

Troubleshooting SHIELD

Before using this troubleshooting guide, make sure that your SHIELD is [updated with the latest system update](#), available automatically if your SHIELD is connected to the Internet.

If you are unable to resolve the issues you are having with the troubleshooting steps in this guide, you may find a resolution in the [GeForce Experience Forums](#) > **SHIELD** section.

If you are still unable to resolve the issues you are having, [please contact NVIDIA support](#).

Connecting and Accessory Issues

My SHIELD remote won't connect with SHIELD.

If your SHIELD remote won't connect with your SHIELD, [follow these instructions to connect SHIELD remote](#).

If SHIELD remote is charged and still does not connect, restart SHIELD and repeat the instructions.

If SHIELD remote still does not connect, follow these steps.

You can also learn how to [setup and use the SHIELD remote for the first time](#).



1. On the SHIELD Home screen, select **SHIELD accessories**
2. Select "Forget all accessories" > "OK."
3. Repeat the instructions to connect SHIELD remote and your other accessories.

If these steps don't fix the issues, please [contact NVIDIA support](#).

My SHIELD remote fails to apply a software update.

If your SHIELD remote fails to apply a software update, your SHIELD remote battery may need to be [charged](#). Charge your SHIELD remote until the battery is sufficiently charged. To check to see if your SHIELD remote is sufficiently charged, from the SHIELD Home screen, select



SHIELD accessories and look for "SHIELD remote" in the list. If it has the message "Battery: Good" underneath it, then your SHIELD remote is sufficiently charged to receive a software update.

My SHIELD controller won't connect with SHIELD.

If your SHIELD controller won't connect with your SHIELD, [follow these instructions to connect SHIELD controller.](#)

If SHIELD controller is charged and still does not connect, restart SHIELD and repeat the instructions.

If SHIELD controller still does not connect, follow these steps:

You can also learn how to [set up and use the SHIELD controller for SHIELD for the first time.](#)



1. On the SHIELD Home screen, select **SHIELD accessories**
2. Select "Forget all accessories" > "OK."
3. Repeat the instructions to connect SHIELD controller and your other accessories..

If these steps don't fix the issues, please [contact NVIDIA support.](#)

My SHIELD controller fails to apply a software update.

If your controller fails to apply a software update, your controller battery may need to be [charged](#). Charge your controller until the battery is sufficiently charged. To check to see if your controller is sufficiently charged, from the SHIELD Home screen, select **SHIELD accessories**



and look for "SHIELD controller" in the list. If it has the message

"Battery: Good" underneath it, then your controller is sufficiently charged to receive a software update.

My Bluetooth accessory won't connect with SHIELD.

If your Bluetooth accessory won't connect with your SHIELD, try the troubleshooting steps below. Try to connect [your Bluetooth accessory](#) after each step.

1. Turn your Bluetooth device off, then turn it back on.
2. Restart your SHIELD.



NOTE Connecting file transfer Bluetooth devices such as smartphones, tablets and laptops to SHIELD is not supported.

My SHIELD controller does not power on after charging it.

If your controller is not turning on after charging it, follow these steps:

1. Hold the NVIDIA  button for 20 seconds and release.
2. Tap the NVIDIA  button.

Audio & Video Issues

I'm not hearing any sound.

If there's no sound when you're using your SHIELD, try the troubleshooting steps below. Try playing a video or song after each step to see if your sound is working.

- If you are using a monitor, check that your monitor has an audio output. Many monitors do not have audio output, and require headphones or speakers.
- Check that your TV's sound or AV receiver isn't muted.
- Check that Android volume isn't muted. Press the '+' volume button on your SHIELD controller.
- If you're using SHIELD with a separate AV receiver, check that the TV is connected to the AV receiver properly. If you hear sound from the TV but not the receiver, there may be an issue with the connection.
- Some HDMI to DVI/VGA adapters may not support audio. If possible, connect your SHIELD to an HDMI port on your TV without using an adapter.
- Try using a different HDMI input on your TV for your SHIELD. Many TVs have several HDMI ports.

- If you are using headphones plugged into SHIELD controller or SHIELD remote, you will be unable to hear AC3 and Dolby audio formats.
- Update to the latest [SHIELD system update](#) and receiver firmware.
- If multiple audio output devices are connected to your SHIELD simultaneously, see the audio/mic routing policy.
- Restart your SHIELD.

My screen is blank.

If there's nothing on the screen when you try to use your SHIELD, try the troubleshooting steps below.

- Check that your SHIELD is plugged in all the way. Check the power cord and HDMI cable.
- Check that your TV is turned on. The green light will be illuminated if SHIELD is on.



- Check that your SHIELD isn't in sleep mode. Touch the NVIDIA  button on your SHIELD.
- Check that your TV's source input matches the HDMI port where your SHIELD is plugged in. HDMI ports are usually labelled on the back or side of a TV. Keep changing your TV input source until you get to the HDMI input with SHIELD on it.
- Try using a different HDMI port. Connect your SHIELD to a new HDMI port, and change the source or input on your TV to match the new port.
- Try using a different HDMI cable. High Speed HDMI cables and HDMI cables shorter than 3m are recommended.
- Check that your TV has an HDCP-compatible HDMI port. Some content requires HDCP.
- Update to the latest [SHIELD system update](#) and TV firmware.
- Some HDMI to DVI adapters may not support video. If possible, connect your SHIELD to an HDMI port on your TV without using an adapter.
- Restart your SHIELD.

Video frame rate is very low.

Refer to [Optimize Video Performance](#).

MicroSD Card Issues

I own SHIELD Pro and already have 500 GB internal storage. Should I use this feature?

If you own SHIELD Pro, it is not recommended to set up an SD card as internal storage since it doesn't make sense to replace your 500 GB of storage with less storage from an SD card.

Can I upgrade to Android Marshmallow and continue to use the "Auto-move to SD card feature" available in Android Lollipop?

No. In Marshmallow, storage for new apps and games needs to be encrypted. You can continue to use your SD card 'as is', however, you will not be able to install or move additional apps and games to it. Users should find that the new feature makes it much easier to take advantage of an SD card for game storage and it also extends the feature to USB drives.

Can I unplug my storage device after formatting as internal storage?

This is not recommended since the storage device is formatted to not work with other devices. To safely unplug, first eject from **Settings > Storage & reset > Eject**. Failure to eject will cause applications to crash.

After formatting as internal storage, an app fails to launch. What can I do?

First reboot your SHIELD. If the app still fails to launch, go to the Google Play store to see if the app has an Android Marshmallow update. For example, *Asphalt 8* requires an app update for M. Open **Google Play Store > My Apps** and install any pending updates.

App or game performance is slow. What can I do?

Internal storage will provide the fastest performance for apps and games. If you choose to use a MicroSD card or USB drive as internal storage, make sure to use an SD card with a **Class 10** speed rating or higher or a USB 3.0 drive.

Where are the storage locations in a File Explorer?

The contents of the current user-defined internal storage can be found at `/storage/emulated/0/`. The other storage location can be found in a subfolder named **InternalStorage, SDCard, USBStorage, SanDisk** or such depending on the type of storage.

Does the encryption slow down the read/write speed of my SD card or USB drive?

Performance differences between internal storage and SD cards or USB drives should be very minimal as long as a MicroSD card with a **Class 10** speed rating or higher or a USB 3.0 drive is used.

Can I access the encrypted SD card or USB drive by connecting my SHIELD to my PC?

Yes. If you set up your SD card or USB drive as internal storage, the contents of the storage can be found at `/storage/emulated/0/`. The other storage can be found in a subfolder named **InternalStorage**, **SDCard**, **USBStorage**, **SanDisk** or such depending on the type of storage.

Can I change my storage location back to SHIELD's internal storage after using this feature?

If you have enough free space on SHIELD's internal storage, you can move data back to internal storage and start using that location again as the default place for app and game installations. Go to **Settings** > **Storage & reset** and select **Internal Storage**. Then select **Move data now**.

Google Play Issues

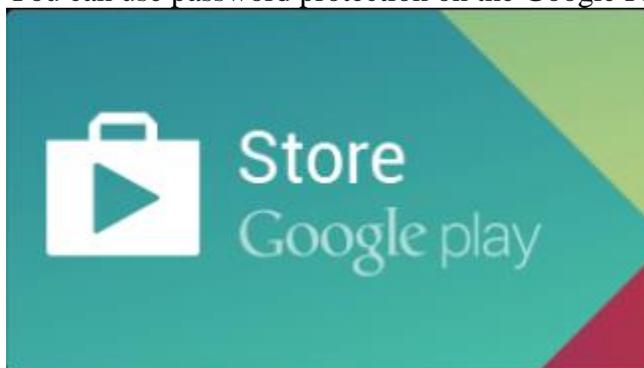
Refunds for Google Play content

Refund policies for content you bought on Android TV depend on the type of content.

Learn more about the detailed [refund policy for each type of content offered on Google Play](#).

Prevent accidental or unwanted purchases on Android TV.

You can use password protection on the Google Play Store app



to help prevent accidental or unwanted purchases on your Android TV. Your password is the same as what you use to sign in to Gmail or Google Play on your computer.

Learn more about how to [prevent accidental or unwanted purchases](#).

Update your Google Play payment method.

You can change your payment method or add a new one before making purchases on Google Play. Here's how you can [change your payment method using your Android TV](#).

Networking Issues

My SHIELD won't connect to Wi-Fi.

Here are some troubleshooting steps if your SHIELD won't connect to the Internet.

If your Wi-Fi network appears on the SHIELD

If you see your Wi-Fi network listed but can't connect, try the following:

- Ensure that your SHIELD is not connected to your network via Ethernet. An Ethernet connection automatically disables Wi-Fi networking.
- Make sure you're using the correct network password.
- Restart your SHIELD.
- Check if other devices can connect to the Wi-Fi network you're using. If not, there may be an issue with the router.
- If your router is having issues in general, update your router firmware.
- If you're using a Wi-Fi network at a business, hotel, or school, you may have trouble connecting. Networks at these locations don't always work with SHIELD. Contact the people in charge of the Wi-Fi network for assistance.

If your Wi-Fi network does not appear on the SHIELD

If you don't see your Wi-Fi network listed, your network name (SSID) may be hidden.



NOTE If you are setting up your SHIELD for the first time, when you get to the Wi-Fi network as part of on-screen setup, start at Step 4 below.

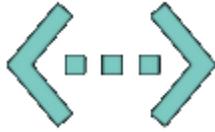
Here's how to add a hidden network:

1. From your SHIELD Home screen, select **Network Settings** .
2. Select **Wi-Fi**.
3. Find or select **Add new network**.
4. Enter the network name (SSID) and other security details, if needed.

My SHIELD won't connect to Ethernet.

Here are some troubleshooting steps if your SHIELD won't connect to the Internet.

- On your SHIELD Home screen, check that the **Network Settings** Ethernet symbol



displays:

- Check that your Ethernet cable is connected from your SHIELD to your router or Ethernet port.

GeForce NOW Issues

Network test detected a "Poor network" or "Network error."

This generally happens because of poor networking. Please make sure you meet the [network requirements](#) to run GeForce NOW.

For an amazing GeForce NOW experience, we recommend the following:

- Internet connection with at least a 10 Mbps download speed
- Home network with 60 ms or less ping time to a GeForce NOW server. Please visit this website to find out where our GeForce NOW servers are located:
<http://shield.nvidia.com/game-streaming-with-geforce-now>
- NVIDIA GameStream™-ready 5 GHz Wi-Fi router

I have all the requirements to run GeForce NOW. However, sometimes the GeForce NOW network test allows me to play GeForce NOW, and sometimes it doesn't. Why is this?

GeForce NOW performs a network test each time you launch the app to determine your current network performance. There may be problems with your network at different times during the day. You should contact your Internet Service Provider (ISP) to see what you can do to improve it. Also, check to see whether you have an NVIDIA GameStream™-Ready 5 GHz Wi-Fi router:
<http://shield.nvidia.com/routers>

I was idle and GeForce NOW disconnected me from my game. Can I log back onto GeForce NOW and rejoin my game where I left off?

Yes, your last game state will be saved. You can start another game session and load one of your saved games.

Why am I getting a message, "You have reached the session time limit and will be terminated in 5 minutes" when playing GeForce NOW?

GeForce NOW allows you to play a single game session up to 2 hours. After that you will be disconnected from GeForce NOW. If you receive this message we recommend you save your game immediately. You can then start another game session and load one of your saved games.

I'm experiencing a lot of audio cracking, audio cutoff, or video stuttering.

Please make sure you meet the network requirements to run GeForce NOW.

- Internet connection with at least a 10 Mbps download speed
- Home network with 60 ms or less ping time to a GeForce NOW server. Please visit this website to find out where our GeForce NOW servers are located:
<http://shield.nvidia.com/game-streaming-with-geforce-now>
- [NVIDIA GameStream™-ready](#) 5 GHz Wi-Fi router

GeForce NOW network test detected a "Poor WiFi" or "Poor WiFi Signal."

This error message indicates some problems with your Wi-Fi router. Here are some suggested steps to improve it:

- Make sure you are connecting to your router at 5 GHz mode. Newer routers allow users to connect at 2.4 GHz and 5 GHz. The router's settings menu should allow you to set up a separate SSID for 5 GHz mode.
- Use an NVIDIA GameStream™-ready 5 GHz Wi-Fi router. These products have been tested to work with GeForce NOW.
- Move closer to your Wi-Fi router. The farther away you are from your router, the lower the signal, which will degrade your Wi-Fi performance.
- Try to get better line of sight to your router. Obstacles inside your home, such as walls and floors, can affect Wi-Fi performance.

If there is network interruption can I rejoin my game where I left off?

Yes. If you reconnect within five minutes to the GeForce NOW server, you will rejoin your game where you left off.

Other Hardware Issues

How can I force my SHIELD to shut down?

To force the unit to turn off, touch and hold the NVIDIA button  for about 10

seconds. To turn the unit back on, just touch the NVIDIA button .

SHIELD System Upgrade failed to install.

If a SHIELD system upgrade fails to install, it may be due to the download of the upgrade image being corrupted. One way to resolve this is to delete the local data for the update from the device, forcing it to download a fresh copy. To do so, use any file explorer app (such as ES File Explorer) to delete the OTA folder located in: Local\NVIDIA\App\OTA. After this folder is deleted, reboot the device, then retry the download and installation of the update.

SHIELD won't wake up.

If your TV screen is blank, your SHIELD may be on, but stuck in sleep mode. You'll see a light on the top of your SHIELD if your device is on.

To wake up your device, try the troubleshooting steps below. After each step, check if your SHIELD wakes up.

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1. Touch the NVIDIA  button on your SHIELD.
 2. Restart your SHIELD by holding the NVIDIA button for 10 seconds, release, and then tap it again or by unplugging the power cord, waiting 10 seconds, and then plugging the power cord back in.

My SHIELD ran out of space.

If you have a lot of apps or games on your SHIELD, you may run out of storage space. If you are out of space on your device, you'll get a notification the next time you try to install a game or app from the Play Store.

If you run out of space but you'd like to install new apps or games, you have to uninstall some of your other apps or games or else [insert an SD card](#) or [attach an external hard drive](#).

Here's how to uninstall apps or games:

- On the SHIELD Home screen, select **Settings** .
- Under "Device," select **Apps**.
- Under "Downloaded," find and select an app.
- Select **Uninstall**.
- Select **OK** to confirm.

My SHIELD is sluggish and unresponsive.

In this case, your 3rd party apps may be causing this issue. We recommended booting up your SHIELD in Android Safe Mode.

To enable Android Safe Mode:

1. Disconnect the power cable.
2. Connect a USB keyboard to your SHIELD USB 3.0 port, or connect a SHIELD controller to your SHIELD USB port.
3. Connect the power cable.
4. Hold down the 'S' key on your keyboard until your TV display shows the Android TV home screen, or turn on your SHIELD controller (with NVIDIA button on controller) and hold down the volume down button on your SHIELD controller until the TV display shows the Android home screen.
5. You will see "Safe mode" on the bottom left part of the home screen.