

# **Helix User's Manual**

**Version 1.1**

# **Dillinger Labs**

**Model # PL5576**

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# **Helix Users Manual**

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<b>Revision</b>	<b>Description/Changes</b>	<b>By</b>	<b>Date</b>
1.0	Users Manual DRAFT		Jul 7, 2019
1.0	Fill in missing info and data		Jun 11, 2019
1.0	Updates added		Jun 13, 2019
1.1	Added Model # to front page and Regulatory Info section		Sep 10, 2019





## 100 Introduction

Thank you for purchasing the Helix Wireless Headphones from Dillinger Labs using the new SKAA standard. See [www.SKAA.com/TLC](http://www.SKAA.com/TLC)

SKAA Transmitters and Receivers such as the Helix Headphones bond and play audio seamlessly.





### 1.1 Quick Start Guide

Please use this section as it is intended which is to get you up and running quickly. Once you have your headphones operating please read the following sections to learn how to get the most out of your SKAA headphones.

1. On the headphones Left ear cup locate the power button,  press and hold it down for 1 second.
2. The SKAA indicator will light dim Amber (Lower Right part of the colored ring on the Left cup)
3. Plug in any SKAA Transmitter and play audio. IE: Plug in your Ursula (USB Transmitter) into your computer USB port and play audio from your favorite player. You may need to open the Volume Mixer on your computer to select the SKAA Transmitter as the playback device. Or if you have a Ryobi Transmitter play audio from it.
4. The SKAA indicator will go Bright Amber indicating you are bonded to that Transmitter and you should now be hearing audio from the headphones.
5. Note: After 30 min of continuous listening to audio (in Amber mode) with this SKAA Transmitter the headphones will automatically place this Transmitter on the headphones green list and the SKAA indicator will go Green. Now every time you power up your headphones it will immediately bond with this SKAA Transmitter if it is on and in range and playing audio.
6. To listen to audio from another SKAA Transmitter double click the  Bond button which enters the headphones into Amber mode again so it will bond up to any new SKAA Transmitter (New Transmitter means, a Transmitter not on the headphones green list)
7. Once you have audio with the 2<sup>nd</sup> SKAA Tx you can manually add it the the headphones green list by pressing and holding the  Bond button for 2 seconds, or just remain bonded and playing audio >30 min at which time the headphones will automatically add this Transmitter to the green list too. (The headphones Green list has space for up to 10 Transmitters)
8. Now that you have 2 SKAA Transmitters on the green list you can bounce between them by simply clicking the  Bond button once to listen to audio on Transmitter 1 and clicking it once again to go the listen to audio on the 2<sup>nd</sup> Transmitter.
9. Download SKAA cmd for your host device. This App has many features including allowing you to name all of your SKAA Transmitter's, and

Receiver's to anything you wish (32 character Limit) as well as get additional control of your SKAA devices.


## 1.2 Headphone Operating Instructions

Symbol	Description
	<p><b>Power Button</b> – Press and hold for 1 second to power the headphones On. Also, Press and hold for 1 second to power the headphones Off.</p>
	<p><b>Bond Button</b> – Used to select which audio source to play from. This button uses single, multiple or click and hold actions to control selections. (Note: this button uses the same click actions as one would use controlling a computer mouse or track pad) See the SKAA operating Instructions section for a link to <b>download the "SKAA Receiver user's guide" for more info</b> on what all this clicky stuff does.</p>
	<p><b>Volume +</b> - part of a rocker style switch with Vol -. Pressing this button will increment the volume up one step for every press or if held down will scroll volume up for as long as the button is held or until Max Vol is reached.</p>
	<p><b>Volume -</b> - part of a rocker style switch with Vol +. Pressing this button will increment the volume down one step for every press or if held down will scroll volume down for as long as the button is held or until Min Vol is reached.</p>
	<p><b>SKAA Indicator</b> – Indicates the status of your bond with any SKAA Transmitter. This indicator will display different colors which indicate the type of bond, and bond status. IE: Dim for un-bonded, bright for bonded and slow flashing for mute indication.</p> <p>See SKAA Operating Instructions section for link to download the SKAA Receiver user's guide.</p>
	<p>Basic operating modes:</p> <ol style="list-style-type: none"><li>1. Amber Mode – Headphones are ready to bond with any SKAA Transmitter on and in range. (If there are SKAA Transmitter's on the Headphones green list then in this mode the headphones will automatically bond with any New SKAA Transmitter and will not automatically bond to a Transmitter already on the Green List)</li><li>2. Green Mode – In this mode the Headphone will bond with the last green listed Transmitter it saw. If there are more than 1 Transmitter on the Headphones green list it will step through</li></ol>











the green list looking for a green listed Transmitter that is on and in range.

**Charge Indicator** – Located beside the SKAA bond indicator, this orange indicator displays the status of the batteries. See Battery Charging section for details.

### 1.3 SKAA Operating Instructions (Receiver User’s Guide)

Each SKAA® receiver has a *Green List* which remembers your *favourite* transmitters. A Green Indicator on your receiver means you are listening to a favourite, or hunting for one. Your receiver can also *explore* to find new transmitters—an Amber Indicator means you are *exploring* for transmitters which are not on your Green List. A *Cluster* is a product with two or more pieces which behave as one, such as a left and right speaker pair. The *Bond Button* lets you select which transmitter you’re listening to. The Bond Button has the  logo.

#### Essentials

<i>Bond Button</i>	<i>Command</i>	<i>Indicator Meaning</i>
Hold a few seconds	<u>Add / Delete</u> Manually add / delete the current transmitter to / from your Green List	 to  = Added  (flash) = Deleted
-	<u>Auto Add</u> SKAA will automatically add the current Amber transmitter to your Green List if you listen to it for 30 minutes	 to  = Added
1 Click	<u>Green Mode</u> Rotate through your list of <i>favourite</i> transmitters (Green List) — when a favourite transmitter is found, the search stops and audio plays from that transmitter	 (dim) = Hunting  (flash) = Next one  (bright) = Bonded
2 Clicks	<u>Amber Mode</u> <i>Explore</i> for new, unknown transmitters (ones which are not already on your Green List)	 (dim) = Hunting  (bright) = Bonded

Go to :<https://skaa.com/tlc/>

Download the SKAA Receiver User’s Guide

Also go to the following links for additional information.

Subscribe here:

<https://www.youtube.com/user/SKAAwireless>

SKAA for Beginners

<https://www.youtube.com/watch?v=S8QJq61g2i0&t=72s>

Helix Headphones  
<https://www.youtube.com/watch?v=K6QFzfSsKWc>

## 1.4 SKAA Cmd App

An App called SKAA cmd is available for download for:

- Mac Computers
- Windows Computers
- Android Phones and other Android devices
- iOS devices such as iPhone, iPad Air, iPad mini etc.

The App "SKAA cmd" provides a convenient way to control many functions of the SKAA operating system and is highly recommended.

For information on SKAA cmd visit : <https://skaa.com/tlc/>

There you will also find more guides such as:

- SKAA cmd User's Guide
- SKAA Transmitter User's Guide
- SKAA Receivers User's Guide
- Troubleshooting

## 1.5 Battery Charging

The 2 x NiMH AAA batteries which powers the headphones are internal to the product and are not normally accessible to the user.

### **Power Requirements:**

- 5V @ 500 mA USB power source for charging.

**Battery Status** – An orange LED located on the Left Cup along the inner side of the lower part of the red ring near the Bond Indicator.

This LED indicates as follows:(With no charge cable plugged in)

- **Off** – Batteries have a good charge somewhere between fully charged to near Low Batt.
- **Flashing Slow** – Low Batt indication. Batteries should be charged soon.

When Charge Cable is plugged in.

- **Off** – Batteries are Fully Charged (If charge cable is plugged in and charging)
- **On** – Batteries are being charged.

### **Charge port Location:**

**Use the USB charge cable which is included in the Box the headphones came in.**

Located on the bottom of the Right ear cup is a black flap (next to the gold colored contacts). Open the flap to expose a recessed micro USB port. Connect one end of the supplied USB power cable to this port and the other end of the supplied cable to a suitable 5V USB power source.

Charging of the internal batteries will start and be indicated by the charge LED on the Left cup.

Use this cable to connect to any 5V USB power source.

If the headphones are to be stored or left unused for a long period of time (6 months to 1 year) it is recommended to fully charge the batteries before storage and store in a cool dry place to minimize battery depletion during storage.

**Note:** The headphones will work normally while charging

## 200 Warranty

The headphones come with a 1 year limited warranty.

Warranty information can be found at  
:<http://dillingerlabs.com/headphones/helix/>



### FCC Statement

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.

### FCC Radiation Exposure Statement

This device complies with FCC radiation exposure limits set forth for an uncontrolled environment and it also complies with Part 15 of the FCC RF Rules. This equipment must not be co-located or operating in conjunction with any other antenna or transmitter. End-users and installers must be provide with antenna installation instructions and consider removing the no-collocation statement.

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.

### Caution!

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

### IC Statement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The device meets the exemption from the routine evaluation limits in section 2.5 of RSS 102 and compliance with RSS-102 RF exposure, users can obtain Canadian information on RF exposure and compliance.

Le dispositif rencontre l'exemption des limites courantes d'évaluation dans la section 2.5 de RSS 102 et la conformité à l'exposition de RSS-102 rf, utilisateurs peut obtenir l'information canadienne sur l'exposition et la conformité de rf.