets you select Internet content and send it to your TV.

- > To set up your computer with Flingo:
  - 1. Launch a web browser.
  - **2.** Go to the Flingo website at www.flingo.org.
  - **3.** Check to make sure that your browser is supported.
  - 4. Drag the Fling button from the Flingo website onto your browser .
- > To fling a video from your computer to your TV:
  - 1. Turn on the NTV200.
  - 2. Select Fling Queue.



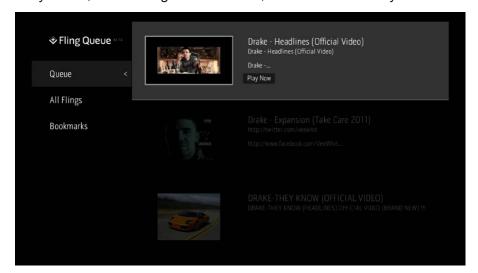
Fling Queue is typically one of the selections on the Most Popular screen.

- **3.** Make sure that your computer and the NTV200 are on the same network.
- **4.** On your computer, use your browser to navigate to the Internet content that you want to play on your TV.
- **5.** Click the **Fling** button on your browser. Flingo locates the NTV200 on your network and displays the following message:



6. Select the items that you want to fling, and click Fling 'em.

7. On your TV, on the Fling Queue screen, select the item that you want .



## Settings

2

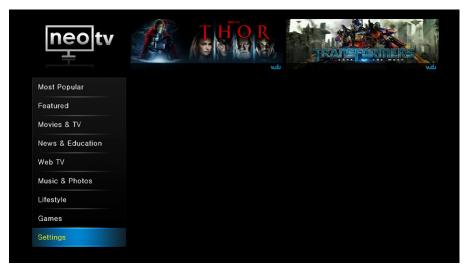
This chapter covers the following topics:

- Settings Menu
- General Settings
- Audio & Video Settings
- Network Settings
- About

## Settings Menu

You can customize the settings for your NeoTV Streaming Player.

- > To view or change the settings:
  - 1. Select **Settings** on the Home screen.



2. Press **OK** to display the following screen:



Each setting menu is described in the following sections in this chapter.

## **General Settings**

Select **Settings > General** to display this screen:



The General Settings menu includes the following:

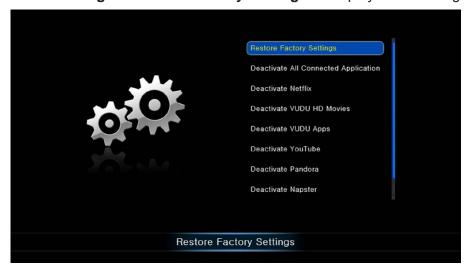
- **Software Update**. Check to see if newer versions of software are available. Download them and install them on your NeoTV Streaming Player.
- **Screen Saver Timing**. Specify how long the NeoTV Streaming Player should wait to display a screen saver when no channel is playing.
- **Standby Timing**. Select the number of minutes the NeoTV Streaming Player waits before turning off and going into standby mode.
- Restore Factory Settings. Return the NeoTV Streaming Player to its factory settings.
  This option erases any settings that you have specified. It does not erase software
  updates.
- Legal. View legal information about your product.

### **Restore Factory Settings**

You can use the restore factory settings feature to return the NeoTV Streaming Player to its factory settings, or to deactivate streaming services.

Selecting Restore Factory Settings restores the unit to default settings, but it does not remove the channel account information. To remove the channel account information, select **Deactivate All Connected Application** or deactivate specific channel account information.

- To restore factory settings:
  - 1. Select **Settings** > **Restore Factory Settings** to display the following screen:



- 2. Press **OK** to confirm.
  - The NeoTV Streaming Player erases the settings that you specified during setup, and restarts.
  - The Quick Setup Welcome screen displays.
- **3.** To set up your NeoTV Streaming Player, follow the onscreen instructions to select your TV resolution, specify the standby timing, and connect to your network.

The NeoTV Streaming Player might check for software updates, download and install new software if it is available, and restart.

## **Audio & Video Settings**

Select **Settings > Audio & Video** to display the following screen:



#### **Digital Output**

Select the digital output setting for the audio. If you connect the NTV200 TV directly through HDMI cable, select PCM stereo. If you connect the NTV200 to anA/V receiver cable, see the following table.

Table 2. Digital Output settings with an A/V receiver

NTV200 connection	Receiver decodes Dolby Digital or Dolby Digital Plus	Setting
SPDIF cable	Yes	Bitstream Legacy
SPDIF cable	No	PCM Stereo or PCM 5.1 (depends on the number of speakers)
HDMI	N/A	Bitstream HD

#### TV Resolution

Select the resolution for your TV. The following table describes the available settings.

TV Resolution setting	HDMI TV
HDMI Auto	The NeoTV Streaming Player automatically sets the correct resolution for your HDTV.
1080p	Your TV is a high-definition TV (HDTV) capable of 1080p (any frame rate).
1080i	Your TV is a high-definition TV (HDTV) capable of only 1080i.

TV Resolution setting	HDMI TV
720p	Your TV is a high-definition TV (HDTV) capable of only 720p.

#### TV Aspect

Select the aspect ratio. If your TV has a very rectangular (widescreen, or 16:9) aspect ratio, you can select either full screen or pillarboxed). The following table describes these settings.

Media	16:9 Full	16:9 Pillarboxed
Movie in widescreen format	<ul> <li>4:3 video sources are stretched horizontally to fit the entire screen.</li> <li>Selecting a 4:3 aspect ratio setting when resolution is set to 720p or 1080i/p has no ef fect.</li> </ul>	4:3 video sources are shown in center of the screen; vertical bars are on the sides of the screen.
HD video in widescreen format	The episode fills the entire screen.	No effect. The episode fills the entire screen.
SD (4.3) TV episodes	The episode is stretched horizontally to fit the entire screen.	The episode is shown in the center of the screen with vertical bars on the sides of the screen.
Cropped movie (movie put on disk in 4:3 aspect ratio)	The movie is stretched horizontally to fit the entire screen.	The movie is shown in the center of the screen with vertical bars on the sides of the screen.

#### **CEC Support**

The CEC (Consumer Electronics Control) option allows the TV remote control to control certain functions of the NeoTV Streaming Player and for the NeoTV Streaming Player to control certain functions of the TV.

**Note:** Not all TVs are compatible with your NeoTV Streaming Player's CEC control.

If you press the Power button on the NTV200 remote control to wake up the NeoTV Streaming Player, if the TV is in standby mode, the TV also wakes up.

Your TV uses CEC to control the NeoTV Streaming Player in the following ways.

- Pressing the TV Power button to power down or go to standby mode, places the NeoTV Streaming Player in standby mode.
- The NeoTV Streaming Player becomes a TV CEC device.
- Certain TV remote controls can operate the NeoTV Streaming Player through CEC (such as Up, Down, Left, Right, and OK).

### **Network Settings**

You can view or change the network settings for the NeoTV Streaming Player. The options displayed in the Network Settings screen depend on whether or not an Ethernet cable is connected to the NeoTV Streaming Player.

Select **Settings** > **Network** to display the Network Settings screen.

If no Ethernet cable is connected, the NeoTV Streaming Player displays options for a wireless network connection.



If an Ethernet cable is connected, the NeoTV Streaming Player detects it, and displays only network information for a LAN cable connection to your network.



The Network Settings menu includes the following options:

- Connect by selecting your WiFi network. The NeoTV Streaming Player scans for wireless networks in your area and displays a list. Select your network, and enter its password to connect wirelessly.
- Connect to WiFi network using WPS. Wi-Fi Protected Setup (WPS) lets you join a
  wireless network that is secured with WPA or WPA2 without typing the password. Your
  wireless router or access point has to be compatible with WPS.

- Connect manually to your network. Type in the wireless network name (SSID) and network password for your network.
- IP Settings. View the IP settings for the NeoTV Streaming Player.
- **Test Network Connection**. Verify that basic network communication is working.

#### **About**

View details about the software and hardware version of your NeoTV Streaming Player. Select **Settings > About** to display the following screen:



- **Software Version**. The version of software currently running on your NTV200.
- Software Date. The date your current software was released.
- Hardware Version.
- Netflix ESN. This is the electronic serial number (ESN) used for Netflix. Every unit has an
  individual ESN associated with a Netflix account.

## Maintenance

3

This chapter covers the following topics:

- Update Notification
- Replace the Remote Control Batteries
- Error 101 on Flingo Channels

## **Update Notification**

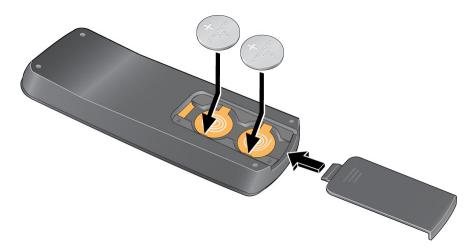
When there is new firmware, the NeoTV Streaming Player notifies you when the unit powers up, or wakes up from standby.



Follow the onscreen instruction to press the red remote control button, and then press **OK** to update the firmware.

## Replace the Remote Control Batteries

The remote control uses two CR2032 coin batteries. To replace the batteries, slide open the battery compartment and put in the new batteries as shown.



## Error 101 on Flingo Channels

Due to Internet bandwidth and quality of the Internet connection, Flingo channels sometimes display *error 101* at the bottom of the display. To correct this, increase the Internet bandwidth or improve the quality of Internet connection.

## NeoTV Mobile Apps

NeoTV mobile apps are sold separately. They allow you to use your phone as a remote control for the NeoTV Streaming Player. NeoTV mobile apps are free to download from Android market and the Apple apps store.

This chapter covers the following topics:

- NeoTV Remote Control App
- Using the App with the NeoTV Streaming Player

### **NeoTV Remote Control App**

The NeoTV remote control app turns your iPhone, iPod touch, or Android phone into a NeoTV Streaming Player remote control. You can use it to manage devices and you can specify the feedback settings.



Figure 6. The app is like a virtual NeoTV remote control

#### > To use the NeoTV remote control app:

1. Using your iPhone or Android smartphone, navigate to the Apple AppStore or Android Market, and search for NeoTV. You can use the following QR codes to speed up this process:



**Apple App Store** 



**Android** 

- **2.** Install the app on your phone.
- **3.** Make sure that the phone is connected to the same WiFi network (SSID) as your NeoTV Streaming Player.

Launch the app, and it searches for your device and connects.

## Using the App with the NeoTV Streaming Player

When you select the NeoTV App on your phone, the Remote screen displays:

#### > To use the NeoTV app to control the TV:

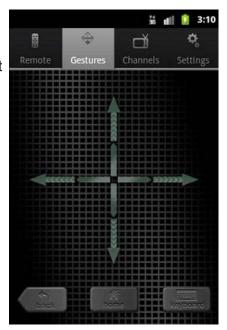
- Make sure that your TV and the NeoTV Streaming Player are turned on.
- 2. Use your phone in place of the remote control to make NTV200 selections on the TV screen.

The NeoTV app automaticly pairs with the unit in the same LAN.



#### Gestures

You can use the Gestures screen to slide your finger up, down, left or right to navigate, or you can tap the screen for OK. When you use this screen on your phone you don't have to look at the phone while you are controlling the NTV200.



#### Channels

You can use your phone to view the channels that are available on your NeoTV Streaming Player and select the one that you want to watch on TV.



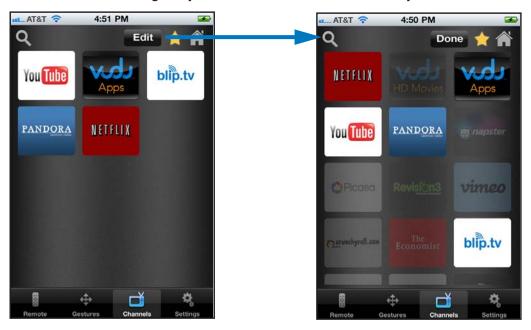
iPhone App



Touch the channel that you want to watch on your TV: You can use the star symbol to create a list of favorites.

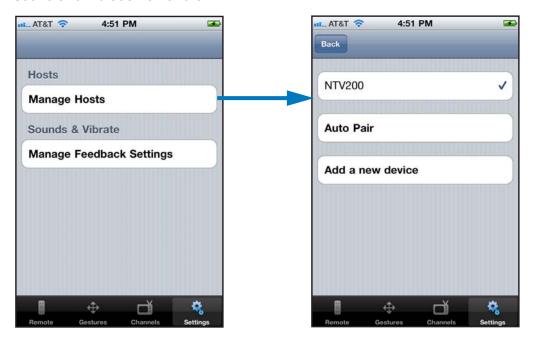
#### **Favorites**

Touch the star icon to go to your list of favorites. You can edit your favorites.



## **Settings**

The Hosts setting lets you specify your network connections. Sounds & Vibrate lets you turn sound and vibration on and off.



The Host screen shows the device you are currently connected to, and lets you change your connection.

#### **NeoTV Streaming Player (NTV200)**

•	<b>Auto Pair</b> . This feature automatically finds NeoTV Streaming Player and connect to it through your WiFi network.
•	Add a new device. Manually type in the your network information.

## Supplemental Information



This appendix covers the following topics:

- Factory Default Settings
- Technical Specifications

## **Factory Default Settings**

You can use the onscreen menus to restore factory settings. Select **Settings > Restore Factory Settings**. The following table shows the factory settings.

Feature	Setting
Language	English
Video mode	HDMI auto
Digital output	PCM 5.1
TV aspect	16:9 Pillarbox
CEC	On
Standby timing	30 minutes

## **Technical Specifications**

The following table includes technical specifications for the NeoTV Streaming Player.

Feature	Description
Data and routering protocol	TCP/IP, DHCP
Power adapter	12V, 1A
Dimensions	113 mm x 113 mm x 24 mm
Weight	136g
Environmental	Operating temperature: Operating humidity:
Interface	LAN: 10BASE-T or 100BASE-Tx, RJ-45 WLAN: 802.11.n/g/b

## Notification of Compliance

## B

## NETGEAR NeoTV Streaming Player

#### **Regulatory Compliance Information**

This section includes user requirements for operating this product in accordance with National laws for usage of radio spectrum and operation of radio devices. Failure of the end-user to comply with the applicable requirements may result in unlawful operation and adverse action against the end-user by the applicable National regulatory authority.

#### **FCC Requirements for Operation in the United States**

#### **FCC Information to User**

This product does not contain any user serviceable components and is to be used with approved antennas only. Any product changes or modifications will invalidate all applicable regulatory certifications and approvals

#### **FCC RF Radiation Exposure**

#### **RF Exposure Information**

The radio module has been evaluated under FCC Bulletin OET 65C (01-01) and found to be compliant to the requirements as set forth in CFR 47 Sections, 2.1093, and 15.247 (b) (4) addressing RF exposure from radio frequency devices. This model meets the applicable government requirements for exposure to radio frequency waves

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

#### **FCC Declaration of Conformity**

We, NETGEAR, Inc., 350 East Plumeria Drive, San Jose, CA 95134, declare under our sole responsibility that the NETGEAR NeoTV Streaming Player NTV200 complies with Part 15 Subpart B of FCC CFR47 Rules.

Operation is subject to the following two conditions:

- · This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

#### **FCC Radio Frequency Interference Warnings & Instructions**

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 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 or more of the following methods:

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