

*Harley Benton*

MP-100

MIDI foot switch



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# 1 General information

## 1.1 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](http://www.thomann.de).

### 1.1.1 Further information

On our website ([www.thomann.de](http://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.

## 1.1.2 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.

## 1.1.3 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
<b>DANGER!</b>	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.
<b>NOTICE!</b>	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

This device is used to control guitar amplifiers or effect devices via footswitches and MIDI. Use the device only as described in this user 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.



### **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.



### **NOTICE!**

#### **Risk of fire due to incorrect polarity**



Incorrectly inserted batteries may destroy the device or the batteries. Ensure that proper polarity is observed when inserting batteries.



**NOTICE!**

**Possible damage by leaking batteries**



Leaking batteries can cause permanent damage to the device. Take batteries out of the device if it is not going to be used for a longer period.



**NOTICE!**

**Possible staining**



The plasticiser contained in the rubber feet of this product may possibly react with the coating of your parquet, linoleum, laminate or PVC floor and after some time cause permanent dark stains. In case of doubt, do not put the rubber feet directly on the floor, but use felt-pad floor protectors or a carpet.

### 3 Features

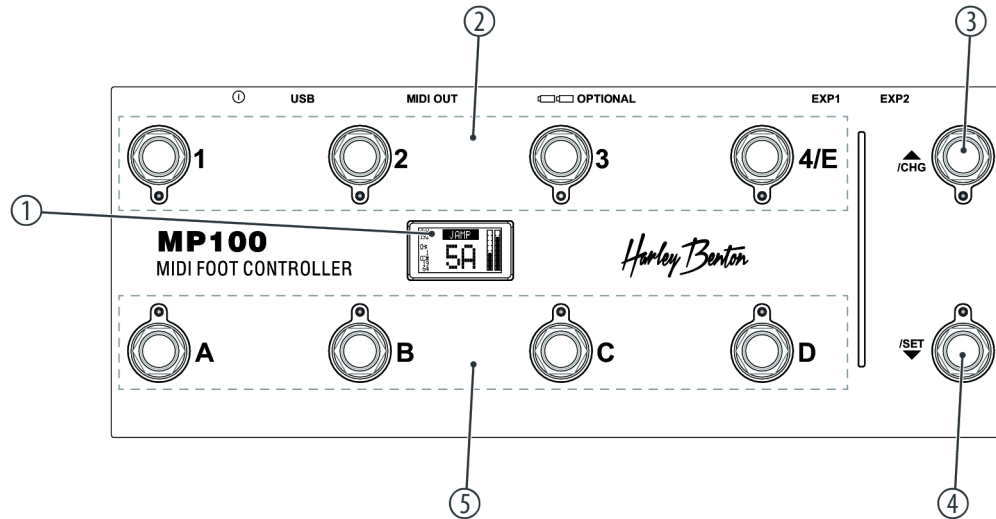
- USB/MIDI footswitch for controlling guitar amps or effect devices via mobile end devices and apps (iOS, Mac OS and Android systems)
- USB MIDI control and standard MIDI control
- 10 programmable footswitches
- 2 inputs for effect pedals with display to control the effect parameters (effect pedals not included)
- 1 USB port
- 1 MIDI output
- Pre-programmed configurations for common software or devices, e.g. Bias FX, JamUp, Kemper or Axe FX
- Power supply via USB or 2 × AAA batteries or AAA batteries (not included)
- Built-in battery charging function
- MIDI cable and USB cable (type B) included in delivery

## 4 Installation and starting up

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the product against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

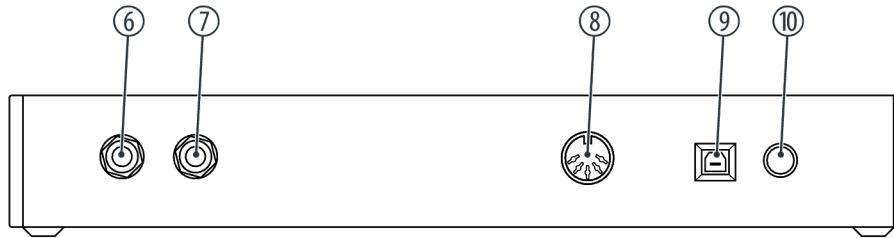
## 5 Connections and controls

### Front panel



1	Display
2	<i>[A]...[D]</i> Footswitch for sending program change and control change MIDI commands
3	▲ <i>[/CHG]</i> Increases the displayed value by one and selects menu items.
4	▼ <i>[/SET]</i> Decreases the displayed value by one and selects menu items.
5	<i>[1]...[4/E]</i> Footswitch for sending program change and control change MIDI commands

## Rear panel



6 [EXP2], [EXP2]

Input for connecting an effect pedal, designed as a 6.35 mm jack plug

7 [EXP1]

Input for connecting an effect pedal, designed as a 6.35 mm jack plug

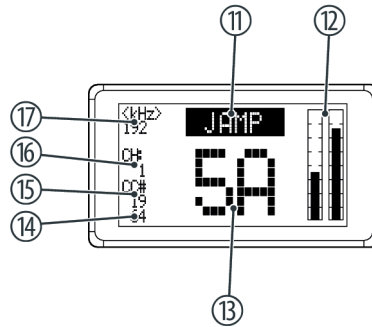
8 [MIDI OUT]

MIDI output for connecting external devices, designed as DIN connector (5-pin)



9	<p>[USB] USB interface for power supply and connection of mobile end devices or PC</p>
10	<p>⏻ Main switch. Turns the device on and off.</p>

### Display



11	Configuration
12	Dynamic display for [EXP1] (empty if no effect pedal is connected to EXP1)
	Dynamic display for [EXP2] (empty if no effect pedal is connected to EXP2)
13	Current number of the program change MIDI command
14	Sub-parameter of the sent control change MIDI command (updated only if changed and held for 0.5 s)
15	Sent control change MIDI command (updated only when changed and held for 0.5 s)
16	MIDI channel used
17	Sampling rate

## 6 Operating

### Inserting a battery

The device can be powered by batteries or rechargeable batteries if the device is not connected to the power supply via a USB cable.

Insert 2 x AAA batteries into the battery compartment on the bottom of the device. You can use conventional AAA batteries or rechargeable AAA NiMH batteries.

### Charging the battery

You can charge rechargeable AAA NiMH batteries directly in the device. Activate the built-in charging function only if you have inserted rechargeable batteries.

1. ➤ Insert two AAA NiMH batteries.
2. ➤ Connect the device to the power supply with the USB cable.
3. ➤ Press [*/CHG*], hold down the button, and turn the device off and on again at the main switch.
  - ⇒ The charge mode for rechargeable batteries is activated. Charging stops automatically when the battery is fully charged (average charging time approx. 3 hours).

### Turning the unit on

- 1.** ➤ Connect the device to your mobile end device or PC using the supplied USB cable.
  - ⇒ The device is detected automatically.
- 2.** ➤ Turn the device on using the main switch.
  - ⇒ The LEDs under the foot switches light up briefly. The display shows the current status of the device.

### Select configuration

You can switch between 6 preset and 2 individually programmable configurations.

- 1.** ➤ Depending on the desired configuration, press *[1]...[4]* or *[A]...[D]* and keep the button pressed.
- 2.** ➤ Switch the device off and on again at the main switch.
  - ⇒ The selected configuration is activated. The display will show the selected configuration.

Foot switch	Configuration	Function
1	JAMP	Control of effects of the iOS software JamUp
2	BIFX	Control of effects of the Biax FX software
3	KMPA	Control of effects of the Kemper profiling amp
4	AXEF	Control of AXE FX effects
A	ATOM	Control of the ATOMIC amplifier effects
B	PC-8x	[1]...[4] and [A]...[D] for sending program change MIDI commands. 8 patches are a group. 8 different patches can be switched.
C	CUS-1	Individually programmable configuration
D	CUS-2	Individually programmable configuration

**Programming the configuration** You can program and save two individual configurations.

1. ▶ Press *[SET]* and hold down the button.
2. ▶ Switch the device off and on again at the main switch.
  - ⇒ The setup for individual configurations is activated. The display shows the sub-menus '*MIDI.CH*', '*CUS1*' and '*CUS2*'.
3. ▶ Press *[2]* r *[3]* to switch between the submenus.

In the '*MIDI.CH*' submenu, MIDI channels can be assigned to the preset configurations.

1. ▶ Use *[CHG]* or *[SET]* to select the desired configuration.
2. ▶ Press *[B]* or *[C]* to select the desired MIDI channel for the configuration.
  - ⇒ The selected settings remain stored even after the device is turned off.

In the submenus '*CUS1*' and '*CUS2*', parameters for individually set configurations can be set.

1. ▶ Use *[CHG]* or *[SET]* to select the desired parameters.
2. ▶ Press *[B]* or *[C]* to select the desired option for the parameter.
  - ⇒ The selected settings remain stored even after the device is turned off.

Parameter	Option	Function
ABC/123	ABC/123	Display of patch numbers 1A, 1B, 1C or 1, 2, 3
Bank Move	4x, 5x, 8x, 10x	Number of selected patches in a group
Bank Mode	WAI, IMM	WAI: Switches to the first patch of the next group with a delay when the foot switch is pressed. IMM: Immediately switches to the first patch of the next group when the foot switch is pressed.
SCR Start	0, 1	0: Displays the patch table starting from 0 1: Displays the patch table starting from 1
PC Start	0, 1	Current program change value of the first patch table
EXP1 CC#	1...127	Command number of the control change MIDI command for effect pedal 1
EXP2 CC#	1...127	Command number of the control change MIDI command for effect pedal 2
KEY 1 MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY 1 CC#	1...127	Command number of the control change MIDI command

Parameter	Option	Function
KEY 1 Tog	OFF, ON	ON: The sub-parameters change between 0 and 64
KEY 2 MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY 2 CC#	1...127	Command number of the control change MIDI command
KEY 2 Tog	OFF, ON	ON: The sub-parameters change between 0 and 64
KEY 3 MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY 3 CC#	1...127	Command number of the control change MIDI command
KEY 3 Tog	OFF, ON	ON: The sub-parameters change between 0 and 64
KEY 4 MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY 4 CC#	1...127	Command number of the control change MIDI command
KEY 4 Tog	OFF, ON	ON: The sub-parameters change between 0 and 64



Parameter	Option	Function
KEY A MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY A CC#	1...127	Command number of the control change MIDI command
KEY A Tog	OFF, ON	ON: The sub-parameters change between 0 and 64
KEY B MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY B CC#	1...127	Command number of the control change MIDI command
KEY B Tog	OFF, ON	ON: The sub-parameters change between 0 and 64
KEY C MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY C CC#	1...127	Command number of the control change MIDI command
KEY C Tog	OFF, ON	ON: The sub-parameters change between 0 and 64

Parameter	Option	Function
KEY D MOD	PC#, CC#	PC: Program change MIDI command CC: Control change MIDI command
KEY D CC#	1...127	Command number of the control change MIDI command
KEY D Tog	OFF, ON	ON: The sub-parameters change between 0 and 64



*Particular setups may cause conflicts. When you set 4 patches for a group, the buttons [1] to [4] are not available in the program change mode. When you set 5 patches for a group, the buttons [1] to [3] are not available in the program change mode. Follow the setup order from "Bank Move" to the end.*

## Restore factory setting

You can use this function to reset the device to its factory default setting.

1. ➤ Press [/SET] and [/CHG] and hold down both buttons.
2. ➤ Turn the device off using the main switch.
  - ⇒ The device is reset to the standard settings.

## 7 Technical specifications

Control		Foot switch
		USB/MIDI control
		MIDI control
Input connections	Power supply of further devices	1 × USB port
	Effects pedal	2 × 1/4" phone socket
Output connections	MIDI	1 × DIN socket, 5-pin
Power supply		5 V $\overline{\text{DC}}$ via USB or battery
Battery type		2 × AAA batteries or
		2 × AAA NiMH rechargeable batteries
Charging time in the device		approx. 3 h
Dimensions (W × H × D)		286 mm × 65 mm × 110 mm

Weight		950 g
Ambient conditions	Temperature range	0 °C...40 °C
	Relative humidity	20 %...80 % (non-condensing)

### Further information

Number of buttons	10
Number of pedals	0
Display	Yes
Connection for Expression Pedal	Yes

## 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.

### 1/4" TS phone plug (mono, unbalanced)



1	Signal
2	Ground, shielding

### 1/4" TRS phone plug (mono, balanced)



1	Signal (in phase, +)
2	Signal (out of phase, -)
3	Ground

## 9 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 these materials with your normal household waste, but make sure that they are fed to a recovery. Please follow the notes and markings on the packaging.

### Disposal of batteries



Batteries must not be disposed of as domestic waste or thrown into fire. Dispose of the batteries according to national or local regulations regarding hazardous waste. To protect the environment, dispose of empty batteries at your retail store or at appropriate collection sites.

### 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 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.



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