DrumIt Five

Operating System 1.2X*

* This manual refers to system 1.2X. Older systems differ in the menu structure and some of the features that are explained here are not available.

Please update the system, so you can fully make use of this manual and your instrument. You can find the updates on our homepage www.2box.se.

You just want to start right now?

Good news for everyone who is in a hurry or just doesn't like to study manuals:

The concept of the DrumIt Five is designed so all functions can be learned by trial and error. Everything can be done by intuition. There are no complicated submenus or hidden key commands.

The logically constructed operating system is virtually self-explanatory.

But first: calibrate the Hihat!

Plug & Play is one of the fortes of the DrumIt Five set.

Setup, plug your cables and play. Only the hihat has to be calibrated the first time you set up. You'll find on page 25 how to do this.

Contents

*= PAGE for settings of single Drum-Channels

⚠ = important advice   ⓘ = practical tip   ❗ = note   🎓 = note for advanced users

1   Intro

Thank you for choosing DrumIt Five of 2box. You made the right choice. Your new instrument combines first-class sound with highest flexibility. The DrumIt-Five module has an open sound architecture and offers 15 independent trigger channels, 8 audio outs and 4 GB sound memory. Combined with the DrumIt Five Pads and the aluminum rack you get a drum set that makes you feel like playing and acoustic drum set.

Trigger

The DrumIt Five has an ultra fast and precise trigger interface and allows virtually latency-free playing with a huge dynamical range. Depending on the pad, you can trigger different sounds via separate trigger zones. The tom- and snare pads of the DrumIt Five have a head and a rim sensor, the cymbal pads even have three zones – edge, bow and bell. In addition, the cymbal pads can be choked for stopping the sound – just like a traditional cymbal.

Sounds

The sounds of the DrumIt Five are convincing through an absolutely natural listening experience. This is achieved by a complex multi-layer method. Drums and cymbals were recorded at hi-end recording studios with sophisticated multi-miking and at various distances. All sounds were mixed in stereo, some rather "dry" and others with clearly audible room ambience.

In a 2BOX "multi-layer" every Instrument is recorded at many different volume levels. So, the intensity of a stroke not only affects the volume, but also the sound and frequency response. Some of the factory presets consist of up to 128 (!) single-layers. The result is an absolutely natural sound performance and an outstanding authenticity of the samples.

You can assign any sound to any drum channel. However, there are instruments with multiple (sound) zones, which are only fully available when they are controlled by a matching pad (for example, cymbal sounds with 3 zones: edge, bow, bell). Each drum sound is saved as a single file and sorted in the respective folders. This way, you keep track of everything and can organize your sounds simple and straightforward.

Memory locations (KITs)

The-DrumIt Five sound module provides 4 GB of sound memory space with 100 presets (KITs). In contrast to common practice, where memory slots are divided into factory-KITs and (blank) user-KITs in DrumIt Five all (!) KITs are already preconfigured at the factory and can nervertheless be modified and saved according to your needs. Of course you can rename and rearrange KITs to make access and handling on stage easier. Please note that for this, the SAVE mode has to be enabled (see page 60).

Play-Along function

If you like to practice with songs or backing tracks, you can load standard WAV files in CD quality (stereo, 16 Bit/44,1 kHz) into the module via USB and then assign them to a KIT. Alternatively, you can connect a CD or MP3 player to the line-in jack. Of course, you can also use this input for other instruments or a monitor mix (live resp. studio).

Metronome

The built-in metronome not only helps you with practicing and refining your technique, but can also be used for live performances. You can save one individually programmed metronome per KIT. There is a variety of time signatures and sounds available and the tempo can precisely be adjusted according to your specifications. The metronome can as well be used as a one- or two-bar count in: The Click automatically stops in the respective mode.

PC / Mac Editor

With the DrumIt Five software editor you can easily manage your module from your computer, and even create your own sounds in DrumIt Five format. Once the DrumIt Five module is connected to your computer (Mac or PC) via USB, you can organize and manage the 100 internal KITs. Assign sounds from the extensive internal DrumIt library and make your personal settings (tuning, volume, pan). You can preview the sounds comfortably on the computer and edit settings with ease.
 In addition, you can create your own sounds in the specific DrumIt Five format. Create your own multi-layered sound files from WAV files, eg. from recordings of your acoustic set or sounds from sample libraries.
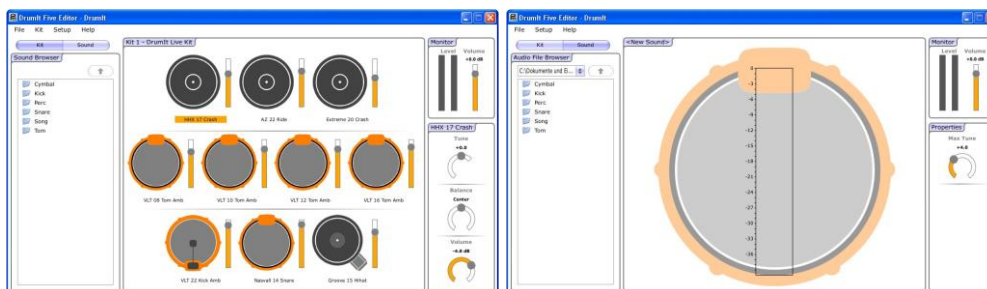
The 2BOX Editor is available as a free download on our website www.2box.se

2   Handling

Playing an electronic drum kit differs from the use of an acoustic drum set, and in some respects requires a different handling.

With the DrumIt Five, the maximum volume of a drum sound – especially rim shots – is not necessarily achieved by powerful strokes, but by adjusting the module settings to your personal preferences.

You may want to review and adapt your playing technique to the new situation. With careful and proper handling of your new instrument, you can look forward to many years of fun with your DrumIt Five.

> ⚠️ **Powerful strokes**
>
> When using electronic drums, high volume levels are not achieved by powerful strokes. You should rather work with the volume settings for each channel and the master volume.

If you are using a complete DrumIt Five drumset, you should pay attention to setting up properly. A proper setup not only protects the instrument, but also your joints.

Especially the cymbal setup is of great importance. Never mount the cymbals horizontally – this may cause defects in the pads. Cymbal pads should be mounted at an angle of $30^{o} - 45^{o}$.

3   Safety Information

Important Safety Information

- Please make sure that the included power adapter is suitable for the power supply of your country.

- Never attempt to open the power supply or modify it.

- Should you nevertheless need a third-party power adapter, use an AC power supply with 18 V/500 mA and DC plug.

- Never use the AC adapter outdoors, avoid humid environments in general.

- The DrumIt Five module has a low power consumption, so it usually does not pose any danger. Nevertheless treat it always with common sense.

- Do not spill any liquids into the device.

- Do not drop the unit.

- Do not apply excessive force when dealing with the module.

- Do not expose the module to extremely hot (> 40° C) or extremely cold environments (below 0° C).

- Make sure that the bottom and rear of the unit and power supply are not obscured unnecessarily. Both heat up during operation and require a certain amount of air circulation.

- In short: Handle the DrumIt Five module as carefully as other electronic devices. Then you will enjoy it for years.

4 Basic Know-How

4.1 USB mode

When you connect the DrumIt Five module via USB to your computer (PC or Mac) and run it in USB mode, it will be recognized and displayed as a "normal" memory drive. The module now behaves exactly like an external USB hard drive or a card reader. You can e.g. exchange, move and copy the sound files by drag & drop between your computer and your 2BOX module. This makes the management of 2BOX sounds as easy and straightforward as working with digital photos, MP3s or Office files.

In order to start the DrumIt Five module in USB mode, simply hold down the left DATA button above the display, while powering up the unit.

The display shows:

USB_Disconnected: No USB connection   →   *USB_Connected: Active USB connection*
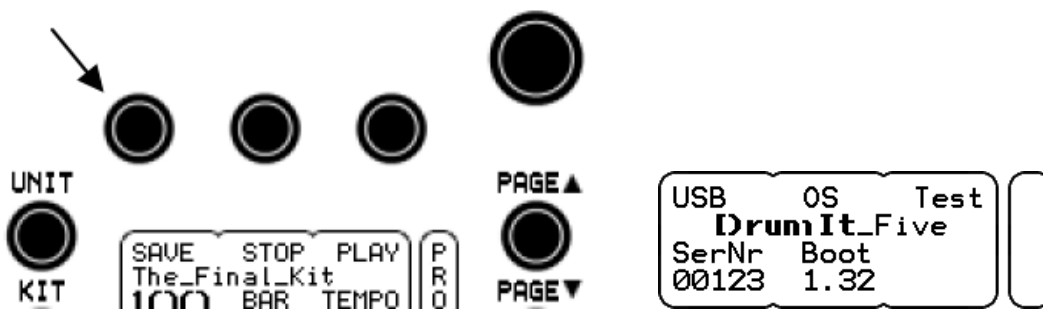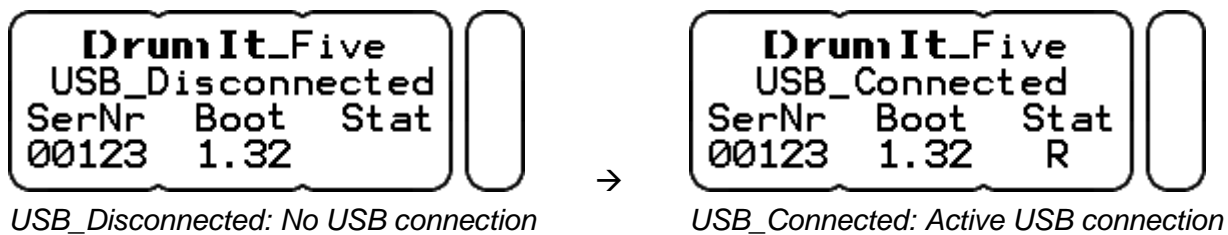
When the module is correctly connected to the computer, "R" (below "Stat") symbolizes read mode and "W" write mode. Please note that errors may occur in the file system when you disconnect the USB cable while the module is in read (R) or write mode (W).

Back Up

When your DrumIt Five module is connected to your PC via USB, you can easily save the content of the module so as to prevent accidental loss of your sound files.

Copy the uncompressed files to your computer or use a conventional back-up program.

4.2   Menu structure

The DrumIt Five module is characterized by a simple and intuitive menu structure. There are two general operating modes:

UNIT: In the mode UNIT, you make general settings for your module.

KIT: in the mode KIT you will find all pages that you need to edit a KIT. A "KIT" is a set, factory made or edited resp. programmed by you, that contains all drum channel, sound, effect, tempo and song settings and is stored on one of the 100 program memory locations.

Each mode has a number of pages, on which the various functions are grouped thematically. There are pages that contain global settings and others that allow separate settings for each drum channel. The latter are indicated by * in the chapter heading and the table of contents.

Scroll through the respective menu with PAGE ▲ or PAGE ▼ to select the desired page.

4.3 File-System

The DrumIt Five module can be connected to a computer (PC or Mac) via USB and then acts like a conventional external mass storage device (see also page 19).

In order to simplify the handling of the files, you'll find explanations of the file and folder system of the DrumIt Five in the following.
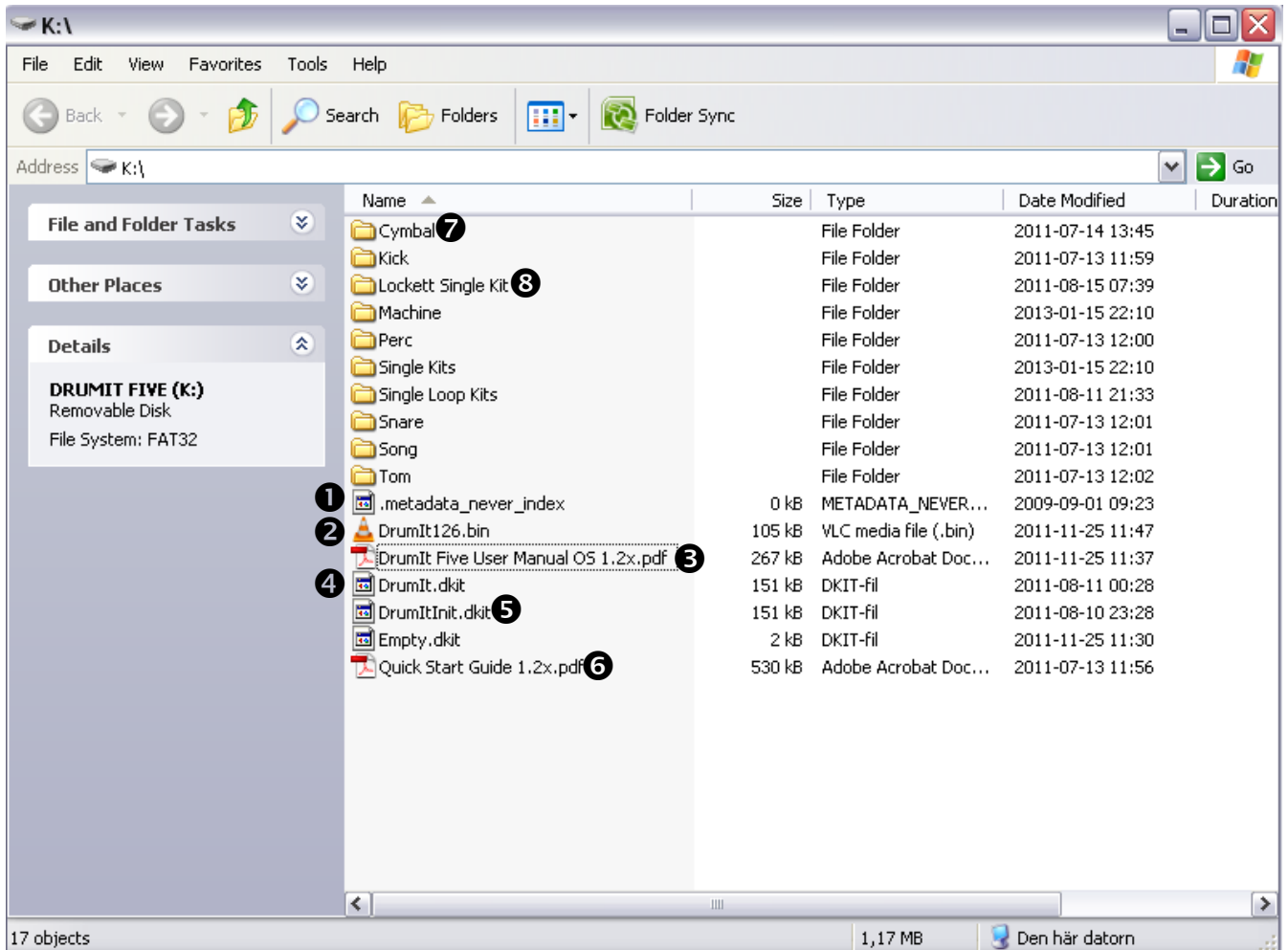
Folders

The folders of the DrumIt Five can contain both sound files ❼ and KIT files❽ (see screenshots below). You can change the folder structure according to your own ideas and preferences, and give the file storage system your personal structure. With regard to the size of the DrumIt Five module's display and for reasons of clarity, it is recommended not to use long folder names and not to create too many levels.

Files

❶   indexing file that is required for Mac OS

❷   **operating system** DrumIt Five (.bin file)

❸/❻ manuals in PDF format

❹   **User-KIT-Bank**; in this file, your personal KIT and UNIT settings are
       saved (dkit file.)

❺   In this file, factory KIT- and UNIT- settings are stored. This file enables you to restore
       factory default settings
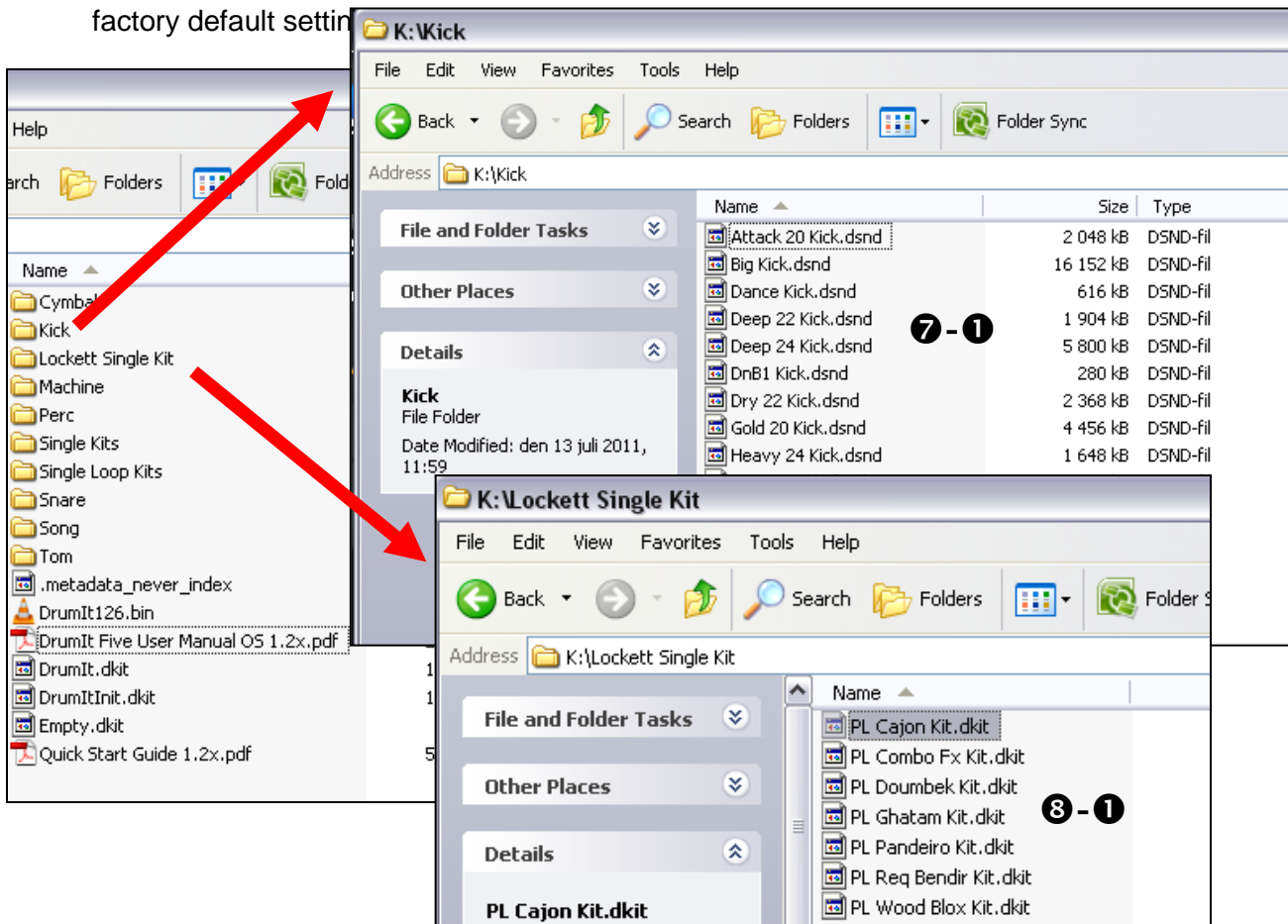
❼-❶ **sound files** in the 2BOX format (dsnd.)

❽-❶ **Single-KIT**-files

> **ⓘ**   **Don't forget to back up regularly!**
>
> Connect your DrumIt Five module to a computer and save your files with a back-up program
> or by simply copying via drag and drop.

4.4 User-KIT-Bank and Single-KIT-file

User-KIT-Bank

The user-KIT-bank (drumit.dkit)) contains 100 KITs (program memory locations), which are already filled with a variety of factory preset KIT setups. All 100 KITs can be changed freely by you and then stored if necessary. Please note that for this the SAVE mode has to be enabled (see page 60).

> **Multiple user KIT banks**
>
> From operating system 1.20 on, it is even possible to have multiple user KIT banks. Just copy the drumit.dkit file to your module and rename the file according to your ideas. Now there are 2 user-KIT-banks with 100 editable user KITs each available! To switch between the user-KIT-banks, you have to select the respective bank when starting the module. To do this, hold down the KIT button when the unit is powered up. In the menu that now appears, you can choose between the various user KIT banks (PREV and NEXT) and then open the desired KIT bank (OPEN).

Single-KIT-file

In addition to the user KIT bank (see above), the DrumIt Five module can manage up to 999 (!) single user KITs. These user KIT files are single, editable program memory locations, each containing only one kit.

To use single user KITs, start the module in USB mode and copy the desired user KIT file (.dkit) together with the corresponding sound files to your module. It does not matter where the file is stored. The DrumIt Five module automatically recognizes new user KITs and makes them available in alphabetical order beyond the KIT program number "100" after a restart. The file name is also the name of the KIT in the DrumIt Five module. For example, when the file is named "My_Rock_Set.dkit", this appears as user KIT "My_Rock_Set" in the display of your module.
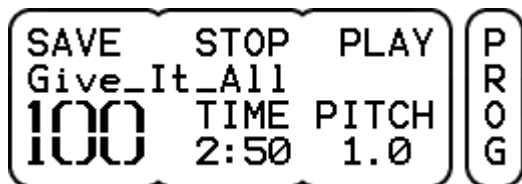
Display view: User KIT Bank
(large numbers 1 to 100)
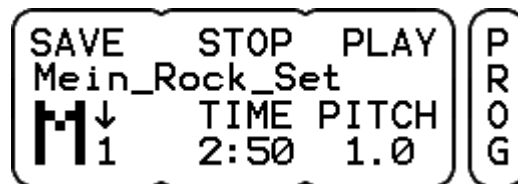
Display view: User KIT file
(Initial letter KIT + sequential number)

Creating a User KIT-file

There are several ways to create user KIT files. You can copy one of the existing user KIT files that are available as a free download on our website (www.2box.se) or you can use the export function of the editor software. This editor software is also available as a download on our homepage.

Changes to user KITs can be stored using SAVE. Please note that names of user KITs can not be changed in the saving process. If you want to change a name, you have to rename the respective user KIT file. It is not possible to copy settings from the KIT bank (program memory location 1 to 100) to a user KIT. Settings from user KITs, however, can be copied to any program memory location of the KIT bank.

A user KIT can not be accessed via MIDI Program Change command. If you want to select a kit using this MIDI function, you have to copy it to the KIT bank first.

Exchanging KIT-settings

Single-KIT files are a great way to share KIT settings with other DrumIt Five users.

You have created e.g. a set that sounds like the drum sound on Michael Jackson's album "Thriller"? You want to make this kit available for other 2BOX drummers? No problem! Simply send the respective user KIT file (including all required sound files) to your 2BOX friends. Done ...

4.5   Channel overview

The table below provides basic information about the functions of the DrumIt Five module.

Drum-Channel	Trigger-Channel	MIDI-Note	Zone				Choke
			1	4	8	9	
KICK	KICK	C2	Head	-	-	-	
SNARE	SNARE	F2	Head	-	-	-	
	PERC 5	F#2	-	-	Rim	-	
HIHAT	HIHAT	A2-A#2-B2	-	Bow	Edge	Foot	
TOM 1	TOM 1	D3	Head	-	-	-	
	PERC 1	D#3	-	-	Rim	-	
TOM 2	TOM 2	F3	Head	-	-	-	
	PERC 2	F#3	-	-	Rim	-	
TOM 3	TOM 3	A3	Head	-	-	-	
	PERC 3	A#3	-	-	Rim	-	
TOM 4	TOM 4	C4	Head	-	-	-	
	PERC 4	C#4	-	-	Rim	-	
CYMB 1	CYMB 1	E4-F4-F#4-(G4)	Bell	Bow	Edge	-	X
CYMB 2	CYMB 2	B4-C5-C#5-(D5)	Bell	Bow	Edge	-	X
CYMB 3	CYMB 3	E5-F5-F#5-(G5)	Bell	Bow	Edge	-	X

Drum-Channel

A Drum Channel is synonymous with the connectivity options of the module (see also page 16). To each drum channel, a Drum Channel button is assigned, that you can use to preview the sound. Also, while editing sounds, you use these buttons to select the respective drum channel (see also page 20).

Trigger-Channel

The DrumIt Five module has 10 jacks for pads. But there are up to 15 independent trigger channels available, since five of the drum channels are designed as **Dual-Channels** (SNARE, TOM 1 to TOM 4). These additional trigger channels are referred to as **PERC 1** to **PERC 5** (see table) and can be edited like the other drum channels. The additional channels can be controlled via both MIDI and pads.

MIDI-Note

The table shows the MIDI notes that are assigned to the individual trigger channels at the factory. Of course these settings can be changed individually (see also page 52).

There is a special feature on the Drum Channels HIHAT and CYMB 1 to 3 (highlighted in gray in the table). Each MIDI note controls one zone resp. the choke function (in the table marked by ()).

Here's an example:

CYMB 1: E4 = bell, F4 bow, F#4 = edge, (G4) = choke function

The four MIDI notes are grouped together and can not (!) be changed individually. Only the first MIDI note can be edited (see page 52). The other MIDI notes are linked to the first note. The notes are always successive half-steps. If e.g., the MIDI note of the Drum Channel CYMB 1 (see example above) is changed from E4 to G4, the MIDI notes of the other zones automatically change accordingly.

CYMB 1: G4 = bell, G#4 = bow, A4 = edge, (A#4) = choke function

Please make sure that there is no overlap with other channel settings.

Zone

Similar to an acoustic instrument that sounds different depending on where it is played, there are sound areas, called zones, which, depending on the type of drum channel (e.g. TOM, CYMB), have different sounds assigned to. The various types of Pads feature in turn playing areas (zones), corresponding to the respective (sound) zones.

Please note that you may not be able to use all of the sounds when you connect a pad in which the playing zones do not match the zones of the drum channel. For example, if you use a tom pad on a CYMBAL channel, you will not be able to trigger all sounds.

Trigger-Channel PERC 1 to PERC 5

To edit a **PERC Channel** , you have to hold the MORE button while you press the button of the related drum Channel (SNARE, TOM 1 to TOM 4).

Example: Press MORE + SNARE to select the channel PERC 5.

If there is no sound assigned to a PERC channel, the rim sound of the associated trigger channel is used automatically.

Example:

Situation	trigger-channel	assigned sound	zone	
			1	8
No sound assigned to the PERC-Channel	SNARE	Maple_10_Snare	head sound "Maple_10_Snare"	rim sound "Maple_10_Snare"
	PERC 5	-	-	-
With sound assigned to the PERC channel	SNARE	Maple_10_Snare	head sound "Maple_10_Snare"	-
	PERC 5	Bobs 1950 cowbell	-	sound "Bobs 1950 cowbell"

5   Connections

PHONES OUT5 OUT3 OUT1 TOM4 TOM3 TOM2 TOM1 SNARE OUT MIDI IN USB ACIN POWER

LINEIN OUT6 OUT4 OUT2 CYMB3 CYMB2 CYMB1 HIHAT KICK

❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

❺ MIDI

KICK
SNARE
HIHAT

TOM1-4

CYMB1-3

OUT1-6

LINE IN

❻ USB

❼ POWER

PHONES

❶ ❷ ❸ ❹
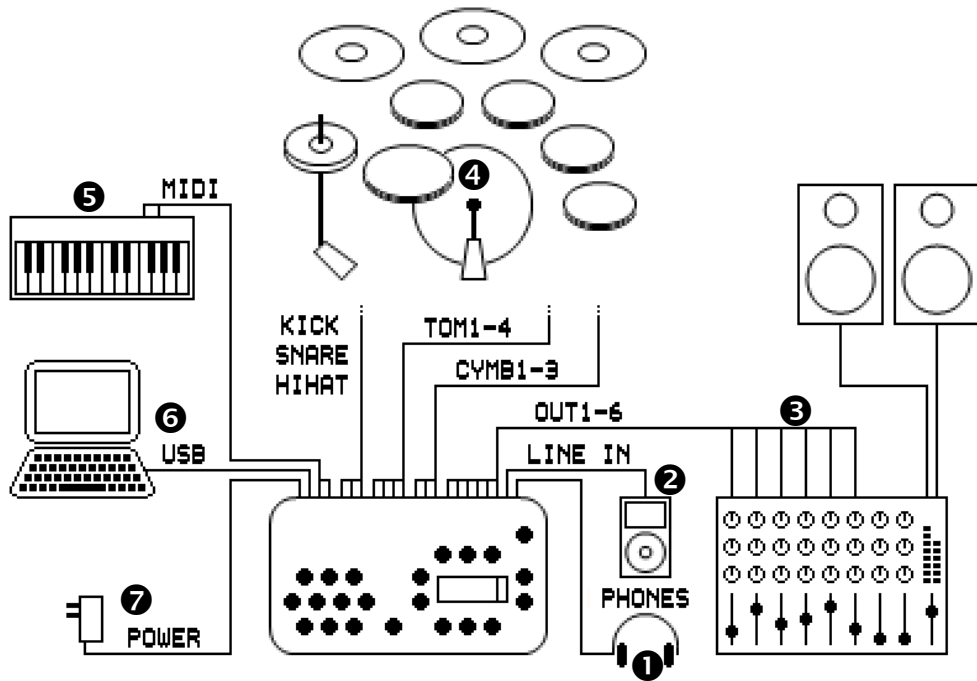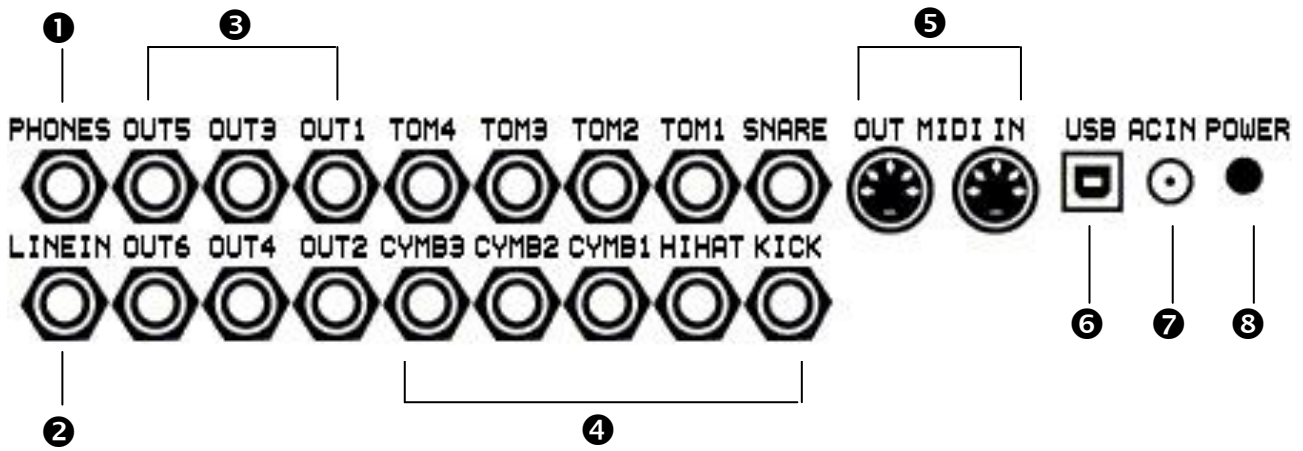
❶ PHONES: Headphone jack

Plug your headphones into this 1/4" stereo phone jack (recommended impedance 32 Ω - 600 Ω). Adjust to the desired volume with the LEVEL control LEVEL control right above the display.

Headphone jack as single output

As a default setting, the stereo main mix signal is on this output. But you can use this socket also as additional single outputs 7+8, by plugging a Y-splitter cable (1 x stereo jack to 2 x mono jack), into it and make the respective settings in the UNIT menu on page OUT (see examples on page 64). In the default setting the headphone output is twice as loud as the line outputs 1 to 6 (approx. 6 dB). As soon as you switch the headphone output to single output „7+8!" this level is automatically reduced and adjusted to the other six single outputs - the sound engineer will be pleased ...

❷ LINE IN: Input jack

Here you can plug in any stereo line source in order to e.g. play / practice with accompaniment (MP3 or CD player). Another possibility is to feed the sum of an external mixer or its monitor signal into this input in live or studio situations. You can use either a stereo or a mono cable. In a stereo jack cable the left channel of a stereo signal is on the tip and the right channel on the ring of the stereo jack. If you plug in a mono cable, the audio signal is only heard in the „center", when you select "mono" on the page OUT in the menu UNIT (see also page 55). Please note that the factory default setting of the LINE IN volume is set to "0" in the MIX. To hear LINE IN you will need to raise the value.

❸ OUT1 to OUT6: Single Outputs

With these, you connect the module to an external mixer or audio interface. OUT1 and OUT2 act as the main output and supply the entire stereo signal as default setting. Depending on the application, you can assign separate instruments (drum channels) to the individual outputs (OUT1 to OUT6). You have thus 6 or 8 (see PHONES) separate output signals for a variety of application situations at your disposal (more on page 64).

❹ **Drum-Channel/Trigger Inputs**

Connect the respective pads with the included stereo cables (included with the complete sets only) according to the labels on the module. Note that although you can in principle plug any pad to any input, however, there may be limitations in terms of functionality, because the various channels (e.g. toms, cymbals, etc.) have different sound zones, which are designed for the corresponding drum pad and its use (see also page 14). If you plug for example a tom pad (2 zones) to a cymbal-channel (3 zones), you can not use all (sound) zones of this channel.

Connector Assignment

All pads are connected with stereo jack cables. The trigger signal for the main zone is always on the tip of the plug, the signals of other zones or controllers are on the ring.

Additional Trigger-Channels

It is possible to use an additional five trigger channels (PERC 1 to 5) to increase the number of pads connected to the DrumIt Five module from 10 to a total of 15 pads.

In order to be able to use the additional trigger channels, connect two pads with a Y-splitter cable (1 x stereo jack to 2 x mono jack) to the SNARE or the TOM channel. Here, the stereo plug is inserted into the module and the two mono plugs into the pads.

Important! If you connect the pads this way, you can only use the main zone (e.g. head) and will lose all other trigger signals (e.g. rim).

For example, you connect two pads to a TOM channel as described above. On both pads only the head sensor works, but no longer the rim sensor. On one side you lose ... the rim as a trigger source, but on the other hand, you gain an additional playing area, to which you can assign a sound of your choice.

❺ MIDI-Ports

Via the MIDI OUT - port, you can control an external MIDI sound module or send MIDI data from the module to a sequencer or other software. Connect the module for this purpose with a standard MIDI cable to the MIDI IN of the external device. Now the MIDI data generated by the pads is transmitted.

Vice versa you can use the MIDI IN port to control the module from an external controller or sequencer and thus use it as a sound source only. For this, connect the MIDI OUT of the external device to the MIDI IN of the DrumIt Five.

❻ USB-Port

This port lets you connect the module to a computer (PC or Mac). The USB port on the DrumIt Five is a 1.1 port (full speed - 12 Mbit/s) and compatible with USB 1.1 and USB 2.0. The DrumIt Five module is designed as a standard USB mass storage device and requires no driver installation. Once the module is connected to the computer and started in USB mode, it is immediately recognized as an external storage drive. You can now handle the module like an external hard drive or a USB stick.

In order to start the DrumIt Five module in USB mode, hold down the left DATA button above the display while powering up the unit.

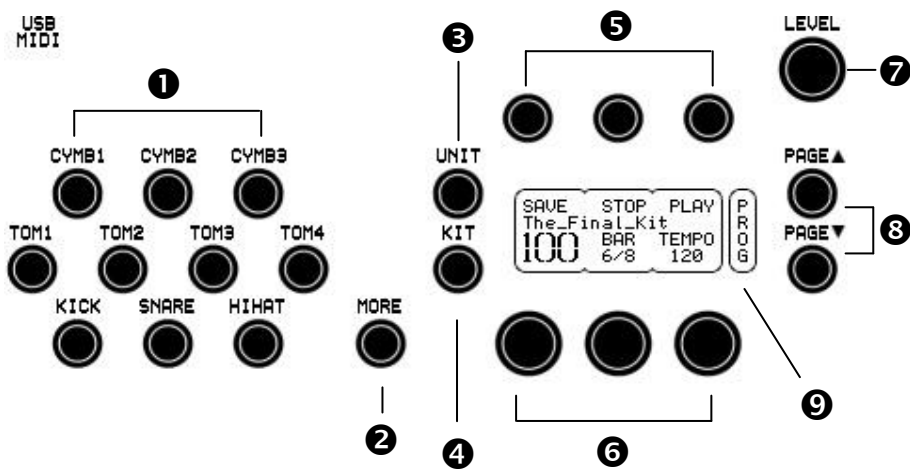**❼ AC IN** socket for 18 V AC power adapter

Original Power Adapter

Use only the original power adapter. AC adapters with a higher voltage than 18V AC or any DC power adapter can seriously damage the module!

❽ POWER Switch

Turns the unit on and off.

6 Controls

❶ Drum Channel Buttons

To the left of the control panel you find 10 round buttons that are associated with the trigger inputs and named accordingly. The labeling of the channels follows the suggested factory configuration and reflects the commonly used e-drum setup. Of course, any sound can be assigned to any channel, individually and to your liking.

The channel buttons are used for previewing the assigned sounds and for selecting a certain drum channel in order to make settings.

The five additional trigger channels PERC 1 to 5 (see also page 14). are selected by holding down the MORE button❷ while you press the SNARE button or one of the four TOM buttons. The volume of the sounds triggered by the channel buttons (prelisten function) can be edited (see page 60, mode UNIT page PREF).

❷ MORE Button

With the MORE button you can access the additional trigger channels (PERC 1 to 5 - see above). You also need the MORE button for additional functions and operational steps (such as undo / redo, see page 29).

With the help of the MORE button you can e.g. call up the most recently visited edit page in the modes UNIT or KIT. For this, hold down the MORE button and press UNIT or KIT. Now the display will automatically jump to the last page you were on (for example KIT FX, or UNIT TRIG) and you do not have to scroll through the entire menu again.

If you hold down the MORE button, you can use the DATA buttons to call up parameter values in reverse order – i.e. backwards.

❸ **UNIT Button**

This button takes you to the "UNIT" mode and the corresponding pages. In the UNIT menu, you make settings of parameters that affect the entire DrumIt Five system and apply globally to all KITs (e.g. mixer, trigger, MIDI and general pad settings). The UNIT-mode is active when the label above the button lights up.

❹ **KIT Button**

Pressing this button, you enter the "KIT" mode with the corresponding pages and change the respective KIT settings. When switching on the module, the KIT-mode is already active (the label above the button lights up).

❺ **DATA Button**

These three buttons are used to stepwise change the parameters that are displayed in the upper two rows of the display below. Examples: saving of settings, undo / redo steps, start / stop commands for the metronome respectively the media player).

❻ **DATA Controller**

These three alpha dials are used to adjust the respective parameters shown in the upper part of the display. In addition, they function as a pushbutton that, depending on the page, allows you to enter more commands or call up additional parameters. This option is shown in the display by an arrow behind the respective parameter. This points to a second functional level, which is reached by pressing the pushbutton.
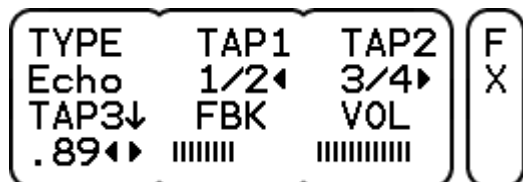
❼ **LEVEL Control**

This control adjusts the overall volume of the module. By default, this affects both the headphone output and the main outputs OUT1 and OUT2; but in the menu the latter can be uncoupled from the LEVEL control, so that your output always has a fixed level (see page 55 UNIT – OUT).
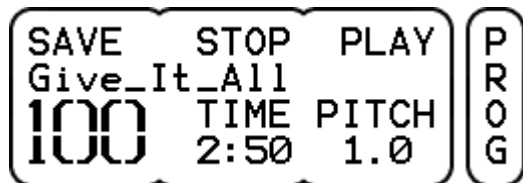
❽ **PAGE Button**

Use these buttons to move through the respective menus (UNIT or KIT).

➒ Display

The display of the DrumIt Five-module can give a readout of up to 6 parameters. In general, these are three below the DATA buttons and three above the DATA controllers. The name of the parameter is always in the upper row (see example: TYPE, TAP1, TAP2, TAP3, FBK, VOL) and the value to be edited beneath (see Example: Echo, 1/2, 3/4, .89, llllllll, llllllll).

```
TYPE    TAP1  TAP2    F
Echo    1/2◀  3/4▶    X
TAP3↓   FBK   VOL
.89◀▶  llllllll  llllllllll
```

However, there are pages in which the value extends over several fields. However, from the context it is obvious what it is about. In the example below, the entire second row is used for the KIT-name and the KIT number is displayed without a heading.

```
SAVE    STOP   PLAY    P
Give_It_All             R
100     TIME  PITCH    O
        2:50   1.0      G
```

In addition, on some pages not all the buttons / controllers have a function assigned. On the page MIDI (see example below) two of the three controllers have no function.

```
PRCHG LOCAL  THRU     M
 On     On    Off     I
CHAN                   D
 10                    I
```
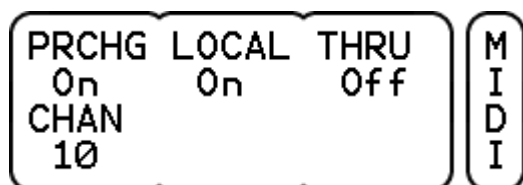
Furthermore, there are pages on which only one single, specific function is assigned to a button. In the example below, a START/STOP command is given with the right button over the display.

```
TYPE↻          PLAY    A
Give_It_All             C
FILE↓   TIME   VOL     M
 13     2:50  llllllllll  P
```
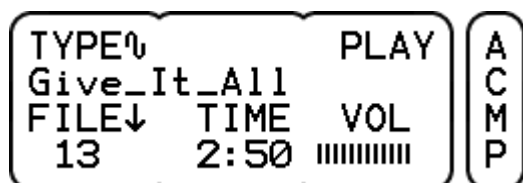
On the right side, a separate, vertical section of the display always shows on which page you are currently in the menu.

7 Setting Up And Getting Started

Now that you have got yourself a general idea on the previous pages, let's get in action: Set up the DrumIt Five kit (see separate instructions) and hook up the pads either according to your own ideas, or to the factory recommendations.

Pads and Triggers

If you are using the DrumIt Five pads and have them wired as specified, you only need to calibrate the hihat (see chapter Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden.on page 25) and you can start immediately. If you use pads or triggers from other manufacturers with the DrumIt Five module, you may have to change trigger settings because the factory defaults were naturally optimized with DrumIt Five pads in mind. On page 47Seite 47 you'll find how to adjust trigger settings.

Monitoring

To hear the sound of your new e-drums, you need to either plug in headphones or connect the DrumIt Five module to a PA system, a mixer or an amplifier. Adjust the volume with the volume control. In the factory default setting, the headphone signal will be softer or louder in the same ratio as the sum signal „Main Out" (OUT1·2).

Output- Options

The DrumIt Five offers an optimal "output" solution for every use. From a simple stereo main mix on the headphones to individual monitor and playback setups, you can create almost anything with the routing capabilities of the DrumIt Five. Up to eight individual output (direct out)) signals can be used for live or studio applications. A detailed description of the most important options and suggestions for creative applications can be found starting at page 64.

Connecting The DrumIt Five

The DrumIt Five is designed for the use with pro audio equipment (PA, mixer, audio interface, amplifier, etc.) and with headphones. On standard consumer audio systems, the tweeters of the connected speakers can be easily damaged by the relatively high dynamics of the output signal, so therefore take care what devices you plug the DrumIt Five to.

Always start with a low volume and then increase gradually.

Selecting a KIT

After switching on the module, the DrumIt Five is in the KIT mode (KIT LED is lit). Use the left DATA knob to call up the various KITs of the user KIT bank.

See **chapter 9** for a detailed description of how to make changes to the default KITs.

Adjusting the Volume

The LEVEL control adjusts the volume of the DrumIt Five. In the factory default setting the turning of this knob changes the volumes of the line outputs OUT1·2 and the PHONES output at the same time. This setting can be modified for other situations (see examples on page 64).

Saving

Any changes made in the modes KIT and UNIT can be saved if SAVE is enabled (see page 60). For this, use the SAVE function on the respective main page.

UNIT-MIX (see explanations on page 45)

KIT-PROG (explanations starting on page 31)

Editing

The editing of KITs and sounds in the DrumIt Five is intuitive. Go to the respectively required page and then select the drum-channel to be edited by pressing its drum channel button. Hold down the MORE button to select a PERC-channel (see information in Chapter Fehler! Verweisquelle konnte nicht gefunden werden. Fehler! Verweisquelle konnte nicht gefunden werden.). Change the parameters with the respectively assigned DATA buttons and controllers.
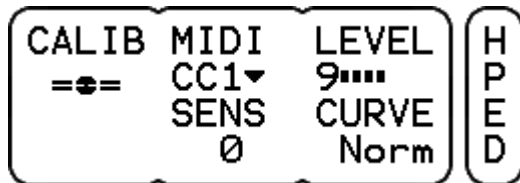
8   Calibrating the Hihat

When you connect the Hihat for the first time you must perform a calibration. Usually a message appears asking you to calibrate the hihat. At this point, the hihat machine should of course already be installed or set up correctly. Now take the barrel shaped receiver and slide it – green rubber side facing upwards – down the hihat rod until it sits on the seat for the bottom cymbal. Now, mount the pad on the hihat machine like a regular top cymbal and plug it into the module using the supplied stereo cable.

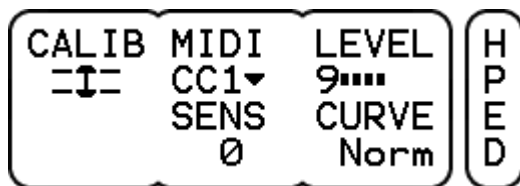Then press the UNIT button and go to the page HPED using the PAGE buttons.

As soon as you have accessed the page HPED, the calibration process will start automatically. The display shows a flashing icon that looks like a closed hi-hat.

```
┌─────────────────────┐ ┌───┐
│ CALIB MIDI   LEVEL  │ │ H │
│  =●=  CC1▾  9▪▪▪▪    │ │ P │
│       SENS   CURVE  │ │ E │
│         0    Norm   │ │ D │
└─────────────────────┘ └───┘
```
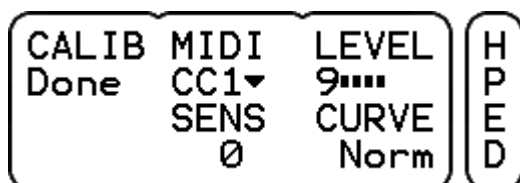
! If you have already performed a calibration of your module previously, the process will not start automatically. The hihat symbol will not flash! To start the calibration, you need to press the DATA button to the left. Now you see the flashing icon of a closed hi-hat and can proceed.

"Close" the hihat, by stepping on the pedal, or releasing the clutch, so that the pad rests on the bottom.

Press the left DATA button again and the flashing icon will change once more. It now looks like an open hi-hat.

```
┌─────────────────────┐ ┌───┐
│ CALIB MIDI   LEVEL  │ │ H │
│  =I=  CC1▾  9▪▪▪▪    │ │ P │
│       SENS   CURVE  │ │ E │
│         0    Norm   │ │ D │
└─────────────────────┘ └───┘
```

Now mount the pad just like an acoustic hihat-cymbal at the desired height. Finish the calibration procedure by pressing the DATA button a third time. If the calibration was successful, you will see „Done" in the display.

```
┌─────────────────────┐ ┌───┐
│ CALIB MIDI   LEVEL  │ │ H │
│ Done  CC1▾  9▪▪▪▪    │ │ P │
│       SENS   CURVE  │ │ E │
│         0    Norm   │ │ D │
└─────────────────────┘ └───┘
```

Now check the calibration. If the behavior of the hihat, concerning playability and reaction, does not meet your expectations, you can repeat the process and make a different setting by varying the height of the hihat pad.

You can also make further settings for the hi-hat. These are explained on page 51.

If the display reads „NoChg", there was a problem with the calibration.

```
┌──────┬──────┬───────┐┌───┐
│CALIB │MIDI  │LEVEL  ││ H │
│NoChg │CC1▾  │9▪▪▪▪  ││ P │
│      │SENS  │CURVE  ││ E │
│      │  0   │ Norm  ││ D │
└──────┴──────┴───────┘└───┘
```

Check the setup and perform the procedure again.

! In case that you have already performed a successful calibration, "NoChg" only means that the settings have not changed.

9 KIT-Mode

In the menu KIT you will find all pages that you need to edit a KIT. A KIT includes all settings of individually assembled setups that are stored in one program memory location.

A KIT can be a **drum setup** (bass drum, snare, toms, cymbals), a **Percussion setup** (tablas, bongos, congas usw.), an **effect setup** (Loops, Sounds) or a **„mixed" setup**.

Within a KIT sounds are assigned to the various drum channels, and custom sound, effects and EQ settings are saved. In addition, each KIT includes either a metronome or a media player (see also page 42).

The user KIT bank has 100 fully changeable and saveable KITs. More details on page 12.

In the following you will learn how to save, rename, move or copy a KIT. These functions are available directly - and only - on the main page of the KIT mode.

Saving a KIT

If you have made changes on a KIT page and want to keep them, you have to save the modified KIT.
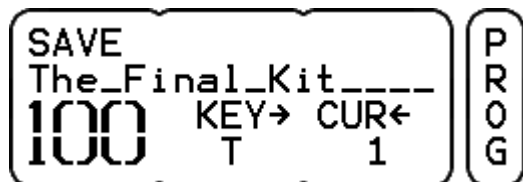
> **!** Please note that the SAVE function of the DrumIt Five has to be switched on in order to be able to save a KIT. If you cannot perform the SAVE procedure described below, that function is turned off. How to activate the SAVE function is explained on page 60.

A „**?**" next to **SAVE** on the KIT main page indicates that the selected KIT has been changed.

```
SAVE?  STOP  PLAY  P
The_Final_Kit       R
100    TIME PITCH   O
       2:50  1.0    G
```

Now press the left DATA button above the display.

```
SAVE               P
The_Final_Kit____  R
100    KEY→ CUR←   O
        T      1    G
```

If you press the button above SAVE once more, the KIT is stored.

In the saving process you can also rename, move or copy a KIT to another program location:

Renaming a KIT

If you want to rename a KIT, press the button above SAVE at the KIT main page.

```
SAVE                    P
The_Final_Kit____       R
100    KEY→ CUR←        O
        T        1      G
```

You can use uppercase and lowercase letters, numbers and various symbols. With the rotary control in the middle you can select the desired letter by turning or insert a space by pressing the knob.

With the right rotary control you set the cursor position - indicated by the flashing underline in the display. Pushing the right rotary control deletes the character above the cursor. If you hold down the MORE button and turn the rotary control clockwise, all characters beginning at the cursor are moved. If you turn the rotary control counterclockwise, however, you clear all characters up to the cursor. To finish, press the left button above the display (SAVE) again.
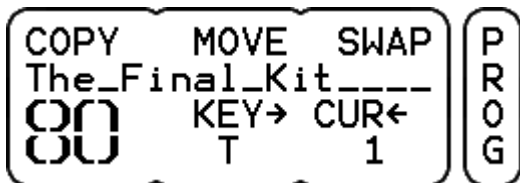
Copying, moving and swapping a KIT

You can also move a kit, swap it with another kit or copy it to another program location.

To do so, press the left button above the display.

```
SAVE                    P
The_Final_Kit____       R
100    KEY→ CUR←        O
        T        1      G
```
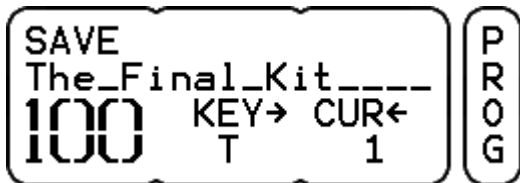
Now change the kit number with the left controller, a corresponding selection is displayed.

```
COPY    MOVE   SWAP     P
The_Final_Kit____       R
80     KEY→ CUR←        O
        T        1      G
```

If you now press the left button (above COPY), the KIT is copied 1:1 to the selected program location (in this example to No. 80).

With the button in the middle (above MOVE) you insert the KIT to the selected program number. The old KIT and the following KITs are shifted, the numbers change according to the new position. In this example, the old KIT becomes No. 81. Accordingly, all following KITs are shifted by one position (the numbers will change +1).

When you press the right button (above SWAP), the memory locations are swapped. In the example above KIT No. 100 becomes the new No. 80 and the old KIT No. 80 the new No. 100

Data Exchange Between User-KIT Bank and Single-KITs

Renaming, copying (COPY), moving (MOVE) and exchanging (SWAP) of a KIT is only possible within the user-KIT-bank. An exchange between multiple user-KIT-banks or between single-KITs is not possible.

Canceling the SAVE Process

To cancel the save process and exit the SAVE menu, simply press the KIT button. The changes you made remain valid, as the „?" next to the SAVE option in the menu indicates, but are not stored.

Dismissing Changes

If you decide not to save the changes you made, there are two ways to cancel the settings:

Simply select, without saving, another KIT, and the changes are lost.

The UNDO / REDO function offers another possibility.

UNDO/REDO

If you press the MORE button before you save, an UNDO function comes up in place of the SAVE function. If you select UNDO, the changes will be reset, but stay cached.

```
UNDO   STOP  PLAY   P
The_Final_Kit        R
100   TIME PITCH    O
100   2:50  1.0     G
```

If you press the MORE button once again, you get a REDO option. With this, you can restore your changes.

```
REDO    STOP  PLAY    P
The_Final_Kit           R
100     TIME PITCH      O
        2:50  1.0       G
```

> **UNDO/REDO**
>
> The UNDO / REDO function is a great way to compare new settings with the original KIT. This feature allows you to switch back and forth between two KIT variants. This way, you can check simply and easily e.g. during a sound check whether the new toms work with the band sound or not.

The various PAGES of the menu are explained in the following. To access these, scroll with the PAGE ▲ and PAGE ▼ buttons to the right of the screen.

Please note that some menu pages affect the whole KIT, while others change the settings for a single drum channel. To make clear at which pages you can make settings for single drum channels, the respective sections are marked as follows:

* = Page with settings for single drum channels within a KIT

9.1 KIT – PROG

```
┌──────────────────────┐┌─────┐   ┌──────────────────────┐┌─────┐
│ SAVE   STOP   PLAY   ││ P   │   │ SAVE   STOP   PLAY   ││ P   │
│ The_Final_Kit        ││ R   │   │ The_Final_Kit        ││ R   │
│ 100    TIME PITCH    ││ O   │   │ 100    BAR  TEMPO    ││ O   │
│        2:50  1.0     ││ G   │   │        6/8  123.4    ││ G   │
└──────────────────────┘└─────┘   └──────────────────────┘└─────┘
```
Display view: KIT with Song   *Display view: KIT with metronome*

NUMBER   The large numeral indicates the KIT number. Use the left rotary control to select a KIT (program location).

SAVE   See detailed descriptions on page 27.

PLAY/PAUSE   PLAY starts - if available – the song or metronome loaded with the KIT (see also page 42). Do this with the DATA button to the right.

When you have started a song with PLAY (Right DATA button), the display changes to PAUSE. With PAUSE (right DATA button again), you can pause the song. The time display below TIME will flash, signaling the PAUSE status.

STOP   Stops playing back the song or the metronome (DATA button in the middle)

Functions for KITs With a Song:

TIME   Shows the elapsed time of the song. If no song is selected, "-" appears in the display. *(The knob has no function)*

PITCH   This feature allows you to change the tempo of the song. You can adjust the tempo in a range between .50 and 1. This feature is useful for playing back the song slower while practicing. Please note that this also changes the pitch.

Functions for KITs With Metronome:

BAR   Indicates the selected metronome setting. While the metronome is running, you can read the current bar and the current beat here. *(The rotary control has no function)*

TEMPO   Here you can see or edit the current tempo of the metronome. The metronome has a tempo range from 30 to 280 bpm When you push the rotary control, an arrow appears pointing to the right and you can set the tempo in decimals. If you push the controller once more, you can change the tempo in whole bpm steps again.

Saving the Tempo

The tempo of the metronome is stored with the selected KIT. If you want to change the tempo and keep this change, you have to save the KIT (SAVE).

This function is useful for preparing several tempos for a live performance, which you can recall in succession by selecting the respective KITs.

STOP ALL

With the key combination MORE + STOP (DATA button in the middle) you stop the playback of all sources at once (song, metronome, loops).
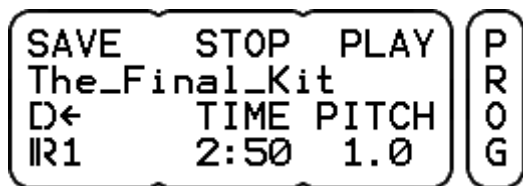
Quick Search Function: Quickly Find and Select Single-KITs

As described in chapter 4.4, page 12, the DrumIt Five distinguishes between a user-KIT-bank with 100 memory locations and single user KIT files (see page 12) with only one memory location. The user KIT files (also called single KIT) are stored in alphabetical order starting after the KIT program number "100".

The Quick Search feature allows users to search and select KIT-files faster. Press the left DATA controller to switch into Quick Search mode. If you now turn the DATA wheel you jump directly from one to the next group of letters, without having to call up every single KIT with the same first letter. In the first display view (see below), you see the user-KIT-bank, which is followed by the user KIT files in alphabetical order.

If you e.g. search a Single-KIT-file with a name starting with "M", turn the DATA wheel until the letter "M" appears in the display. Now press the DATA controller again, and return to the standard mode. Now you can sequentially browse or select all KITs starting with "M".

```
┌─────────────────────┐ ┌───┐
│ SAVE   STOP   PLAY  │ │ P │
│ The_Final_Kit       │ │ R │
│ D←       TIME PITCH │ │ O │
│ IR1      2:50  1.0  │ │ G │
└─────────────────────┘ └───┘
```
```
┌─────────────────────┐ ┌───┐
│ SAVE   STOP   PLAY  │ │ P │
│ Mein_Rock_Set       │ │ R │
│ M←       TIME PITCH │ │ O │
│  1       2:50  1.0  │ │ G │
└─────────────────────┘ └───┘
```
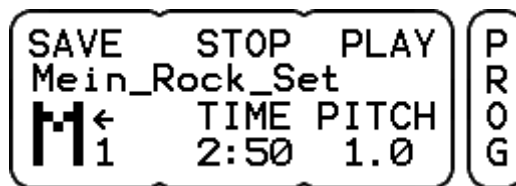
Display view: User-KIT-bank   *Display view: Single-KIT file*
                                        (letter "M")

9.2   KIT – DRUM*

```
Cymbal/Crash/        D
Legacy_17_Crash      R
FILE↓ TUNE← VOL      U
  8   -2.0 ΙΙΙΙΙΙΙΙΙΙ  M
```

FILE↓/FOLD↑   Here you can assign a sound to a channel. The name of the sound is displayed in the second row. The first row contains information about the folder (category of sounds). Turn the left DATA controller to browse the sounds. The FILE-number indicates the position within the selected folder and is not part of the sound name.

If you press the rotary controller, the display switches to FOLD ↑. Now you can navigate the folders with the rotary controller. Pressing it again switches back to the **FILE ↓** mode. Should a deleted sound be assigned to the channel, a „**?"** is displayed instead of the FILE number.

With the three DATA buttons you can trigger the currently selected sound. Each button triggers a different zone, depending on the sound. With a cymbal sound, for example, you can preview Bell, Bow, and Edge, with a kick sound, of course, only the sound of the head.

TUNE←   TUNE changes the pitch of the sound. The lowest pitch is at **-12** (12 semitones = one octave down). The highest achievable tuning value. Usually it is about four half-steps up (**+4**). But there are sounds that are can be changed more respectively less than 4 half-steps up. If you press the rotary control, you switch to a fine-tuning mode. Then you can adjust the pitch in decimal steps.

VOL   With the right rotary control you set the volume of the sound resp. the trigger channel. Changing this parameter will automatically affect the VOL value on the KIT-page VOL (see Section 9.4), which is identical with this here.

Please note that the volume of the channel set here affects both the volume in the mixer and the volume in the selected BUS (see also page 64). I.e.: Increasing the volume of this channel increases the volume of the single output (selected BUS) and the volume in the corresponding mixer channel at the same time. This in turn affects the sum and/or the headphone volume.

Selecting a Channel

To select a channel for editing, you can either hit the corresponding pad or press the respective channel button on the module.

9.3 KIT – ENV*

```
SOUND LAYER VOICE  E
 ++ -   Var   Poly N
ATTACK HOLD DECAY  V
 .047   .68   1.6
```

SOUND Here you can specify which zone of the selected sound will be used. Depending on the type of sound, several zones can be controlled. For example, with cymbal sounds, three zones (**+ Bell + Bow + Edge**) are available, with snare sounds, only two zones (**+ Fell + Rim).** You change the value by pressing the left DATA button. You will be offered all possible combinations sequentially.

Example 1: tom sound: **+ +** = depending on where you hit the pad (head or rim) - the respectively assigned sound is generated

Example 2: tom sound: **- +** = no matter where you hit the pad, always the rim sound is generated.

Example 3: cymbal sound: **+ - -** = the sound of the bell is always generated.

This feature is helpful if you want to trigger a cymbal on a pad and assign e.g a crash sound on the rim of a tom pad (additional trigger channel (PERC)) and play the bell or the ride on the head.

Loop-Sounds are an exception. When a loop is selected on the page DRUM, the following parameters are available:

Loop The loop will be played until the pad is struck again (start / stop) - default setting -

Loop! regardless of the velocity, the loop is always played at the maximum level

Solo The loop is played only once.

Solo! The loop is also played only once, but with maximum volume.

To avoid double-trigger, in loop mode the threshold is internally raised to -24 dB automatically.

LAYER   With LAYER you determine the way each sample layer (volume levels) of the sound will be triggered.

Var: : (default setting of most sounds) At random, the module selects a layer which is in the volume range that best matches the trigger-impulse intensity. With this setting, the typical "machine gun effect" is avoided, because even with an identical trigger impulse at the following beat, another sound layer will be used (randomly) and previously generated sound layers can still fade out completely.

Top: Regardless of the velocity, always the "top layer" sound, i.e. the loudest layer is used.

Fix: always the layer matching the trigger impulse best is used. I.e. with identical trigger-impulse intensity the same layer is used.

> **!** In all three situations the audible volume of the sound corresponds with the intensity of the stroke, only the layer within the sound selected by the module changes. When a loop sound is selected, only "fix" is available.

> **Custom Sounds**
>
> With the 2BOX sound editor you can create custom 2BOX sound files (.dsnd) from your own samples (see separate instructions for the Editor). For custom sounds with only a few layers (1-10 layers) the layer setting "FIX" should be selected for the parameter settings on this page, because otherwise the sound has an unnatural effect.

VOICE   The values **Poly** and **Mono** are available here. When "Mono" is selected, a sound layer can only sound exactly once and might be truncated.

ATTACK   This parameter defines the transient response of the sound. The minimum value "0" defines that the sound starts immediately. A value >0 sets the time until maximum volume is reached.

HOLD   With HOLD you determine for how long this maximum volume will sound. Combined with other parameters alienated sounds can be produced this way.

DECAY   This value determines how long the underlying sample of the sound will be played back. With the setting ∞ (infinity), the whole sample will be played back.

Gated Sound

With the parameters HOLD and DECAY you can create "gated sounds" (e.g. gated snare). To do this, set the HOLD value to the desired time length and a short DECAY time value.

Loops

The DrumIt Five can play back loops in various playing modes. Loops can be assigned to any drum channel just like a regular 2BOX sound and thus started and stopped via the pads (see details on page 34).

You can also create your own loops. With the DrumIt Five editor, standard WAV files (e.g. from loop libraries) can be converted to the 2BOX file format (.dsnd). The editor is available on our website as a free download.

When creating your own loops, pay attention to the correct (bar-) length of the wave file. Otherwise, the loop will not play correctly.

The tempo of loops can be edited using TUNE ← on the page DRUM in the KIT menu. Please note that this also changes the pitch.

The Drum Channel buttons can also be used for previewing loops. However, only one second of the loop is played. If you want to hear the entire loop, you have to hold the button for half a second. To stop the loop, hold the button half a second once again.

With the key combination MORE + STOP (DATA button in the middle) you stop all running loops at once.

9.4   KIT – VOL*

```
        EQ-              ┌─┐
                         │V│
                         │O│
   FX     BAL    VOL     │L│
  ‖‖‖‖‖‖‖   I   ‖‖‖‖‖‖‖‖   └─┘
```
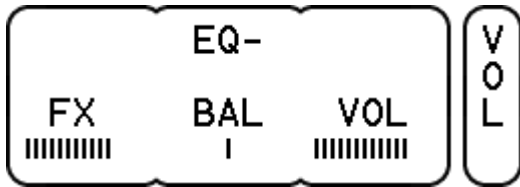
EQ   This feature allows you to specify whether the signal of the selected drum channel is sent through the EQ (see page 38) (**EQ+**) or not (**EQ-**). This feature is only available if the value for BUS on the EQ-page is set to "drum".

!   The BUS signal itself is not affected by the EQ. Please check pages 54 and 64 for more information about BUS settings.

FX   With FX, you control the level of the effects send signal of each drum channel. The configuration is post fader, the effects send gets the signal after the VOL control.

BAL   With BAL you determine where the sound is placed in the stereo sound image (left <> right). Please note that the setting affects both the signal going to the internal mixer and the signal on the BUS (individual outputs). If you have for instance a tom routed to BUS 3+4 and now turn BAL all the way to the right, the signal is only on BUS 4, but not on BUS 3.

VOL   With VOL you control the volume of the sound respectively of the drum channel. If you change the value, this will automatically affect the VOL value on the KIT page DRUM, which is identical with this VOL value here. See also page 33.

9.5   KIT – EQ

```
┌─────────────────────────┐ ┌───┐
│ CURVE   FREQ   BUS      │ │ E │
│ ⌐─^─⌐   1k3    Drum     │ │ Q │
│  LOW    MID↓   HIGH     │ │   │
│  -5      8     -9       │ │   │
└─────────────────────────┘ └───┘
```
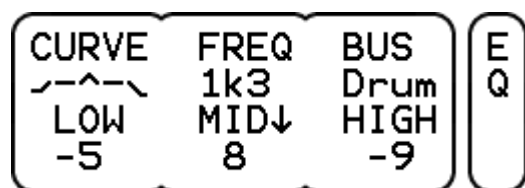
Each KIT is equipped with a 3-band EQ with a semi-parametric mid band.

CURVE   Shows you a graphical view of the EQ settings made. Pressing the left DATA button (over CURVE) resets the equalizer. Pressing the button again restores the deleted setting.

FREQ   Select the desired frequency for the mid band with the DATA button. Frequencies from 125 Hz to 8 kHz in octave steps are at your disposal. You can also set the desired frequency by using the middle rotary control. Press the controller. The display changes to **MID** Now you can fine-tune the cutoff frequency of the mid band with a 1/3-octave equalizer in the range from 100 Hz to 10 kHz.

BUS   Select here which signals should be routed to the KIT-EQ. The choices are:

Drum: The drum channels are routed individually through the EQ. Turn on the EQ on the page VOL separately for every channel you want.

Mix: The EQ settings are applied to the internal mixer. All drum channels are automatically routed through the EQ.

Sub: The EQ settings are applied to the internal SUB-mix and automatically affect all drum channels that are routed to the sub-mix.

Live Sound

If you want to process only certain instruments of your KIT with the EQ, e.g. to give the snare a little more mids without changing the tom sound, then select "Drum" as bus setting and turn on the EQ on page VOL only for the snare.

LOW   The low band has a shelf characteristic, the cutoff frequency is 80Hz. You can cut or boost in a range from -12 to +12 dB. In addition, a high-pass filter at 80 Hz is available.

MID   Here you determine how much the mid band should be boosted or cut (**MID↓**–mode). You have a control range from -12 to +12 dB. By pressing the controller you change to the **MID**. Now you can set the desired frequency (see also under FREQ).

HIGH   Like the low-band, the hi band also has a shelf-characteristic with a cutoff frequency at 12 kHz. Again, you have a control range from -12 to +12 dB and a low pass filter at 12 kHz.

9.6   KIT – FX

```
┌─────────────────┐ ┌───┐
│TYPE  LEFT  RIGHT│ │ F │
│Echo   1/2◀  3/4▶│ │ X │
│TIME↓  FBK   VOL │ │   │
│.89 L ┉┉┉┉┉ ┉┉┉┉┉┉│ │   │
└─────────────────┘ └───┘
```

```
┌─────────────────┐ ┌───┐
│TYPE             │ │ F │
│Flang            │ │ X │
│RATE  DEPTH  VOL │ │   │
│ 1.0    5   ┉┉┉┉┉┉│ │   │
└─────────────────┘ └───┘
```
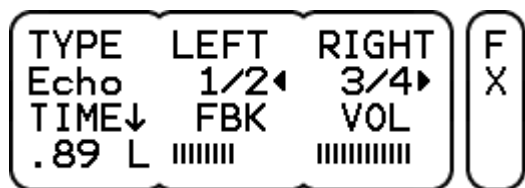
Display view: TYPE Echo   *Display view: TYPE Flange*

You have one internal effects section per KIT. This can be used by every single drum channel (see also page 37).

TYPE   Select here the type of effect you want. **Delay** and **flanger** are available.

VOL   Adjust the level of the output volume of the entire effects section with the rotary control. Please note that this signal is sent to the internal mixer and can be processed there, too (see also page 45).

Functions for TYPE "Echo":

LEFT   Set here the delay time for an additional **left** channel delay signal. The setting is done in fractions (like 1/2, 1/4, 3/4, etc.) of the overall delay time (TIME).

RIGHT   Set here the delay time for an additional **right** channel delay signal. The setting is done in fractions of the overall delay time (TIME).

> *Note:*
> *If you set LEFT and RIGHT to the same value, the delay signal will sound in the center of the stereo image.*

TIME   With TIME you set the overall delay time, between **.01** (10 ms) and **1.0** (1 sec.). In addition, it is possible to synchronize the delay reflections with the metronome tempo of the KIT. To do this, set the value to **Syn**.

You can also specify where the delay signal will sound in the stereo image. Press the left rotary control and choose from the following options: **.80 C** = signal in the center **.80 L** = signal only on the left **.80 R** = signal only on the right side.

FBK   With this parameter (feedback) you can set how often the delay signal is repeated. With very short delay times, you can create in this way interesting sound effects.

Functions for TYPE "Flanger":

RATE   RATE controls the modulation speed of the effect. There is a control range from 0.1 Hz to 10 Hz.

DEPTH   With DEPTH, you control the intensity of the effect. The higher the value, the more intense is the effect. You can set values from 0 to 10.

9.7   KIT – ACMP
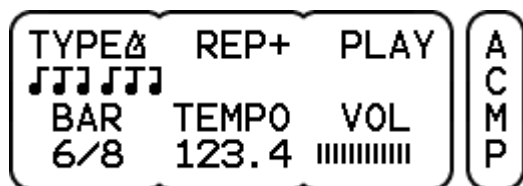
```
┌─────────────────────┐ ┌───┐      ┌─────────────────────┐ ┌───┐
│TYPE⚒  REP+   PLAY│ │ A │      │TYPE⬆          PLAY│ │ A │
│♫♩♫♫♩                │ │ C │      │Give_It_All          │ │ C │
│ BAR   TEMPO   VOL │ │ M │      │FILE↓   TIME   VOL │ │ M │
│ 6/8   123.4 ▮▮▮▮▮▮▮▮▮│ │ P │      │ 13     2:50 ▮▮▮▮▮▮▮▮▮│ │ P │
└─────────────────────┘ └───┘      └─────────────────────┘ └───┘
```
Display view: TYPE metronome   *Display view: TYPE song*
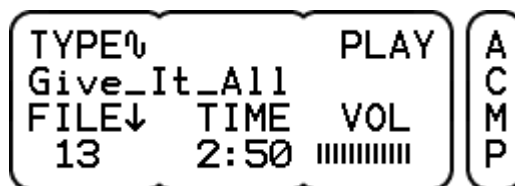
For live and studio applications, as well as for jamming and practicing, an internal player is provided. The settings you make here are stored in the respective KIT just like sound and equalizer settings. There are two different types of players:

TYPE   Choose between the **song player** ⬆ and **metronome** ⚒.

PLAY/STOP   Use the right DATA button to start or stop the song or the metronome.

VOL   This sets the output level of the player. Please note that this signal is sent to the internal mixer and can be processed there, too (see also page 45).

Functions for TYPE "Metronome":

REP   REP controls the playback mode of the metronome. **REP+** + means that the metronome is playing until you press STOP. With **REP1** the metronome plays only one bar, with **REP2** two bars. REP1 and REP2 can thus be used as a perfect count-in.

BAR   Here you can set the time signature for the metronome. You can choose from a selection of the most important variations with different accents: 1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 5/8, 6/8, 7/8, 9/8 or 12/8. A setting of 1/4 is recommended if you do not want accents in the click.

TEMPO   Here you can set the tempo. There is a tempo range from 30 to 280 bpm When you press the rotary control, an arrow appears pointing to the right → and you can set the tempo in steps of ten. Press the control once more ←, and you can change the tempo in whole bpm steps again. The selected tempo can be saved, of course, with each KIT.

Metronome sound

In the mode UNIT on the page METR you can select a sound for the metronome. It is a global setting that applies to all KITs. See also page 58.

Functions for TYPE "Song":

TIME   Gives information on the duration of the song (the controller has no function).

FILE↓   Use the left rotary control to select the desired song. The second display row shows the name of the song (= filename). The number under FILE specifies the song position. All WAV files on the module - regardless of their location - are listed in alphabetical order.

If the linked Song no longer exists because it was deleted from the module, a „?"appears under FILE instead of a number.

Split Wave-Mode

Press the left DATA controller to go into the split-wave mode.

Now, next to the FILE number the symbols for song $\textrm{\textbackslash}$ and metronome appear. In split wave mode, the left and right signal of the song (WAV file) are automatically sent to separate channels in the SUB-mix (see also page 55) In effect, this means for situation 1 (see figure below) that the left channel of the song is treated as a "metronome" and the right channel as a "song". With Situation 2, it's the other way around.

```
Give_It        Give_It
FILE↓          FILE↓
 13ᕲᘹ           13ᘹᕲ
```

Split-wave mode: Situation 1   *Split-wave mode: Situation 2*

Split wave Split-Wave Mode In Practice

You need the split-wave mode, e.g., if you want to play live with a backing track. To stay "on time", you maybe have produced a playback, with the music on the left and a matching click on the right. If you would let the song play just like that now, the click would be heard via the PA system. In the split-wave mode now, you have the option to route the side of the song that contains the click to a different channel in the SUB-mix and to set individually to which output the click signal is sent. In our example you would set up the routing in such a way, that the click is heard only on the headphones and not on the main output (OUT1·2). How this works in detail is explained from page 55 on.

10 UNIT Mode

In the mode UNIT you make general settings. On the pages in this section, you can change the general routing and trigger settings, adjust the internal mixer and calibrate the hihat. The settings made here are global and therefore apply to all KITS.

Changes in the mode UNIT are saved on the UNIT Main page (see SAVE on the next page).

10.1 UNIT – MIX
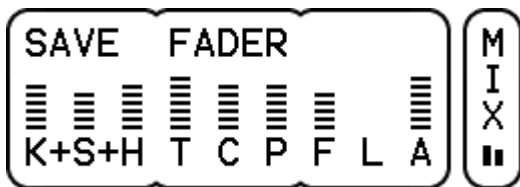
Display view: vertical display
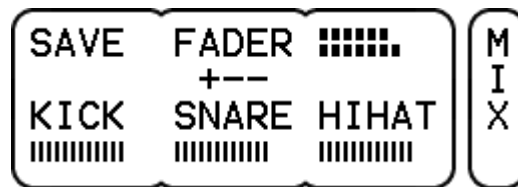
Display view: horizontal display

The DrumIt Five includes a mixer, that allows you to balance out the volume levels of the drum channels. There are nine FADER groups whose levels can be controlled individually.

FX (F) sets the volume of the internal effects section, **LINE (L** controls the line-in channel's signal, and **ACMP (A)** controls, depending on the selection within the kit, either the volume of the metronome or of the song player. The assignment of this group is fixed and can not be changed.

The remaining six groups are used to control the volume levels of the drum channels. By default, the respective channels are already assigned to the following groups: **KICK (K)**, **SNARE (S)**, **HIHAT (H)**, **TOMS(T)**, **CYMBS (C)** and **PERC (P)**. You can change the assignment of every channel individually on the INTF page (see page 52). You can even modify the names of each fader group according to your needs (more on page 60).

The current setting of the respective group is symbolized by a bar with dotted lines.

On the page PREF you can choose between two different views (see page 60).

Vertical Display

In this view you see all nine groups in an overview. With the DATA controllers you always have access to three FADERs - namely those three that are connected through a "+". Rotate to the right to increase the volume (the bar grows), turn left to reduce the volume (the bar becomes smaller).

The "+" signs indicate which FADERs are assigned to the DATA controllers. Press the middle DATA button to move to the next group of three.

When you select a new fader group or while you are making changes, the full names of the currently active FADERs appear directly after pressing the DATA button or controller.

A small LED bar below the page label "MIX" shows you the volume of the entire MIX signal in stereo.

To cancel the changes made in the mixer, press the MORE button and confirm UNDO. To restore the changes, press MORE and REDO.

Horizontal View

This view shows only the three currently active FADERs - with full names. The "+" in the display „+ - -" below FADER indicates which FADER group is currently selected. Again, you press the middle DATA button to switch to the next group of three: You will notice that the "+" moves accordingly. To the right of FADER a horizontal bar meter is depicted, which indicates the level of the output signal.

SAVE   If you have made changes in the UNIT mode, this will be indicated by a „**?**" next to SAVE. To make these changes permanent, press the left DATA button. The „**?**" disappears and the changes are saved. Please be aware that for this the SAVE mode on the page PREF has to be switched on (see page 60). Should the "**?**" still be there after you pressed the DATA button, the SAVE mode is disabled.

FADER   With the DATA buttons above FADER, you select which FADER group is active, i.e. which FADERs can be changed by the three DATA controllers.

Selecting FADERs – alternative option

The desired FADER group can also be selected by pressing the pushbutton of the DATA controller. Push the left controller to select the group KICK/SNARE/HIHAT the middle controller for the group TOMS/CYMBS/PERC and with the DATA controller to the right you select the Group FX/LINE/ACMP.

This method is very simple and convenient as you don't need to make sure first which FADERs are currently active.

Routing and Signal Flow

The DrumIt Five offers a variety of routing options and allows you, through a combination of internal mixing and direct out channels, to master every imaginable application scenario. The way the routing in the DrumIt Five works is explained on page 64, based on practical examples. Once you have understood the signal flow, there are no limits to your creativity.

10.2 UNIT – TRIG*

```
TYPE  XTALK LEVEL  T
Pad12 Med   1█████ R
GAIN  THRES CURVE  I
  3    -42  Norm   G
```
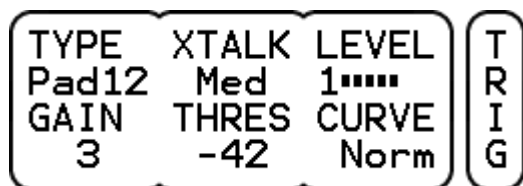
On this page, you can change the trigger settings for the pads and optimize them for your playing style. The parameters on this page are particularly important if you want to hook up acoustic triggers or pads from other manufacturers to the DrumIt-Five module.

TYPE		Here you can set what trigger type is connected to the correspondig drum channel. TYPEs include various optimized trigger parameters for the respective pad type.
		Please note that not all types are available on every trigger channel. See the table below for what options exist.

TYPE	settings optimized for:	KICK	SNARE	TOM 1-4	CYMB 1-3	HIHAT	PERC 1-5
Kick 1	fast triggering kick pad	○	○	○	○	○	○
Kick 2	normal triggering kick pad	●	○	○	○	○	○
Pad8	8" pad (mesh head)	○	○	○	○	○	○
Pad10	10" pad (mesh head)	○	○	●	○	○	○
Pad12	12" pad (mesh head)	○	●	○	○	○	○
Rim	rim						●
Cym12	12" cymbal pad (3 zones + choke)				○		
Cym14	14" cymbal pad (3 zones + choke)				●		
CyCup	cymbal pad with bell-trigger (BOW+CUP)				○		
CyEdg	cymbal pad with edge-trigger (BOW+EDGE)				○		
Hihat	hihat pad (2BOX only)					●	
AcTr1	acoustic-trigger on small drums	○	○	○	○	○	○
AcTr2	acoustic-trigger on medium drums	○	○	○	○	○	○
AcTr3	acoustic-trigger on large drums	○	○	○	○	○	○

factory default settings are marked „●".

XTALK   This feature can be used to prevent unwanted trigger impulses (cross talk) from other pads. If, e.g. a hard cymbal stroke triggers a tom sound, you can suppress the latter. Just select the channel of the unwanted sound (in our case: tom) and change the value of XTALK. You have the following parameter values: **Off** (no suppression), **Low** (low suppression), **Med** (medium suppression), **High** (maximum suppression).

LEVEL   Here you can read the level of the trigger signal. There are three different views you can select by pressing the DATA button to the right.

View 1   *View 2*   *View 3*
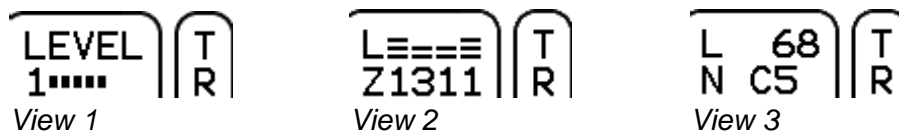
> **View 1**   The number indicates which zone was triggered last. The graph displays the signal level. While triggering, the dB value of the signal is shown in the top row.

> **View 2**   This view shows the last four strokes. You see the signal level in the first row and the zone number in the second row.

> **View 3**   This view gives you information about the triggered MIDI note number (N) and the velocity value (L).

GAIN   With GAIN, you can increase the level of the trigger signal. This feature is important if you use acoustic triggers or pads from other manufacturers, which may have comparatively lower trigger output. In addition, you can customize the triggering behavior to your personal playing style.

Set GAIN so that exactly all LED-meter segments are lit when you hit the hardest (see above). You have an adjustment range from +1 to +24 dB. With a GAIN value higher +12 dB the THRES value is automatically set to -36 to avoid double triggers.

The drum channels **CYMB1-3** have an **additional GAIN parameter** for the bell signal.
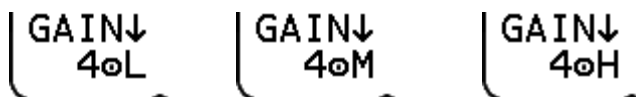
First, set the GAIN value (number) for the zone "bow" so that the hardest stroke triggers no bell sound. Then you can press the DATA knob to adjust the GAIN value for the zone "cup".

You can switch between **L** ((low - minimum GAIN increase), **M** (medium increase) and **H** (high increase).

THRES   With the threshold value you determine how strong the lightest stroke has to be for triggering an impulse. Useful you when you need pad to be less sensitive for stray triggers. You have a control range from -48 to -18 dB.

Low Threshold

The lower you set this value, the higher is the risk of double-trigger impulses and crosstalk.

CURVE   With CURVE you can set the relationship between velocity and signal volume. Nine different curves are available. Depending on the sound or application situation, different settings can make sense.

Take advantage of this feature also to adjust the trigger behavior to your playing.
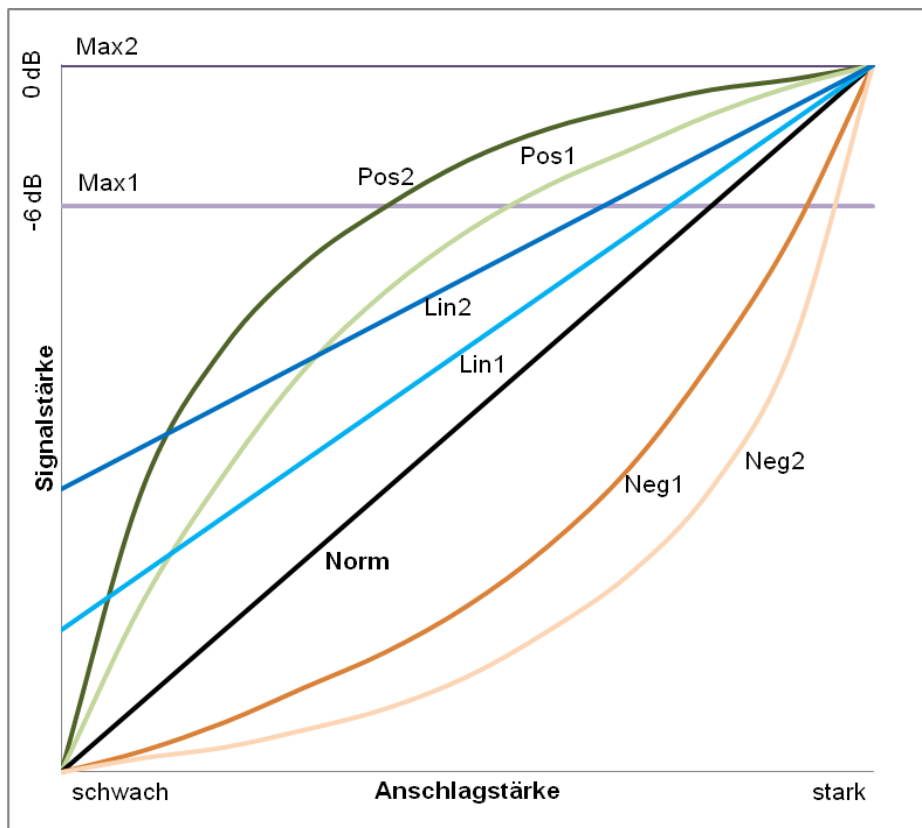
Max2: Regardless of the velocity, a fixed signal level of 0 dB is generated.

Max1: Like Max 2, although with a fixed signal level of -6 dB.

Pos2: The signal level increases more than the velocity. But at high velocities, the signal level increase is much smaller, i.e. the signal level changes only marginally with real hard strokes.

Pos1: Like Pos2 but the difference is not as pronounced.

Lin2: The faintest stroke triggers already a high signal level. With increasing velocity, the signal level then grows steadily and evenly.

Lin1: Like Lin2, but the initial volume level is lower.

Norm: The signal and velocity levels increase at the same rate (linearly).

Neg1: The signal level grows with increasing velocity, at first only slowly. Only at higher stroke strengths the signal level increases accordingly.

Neg2: like Neg1, although the difference is more pronounced.

Adjusting Trigger Behavior with CURVES

With CURVES you can optimize the trigger behavior so it suits your playing best. It pays to experiment a little with the parameter values.

Depending on your playing style, the various options can give you a more realistic feel.

10.3 UNIT – HPED

```
┌─────────┬──────┬────────┐┌───┐
│ CALIB   │ MIDI │ LEVEL  ││ H │
│  =I=    │ CC1▼ │ 9▪▪▪▪  ││ P │
│         │ SENS │ CURVE  ││ E │
│         │   0  │ Norm   ││ D │
└─────────┴──────┴────────┘└───┘
```
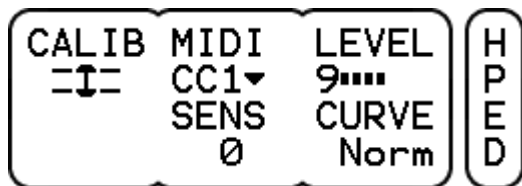
On this page important adjustments for the hi-hat are made.

CALIB On this menu page you can calibrate the hihat, i.e. adjust it to your playing. Because of the importance, we have dedicated an extra chapter to this subject. Please read the detailed explanations starting on page 25.

MIDI Set here the controller format for the foot controller of the hihat. You can choose between **CC1** (modulation wheel) and **CC4** (pedal control). For each controller format there are 4 different modes.

▼: value 0 for the open and value 127 for the closed hihat

▼!: In difference to ▼ the controller data is sent continuously and not just once with the NOTE-ON command.

▲: value 0 with closed and value 127 with open hihat

▲!: In comparison to ▲ the controller data is sent continuously and not just once with the NOTE-ON command.

LEVEL Here you can read the signal level of Zone 9 (pedaled hihat - the DATA button has no function).

SENS Set the sensitivity of the hihat pedal (pedaled signal) here. You have a control range of -6 to +6 dB.

CURVE There are nine different trigger curves. Select the value that supports your playing best by rotating the DATA controller. Detailed information on the topic CURVE can be found in the notes to page TRIG on page 49 ff.

10.4 UNIT – INTF*

```
      ZONES FADER     I
        1    Perc     N
CHAN  NOTE↓   BUS     T
 10!    G2    7+8     F
```

On this page you make the global routing and MIDI settings for each trigger channel. Here you set to which BUS the respective signals should be sent and the settings for the MIDI control of each channel. Application examples expanding on this topic can be found from page 64 on.

ZONES   Here you can see how many (sound) zones are assigned to a trigger channel (see chart on page 14). The number of zones indicates how many MIDI notes are used for the channel. Please note that for all trigger channels with multiple zones the MIDI notes are a consecutive sequence that can be shifted, but not separated from each other.

example:
Cymbal 2 has 4 zones and has B4 assigned as MIDI note. Therefore, the MIDI note sequence for the cymbal 2 is:

B4 = bell, C5 = bow, C#5 = edge, D5 = choke function.

FADER   Select here to which FADER group of the internal mixer (see also mode UNIT Page MIX on page 45 the respective trigger channel should be assigned. Please note that for this purpose only the first six FADER groups are eligible, the assignment of the groups FX, LINE, ACMP is fixed.

CHAN   This sets the MIDI channel for the transmitting or receiving of MIDI signals for the respective drum channel. You can assign a different MIDI channel (1 to 16) to each drum channel. The default setting for all channels is the global MIDI channel (see also menu item MIDI on page 59). This channel is marked with "!" and can be set manually. To do this, turn the DATA controller to the far right.

NOTE↓

Here you can specify with which MIDI note the respective channel will send and receive "NOTE ON" and "NOTE OFF" messages with. Channels with multiple zones use a consecutive sequence of MIDI notes (see also ZONES, as well as explanations about MIDI notes on page 14). Push the DATA controller to toggle between the display of the note (e.g. "C1") and the display of the respective MIDI note number (e.g. "24").

The MIDI note number "0" equals the MIDI note "C-1". You can use the range from 0 (C-1) to 127 (G9).

Default MIDI Configuration (see also page 14)
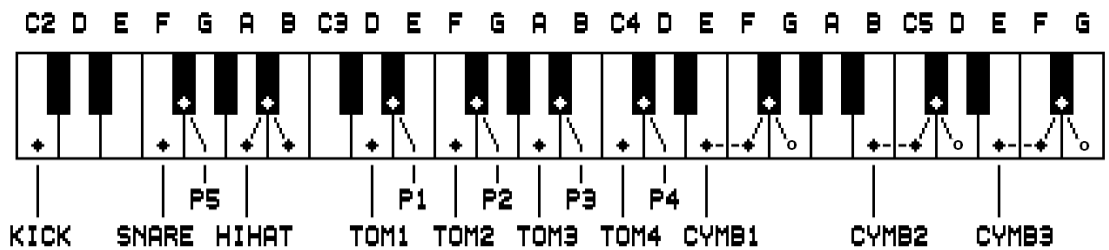
Explanations to the figure:
P1 to P5 = PERC channels (see also explanations on PERC channels on page 15)
o = choke function (G4, D5 and G5)

MIDI Messages Hi-Hat and Cymbals

A cymbal stroke at the zones 1 (Bell), 4 (Bow) or 8 (Edge) generates a NOTE ON and a NOTE OFF command. A choke generates a NOTE ON command which continues until the pad is released (NOTE OFF).

Playing the hi-hat in the zones 4 or 8 also generates both a NOTE ON and NOTE OFF signal. Parallel to this, the DrumIt-Five module produces pedal controller data. When you step on the hi-hat pedal (Zone 9), initially only a NOTE ON message is generated. When the pedal moves back up, a NOTE OFF message is transmitted. The time between the NOTE ON and NOTE OFF message determines whether a chick (long duration) or a foot splash sound (short duration) is generated.

BUS   Here you can send signals to BUS channels according to your needs. There are eight single BUS channels (1-8) and four BUS groups (1+2, 3+4, 5+6, 7+8).

BUS

Think of a bus as an internal signal path. It leads the respective signal to a specific output (direct out).

Which BUS signals can be routed to which output jacks is shown in the following table:

	OUT1	OUT2	OUT3	OUT4	OUT5	OUT6	PHONES
BUS1	○						○
BUS2		○					○
BUS3			●				○
BUS4				●			○
BUS5					●		○
BUS6						●	○
BUS7							○
BUS8							○

● = fixed ○ = optional

10.5 UNIT – OUT

```
┌─────────────────────┐ ┌───┐
│ LINE         VOL    │ │ O │
│ Streo     IIIIIIIIII │ │ U │
│  SUB↓ OUT1·2 PHONS  │ │ T │
│ ♂♖♘♙♗ Sub    Mix   │ │   │
└─────────────────────┘ └───┘
```
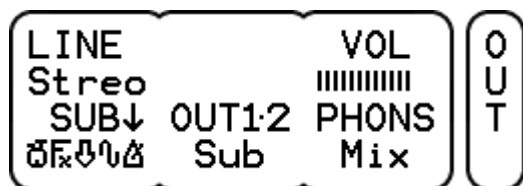
Concerning the signal routing the DrumIt Five module offers a number of options. In Chapter **11.. "Signal Flow and Routing Options"** on page 64 some connection scenarios are listed, which will explain clearly what routings are available.

LINE   This parameter is important if you want to connect a mono signal to the line-in jack. Select "Mono" so that the fed-in signal is heard in the center of the stereo sound image (only the signal of the tip of the jack will be transmitted). If "Streo" is set (logically the default setting for stereo sources) an incoming mono signal will be placed only on the left channel.

Line In - Mono

This setting is useful if you are using the DrumIt Five module as an in-ear monitor station and only a single monitor signal is provided by an external mixer (AUX). In this situation, you should select "mono" so that the signal will sound in the middle, i.e. on both sides of the headphones.

OUT1·2   This determines which signal is going to the main output jacks (OUT1·2). You can choose from the following options:

    Mix   The entire sum signal of the internal mixer (see also page 45) (all instruments, metronome, FX, line in and the song player).

    Mix!   Like "Mix", only with a fixed volume. The output volume no longer depends on the LEVEL control. The control can thus be used exclusively for the headphone output.

    Sub   In this setting, the sub-mix signal is used (see SUB).

    Sub!   Like "Sub", only with a fixed volume - independent of the LEVEL control.

    1+2!   The Signals of BUS 1 and BUS 2 are outputted with a fixed volume on the jacks OUT1 and OUT2, which then serve as additional individual outputs (Direct out).

Fixed Volume - ! -

Decoupling the output volume from the LEVEL control makes especially sense in live use because this ensures that the volume of the drum signal on the PA system is not changed when you change the volume of the headphones.

SUB↓   As an alternative to the complete signal from the internal mixer, you can create a so-called "SUB-mix." The SUB-Mix allows you to disable certain channel groups of the mixer, so that they don't go, for example, to the main output. The following groups of signals are available:

ᛦ   Drum channels (kick, snare, toms, cymbals, hi-hat, perc)

Ⓕx   internal effects

⬇   line in signal

⬆   song signal

♟   metronome

Select a group by rotating the DATA controller and disable or enable the signal for the sub-mix by pressing the controller.

Song and Metronome

The signals "song" (⬆)and "metronome" (♟)are treated separately in the sub-mix, although they share one FADER in the internal mixer (ACMP). The reason for this is that per kit only either a song or the metronome can be selected. A differentiation is not necessary in the mixer. But through settings in the sub-mix it can be ensured that the metronome signal, independent from the chosen kit, is generally sent only to the headphones (PHONS).

PHONS   Allows you to specify which signal will go to the headphone output. As with „OUT1·2" you can choose between the options **mix** and **sub**. . In addition, various BUS groups can be selected: BUS**1+2**, BUS**3+4**, BUS**5+6** and BUS**7+8.**

Again, the selection of „BUS**7+8!"** allows you here to decouple the signal from the LEVEL control (fixed volume). Thus, the headphone out becomes a true direct-out (see routing examples on page 64).

VOL   Here you can read the level setting of the level controller.

10.6 UNIT – VU
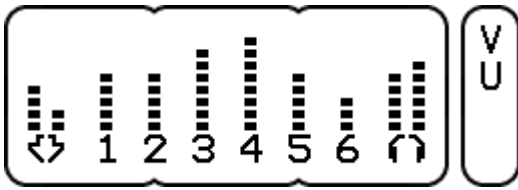
On this page, you can read the current signal level of the line input and the output channels from LED meters (DATA-buttons and DATA-controllers have no function).

For an optimum signal quality, it is recommended to drive high levels but to avoid "clipping" (permanent illumination of the topmost LED segment). Each segment of the LED bar represents a level value of 6 dB.

⟨⟩   The level of the line-input signal (e.g. mp3 players) is displayed here. Please note that there is no separate gain controller for this signal. Make sure that the output volume of the external device is not set too high, otherwise the signal will be distorted.

1 - 2   Here, the level of the main output is displayed. Depending on the routing settings on Page OUT (see also page 55 and page 64), the signal level can be adjusted with the LEVEL controller.

As factory default the MIX signal (internal mixer) is sent to OUT1 and OUT2. This way, you can adjust the sum signal with the LEVEL control. However, if you use OUT1 and OUT2 as direct outputs (value "1+2!" for parameter OUT1·2 on page OUT), the LEVEL controller has no function.

3 - 6   This shows what level is going out of the outputs 3 to 6 (BUS 3-6). Please note that the Direct Out signal of the respective bus can only be changed through the volume (VOL) of the corresponding drum channel on page DRUM in the KIT menu. See also the examples on page 64.

🎧   Here, the level of the headphone signal is displayed. Depending on the selected routing settings on Page OUT (see also page 55 and page 64) the volume is dependent of the LEVEL controller.

10.7 UNIT – METR

```
┌─────────────────────┐ ┌───┐
│ Perc/Cowbell/       │ │ M │
│ Latin_Salsa_Bell    │ │ E │
│ FILE↓ TUNE← DECAY   │ │ T │
│   2    0.0    .56   │ │ R │
└─────────────────────┘ └───┘
```
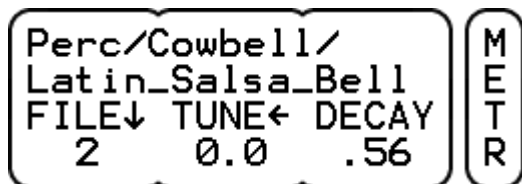
On this page you can change the sound settings of the metronome. Please note that these are global settings that affect all KITs.

FILE↓	Like on the DRUM Page in the KIT menu, you can select a sound by rotating the left DATA controller. Pressing the DATA controller switches to **FOLD↑** and you can navigate through the folder structure. The first line of the display shows the folder, the second line, as usual, the name of the sound.
TUNE←	TUNE changes the pitch of the sound. The lowest pitch is at **-12**. The highest achievable pitch is dependent on the selected sound. Four half-steps up (**+4**) are common. But there are sounds that can be changed even more or less than 4 half steps up. If you press the controller, you switch into a fine-tuning mode and you can adjust the pitch in decimals.
DECAY	This value determines how long the underlying sample of the sound will be played back. With the setting ∞ (infinity), the whole sample will be played back. Turn the controller to the left to shorten the sound. In practice, it is recommendable to shorten the sound length using DECAY in order to generate a clearly audible and precise click.

With the DATA buttons you can listen to the various zones of the selected sounds. Please note that only the first zone (left DATA button) can be used as a metronome sound.

10.8 UNIT – MIDI

```
┌─────────────────────────┐ ┌─────┐
│ PRCHG LOCAL THRU        │ │ M   │
│   On    On   Off        │ │ I   │
│ CHAN                    │ │ D   │
│   10                    │ │ I   │
└─────────────────────────┘ └─────┘
```
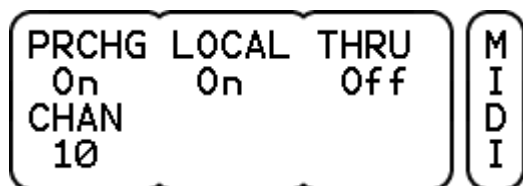
On this page, you can change the global MIDI settings.

PRCHG   You can choose between **on** and **off**. If you have selected "On", the DrumIt Five module can both send and receive MIDI program change messages. This is useful .. e.g. changing KITs via a MIDI keyboard or, in the reverse case, to control an external MIDI device from the DrumIt-five-module.

LOCAL   Turn LOCAL "Off" to disable the internal sound engine. Now the DrumIt Five only transmits MIDI messages and no longer triggers the internal sounds. This setting is useful if you want to control an external sound source without having the DrumIt-Five sound engine always playing along.

THRU   When you switch from "Off" to "On" here, MIDI-IN- signals are routed directly to the MIDI-OUT This way, an external MIDI device can control both the DrumIt-Five-module and another MIDI device connected to the DrumIt five.

CHAN   Here you can specify on which MIDI channel program changes and MIDI note messages for the various trigger channels will be sent and received. Please note that the global MIDI channel (Program Change) setting made here can be set to an individually trigger channel (see also menu UNIT-INF explained on page 52).

10.9 UNIT – PREF

```
┌─────────────────────┐┌───┐
│SAVE   VOL   MIXER   ││ P │
│ On    BAR    Ver    ││ R │
│TRIG  FAD1↓  INIT↓   ││ E │
│ -6    Kick    -     ││ F │
└─────────────────────┘└───┘
```

SAVE   This parameter determines whether changes in the modes KIT and UNIT can be saved or not. Select "**On**", to be able to save your results permanently after successful programming by pressing the left DATA button. The saving process is executed on the main page of the modes (KIT Page PROG or UNIT Page MIX). As soon as something is changed in the original settings, this is indicated by a „?" displayed to the right of SAVE.

In the **off** mode, your changes will not be saved.

> **SAVE-Off Mode**
>
> The SAVE-off mode is particularly useful when several percussionists play on your DrumIt Five (e.g. at a festival) and you want to prevent people from tampering with your drum kits and configurations and then saving that.

VOL   Here you can specify how the VOL display will look at the pages with horizontal sliders (e.g. mode KIT Page DRUM).

There are two options:

Bar   only graphical view of the VOL-level

NUM   additional display of a numeric dB value

```
┌──────────┐┌───┐      ┌──────────┐┌───┐
│  VOL     ││ U │      │ V 4.8    ││ U │
│ IIIIIIIII││ M │      │ IIIIIIIII││ M │
└──────────┘└───┘      └──────────┘└───┘
```
View "Bar"   *View "NUM"*
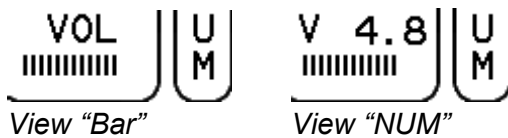
MIXER   Here you set the display mode of the internal mixer. You can choose between **Ver** (vertical view) and **Hor** (horizontal view). Details on this can be found on page 45.

TRIG   Here you can set the volume at which the sounds will be played back when pressing the drum channel button - i.e. when prelistening. The available range extends from -48

to 0 dB (default -6 dB). You can turn off the prelisten function of the drum channel buttons as well. Just select "off".

FADx↓   This feature allows you to rename the first 6 FADERs of the internal mixer (see menu item MIX on page 45) Rotate the middle DATA controller ← until the FADER to be edited is displayed. Now press the DATA controller ↓ to change the letters. The flashing cursor indicates the position at which you change the characters when you turn the DATA controller. Turn the controller until the desired letter is displayed. Pressing the DATA controller ↓ moves the cursor to the next position.

INIT↓   This function resets the DrumIt-Five-Module to factory default. Rotate the DATA controller to select the part you want to reset. After selecting the desired value, press the DATA controller ↓.

There are various options available.

Unit	resets all settings of the mode UNIT
Kit1 bis 100	only resets the settings of the selected KIT
KtPrg	resets the order of the KITs to factory default
All	resets all KITs and the order of the KITs to factory default

If you have completed the process successfully, **Done** appears on the display. If **NoChg** appears, the system has not made any changes.

Module Reset

To restore the factory default settings of your module, you can use the function INIT (see above). You can also download a new DrumIt.dkit bank file from our website and overwrite the existing file on your module with it. Please note that a complete init or loading a new DrumIt.dkt files also corresponds to factory default sounds. If you have deleted sounds a "?" will appear under FILE for that channel in the Kit.

Sounds can be downloaded for www.2box .se/downloads

The factory default settings are saved in the file „DrumItInit.dkit" (see explanations on page 11). With a trick it is possible to create a personal init file, so you have access to your own settings instead of the default settings in case of emergency. For this, back up the original DrumItInit.dkit file on your computer (for the worst-case scenario) and copy your personal "DrumIt.dkit" file to the module. Rename this copy to "DrumItInit.dkit".

This way you create an initialization file that contains your personal settings.

10.10 UNIT – MEM

```
 ┌──────────────────┐ ┌───┐
 │    FOLDS FILES   │ │ M │
 │      15   183    │ │ E │
 │FLASH USED  FREE  │ │ M │
 │ 4GB  97%    3%   │ │   │
 └──────────────────┘ └───┘
```

On this page you can read information about memory usage and the number of files respectively folders (DATA buttons and DATA controllers have no function).

FOLDS   Displays the number of folders and subfolders.

FILES   Provides information on the number of files on your module. Please note that this is not the number of sound files, but the total number of files. In fact, all files are counted here: system files, sound files, User-KIT files, etc.

FLASH   Displays the size of the internal flash memory.

USED   Percentage of the flash memory that is used.

FREE   Percentage of the flash memory that is still free and available to you for additional sound files.

	Memory Capacity
	When you frequently copy additional sounds to your DrumIt Five-module, it may occur that there is not enough memory available. In this case, you should clear up your module to make room for new sounds. Make a back-up of the entire contents of your module and in the second step, delete those sounds from the module, you don't like. This way, you create free space and still have all the original 2BOX sounds archived.

10.11 UNIT – INFO

```
 ┌──────────────────┐ ┌───┐
 │                  │ │ I │
 │  DrumIt_Five     │ │ N │
 │ SERNR  BOOT   OS │ │ F │
 │ 00123  1.32  1.20│ │ O │
 └──────────────────┘ └───┘
```

This page gives you information about the software version of your module (DATA buttons and DATA controllers have no function).

SERNR   Serial number of your module

BOOT   software version of the boot program

OS   software version of the operating system

11 Signal Flow and Routing Options

In this chapter we show you how the signal flow is set up within the module and give you suggestions for the use of the DrumIt Five in real life on the basis of a few examples.
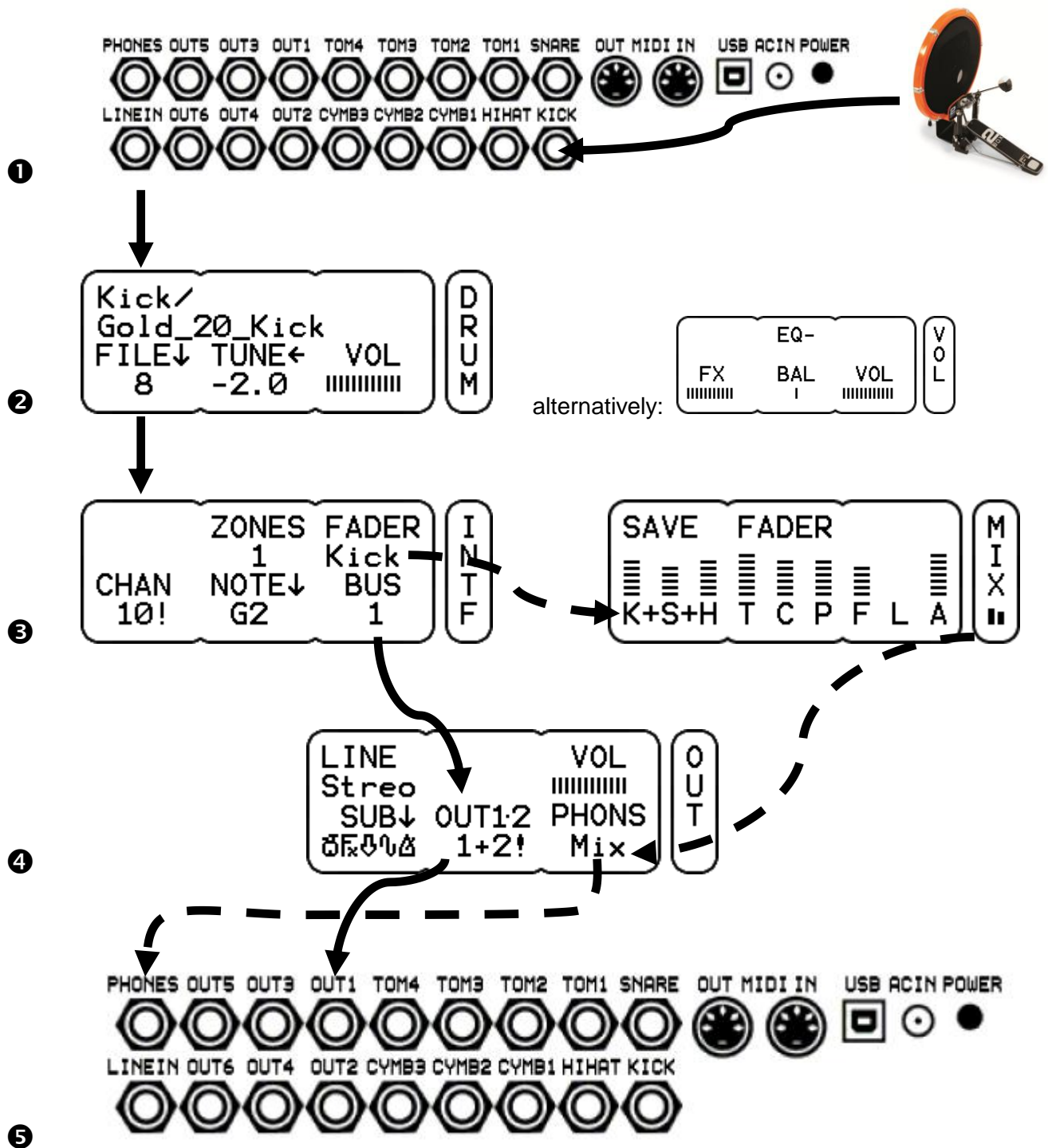
❶ The pads are connected to the corresponding drum channel input (in our example, a kick-pad).

❷ In the mode KIT on the page DRUM a sound is assigned to the trigger signal of the respective drum channel, and the overall volume of the signal is set. Alternatively, the volume can be set on the page VOL, since both VOL controls are identical (see page 37).

❸ The signal of the drum channel is then routed on the page INTF in the mode UNIT. The signal is sent to both the selected BUS (BUS 1 here) and to the fader group of the internal mixer (here KICK / K). The volume level of the signal set on the page DRUM (resp. VOL) remains unaffected from this (see ❷). Now the signal is present in two different places. Once on the BUS (solid line) and once in the internal mixer (dashed line).

❹ The two parallel signals can then be assigned to the desired outputs in the mode UNIT on the page OUT (BUS and mixer). In this case, BUS 1 is assigned to the outputs OUT1·2 and the mixer signal to the headphone output (see ❺).

Result: This way the volume of the kick drum can be changed for the headphones without affecting the direct out signal. For this, you only need to adjust the fader "kick" in the mixer accordingly. The mixer does not affect the BUS signal at the output OUT1, since these are two independent signal paths.

The examples on the following pages show what options you have with the routing capabilities of the DrumIt Five. Of course, these are just a few configurations and not an exhaustive list of all the options that are available for your personal use.
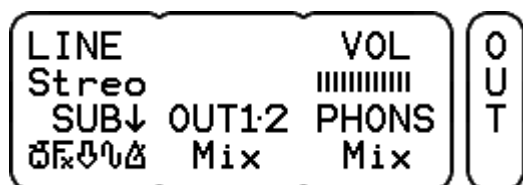
Please note that there is not an example for every drum channel in the following explanations. Only the essential pages are shown, comments on the corresponding pages are noted below.

Situation 1 - Rehearsal Room: The same signal on PA and headphones

You connect the Five-DrumIt module to a small PA in the rehearsal room and/or play with headphones.

All signals from the mixer (**MIX**) (drum channels 🥁, effects 🎚, line-in signal ⬇, song player 🎵 and metronome 🔔) are on both the headphones and the output jacks (OUT1·2). The bus settings on page INTF do not affect the result. The volumes of the various instruments are controlled with the mixer on the page MIX.

	KICK	SNARE	HIHAT	TOMS	CYMB	PERC	EFFEC	LINE	SONG	METR
Output	🥁	🥁	🥁	🥁	🥁	🥁	🎚	⬇	🎵	🔔
OUT1	x	x	x	x	x	x	x	x	x	x
OUT2	x	x	x	x	x	x	x	x	x	x
PHONES	x	x	x	x	x	x	x	x	x	x

```
LINE          VOL     O
Streo    IIIIIIIIIII   U
  SUB↓ OUT1·2 PHONS    T
🥁🎚⬇🎵🔔 Mix    Mix
```

For both OUT1·2 and PHONS
the setting is Mix.

Situation 2 - In-Ear Monitoring: Mix for the PA, click and monitor signal on the headphones

In this setup, you want to output the drum signals, the internal effects and songs as a stereo mix. At the same time you want to use the DrumIt Five as "in-ear monitor station" (stereo mix, metronome, external monitor signal).

For this, you connect the output jacks OUT1·2 of the DrumIt Five with an external mixer and simultaneously the monitor output of the mixer (Aux) with the line-in jack of the DrumIt-Five module.

On the headphone output are now the signals of the DrumIt Five (drum channels, metronome, effects, song player) plus the external monitor signal (e.g. vocals, bass, guitar).

For the stereo output, use the SUB mix. So that neither the signal of the metronome nor of the line-in channel are in the stereo sum, the respective sub-groups are switched off (see also page 55).

	KICK	SNARE	HIHAT	TOMS	CYMB	PERC	EFFEC	LINE	SONG	METR
Output	ᗷ	ᗷ	ᗷ	ᗷ	ᗷ	ᗷ	℉ₓ	⬇	⬆	⚠
OUT1	x	x	x	x	x	x	x		x	
OUT2	x	x	x	x	x	x	x		x	
Phones	x	x	x	x	x	x	x	x	x	x

```
LINE        VOL    O
Streo    ||||||||||| U
  SUB↓ OUT1·2 PHONS T
ᗷ℉ₓ ⬆   Sub    Mix
```
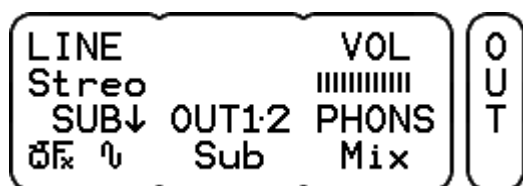
The output jacks OUT1·2 get only the
SUB-mix (with no line-in and metronome).
The headphone jack is fed with the
complete mix (internal mixer).

Situation 3 - Studio: All Instruments Separately

You connect the DrumIt-Five to an external mixer and want to provide the sound engineer with as many separate channels as possible. For this, you turn the headphone jack into the individual outputs 7+8 using a Y-split cable (1x stereo jack to 2x mono jack). Logically, a headphone can not be connected in this setup.

The PERC group can be used for e.g. percussion and loops. Toms and cymbals are routed to separate BUS groups. Within this BUS group, the various instruments can be placed in the stereo image (page VOL in the mode KIT).

Only the DRUM channels are outputted. All other signals (effects, line in, song and metronome) can not be heard.

	KICK	SNARE	HIHAT	TOMS	CYMB	PERC	EFFEC	LINE	SONG	METR
Output	ᗡ	ᗡ	ᗡ	ᗡ	ᗡ	ᗡ	℞	⇩	↷	⌂
OUT1	x									
OUT2		x								
OUT3				x						
OUT4				x						
OUT5					x					
OUT6					x					
PHONES L			x							
PHONES R						x				

```
      ZONES FADER    I
         1    Kick   N
CHAN   NOTE↓  BUS    T
 10!    G2      1    F
```
Kick: only BUS 1 is selected

```
      ZONES FADER    I
         1   Snare   N
CHAN   NOTE↓  BUS    T
 10!    B2      2    F
```
Snare: only BUS 2 is selected

```
      ZONES FADER    I
         1    Toms   N
CHAN   NOTE↓  BUS    T
 10!    F1    3+4    F
```
Toms: stereo on BUS 3+4

```
      ZONES FADER    I
         1   Cymbs   N
CHAN   NOTE↓  BUS    T
 10!    E4    5+6    F
```
Cymbals: stereo on BUS to 5+6

```
      ZONES FADER    I
         1   Hihat   N
CHAN   NOTE↓  BUS    T
 10!    A3      7    F
```
Hihat: only BUS 7 is selected

```
      ZONES FADER    I
         1    Perc   N
CHAN   NOTE↓  BUS    T
 10!    G1      8    F
```
Perc: only BUS 8 is selected

```
┌─────────────────────┐ ┌───┐
│ LINE         VOL    │ │ O │
│ Streo     ||||||||||| │ │ U │
│  SUB↓ OUT1·2 PHONS  │ │ T │
│ ♂⡀⠩⠧⠘  1+2!  7+8!  │ │   │
└─────────────────────┘ └───┘
```
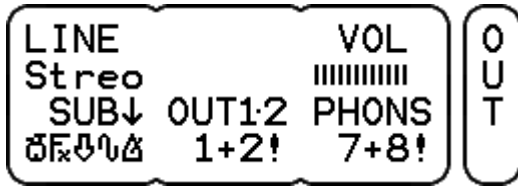
*The output jacks OUT1·2 are assigned to
the group BUS 1+2. The headphone jack
is assigned to the group BUS 7+8.*

! | The setting for SUB does not matter in this setup, because the SUB signal is not sent to any output

Situation 4 - Live 1: The Most Important Instruments Separately and Playback Songs for the PA

In this particular situation, you want to use as many individual signals as possible and at the same time send a song as a playback to the PA.

Also in this situation, a Y-split cable is used in order to employ the headphone stereo jack as single outputs 7+8. The output jacks OUT1·2 are used for the playback signal. For this, the SUB-mix, which contains only the playback signal, is assigned to these jacks.

	KICK	SNARE	HIHAT	TOMS	CYMB	PERC	EFFEC	LINE	SONG	METR
Output	ᙙ	ᙙ	ᙙ	ᙙ	ᙙ	ᙙ	𝔉x	⇩	⇧	⌂
OUT1									x	
OUT2									x	
OUT3	x									
OUT4		x								
OUT5			x							
OUT6				x						
PHONES L					x					
PHONES R					x					

```
        ZONES FADER    I
           1   Kick     N
CHAN    NOTE↓  BUS       T
 10!     G2      3       F
```
Kick: only bus 3 is selected

```
        ZONES FADER    I
           1   Snare    N
CHAN    NOTE↓  BUS       T
 10!     F1      4       F
```
Snare: only bus 4 is selected

```
        ZONES FADER    I
           1   Hihat    N
CHAN    NOTE↓  BUS       T
 10!     D1      5       F
```
Hihat: only bus 5 is selected

```
        ZONES FADER    I
           1   Toms     N
CHAN    NOTE↓  BUS       T
 10!     C3      6       F
```
Toms: only bus 6 is selected

```
        ZONES FADER    I
           1   Cymbs    N
CHAN    NOTE↓  BUS       T
 10!     E3     7+8      F
```
Cymbals: stereo on bus 7+8

```
LINE         VOL      O
Streo     ||||||||||   U
  SUB↓ OUT1·2 PHONS     T
    ⇧    Sub    7+8!
```
On the page OUT, the SUB-mix is routed
to the output jacks OUT1·2, and the group
BUS 7+8 to the headphone jack.
The SUB-mix contains only the playback signal.

Situation 5 - Live 2: Variation of Situation 4

In the previous example (situation 4) the toms were deliberately configured mono and the PERC group was left out.

Of course you could additionally use the PERC group by sending the cymbals only to one output.

	KICK	SNARE	HIHAT	TOMS	CYMB	PERC	EFFEC	LINE	SONG	METR
Output	⎍	⎍	⎍	⎍	⎍	⎍	⨎	⬇	⬆	⚠
OUT1									x	
OUT2									x	
OUT3	x									
OUT4		x								
OUT5			x							
OUT6				x						
PHONES L					x					
PHONES R						x				

```
           ZONES FADER  | I
             1   Cymbs  | N
 CHAN      NOTE↓  BUS   | T
  10!        E3    7    | F
```
Cymbals: only BUS 7 is selected

```
           ZONES FADER  | I
             1   Perc   | N
 CHAN      NOTE↓  BUS   | T
  10!        G1    8    | F
```
Perc: only BUS 8 is selected

Situation 6 - Live 3: Variation of Situation 5

There is another, somewhat more sophisticated way to use the PERC group, e.g., for loops without having to output the cymbals in mono.

In this setup, the playback signal and the PERC group share the outputs OUT1·2. The volume of both signals can still be controlled separately in the internal mixer (page MIX).

	KICK	SNARE	HIHAT	TOMS	CYMB	PERC	EFFEC	LINE	SONG	METR
Output	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Fx	⇩	⇧	▲
OUT1						x			x	
OUT2						x			x	
OUT3	x									
OUT4		x								
OUT5			x							
OUT6				x						
PHONES L					x					
PHONES R					x					

First, the drum channels in the SUB-mix are switched back on. Now playback songs and loops (PERC) sound on OUT1·2.

There is a trick to silence the signals of kick, snare drum and the other drum channels on OUT1·2: For this, all signals except the PERC group and the song player have to be set to "zero" in the mixer.

```
SAVE  FADER          │ M │
              ≣   ≣  │ I │
                     │ X │
K+S+H T C P F L A    │ ▮▮│
```
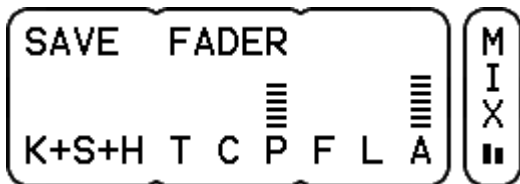
In the mixer, and all groups except PERC and ACMP are set to "zero".

```
LINE         VOL     │ O │
Streo   ‖‖‖‖‖‖‖‖      │ U │
  SUB↓ OUT1·2 PHONS   │ T │
ŏ    ⇧   Sub    7+8!  │   │
```
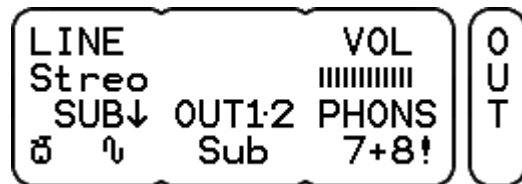
On page OUT the drum channels for the sub-mix are turned on.

Just try it!

You'll see, there are (almost) no limits to your creativity. Try it out!

12 Technical Data

Connectors:	10 x Trigger Input (6.3mm stereo jack)
	1 x Line In, stereo (6.3 mm stereo jack)
	6 x line out, mono (6,3 mm mono jack)
	1 x headphone jack (6.3 mm stereo jack)
	1 x USB 1.1 (Full Speed)
	1 x MIDI IN
	1 x MIDI OUT
	1 x power supply (18 V AC, external power supply)
Display / Memory Type:	LCD (20 x 4 characters)
	4 GB Flash memory
Controls:	18 x pushbutton
	3 x rotary push controller (endless)
	1 x rotary controller
Dimensions & Weight:	260mm x 166mm x 65mm (width x height x depth, including rubber feet and knobs)
	1,25 kg
Amount of manageable Data:	The operating system can manage up to 8,000 dsnd files, 1,000 folders, 800 Wav files and 999 single-Kit files.
Name Size:	File names can have up to 63 characters and folder names (including subfolders) up to 127 characters.

13 Update

Thanks to the Open Sound System of 2BOX the module can be updated easily and comfortably using drag and drop.

This way you can keep your DrumIt Five always up to date and benefit from the operating system updates, new features and technical enhancements.

1. Download the current operating system from our website (www.2box.se). The file format of the operating system is a **.bin file** (see picture).

2. Start the module in USB mode (see page 8).

3. Copy the new .bin file to the module with drag & drop.

4. Restart the module. The module shows the new operating system number during the boot process at the bottom right (you can also get this information in the mode UNIT on the Page INFO).

5. Done!

You don't need to delete the old operating system file. The module will automatically recognize the newer version. In the example below, the system recognizes the file DrumIt120.bin (OS 1.20) as the latest version and ignores the file DrumIt110.bin (OS 1.10).

📁 Tom		Dateiordner
📄 .metadata_never_index	0 KB	METADATA_NEVER...
📄 DrumIt110	103 KB	VLC media file (.bin)
📄 DrumIt120	120 KB	VLC media file (.bin)
📄 DrumIt User Manual 1.1x r3	267 KB	PDF-XChange View...
📄 drumit.dkit	151 KB	DKIT-Datei
📄 DrumitInit.dkit	151 KB	DKIT-Datei
📄 Quickstart 1.1x	509 KB	PDF-XChange View...

! The above described procedure applies to all modules with a boot program later than 1.30.

If your module has an older boot-program (before 1.30), you have to update the boot program first. Please contact your local distributor for support.

```
DrumIt_Five        I
SERNR  BOOT   OS   N
00123  1.32  1.20  F
                   O
```
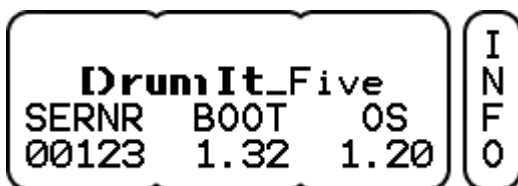
Choosing Between Operating Systems

During the boot process, you have the option to choose between the various operating systems that are available on your module. To do so, press the middle DATA button while powering up..

```
Prev  Next  Load
DrumIt110
SerNr  Boot   OS
00123  1.32  1.10
```

After you have selected the desired operating system with Prev/Next (left and middle DATA button), start the boot process by pressing the DATA button to the right (load).

Please note:
Settings in the modes KIT and UNIT that relate to functions of a higher operating system will be lost if you edit and save the same part (e.g. a kit) in an earlier version of the operating system.

14 FAQs

How can I adjust the volumes of the instruments to each other?

For this purpose you have an internal mixer in the mode UNIT on the page MIX (see page 45). Refer also to the detailed explanations on this topic starting on page 64.

How can I save my settings?

Changes can be saved in both modes UNIT and KIT at the main page (KIT PROG respectively UNIT MIX) by pressing the left DATA button. Any changes you made in the respective areas are indicated by a "?". Refer also to page 27 and page 45. In order to be able to save, you have to have the SAVE function enabled on the page PREF in the mode UNIT (see page 60).

How do I calibrate my hihat?

The calibration is done on the page HPED in the UNIT mode. Please refer to page 25 ff.

How can I optimize the response behavior of the hihat to my needs?

Special configuration options for the hi-hat can be found in the mode UNIT on the pages HPED (see page 51) and TRIG (see page 47). In any case, you should calibrate the hihat properly. It is also recommended that you experiment with the trigger-curves and GAIN Please note that an electronic hi-hat always responds somewhat different from a normal hi-hat.

How can I avoid trigger cross-talk?

Due to vibrations of the floor or in modified setups of the kit it is possible that unwanted crosstalk occurs between the drum channels. As a first step, check if the kit was set up correctly and all screws are properly tightened. If the problem persists, you should check whether you have set the proper pad type on the page TRIG in the mode UNIT. Should this also be set correctly, you can still minimize eventual crosstalk by using the XTALK function on the page TRIG. Please refer to page 47.

How can I assign a different sound to the Rim?

Call up the page DRUM in the mode KIT and select the desired PERC channel by simultaneously pressing the MORE button and the respective Drum Channel button. Now you can assign a sound to the PERC channel as accustomed (see also page 33).

How can I avoid double triggers?

At first, you should check the tension of the heads of the affected pads. It should be even and not too loose. You should also make sure that the pad is mounted properly and does not vibrate too much. If you still have problems with double triggers, you can change the trigger settings (GAIN and THRES) on the Page TRIG in the mode UNIT. See section 10.2 UNIT – TRIG* starting on page 47.

How do I get a more consistent kick signal?

There are situations in which a pronounced dynamic at the kick signal is not desired. In these cases, the GAIN parameter on the Page TRIG in the mode UNIT can be used to even out the volume. Set the value so that the kick signal has a more consistent volume.

How can I mount a pedal or a double pedal?

Pedals can be set up and mounted just like with acoustic drums. Make sure, however, that the beater NEVER hits the sensor directly (applies to kick pad with central trigger sensor MK1 and MK2 version), otherwise you will destroy the sensor in a very short time.

How do I assign individual drum channels to direct outputs?

The DrumIt Five provides many routing options. Read from page 64 on, what settings you need to make in order to assign individual channels directly to specific outputs.

Can I connect two pads to one plug and assign different sounds?

Absolutely. The drum channels TOM 1 to TOM 4 and SNARE have a parallel PERC channel, which can be utilized separately using a Y-split cable. How this works is described in detail on page 15 and page 18.

Can I assign a separate MIDI channel to each drum channel?

Yes, in the mode UNIT on page INTF. How this exactly works is described on page 52.

I've lost a cable. Do I need to buy something special?

The 2BOX cables are standard stereo jack cables (6,3 mm).

Can I use the DrumIt Five with acoustic triggers?

Of course. The DrumIt Five works fine with the products of the major manufacturers, the most common triggers have been tested successfully with the DrumIt Five. In the UNIT mode on page TRIG you will find specific trigger TYPES (AcTr1, AcTr2 and AcTr3) and other parameters (GAIN, THRES), that allow you to set the module so it is perfectly suited to the use with acoustic triggers. Please refer to the section 10.2 UNIT – TRIG* starting on page 47.

15 Contact and Support

You have questions about your DrumIt Five or a technical problem?

Visit our website at:

www.2box.se

In our support area you'll find answers to your questions.

2BOX International

2BOX Music Applications AB

16 Keyword Index