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SURGE CYMBALS SETUP GUIDE

INTRODUCTION

Electronic cymbals produce no sound themselves and require the use of external sound modules in order to be used as musical instruments. Surge Cymbals are compatible with many drum modules on the market including those manufactured by Roland™, Yamaha™, Ddrum™, and, of course, Alesis.

Surge Cymbals can also be used to trigger sounds on any MIDI instrument using a "Trigger to MIDI" interface such as the Alesis Trigger IO module.

QUICK SETUP

1.   Insert the "right angle" plug into the trigger housing on the underside of the cymbal.
2.   Place the cymbal onto a cymbal stand.
3.   Connect the other end of the cable to your drum module.
4.   Set the trigger type specified for your cymbal and module.
5.   Adjust the trigger settings to suit your needs.

CONNECTING THE CABLE

Each Surge cymbal comes complete with a stereo 1/4" male-to-male cable. One end of the cable has a "right angle" plug. This end should be connected to the trigger housing on the underside of the Surge Cymbal while the straight end should be connected to your module's trigger input.

PROPER CYMBAL MOUNTING

Surge 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, a series of washers, and a wing-nut. Your Surge Cymbal should be mounted between the two felt washers, and the wing-nut should keep these fastened to the cymbal stand.

Gibraltar™ cymbal arms are very good for mounting acoustic cymbals and electronic Surge Cymbals as they come standard with a T-shaped plastic cymbal sleeve (which is covers the mounting rod so the cymbal's hole does not rub against it). Alternately, you can always use Aquarian™ Cymbal Springs or other mounting systems with a standard 1/2" bore.

Note that you CAN NOT use a cymbal sleeve with the Surge Ride cymbal as it already has a built-in sleeve, but be sure to use felt washers when mounting it.

■ *Mounting the Hi-Hat Cymbals*

The Surge Hi-Hat Cymbals are designed to be mounted on a fixed hi-hat arm stand – not a standard hi-hat stand with a pedal and clutch. These are manufactured by most drum hardware companies and are available from your favorite drum shop.

Furthermore, the Surge Hi-Hat cymbal is only the _trigger_. The _foot controller_ is actually responsible for the difference between "open" and "closed" hi-hat sounds. We recommend the Alesis DM5 Pro Kit Expansion Hi-Hat Pedal. You can also use the Roland FD-7 or FD-8.

SETTING THE TRIGGER INPUTS

The following information is a starting point for setting your module to use Surge Cymbals. There are many factors that will affect the triggering and sensitivity of your module's inputs including:

- Playing style
- Type of drum sticks
- Cymbal mounting (stands vs. racks)
- Types of drums used and their sizes
- Module features
- How hard you play

Start with the recommended trigger input settings and then adjust your module's trigger input parameters to best match your needs.

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MODULE SETTINGS

ALESIS DRUM MODULE SETTINGS

For specific Alesis Module information, refer to the manual that came in the box with your Surge Cymbals.

ROLAND™ DRUM MODULE SETTINGS

Roland produces several popular drum modules. We have included the default settings for some of the most recent ones here. If you have a Roland module which is not listed here, experiment with the trigger input settings and e-mail us to let us know what works best for you and we'll try to include it in the next version of this user guide.

■ Roland TD-20 and TD-12

	Type	Sens	Thold	Curve	Rim Gain	Scan	ReTrg Can.	Mask	Xtalk	Mount
Splash	CY-6	8-10	2	1.0	Linear	2.0	6	10	40	Cym
Crash	CY-14C	8-10	2	0.8	Linear	1.6	6	10	40	Cym
China	CY-14C	8-10	2	0.8	Linear	1.6	6	10	40	Cym
Ride Bow	CY-6	8-10	2	1.0	Linear	2.0	6	10	30	Cym
Ride Bell	CY-8	12-14	0	1.1	Linear	2.0	6	10	30	Cym
Hi-Hat	CY-12H	8-10	2	1.0	Linear	2.0	6	10	40	Cym

Notes for using the Surge Triple-Zone Crash/Ride Cymbal:

1. Turn off 3-way triggering.
2. Connect one stereo cable from the bow trigger jack to the RIDE input on your module.
3. Connect the other stereo cable from the bell trigger jack to the EDGE input on your module.
   IMPORTANT: Make sure you have the two inputs set to trigger the appropriate sounds for each kit:
   > RIDE Input HEAD = Ride Bow sound.
   > RIDE Input RIM = Ride Edge sound.
   > EDGE Input HEAD = Ride Bell sound.
   > EDGE Input RIM = Ride Edge sound (same as Ride RIM input).

Notes for using the Surge Dual-Zone Ride Cymbal:

1. Turn off 3-way triggering on the RIDE input and use the included Y-cable on the module's end of the ride's stereo cable.
2. Plug the black tip plug into the RIDE input and the orange ring plug into the EDGE input. This places the bow ride sound on the RIDE input and the bell ride sound on the EDGE input.
3. Make sure you have a Ride Bow sound assigned to the HEAD of the Ride input and the Ride Bell sound assigned to the HEAD of the EDGE input.

Alternately, you can use one of the AUX inputs for the ride without the Y-cable. The AUX inputs are dual-piezo inputs (like the toms and snare) and allow for dual-piezo stereo triggers like the Surge Ride. This frees up inputs 10 and 11 (RIDE and EDGE) for two additional cymbals. Make sure to select PD-120 for the input type on the AUX input as this will allow the bell and bow sounds to be triggered, then select a Ride Bow instrument and assign it to the HEAD of the AUX input and a Ride Bell instrument and assign it to the RIM of the AUX input. Make sure you have a Ride Bow sound assigned to the HEAD and a Ride Bell sound assigned to the RIM of the AUX input.

■ Roland TD-9

	Type	Sens	Thold	Curve	Rim Gain	Scan	ReTrg Can.	Mask	Xtalk	Mount
Splash	CY-8	8-10	2	Linear	1.0	2.0	6	10	40	Cym
Crash	CY-14C	8-10	2	Linear	0.8	1.6	6	10	40	Cym
China	CY-14C	8-10	2	Linear	0.8	1.6	6	10	40	Cym
Ride Bow	CY-6	8-10	2	Linear	1.0	2.0	8	10	30	Cym
Ride Bell	CY-8	12-14	0	Linear	1.1	2.0	8	10	30	Cym
Hi-Hat	CY-12H	8-10	2	Linear	1.0	2.0	6	10	40	Cym

Notes for using the Surge Triple-Zone Crash/Ride Cymbal:

1. Connect the cable marked RIDE to the cymbal's bow trigger jack (the left jack while looking at the bottom).
2. Connect a separate stereo cable (not one in the cable harness) from the cymbal's bell trigger jack to the AUX input on the side of your TD-9 module.

   IMPORTANT: Make sure you have the two inputs set to trigger the appropriate sounds for each kit:

   RIDE Input HEAD = Ride Bow sound
   RIDE Input RIM = Ride Edge sound
   AUX Input HEAD = Ride Bell sound
   AUX Input RIM = Ride Edge sound (same as Ride RIM input)

Notes for using the Surge Dual-Zone Ride Cymbal:

1. Plug the included stereo cable into the RIDE Input. A Ride sound should be assigned to the HEAD trigger and a Ride Bell sound should be assigned to RIM trigger.
2. Use the CY8 Trigger Type and increase the RIM GAIN to 5.0 and adjust from there.

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■ Roland TD-10

	Type	Sens	Thold	Curve	Scan	ReTrg Can.	Mask	Xtalk
Splash	PD-7	3	2	Linear	0.3	3	12	30
Crash	PD-7	3	2	Linear	0.3	3	12	30
China	PD-7	3	2	Linear	0.3	3	12	30
Ride Bow	PD-7	5	2	Linear	0.3	3	12	40
Ride Bell	PD-7	2	1	Linear	0.3	3	12	30
Hi-Hat	PD-7	3	2	Linear	0.3	3	12	30

Notes for using the Surge Triple-Zone Crash/Ride Cymbal:

1. Connect one stereo cable from the bow trigger jack to the RIDE input on your module.
2. Connect the other stereo cable from the bell trigger jack to the AUX 1 input on your module.
   IMPORTANT: Make sure you have two inputs set to trigger the appropriate sounds for each kit:
   > Ride Input HEAD = Ride Bow Sound
   > Ride Input RIM = Ride Edge Sound

■ Roland TD-6 and TD-6V

	Type	Sens	Thold	Curve	Scan	ReTrg Can.	Mask	Xtalk
Splash	CY-6	10	2	Linear	2.5	6	8	40
Crash	CY-6	10	2	Linear	2.5	6	8	40
China	CY-6	10	2	Linear	2.5	6	8	40
Ride Bow	CY-6	8	2	Linear	2.5	6	8	40
Ride Bell	CY-6	12	0	Linear	2.5	6	8	40
Hi-Hat	CY-6	10	2	Linear	2.5	6	8	40

Notes for using the Surge Triple-Zone Crash/Ride Cymbal:

1. Connect one stereo cable from the bow trigger jack to the RIDE input on your module.
2. Connect the other stereo cable from the bell trigger jack to the AUX input on your module.
   IMPORTANT: Make sure you have the two inputs set to trigger the appropriate sounds for each kit:
   > RIDE Input HEAD = Ride Bow Sound
   > RIDE Input RIM = Ride Edge Sound
   > AUX Input HEAD = Ride Bell Sound
   > AUX Input RIM = Ride Edge Sound (same as Ride RIM input)

Notes for using the Surge Dual-Zone Ride Cymbal:

Use the included Y-cable on the module end of the ride's stereo cable. Plug the black tip plug into the Ride input and the orange ring plug into any other available input.

■ **Roland TD-3**

	Type	Sens	Thold	Curve	Scan	ReTrg Can.	Mask	Xtalk
Splash	CY-6	10	2	Linear	2.5	6	8	40
Crash	CY-6	10	2	Linear	2.5	6	8	40
China	CY-6	10	2	Linear	2.5	6	8	40
Ride Bow	CY-6	8	2	Linear	2.5	6	8	40
Ride Bell	CY-6	12	0	Linear	2.5	6	8	40
Hi Hat	CY-6	10	2	Linear	2.5	6	8	40

Notes for using the Surge Triple-Zone Crash/Ride Cymbal:

1. Connect one stereo cable from the bow trigger jack to the RIDE input on your module.
2. Connect the other stereo cable from the bell trigger jack to any other available input on your module.

    IMPORTANT: Make sure you have the two inputs set to trigger the appropriate sounds for each kit:

    > Ride Input HEAD = Ride Bow sound
    > Ride Input RIM = Ride Edge sound
    > Other Input HEAD = Ride Bell sound
    > Other Input RIM = Ride Edge sound (same as Ride RIM input)

Notes for using the Surge Dual-Zone Ride Cymbal:

Use the included Y cable on the module end of the ride's stereo cable. Plug the black tip plug into the Ride input and the orange ring plug into any other available input.

■ **Roland TMC-6**

	Type	Sens	Thold	Curve	Scan	ReTrg Can.	Mask	Xtalk
Splash	CY	10	4	Linear	2.5	8	8	40
Crash	CY	10	4	Linear	2.5	8	8	40
China	CY	10	4	Linear	2.5	8	8	40
Ride Bow	CY	8	4	Linear	2.5	8	8	40
Ride Bell	CY	12	0	Linear	2.5	8	8	40
Hi Hat	CY	10	4	Linear	2.5	8	8	40

Notes for using the Surge Triple-Zone Crash/Ride Cymbal:

1. Connect one stereo cable from the bow trigger jack to the RIDE input on your module.
2. Connect the other stereo cable from the bell trigger jack to any other available input on your module.

> *IMPORTANT: Make sure you have the two inputs set to trigger the appropriate sounds for each kit:*
>> Ride Input HEAD = Ride Bow Sound
>> Ride Input RIM = Ride Edge Sound
>> Other Input HEAD = Ride Bell Sound
>> Other Input RIM = Ride Edge Sound (Same as Ride RIM input)

Notes for using the Surge Dual-Zone Ride Cymbal:

Use the included Y-cable on the module end of the ride's stereo cable. Plug the black tip plug into the any input (other than #2) and the orange ring plug into any other input (other than #2).

Alternately, you can use Input #2 only which is a stereo input (the only one on the TMC-6 without the Y-cable. Use the following settings if you connect the Ride to Input #2.

NOTE: *You <u>must</u> set the pad type to P12 to be able to use the Bow and Rim sounds. You will have to adjust the Head and Rim settings independently.*

	Type	Sens	Thold	Curve	Scan	ReTrg Can.	Mask	Xtalk
Ride Head	P12	8	4	Linear	2.5	8	8	40
Ride Bell	P12	12	0	Linear	2.5	8	8	40

YAMAHA™ DRUM MODULE SETTINGS

Yamaha also offers a few very popular drum modules in the DTX line of electronic drums such as the DTXTREME IIS and the DTXPRESS III. The Surge Splash, Crash, China, and Hi-Hat Cymbals are supported when using the PCY-80 trigger input setting. Surge Ride Cymbals will work but are not supported at this time.

DDRUM™ DRUM MODULE SETTINGS

Ddrum modules are not officially supported, but may work with Surge Cymbals using mono inputs. E-mail us if you have one of these modules and want to report your trigger settings.

Note: *The Ddrum cymbal inputs are not compatible with the choke-able or dual-zone cymbals. You will only get one zone from all Surge Cymbals.*

COMPATIBILITY GUIDES

The following charts represent the brands and types of drum modules that have been tested with the Surge Cymbals so far and show the Surge Cymbals' functions with those modules.

SURGE 12" HI-HAT

Alesis	**DM5**	Single-zone
	DM Pro	Single-zone
	D4	Single-zone
	Trigger IO	Single-zone
	Control Pad	Single-zone
Roland	**TD-12 / TD-20**	Single-zone
	TD-10	Single-zone
	TD-8	Single-zone
	TD-6 / TD-6V	Single-zone
	TD-3	Single-zone
	TMC-6	Single-zone
Yamaha	**DTXTREME**	Single-zone
	DTXPRESS	Single-zone

SURGE 13" CRASH

Alesis	**DM5**	Single-zone
	DM Pro	Single-zone
	D4	Single-zone
	Trigger io	Single-zone
	Control Pad	Single-zone
Roland	**TD-12 / 20**	Dual-zone capability
	TD-10	Dual-zone capability
	TD-8	Dual-zone capability
	TD-6 / TD-6V	Dual-zone capability
	TD-3	Dual-zone capability
	TMC-6	Dual-zone capability
Yamaha	**DTXTREME**	Single-zone
	DTXPRESS	Single-zone

SURGE 13" CRASH WITH CHOKE

Alesis	**DM5**	Single-zone (choke not functional)
	DM Pro	Single-zone (choke not functional)
	D4	Single-zone (choke not functional)
	Trigger IO	Single-zone with choke
	Control Pad	Single-zone (choke not functional)
Roland	**TD-12 / TD-20**	Single-zone with choke
	TD-10	Single-zone with choke
	TD-8	Single-zone with choke
	TD-6 / TD-6V	Single-zone with choke
	TD-3	Single-zone with choke
	TMC-6	Single-zone with choke
Yamaha	**DTXTREME**	Single-zone (choke not functional)
	DTXPRESS	Single-zone (choke not functional)

SURGE 16" DUAL-ZONE RIDE

Alesis	**DM5**	Dual-zone (with Y-cable)
	DM Pro	Dual-zone (with Y-cable)
	D4	Dual-zone (with Y-cable)
	Trigger IO	Dual-zone (with Y-cable)
	Control Pad	Dual-zone (with Y-cable)
Roland	**TD-12 / TD-20**	Dual-zone (with Y-cable)
	TD-10	Dual-zone (with Y-cable)
	TD-8	Dual-zone (with Y-cable)
	TD-6 / TD-6V	Dual-zone (with Y-cable)
	TD-3	Dual-zone (with Y-cable)
	TMC-6	Dual-zone (with Y-cable)
Yamaha	**DTXTREME**	Dual-zone (with Y-cable)
	DTXPRESS	Dual-zone (with Y-cable)

SURGE 16" DUAL-ZONE RIDE WITH CHOKE

Alesis	**DM5**	Dual-zone (choke not functional)
	DM Pro	Dual-zone (choke not functional)
	D4	Dual-zone (choke not functional)
	Trigger IO	Dual-zone with choke
	Control Pad	Dual-zone (choke not functional)
Roland	**TD-12 / TD-20**	Compatible as triple-zone *
	TD-10	Compatible as triple-zone *
	TD-8	Compatible as triple-zone *
	TD-6 / TD-6V	Compatible as triple-zone *
	TD-3	Compatible as triple-zone *
	TMC-6	Compatible as triple-zone *
Yamaha	**DTXTREME**	Dual-zone (choke not functional)
	DTXPRESS	Dual-zone (choke not functional)

* The cymbal is compatible as a triple-zone cymbal if connected according to the instructions in **"Notes for using the Surge Triple-Zone Crash/Ride Cymbal"** for each module in the ROLAND™ DRUM MODULE SETTINGS section.

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CYMBAL CARE

Surge cymbals are designed to the highest standards and should provide you with a lifetime of reliable service. As with any piece of electronic equipment, you should take care when transporting and cleaning your cymbals.

TRANSPORTING YOUR CYMBALS

You should transport your cymbals in protected and padded cases, which should be available from your favorite drum shop. The use of hard, plastic "cymbal-safe" type of cases isn't recommended because you can not fasten more than a few Surge Cymbals in the case before you run out of room.

The trigger housings on the undersides of the cymbals are made from a very strong and lightweight ABS plastic and are very durable, but please be sure not to stack too much weight on the cymbals. Because of this trigger housing, you will not be able to stack these cymbals as flatly and neatly as you could stack the same number of acoustic cymbals.

CLEANING YOUR CYMBALS

■ Cleaning the Top Surface

The top playing surfaces of your Surge Cymbals are made from a real brass alloy cymbal, therefore you should use a damp wet cloth or a non-abrasive cymbal cleaner or cymbal polish – **on the top surface only** – to remove stick marks or other debris. *DO NOT USE CYMBAL CLEANER ON THE BOTTOM SURFACE.*

■ Cleaning the Bottom Surface

The bottom surface is covered with the special plastic dampening material and should _not_ be cleaned with cymbal cleaner or cymbal polish. Instead, dampen a cloth with water and clean the surface or, in extreme cases, use a specialty plastics cleaner (such as the kind used for cleaning the isinglass on a boat.

SUPPORT

If your drum module is not listed above and you would like to report the settings that work best for you, let us know and we'll try to include it in the next version of this manual.

E-mail: support@alesis.com

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