



HYPERSWITCH™

User Guide

Thank you for purchasing the HyperSwitch Bluetooth 5-way Switch. Here are a few quick steps to get you connected to the HyperSwitch App and up and running.

Make sure to visit seymourduncan.com for the most up to date product information, installation guides, sample settings, firmware updates, FAQ's, warranty information, and additional safety/compliance information.

Quick Tips/Notes/Suggestions:

1. **Wake your HyperSwitch up!** When you first pick up your guitar to play, you may need to wake the HyperSwitch from sleep mode by moving the switch 1 or 2 locations. The HyperSwitch times out when not used to preserve battery life.
2. **Check the remaining battery power.** You must be paired with the App to do this. Actual battery life will vary depending on how often and how long you are connected to the App, as using Bluetooth uses significantly more power and will deplete the battery faster. Using the HyperSwitch unpaired with the App in a live/playing state uses very little power.
 - **Functional Range: 2100hrs.** This use case would be minimal App pairing time and using the HyperSwitch for playing.
 - **Pairing Range: 6hrs.** This use case would be pairing to the App continuously, never disconnecting from the App or going into sleep mode.
 - **HyperSwitch must have power to work – a *dead battery will result in no sound**
 - **HyperSwitch does not require the App to be on to work in the guitar (normal playing)**

NOTE: *when the battery percentage gets below **60%** the HyperSwitch will still work, but there may not be enough power to reliably connect to the App (Bluetooth).

- Cannot pair to the App:
 - Battery is getting low. The HyperSwitch will continue to work normally, but cannot supply enough current to activate Bluetooth and connect to the App. The battery should be replaced very soon.
- Signal, but HyperSwitch does not switch positions:
 - Battery is nearing full drain. Signal will be present, but the switch setting will be "locked" in the last preset the switch was in before the battery voltage dropped beyond a functional level. The battery should be replaced immediately.

To be on the safe side, we recommend the battery should be replaced when the low battery warning pops up (close to 65%). For maximum safety, it is recommended that you only use 9v alkaline batteries. However, HyperSwitch will work with rechargeable and higher performance batteries like lithium manganese oxide batteries.

3. Make sure to set **Sleep Timer** to a long enough time to get you through your typical playing time/gig. The default is 180 minutes (3hrs). This time is reset and starts over every time the switch is moved 1 position. See Sleep Timer in Device Settings for more information.
4. Set the **Bluetooth Timeout** to turn off the Bluetooth power (disconnect from the App) if you aren't actively using the App to the minimum time acceptable to your use. The default is 10 minutes, with a minimum of 2 minutes. This is to preserve battery life – Bluetooth uses the most power from your battery. We suggest setting this as low as possible depending on how you are using the App. See Bluetooth Timeout in Device Settings for more information.
5. Playing while using the App (Bluetooth ON): you may hear some low-level "ticking" if you are playing while the HyperSwitch is paired to the App. This is due to the Bluetooth being on and is normal. Under normal operation the App and Bluetooth are both off, and there is no ticking sound.

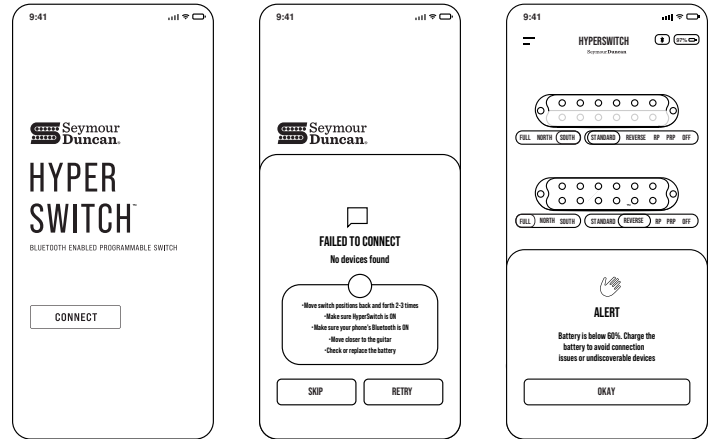
Important Safety Instructions

1. Read this instruction manual in its entirety before operating the equipment. Keep the manual for future reference.
2. This device requires a 9v battery to operate. For optimum safety: use only 9v alkaline batteries. Do not use rechargeable batteries.
3. Check installation of battery for correct polarity before use.
4. Make sure the battery cannot short against any other wire connections or components inside the guitar cavity.
5. HyperSwitch should be used in locations where children are not likely to be present.

Getting Started

1. Download the HyperSwitch app for your phone or mobile device.
 - **iPhone:** Apple Applications Store
 - **Android:** Google Play Store
2. Make sure Bluetooth is enabled on your phone or mobile device.
3. Launch the App and you will see a home screen to connect to the HyperSwitch.
4. Move the switch on the HyperSwitch to wake it up.
5. Press the **CONNECT** button on the App and quickly move the switch lever on HyperSwitch fully back and forth through all switch positions **4-5 times**. This activates the Bluetooth on the HyperSwitch.

To preserve battery power the switch has a low signal radius. For best results you should try to stay within 2 to 4 feet of the guitar.



6. If you get "Fail to Connect", check the following troubleshooting tips (also shown on the screen), then swipe the HyperSwitch back and forth several more times and click "Retry"

- Move switch positions back and forth several times through **all switch positions**
- Make sure HyperSwitch is on
- Move Closer to the guitar
- Check or replace battery. The battery must have 60% or better voltage to power Bluetooth.

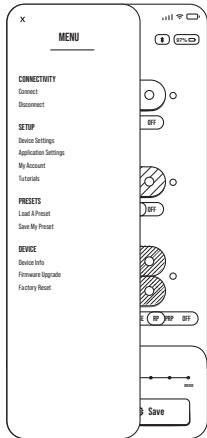
If you tap "Skip" you will be taken to the default screen showing 3 single coil pickups. When the app is not paired to the switch, you be unable to use the HyperSwitch app to manipulate the pickups, make or save any presets, or change any of the device settings. When not connected to HyperSwitch on the guitar, you still can use the app to:

- View saved devices
- Access Application Settings, including
 - FAQs
 - Message Support
 - Review the Terms and Conditions
 - Edit your profile

7. In a few seconds, the app will pair with the HyperSwitch. When it pairs for the first time, it will ask you to create an account. Enter an email that you would like to use for your account. Check the box to approve Terms and Conditions and press "Continue".
8. A verification code will be sent to your email. On the next screen, enter the code and click "Continue".
9. On the next screen, you can complete your profile by entering your name and uploading an image. Or you can choose to skip this step for now. You will be taken back to the Home screen, where you can now pair with your HyperSwitch.
10. Swipe the HyperSwitch quickly back and forth completely through all 5 positions 4-5 times to "turn on" the Bluetooth radio in HyperSwitch.
11. Click "Connect" on the home page of the app.
12. If you are pairing for the first time, or have logged off and are logging on again, HyperSwitch will show a list of available devices. Select the one that is for the switch you would like to pair with (more than one device will only show if you have more than one guitar outfitted with a HyperSwitch and you had previously paired with that switch):
13. After tapping on your device name for the first time, the "Welcome to the Tutorial" screen appears.
 - We recommend checking out the tutorial for a brief introduction to the features and locations of important HyperSwitch controls that appear on the Pickup Configuration Screen.
14. Following the tutorial, you will be brought to the Pickup Configuration screen. The main window defaults to 3 single coil pickups in a standard Stratocaster configuration, or to the last preset that was used.

Setting Up HyperSwitch

To set HyperSwitch up to use with the pickups installed in your guitar, tap on the menu icon in the upper left corner. The Menu screen will then appear.



Connectivity: allows you to connect or disconnect your HyperSwitch, as well as shows all saved devices on the App

Setup:

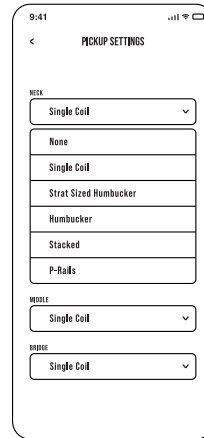
- **Device Settings:** access and modify Pickup Settings, Tone Knobs, Sleep Timer, Switch Reverse, Bluetooth Timeout, Device Info, Firmware Upgrade, and Factory Reset
- **Application Settings:** FAQ's, Support, Terms & Conditions, Edit Profile, Log Out
- **Tutorial:** access the onboard tutorial

Presets:

- Load Presets to the HyperSwitch saved in the App on this device
- Save Presets from the HyperSwitch to the App on this device

Setting Up Your Pickups

1. Tap on **Device Settings** from the menu
2. Then tap on **Pickup Settings**
3. For each pickup position, choose the type of pickup you have from the drop down menu:



You can choose:

None: if you don't have a pickup in that particular location on your guitar. Probably most useful for the middle position, if you only have a two pickup guitar.

Single Coil: For standard Strat and Tele single coils or P90 pickups.

Strat Sized Humbuckers: for models like our Little 59, Jbjr, or Red Devils, or Rails models like Hot Rails and Cool Rails.

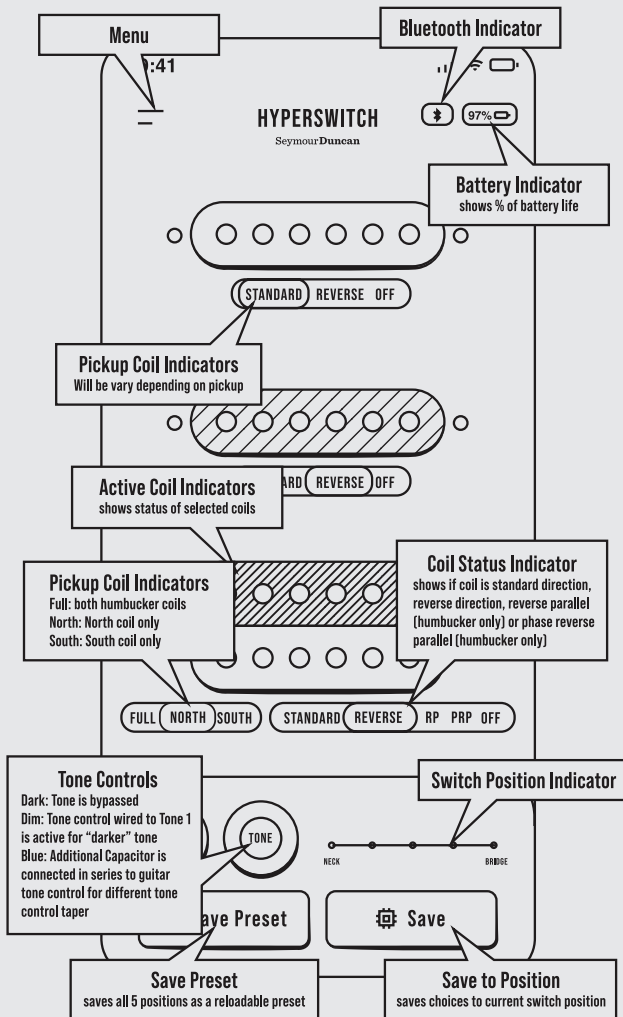
Humbucker: for Full Sized Humbuckers

Stacked: for our hum-cancelling stacked pickups like YJM, Classic Stack Plus, Vintage Hot Stack Plus, Custom Stack Plus for Strat, or Vintage Stacks for Telecaster.

P-Rails: for our unique and versatile P90/Rail humbucker pickups.

Pickup Configuration Page

On the Pickup Configuration Page, you can select which pickups, or coils from each pickup you would like to assign to each switch position.



Setting Your Switch Configuration

To begin a new switch configuration:

1. **On the guitar:** Move the HyperSwitch to the desired switch position – the Switch Position icon on the app will indicate which position the physical switch on the guitar is currently set.

NOTE: On the Switch Position Indicator:

- Position 1: Closest to the bridge
- Position 5: Closest to the neck

2. Select your desired pickup wiring:

Assigning pickup settings can be done 3 ways;

- by tapping the words of the Pickup Coil Indicator and Coil Status Indicator below each pickup.
- by tapping the coils shown in the "Pickup Configuration Page" until the desired wiring style is highlighted, or
- tapping and holding on a pickup will bring up a drop-down menu. You can choose from the available coil combinations for that pickup type.

3. Press the blue **SAVE** button when you have the pickup configuration you want for that switch position or patch. Repeat this for each of the 5 positions on HyperSwitch.

- Once the particular patch is saved in that switch position, move the switch on the guitar to change to a new switch position and repeat the steps until you've saved a patch in each of the 5 positions.

4. You can also include tone control settings to each patch.

For each tone control, you can choose

- Off (black): the tone control is bypassed.
- Dim (grey): the tone control on your guitar will operate the stock tone control.
- Blue: a .027 uf capacitor is wired in series to give a different taper to your stock tone control. If you have a .047 uf capacitor as stock on your tone control, this setting will change the tone control to .017 uf, and will keep more treble in while rolling down the tone control.

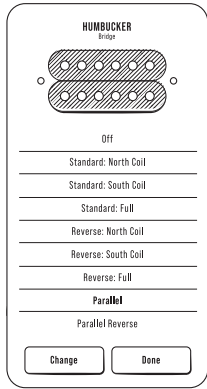
And... if you have a guitar with 2 tone controls, you can have both activated and able to affect the current patch!

5. To save all 5 patches as a Preset, click on **Save Preset** in the lower left corner of the screen. You can then name the preset and submit it to save it in the Load Presets folder.

You've now got your HyperSwitch set up and ready to go!
Enjoy experimenting with amazing number of accessible tonal options!

The "Available Pickup Combinations" chart at the end of this guide explains what is happening in the pickup wiring according to the color highlighted on the pickup or coil.

HyperSwitch Coil Choice Drop Down



Humbucker pickups can be assigned as:

- **Standard Full** (grey both coils, slugs highlighted both coils, as shown above): coils in series in standard wind direction
- **Standard South Coil** (grey south coil with slugs highlighted): split to south coil of the pickup, normal wind direction. For most humbucker models, the south coil is the coil with the screws, sometimes referred to as the adjustable coil. The south coil is usually closest to the neck on a neck humbucker and closest to the bridge on a bridge humbucker.
- **Reverse South Coil** (blue south coil with slugs highlighted): split to south coil, reversed wind direction.
- **Reverse Full** (both coils blue): coils in series in reverse wind direction.

- **Standard North Coil** (grey north coil with slugs highlighted): split to north coil of the pickup, normal wind direction. The north coil of most humbuckers is the one with the slugs, and is the farthest from the neck in most neck humbuckers, and is the furthest from the bridge in most bridge humbuckers.
- **Reverse North Coil** (blue north coil with slugs highlighted): split to north coil, reversed wind direction.
- **RP** (gold): Coils out of phase in parallel. Coil starts are hot.
- **PRP** (green): Coils out of phase in parallel reversed. Coil finishes as hot.
- **Off** (black)

Stacks can be assigned as

- **Standard Full** (grey, poles highlighted): coils in series in standard wind direction.
- **Standard Top Coil** (center of pickup grey and poles highlighted): split to top coil. On most of our Stack models, the upper coil is north up.
- **Standard Top Coil Reverse** (center of pickup blue and poles highlighted): split to top coil, wind direction reverse.
- **Reverse Full** (blue): Coils in series reverse wind direction.
- **Reverse Bottom Coil** (outer of pickup blue and poles highlighted): split to bottom coil.
- **Standard Top Coil** (outer of pickup grey and poles highlighted): split to bottom coil.
- **RP** (gold): Coils out of phase in parallel. Coil starts are hot.
- **PRP** (green): Coils out of phase in parallel reversed. Coil finishes as hot.
- **Off** (black)

Single Coils can be assigned as

- **Standard** (grey, screws highlighted): standard wind direction for that pickup.
- **Reverse** (blue): reverse wind direction.
- **Off** (black)

Any coil pickup from any pickup or combinations of coils from different pickups can be assigned to any switch position. Experiment with different combinations to find a tone that you like and save as a patch.

Menu Page

Connectivity

- **Connect:** Tap here to return to the Home screen to reconnect HyperSwitch with the app
- **Disconnect:** Tap here to disconnect HyperSwitch from the app.
- **Saved Devices:** if you have more than one guitar with HyperSwitch installed, you can name and save them. Tap here to see the list of your devices.

Device Settings

- **Pickup Settings:** tap here to modify pickup settings
- **Tone Knobs:** choose the number of tone controls that you have connected to HyperSwitch.
- **Sleep timer:** Sets the time after which the HyperSwitch to enter "Sleep" mode. When HyperSwitch is in Sleep mode, the battery is drawing minimal power, but no signal will pass through switch. Default is set to 180 minutes or 3 hours. For longer gigs or sessions, you may want to increase the Sleep timer. The HyperSwitch will only enter sleep mode if the switch position has not changed within the time that this is set.
- **Switch Reverse:** In some guitars, due to space constraints, the HyperSwitch may need to be installed in the reverse direction from which we expect. Activating Switch Reverse will correspondingly change what was in stored in position 1 to position 5, position 2 to position 4, etc.
- **Bluetooth Timeout:** The HyperSwitch uses the most power when the Bluetooth radio is on. To extend battery life, the transmitter that pairs with your phone or mobile device will turn off automatically after the number of minutes set for Bluetooth Timeout if the switch has not changed positions within that time.

- **Device Information:** tap on Device Information to find the current App software version.
- **Firmware Upgrade:** Click here to go into Firmware Upgrade mode.
- **Factory Reset:** Will reset to factory settings. Reset will erase any presets, as well as the current pickup and tone control configuration.

Application Settings

- **FAQs:** Check here for troubleshooting tips and other info.
- **Support:** emails to Support@seymourduncan.com, if you need additional support not found in this guide or the FAQs.
- **Terms and Conditions:** tap here to review the Terms and Conditions
- **Edit Profile:**
 - Photo: can upload a photo
 - Name: enter full name
 - Email:
 - Phone:
- **Log Out:** will log you out as the current user. You will need to log back in to pair with the HyperSwitch.

Presets

- **Load Preset**
 - Choose from the list
 - Settings that will not work with the current HyperSwitch are dimmed.
 - For instance, if you have two guitars with different pickup configurations, only the presets highlighted will work with the corresponding HyperSwitch.
- **Save Preset**
 - Enter preset name
 - Click submit
 - Preset will now show up in Preset list, ready to load

The following charts explain what is happening with the internal wiring of the individual pickups according to which model of pickup is chosen and the app setting chosen. You'll notice that certain settings, such as north and south, may vary according to pickup position, and wind directions may also be different, as we refer to the wind and polarity of a usual stock pickup of that type.

For those of you with some prior knowledge, you can rewire instantly for certain expected combinations.

Or, just experiment, and see what tones you like!

Humbuckers

Coil Setting

Bridge

Neck

Both Coils Off



Coils in Series Standard wind direction



North Coil Standard Wind direction South Coil off



North Coil Reverse Wind direction South Coil off



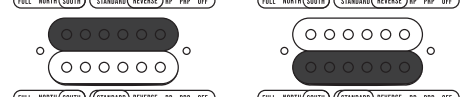
Coils in series Reverse wind direction



North Coil Off South Coil Reverse wind direction



North Coil Off South Coil Standard wind direction



Out of Phase Coils wired in parallel with coil starts as hot



Out of Phase Reverse Coils wired in parallel with coil finishes as hot



Single Coil Sized Humbuckers and Rails

Coil Setting	Bridge	Neck
Both Coils Off		
Coils in Series Standard wind direction		
North Coil Standard Wind direction South Coil off		
North Coil Reverse Wind direction South Coil off		
Coils in series Reverse wind direction		
North Coil Off South Coil Reverse wind direction		
North Coil Off South Coil Standard wind direction		
Out of Phase Coils wired in parallel with coil starts as hot		
Out of Phase Reverse Coils wired in parallel with coil finishes as hot		

Stacks

Coil Setting	Bridge	Neck
Both Coils Off		
Coils in Series Standard wind direction		
Top Coil Standard Wind direction Bottom Coil off		
Top Coil Reverse Wind direction Bottom Coil off		
Coils in series Reverse wind direction		
Top Coil Off Bottom Coil Reverse wind direction		
Top Coil Off South Coil Standard wind direction		
Out of Phase Coils wired in parallel with coil starts as hot		
Out of Phase Reverse Coils wired in parallel with coil finishes as hot		

P-Rails

Coil Setting	Bridge	Neck
Both Coils Off		
Coils in Series Standard wind direction		
North Coil Standard Wind direction South Coil off		
North Coil Reverse Wind direction South Coil off		
Coils in series Reverse wind direction		
North Coil Off South Coil Reverse wind direction		
North Coil Off South Coil Standard wind direction		
Out of Phase Coils wired in parallel with coil starts as hot		
Out of Phase Reverse Coils wired in parallel with coil finishes as hot		

Single Coils

Coil Setting	Bridge	Neck
Both Coils Off		
Standard wind direction		
Reverse Wind direction		

Safety and Compliance Information

This product has been tested and complies with all the following standards and certifications.

CE EN 55032:2015+A11:2020
EN 55035:2017+A11:2020

FCC 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.

Contains FCC ID: 2AC7Z-ESP32WROOM32E

Note: 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 or more 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.

Industry Canada

Contains IC ID: 21098-ESPWROOM32E

CAN ICES-003(B)/NMB-3(B)



Disposal Guidelines

In the unlikely event that you ever need to dispose of this product, it must be disposed of properly by handing it over to a designated collection point for the recycling of waste electronic equipment. Please contact your local household waste disposal service or the shop where you purchased this product for those locations. Thanks for helping us conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

For technical support or product recommendations:

support@seymourduncan.com

Tech Support Hotline: (805) 716-6747

Hours: M-F 8:00-5:00 PST

For support, tips and videos on installation, setup and more visit

seymourduncan.com/hyperswitch-support



HYPERSWITCH™

User Guide

5427 Hollister Ave, Santa Barbara, CA 93111

seymourduncan.com