# MAGNATRACK® DRUM AND CYMBAL TRIGGERS

# LOW VOLUME CYMBAL TRIGGERS



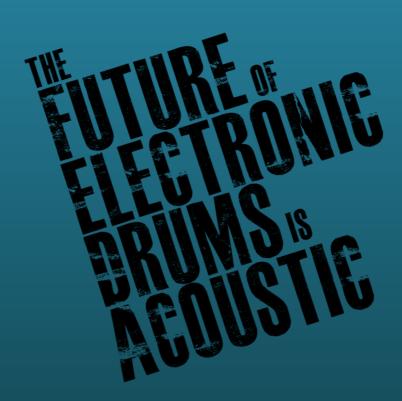




Rare Earth Dynamics Corp. will repair or replace this product at no charge to the purchaser for parts or for labor if the fault is reported within the warranty period. This warranty does not apply to damage that occurred as a result of abuse or misuse, abnormal service or handling, damage which may have been caused either directly or indirectly by another product, or if the product has been altered or modified in any way, or if the damage was caused by repairs or service provided or attempted by anyone other than Rare Earth Dynamics Corp, or a Rare Earth Dynamics Corp Authorized service center. \*Any attempt to dismantle or repair a product without authorization from Rare Earth Dynamics will immediately void any existing warranty for that product. This warranty does not include or provide for incidental or consequential damages.

Thank you for choosing MAGNATRACK. Our company is comprised of drummers that have extensive backgrounds in electronic drums and obsess over bringing you, the artist, the ability to forget about triggering altogether. We strive every day to forever blur the lines between acoustic and electronic percussion.

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# LINKS TO INSTALLATIONS IN THIS MANUAL











# **Getting Started**

### "The Future of Electronic Drums is Acoustic"

MAGNATRACK'S approach to electronic drums is unlike the rest of the industry. We want to embrace as much of the acoustic kit as possible in its purist form. For most drummers that "form" looks and feels like the acoustic kit they already own. What we can achieve with our triggers and your existing drum kit is unparalleled. Not just in performance and cost, but future thinking that's deeply rooted in the traditional drum set. It's the essence of this approach that makes the next part potentially the most crucial when trying to blur the lines between electronic and acoustic drums. Our mission is more than just converting your acoustic drum kit out of convenience, or to save a few bucks. We believe we can convert your kit without compromise. A kit free from any distraction that prevents you from being in the moment, as an artist, completely immersed in rhythm you create. \*groove as directed

### Kit Maintenance

Proper kit maintenance can be the difference between triggering that is responsive, accurate, and captures the subtle nuances that comprise your style, or drive you to the point of madness. Everything on your kit counts in large amounts! Poorly maintained hardware can wreak havoc on your triggers performance. You should approach your kit as if you were about to record in the studio. Proper spacing between stands, tight cymbal boom arms free of wobble, and cymbal felts in good condition are more relevant to preventing unwanted triggering results than you might think. More advanced considerations include installing mesh heads with a gauge just as you would with acoustic heads to ensure even tension across the drum head. There are many tips and tricks we dive into on our site. For now just remember *It all counts*!

**RARE EARTH DYNAMICS** IS NOT LIABLE FOR ANY INJURY TO SELF OR DAMAGE TO ANY EQUIPMENT. USE PRODUCT AT OWN RISK AND PLEASE FOLLOW DIRECTIONS AS DESCRIBED. AT NO TIME ATTEMPT TO DISMANTLE OR AUGMENT ANY PRODUCT OR PART.



# **Contents of Pack**

Low Volume Cymbal Trigger: 5 ea.

Adapter Cable: 5 ea.

 $(1/8^{TH} INCH TRS - 1/4 INCH TRS.)$ 

Foam Mutes: 4 ea.

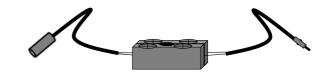
No Drill Wiring Kit

**Dual Zone Splitter Box** 

**Velcro Cable Ties** 











### **Tools Needed**

Substitutions may lead to trigger damage. Only use tools described.

- 1/4" box wrench or socket and driver
- Standard Philips head screwdriver
- Standard drum key



# HI-HAT INSTALLATION

# **Getting Started**







FOAM INSTALLATION



TRIGGER LOCATION

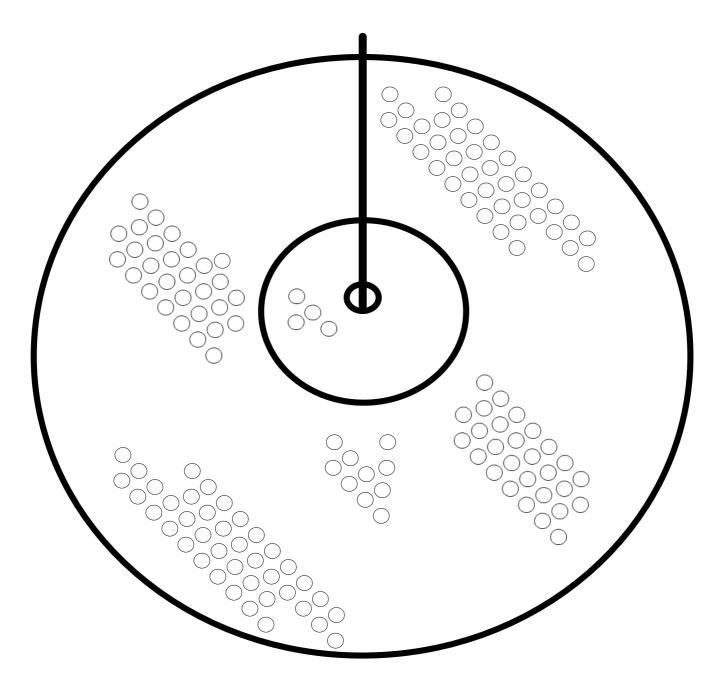


TRIGGER INSTALLATION



# **Mounting Wiring Block**

### PLACE THE BOTTOM HI-HAT ON THE STAND



**BOTTOM HAT** 





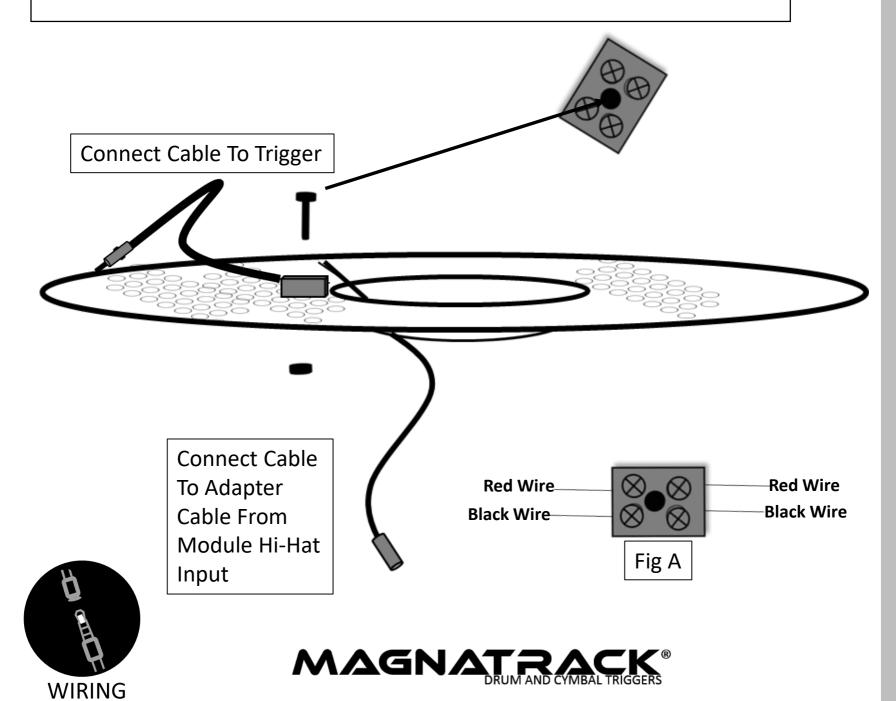
# **Mounting Wiring Block**

### **Tools Needed**

- 1/4" box wrench or socket and driver
- Standard Philips head screwdriver

# No Drill Wiring Block

- Mount the block near the edge of the bell of the bottom Hi-Hat
- Route the female cable's bare ends through a single hole near block from below
- Insert the bare wires into the block matching wires on corresponding side (Shown below in Fig A)

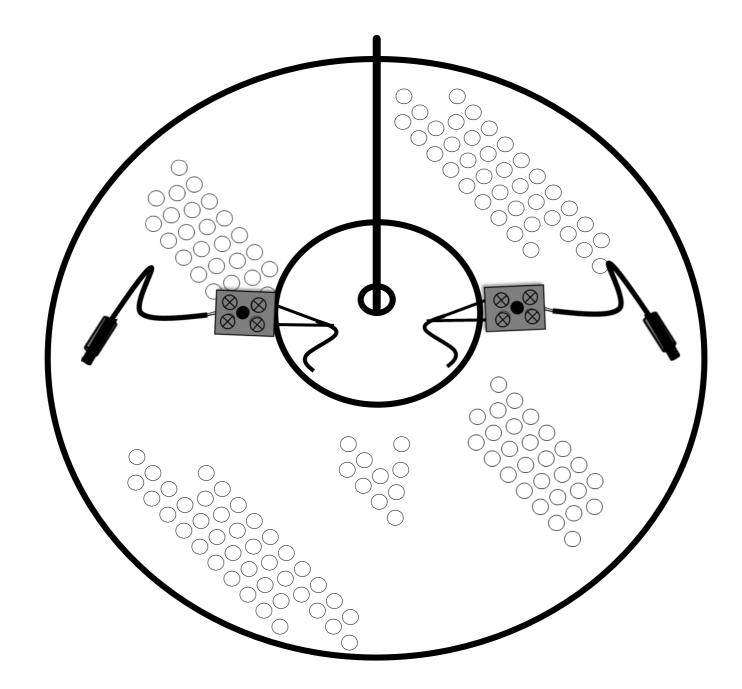


# **Mounting Wiring Block**

### For Dual Zone Hi Hat:

You can repeat wiring block installation by moving second block to opposite side of bell.

\*NOT INCLUDED IN STANDARD PACK



**BOTTOM HAT** 

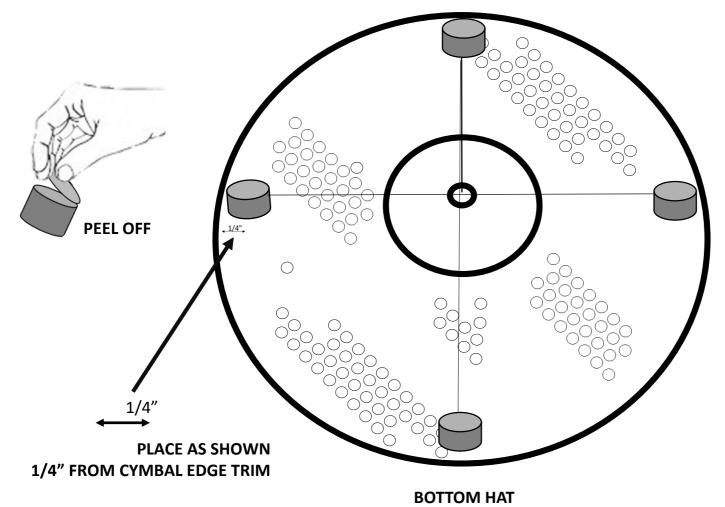




# **Hi-Hats (Bottom Hat)**

### Foam Mute Installation:

The foam mutes allow the top and bottom hat to be played traditionally by preventing unwanted triggering when the two cymbal come in contact with one another. This is only necessary when using a traditional Hi-Hat stand that allows both top and bottom hats. For an example of what's needed to take advantage of this method check out the Hi-Hat demo video linked on page 2. However, if you have a separate pedal included with your module you can enjoy the feel of playing both hats without the physical open and close movement that follows the articulations.



WHEN PLACING THE FOAM MUTES
USE A TAPE MEASURE TO

ENSURE EQUAL DISTANCE FROM CYMBAL EDGE.

1/2" OFF CYMBAL EDGE OR 1/4" OFF TRIM

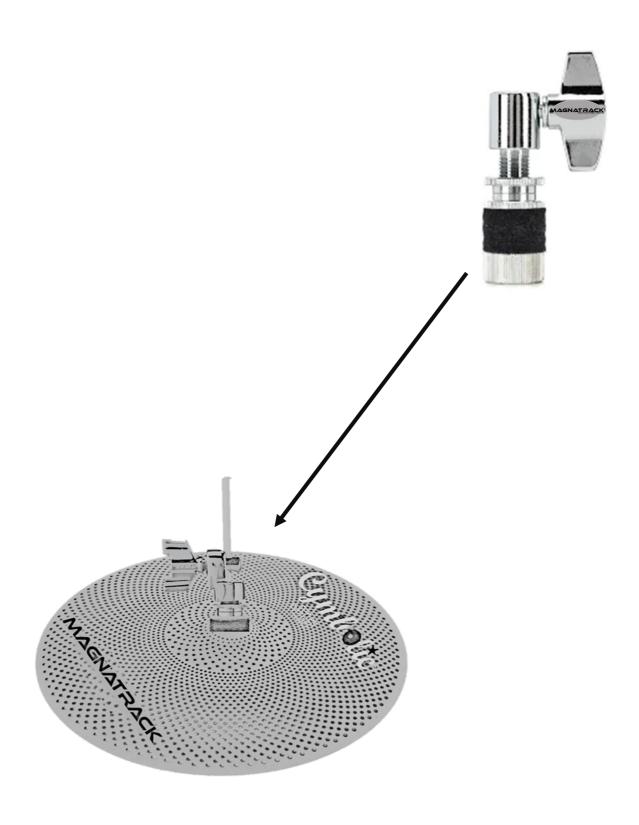




# **Install Hi-Hat Hardware (Top Hat)**

### **Top Hat Install:**

Install your hi-hat clutch to the top hi-hat cymbal.





### **Top Hat Install:**

Mount the top hat onto the stand. Tighten clutch so it leaves enough room to access the underneath side of the top hat.





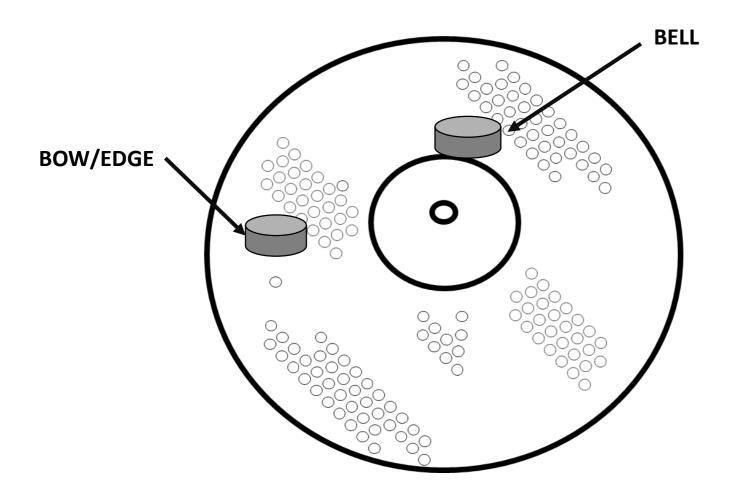
MAGNATRACK®
DRUM AND CYMBAL TRIGGERS

Most triggers require it to be located directly under the strike area causing a lack of true velocity and accelerated wear.

MAGNATRACK'S Cymbal Triggers are designed with Proximity Detection Technology which provides accurate capture of your playing style without having to play on top of the trigger.

As shown in the diagram below this

allows you to easily create and dial in your zones with just an increase in one triggers sensitivity and lower threshold while applying the opposite settings to other trigger.

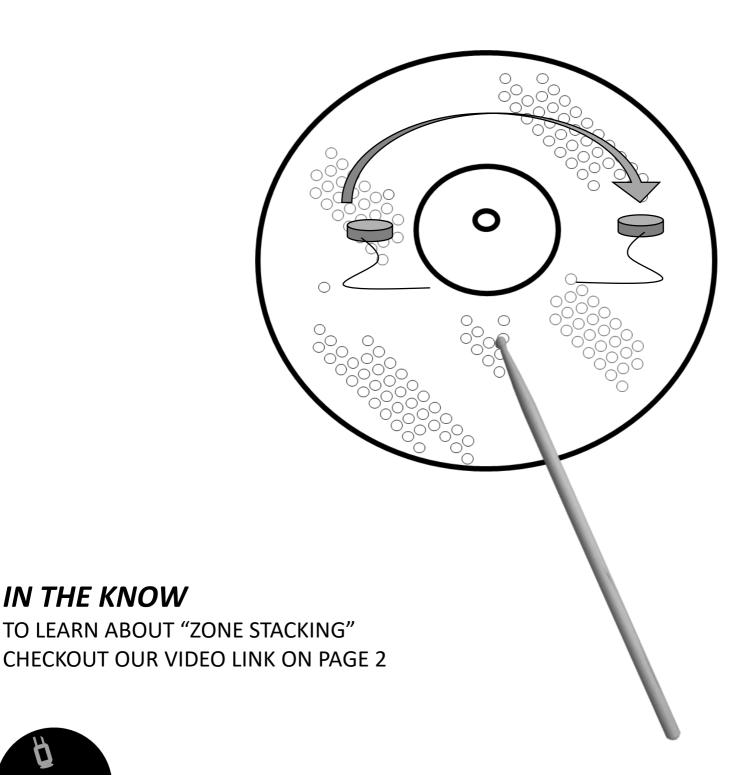






### **SINGLE ZONE HI-HAT**

You can get optimal results with the triggers placed on either side of the hi-hat bell. By experimenting with different locations, you can capture fine nuances, as well as, eliminate any dead spots, or double triggering.





IN THE KNOW

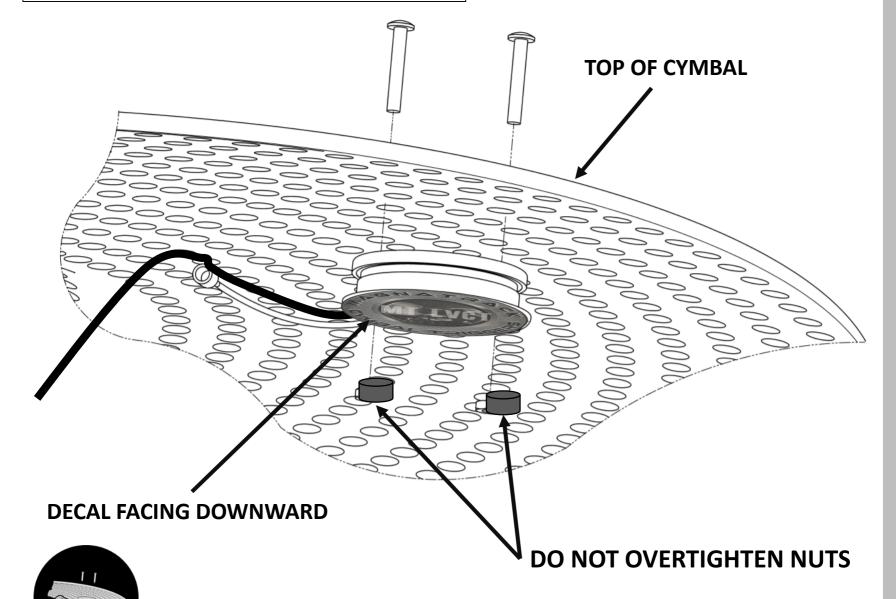


# **Trigger Mounting**

ALL HI-HAT
TRIGGERS GET
MOUNTED TO
BOTTOM SIDE
OF THE TOP HIHAT

TRIGGER INSTALLATION

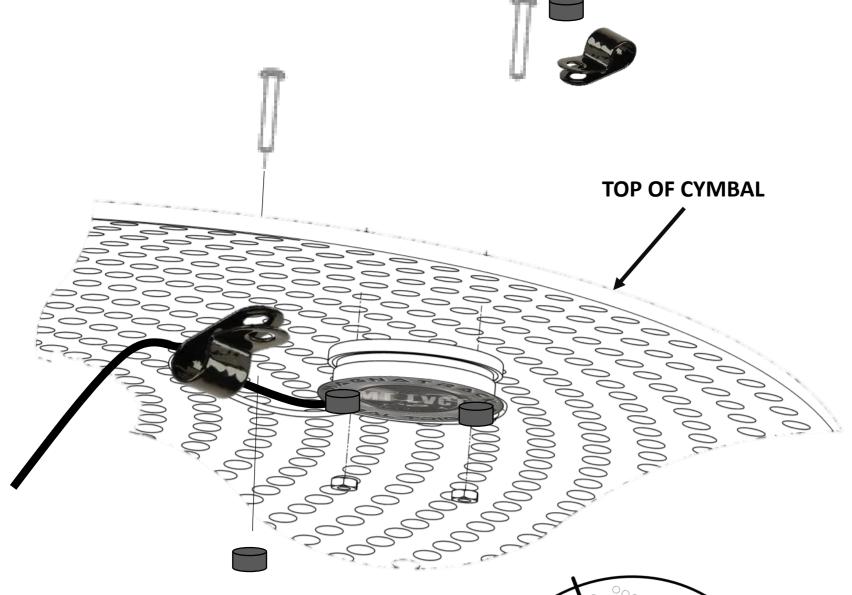
THE BLACK RUBBER PORTION OF THE TRIGGER SHOULD BE MAKING CONTACT WITH THE CYMBAL



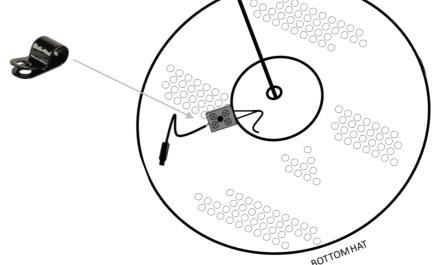


# **Trigger Mounting**

Secure the cable of the trigger using the 1/8" "P" clip. Use a nut and bolt to secure. Bolt goes down through top cymbal with head of facing up, on top side of cymbal.



Repeat this process to secure cable on the bottom hat. Ensure to leave enough length for connection of the make cable to reach trigger while hi-hats are open.



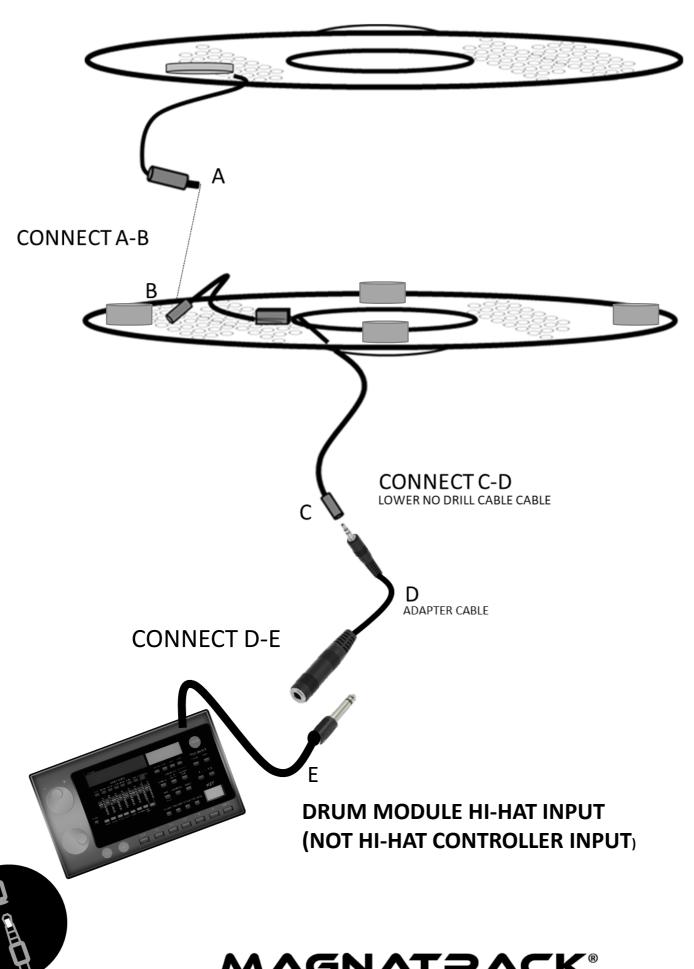




**WIRING** 

## **Final Connections**

### COMPLETE CABLE CONNECTIONS AS SHOWN



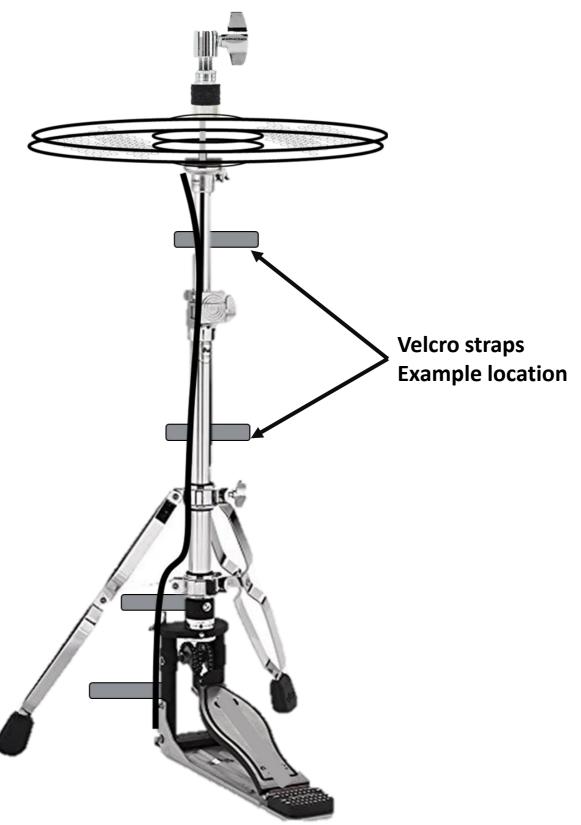
MAGNAT

# **Cable Management**

### **Securing Cables:**

Secure the cables, starting at the top of the hi-hat stand, using the provided Velcro straps. Ensure to avoid attaching Velcro straps to any moving parts of the stand.







# **Settings**

**NOW** that everything is connected, you can power up your module.



**CONSULT** your manual to locate your trigger settings.



# LOCATE HI-HAT ADJUSTMENTS

Hi-Hat		
SENSITIVITY	00	
THRESHOLD	00	

**ADJUST** your trigger settings as described in your manual. Every module varies in its terminology and internal correction algorithms. Understanding your drum modules parameters and corrective abilities is crucial for optimal performance. We have a list of baseline settings on our website for most popular drum modules to get you started.



CLICK HERE FOR QUICKSTART SETTINGS



# CRASH INSTALLATION

# **Getting Started**





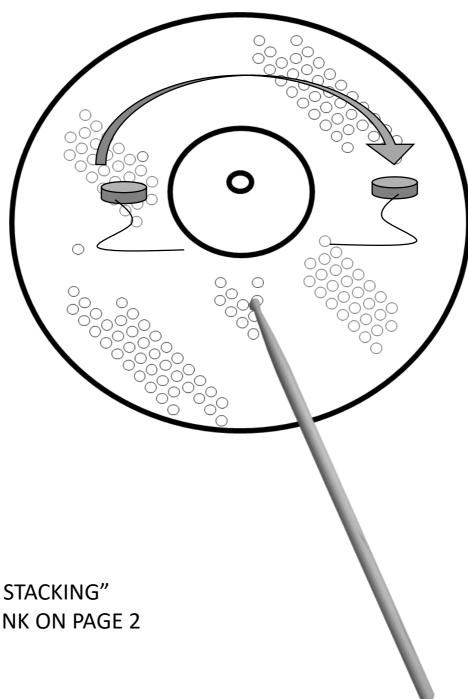






### SINGLE ZONE CRASH

Place the trigger about 3 inches off to the side of the bell on 16" and 18" crash cymbals. You can experiment with either side to see if there is a noticeable difference when struck normally.





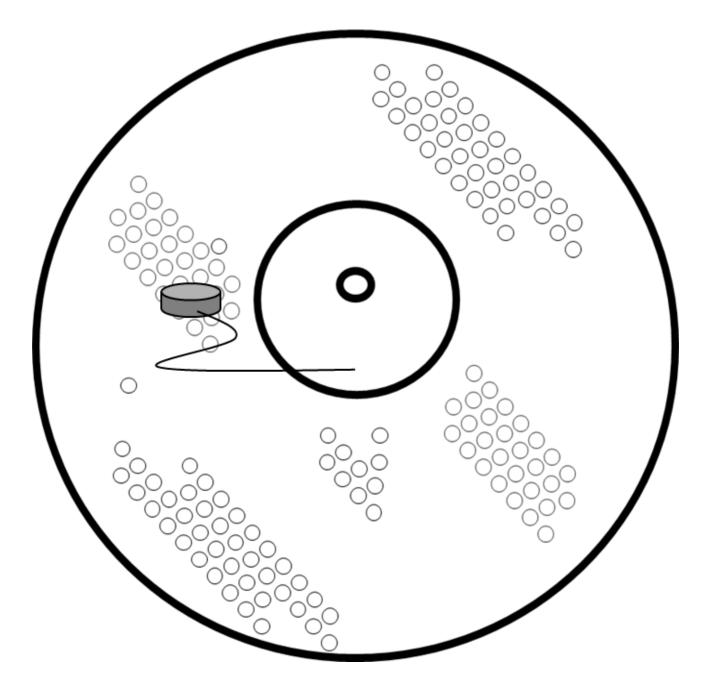
TO LEARN ABOUT "ZONE STACKING" CHECKOUT OUR VIDEO LINK ON PAGE 2





### **SINGLE ZONE CRASH**

You should end up with this view from the bottom of the cymbal. On the next slide we will secure the trigger and the retainer clips.



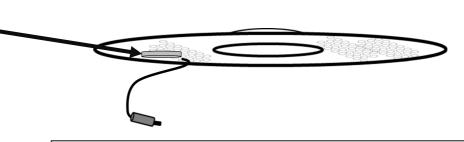




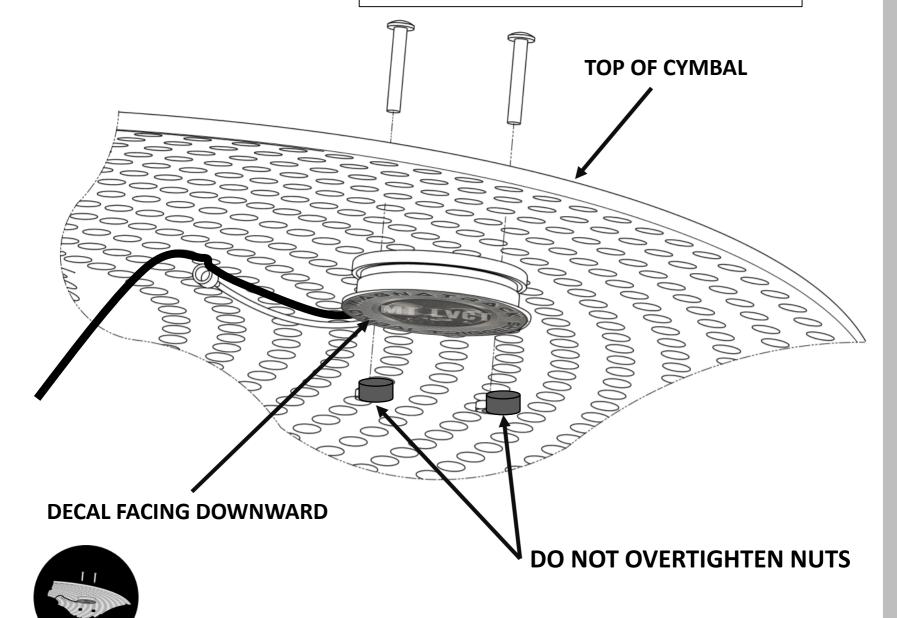
# **Trigger Mounting**

ALL TRIGGERS
GET MOUNTED
TO BOTTOM
SIDE OF THE
CYMBAL

TRIGGER INSTALLATION



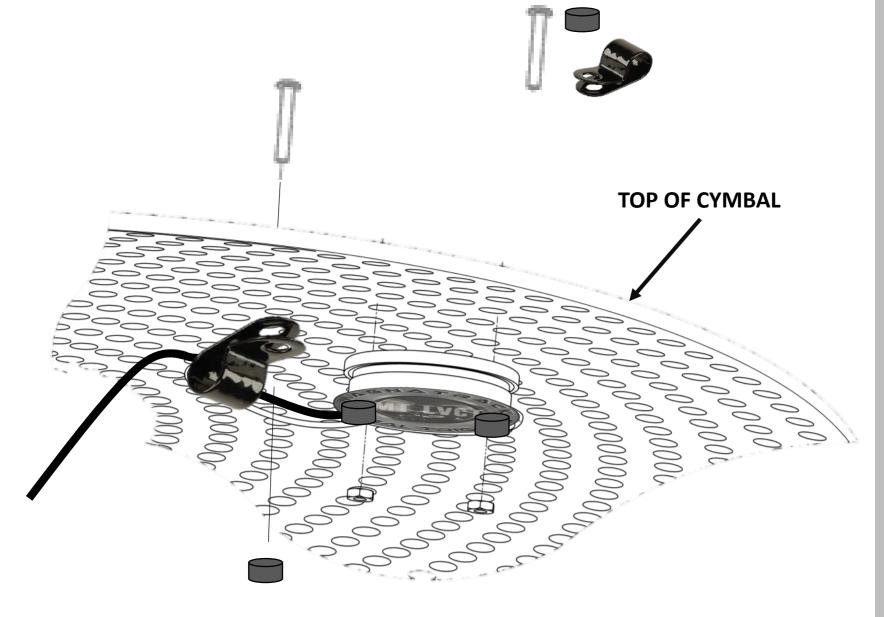
THE BLACK RUBBER PORTION
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MAKING CONTACT WITH THE
CYMBAL





# **Trigger Mounting**

Secure the cable of the trigger using the 1/8" "P" clip. Use a nut and bolt to secure. Bolt goes down through top cymbal with head of facing up, on top side of cymbal.



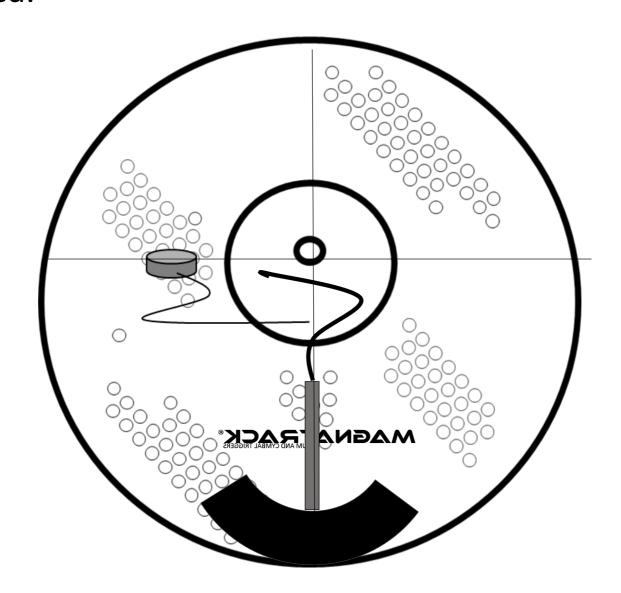






### **SINGLE ZONE CRASH + CHOKE**

Adding the LVC-1 is much like mounting a trigger. Once installed it should look like image below with cable ends both ready to be secured by clips to the bell area.

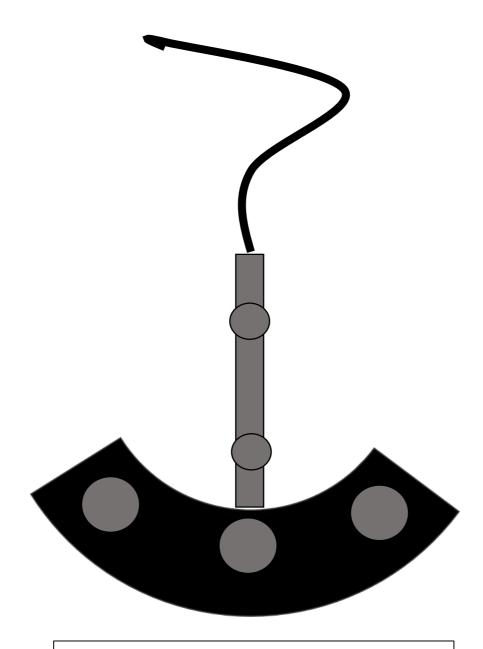






### **SINGLE ZONE CRASH + CHOKE**

Locate the placement of the choke with Magnatrack logo on top side before removing the double sided adhesive dots.



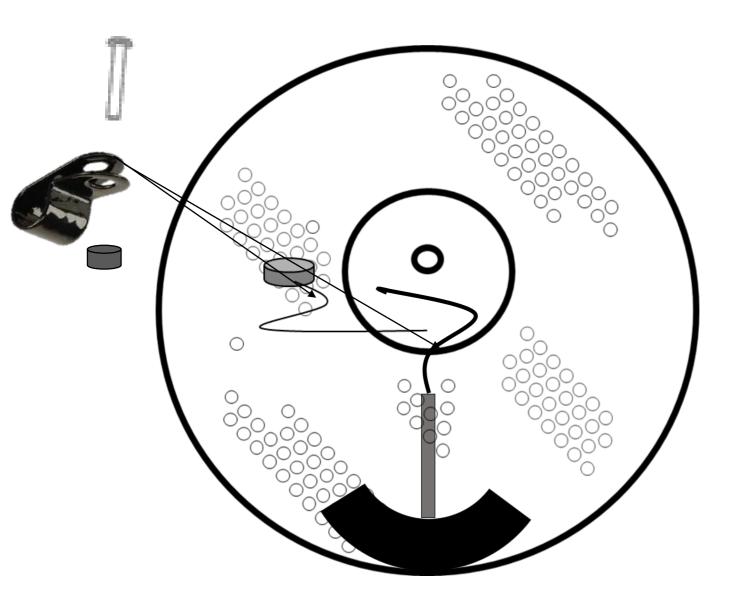
**BOTTOM SIDE OF CHOKE** 





# **How Our Cables Work**

Secure both with clips near the body of the choke and trigger as shown, leaving slack on opposite side to connect to the Dual Zone Adapter. Clips should be tight enough to prevent cable movement through the clip.





# **Crash Dual Zone Adapter**

The Dual Zone Adapter is for use with a Dual Zone Crash when one of the zones is a choke. It can be used for multiple trigger zones, however we always recommend giving each trigger its own input channel on the drum module if possible. This avoids any trigger cancelation and allows the triggers to be blended in a natural way.

### **Dual Zone Adapter**





Mount the Dual Zone Adapter As shown in Fig A.

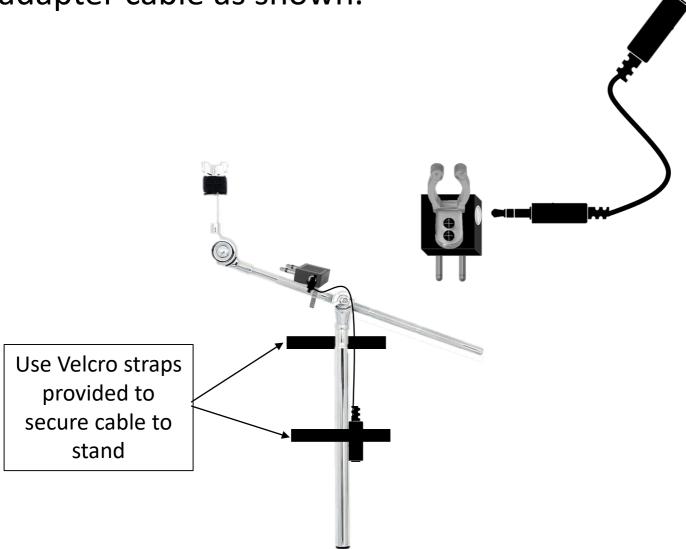


# **Crash Dual Zone Adapter**

The Dual Zone Adapter is for use with a Dual Zone Crash when one of the zones is a choke. It can be used for multiple trigger zones, however we always recommend giving each trigger its own input channel on the drum module if possible. This avoids any trigger cancelation and allows the triggers to be blended in a natural way.

Connecting the Dual Zone Adapter to module using

adapter cable as shown.

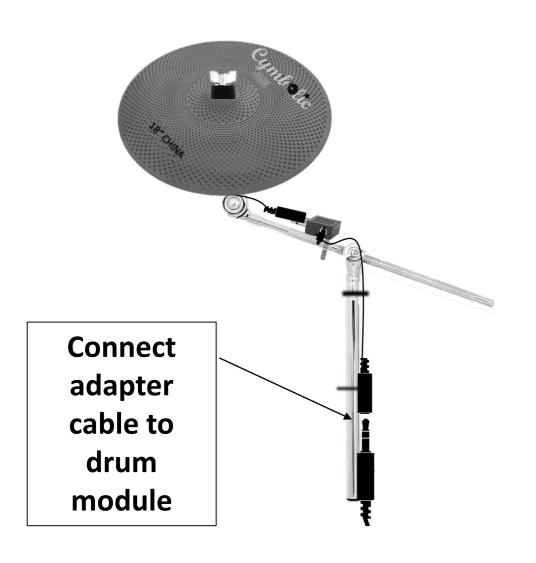




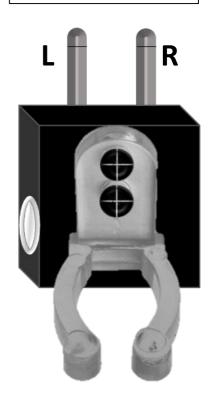
# **Crash Dual Zone Adapter**

The Dual Zone Adapter is for use with a Dual Zone Crash when one of the zones is a choke. It can be used for multiple trigger zones, however we always recommend giving each trigger its own input channel on the drum module if possible. This avoids any trigger cancelation and allows the triggers to be blended in a natural way.

Connecting the trigger and choke Dual Zone Adapter cable as shown.



L/R inputs may vary among brands





# **Settings**

**NOW** that everything is connected, you can power up your module.



**CONSULT** your manual to locate your trigger settings.



# LOCATE CRASH ADJUSTMENTS

CRASH		
SENSITIVITY	00	
THRESHOLD	00	

ADJUST your trigger settings as described in your manual. Every module varies in its terminology and internal correction algorithms. Understanding your drum modules parameters and corrective abilities is crucial for optimal performance. We have a list of baseline settings on our website for most popular drum modules to get you started.



CLICK HERE FOR QUICKSTART SETTINGS



# RIDE INSTALLATION

# **Getting Started**



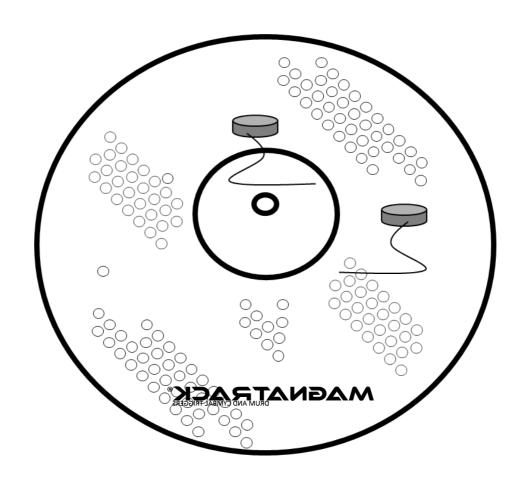






### **DUAL ZONE RIDE**

IT IS HIGHLY RECOMMENDED FOR OPTIMAL RESULTS TO PUT EACH OF THE RIDE TRIGGERS ON THEIR OWN INPUTS. THIS WILL PREVENT TRIGGER CANCELATION BETWEEN THE ZONES. THIS APPROACH ALSO MAKES "ZONE STACKING" FOR THE BOW/EDGE TRIGGER HIGHLY EFFECTIVE IN ACHIEVING A NATURAL RIDE SOUND.



### IN THE KNOW

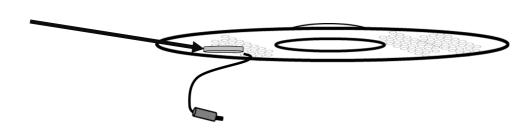
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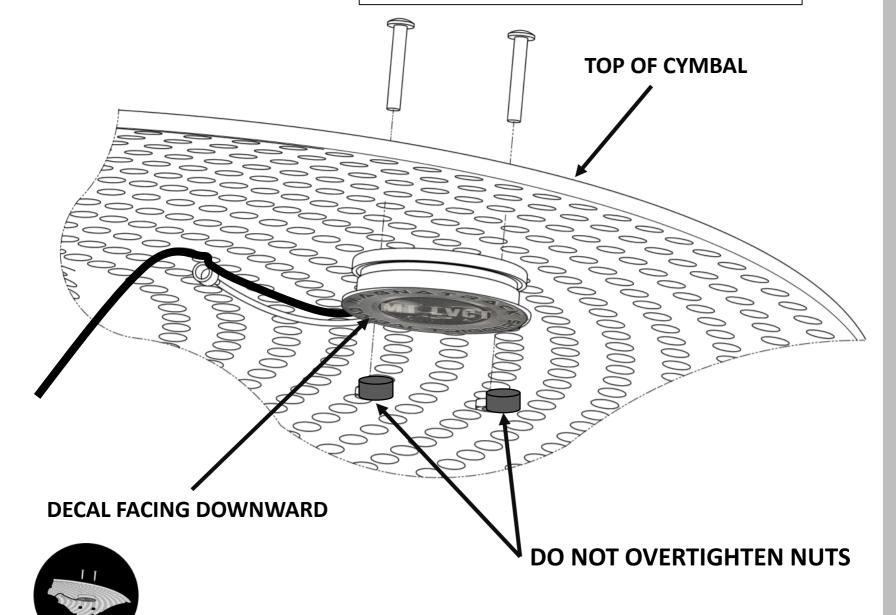


TRIGGER INSTALLATION

# **Trigger Mounting**



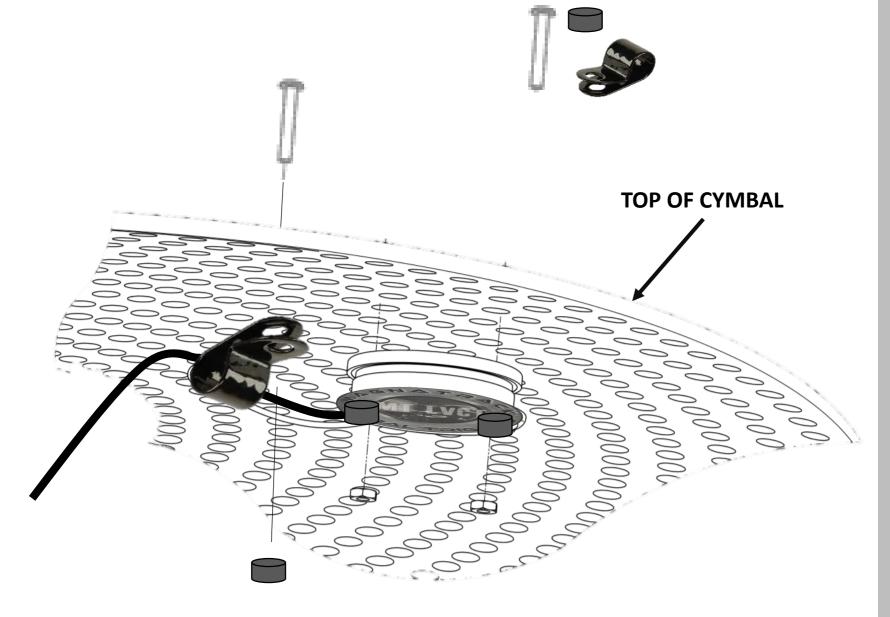
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# **Trigger Mounting**

Secure the cable of the trigger using the 1/8" "P" clip. Use a nut and bolt to secure. Bolt goes down through top cymbal with head of facing up, on top side of cymbal.









# **Settings**

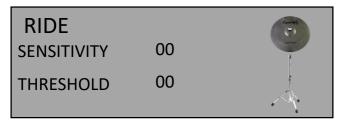
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**CONSULT** your manual to locate your trigger settings.



# LOCATE RIDE ADJUSTMENTS



ADJUST your trigger settings as described in your manual. Every module varies in its terminology and internal correction algorithms. Understanding your drum modules parameters and corrective abilities is crucial for optimal performance. We have a list of baseline settings on our website for most popular drum modules to get you started.



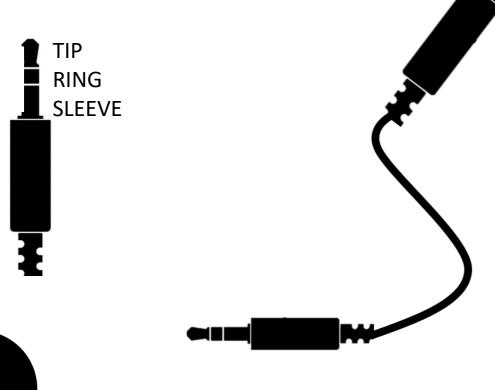
CLICK HERE FOR QUICKSTART SETTINGS



## **How Our Cables Work**

OUR ADAPTER CABLES ARE ALL STEREO TRS 1/8" MALE TO 1/4" TRS FEMALE TO ENABLE UNIVERSAL COMPATIBILITY WITH ALL STANDARD DRUM MODULE CONNECTIONS. THE CABLE CAN WORK AS BOTH A SINGLE OR DUAL ZONE IN IT'S FUNCTIONALITY. FOR EXAMPLE IF USING A DUAL ZONE SNARE CHANNEL ON YOUR MODULE WITHOUT A RIM ZONE CONNECTED YOU WILL GET UNWANTED RIM SOUNDS WHEN STRIKING THE HEAD TRIGGER DUE TO THE FACT THE TWO ZONES SHARE A GROUND OR THE SLEEVE IN A TRS CONNECTION. TO PREVENT THIS YOU HAVE MULTIPLE OPTIONS.

- OPTION 1 SET YOUR INPUT PRESET FOR A SINGLE ZONE LIKE A KICK DRUM. IN MOST CASES YOU WILL STILL HAVE ACCESS TO THE SAME PARAMETER FUNCTIONALITY AS YOU WOULD WITH A DUAL ZONE PRESET.
- OPTION 2 IF YOUR MODULE HAS THE ABILITY TO SIMPLY TURN A ZONE OFF OR CHOOSE NO SAMPLE ASSIGNED THIS WILL WORK AS WELL.
- OPTION 3- MOST MODULES HAVE INTERNAL MIDI NOTE ASSIGNMENT FUNCTIONALITY. SIMPLY CHANGE THE MIDI NOTE TO OFF, NONE OR A NOTE THAT HAS NO SAMPLE TIED TO IT.







# **How Our Cables Work**

COMPLETE CABLE CONNECTIONS AS SHOWN

1. TRIGGER



3. MODULE INPUT CABLE



# **Quickstart Settings**

We have provided a set of baseline module settings to get you started. These baseline settings are relevant for all modules of "R" type brand. Personal tweaking may be needed. "R" Type Modules



### HI-HAT

PRESET - KD-7 SCAN TIME - 2.0

SENS – 12-20 RETRIGCANCEL – 5-8

THRESH – 8 MASK TIME - 10

**CURVE – LINEAR** XTALK CANCEL - 10





### **CRASH W/CHOKE**

PRESET - CY-14C SCAN TIME - 2.0

SENS – 12-15 RETRIGCANCEL – 5-8

THRESH – 2-5 MASK TIME - 10

**CURVE – LINEAR** XTALK CANCEL – 30

**RIM GAIN - 0.8** 



### **AUX BOW/EDGE**

PRESET – KD-7 SCAN TIME – 1.6

SENS – 12-15 RETRIGCANCEL – 3-5

THRESH – 6-8 MASK TIME - 10

CURVE – LINEAR XTALK CANCEL – 30



### RIDE BELL

PRESET - KD-7 SCAN TIME - 1.6

SENS – 12-15 RETRIGCANCEL – 3-5

THRESH – 6-8 MASK TIME - 10

**CURVE – LINEAR** XTALK CANCEL – 20

