

## INFORMATION ABOUT TRIGGER TYPES

Following is a basic explanation about the difference between various trigger types.

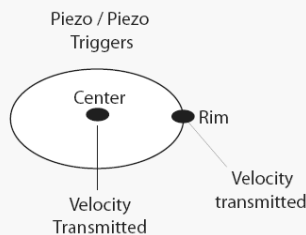
### ***The basics - How the pads work***

Piezo pickups are like microphones. They transmit the acoustic information of the pad being struck into electrical impulses. Piezos are good sound transducers, however they are susceptible to picking up vibrations from other pads being struck (this is called Crosstalk). Piezo pickups are embedded into the drum pad and the trigger information is converted into MIDI signals in the drum module (DM5 and Trigger IO).

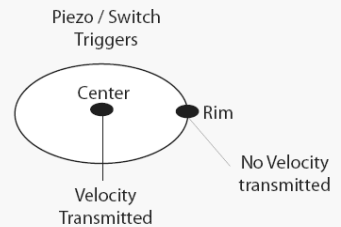
Some drum pads use switches on the edges which send out impulses that are converted into MIDI information. However, this information doesn't have the ability to be velocity sensitive like Piezos. Older drum kits like the Roland TD-7 and some current Roland Pads (Roland PD-9) have switches as well as Piezos. While this can eliminate Crosstalk issues, it does limit the functionality of the trigger. The majority of professional drum pads use Piezo triggers on both zones because of the limitation of switch triggers.

### ***Dual Zone Pads***

**New Gum Rubber / Drum head / Mesh head Pads**



**Older Style Gum Rubber Pads**

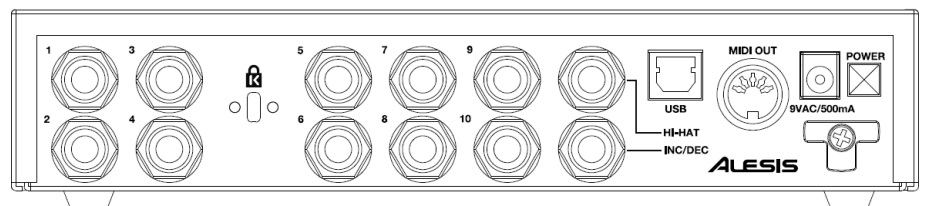


### ***How the Trigger IO works***

The trigger IO's inputs are TRS (tip ring sleeve). This means that you can send two triggers (dual zone) to each input and effectively control two different sounds from the same pad. The Trigger IO is designed primarily to use Piezo trigger inputs on both zones, as this provides more control and playability. In addition, the Trigger IO features sophisticated Crosstalk adjustments, allowing the two Piezos to work well on a single trigger pad.

All of the inputs except for input #4 are designed for Piezo/Piezo trigger inputs. Electrically, you can have only one or the other. To allow for maximum control of your performance, we choose to work with the newer/better type of triggers for dual zone control. If you plug in an older drum pad with a piezo/switch configuration the center zone will work fine, however the edge switch trigger won't work unless you plug it into input #4.

**Note:** Input #4 is designed to accept Piezo/Switch inputs and will work with electronic cymbal triggers which have a switch for a bell trigger (Pintech and Roland electronic cymbals).



Just to confuse you more, all of our inputs *will* work with most electronic cymbals that have a switch mounted underside the cymbal the sends a message to choke a sound. This replicates the effect that you get when you hit a crash cymbal and then grab the edge. This basically shuts off the sound on a module or software.

We are constantly updating our compatibility information for the Trigger IO with various manufacturers' pads. This information is published on our website.