

This is the user guide we wish had been provided, collected from the feedback of Nextube customers. This isn't an official guide provided by Rotrics and the information provided here is "as-is." There are no guarantees of accuracy, and your usage of the guide conveys no liability to the authors.



Join the enthusiastic fans of Nextube at facebook.com/groups/197056519103446.



### Included in the box

- Nextube with six 0.96" IPS screens
- USB-A to USB-C cable
- USB 5V/1A charger

### Software installation

To set up your Nextube, you must download the Nextube Studio software.

1. Download Rotrics Nextube Studio at **rotrics.com/pages/downloads**. A Windows and Mac desktop version is available.



Software download page

2. Install the software on your computer and then open Nextube Studio.



**SECURITY** Due to the software's origin and small installed user base, you might see a notice that the site or software is untrusted and potentially malware. To this date, no one has reported an issue with the software. However, installing the software remains at your own risk and is required to configure Nextube.

#### **Linux users**

Although unsupported, the Windows version of Nextube Studio can be used with Wine for Ubutno 20.04. Users report that USB connections don't work, but Wi-Fi does.

## **Initial connection setup**

There are two ways to initially set up your Nextube — wired (preferred) or wireless.

#### **CONNECTION METHOD 1 — Wired (preferred)**



If you use the wired option for initial setup, you can enter your Wi-Fi network information so that all subsequent changes in Nextube Studio are made via a Wi-Fi connection. Customers report fewer issues when using the initial wired connection method.

- 1. Using the supplied USB-A to USB-C cable, connect your Nextube to a USB connector on your computer. Don't use a USB-C to USB-C cable.
- 2. In Nextube Studio, in the upper-left corner, click <a> Connect</a>.

The **Connect Nextube** dialog box appears.

- 3. Click Serial Port.
- 4. Click in the **Choose a port** box, and then click the COM port.



Multiple COM ports might appear. Try clicking one. If the blue **Connect** button turns gray and **Disconnect** turns blue, your Nextube is connected. If this doesn't happen, try another COM port until Nextube is successfully connected.

The Connect button on the upper-left of the Nextube Studio window should appear orange to indicate connected.

5. On the **Connect Nextube** dialog title bar, click **X** to close the dialog box.

#### Optionally, enter your Wi-Fi information

- 1. In **Settings**, click **Wi-Fi Network**.
- 2. Enter your Wi-Fi (SSID) name and password. The Wi-Fi network name and password are *both* case-sensitive.



Nextube only supports 2.4 GHz Wi-Fi networks. Most newer routers support both 2.4 GHz and 5 GHz. Older single band routers are typically 2.4 GHz.

- On the Settings title bar, click X to close the Settings dialog box.
- 4. In the upper-right, click Upload.

Your Nextube will update and connect via your Wi-Fi network.

The Nextube clock is calibrated automatically by using NTP (network time protocol) and a RTC (real time clock) chip. The time will synchronize to the computer time after about 30 seconds to 5 minutes.

#### CONNECTION METHOD 2 - Wi-Fi AP

- Using the supplied USB-A to USB-C cable, connect your Nextube to the supplied USB power adapter and plug the power adapter into an electrical outlet.
- 2. On your computer or mobile device, open Wi-Fi settings and connect to the network name (SSID) **nextube-ap-xxxxxxxxxxxx** where **xxxxxxxxxxx** is the MAC address.
- 3. Enter **12345678** for the password.

A web page should open in a web browser. If it doesn't, open your web browser, and then in the address bar, enter 10.10.10.1 to open the Nextube configuration page.

4. Select the name of your Wi-Fi network, and then click **Next**.



Nextube only supports 2.4 GHz Wi-Fi networks. Most newer routers support both 2.4 GHz and 5 GHz. Older single band routers are typically 2.4 GHz.

- 5. Enter your Wi-Fi network password, and then click Apply.
- 6. In Nextube Studio, in the upper-left corner, click <a>Connect</a>.

The **Connect Nextube** dialog box appears.

- 7. Click Wi-Fi.
- 8. Click + to open the Wi-Fi connect manually dialog box.
- 9. Enter the IP address of your Nextube, and then click **Confirm**.

On the **Connect Nextube** dialog box, if the blue **Connect** button turns gray and Disconnect turns blue, your Nextube is connected.

The Connect button on the

#### How do I find my Nextube IP address?

Log in to your Wi-Fi router and look for the DHCP lease and IP address for the device. Nextube usually appears with a hostname containing nextube. Each router is different, so please refer to your router's manual for more instructions.

There are also apps for Windows, Mac, Android, and iOS that can help identify devices on your Wi-Fi network. Fing is a free app available for both Windows and Mac desktops, as well as Android and iOS mobile devices. Download Fing at fing.com/products/fing-app.

upper-left of the Nextube Studio window should appear orange to indicate connected.

- 10. On the Connect Nextube title bar, click X to close the dialog box.
- 11. In the upper-right, click Upload.

Your Nextube will update and connect via your Wi-Fi network.

The Nextube clock is calibrated automatically by using NTP (network time protocol) and a RTC (real time clock) chip. The time will synchronize to the computer time after about 30 seconds to 5 minutes.

## **Customize your Nextube**

Changes are uploaded to Nextube via a wired connection with the included USB cable or a Wi-Fi connection if you set it up in the **Initial connection setup** section.

#### **WI-FI CONNECTION**



You should have already configured your Nextube Wi-Fi configuration. If not, go to the **Initial connection setup** section first.

- 1. Using the supplied USB-A to USB-C cable, connect your Nextube to the supplied USB power adapter and plug the power adapter into an electrical outlet.
- In Nextube Studio, in the upper-left corner, click ☐ Connect.

The Connect Nextube dialog box appears.

- 3. Click Wi-Fi.
- Click the + icon to open the Wi-Fi connect manually dialog box.
- 5. Enter the IP address of your device, and then click **Confirm**.

On the **Connect Nextube** dialog box, If the blue **Connect** button turns gray and **Disconnect** turns blue, your Nextube is connected.

The Connect button on the upper-left of the Nextube Studio window should appear orange to indicate connected.

#### How do I find my Nextube IP address?

Log in to your Wi-Fi router and look for the DHCP lease and IP address for the device. Nextube usually appears with a hostname containing **nextube**. Each router is different, so please refer to your router's manual for more instructions.

There are also apps for Windows, Mac, Android, and iOS that can help identify devices on your Wi-Fi network. Fing is a free app available for both Windows and Mac desktops, as well as Android and iOS mobile devices. Download Fing at fing.com/products/fing-app.

6. On the **Connect Nextube** title bar, click **X** to close the dialog box.

#### WIRED CONNECTION

- 1. Using the supplied USB-A to USB-C cable, connect your Nextube to a USB connector on your computer. Don't use a USB-C to USB-C cable.
- 2. In Nextube Studio, in the upper-left corner, click Connect.
  - The **Connect Nextube** dialog box appears.
- 3. Click Serial Port.
- 4. Click in the **Choose a port** box, and then click the COM port.
  - 0

Multiple COM ports might appear. Try clicking one. If the blue **Connect** button turns gray and **Disconnect** turns blue, your Nextube is connected. If this doesn't happen, try another COM port until Nextube is successfully connected.

The Connect button on the upper-left of the Nextube Studio window should now appear orange to indicate a connected.

5. On the **Connect Nextube** title bar, click **X** to close the dialog box.

### Set clock mode

In Nextube Studio, there are three clock modes for the default clock app.

Mode	Clock type	Display
102957	24-hour clock	Hours   Minutes   Seconds
10:29 A/P	12-hour clock	Hours   Minutes   AM/PM
10:29 Alt	24-hour clock	Hours   Minutes   Information



If you use 10:29 Alt, there are additional options that can be set.

- Weather conditions
- Week/Date
- Indoor High/Low temperature
- Current temperature
- Display duration of each information item
- 1. Click the display format that you want.
- 2. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Vour Nextube updates and restarts.

# Set clock style

To use custom created styles that you've created or downloaded from other customers (for example, in the Facebook group), see the **Custom clock styles** section.

The default Clock app can be customed with 12 different display character sets that are included with Nextube Studio.

1. Click the Nextube illustration to open the **Pick your style** dialog box.



- 2. Click one of the character styles.
- 3. On the **Pick your style** title bar, click **X** to close the dialog box.
- 4. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click

  Your Nextube updates and restarts.

# **Set display brightness**

- 1. In the upper-right of Nextube Studio, click <a>O</a> Settings</a>.
- 2. Click Screen Brightness.
- 3. Click on the **Screen Brightness** bar to set the brightness level between 0 and 100.
- 4. On the **Settings** title bar, click **X** to close the **Settings** dialog box.
- 5. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Vour Nextube updates and restarts.

### Set backlight

Each Nextube tube contains a LED backlight on the rear side of the side. These backlights can be used to provide ambient background lighting as an enhancement to your Nextube.

In addition to Off, there are four backlight settings.

- Solid
- Breathing (about a one-second interval)
- Marquee (set the LED color of each tube and the color changes in a loop one by one)
- **Neon** (the LED color will be random)

The **Solid**, **Breathing**, and **Marquee** options allow you to specify the color.

- 1. In the upper-right of Nextube Studio, click @ Settings.
- 2. Click Backlight.
- 3. Select the backlight type.
- 4. If you selected the **Solid**, **Breathing**, or **Marquee** options, click on one of the six default base colors. Choose any color by clicking on the color palette.

- 5. On the **Settings** title bar, click **X** to close the **Settings** dialog box.
- 6. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Vour Nextube updates and restarts.

## Set weather configuration

- 1. In the upper-right of Nextube Studio, click O Settings.
- 2. Click Weather Config.
- For Location, enter a city name.
  - A bug exists where multiple cities appear without unique state or district identifications. For example, "Dallas" shows repeated "Dallas, US" entries. You must experiment to find the correct entry for your location in these situations.
- 4. For Temperature Format, select °F or °C.
- 5. On the **Settings** title bar, click **X** to close the **Settings** dialog box.
- 6. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click

  Your Nextube updates and restarts.
- The city name isn't retained. If you enter the **Weather Config** settings later, you must re-enter the city.

### Set volume

- 1. In the upper-right of Nextube Studio, click O Settings.
- 2. Click Sound.
- 3. Click on the **Sound** bar to set the volume level between 0 and 100.
- 4. On the **Settings** title bar, click **X** to close the **Settings** dialog box.
- With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click
   Your Nextube updates and restarts.

# Install apps

There are seven apps provided in Nextube Studio. Additional apps are planned in the future. Up to 16 apps can be installed at any time on your Nextube.

The apps include the following:

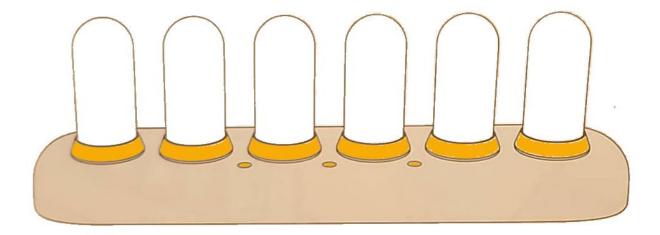
Clock — The default Nextube clock.

- Custom Clock Clocks that you can customize with your custom styles.
- **Pomodoro Timer** A timer that you can start using the buttons on Nextube.
- **Timer** A pre-defined time duration.
- **Subscribe** Currently, supports subscriber counts for a YouTube channel.
- Alarm An alarm clock function.
- Album Display your own pictures on Nextube.
- 1. In the top-center of Nextube Studio, click to open the **App Library**.
- 2. To add an app, click and drag the app icon to the dock below the library.
- 3. To re-arrange the order of the apps, click an app icon in the dock and drag it left or right.
- 4. To remove an app from the dock, right-click the app icon, and then click **Delete**.
- 5. On the **Settings** title bar, click **X** to close the **Settings** dialog box.
- With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click
   Your Nextube updates and restarts.

### **Select app on Nextube**

One app at a time can be displayed on your Nextube.

 To switch between apps, press the first or third button to display the previous or next app, respectively.



If your apps use the same display style, the switching time between apps is minimized. Using different display styles for loaded apps increases the time to switch apps.

## **Custom clock styles**

Customers have begun sharing custom clock styles in the Nextube Facebook group files section.

#### facebook.com/groups/197056519103446/files/docs





Designing your own clock styles?

See the Photoshop **Nextube Artwork Template.psd** template in the Facebook group **Files** section.

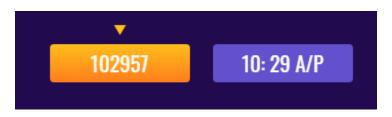
Use up to five custom clocks with Nextube.

To use a custom clock style from the Facebook group, download the file to your computer and rename the file extension (usually .zipper) to .zip (this is due to an issue with uploading files to a Facebook group).

To install a custom clock style, do the following:

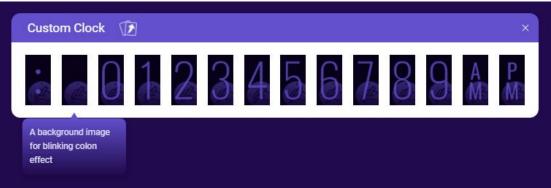
- 1. In the .zip file extract the folder containing the files to a location on your computer like the Desktop or the Downloads folder.
- 2. In the top-center of Nextube Studio, click to open the **App Library**.
- 3. Click and drag the **Custom Clock** app icon to the dock below the library.
- 4. To re-arrange the order of the apps, click an app icon in the dock and drag it left or right.
- 5. To remove an app from the dock, right-click the app icon, and then click **Delete**.
- 6. Click the Custom Clock app icon in the dock.
- 7. There are two clock modes available for the Custom Clock app. Select a clock mode.

Mode	Clock type	Display
102957	24-hour clock	Hours   Minutes   Seconds
10:29 A/P	12-hour clock	Hours   Minutes   AM/PM



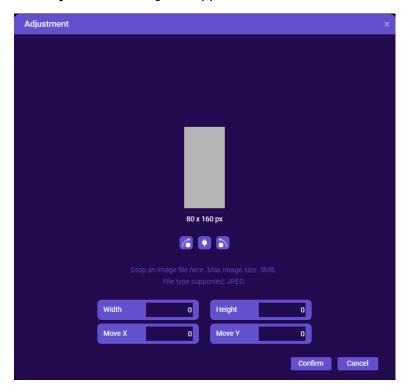
8. You must add a new icon for each digit, colon, blank, AM, and PM. Start by clicking anywhere on the Nextube illustration.

The Custom Clock dialog box appears.



9. Click one of the characters.

The **Adjustment** dialog box appears.



- 10. Open the folder on your computer that contains the custom fonts and then drag the corresponding .jpg graphic file to the gray box in the **Adjustment** dialog box. Alternatively, click the gray box to open a file browser window, and then select the file.
- 11. Click in the Width box and replace the value with 80.
- 12. With the cursor still in the **Width** box, click in the **Move X** box.



Don't press tab or click in the Height box as this reverts the Width setting.

- 13. In the **Move X** and **Move Y** boxes enter **0** or, alternatively, drag the resized digit to the right position. You can press Tab to move from the **Move X** to **Move Y** boxes.
- 14. Click Confirm.
- 15. Repeat steps 9–14 for each of the other digits, colon, etc.
- 16. On the **Adjustment** title bar, click **X** to close the dialog box.
- 17. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Vour Nextube updates and restarts.

#### **Location of original Rotrics theme images**

#### Windows

c:\Users\username\AppData\Local\Programs\rotricsnextube\resources\static\data\images\themes

#### Mac

Go to Applications and right-click on the Rotrics Nextube app. Click Show Package Contents.

\Applications\Rotrics
Nextube.app\Contents\Resources\static\data\images\themes

### **App: Pomodoro Timer**

This timer is based on the Pomodoro Technique, a time management method developed by Francesco Cirillo. Derived from the Italian word for tomato, each interval is known as a pomodoro. Why a tomato? Cirillo used a tomato-shaped timer as a student.

A task or interval (25 minutes) is followed by a short break (5 minutes). After the defined number of intervals (usually 4), there's a long break (15 minutes). The pattern then restarts. Although these are the standard values, you can customize them in Nextube Studio.

- 1. In the top-center of Nextube Studio, click to open the **App Library**.
- 2. Click and drag the **Pomodoro Timer** app icon to the dock below the library.
- 3. In the tray, click the Pomodoro Timer app icon.
- 4. Click Pomodoro Timer 25(4) to open the **Pomodoro Settings** dialog box.



- 5. Set the **Duration**, **Short Break**, **Long Break**, and **Intervals** settings.
- 6. On the **Pomodoro Settings** title bar, click **X** to close the dialog box.
- 7. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Vour Nextube updates and restarts.

To use the app, when selected on your Nextube:

- A short press of the *middle* button starts and stops the timer.
- A long press of the *middle* button resets the timer.
- If you switch apps, the timer resets.

# **App: Timer**

A timer with a pre-defined time duration.

- 1. In the top-center of Nextube Studio, click to open the **App Library**.
- 2. Click and drag the **Timer** app icon to the dock below the library.
- 3. In the tray, click the Timer app icon.



- 4. Set the **Timer** setting for minutes and seconds.
- 5. On the **Timer Settings** title bar, click **X** to close the dialog box.
- 6. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Vour Nextube updates and restarts.

To use the app, when selected on your Nextube:

- A short press of the middle button starts and stops the timer.
- A long press of the middle button resets the timer.
- If you switch apps, the timer resets.

### **App: Subscribe**

Currently, subscriber counts are supported only for a YouTube channel.

- 1. In the top-center of Nextube Studio, click to open the **App Library**.
- 2. Click and drag the **Subscribe** app icon to the dock below the library.
- 3. In the tray, click the Subscribe app icon.

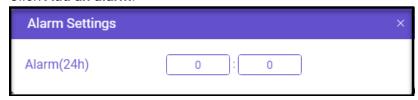


- 4. Enter the Youtube channel ID.
- 5. With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Vour Nextube updates and restarts.

### **App: Alarm**

Your Nextube can be used as an alarm clock with an audio alert. Up to six alarms can be added.

- Your Nextube must be on the Alarm app at the specified time, or the alarm will not sound.
  - 1. In the top-center of Nextube Studio, click to open the **App Library**.
  - 2. Click and drag the Alarm app icon to the dock below the library.
  - 3. In the tray, click the Alarm app icon.
  - 4. Click Add an alarm.



- 5. In the **Alarm Settings** dialog box, enter the hours and minutes. Enter hours using a 24-hour clock format.
- 6. Alarms can be turned on or off by toggling the control for each alarm.

- 7. If you have multiple alarms configured, you can enter a custom display name for convenience. Click **Alarm**, and then in the box enter the custom name. When you click away from the box, the entry is saved.
- 8. On the **Alarm Settings** title bar, click **X** to close the dialog box.
- With the clock plugged in and connected (wired or Wi-Fi), in the upper-right, click Upload .
   Your Nextube updates and restarts.

To silence the alarm, press the *center* button.

## **App: Album**

Display your own images on Nextube. You can add three groups of images. Each group can contain six images (one for each tube).

Nextube supports standard image files like .gif, .jpg, and .png.

- 1. In the top-center of Nextube Studio, click to open the **App Library**.
- 2. Click and drag the **Album** app icon to the dock below the library.
- 3. In the tray, click the Album app icon.
- 4. Click Album#1, Album#2, or Album#3.
- 5. In the **Album Settings** dialog box, click one of the six slots.
- 6. Select an image.
- 7. To adjust the image, click the image thumbnail and make changes in the **Adjustment** dialog box. Adjust the size using the **Width** and **Height** boxes values.
  - Positioning can be changed with the three alignment buttons (rotate left, center, rotate right), the **Move X** and **Move Y** boxes values, or dragging the image with your mouse pointer.
- 8. When you're done adding images, on the **Album Settings** title bar, click **X** to close the dialog box.

To change the order of albums, click and drag the iii icon.

To change the duration that an image is shown, click the number in **Duration** row.

After an image is added, it can be replaced, but the slot can't be cleared entirely from a group.

- 1. Open the album.
- 2. Click the image thumbnail.
- 3. Click one of the three alignment buttons (rotate left, center, rotate right).

- 4. Click Cancel.
- 5. Click the blank thumbnail.
- 6. Select an image, make any adjustments, and then click Confirm.
- 7. On the **Album Settings** title bar, click **X** to close the dialog box.

To completely remove an image from a slot within any of the three albums, you must remove the Album app from the dock, re-add the app to the dock, and then add images again.

### **Update firmware**



**WARNING** Installing the wrong firmware or a data/power interruption during the update process can damage your device and, at worst, permanently disable it. Only update your firmware if advised by the manufacturer and you're comfortable doing so.

1. Download the Rotrics Nextube firmware at **rotrics.com/pages/downloads**. The firmware file (**firmware.bin**) will be contained in a compressed .zip file. The current version as of this writing is 1.2.1.



Software download page

- After downloading the firmware file, you must extract the firmware.bin file from the .zip file. Double-click the .zip file. You can then either drag the firmware.bin file to your computer's desktop, or another convenient folder, like Downloads.
- 3. In the upper-right of Nextube Studio, click <a>Obsertings</a>.
- 4. Click the **General** dropdown list.

Your Nextube firmware, software, and hardware version appears. If you downloaded a later version firmware version in step 2 above, you may update the Nextube.

5. Click **Update** next to the firmware entry, and then select the file (**firmware.bin**) that you downloaded.

Wait for the update to complete.



**WARNING** Don't disconnect the USB cable or shut down your computer until the firmware update process completes.

There will not be a version listed after the firmware update is complete like the current v0.0.2 that appears in the software. If you uploaded the master firmware file folder and not the internal file, the Nextube will go black, and must restart.

### **Troubleshoot Nextube and Nextube Studio**

#### What happens if the Update stops at 99%?

If this happens, try the following:

- 1. Click Connect, and then **Disconnect**.
- 2. Close Nextube Studio.
- 3. Power cycle the Nextube by removing cable from the rear USB-C connector, waiting 10 seconds, and then reconnecting power.
- 4. Restart Nextube Studio.
- 5. Click the Connect button and reconnect via Serial Port or Wi-Fi.

#### How do I reset the Wi-Fi information on Nextube to factory default (AP mode)?

- 1. Using the supplied USB-A to USB-C cable, connect your Nextube to the supplied USB power adapter and plug the power adapter into an electrical outlet.
- 2. Long press the *left* button for two seconds until you hear a beep.
- 3. Quick press the *middle* button twice. You should hear a beep.
  - Your Nextube will restart.
- 4. Repeat the initial connection configuration. See the **Initial connection setup** section.

#### Why does my Nextube continue to show the wrong local time?

The Nextube clock is calibrated automatically by using NTP (network time protocol) and a RTC (real time clock) chip. The time synchronizes to the local time after about 30 seconds to 5 minutes, after you've completed the **Initial connection setup** steps.

If the clock is wrong, the most likely problem is that the Nextube can't connect to the Internet and establish a connection to a NTP server.

- 1. Check your Wi-Fi credentials in Nextube Studio. Even if you're updating Nextube via the USB connection method, Nextube uses your Wi-Fi network to connect to the Internet. The Wi-Fi network name and password are *both* case-sensitive.
- 2. Make sure your Nextube is connected to a 2.4 GHz Wi-Fi network. The newer 5 GHz Wi-Fi networks aren't supported.

#### Why is my Nextube stuck in a reboot?

One of the common causes of a reboot loop is a malformed custom clock style.

To correct this, you can either:

- Connect the Nextube your computer with a USB connection, and then in Next Tube studio, remove the display style you added, and then click **Upload**.
- Reset the Nextube to default AP mode and then set up again using the steps in the Initial connection setup section.

#### Why can't I use a USB-C to USB-C cable?

The wrong cable could damage your Nextube.

If you have a computer that only has USB-C ports, use a USB-C to USB-A adapter.

#### Is there a way to make my Nextube get the same IP address on my Wi-Fi network every time?

Yes. Most networks are configured to dynamically assign IP addresses. This means that when a device requests an IP address assignment or after a pre-defined time limit, a DHCP server assigns an IP address. Sometimes it could be the same, sometimes it could be different.

Most DHCP servers whether on a computer network or a Wi-Fi router allow you to create DHCP reservations. This allows you to specify that when a device with a unique MAC address connects, always assign it a specific IP address.

Each server and router is different, so please refer to your manual for more instructions.



# Nextube



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