# **OWNER'S MANUAL**

# VERMONA





analog drum synthesizer

## Foreword

Thank you for purchasing the DRM1 MKIII – analog drum synthesizer.

With the DRM1 MKIII you have acquired a very flexible eight-channel drum synthesizer, which gives you the possibility to create your own sounds and a lot of the classic analog drum sounds, too. Every sound parameter of the DRM1 MKIII has it's own controller, so it's easy to use and you'll always have the best overview over the settings.

We would like to please you to read this manual carefully for becoming familiar with the DRM1 MKIII, with it's various possibilities and to avoid wrong handling.

We wish you success and much fun with your DRM1 MKIII

The VERMONA team

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# General

#### Important safety information

The following safety precautions must be observed during all phases of operation, service and repair of this equipment. Failure to comply with these precautions or with specific warnings in this manual violates safety standards of design, manufacture and intended use of this equipment.

The manufacturer assumes no liability for the customer's failure to comply with these requirements!

#### Ground and power connection

To prevent the risk of electrical shock, this equipment must be grounded. The factory setting for power is already made for each country (115V AC, 230V AC). An individual setting is not allowed by virtue of safety reasons. This modification must be done by qualified personal only!

#### Voltage peak

The units are equipped to manage voltage peaks, which are often generated at live situations. When using the units with unstable voltage, please make sure that the device is grounded.

#### Use near explosive goods

The units should not be used near easy flammable or explosive goods.

#### Dampness

The units should not be used in damp or wet places. Make sure the unit is not in humid atmospheres, because this could cause condensations within the unit WARNING: Risk of electrical shock!

#### Connections

Do only use cables, plugs and adapters, which do not affect the normal use of the unit.

#### **Cooling System**

The unit should not be used near heating or warm or hot fans. When using the unit in a rack or wall system, make sure that the unit has enough space to let the generated heat dissolve.

#### Cleaning

Please clean the unit only with a dry duster. Do not use sharp cleaning fluids or water!

#### Spare parts or modifications

Modification instructions and schematic information should only be used from service departments of our official authorized VERMONA dealers. To prevent the risk of electrical shock, please do not open or modify the unit yourself. Before opening the unit always disconnect the power lead/AC Adapter. Opening or modifying the units causes the loss of warranty claims!

#### Warranty

The manufacturer warrants this product to be free of defects in material and/or workmanship. The manufacturer's warranty does not apply to products that have been damaged due to and/or subjected to improper handling by shipping companies (forwarders), negligence, accidents, improper use or alteration not authorized by the manufacturer.

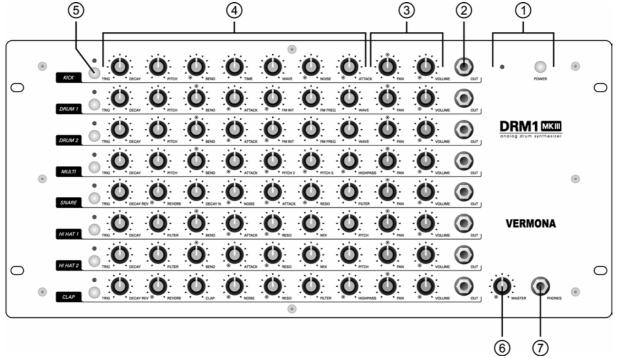
This warranty is in lieu of an excluded all other warranties, expressed or implied. The manufacturer will not be liable for incidental or consequential loss or damage whatsoever, whether based upon allegations or negligence, breach of warranty, or otherwise. This disclaimer of incidental or consequential damages includes, but is not limited to, property damages, loss of profits, loss of time or other losses or inconvenient resulting from any defect in the material or workmanship of this product or any other connection with the purchase, operation or use of this product.

#### **Technical changes**

All changes, which improve the technical features of the units, can be made without subjective noticed by the manufacturer.

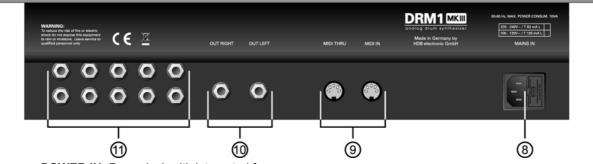
# **Control Features and Connections**

# Front Panel



- 1 POWER switch with LED
- 2 OUT: Individual output/insert jack.
- 3 PAN and VOLUME: volume and panorama control for each channel
- 4 Sound programming parameter controls
- 5 TRIG button and LED: for triggering the sound
- 6 MASTER: Sets the main output level of the DRM1 MKIII.
- 7 **PHONES:** Jack for connecting a headphone.

## **Rear Panel**



- 8 **POWER IN:** Power jack with integrated fuse.
- 9 MIDI THRU/MIDI IN: MIDI jacks for connecting a MIDI source and for putting the Midi signal through the DRM1 MKIII.
- 10 OUT RIGHT/OUT LEFT: Master output right and left.
- **11** Trigger Inputs (optional)

# **Getting started**

## Unpacking

All VERMONA devices are checked and tested carefully before packaging. In spite of special made cartons and the solid buildup of the devices, damages during the transport are possible. Therefore we would like to please you to check the unit after receipt for seeable damages.

Please do not discard the original packing! Use it for shipping the unit again, if this is necessary.

## Inventory

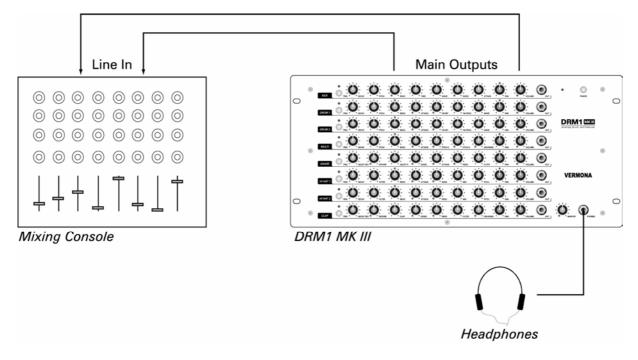
The VERMONA DRM1 MKIII comes complete with:

- The VERMONA DRM1 MK III
- Power cord
- This manual

Please ensure all items above are included. If something is missing contact your local dealer.

## Connections

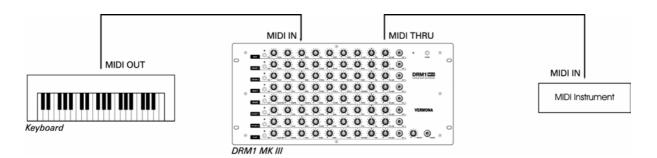
#### Setting up the necessary audio connections



- Connect the DRM1 MKIII with the included power cord to the power socket.
- Connect the outputs of the DRM1 MKIII (10) with the line inputs of your mixing console, amplifier, ... (Alternatively, you can use a headphone with the Phones jack (7).)
- Press the POWER switch to turn the device on the POWER LED (1) flashes.

**Note:** Before connecting and disconnecting the DRM1 MKIII to a power supply source, turn your amp's volume control all the way down to avoid damage due to on/off switching noise!

## Setting up the MIDI connections



- Connect the MIDI IN jack (9) with the MIDI OUT jack of your Midi source (i.e. keyboards, sequencer, computer, ...)
- With the MIDI THRU jack you can put the MIDI signal through the DRM1 MKIII for controlling other devices.

# The Channels of the DRM1 MKIII

In this chapter each channel of the DRM1 MKIII will be described shortly, for a better understanding of the programming parameters.

The parameters PAN and VOLUME as soon as the TRIG button, occurs in every channel. So they were overlooked in the channel descriptions.

PAN: For placing the sound in the stereo field.VOLUME: For setting the individual volume for each channel.TRIG: For triggering the sound with a constant velocity value of 3/4 .

## Kick

DECAY: decay time PITCH: tone pitch BEND: envelope amount (DECAY) to the tone pitch TIME: pitch envelope WAVE: transforms the waveform of the oscillator from sine to square NOISE: noise amount ATTACK: level of the needle pulse

## The channels DRUM1, DRUM2, DRUM3

DECAY: Decay time PITCH: Tone pitch BEND: Envelope amount to the pitch – middle position = 0 ATTACK: Level of the needle pulse FM INT.: Intensity of the frequency modulation FM FREQ.: Modulation frequency WAVE: transforms the waveform of the oscillator from sine to square

## The Channel MULTI

DECAY: Decay time of all VCOs
PITCH: Tone pitch for oscillator 1
BEND: Envelope amount to the pitch – middle position = 0
ATTACK: Level of the needle pulse
PITCH2: Tone pitch for oscillator 2; 0 = no second tone
PITCH3: Tone pitch for oscillator 3; 0 = no third tone
HIGH PASS: Cut-off frequency of the high-pass filter

## The channel SNARE

DECAY REV.: Decay time – Reverb REVERB: Reverb amount DECAY N.: Decay time – Noise NOISE: Amount Noise ATTACK: Attack of the needle pulse RESONANCE: resonance of the low-pass filter FILTER: Cut-off frequency of the low-pass filter

## The channels CYMBAL1, CYMBAL2

**DECAY**: Decay time **FILTER**: cutoff frequency of the low-pass filter **BEND**: envelope amount to the pitch – 0 = off **ATTACK**: Attack of the needle pulse **RESONANCE**: resonance of the low-pass filter **MIX**: proportion between noise and oscillators

#### **TRIG Button**

The sounds of the CYMBAL channels can be triggered in two different ways – as cymbal/open hat and as closed hat. The closed hat has a fixed decay time, which is short and independent of the DECAY controller (in this mode it has no function). Whenever the DRM1 MKIII will be switched on, the TRIG button triggers the cymbal/open hat – sound. For triggering the closed hat, the TRIG button must be pressed for about 2 seconds, the TRIG LED flashes shortly and the sound will be heard. Now you can trigger the closed hat sound. For triggering the open hat/cymbal sound, this procedure must be repeated. When controlling the DRM1 MKIII via MIDI, every cymbal channel has two separate note numbers, one for cymbal/open hat and one for closed hat.

## The channel CLAP

DECAY REV.: Decay time – Reverb REVERB: Reverb time CLAP: Speed of the CLAP sequence NOISE: Amount Noise RESONANCE: Resonance level of the low-pass filter FILTER: Cut-off frequency of the low-pass filter HIGH PASS: Cut-off frequency of the high-pass filter

# **Midi Application**

The DRM1 MKIII receives MIDI note and velocity messages (for playing the sounds dynamically).

### Adjusting the MIDI- notes and channel

#### Adjusting a single channel

- Hold down the TRIG button of the channel you like to assign a note number and midi channel, while switching on the DRM1 MKIII. Release the TRIG button, after the specific channel has been triggered. (TRIG LED flashes)
- The DRM1 MKIII is in learn mode now.
- Send the note number and the midi channel to the DRM1 MKIII
- The note number and midi channel is stored now.

#### Adjusting all channels

- Hold down two arbitrary TRIG buttons (4) while switching on the DRM1 MKIII. Release the buttons after these two channels has been triggered.
   The DRM1 MKIII is in the learn mode, now.
- Send eight note-on messages from your midi source to the DRM1 MKIII. (i.e. by pressing eight keys on a keyboard/synthesizer)

The first note value that will be received from the DRM1 MKIII, is valid for the first drum channel (DRUM1). When the device receives the midi message, the TRIG LED (5) of the corresponding channel flashes and its sound can be heard.

The note-on value for the first channel is set now and the DRM1 MKIII jumps to the next channel (DRUM2).

• This procedure has to be repeated eight times (from DRUM1- up to the CLAP channel).

**NOTE:** Each cymbal/hi hat channel (CYMBAL1 and CYMBAL2) needs two note numbers, one for cymbal/hi hat and one for closed hat.

When setting the note-on number for this channels you always assign the value for the cymbal/open hat. The note-on value for the closed hat will be assigned automatically. It lays two semitones below the open hat/cymbal, so you have to let a minimum of two semitones space on the keyboard after the previous channel. (I.e. if you send a B to the Cymbal1 channel, the closed hat is set automatically to an A)

• The midi channel will be sent with the last (8th) midi-note information. When having sent eight midi-on messages to the DRM1 MKIII, it will jump to the normal play mode – the assignments are stored (also after switching the device off).

**NOTE:** If the DRM1 MKIII is in the learn mode and doesn't receive any midi message, the factory settings will be restored.

It is possible to set more channels of the DRM1 MKIII to the same note-on value. This can be used for special sounds, but it can also be a possible problem source.

#### **Factory Settings:**

Channel	Midi Note value
KICK	36 (C)
DRUM2	48 (c)
DRUM3	41 (F)
MULTI	58 (b)
SNARE	40 (E)
CYMBAL/HI HAT1 closed	49 (cis)
CYMBAL/HI HAT1 open	51 (dis)
CYMBAL/HI HAT2 closed	42 (FIS)
CYMBAL/HI HAT2 open	44 (GIS)
CLAP	39 (DIS)

# **Individual Outs/Inserts**

Each channel of the DRM1 MKIII is equipped with a separate output/insert (9), which can be used in different ways. Deciding for the function of the jack (9) is the used cable type, or rather the plug assignment of the cable.

## Use as Individual Output:

The jack (9) can be used as individual out in two different ways:

(1) The signal of the channel that is taken from the individual out will be taken from the main outputs (11). Therefore you need a simple mono cable:



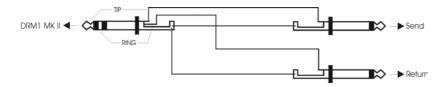
(2) The signal of the channel that is taken from the individual but is additionally on the main outputs (11). Therefore you need a special stereo-mono cable:



Tip and Ring of the stereo plug have to be bridged.

## Use as Insert

The plug (9) can also be used as channel insert for integrate an external effect unit (i.e. DAF-1, PH-16). Therefore you need a so-called Y- or Insert-cable:



# **Declaration of conformity**

for VERMONA DRM1 MKIII - analog drum synthesizer

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents in attention of operation conditions and installation arrangements acc. to operating manual:

EN61000-3-2, EN 61000-3-3, EN 55013, EN 55020, EN 60065 according to the provisions of the regulations 89/336/EWG and 73/23/EWG.

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