



Tanzbär 2
Hybrid-Drumcomputer
Operating Manual

Thank you!

First we would like to thank you for buying the Tanzbär 2. To guarantee this machine to never gets boring, we advise you to read the following instructions carefully and in all peace.

IMPRESSUM

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Disclaimer

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Safety Instructions

Please carefully read the following safety instructions! These include general rules of handling electric products. Carefully read all notes before placing the unit into operation.

Suitable place of installation

- Only use this device in confined spaces, avoid humidity and dust.
- Ensure unhindered airflow to all sides of the device. Do not place the device in direct proximity to heat sources.
- Do not expose the device to direct sunlight or strong vibrations.

Connection for power supply

- Please only use the power supply that comes with the unit.
- If the provided power supply does not suit your power socket, please consult a qualified electrician.
- Unplug the power supply if you are not going to use the device for a longer period.
- Never touch the powersupply with wet hands.
- While unplugging the device, always pull the plug not the cable!

Operation

- Never place containers of liquid on the device.
- Ensure a safe and firm stand when in use.
- Make sure no objects get inside the device. Should this happen, switch off the device and remove it from the receptacle. Consult a qualified dealer or MFB next.

Maintenance

- Do not open the device. Repairing and servicing must only be carried out by qualified personnel. There are no user serviceable parts inside the device. In addition, unauthorized opening the device renders the warranty void.
- Only use dry and soft cloth or a brush for cleaning. Alcohol, solvents or comparable chemicals will damage the device's surface.

Intended use

This device has exclusively been designed to generate and process audio signals as well control signals corresponding to MIDI- and USB-specifications. Any further use is not allowed and will preclude any warranty claims against MFB.

Disposal

This unit has been manufactured RoHS-conforming in compliance with the requirements of the European parliament and council and thus is free from lead, mercury, cadmium and hexavalent chromium.

Nevertheless, disposal of this product is classified as special waste which must not be disposed with general household waste!

For proper disposal please refer to your dealer or to:MFB

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Quick-Start

Here you will find a brief explanation of some of the basic functions so that you can program your first patterns as quick as possible.

Tempo: Hold down the **TEMPO**-key and use the **DATA1**-encoder to select and set, the desired tempo in BPM, as shown on the display.

Play: Pressing the **PLAY**-key will start the internal sequencer.

Pattern

Select: Hold down the **Pattern**-key. Press one of the upper black buttons (marked 0-9). For example to select Pattern 01 you have to press 0 first and then 1. This input pattern applies to pattern location 99.

ATTENTION! There are two different modes to program patterns Modi **Manual-Trigger-Mode** and **Record-Mode**. In Manual-Trigger-Mode, the instruments can be triggered (prelistened) by the corresponding buttons, while the sequencer is not running. To really record them, the function **Real Time Note Record Mode** needs to be activated. This is explained here.

The **Record-Mode** and its function-enhancing operating modes are explained in detail on page 12.

Programming: If the LED above the **MAN TRG/RECORD**-key lights up green, you are in **Manual-Trigger-Mode**. To activate the **Real Time Note-Record-Mode**. Hold the **PATTERN/SHIFT**-key in conjunction with key 10 (**VOICE2,REAL RECORD**). Display shows Real Time Note. Set to Yes by pressing **DATA3**-button. Press the **INTRUMENT/SEL**-key to confirm and save the settings. The instruments will now be triggered by the corresponding keys while the sequencer is running.

Instrument-Selection : If the sequencer is stopped, instruments are directly selected and shown in the display with two further parameters by pressing each corresponding key. While the sequencer is running, hold the **INTRUMENT/SEL**-key and press the key for the desired instrument.

LEGEND

Number	Labeling	Function	Shift-Function (P. 15-17)
1	MAN TRG/Record	Switch between Manual-Trigger-Mode and Record-Mode	/
2	KNOB RECORD	Records the movement of each parameter	/
3	ACCENT	Adjusts the pitch of each Instrument	/
4	ROLL/FLAM	Set rolls or flams	/
5	LFO	A LFO can be assigned to each instruments	Mute LFO
6	MUTE	Each instrument can be muted by pressing this key	/
7	CHAIN/GLIDE	Pattern Chaining	Glide for the Synth
8	Synth	Instrument	Shuffle
9	KICK1,2	Instrument	LAST STEP
10	SNARE1,2	Instrument	SCALE
11	MIDI1	MIDI TRACK 1	COPY BAR
12	TOM 1,2,3	Instrument	TOM1:PASTE BAR TOM2:STORE PAT. TOM3:CLEAR BAR
13	CONGA 1,2,3	Instrument	/
14	MIDI2	MIDI TRACK 2	PATTERN DUMP
15	VOICE 1,2,3	Sample based Instrument	VOICE1:MANUAL/STEP VOICE2:REAL RECORD MODE VOICE3:MIDI LEARN
16	CLOSED HIHAT	Sample based Instrument	/
17	OPEN HIHAT	Sample based Instrument	/
18	CLAP	Sample based Instrument	MIDI CLOCK
19	PERC1,2,3	Sample based Instrument	/
20	RIMSHOT	Sample based Instrument	MIDI NOTES
21	RIDE	Sample based Instrument	MIDI CC
22	CRASH1,2	Sample based Instrument	CRASH1:MIDI THRU CRASH2: MISC
23	PATTERN	Pattern Selection	SHIFT
24	INSTRUMENT/SEL	Instrument: Instrument selection in Manual-Mode Select: Completion of shift functions	/
25	Sample	Sample selection for sample-based instruments	/
26	BAR A,B,C,D	Selection of bar to be played	/
27	PLAY	Start a sequence	/
28	TEMPO	Hold and use the DATA1 knob to enter the desired tempo in BPM	/
29	DATA3	Provides an additional parameter for most instruments	/
30	DATA4	Provides an additional parameter for most instruments	/
31	USB	USB-MIDI IN/OUT	/
32	MIDI OUT/THRU	Sends or transmits MIDI Data	/
33	MIDI IN	Receives MIDI-data	/
34	AUDIO OUT	Please use an insert cable, 1 x 6.3 mm TRS to 2 x 6.3 mm TS	/
35	INDIVIDUAL OUTS	All individual outputs are mono 3.5 mm	/
36	POWER	Micro-USB input, 5VDC,--(-+	/

Operating Modes

The mentioned Sequencer Mode **Record Mode** will be further explained on the next Page.

Manual-Mode

This operation mode is preset ex factory. If Manual Mode is turned on and **Record-Mode** is selected, accents and flams can be programmed, as well samples be selected.

Step-Mode

Unlike Manual-Mode if Step-Mode is turned on and **Record-Mode** is selected. Parameter changes for individual steps can be set here (Parameter lock). First, select the step to be edited (LEDs flash red). Save the parameter setting by pressing the **INSTRUMENT/SEL**(Select)key.

To change the parameters for all preset steps and not only for one, press the **Shift** key in combination with the **INSTRUMENT/SEL**(Select) key.

You will find the instructions for switching between Manual and Step Mode under Shift Functions.

Sequencer-Modes (Pattern Programming)

There are two different sequencer modes available to program(record/write) a pattern: **Manual-Trigger-Mode** and **Record-Mode**.

Manual-Trigger-Mode

The LED of the **MAN TRG/RECORD** key lights up green. While the sequencer is not running, instruments can be triggered by the corresponding keys (prelisten). They are shown in the display with two additional parameters that can be adjusted via the **DATA1** and **DATA2** encoders.

To actually record the triggered instruments while the sequencer is running **Real Time Note Record Mode** needs to be activated. The instructions on how to activate this mode, you'll find under **Shift-Functions**.

Selection of Instruments

While the sequencer is stopped, press a corresponding instrument key (the instrument is shown in the display).

However, this does not happen while the sequencer is running. While the sequencer is running, press the **INTRUMENT/SEL** key in combination with the corresponding instrument key to be shown in the display.

Record-Mode

Please Note! The previously mentioned operating modes **Manual-Mode** and **Step-Mode** apply to this sequencer-mode.

In this mode, triggers are set for the desired steps. These can be edited by their corresponding parameters.

Newly set steps are automatically in **Edit-Mode** (they flash red).

Already existing steps can be edited by holding down the **INSTRUMENT/SEL**(Select) key in conjunction with the step to be edited.

Selection of Instruments

To enter **Record-Mode** hold the **MAN TRG/RECORD** key, and press a corresponding instrument key. The LED above the **MAN TRG/RECORD** key lights up red. The display shows the selected instrument as well as two additional parameters that can be set by the **DATA1** and **DATA2** encoders.

Pattern selection

- Press the **Pattern** key in conjunction with one of the upper black keys.
- Display shows LOAD PATTERN.
- The black keys are marked from 0-9.
- To select Pattern 01, first press 0 and then 1.
- This selection pattern applies up to the 99th pattern location.
- Alternatively, patterns can be selected using the **DATA1** encoder.

Please note! It is not possible to select an empty pattern .
How to save patterns can be found under **Shift Functions**.

The first 16 patterns are preset by MFB.
Try these out to test the device functions.

Pattern Chains

16 chains of patterns can be programmed consecutively.

These can be selected as follows:

- Press **Chain** and one of the top black keys.
- Display shows **No.** and **Pattern**.
- **No.** is the number of patterns in the already programmed chain.
- **Pattern:** Number of patterns which should be played.
- Confirm with **INSTRUMENT/SEL**(Select).

Entering numerical values is identical to the general pattern selection.

Knob Recording

Parameter movements of currently selected instruments can be recorded (Motion Record). The knob record function is only usable if **Step-Mode** is selected, and **Record-Mode** being turned on:

- Make sure **Record-Mode** is turned on. If this is not the case, please refer to page 10.
- Push the **Knob-Record** key.
- The LED flashes red until the current pattern starts again.
- Recording starts if the LED glows red until the end of the pattern (depending on how many bars are turned on).
- All parameter movements can be recorded while the LED is glowing red.

Accent

The accent always corresponds to the set accent level. A total of four accent levels are selectable. To change accents **Record-Mode** needs to be turned on. Changes to the preset accent level affects all steps that have been selected for editing as well as newly set steps.

Follow these instructions to change the Accent:

- Press the **Accent** key
- The LED goes out (Level 1)
- Press again
- The LED lights up green (Level 2)
- Press again
- The LED lights up red (Level 3)
- Press again
- The LED lights up green/red (Level 4)

Sample Key

If you have selected one of the sample-based instruments in Record-Mode (LEDs of selected steps flash), the preset sample can be changed as followed. In order to change the sample of previously set steps, these have to be set in **Edit-Mode**(p.12).

- Hold the **Sample**-key and additionally press one of the 16 white keys. Each key features a different sample. Try the sounds and select the desired sample.
- The **Sample** key must always be pressed when a changing of samples!

In Manual- Trigger-Mode the samples of the currently selected instrument (see display) can be prelistened while holding the **Sample** key and pressing one of the 16 white keys.

Flams

As with **Accent**, for using **Flams**, **Record-Mode** needs to be turned on for the respective instrument. Flam is set as follows:

- Hold **Flam** key
- Adjust the intensity of the flam by pressing one of the 16 white keys.

Please Note! Flam only affects the steps in edit mode(LEDs flash red).

LFOs

Press the **LFO** key to turn on an LFO track. The parameters shown in the display shown, **Rate** and **Amount**, can be adjusted using the encoders **DATA1** and **DATA2**.

The waveform can be changed by using of the **DATA3** key and the first eight white keys (see list below).

The **DATA4** key selects the modulations target of the LFO. In most cases, this is the tune parameter.

Mute LFOs

Enter the Mute-LFO mode by pressing the **LFO** key while holding down the shift-key. The LED above the **LFO**-key is now lit green. The respective LFOs can now be muted using instrument keys.

Please note! Instruments with alternative tracks such as Clap and Perc1 only have one LFO each.

Button	Display	Explanation
1	sawU	Sawtooth Up
2	sawD	Sawtooth Down
3	Puls	Puls wave
4	sine	Sine wave
5	sawUO	Sawtooth Up One Shot
6	sawDO	Sawtooth Down Oneshot
7	pulsO	Puls wave One shot
8	sineO	Sine wave One shot

Mute

Muting individual instruments succeeds as follows:

- Press the **Mute** key (LED lights red)
- Press the desired instrument key to be muted. The LED above lights red. For the black instrument keys the LED on the left underneath lights up green.
- All faders will show which instrument is muted while not in **Mute-Mode**. (Exception: Toms/Congas and Hi-hats – both instruments need to be muted)

The status of the **Mutes** is saved with a pattern!

Tempo

To set the tempo to the desired BPM value. Hold down the **Tempo** key and turn the **DATA1** encoder to the desired value.

Play

The LED above the **Play** key indicates whether an internal (red) or an external (green) clock is being used.

Please note! If MIDI-Clock-Receive activated, the external clock always has priority. This means if the internal clock is running, the sequencer will be stopped by a MIDI-start command and must be restarted.

BAR A,B,C,D

Each **BAR** key has a corresponding LED. A glowing red LED indicates which bar area can currently be edited. The order in which the bars are played can be adjusted by holding one bar key in combination with another.

Synthesizer-Programming

To program the internal Bass Synth, Record mode needs to be activated (p. 9).

The keys now work as a keyboard. After setting a step (note), the next step (note) is always awaited. Notation is carried just like on a regular keyboard.

Step 1 (**Rest**) sets pauses.

Pressing **Shift** and Step 1 (**Hold**) holds the note.

Set **Glide** by pressing the respective button in combination with the next note (Step).

The octave range can be adjusted by using the **DATA4** key. It is only meant to program a new sequence. You can choose between the values -, 0 and +.

<p>Please note! Saved sequences can not be edited! As soon as a new step (note) is set the previous sequence will be deleted. Parameterlocks are still possible.</p>
--

Programing MIDI-tracks does work the same way. With the exception of the Glide function being disabled.

Roll: With this function, entered notes are being repeated(Note-Repeat).

Shift-Functions

All **Shift functions** are marked blue on the white instrument keys and can only be accessed via Shift (also marked blue). As soon as you've chosen the desired function, it will be shown in the Display. This always works the same way : **Shift+Shift function** (key 1-16) and confirm with **INSTRUMENT/SEL**(Select) key.

1. Shuffle

After selecting the shuffle-menu as described above, the shuffle intensity can be increased by pressing steps 2 to 16. No shuffle is set by pressing step 1.

The shuffle equally applies to all(!)tracks, both in Manual- as well as in Step-Mode.

2. Last Step

Last Step sets the number of steps per bar:

- for all tracks (in Manual-Trigger-Mode)
- individually per track (in Record-Mode)

3. Scale

Rhythmic scaling can be set with this function.

You can choose:

- press key 1 for demisemiquavers.
- press key 2 for 16th triplets,
- press key 3 for 16th
- press key 4 for 8th triplets
- press key 5 for 8th

4. Copy Bar

The display shows which one of the four bars to copy. You either press A, B, C or D. Also, the following should be noted: In Manual-Trigger-Mode all instruments are copied, while in Record Mode only the selected instrument is copied.

5. **Paste Bar**

Press one of the four bar keys to place the previously copied bar.

6. **Saving patterns**

The patterns are saved using the black numbered buttons as already mentioned. The system for entering a pattern location is the same procedure as calling up a pattern (p.13).

7. **Clear Bar**

Select the bar you want to delete. Note that in Record-Mode only the selected instrument and in Manual-Trigger-Mode all instruments are deleted.

8. **Pattern DUMP**

To transfer patterns from Tanzbär 2 to your computer:

- First use the **DATA3** key to choose whether you want do dump from the USB- or MIDI-port.
- Then confirm and start the process by pressing **Select**.

9. **MAN/STEP**

Use the **DATA3** key to switch between Step-or Manual-Mode. Confirm the desired mode with **Select**.

10. Real Time Note Record

With the sequencer running and instruments being triggered, these events are being recorded or can be triggered by MIDI notes.

11. MIDI Learn:

With this mode being selected, Tanzbär expects a MIDI note for each instrument. The note number and the corresponding MIDI channel are saved. After receiving all notes Tanzbär exits this mode automatically.

12. MIDI Clock Setup

The transmission and reception of MIDI data is turned on and off here. To confirm press **Select**. If **Shift** is pressed additionally, the entry is only valid for the current session. If the unit is turned on again, it will be set to the same mode it was set before the last session.

13. MIDI Notes Transmit

MIDI-triggers can be sent to the drum tracks.

MIDI notes transmit is turned on and off by **Data3** key.

If the **Shift** key is pressed, the settings are only saved for the current session.

Press **Select** to save the settings permanently.

14. MIDI CC:

Transmission and reception of MIDI controller values can be turned on and off using the **DATA3** and **DATA4** keys.

The encoders **DATA1** and **DATA2** can not be controlled via MIDI CC.

15. MIDI Thru:

As soon as this function is activated, no internal MIDI functions will be sent to the output. Neither MIDI-triggers, MIDI controller-data nor MIDI-clock. Data being received on the MIDI input, will be passed on to the output. If you only want to pass on incoming MIDI clock data, see **MIDI Clock Setup**.

16. MISC Submenu

Key 1: Set LCD-contrast by Encoder **DATA1** and store by pressing **Select**.

Key 2: MIDI-CC-numbers for MIDI-track 1 can be set using the **DATA1** and **DATA2** encoders. To select a MIDI channel use **DATA3** key.

Key 3: Setting the MIDI-CC-numbers, as well as selecting the MIDI-channel follows the same procedure as for MIDI track 1.

Sample Transfer

All samplebased instruments can be replaced by your own samples. To transfer your samples, please download on the MFB-Homepage the Sample-Transfer-Tool which comes with the newest OS, as well the Update-Tool.

ATTENTION! Please be aware that the maximum length of a Sample can be 8 seconds. Are all Sampleslots full nothing will be indicating, neither the Display or something else. Be aware that there are already saved Samples inside that take Storage space.

To transfer samples from your Computer to the Tanzbär 2 please follow these Instructions:

- Start the Sample-Tool on your Computer or Mac.
- Now connect either the MIDI-Output of your Interface with the MIDI-Input of the Tanzbär 2 or use the USB-Hub on both sides.
- If you have connected your Tanzbär 2 using the MIDI-In/Output please select your MIDI-Interface in the Sample-Tool. If you have connected it using the USB Hubs, Tanzbär 2 will show up automatically as an option to select.
- „Sample Number“ indicates in which slot you want to replace the Sample you have chosen.
- Drag the sample with your mouse and drop it in the field saying „Drop Sample here!“.
- The sample file will show up below the „Drop Sample here!“ field.
- Start the transfer by clicking on „Start Transmission“.
- The display will show the on going Transfer of the Sample

Software Update

To update the device with a new Software please use the Bootloader Software downloadable on www.mfberlin.de.

Update can only be done using a MIDI interface.

- To update the device: Turn on your Tanzbär 2 and hold **DATA3** and **DATA4** key.
- The Display will indicate that the device can now be updated.
- Open the Bootloader. Select your MIII interface. Then select syx. Update file. Start the Update.
- The LEDs glowing up red one by one from left to right indicate the Status of the update. As well as software and display.
- Once the update is done, the display will show: Done!
- Turnn the device off and on. It will show the newest firmware.

The newest OS is 1.03.

MIDI-CC-Tabelle Analoge Instruments

Instrument	Note	Channel
Synth	ALL	1
Parameter		
DECAY	38	
CUTOFF	36	
RESONANCE	37	
ENVELOPE	58	

Instrument	Note	Channel
KICK1	37	3
Parameter:		
ATTACK	0	
DECAY	1	
TUNE	2	

Instrument	Note	Channel
KICK2	38	3
Parameter		
DECAY	8	

Instrument	Note	Channel
SNARE1	52	3
Parameter		
SNAPPY	11	
SNAPPY DECAY	15	
TUNE	14	

Instrument	Note	Channel
SNARE2	53	3
Parameter		
SNAPPY	17	

Instrument	Note	Channel
TOM/CONGA1	40/53	3
Parameter		
TUNE	21	

Instrument	Note	Channel
TOM/CONGA2	41/54	3
Parameter		
TUNE	24	

Instrument	Note	Channel
TOM/CONGA3	42/55	3
Parameter		
TUNE	27	

Samplebased Instruments

Instrument	Note	Channel
VOICE1	44	3
Parameter		
TUNE	93	
CUTOFF	48	
DECAY	40	

Instrument	Note	Channel
VOICE2	45	3
Parameter		
TUNE	94	
CUTOFF	49	
DECAY	41	

Instrument	Note	Channel
VOICE3	46	3
Parameter		
TUNE	95	
CUTOFF	50	
DECAY	42	

Instrument	Note	Channel
OPEN HIHAT	58	3
Parameter		
DECAY	45	

Instrument	Note	Channel
CLOSED HIHAT	57	3
Parameter		
DECAY	44	

Instrument	Note	Channel
CRASH1/2	49/50	3
Parameter		
DECAY	43	

Instrument	Note	Channel
CLAP/PERC1	47/59	3
Parameter		
DECAY	46	

Instrument	Note	Channel
RIM/PERC2	48/60	3
Parameter		
DECAY	47	

Instrument	Note	Channel
RIDE/PERC3	49/61	3
Parameter		
DECAY	61	



Tanzbär 2