

## DDRUM4 CAST PRECISION PADS

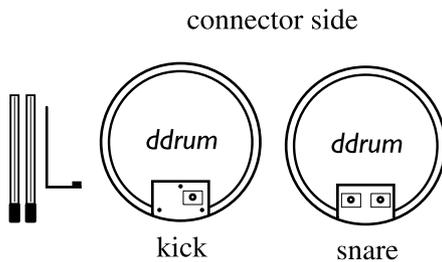
The feel of these pads is as important to the overall function of the ddrum4 SE sound engine as the sounds themselves.

### CAST PRECISION PADS

The Cast Precision Pads feature a real drumhead. They are assembled in conjunction with a cast aluminum shell. The Cast Precision Pads detect pressure on the head and the position where you strike. The position feature is great to use together with multisampled sounds! These pads are also dampened for a quiet performance.

### ASSEMBLY OF THE PADS

Locate the Kick pad. It is one of the two 12 inch pads in the pad package, the one with only one XLR connector on the back side. The Snare pad comes in the same size as the Kick pad but with two XLR connectors; one for the drumhead and one for the rim.

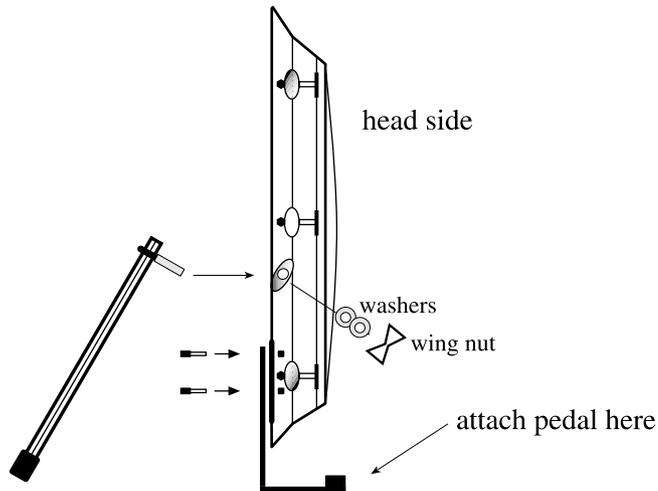


You need to assemble the L-shaped pedal attachment and the two chrome legs to the kick pad. The necessary nuts, bolts and washers are located within the package that contains the legs. The only tool needed is your drum key. The pedal attachment has three holes for the bolts and one square cut-out, for the connector output. The shorter part of the L should point in the direction towards your playing position.

Place the pad with the drum head facing downwards on, e.g. a table. Locate the square connector housing towards the edge of the table. Place the L-shaped attachment on top of the connector housing, short part facing downwards. Insert a nut from underneath and a bolt through one of the holes from the top. Tighten the bolt with your fingers. You should use all three bolts to secure the pedal attachment to the kick pad.

Locate the points of attachment for the two legs on the cast aluminum rim of the pad. Take the eye-bolt and insert the leg through it. Place the legs in the attachment, pushing the bolt through the hole in the

rim. Place two washers on each bolt and then take the wingnut and tighten the legs firmly to the pad. The legs should point downwards, at an angle away from your playing position.



## MAINTENANCE

Always make sure that the pads regain normal room temperature if they have been kept at a low temperature. Wipe the surface of the pads and the cymbals with a soft cloth, every now and then. Do not use any solvent. The heads should be replaced when worn out. You can use any head you like with the ddrum pads.

### TOM PADS

When you replace the head on a Cast Precision Tom, check that the foam layer beneath the head has not turned porous. The foam layer is a spare part and can be obtained at your ddrum supplier.

### SNARE AND KICK PADS

The two foam layers in these two Precision pad types are separated from the sensor plate. If the foam gets porous or the sensor plate is damaged on a snare or kick pad, you must replace both the foam layer(s) and the sensor plate. **Make sure you place the hardest foam layer on top (in front) of the sensor plate!**

## DDRUM4 CAST PRECISION MESH HEAD PADS

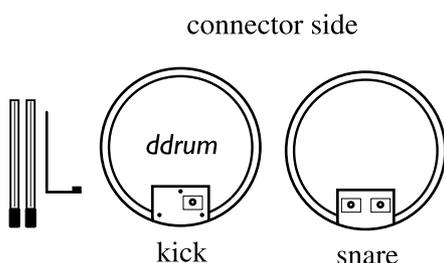
The feel of these pads is as important to the overall function of the ddrum4 SE sound engine as the sounds themselves. The mesh heads make these pads extremely low on acoustic noise.

### CAST PRECISION MESH HEAD PADS

The Cast Precision Mesh Head Pads feature “silent” web drumheads for minimum acoustic noise. To minimize the acoustic noise even more, the rim hoops of the pads are rubber coated. They are assembled in conjunction with a cast aluminum shell.

### ASSEMBLY OF THE PADS

Locate the Kick pad. It is one of the two 12 inch pads in the pad package, the one with only one XLR connector on the back side and with a solid aluminum back side. The Snare pad comes in the same size as the Kick pad but with two XLR connectors; one for the drumhead and one for the rim, and without the aluminum back.

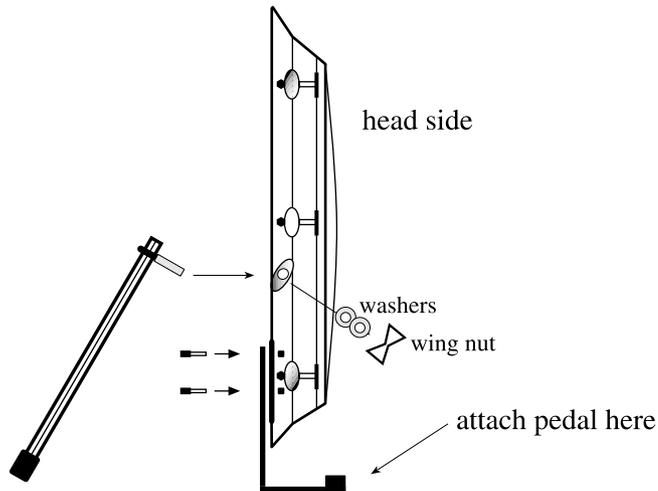


You need to assemble the L-shaped pedal attachment and the two chrome legs to the kick pad. The necessary nuts, bolts and washers are located within the package that contains the legs. The only tool needed is your drum key. The pedal attachment has three holes for the bolts and one square cut-out, for the connector output. The shorter part of the L should point in the direction towards your playing position.

Place the pad with the drum head facing downwards on, e.g. a table. Locate the square connector housing towards the edge of the table. Place the L-shaped attachment on top of the connector housing, short part facing downwards. Insert a nut from underneath and a bolt through one of the holes from the top. Tighten the bolt with your fingers. You should use all three bolts to secure the pedal attachment to the kick pad.

Locate the points of attachment for the two legs on the cast aluminum rim of the pad. Take the eye-bolt and insert the leg through it. Place the legs in the attachment, pushing the bolt through the hole in the

rim. Place two washers on each bolt and then take the wingnut and tighten the legs firmly to the pad. The legs should point downwards, at an angle away from your playing position



## MAINTENANCE

Always make sure that the pads regain normal room temperature if they have been kept at a low temperature. Wipe the surface of the pads and the cymbals with a soft cloth, every now and then. Do not use any solvent. The mesh heads should be replaced when worn out. You can use any head you like with the ddrum Mesh Head Pads, but for “silent” playing, use mesh heads.

### SNARE AND TOM PADS

When you replace the head on the Cast Precision Mesh Head pad, first remove the small red protection plate that sits above the transducer. Then, remove the rest of the tension rods. Note: don't forget to mount the red protection plate back on after you've replaced the drum head. The protection plate prevents the piezo transducer from direct hits, which might destroy it.

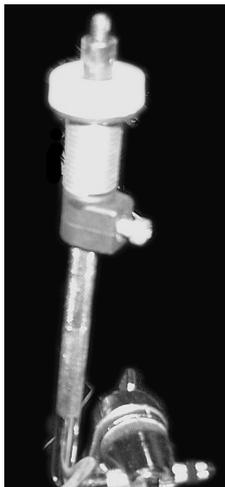
### KICK PAD

The two foam layers in the Kick pad are separated from the sensor plate. If the foam gets porous or the sensor plate is damaged on the Kick pad, you must replace both the foam layer(s) and the sensor plate. **Make sure you place the hardest foam layer on top (in front) of the sensor plate!**

## DDRUM4 CAST CYMBAL

### UNPACKING THE CAST CYMBAL

The Cast Cymbal comes with an L-rod receiver, a supporting spring and a mono XLR-jack cable. The Cast Cymbal is designed to be mounted on an L-rod stand using the supporting spring (see pictures below). Connect the cymbal to Channel 8 or 9 on the ddrum4 SE module.



### HOW TO CHOKE THE CAST CYMBAL

The Cast Cymbal pad is chokeable in a different way than you are used to. You press with your hand or with the drumstick in the center of the pad to mute the sound. Most of the ride cymbals in the ddrum soundlibrary offers ride and bell sound. The bell sound in these cases will be naturally positioned in the center of the Cast Cymbal pad.

### MAINTENANCE

Wipe the surface of the Cast Cymbal with a soft cloth, every now and then. Do not use any solvent. The playing surface is rubbercoated metal for the right feel. If the rubber becomes damaged or worn out, you can order a replacement rubber part from your ddrum supplier.

## DDRUM4 CAST HI-HAT

### UNPACKING THE CAST HI-HAT

The Cast Hi-Hat comes in two parts. The upper part is called the Hi-Hat clutch, to be mounted on your Hi-Hat rod. The larger part is called the Hi-Hat Controller, that mounts onto the Hi-Hat stand similar to a traditional bottom Hi-Hat cymbal. The Cast Hi-Hat is designed to fit conventional Hi-Hat stands. There is also a stereo XLR-jack cable included.

### HOW TO MOUNT THE CAST HI-HAT

Start with the Hi-Hat Controller. The first thing to do is to totally open up the mounting bracket on the lower part of the Hi-Hat Controller. Take the package and let the Hi-Hat rod slide through the centre hole. Place the Controller on the felt washer. (Make sure you have one!) It is important to make sure that the plastic center part of your Hi-Hat stand doesn't protrude above the surface where the Hi-Hat clutch have its target area. If it does; adjust the Hi-Hat Controller upwards or get a felt washer. Now attach the clamp around the Hi-Hat stand and tighten it firmly.

Connect the Hi-Hat Controller to channel 10 on the ddrum 4 with the attached stereo cable. Please note: To gain all the features of the Hi-Hat functions you need to use a stereo XLR-jack cable! Finally, mount the Cast Hi-Hat clutch onto the Hi-Hat rod. Do not tighten it until you have done the calibration described below.

### HOW TO CALIBRATE THE CAST HI-HAT

1. Let the Hi-Hat clutch fall down on the Hi-Hat Controller by its own weight.
2. Press the SYSTEM button until you get to the Trig Input mode for channel 10. Select 'HHt' with the ROTARY DIAL.
3. Without touching the Hi-Hat stand, hold SHIFT and press EXIT. The DISPLAY will briefly show 'CAL' and the calibration is completed.
4. Secure the Hi-Hat clutch at a comfortable height for playing.
5. Your new Cast Hi-Hat is ready for action.

### MAINTENANCE

Wipe the surface of the Hi-Hat Controller with a soft cloth, every now and then. Do not use any solvent. The playing surface is rubbercoated metal for the right feel. If the rubber becomes damaged or worn out, you can order a replacement rubber part from your ddrum supplier.

### WHICH HI-HAT SAMPLES SHOULD I USE IN THE DDRUM4?

In Sound Library versions starting from 3.1, all hi-hat samples are compatible with the Cast Hi-Hat. In Soundlibrary 3.0: The samples 001, 005 and 008 are compatible with the new Hi-Hat functions. The Hi-hat samples 202 and 203 are velocity Hi-Hats and should only be played on a Cast Precision Pad. They do not work as expected with the Cast Hi-Hat Controller.

## DDRUM ACOUSTIC TRIGGERS



The ddrum Acoustic Triggers should be mounted on acoustic drums. They can be used with ordinary drum heads as well as with mesh heads. When used together with the ddrum4 SE module you'll get the same great dynamic response as with ddrum4 Pads. The ddrum Acoustic Triggers come in three different models: the Tom Trigger, the Kick Trigger and the Snare Trigger.

### TOM TRIGGER

This one should be fastened to your tom tom hoops. If you have drums with rims mounted you will find the area to mount the Trigger to be more restricted, but there is still plenty of space for it. If you find that the Triggers are in your way, try to change the angle of your tom tom holder. If you are using a rack system type of stand you will find you get a lot of different options on the placement of your toms and triggers. The Triggers use an industry standard XLR output connector. Use a ddrum pad cable or similar to connect it to the ddrum4 SE module. The pin configuration is as follows: pin 2 is hot (signal), ground on pin 1. All tom tom sounds can be found on Channels 4, 5 and 6 in the factory kits. We recommend you to use these inputs for your Tom Tom Triggers. The highest pitched tom is usually located on Channel 4 in a ddrum4 SE module.

### KICK TRIGGER

Fits all types of standard bass drums hoops. The Kick Trigger comes with an extra rubber part. Mount the rubber if you have a bass drum hoop that is made out of metal. Most of the metal hoops have a pit on the drumhead side. Put the rubber part in this pit. This will prevent the lower part of the Kick Trigger to slip. Make sure that the transducer isn't pressing on the shell edge.

### SNARE TRIGGER

The ddrum Snare Trigger is a special double microphone Trigger. Use an XLR cable split into two mono jack connectors to connect to your ddrum4 SE module. Pin 2 on the XLR is the signal from the drumhead microphone, pin 3 is the signal from the rim microphone and pin 1 is ground. On the ddrum4 SE module the snare sounds can be found on channel 2 and the rim sounds on channel 3.

### SETTING UP WITH DDRUM TRIGGERS

Mount the triggers on you drums. Press softly downwards towards the drumhead and tighten the screws that locks the Tom and Snare Triggers to the hoops. Make sure the screws are firmly tightened but not

too hard. Don't worry, they will not come off. When mounting the Kick Trigger, press softly towards the drumhead. Make sure that the transducer isn't pressing on the shell edge. Tighten the screw firmly.

### **SOME TRIGGERING TIPS ON THE ROAD**

When you set up your toms we suggest that you match the tuning of your acoustic drums and the sounds produced by the ddrum4 SE module. Otherwise you might experience the total drum sound as less natural. Matching the tuning will make the composite sound (digital and acoustic) much more natural and you will feel more comfortable when playing the system. The higher in pitch you tune your drum, the weaker the trig signal will get. This may not be a problem, but if you find that you need more gain from your Triggers, lower the tuning of the drum. If the Snare double triggers while you hit other drums, or itself, it can depend on the snare bed. Try to tighten the snare bed properly. If that isn't the problem try to raise the trig threshold or increase the crosstalk value a little.

### **MAINTENANCE**

The triggers are roadworthy and they shouldn't require any real maintenance. Do not use any solvents when you clean them. The transducer itself can be bought as a spare part. A good idea is to have one as a spare in case of malfunction. It's very easy to change it. The only thing you need is a good soldering unit. The transducer is fastened onto the metal casting with adhesive. And it's soldered to the XLR connector. Check the configuration on the cables before you remove the old transducer from the metal and solder it away from the connector. (It's Blue lead on pin 1 and shield. Red on pin 2 (red is hot). Rim sensor is hot on pin 3). Take away the old adhesive from the metal. Use your nail or a alcohol based solvent. Take the new transducer and peel off the protecting paper from the foam. Fasten it at the same place. Put the cables through the clips and tighten the cable to the connector. Solder them onto appropriate pins on the XLR connector.

The ddrum Acoustic Triggers are patented by Clavia DMI AB.  
US Patent # 5,345,037, EU patent # 0542706, other countries patent pending.

## DDRUM RED SHOT TRIGGERS



The ddrum Red Shot Triggers should be mounted on acoustic drums. They can be used with ordinary drum heads as well as with mesh heads. When used together with the ddrum4 SE module you'll get the same great dynamic response as with ddrum4 Pads. The ddrum Red Shot Triggers come in two different models: the Tom (and snare) Trigger, and the Kick Trigger.

### TOM TRIGGER

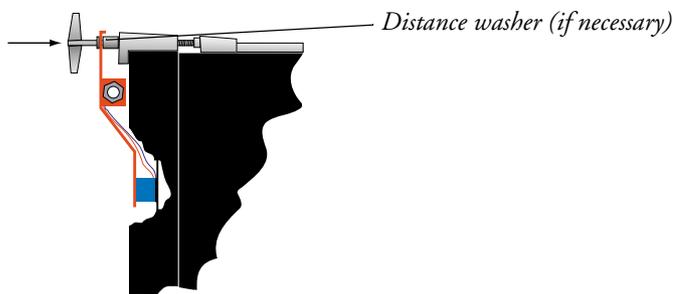
This one should be fastened to one of your tom or snare tension rods. The Triggers use an ordinary mono-jack output connector. Use standard mono-jack cable to connect it to the ddrum4 SE module. The pin configuration is as follows: tip is hot (signal), and sleeve is ground. All snare sounds can be found on Channel 2 and all tom tom sounds can be found on Channels 4, 5 and 6 in the factory kits. We recommend you to use these inputs for your Red Shot Tom Triggers. The highest pitched tom is usually located on Channel 4 in a ddrum4 SE module.

### KICK TRIGGER

This one should be fastened to one of your kick tension rods. The Triggers use an ordinary mono-jack output connector. Use standard mono-jack cable to connect it to the ddrum4 SE module. The pin configuration is as follows: tip is hot (signal), and sleeve is ground. All kick sounds can be found on Channel 1 in the factory kits. We recommend you to use these inputs for your Red Shot Kick Trigger.

### SETTING UP WITH DDRUM TRIGGERS

Mount the triggers on you drums. Press softly downwards towards the drumhead and tighten the tension screw that locks the Tom Triggers to the rims. Make sure the screws are firmly tightened but not too hard. Don't worry, they will not come off. When mounting the Kick Trigger, remove one tension screw. Put the tension screw through the hole of the Red Shot Kick Trigger and back on the drum again. If necessary, also apply the supplied distance washer to make the entire trigger sensor surface touch the drum head (see picture below). You may have to bend the trigger plate slightly to fine-adjust the position.



## **SOME TRIGGERING TIPS ON THE ROAD**

When you set up your toms we suggest that you match the tuning of your acoustic drums and the sounds produced by the ddrum4 SE module. Otherwise you might experience the total drum sound as less natural. Matching the tuning will make the composite sound (digital and acoustic) much more natural and you will feel more comfortable when playing the system. The higher in pitch you tune your drum, the weaker the trig signal will get. This may not be a problem, but if you find that you need more gain from your Triggers, lower the tuning of the drum. If the Snare double triggers while you hit other drums, or itself, it can depend on the snare bed. Try to tighten the snare bed properly. If that isn't the problem try to raise the trig threshold or increase the crosstalk value a little.

## **MAINTENANCE**

The triggers are quite roadworthy and they shouldn't require any real maintenance. Do not use any solvents when you clean them. The transducer itself can be bought as a spare part. A good idea is to have one as a spare in case of malfunction. It's very easy to change it. The only thing you need is a good soldering unit. The transducer is fastened onto the metal plate with adhesive. And it's soldered to the jack connector. Check the configuration on the cables before you remove the old transducer from the metal and solder it away from the connector. (It's Blue lead on shield and Red lead on the tip (red is hot). Take away the old adhesive from the metal. Use your nail or a alcohol based solvent. Take the new transducer and peel off the protecting paper from the foam. Fasten it at the same place. Put the cables through the holes and tighten the cable to the connector. Solder them onto the appropriate pins on the jack connector.

The ddrum Red Shot Triggers are patented by Clavia DMI AB.  
US Patent # 5,345,037, EU patent # 0542706, other countries patent pending.