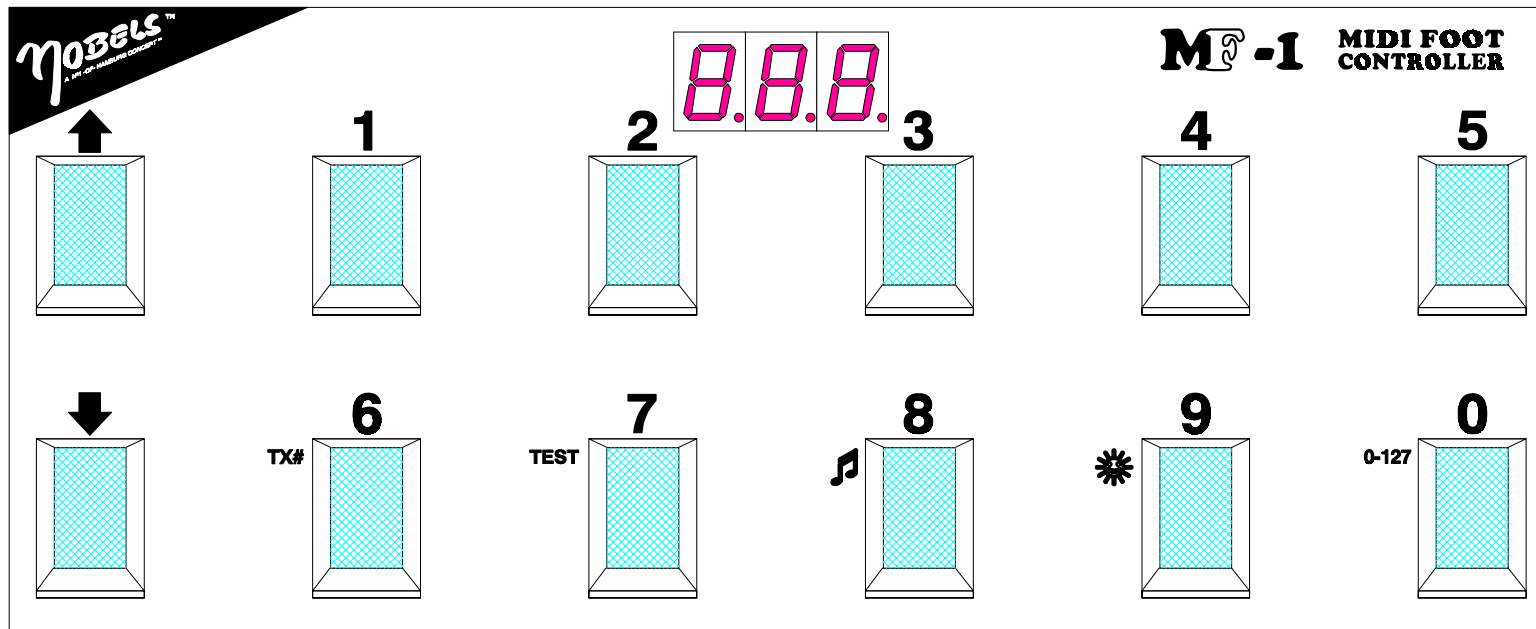


MF-1



MIDI FOOT CONTROLLER

INTRODUCTION

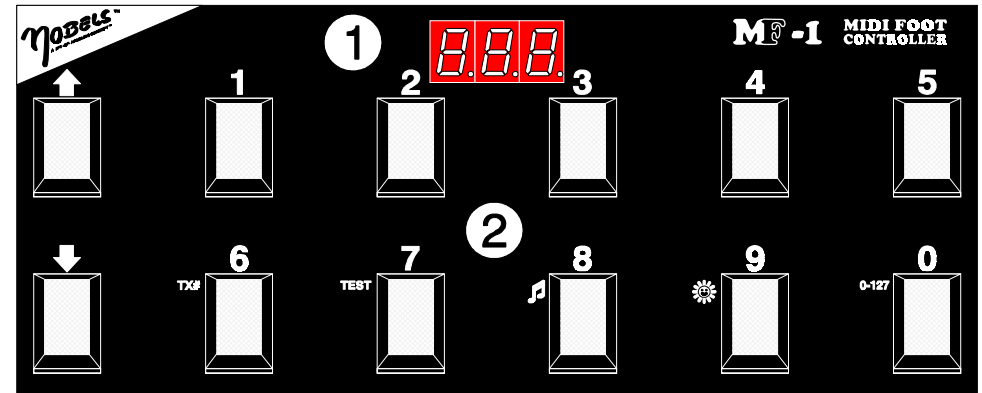
Thank you for purchasing the MF-1. The MF-1 will give you the performance you need for your musical instruments. The MF-1 is a multi purpose MIDI controller which is designed for easy footcontrol. The two operation modes will give you the choice to setup your individuell configuration. To make the best use of it, please read this owners manual carefully!

We hope you enjoy it

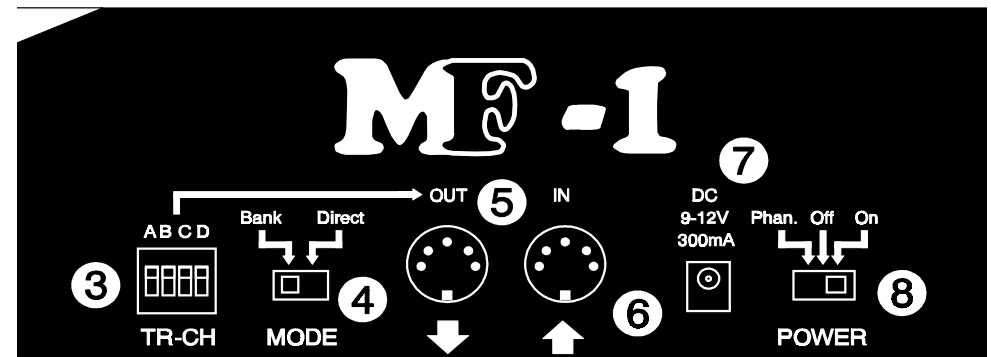
Your N°1 -OF-HAMBURG team.

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Top of the MF-1

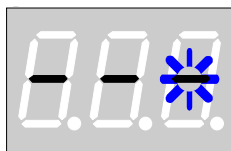
- (1) LED-DISPLAY
(2) FOOTSWITCHES

Back of the MF-1

- (3) DIP-switch to select the MIDI Transmit Channel
(4) MODE switch
(5) MIDI OUT jack
(6) MIDI IN jack
(7) PSU jack
(8) POWER switch

2 CONNECT TO A POWER SUPPLY

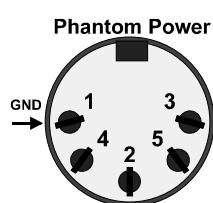
- 2.1 Connect any (9V-12V DC) stabilized power supply adaptor to the POWER jack (7) of the MF-1.
- 2.2 Set the POWER switch (8) to the "ON" position.
- 2.3 Now the LED-DISPLAY (1) shows [- - -].
- 2.4 The right LED-DISPLAY (1) is blinking and the MF-1 is ready to operate.



3 BATTERY OPERATION

- 3.1 Open the batterycover located at the bottom of the MF-1.
- 3.2 Insert 6 baby batteries type "R14".
- 3.3 If you don't need the MF-1 for a longer period you should remove the batteries to prevent leakage.
- 3.4 For longer batterielife switch to the economy mode. This will decrease the brightness of the LED DISPLAY but saves a lot of energie! (see technical information)
- 3.5 Avoid using new batteries together with old ones.

4 SOMETHING ABOUT PHANTOM POWER



Phantom Power Some other manufacturer are also using the MIDI jacks to distribute power from one unit to another (Phantom power). This is easy to handle and you can probably save nerves, time and money which means you need one power adaptor less. The required power may now be supplied from your MIDI effect or keyboard. The idea of the polarity and the connection is described in the ELECTRONIC MUSICIAN issued #12/89. Some other manufacturer are also using this ideal

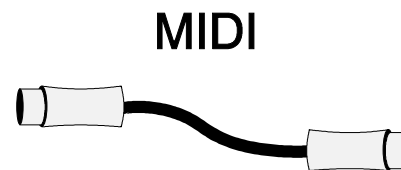
⚠ Please ask your local servicestation for modifying your devices.

5 USING PHANTOM POWER

- 5.1 To receiving power from another device:
- 5.2 Simply connect a standard 5 pole MIDI cable from the unit which supplies the voltage to the MIDI OUT jack (5) of the MF-1.
- 5.3 Switching the POWER switch (8) of the MF-1 to the "Phan." position.
- 5.4 To deliever power to another device:
- 5.5 Connect a standard 5 pole MIDI cable from the MIDI IN jack (6) of the MF-1 to the MIDI OUT jack of the unit which can use the voltage.

⚠ Make sure that the phantom power has extra current (350mA) for the extra unit!

6 CONNECT MIDI OUT

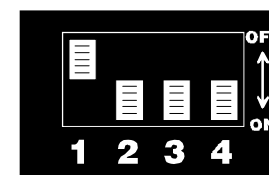


- 6.1 Connect the MIDI IN jack {Receiver} of the other unit to the MIDI OUT jack (5) of the MF-1 {Transmitter}.
- 6.2 The MF-1 switches the connected unit regarding to the actual sent programm-number.

7 SET THE MIDI TRANSMIT CHANNEL

- 7.1 While switching the MF-1 on hold the "6" footswitch (2).
- 7.2 The LED-DISPLAY (1) shows [Cxx] a capital "C" followed by the current MIDI transmit channel number.
- 7.3 Set the DIP-switches TR-CH (3) located on the back of the MF-1 to the requested transmit channel by watching the LED-DISPLAY (1) or regarding the table as shown in the diagram:

Dip switch:



E.g: MIDI TRANSMIT Channel 15

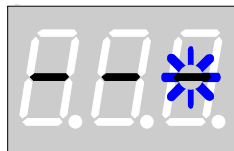
1	2	3	4	MIDI TRANSMIT CHANNEL
ON	ON	ON	ON	1
X	ON	ON	ON	2
ON	X	ON	ON	3
X	X	ON	ON	4
ON	ON	X	ON	5
X	ON	X	ON	6
ON	X	X	ON	7
X	X	X	ON	8
ON	ON	ON	X	9
X	ON	ON	X	10
ON	X	ON	X	11
X	X	ON	X	12
ON	ON	X	X	13
X	ON	X	X	14
ON	X	X	X	15
X	X	X	X	16

8 MIDI MERGE

- 7.1 Connect the MIDI OUT jack of the other unit to the MIDI IN jack (6) of the MF-1.
 - 7.2 The incoming MIDI data will be merged to the MIDI OUT jack of the MF-1.
- ⚠ Too much and excessive MIDI data (e.g. MIDI-SAMPLES or DUMP) will overload the internal buffer. In this case the MF-1 may not switch correctly!

9 BANK MODE 1-128

- 9.1 Switch the POWER switch (8) of the MF-1 to the "ON" position.
- 9.2 The LED-DISPLAY (1) shows: [—] with a blinking right digit.
- 9.3 Set the MODE switch (4) to the "BANK" position.
- 9.4 With the UP or DOWN footswitches (2) you can select the desired BANK.



- Possible BANK numbers are: 0-, 1-, 2- ... 10-, 11-, 12-.*
- 9.5 Holding the UP or DOWN footswitches (2) down will continuously count up or down the BANK number.
- 9.6 Select one of the "0-9" footswitches (2) to send out the MIDI program change.
- 9.7 After sending the right digit of the LED-DISPLAY (1) stops blinking and shows the actual sent MIDI program change number.
- 9.8 Now each further step on one of the "0-9" footswitches (2) sends out a MIDI program change.

⚠ *Program number "000" and "129" are impossible to use. Trying to access one of these numbers show up a right flashing "-" on the LED-DISPLAY!*

.....

E.g.: BANK 4 is selected with the UP or DOWN footswitches (2). The right digit is blinking. Pressing the "5" footswitch (2) stops blinking and the LED-DISPLAY (1) shows "45". At the same time the MF-1 immediately sends out the MIDI program change number 45. A next step on the "2" footswitch (2) sends out the MIDI program change number 42 and so on.

.....

10 BANK MODE 0-127

- 10.1 Some older MIDI devices are using MIDI program change numbers from 0-127. You can match to these units as follows:
- 10.2 While switching the unit on, hold the "0" footswitch (2).
- 10.3 The LED-DISPLAY (1) shows: [0--] with a blinking right digit. That's all.
- 10.4 All other functions are the same as described in "BANK MODE 1-128"

⚠ *Program number "128" and "129" are impossible to use. Trying to access one of these number will show up a right flashing "-" on the LED-DISPLAY!*

After power down the MF-1 is set back to the 1-128 mode.

11 DIRECT MODE 1-128

- 11.1 Switch the power switch (8) to the "ON" position.
- 11.2 The LED-DISPLAY (1) shows: [—] with a blinking right digit.
- 11.3 Set the MODE switch (4) to the "DIRECT" position.
- 11.4 Select the "0-9" footswitches (2) to send the requested MIDI program change number.
- 11.5 The last digit is blinking until you send out the MIDI program change with the UP or DOWN footswitch (2).
- ⚠ *The MF-1 detects automatically impossible program change numbers and cleared them out immediately! See AUTO-CORRECTION!*
- 11.6 Each additional step on the UP or DOWN footswitches (2) will increment or decrement the shown MIDI program change number.
- 11.7 Holding the UP or DOWN footswitches (2) down will continually count up or down the shown MIDI program change number. After releasing the UP or DOWN footswitches (2) the last digit is blinking.(= ready to send!)
- 11.8 A final step on the UP or DOWN footswitches (2) will send out the shown MIDI program change number.



.....

*E.g.: Switch the MODE switch (4) to DIRECT and POWER (8) to ON:
LED-DISPLAY= [--x] the right digit is blinking!
Footswitch "1" LED-DISPLAY= [1] the "1" is blinking!
Footswitch "2" LED-DISPLAY= [12] shifts "1" left, the "2" is blinking!
Footswitch "5" LED-DISPLAY= [125] shifts "12" left, the "5" is blinking!
Footswitch "UP"^(1) LED-DISPLAY= [125] the MF-1 sends out MIDI program-change 125.*

**(1) Also the "DOWN" footswitch (2) can be used for this operation!*

.....

12 AUTO CORRECTION

- 12.1 This feature helps you to correct impossible program numbers. If the MF-1 detects such a wrong program number the first digit will be cleared out automatically.

13 DIRECT MODE 0-127


- 13.1 Some older MIDI devices are using MIDI program change numbers from 0-127. This often creates trouble. You can match to these units as follows:
- 13.2 While switching the unit on hold the "0" footswitch (2).
- 13.3 The LED-DISPLAY (1) shows: [0--] with a blinking right digit. *That's all.*
- 13.4 All other functions are the same as described in "DIRECT MODE 1-128"

⚠ *After power down the MF-1 is set back to the 1-128 mode.*

14 FUNNY NOTE MODE


This little feature may not be used for professional use. But if you like it...

- 14.1 Connect any MIDI keyboard or sound module to the MIDI out jack (5).
 14.2 While switching the unit on hold the "8" footswitch (2).
 14.3 Each step on the footswitches sends out a MIDI note on the selected MIDI transmit channel. Only one note can be sent out at a time. Possible notes are: "C ... B". The MIDI volume is always set to "64". (See *MIDI implementation chart*)
 14.5 The MODE switch (4) switches between 2 different octaves.

 *After power down the MF-1 is set back to the BANK or DIRECT mode*


15 SOFTWARE REVISION

- 15.1 While switching the unit on hold the "UP" footswitch (2).
 15.2 The LED-DISPLAY (1) shows the version number of the built in software revision.

 *After power down the MF-1 is set back to BANK or DIRECT mode!*

16 TEST MODE

- 16.1 While switching the unit on hold the "7" footswitch (2).
 16.2 DIGIT TEST: All digits must blink. (except the dots).
 Press any footswitch (2) to continue.
 16.3 SWITCH TEST: Test the correct function of the switches.
 CHECK: UP, 1, 2, 3, 4, 5, DOWN, 6, 7, 8, 9, 0, MODE, TR-CH(A..D).

 *The first digit shows the number to press next. The last digit shows the actually hold switch*


- 16.4 MIDI INTERFACE TEST: The LED-DISPLAY (1) shows [con].
 Now connect a MIDI cable from the MIDI IN jack (6) to the MIDI OUT jack (5).
 If the MIDI interface is O.K. the test restarts.
 Unplug the MIDI cable and switch the unit off. *Ready!*

17 ECONOMY MODE

- 17.1 While switching the unit on hold the "9" footswitch.
 Now the LED-DISPLAY is less bright and saves energy.
 17.2 *Now:* Pressing "0" activates the 0-127 MODE.
 17.3 Pressing "6" activates the view to the MIDI transmit channel number.
 17.4 Pressing "7" activates the TEST MODE.
 17.5 Pressing "8" activates the FUNNY NOTE MODE.
 17.6 Pressing "UP" shows the software revision number.
 17.7 Pressing "DOWN" activates the selected DIRECT or BANK MODE.

 *Note: After power down the MF-1 is set back to noneconomy mode!*

18 TECHNICAL INFORMATION

Dimension	:	430x170x70mm
Weight	:	2200g (Without batteries)
Power	:	9-12V DC / 350mA / polarity: 
Consumption	:	max. 300mA / 80mA economy
Battery	:	6x 1.5V Baby type R14
Display	:	3 digit led + dot
Inputs	:	MIDI IN / POWER
Outputs	:	MIDI OUT
Operation Modes	:	BANK / DIRECT / FUNNY NOTE
Utility Modes	:	ECONOMY / 0-127
Check Modes	:	TEST / TX# / SOFTWARE REVISION

 **CAUTION** 

Use only the AC adaptor / power supply unit provided.
 Other adaptors may damage the unit.

Notice:

The using of phantom power with this unit is not a regular standard.
 If you are not sure how to use it correctly do not use it.
 We are not responsible for any damages on this or other units.

Radio and Television Interferences (USA)

This unit has been verified to comply with the limits of a Class B computing device, pursuant to subpart 15 of FCC rules. Operation with non certified or non verified equipment is likely to result in interferences to radio and TV reception.

CLASS B (Canada)

This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

CLASSE B

Cet appareil numérique ne dépasse les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Règlement des signaux parasites canadien des Communications.

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Written and designed by Kai Tachibana.

19 WHAT IS MIDI ???

MIDI = Musical Instrument Digital Interface.

MIDI is the computerized unidirectional connection between two devices. One unit sends data to the other. The unit which works as a transmitter is assigned to transmit the data on a specified MIDI channel. 16 different MIDI channel are available. The unit which works as a receiver must be set to the same channel to recognize the send data similar to the Radio and Television systems.

The data of the transmitter must be recognized by the receiver. There are a lot of different possible MIDI data. The function is often claimed in MIDI IMPLEMENTATION CHARTS. A basic function of MIDI is to transmit MIDI program change information so that the connected receiver can be switched to the requested program.

<u>Function</u>	<u>Transmitted</u>	<u>Recognized</u>	<u>Remarks</u>
Basic channel	1-16	X	
Program change	0-127	X	1-128
Note number	C-B'	X	One note at a time
Velocity	64	X	
After touch	X	X	
Pitch bender	X	X	
Control change	X	X	
System exclusive	X	X	
Notes	X	all	Merge function