Drums

Millenium

HD-120

User Manual

E-Drum Module

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1 General information

This user manual contains important information on the safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device to another user, be sure that they also receive this manual.

Our products and user manuals are subject to a process of continuous development. We therefore reserve the right to make changes without notice. Please refer to the latest version of the user manual which is ready for download under *www.thomann.de*.

1.1 Further information

On our website (*www.thomann.de)* you will find lots of further information and details on the following points:

Download	This manual is also available as PDF file for you to download.
Keyword search	Use the search function in the electronic version to find the topics of interest for you quickly.
Online guides	Our online guides provide detailed information on technical basics and terms.
Personal consultation	For personal consultation please contact our technical hotline.
Service	If you have any problems with the device the customer service will gladly assist you.

1.2 Notational conventions

This manual uses the following notational conventions:

Letterings

The letterings for connectors and controls are marked by square brackets and italics.

Examples: *[VOLUME]* control, *[Mono]* button.

Displays

Texts and values displayed on the device are marked by quotation marks and italics.

Examples: *'24ch'*, *'OFF'*.

Instructions

The individual steps of an instruction are numbered consecutively. The result of a step is indented and highlighted by an arrow.

Example:

1. ▶ Switch on the device.

2. ▶ Press *[Auto]*.

⇨ Automatic operation is started.

3. ▶ Switch off the device.

Cross-references

References to other locations in this manual are identified by an arrow and the specified page number. In the electronic version of the manual, you can click the cross-reference to jump to the specified location.

Example: See ↬ *'Cross-references' on page 8*.

1.3 Symbols and signal words

In this section you will find an overview of the meaning of symbols and signal words that are used in this manual.

Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
CAUTION!	This combination of symbol and signal word indicates a possible dangerous situation that can result in minor injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.

Warning signs	Type of danger
	Warning – danger zone.

2   Safety instructions

Intended use

Drum modules are intended to be used for converting digital trigger signals from drum pads to various percussion sounds. Use the unit only as described in this manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety

DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard! Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke! Never let children unattended use electrical devices.

CAUTION!

Possible hearing damage

With loudspeakers or headphones connected, the device can produce volume levels that may cause temporary or permanent hearing impairment. Do not operate the device permanently at a high volume level. Decrease the volume level immediately if you experience ringing in your ears or hearing impairment.

!

NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations. Only operate the device within the ambient conditions specified in the chapter 'Technical specifications' of this user manual. Avoid heavy temperature fluctuations and do not switch the device on immediately after it was exposed to temperature fluctuations (for example after transport at low outside temperatures). Dust and dirt inside can damage the unit. When operated in harmful ambient conditions (dust, smoke, nicotine, fog, etc.), the unit should be maintained by qualified service personnel at regular intervals to prevent overheating and other malfunction.

!

NOTICE!

External power supply

The device is powered by an external power supply. Before connecting the external power supply, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly the user. Unplug the external power supply before electrical storms occur and when the device is unused for long periods of time to reduce the risk of electric shock or fire.

3 Features

- Space-saving, complete e-drum set for beginners
- 12 preprogrammed drum kits
- Metronome
- Connections for headphones, AUX, USB and MIDI
- including drum track, cabling, sticks, stick holders, headphones and seat

4   Installation

Setup, connecting pads and pedals

Setup and assembly of the pads and pedals are described in detail in the enclosed assembly guide. Finally check that all cables between the pads and the e-drum module have been properly connected.

Connecting the power adapter

Connect the included power adapter to the 9V input of the e-drum module. Then plug the mains plug into the socket.

Connecting headphones

Connect your stereo headphones to the phones output of the drum module.

Connecting audio devices

Connect the inputs of your amplifier or active monitors to the *[OUTPUT]* sockets of the drum module.
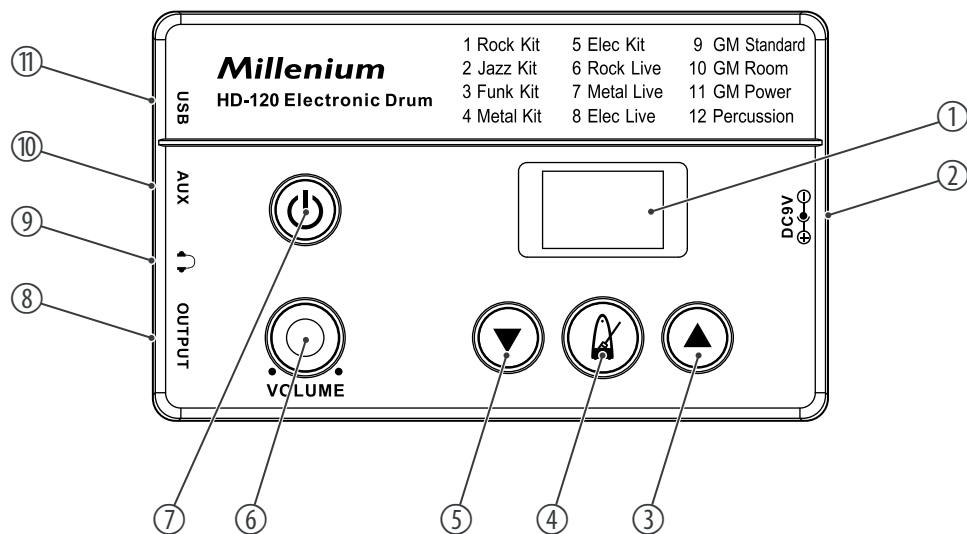
Connecting a CD or MP3 player

Connect a CD or MP3 player to the input socket *[AUX]* IN of the drum module.

Connecting USB devices

Connect external MIDI devices or your computer to the USB port of the drum module.
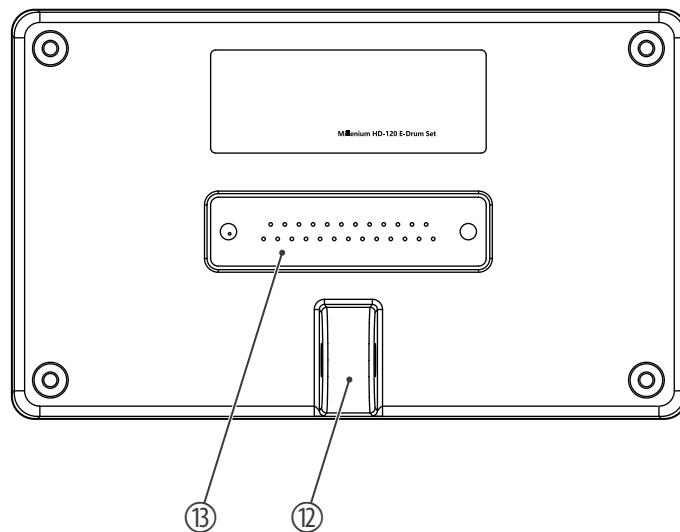
5   Connections and controls

Front panel

1	Display
2	*[DC 9V]* Connection socket for the power adapter
3	▲ Selects an option or sets a value.
4	𝄇 Turns the metronome on and off.
5	▼ Selects an option or sets a value.
6	*[VOLUME]* Volume control. Controls the volume of the drum kits.
7	⏻ Pressing ⏻ turns the device on. Holding down ⏻ turns the device off.
8	*[OUTPUT]* Line output for external audio devices, designed as 3.5 mm jack socket
9	🎧 Headphones output, designed as 3.5 mm stereo jack socket.

10	*[AUX]*
	Input for external audio devices like MP3 or CD players, designed as 3.5 mm stereo jack socket.
11	*[USB]*
	USB MIDI port, designed as USB-B socket

Rear panel

| 12	Holder for attaching the drum module to the drum set
13	Connection socket for connecting cable to the drum set, designed as 25-pin D-sub connector socket

6   Operating

6.1   Functions

Turning on / off

> ⊙ *Check all cable connections for correct fit before turning on*
>
> *Before switching on, turn the [VOLUME] control to minimum.*

Press ⏻ to turn the drum module on. Press and hold ⏻ to turn the drum module off.

Adjusting the volume

To adjust the volume, hit a pad and at the same time adjust the volume of the drum module with the *[VOLUME]* control.

Software version

To display the system information, press and hold ⚷ for 3 seconds with the device switched on. The current software version is displayed.

Reset to factory defaults

To reset the drum module to factory settings, turn it off first. Press and hold ⏻ and ▲ simultaneously. The display shows *'CLr'*. The drum module is reset to factory default settings.

6.2   Selecting drum kits

A drum kit is a compilation in which a certain sound (Voice) and several sound parameters are assigned to each pad. Selecting different drum kits lets you customise the sound in seconds to the desired music genre.

Selecting a drum kit

To select a certain drum kit, proceed as follows:

▶ Press ▲ or ▼ to select the desired drum kit.

⇨ The current kit name and kit number are displayed.

The following drum sets are available:

Number	Drum kit		Number	Drum kit
1	Rock Kit		7	Metal Live
2	Jazz Kit		8	Elec Live
3	Funk Kit		9	GM Standard
4	Metal Kit		10	GM Room
5	Elec Kit		11	GM Power
6	Rock Live		12	Percussion

6.3   Playing the drum kit

Like on an acoustic drum kit, the pads respond to different playing techniques and dynamics. All pads are velocity sensitive. Some voices change their timbre depending on the punch used.

- Bass Drum
    - Change the sound of the bass drum by striking the pedal with different strength and speed.

- Hi-hat
  Change the sound of the hi-hat by combining pedal and stroke techniques in different ways.
    - Strike the Hi-hat pad without pressing the pedal.
    - Strike the Hi-hat pad with fully pressed pedal.
    - Step on the hi-hat pedal without hitting the hi-hat pad.
    - Play the Hi-hat with fully pressed pedal and then open it suddenly.

6.4   Metronome function

Switch on the drum module. Press ♩ to turn the metronome on. While the metronome is on, the indicator LED of the button is flashing.

Settings

1. ▷ Press ♩ to turn the metronome on.

2. ▷ To set the desired tempo, press and hold ♩ until the display shows *'b - (number)'* .

3. ▷ Use ▲ or ▼ to set a value between *'1'* and *'5'* for the time signatures 1/4 … 5/4.

4. ▷ Press ♩ to exit the setting mode.

5. ▷ To turn off the metronome, press again ♩.

Volume

1. ▷ Press ♩ to turn the metronome on.

2. ▷ To set the desired volume of the metronome, press and hold ▲ and ▼ simultaneously until the display shows *'Lu(number)'* .

3. ▷ Use ▲ or ▼ to set a value between *'0'* (silent) and *'9'* (maximum).

4. ▷ Press ♩ to exit the setting mode.

5. ▷ To turn off the metronome, press again ♩.

6.5   Adjusting the pedals

Temperature fluctuations or humidity can alter the sensitivity of the pedals. To reset the sensitivity of the pedals to factory defaults:

1. ▶ While the drum module is switched off, simultaneously press and hold ⏻ and ⏼.

⇨   The display shows *'bdF'*.

2. ▶ Step on the bass drum pedal and hold the pedal in this position.

⇨   ⏼ flashes green and orange during bass drum pedal setup.

3. ▶ When ⏼ stops flashing, the bass drum pedal setup is finished. Now release the bass drum pedal.

⇨   The display shows *'HHF'*.

4. ▶ Step on the Hi-hat pedal and hold the pedal in this position.

⇨   ⏼ flashes green and orange during Hi-hat pedal setup.

5. ▶ ⏼ lights red, the Hi-hat pedal setup is finished. Now release the Hi-hat pedal.

⇨   Pedal adjustment is complete.

6.6　MIDI implementation

Connect the drum module to a synthesizer or PC via the USB-MIDI interface to use the MIDI function.

Function		Transmitted	Recognized	Remarks
Basic channel	Default	10	1-8, 10-16	
	Changed	No	No	
Mode	Default	No	Mode 3	
	Messages	No	No	
	Altered	********	********	
Note number		0…127	0…127	
	True voice	********	0…127	
Velocity	Note ON	1…127	1…127	
	Note OFF	No	1…127	
Aftertouch	Keys	No	No	
	Channels	No	No	
Pitch bend		No	Yes	

Function		Transmitted	Recognized	Remarks
Control change	0	No	Yes	Bank select
	1	No	Yes	Modulation
	4	No	Yes	Foot control
	5	No	Yes	Portamento time
	6	No	Yes	Data entry
	7	No	Yes	Volume
	10	No	Yes	Pan
	11	No	Yes	Expression
	64	No	Yes	Sustain pedal
	65	No	Yes	Portamento ON/OFF
	66	No	Yes	Sostenuto pedal
	67	No	Yes	Soft pedal
	71	No	Yes	Resonance
	72	No	Yes	Release time
	73	No	Yes	Attack Time
	74	No	Yes	Cut off

Function		Transmitted	Recognized	Remarks
	80	No	Yes	Reverb program
	81	No	Yes	Chorus program
	91	No	Yes	Reverb level
	93	No	Yes	Chorus level
	120	No	Yes	All Sound Off
	121	No	Yes	Reset All Controllers
	123	No	Yes	All Notes Off
Program change		No	Yes	
System exclusive		No	Yes	
System common	Song Position	No	No	
	Song Select	No	No	
	Tune	No	No	
System real time	Clock	No	No	
	Command	No	No	
Aux messages	Local ON/OFF	No	No	
	All Notes OFF	No	No	

Function		Transmitted	Recognized	Remarks
	Active Sense	Yes	No	
	Reset	No	No	

Mode 1: Omni on, poly. Mode 2: Omni on, mono. Mode 3: Omni off, poly. Mode 4: Omni off, mono.

7   Technical specifications

Input connections	Power supply	Connector socket for external power adapter
	AUX in	1 × 3.5 mm stereo phone socket
	Signal transmission drum set	1 × D-sub connector socket, 25-pin
Output connections	Line out	1 × 3.5 mm jack socket
	Headphones	1 × 3.5 mm stereo phone socket
	MIDI	USB-B
Drum kits	12	
Power supply	External power adapter, 100 - 240 V ∿ 50/60 Hz	
Operating voltage	9 V ⎓ / 300 mA , centre negative	
Dimensions (W × H × D)	451 mm × 726 mm × 286 mm	
Weight	20.5 kg	
Ambient conditions	Temperature range	0 °C…40 °C
	Relative humidity	20 %…80 % (non-condensing)

Further information

Rack included	Yes
Seat included	Yes
Bass drum pedal included	Yes
Headphones included	Yes
Mesh Head Pads	No
Stereo pads	No
Number of direct outputs	0

8   Plug and connection assignment

Introduction

This chapter will help you select the right cables and plugs to connect your valuable equipment in such a way that a perfect sound experience is ensured.

Please note these advices, because especially in 'Sound & Light' caution is indicated: Even if a plug fits into the socket, an incorrect connection may result in a destroyed power amp, a short circuit or 'just' in poor transmission quality!

Balanced and unbalanced transmission

Unbalanced transmission is mainly used in semi-professional environment and in hifi use. Instrument cables with two conductors (one core plus shielding) are typical representatives of the unbalanced transmission. One conductor is ground and shielding while the signal is transmitted through the core.

Unbalanced transmission is susceptible to electromagnetic interference, especially at low levels, such as microphone signals and when using long cables.

In a professional environment, therefore, the balanced transmission is preferred, because this enables an undisturbed transmission of signals over long distances. In addition to the conductors 'Ground' and 'Signal', in a balanced transmission a second core is added. This also transfers the signal, but phase-shifted by 180°.

Since the interference affects both cores equally, by subtracting the phase-shifted signals, the interfering signal is completely neutralized. The result is a pure signal without any noise interference.

**Three-pole 1/8" mini phone jack
(stereo, unbalanced)**

1	Signal (left)
2	Signal (right)
3	Ground, shielding

9 Cleaning

Device components

Clean the externally accessible device parts regularly. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the device parts.

- Clean with a soft dry cloth.
- Stubborn dirt can be removed with a slightly dampened cloth.
- Never use cleaners containing alcohol or thinner.
- Do not place vinyl objects on the device, as vinyl may stick to the surface or cause it to discolour.

10   Protecting the environment

Disposal of the packaging material

For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

Disposal of your old device

This product is subject to the European Waste Electrical and Electronic Equipment Directive (WEEE) in its currently valid version. Do not dispose with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

Notes