FIELD

ELECTRONIC DRUMS

REFERENCE MANUAL

INTRODUCTION

FIELD electronic cymbals and drums produce no sound themselves and require an external sound module in order to produce sounds. FIELD electronic drums and cymbals can be used to trigger unlimited MIDI instruments or devices by using a "Trigger to MIDI" interface.

FIELD electronic drum and cymbal triggers are uniquely designed to be plug and play compatible with the wide range of sound modules available on the market today that recognize piezo triggers including sound modules made by manufacturers such as: Roland™, Yamaha™, Alesis™, 2-Box™, Pearl™, DDrum™, and Nord™ and many more.

FIELD electronic drums and cymbals are designed to be used with standard pedals, sticks, brushes, mallets, and mountable on any standard drum stands, cymbal stands, drum racks, or mounting arms. FIELD cymbals should be mounted using standard cymbal stands, mounts, and felt washers. FIELD drums come standard for use with L-Rod mounts on stands and drum racks.

Cables are needed to connect FIELD electronic drums and cymbals to a sound module or "Trigger to MIDI" interface. "Right angle" (1/4") quarter inch TRS cables are recommended.

NOTE: 12-inch Splash Cymbals and 16" China cymbals can only be connected using "Right Angle" (1/4") quarter inch TRS plugs due to the shape of the cymbals.

QUICK SETUP

1. Setup necessary drum stands, cymbal stands and pedals.
2. Place the drum or cymbal onto your stand or mount.
3. Insert a RIGHT ANGLE 1/4" TRS plug into the trigger output jack on the side of the drum or underside of the cymbal.
4. Connect the other end of the cable to your drum module.
5. Turn on your sound module and use the default settings.
6. Plug headphones or speakers
7. Depending on your playing style, you may need to change your sound modules default settings to better respond to your playing style.
   Refer to your sound modules
   owners manual for instructions on how to change your trigger settings.
   *Common settings to adjust are: Sensitivity, Threshold, and Cross-Talk.
   See your drum modules owners manual for more information.

CYMBAL MOUNTING

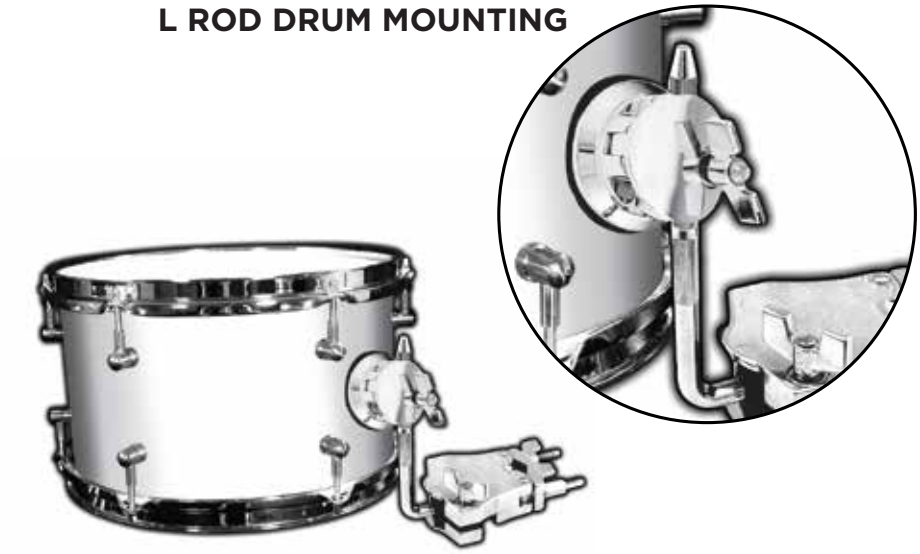
FIELD electronic cymbals are designed to be mounted on any standard cymbal stand or mounting arm. Typical cymbal stands come with a 6mm or 8mm threaded mounting rod, felt washers, and a wing-nut.
Your FIELD cymbal should be mounted between two felt washers with the wing-nut screwing on top.

CYMBAL MOUNTING

DRUM MOUNTING

FIELD electronic drums are designed to be mounted on any standard 10-12mm L-Rod mounting arm. Drum stands with L-Rod mounts are typical and readily available.
Your FIELD drums should be mounted securely with the wing-nut tightened to the L-Rod.
Snare drums are designed for use with standard snare drum stands.

L ROD DRUM MOUNTING



SETUP OVERVIEW

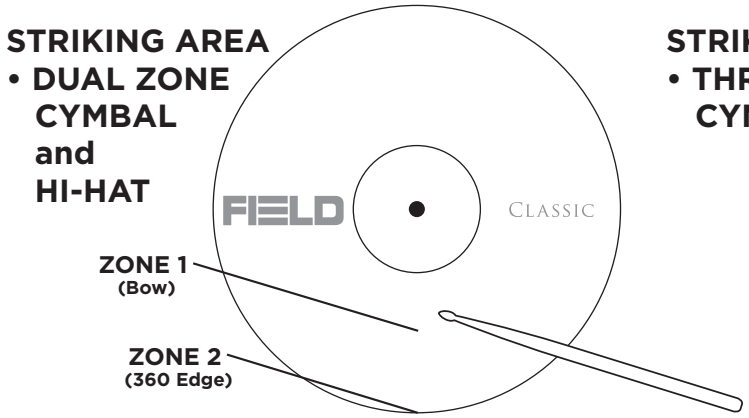
There are many factors that will affect the playability and triggering response on a wide variety of sound modules.

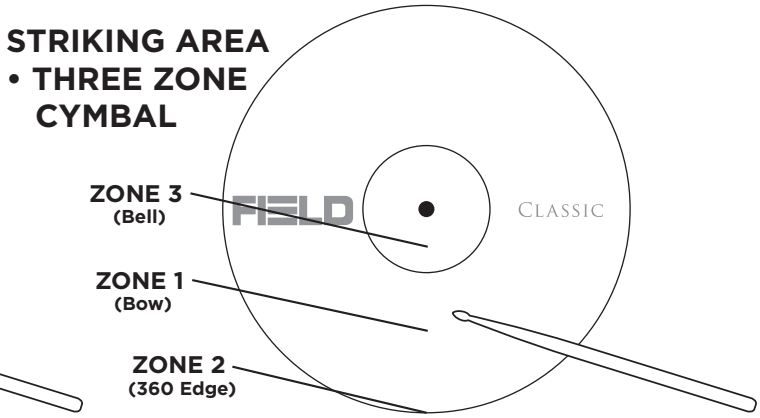
The main factors in determining how well your electronic drums and cymbals play and respond are matching the SENSITIVITY (GAIN) and VELOCITY CURVES to your playing style. You may find that you need to make no adjustments at all unless you are a significantly hard or soft player. Switching from drumsticks to brushes to mallets may also require some minor adjustments. The following information is a starting point for setting your module for use with FIELD electronic drums and cymbals.

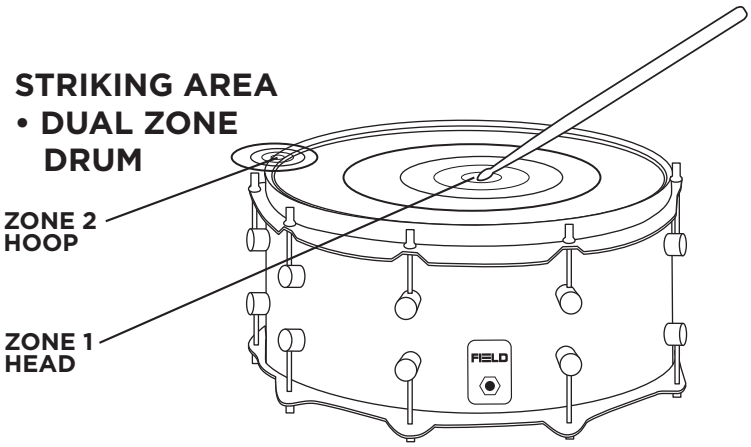
Start with the default recommended trigger input settings and then adjust your module's settings to best match your needs. If you are a heavy hitter and use heavy sticks, you will most likely need to set the GAIN/SENSITIVITY lower so that you can achieve full dynamic range (most variation between soft and loud sounds). When setting GAIN/SENSITIVITY parameters, the meter on your sound module that shows you how hard you are hitting the device should barely peak out when you are striking the device as hard as you will ever play it.

We recommend starting with a LINEAR CURVE. This means that the velocity at which you strike the trigger device directly correlates to the output on a MIDI scale.

STRIKING AREA:
The intended striking area of cymbals and drums are shown below.







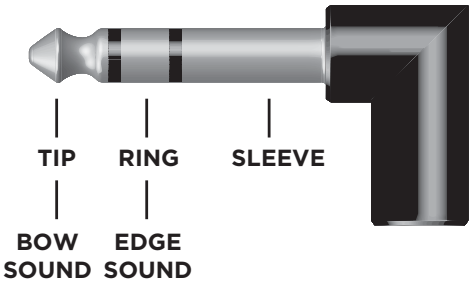
CYMBAL SETUP/CONNECTIONS

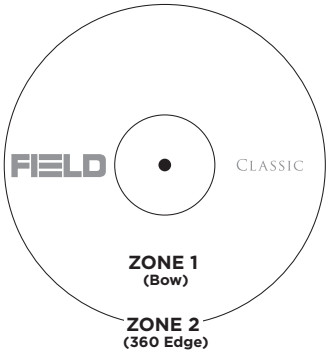
CONNECTIONS and SETTINGS

2 ZONE CRASH or 2 ZONE RIDE CYMBAL

1. Connect one TRS Stereo cable from the (**OUTPUT**) jack to the CYMBAL or AUX input on your sound module.
   (**OUTPUT** BOW/EDGE) = TIP = BOW SOUND / RING = EDGE SOUND

(OUTPUT) TRS Stereo Jack

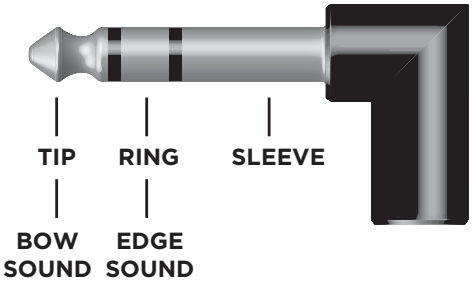




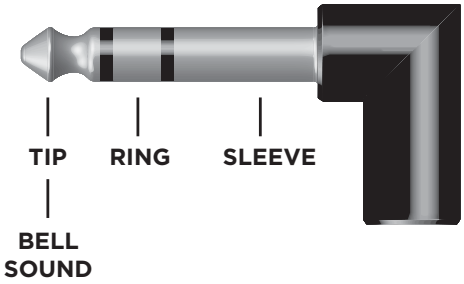
3 ZONE RIDE CYMBAL

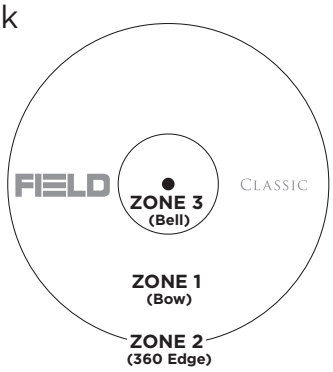
1. *Roland and most drum modules. Set switch on cymbal to setting **A**
2. Turn off 3-way triggering "applies to Roland sound modules"
   "Edge input applies to Roland sound modules"
3. Connect one TRS Stereo cable from the cymbal (**OUTPUT 1** BOW/EDGE) jack to the RIDE or AUX input on your sound module. Assign the bow and edge sound you like to each zone.
4. Connect another TRS Stereo cable from the cymbal (**OUTPUT 2** BELL) jack to the EDGE or AUX input on your sound module. Assign any sound you like to the bell zone.
   *See your drum module owners manual for further details on changing sounds.
   (**OUTPUT 1** BOW/EDGE) = TIP = BOW SOUND / RING = EDGE SOUND
   (**OUTPUT 2** BELL) = TIP = BELL SOUND
   *Roland modules require Head and Rim sound changes.
   (**OUTPUT 1** HEAD = BOW / RIM = EDGE) (**OUTPUT 2** HEAD = BELL)
   *See your drum module owners manual for further details on changing sounds.
5. *Yamaha modules. Set switch on cymbal to setting **B**
   (**OUTPUT 1** BOW/BELL/EDGE) 3 zones on 1 jack output. (**OUTPUT 2**) = NOT REQUIRED

(BOW OUTPUT) TRS Stereo Jack



(BELL OUTPUT) TRS Stereo Jack





OUTPUT SPLITTING

If you wish to separate the tip and ring output from the cymbal for two separate inputs on the sound module, you must use a Ring to Tip Y adapter. The Y adapter is useful for using multiple separate sound module inputs on one cymbal. This is used for further zone isolation and sound options.

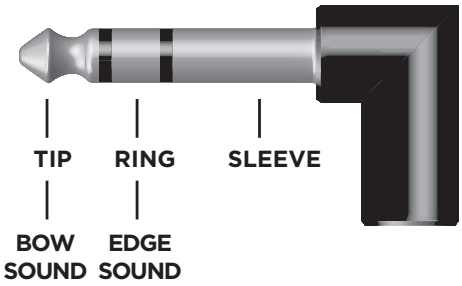
DRUMS SETUP/CONNECTIONS

CONNECTIONS and SETTINGS

2 ZONE DRUMS

1. Connect one TRS Stereo cable from the OUTPUT jack to the DRUM or AUX input on your sound module.
   (OUTPUT) = TIP = HEAD SOUND / RING = RIM SOUND

TRS Stereo Jack **(OUTPUT)**



OUTPUT SPLITTING

If you wish to separate the tip and ring output from the cymbal for two separate inputs on the sound module, you must use a Ring to Tip Y adapter. The Y adapter is useful for using multiple separate sound module inputs on one cymbal. This is used for further zone isolation and sound options.

HI-HAT MOUNTING and CONNECTION

ABOUT HI-HAT CYMBALS
FIELD electronic hi-hat cymbals come in two models. FIELD hi-hats are uniquely designed to be mounted on a wide variety of standard hi-hat stands with pedals or fixed mounting. FIELD electronic hi-hat cymbals come fully assembled including a top and bottom cymbal and a standard hi-hat clutch. Simply take your FIELD hi-hat out of the box, place it on a standard hi-hat stand, and you are ready to plug it in and play.

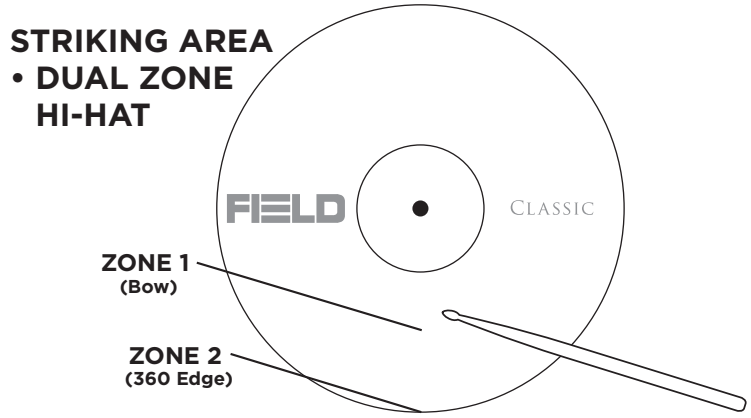
HI-HAT FIXED "FOOT CONTROLLER IS REQUIRED"
The foot controller is responsible for the difference between "open" and "closed" hi-hat sounds. Roland FD-7, FD-8 or Pintech HHC RYC Hi-Hat Stand Mounted Controller are examples of compatible controllers. Many other brands and types of foot controllers are also available.

HI-HAT WITH BUILT IN CONTROLLER.
The internal controller is responsible for the difference between "open" and "closed" hi-hat sounds. The hi-hat needs to be mounted on a standard hi-hat stand that uses a standard hi-hat clutch or standard drop clutch for double bass players. Super clutches with a set screw lock are not needed and should not be used due to FIELD's unique internal controller configuration.

MOUNTING:
To mount the hi-hat, slide the top and bottom hi-hat cymbals along with the clutch over the hi-hat stand mounting post. Raise the top hi-hat cymbal up until it stops and then tighten the wing-nut to the hi-hat post as you would any standard hi-hat.

CONNECTION:
Plug in the hi hat and foot control jacks to the corresponding inputs.
Connect the HH CTRL input from the sound module to the HH CTRL output of the Hi-Hat.
Connect the Hi Hat input from the sound module to the Hi Hat output of the Hi-Hat.

STRIKING AREA:
The intended striking area of the hi-hat cymbal is located on the opposite side of the FIELD logo as shown below. Position the hi-hat so that the FIELD logo is located directly across from where you are striking the hi-hat for optimal triggering response.



HI-HAT COMPATIBILITY

HI HAT COMPATIBILITY

The FIELD hi-hat can be used with many drum sound modules.

Module brands such as ROLAND, YAMAHA, 2-BOX, DDRUM, ALESIS, PEARL and many more are compatible.

You will need to read your specific owners manual for set up and adjustments of the module if needed.

ROLAND modules require the VH-11, VH-12 or VH-13 trigger type settings.

SEE PAGES 11-12 for HI-HAT SETUP with ROLAND modules.
SEE PAGE 13 for HI-HAT MECHANICAL ADJUSTMENTS with ROLAND modules.

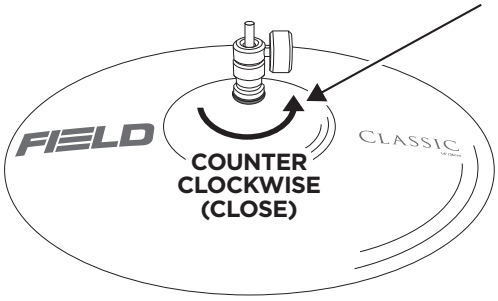
HI-HAT FIXED MODE - IMPORTANT COMPATIBILITY NOTICE!!
If your drum sound module does not have hi-hat open and closed position adjustment options, then you will need to use the hi-hat in a fixed mode in conjunction with a hi-hat foot pedal or a hi-hat controller specific to your drum sound module. Please refer to your drum sound module manual if it has open and closed adjustability. See Page 10 for fixed mode hi-hat setup.

1. Start with dropping the hi-hat clutch and executing the offset function on your drum module.

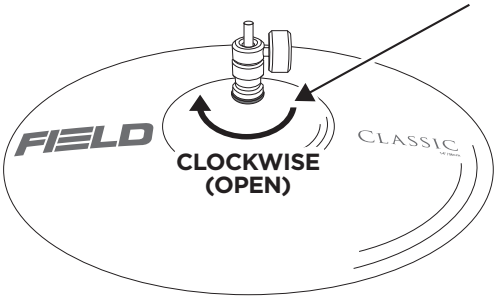
2. Using the VH-11, VH-12 or vh-13 hi-hat trigger type.
   If after dropping the clutch and executing the offset function the position marker is still above or below the closed arrow markers you may need to physically turn the hi-hat clutch counter clockwise or clockwise until the position marker aligns with the closed arrow markers on the drum module display screen.

NOTE: Don't loosen the clutch too much or it will come loose from the bottom hi-hat.

POSITION MARKER
ABOVE CLOSED ARROW MARKERS
SOLUTION = TURN CLUTCH COUNTER CLOCKWISE



POSITION MARKER
BELOW CLOSED ARROW MARKERS
SOLUTION = TURN CLUTCH CLOCKWISE



*** YAMAHA, 2-BOX, DDRUM, ALESIS, PEARL and many more drum sound modules are Compatible.**

- Generally no physical adjustment to the FIELD hi-hat is needed for these and other modules.
- Follow your sound module's instruction manual for setup or calibration needed for optimal playing.

HI-HAT ASSEMBLY

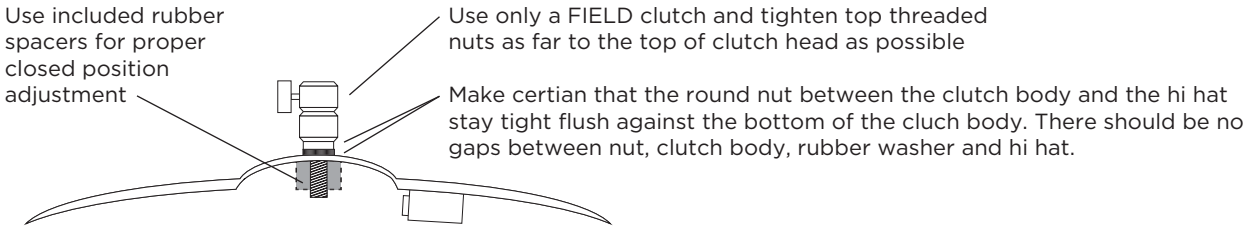
ASSEMBLY

Your FIELD hi-hat comes pre-assembled, no need for assembly. However if you choose to disassemble and reassemble the hi hat or remove an re-install the hi hat clutch simply loosen the clutch wing nut and screw/unscrew clutch from hi hat controller. Be sure to use the included rubber spacers between internal controller and inside top hi hat bell.

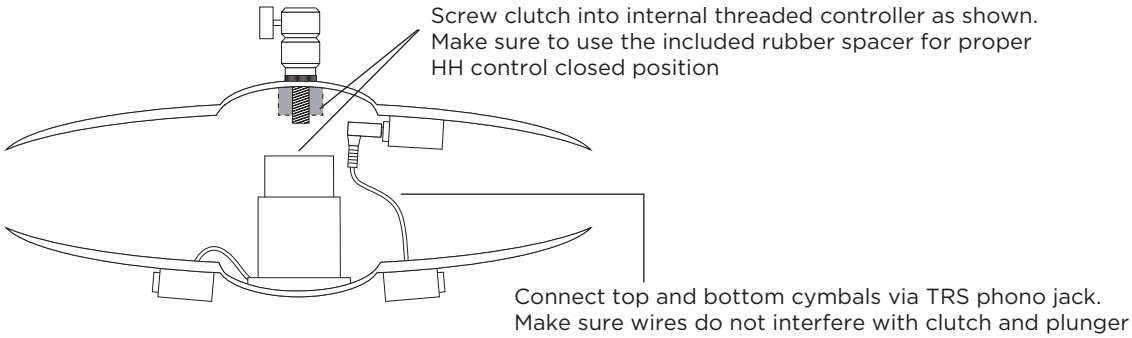
1. Use the included FIELD clutch and tighten top threaded nuts as far to the top of clutch head as possible. Use included rubber spacers for proper closed position adjustment. (see fig A)
2. Screw clutch into internal threaded controller as shown. Connect top and bottom cymbals via TRS phono jack. Make sure wires do not interfere with clutch and plunger. (see fig B)
3. Top and Bottom Hi Hat should fully touch. Internal rubber washers should be in contact with inside top of hi hat bell and top of internal controller to achieve a closed sound from you sound module. (see fig C)

NOTE: Position the (FIELD Logo) so that it is facing toward the player for optimal triggering response.

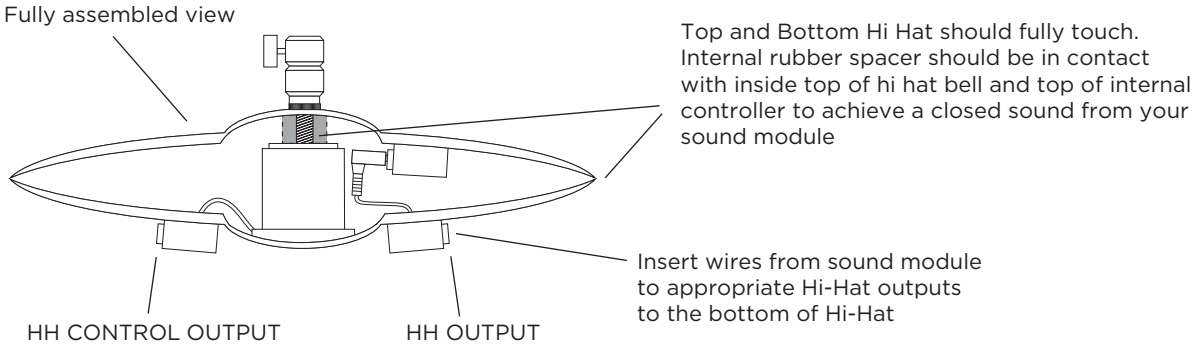
(fig A)



(fig B)



(fig C)



HI-HAT FIXED MODE

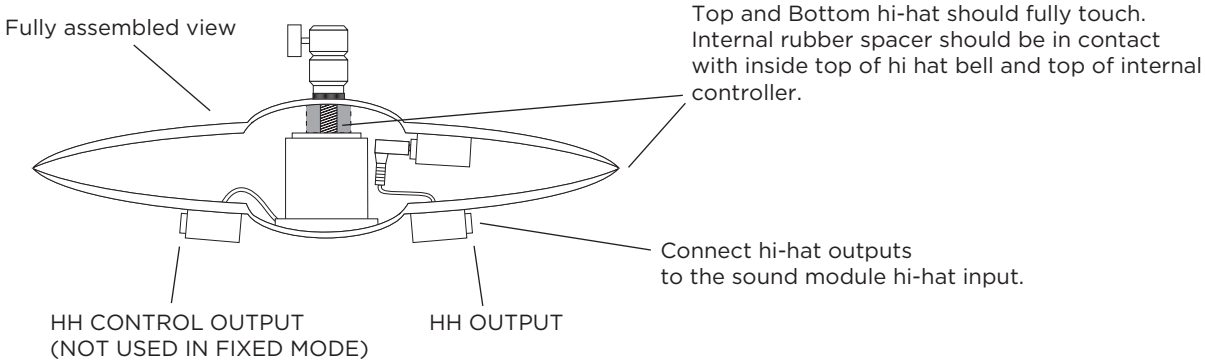
Hi-HAT FIXED MODE
If your drum sound module does not have hi-hat calibration open and closed position adjustment options, then you will need to use the hi-hat in a fixed mode in conjunction with a hi-hat foot pedal or a hi-hat controller compatible with your drum sound module. Please refer to your drum sound module manual if it has open and closed adjustability.

1. **FIXED MODE (TOP and BOTTOM HATS) (Opt A)**
   - Intented for use with a hi-hat controller foot pedal and fixed mount stand.
   - Using in the closed position the Top and Bottom hi-hat should fully touch. Internal rubber washers should be in contact with inside top of hi-hat bell and top of internal controller.
   - Use the included FIELD clutch and tighten top threaded nut as far to the top of clutch head as possible. Use included rubber spacer for proper closed position adjustment.

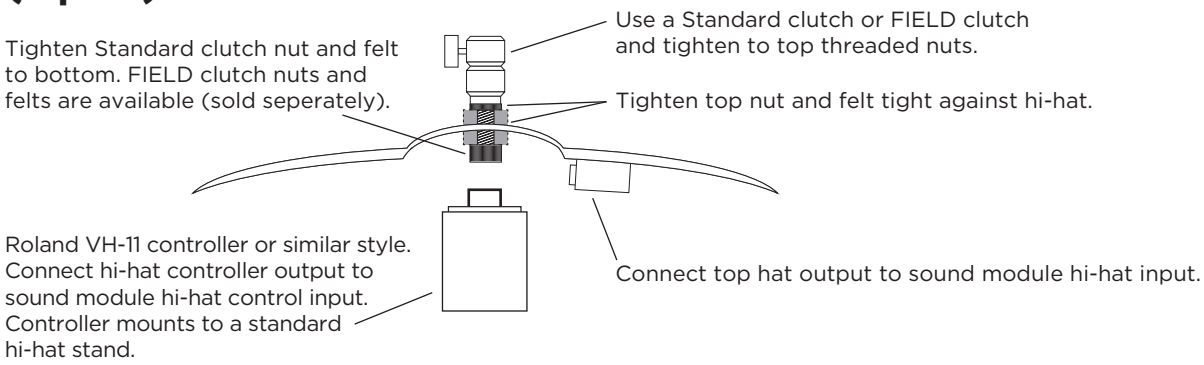
2. **FIXED MODE (TOP HAT ONLY) (Opt B)**
   - The top hi-hat alone can be used in conjuction with a Roland VH-11 controller or similar style controller. The controller mounts to a standard hi-hat stand.

NOTE: Position the (FIELD Logo) so that it is facing toward the player for optimal triggering response.

FIXED MODE (TOP and BOTTOM HATS) (Opt A)



FIXED MODE (TOP HAT ONLY) (Opt B)



HI-HAT ADJUSTMENT

HI-HAT SETTINGS:

ROLAND DRUM MODULES

1. Press the **TRIGGER** button. The **TRIGGER** button will light.

2. Press the **HI-HAT** button. The **TRIGGER HI-HAT** screen will appear.

3. Use the cursor buttons to select the parameter. The parameters available for editing will depend on the Trigger Type setting.

4. Use the [–] [+] buttons or the dial to adjust the setting.

5. When you're finished, press the [KIT] button to return to the DRUM KIT screen.

SETTINGS FOR THE VH-13, VH-12 TRIGGER TYPE

Parameter	Value	Explanation
Offset	-100 +100	Extent of opening Hi-Hat. The bigger the value is, the wider the opening extent is.
Foot Splash Sens	-10 +10	Amount of how easy to make the foot splash
Noise Cancel	1–3	Amount of strength to cancel the bow and edge noise when you play foot close. The bigger the value is, the more difficult to have a noise excluding the foot close.

ADJUSTING THE OFFSET OF VH-13, VH-12 AUTOMATICALLY

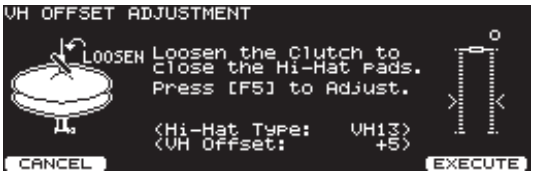
NOTE: TIGHTENING OR LOOSENING THE HI HAT CLUTCH MAY BE NEEDED TO ADJUST THE CLOSED POSITION DEPENDING ON WHAT HI-HAT TRIGGER TYPE IS USED. *See Page 13.

If you're using the VH-13 or VH-12 setting, execute the offset automatic adjustment from your module after making connections. This adjustment is required in order to correctly detect open, close, and pedal operations.

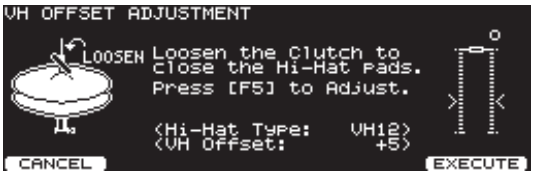
1. Set the hi-hat's Trigger Type to "VH13" or "VH12" In the TRIGGER HI-HAT screen, (OFFSET) button.The VH OFFSET ADJUSTMENT screen will appear.

2. In the TRIGGER HI-HAT screen, (OFFSET) button the VH OFFSET ADJUSTMENT screen will appear.

VH-13



VH-12



3. Loosen the clutch screw of the top hi-hat and let it sit on the bottom hi-hat. *Do NOT touch the hi-hats or the pedal.

4. Press the [F5] (EXECUTE) button. The [TRIGGER] button flashes, and the offset parameter is set automatically. When finished, the [TRIGGER] button stops flashing and remains lit, and the TRIGGER HI-HAT screen appears. You can also perform this operation by holding down the [KIT] button and pressing the [TRIGGER] button.

HI-HAT ADJUSTMENT

HI-HAT SETTINGS:

ROLAND DRUM MODULES cont...

SETTINGS FOR THE VH-11 TRIGGER TYPE

Parameter	Value	Explanation
Foot Splash Sens	-10 +10	Amount of how easy to make the foot splash
CC Max	90, 127 value	Adjusts closed position. Amount of control change that is transmitted in stepping the pedal down completely.

ADJUSTING THE OFFSET OF VH-11

NOTE: TIGHTENING OR LOOSENING THE HI HAT CLUTCH MAY BE NEEDED TO ADJUST THE CLOSED POSITION DEPENDING ON WHAT HI-HAT TRIGGER TYPE IS USED. *See Page 13.

If you're using the VH-11 setting, execute the offset adjustment from your drum module after making connections. This adjustment is required in order to correctly detect open, close, and pedal operations.

1. Connect the hi-hat to your drum module.

2. Loosen the clutch screw and let the hi-hat rest naturally on the bottom hi-hat.

3. Press the [TRIGGER] button.

4. Press the [F1] (BANK) button. The [TRIGGER] button will light, TRIGGER BANK screen will appear.

5. Press the [F3] (HI-HAT) button. The TRIGGER HI-HAT screen will appear.

6. Set the Trigger Type for hi-hat to "VH11".

VH-11

HI-HAT CLOSED POSITION MECHANICAL ADJUSTMENT

HI-HAT SETTINGS:

ROLAND DRUM MODULES cont...

HI-HAT MECHANICAL ADJUSTMENTS
ADJUSTING THE OFFSET FOR VH-13, VH-12 and VH-11 TRIGGER TYPE

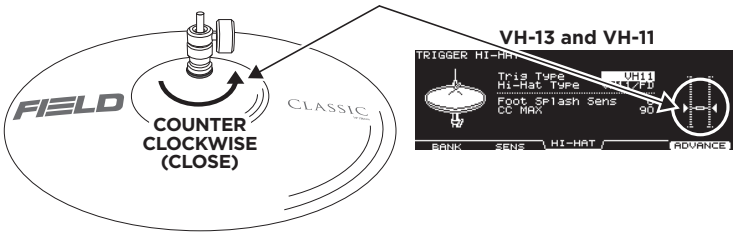
NOTE: TIGHTENING OR LOOSENING THE HI HAT CLUTCH MAY BE NEEDED TO ADJUST THE CLOSED POSITION DEPENDING ON WHAT HI-HAT TRIGGER TYPE IS USED. *WHEN ADJUSTING, MAKE CERTIAN THAT THE ROUND NUT BETWEEN THE CLUTCH BODY AND THE HI HAT STAY TIGHT FLUSH AGAINST THE BOTTOM OF THE CLUCH BODY. THERE SHOULD BE NO GAPS BETWEEN NUT, CLUTCH BODY, RUBBER WASHER AND HI HAT. See Page 9 (fig A).

VH-13 and VH-11 TRIGGER TYPE

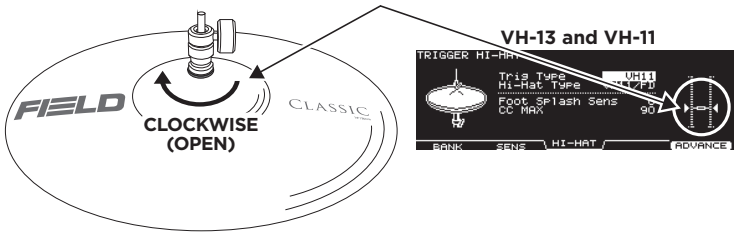
1. Start with dropping the hi-hat clutch and executing the offset function on your drum module.

2. Using the VH-13 or VH-11 hi-hat trigger type. If after dropping the clutch and executing the offset function the position marker is still above or below the closed arrow markers you may need to turn the hi-hat clutch counter clockwise or clockwise until the position marker aligns with the closed arrow markers on the drum module display screen.

POSITION MARKER
ABOVE CLOSED ARROW MARKERS
SOLUTION = TURN CLUTCH COUNTER CLOCKWISE



POSITION MARKER
BELOW CLOSED ARROW MARKERS
SOLUTION = TURN CLUTCH CLOCKWISE

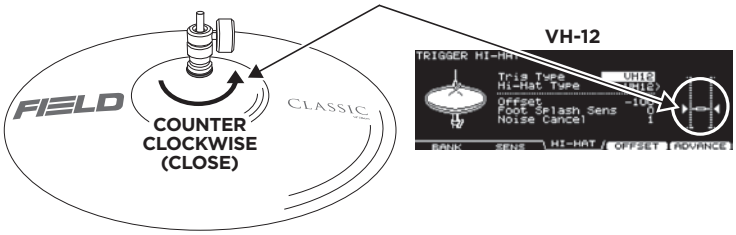


VH-12 TRIGGER TYPE

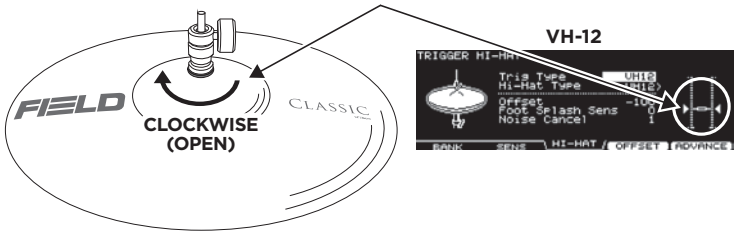
1. Start with dropping the hi-hat clutch and executing the offset function on your drum module.

2. Using the VH-12 hi-hat trigger type. If after dropping the clutch and executing the offset function the position marker is still above or below the closed arrow markers you may need to turn the hi-hat clutch counter clockwise or clockwise until the position marker aligns with the closed arrow markers on the drum module display screen.

POSITION MARKER
ABOVE CLOSED ARROW MARKERS
SOLUTION = TURN CLUTCH COUNTER CLOCKWISE



POSITION MARKER
BELOW CLOSED ARROW MARKERS
SOLUTION = TURN CLUTCH CLOCKWISE



TRIGGER SETTINGS

ROLAND Sound Module

PRODUCT	TRIGGER TYPE	SENSITIVITY	THRESHOLD	CURVE	XTALK	MOUNT	SCAN TIME	RTRG CANC	MASK TIME	ADVANCED SETTINGS RIM GAIN	RIMSHOT ADJUST	XSTICK THRSHLD	3 WAY TRIGGER
FIELD 14" SNARE DRUM	*PD125/PAD2	7	2	LINEAR	10	SEP	2.0	2	6	1	3.0	*90	NA
FIELD 10" TOM	*PD105	7	2	LINEAR	5	SEP	2.0	9	10	1	3.0	NA	NA
FIELD 12" TOM	*PD105	7	2	LINEAR	60	SEP	2.0	2	6	1	3.0	NA	NA
FIELD 14" TOM	*PD105	7	2	LINEAR	60	SEP	2.0	2	6	1	3.0	NA	NA
FIELD KICK DRUM	KD120	7	10	LINEAR	60	SEP	2.0	2	6	1	3.0	NA	NA
FIELD 10" SPLASH	CY8	12	2	LINEAR	30	CYM	2.0	6	10	1.1	NA	NA	NA
FIELD 14" CRASH	CY8	12	2	LINEAR	30	CYM	2.0	6	10	1.1	NA	NA	NA
FIELD 16" CRASH	CY8	12	2	LINEAR	30	CYM	2.0	6	10	1.1	NA	NA	NA
FIELD 16" CHINA	CY8	12	2	LINEAR	30	CYM	2.0	6	10	1.1	NA	NA	NA
FIELD 18" CRASH	CY8	12	2	LINEAR	30	CYM	2.0	6	10	1.1	NA	NA	NA
FIELD 18" RIDE (dual and three zone)	CY15R	12	bow 2/bell20	LINEAR	30	CYM	1.6	3	10	3.2	NA	NA	OFF
FIELD 20" RIDE (dual and three zone)	CY15R	12	bow 2/bell20	LINEAR	30	CYM	1.6	3	10	3.2	NA	NA	OFF
14" HH (Fixed Mount)	VH11	12	2	LINEAR	40	CYM	1.6	3	4	0.8	NA	NA	NA
14" HH	VH12/VH13	12	2	LINEAR	40	CYM	1.6	3	4	0.8	NA	NA	NA

*NOTE: Using Pad 2, PD-128, PD-125 or PD-120 Trigger Type will also work for Drums. Use Pad 2 for Td-30

YAMAHA Sound Module

	Type	Sens	Thold	Curve	Scan	ReTrg Can	Mask	Xtalk
Bow/Head	P12	8-10	2	Linear	2.0	6	8	40
Bell	P12	8-10	2	Linear	2.0	6	8	40

ALESIS Trigger i/o Sound Module

	Type	Sens	Thold	Curve	Scan	ReTrg Can	Mask	Xtalk
Bow/Head	PP	8-10	2	Linear	2.0	6	8	40
Bell	PP	8-10	2	Linear	2.0	6	8	40

3 Zone Ride Cymbal with Choke "trigger type"
1. Connect the ride to the Alesis Trigger iO by connecting BOW/EDGE cymbal output to Ride Input, (set to type "PS.") 2. Connect BELL cymbal output to Aux input (set to type "PS.") Tip is Piezo and Ring is Switch.
NOTE: In PS trigger type mode the edge sound will not function.

NOTE: Make sure the trigger type "PP Piezo" is selected on both Tip and Ring for Dual Zone triggers. Make sure that your trigger's "Trigger Type" is configured correctly before editing or using it. If the Trigger Type is configured incorrectly, your trigger may not function.

NOTE: PP means Piezo to Piezo. PS means Piezo to Switch. See your sound module owners manual for more details.

NOTE: If the Trigger type setting listed do not give the desired results, simply switch trigger type and adjust setings to your liking.

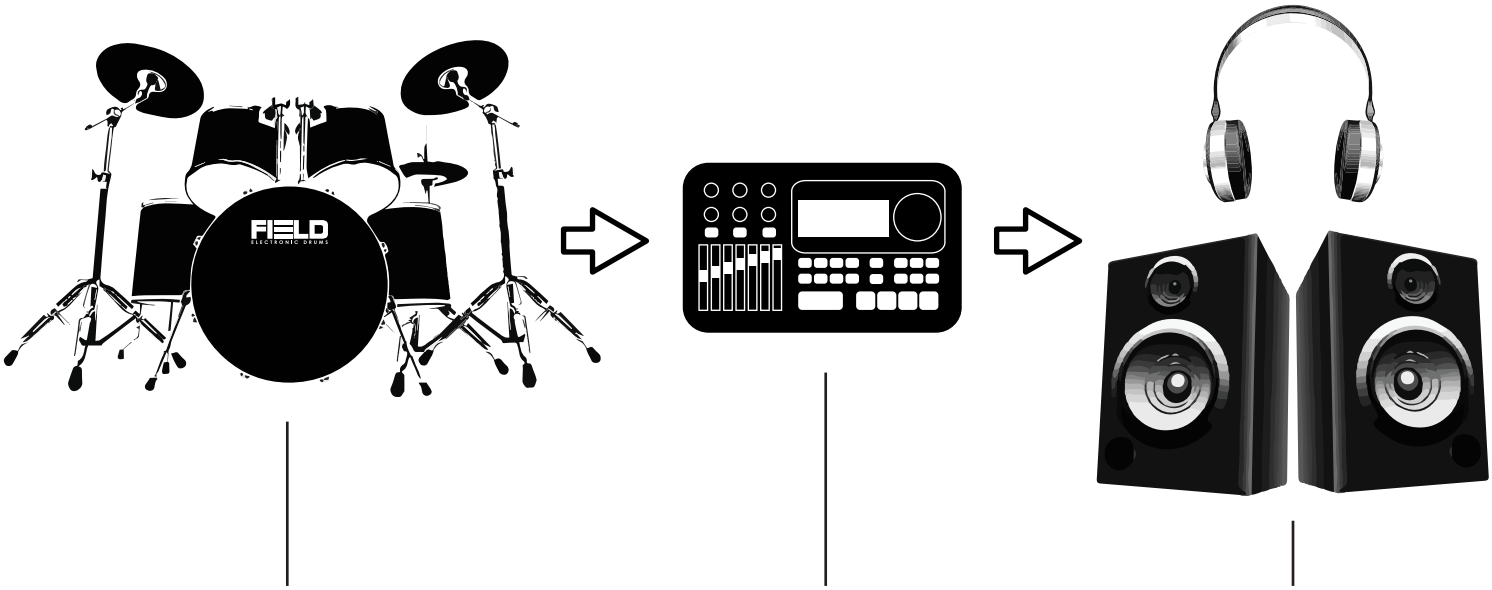
NOTE: Some modules input jacks do not accept dual zone triggers. Using a Y splitter to attach between the trigger and two separate inputs of the sound module can be used to achieve dual zone. The Y splitter must connect the Tip and the Rim from the trigger then split to two separate Tips.

For further information or questions please see the FAQ section on the web at www.fieldelectronicdrums.com

BASIC CONNECTION SETUP

BASIC AUDIO CONNECTION SETUP

- Connect your TRS cables from your Electronic drum set to your sound module.
- Connect your sound module to your headphones or PA Speaker system using high quality 1/4 Phono Jacks.
- Adjust your volume accordingly.



ELECTRONIC DRUMS and CYMBALS **SOUND MODULE** **HEADPHONES or SPEAKERS**

FREQUENTLY ASKED QUESTIONS

PLEASE GO TO: www.fieldelectronicdrums.com/support/faq

SETUP FAQ'S

I just got my order in the mail, now what?

Take it out of the boxes, set your drums and cymbals up to your liking, plug in all the cables, power on your drum module, turn on your speakers or put on your headphones, and you should be ready to play! See your drum module owners manual to further customize your settings to suit your playing style.

How do I adjust the settings of my drums and cymbals?

FIELD Electronic Drums and Cymbals are compatible with virtually any drum modules and are made to "plug and play." If you need to further customize your settings to suit your playing style you can simply refer to the owners manual for which ever drum module you are using.