analog KEYS

4 Voice Analog Synthesizer — By Elektron

GETTING STARTED MANUAL

1. Do not use this apparatus near water.

2. Never use any aggressive cleaners on the casing or the LCD overlay. Remove dust, dirt and fingerprints with a soft, dry and non-abrasive cloth. More persistent dirt can be removed with a slightly damp cloth using only water. Disconnect all cables while doing this. Only reconnect them when the product is safely dry.

3. To avoid scratches or damage, never use sharp objects near the display. Also avoid applying any pressure to the display itself.

4. Install in accordance with the manufacturer's instructions.

5. Connect the apparatus to an easily accessible electrical outlet close to the apparatus.

6. In the EU, only use CE approved power cords.

7. When transporting the unit, preferably use accessories recommended by the manufacturer or the box and padding the unit originally shipped with.

8. Do not install near any heat sources such as radiators, heat registers, stoves, or any other apparatus (including amplifiers) that produce heat.

9. Do not block the ventilation holes located on the side and the bottom of the enclosure of the unit.

10. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable.

11. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

12. Only use attachments/accessories specified by the manufacturer.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service technicians. Servicing is required when the apparatus has been damaged in any way, such as liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING

To reduce the risk of fire, electrical shock or product damage:

- Do not expose the apparatus to rain, moisture, dripping or splashing and also avoid placing objects filled with liquid, such as vases, on the apparatus.

- Do not expose the apparatus to direct sunlight, nor use it in ambient temperatures exceeding 40° C.

- Only use accessories recommended by the manufacturer.

- Do not open the casing. There are no user repairable or adjustable parts inside. Leave service and repairs to trained service technicians only

⚠ The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

⚡ The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated »dangerous voltage« within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION - ATTENTION

RISK OF ELECTRIC SHOCK - **DO NOT OPEN**
RISQUE DE SHOCK ELECTRIQUE - **NE PAS OUVRIR**

CAUTION - To reduce the risk of electric shock, do not remove the cover.
No user serviceable parts inside, refer servicing to qualified personnel.
WARNING - To reduce the risk of fire or electric shock, do not expose
the appliance to rain or moisture.

analog KEYS

THANK YOU

Thank you for purchasing the Analog Keys. This is our flagship four voice analog synthesizer, conceived with the modern artist in mind. Fully analog signal path, digital controls and unprecedented playability makes this a powerful instrument for the expressive musician.

This quickstart will guide you through the basics of the machine. The full reference manual is available as a free digital download at www.elektron.se.

We wish you a happy analog experience. Have fun!

—The Elektron Team

PANEL LAYOUT
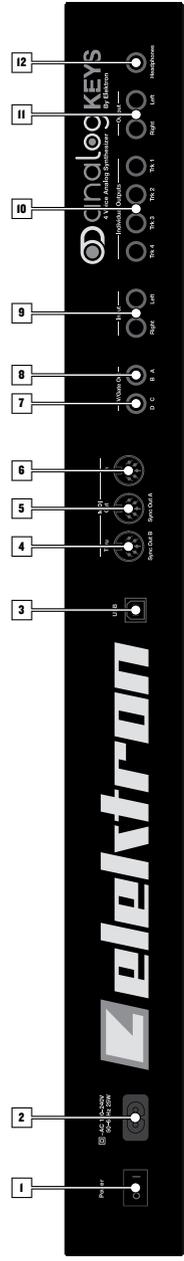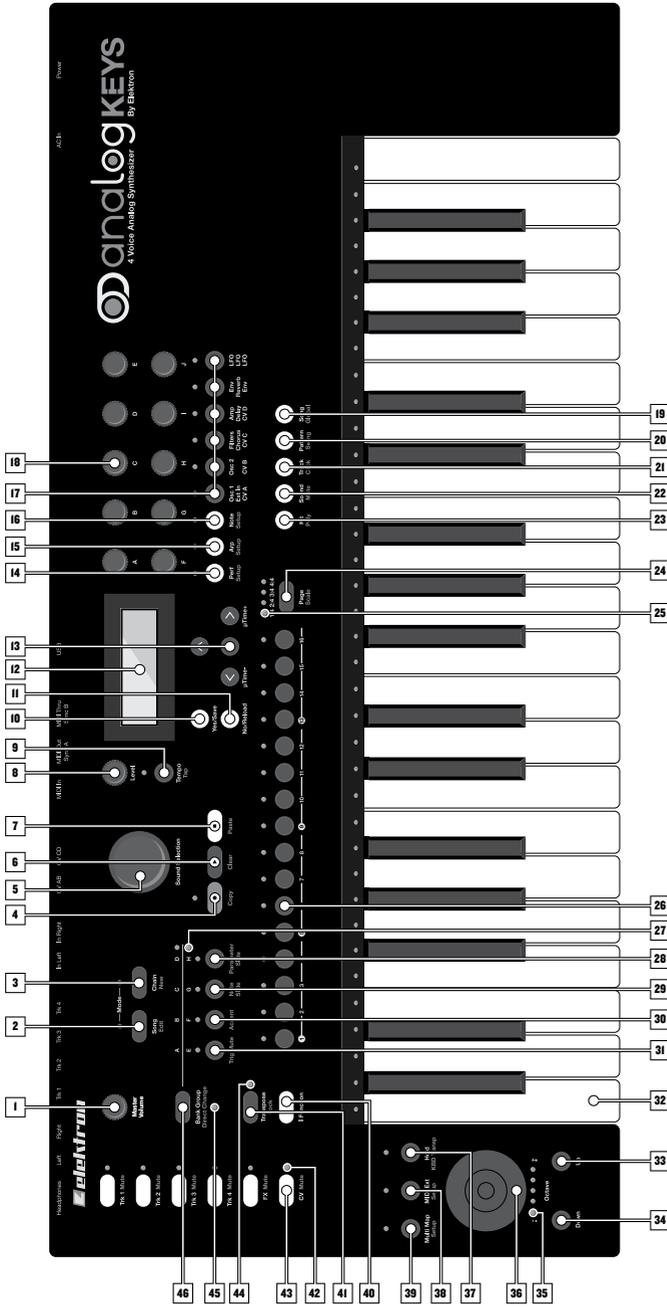
FRONT PANEL

1 *MASTER VOLUME* sets the volume for the main outputs and the headphones output.

2 [SONG MODE] activates/deactivates SONG mode.

3 [CHAIN MODE] activates/deactivates CHAIN mode.

4 [RECORD] key. Activates/deactivates GRID RECORDING mode. Starts LIVE RECORDING if held while pressing [PLAY]. The secondary function is a copy operation.

5 *SOUND SELECTION* wheel allows quick access to Sounds. It is also used to scroll through menus and set some parameter values.

6 [PLAY] starts playback of the sequencer. The secondary function is a clear operation.

7 [STOP] stops playback. The secondary function is a paste operation.

8 *LEVEL* sets the overall volume level of the active track.

9 [TEMPO] opens the TEMPO menu. [FUNCTION] + [TEMPO] makes it possible to tap the tempo.

10 [YES/SAVE] key. Used for entering sub-menus and for confirming choices.

11 [NO/RELOAD] key. Used for exiting an active menu and backing one step.

12 The LCD window.

13 The [ARROW] keys. Used for menu navigation. They are called [UP], [DOWN], [LEFT] and [RIGHT].

14 [PERFORMANCE] enters PERFORMANCE mode.

15 [ARP] key. Controls for the arpeggiator of the active track are found here.

16 [NOTE] key. Note settings for the active track are made here.

17 [PARAMETER] keys switch between the PARAMETER pages of the active track. The upper white text legend indicates the pages for the four synth tracks. The gray text is for the FX track pages and the white text line beneath indicates the CV track pages. A second press on the [PARAMETER] key will in certain cases open secondary PARAMETER pages.

18 *DATA ENTRY* knobs. Used for adjusting parameters.

19 [SONG] key opens the SONG menu. The secondary function opens the GLOBAL menu.

20 [PATTERN] key opens the PATTERN menu. The secondary function opens the pattern SWING settings.

21 [TRACK] key opens the TRACK menu. The secondary function opens the CLICK menu.

22 [SOUND] key opens the SOUND menu. Secondary function accesses the trig-activated track muting.

23 [KIT] key opens the KIT menu. The secondary function opens the POLYPHONY configuration menu.

24 [PAGE] selects the active pattern page in GRID RECORDING mode. The active pattern page is indicated by the four LEDs above the key. The secondary function accesses the SCALE menu.

25 <PATTERN PAGE> LEDs indicate how many pattern pages the active pattern consists of and which pattern page is currently active. The LED flashes on the pattern page currently playing.

26 [TRIG] keys are used for entering sequencer trigs, as well as choosing patterns.

27 <BANK GROUP> LED indicates if bank group A-D or E-H is accessed by the [BANK] keys.

28 [BANK D/H] accesses pattern selection for either bank D or H. The secondary function opens the PARAMETER SLIDE menu.

29 [BANK C/G] accesses pattern selection for either bank C or G. The secondary function opens the NOTE SLIDE menu.

30 [BANK B/F] accesses pattern selection for either bank B or F. The secondary function opens the ACCENT menu.

31 [BANK A/E] key. Depending on the selected bank group, this button selects patterns in either bank A or E. The secondary function opens the TRIG MUTE menu.

32 *KEYBOARD* spans three octaves and has 37 semi-weighted aftertouch and velocity sensitive keys.

33 [OCTAVE UP] shifts the *KEYBOARD* range up one octave.

34 [OCTAVE DOWN] shifts the *KEYBOARD* range down one octave.

35 <OCTAVE> LEDs shows the octave transposition of the *KEYBOARD*.

36 *JOYSTICK* for up to 15 custom assigned parameters, such as pitch bend and modulation.

37 [HOLD] key holds all pressed *KEYBOARD* keys until deactivated. Secondary function activates/deactivates *KEYBOARD* transpose according to sequencer track settings.

38 [MIDI EXT] activates/deactivates *KEYBOARD* and *DATA ENTRY* knob MIDI control of external equipment. Secondary function opens the MIDI CONFIGURATION menu.

39 [MULTI MAP] activates/deactivates the custom mapping of the *KEYBOARD*. Secondary function brings up the MULTI MAP CONFIGURATION menu.

40 [FUNCTION] key. Press and hold to access secondary functions. Secondary functions are generally written in red text on the panel of the Analog Keys.

41 [TRANSPOSE] key transposes the sequencer track. Secondary function is transpose lock.

42 <TRACK> LEDs indicate the active track and muted tracks. Red is active, green is unmuted, off is muted and yellow is active but muted.

43 [TRACK] keys select the active track. Four synth tracks, one FX track and one CV track are available. [FUNCTION] + [TRACK] mutes a track.

44 <TRANSPOSE> LED indicates if the transpose lock function is activated or not.

45 <PATTERN MODE> LED indicates the selected PATTERN mode (sequential (off), direct start (red) or direct jump (green)).

46 [BANK GROUP] key. Selects the active bank group (A-D or E-H). The secondary function toggles between different PATTERN modes.

REAR

1 Power on/off switch.

2 Power in (100-250 V AC, 50-60 Hz).

3 Full-speed USB 2.0 Connection.

4 MIDI Thru.

5 MIDI Out.

6 MIDI In.

7 CV outputs C and D.

8 CV outputs A and B.

9 Audio input L/R.

10 Individual stereo outputs, Track 1-4.

11 Main Out L/R.

12 Headphones Output.

FIRST STEPS WITH THE ANALOG KEYS

SETTING UP THE ANALOG KEYS

Make sure you place the Analog Keys on a stable support, such as a sturdy table with sufficient cable space or a synth stand capable of a 10 kg load.

1 Before you connect the Analog Keys to other equipment, make sure all units are switched off.
2 Plug the included AC cable into a power outlet and the Analog Keys.
3 Connect the main out L/R from the Analog Keys to your mixer or amplifier.
4 Switch on all units.

STARTING THE ANALOG KEYS

Switch on the unit by pressing the Power rocker switch located at the back of the unit. Before restarting the unit, wait 2 seconds after the LCD backlight goes out.

THE USER INTERFACE

The center of Analog Keys editing is the LCD display. The main interface screen is shown below.
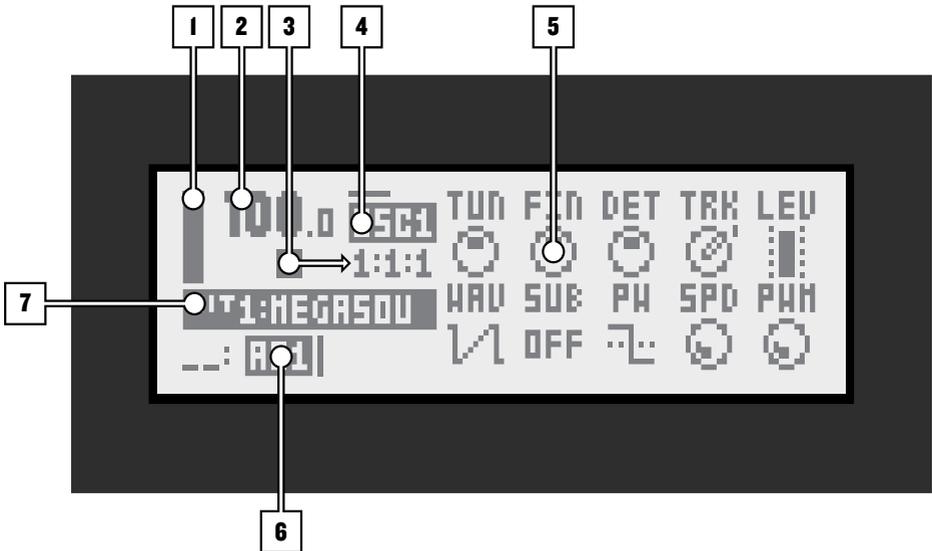
1 Bar indicating the main volume level setting of the active track.
2 The current tempo displayed with one decimal.
3 The playback/recording status of the sequencer indicated by the standard »record«, »play«, »pause« and »stop« symbols: ● ▶ ▌▌ ■ . To the right is a counter displaying how many bars, beats and steps the sequencer has played.
4 Information about which **PARAMETER** page is active. The line above the text indicates the active sub page of the **PARAMETER** page. A fully drawn line means no sub page is available.
5 Up to ten track parameters. They show what the **_DATA ENTRY_** knobs control and also indicate the current parameter values. Press and turn a knob to adjust its parameters in larger increments (whole octaves, for instance, where appropriate).
6 The currently active pattern.
7 The currently active kit. When turning a **_DATA ENTRY_** knob, the full name of the parameter being adjusted is shown here.

🖐 All windows can be closed using the [NO/RELOAD] key.

6
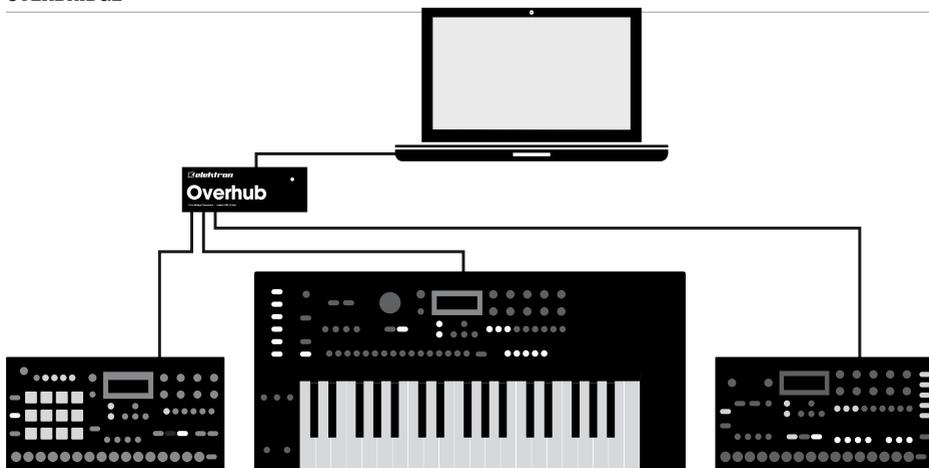
OVERBRIDGE

The Analog Keys is a highly capable standalone instrument. Since the introduction of Elektron Overbridge, however, there is a complementary way of interacting with it. All that is required is an Elektron Analog instrument, a USB cable, a computer running Overbridge, and a DAW.

The Overbridge software suite enables a tight integration between the Analog instruments (Analog Rytm, Analog Keys, Analog Four) and a computer DAW. If you want to hook up multiple machines to a computer, we suggest acquiring the Elektron Overhub, a Multi-TT hub tailored for Overbridge use.

When using the Overbridge setup, the user interface of your Analog device will present itself as a clearly laid out plugin window in your DAW. Sync your device to a software sequencer, record multi track audio, browse and organize sounds, edit kits, and set up modulation and performance macros via a simple point-and-click workflow. Access, edit or automate all parameters for sound shaping on screen.

Overbridge is available as a complimentary download on the Elektron webpage.

1 Install Overbridge.
2 Make sure the OS of your Analog Keys and the OS of Overbridge match. You will find the most recent versions of both operating systems included in the Overbridge download package.
3 Set your Analog Keys device to Overbridge mode on the USB CONFIG screen. You will find this setting in the SYSTEM menu, located at the far south of the GLOBAL menu. Press [YES/SAVE] to tick the box and activate OVERBRIDGE MODE.

EXPERIMENTING WITH PATTERNS

The Analog Keys is shipped with several preset patterns, kits and Sounds. To immediately start experimenting, just follow the instructions below.

1 Switch on the Analog Keys.
2 Press **[PLAY]** to listen to pattern A01.
3 Select pattern A02, which is the second demo pattern, by first making sure bank group A-D is selected. The **<BANK GROUP>** indicates the selected bank group. If A-D is not selected, press the **[BANK GROUP]** key.
4 Pressing **[BANK A/E]** + **[TRIG]** key 2 will make pattern A02 play once the currently playing pattern finishes. Pattern A03 is selected by pressing **[BANK A/E]** + **[TRIG]** key 3 and so on.
5 Mute tracks by pressing **[FUNCTION]** + the **[TRACK]** key of the track you want to mute. Unmute by repeating the procedure.
6 Press **[STOP]** to stop playback.

PERFORMANCE MODE
The **PERFORMANCE** mode makes it possible for the *DATA ENTRY* knobs to control several **PARAMETER** page parameters at once. These parameter mappings are called a parameter macro.

1 Make sure a pattern is playing.
2 Press the **[PERFORMANCE]** key to access **PERFORMANCE** mode.
3 Turn the *DATA ENTRY* knobs and listen how the sound of pattern changes.

ADJUSTING PARAMETERS
Each track contains six **PARAMETER** pages. Parameters affecting the sound of the track are found here.

1 Make sure a pattern is playing.
2 Press the **[TRACK]** key of one of the four synth tracks.
3 To change the cutoff of the ladder filter, press the **[FILTERS]** key. The **FILTERS** page will open. The parameter labelled FRQ changes the cutoff of the ladder filter. Turn *DATA ENTRY* knob A to change the parameter value.
4 Try out the rest of the **PARAMETER** page parameters to experiment with the sound shaping possibilities.
5 To reload the Sound to its original state, press **[NO/RELOAD]** + **[SOUND]**.
6 To reload the whole kit to its original state, press **[NO/RELOAD]** + **[KIT]**.

OVERVIEW OF THE ANALOG KEYS DATA STRUCTURE

```
                    ┌─────────────────┐      ┌──────────────────────┐
                    │  128 PROJECTS   │      │ +DRIVE SOUND LIBRARY │
                    └─────────────────┘      │     4096 SOUNDS      │
                                             └──────────────────────┘

 ┌───────────┐   ┌──────────┐   ┌──────────────┐   ┌──────────┐   ┌─────────────┐
 │ 4 GLOBALS │   │ 16 SONGS │   │ 128 PATTERNS │   │ 128 KITS │   │ SOUND POOL  │
 └───────────┘   └──────────┘   └──────────────┘   └──────────┘   │ 128 SOUNDS  │
                                                                  └─────────────┘
           ┌────────────┐   ┌──────┐   ┌──────┐
           │  4 SOUNDS  │   │  CV  │   │  FX  │
           └────────────┘   └──────┘   └──────┘
```
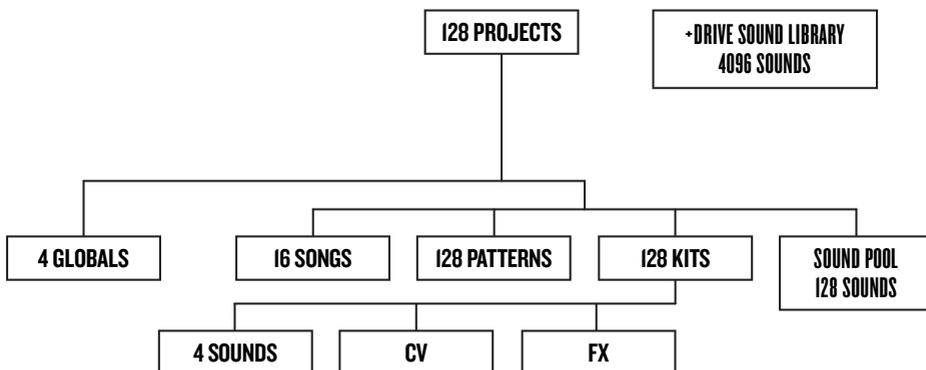
+DRIVE
The +Drive is the non-volatile memory of the Analog Keys. It keeps up to 128 projects (thousands of patterns, kits and songs) stored internally. The +Drive also gives access to the +Drive Sound library, capable of storing 4096 Sounds. Every project has access to these Sounds.

PROJECT

A project contains 128 patterns, 128 kits, 16 songs, 4 global slots, and a project Sound pool consisting of up to 128 Sounds. Generic settings and states (tempo, mutes, et cetera) are also stored in each project. When a project is loaded it becomes the active working state of the Analog Keys. From here it is possible to edit the patterns, kits, songs and globals of the project. The Analog Keys always retains the active working state, i.e. the active project. Projects are saved, loaded and managed in the GLOBAL menu, accessed by pressing [FUNCTION] + [SONG].

KIT

Kits contain up to four Sounds, one for each synth track, as well as settings for the FX and CV tracks. Each project of the Analog Keys can host 128 kits. A kit is always linked to a pattern.

SOUND

A Sound consists of stored synth track parameter settings. Each synth track hosts one Sound. Sounds can also be stored in the Sound pool of the active project or in the +Drive Sound library. The Sound pool can host 128 Sounds and the +Drive library holds up to 4096 sounds. Sounds are loaded to the kit from either the SOUND BROWSER or SOUND MANAGER menus. Access these menus by pressing [SOUND].

BANK

Eight banks exist for each project and each bank hosts 16 patterns.

PATTERN

For each of the 8 banks 16 patterns are available, meaning 128 patterns are always readily availble. A pattern consists of sequencer data like trigs, parameter locks, time signature and individual track lengths for the synth tracks and the FX and CV tracks. They also contain the BPM setting as well as ARP and NOTE page settings.

SONG

16 songs are available for each project. They are used to sequence the playback of patterns. Songs are built from chains.

CHAINS

A chain is a sequence of patterns. Up to 256 pattern slots are possible to allocate between 64 chains.

GLOBAL

The GLOBAL menu contains project management, settings for the synth and sequencer, Analog Keys MIDI setup (including custom mapping of the *KEYBOARD*), CV functionality, OS upgrade and SysEx data handling. Four global slots are available and each slot can have its own specific settings. Access the GLOBAL menu by pressing [FUNCTION] + [SONG].

ABOUT THE TRACKS

THE SYNTH TRACKS

The synth tracks consist of track 1—4. To edit one of them, press [TRACK] key 1—4. Sounds are loaded to the synth tracks.

THE FX TRACK

The FX track controls the Analog Keys internal master effects and external audio inputs. To edit the FX track, press the [TRACK] key 5.

THE CV TRACK

The CV track is used for controlling external equipment capable of receiving analog CV and Gate signals. To edit the CV track, press [TRACK] key 6.

EDITING THE TRACKS

The six **[PARAMETER]** keys open pages that are used for editing the tracks. They contain different parameters depending on the track type. Edit parameters using the *DATA ENTRY* knobs. Press and turn a knob to adjust its parameters in larger increments.

KITS AND SOUNDS

Kits and Sounds are the basic building blocks of the Analog Keys. Kits can be regarded as a collection of Sounds as well as other settings. A Sound is essentially a synth track patch. Sounds can be loaded to any of the synth tracks.

A Sound that has been loaded becomes a part of the active kit. Any changes made to a loaded Sound will not affect the loaded Sound per se, but rather the active kit. A pattern, controlling the playback of the kit, is always linked to a kit. Changing patterns therefore means the kit might be changed as well.

LOADING A KIT

1 Open the **KIT** menu by pressing **[KIT]**.

2 Use the **[UP]** and **[DOWN]** arrow keys to select **LOAD KIT**. Press **[YES/SAVE]** to open the menu.

3 The **LOAD KIT** menu contains up to 128 saved kits. The currently active kit is indicated by inverted graphics. Select the kit to be loaded by using the **[ARROW]** keys or the *SOUND SELECTION* wheel.
4 Once a kit has been selected, press **[YES/SAVE]** to load it. The active pattern will be linked to the loaded kit.

SAVING A KIT

1 Open the **KIT** menu by pressing **[KIT]**.

2 Use the **[UP]** and **[DOWN]** arrow keys to select **SAVE KIT**. Press **[YES/SAVE]** to open the menu.
3 Select the position to which the kit should be saved by using the **[ARROW]** keys or the *SOUND SELECTION* wheel.
4 Once a position has been selected, press **[YES/SAVE]** to save the kit. The naming menu will appear. Read more about the naming menu on page 13

LOADING A SOUND TO A SYNTH TRACK

1 Select the synth track the Sound should be loaded to by pressing [TRACK] key 1-4.

2 Open the SOUND menu by pressing [SOUND].

3 Use the [UP] and [DOWN] arrow keys to select SOUND BROWSER. Press [YES/SAVE] to open the menu. The SOUND BROWSER shows a list of all Sounds residing in either the +Drive Sound library or the Sound pool. Scroll the list by turning the *SOUND SELECTION* wheel or by pressing [UP]/[DOWN].

4 By factory default, the +Drive Sound library is being browsed. If the Sound is to be loaded from the Sound pool, press the [LEFT] arrow key. The SORTING menu will open. Highlighting the first option in the menu and pressing [YES/SAVE] switches between browsing the +Drive Sound library and the Sound pool.

5 Load a Sound by pressing [YES/SAVE].

The SOUND BROWSER can be accessed directly by pressing or turning the *SOUND SELECTION* wheel. Turn the wheel to select the sound of your choice, then press the wheel to load a sound.

SAVING A SOUND

1 Open the SOUND menu by pressing [SOUND].
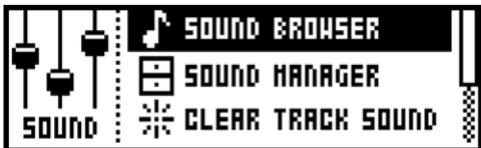
2   Use the [UP] and [DOWN] arrow keys to select **SOUND MANAGER**. Press [YES/SAVE] to open the menu. The **SOUND MANAGER** can be regarded as a more powerful version of the **SOUND BROWSER**. Here Sounds can be saved, loaded, tagged, locked et cetera. Scroll the list by turning the *SOUND SELECTION* wheel or by pressing [UP]/[DOWN].

3   By factory default, the +Drive Sound library is being browsed. If you wish to save the Sound to the Sound pool, press the [LEFT] arrow key. The **SORTING** menu will open. Highlighting the first option in the menu and pressing

[YES/SAVE] switches between browsing the +Drive Sound library and the Sound pool.

4   Select an empty slot. Press [RIGHT] to access the **SOUND OPERATIONS** menu. The available operations will affect the currently highlighted Sound.

5   Select **STORE TRACK SOUND**. Press [YES/SAVE] to store it to the selected slot.

6   The **NAMING** menu will appear. Read more about this menu on the next page.

PLAYING A SOUND

Playing a Sound is done using the *KEYBOARD*.

1   Select the Sound that should be played by pressing [TRACK] keys 1-4. The information on the LCD display showing which kit is loaded will briefly change to reflect the name of the loaded Sound.

2   To change octaves, press the [OCTAVE UP] or [OCTAVE DOWN] keys. The *KEYBOARD* key range spans three octaves and one note. The first and last *KEYBOARD* keys play by default a C note. The <OCTAVE> LEDs indicate which octave is selected.

3   Sounds can be played polyphonically. See **POLYPHONY** below.

POLYPHONY

The Analog Keys is capable of four voice multitimbral polyphony (or unison). This is possible thanks to the powerful sound engine that can change sound instantly and allow completely dynamic voice allocation. The sequencer is fully polyphonic, allowing overlapping notes and chords to be programmed on the tracks. Any track can play up to four notes using its own track sound. Notes are distributed to the synth voices according to a user-selectable allocation method. Certain synth voices can also be poly disabled, allowing tracks to have their dedicated, monophonic synth voice available at all times. The poly configuration is stored per kit, for maximum flexibility.

1 Open the **POLY CONFIG** menu by pressing **[FUNCTION]** + **[KIT]**. Select the menu options by pressing the **[UP]**/ **[DOWN]** arrow keys.

```
VOICES 1☒ 2☐ 3☐ 4☐
ALLOCATION       RESET
USE TRK SOUNDS     ☐
POLYCFG
```

2 Select any combination of the four **VOICES** to be poly enabled by using the **[LEFT]** and **[RIGHT]** arrow keys. Tick or untick a box by pressing the **[YES/SAVE]** key. Voices that are not set to be poly enabled will be dedicated monophonic voices for their corresponding tracks. These will never be used for polyphonic playback. Voices that are set to be poly enabled will be allocated dynamically by any of the poly enabled tracks.

3 **ALLOCATION** changes the allocation cycle of the four voices, or sets all four voices to play simultaneously (**RESET**, **ROTATE**, **REASSIGN** or **UNISON**, respectively). Select mode with the **[LEFT]** and **[RIGHT]** arrow keys.

4 Select **USE TRK SOUNDS** if you want to force the selected voices to use the Sounds of the four tracks, instead of letting the voices use the played Sound in a dynamic way. Tick/untick box to activate/deactivate using the **[YES/SAVE]** key or the **[LEFT]** and **[RIGHT]** arrow keys.

In the **POLY CONFIG** menu, you can activate/deactivate voice 1-4 directly. Just press [TRIG] key 1 through 4. When in the **POLY CONFIG** menu, the red LEDs above [TRIG] key 1-4 will be half-bright. When a voice is activated, the corresponding LED will light up full-bright.

EDITING A SOUND

1 Select one of the synth tracks by pressing **[TRACK]** keys 1-4. The Sound of the active synth track is the one that will be edited.

2 Adjust the overall volume level of the active track with the *LEVEL* knob.

3 Edit a Sound by adjusting the parameters found on the synth track **PARAMETER** pages. Access these pages by pressing the **[PARAMETER]** page keys. If a page contains a subpage, press the **[PARAMETER]** page key again to access it. Use the *DATA ENTRY* knobs to change the parameters.

OSC1 controls oscillator 1. Contains one sub page for the noise generator.

OSC2 controls oscillator 2. The sub page hosts parameters relevant for both oscillators.

FILTERS controls the two filters and the overdrive. One 24 dB/octave 4-pole lowpass ladder filter and one 2-pole multimode filter are available, connected in series with the overdrive between them.

AMP contains parameters for the amplitude envelope. Effect sends are found here as well.

ENV offers two freely assignable envelopes. The first one also controls the filters. The second envelope is located in a subpage.

LFO is where parameters for the two freely assignable LFOs are found. Contains one subpage.

EDITING THE FX AND CV TRACKS

Editing the FX and CV tracks is very similar to editing the Sounds of the synth tracks of the active kit. The **PARAMETER** pages contain parameters relevant for the two types of track.

THE NAMING MENU

The naming procedure is identical for the various naming menus that will appear when Sounds, kits, et cetera are saved or renamed.

```
ENTER SOUND NAME
001:M̲Y SOUND 1          ✎
```

1 Use **[LEFT]** and **[RIGHT]** arrow keys are to navigate between the letters.
2 Turn the *SOUND SELECTION* wheel or press the **[UP]** or **[DOWN]** arrow keys to select the letter.
3 Press **[YES/SAVE]** when you are happy with your name.

When naming, you can also press and hold **[FUNCTION]** to access the HI-SCORE naming menu. Navigate between the letters in this menu using the **[ARROW]** keys. Release **[FUNCTION]** to insert the letter.

THE SEQUENCER

BASIC PATTERN OPERATIONS

The sequencer of the Analog Keys stores information in patterns. A pattern controls the playback of the synth, FX and CV tracks and various aspects of these tracks. Adjustments made to the active pattern are saved automatically. However, you are advised to manually save treasured patterns (and Kits) regularly, especially when working on several patterns at the same time.

SELECTING A PATTERN

1 Press the **[BANK GROUP]** key to choose the bank group. If for example bank group A-D is chosen, patterns in banks A, B, C and D can be selected.
2 Next, press a **[BANK]** key followed by a **[TRIG]** key (1-16) to select a pattern within the selected bank. Patterns containing data are indicated by half-bright red <TRIG> LEDs. The currently active pattern is indicated by a full-bright red <TRIG> LED.
3 To select, for example, pattern B05, select bank group A-D using the **[BANK GROUP]** key. Then press and hold **[BANK B/F]** and press **[TRIG]** key 5.

PATTERN CONTROL

Pressing **[PLAY]** will start the playback of a pattern. Pause by pressing **[PLAY]** again. Pressing **[STOP]** will stop the playback of all tracks. After a pattern has been stopped, pressing **[PLAY]** will make the pattern start playing from the beginning.

TRACK MUTING

Muting tracks is done by pressing **[FUNCTION]** + the **[TRACK]** key of the track that should be muted. Only the note trigs of the sequencer are muted. It is still possible to play a muted track manually using the *KEYBOARD*.

The <TRACK> LEDs indicate the mute status. Unlit <TRACK> LED indicate the muted tracks. Green <TRACK> LEDs indicate audible tracks. A red <TRACK> LED indicates the active, audible track. A yellow <TRACK> LED indicates an active, muted track.

PATTERN RECORDING MODES

The Analog Keys offers two main modes of inputting trigs when creating a pattern: GRID RECORDING mode and LIVE RECORDING mode.

TRIG TYPES

Two types of trigs, note trigs and trigless locks, can be entered in the RECORDING modes. Note trigs trig notes while trigless locks can be used to apply parameter locks without triggering notes. Note trigs are indicated by full-bright <TRIG>

LEDs and trigless locks are indicated by half-bright <TRIG> LEDs.

GRID RECORDING MODE

GRID RECORDING is a method of composing where trigs are added by using the [TRIG] keys.

1 Enter GRID RECORDING mode by pressing the [REC] key. A lit red <REC> LED indicates GRID RECORDING mode is active.
2 Select the track to which you want to add trigs by pressing the relevant [TRACK] button.
3 Place note trigs on the sequencer by pressing the [TRIG] keys. To add note values to trigs, press and hold a [TRIG] key while pressing a key on the *KEYBOARD*. To add a trigless lock, press [FUNCTION] and [TRIG]. To shift all trigs a whole step left or right, press and hold [FUNCTION], then press [ARROW] key left or right.
4 Press [PLAY] to listen to the sequence.

LIVE RECORDING MODE

LIVE RECORDING mode is the second method of adding trigs to the tracks. In this recording mode, the *KEYBOARD* can be played in real time to input trigs to the tracks. It is also possible to enter parameter locks in real time.

1 Hold [RECORD] while pressing [PLAY] to enter LIVE RECORDING mode. The sequencer will start to play and the <RECORD> LED will start to flash.
2 Enter trigs to the active track in real time by pressing the keys on the *KEYBOARD*.
3 Press [PLAY] to exit LIVE RECORDING mode while keeping the sequencer playing. If LIVE RECORDING mode is active and [REC] is pressed, GRID RECORDING mode will be entered.
4 Press [STOP] to stop both the recording and the playback of the sequencer.

SEQUENCER FEATURES

PARAMETER LOCKS

Parameter locks is a powerful feature that allows trigs to have their own unique parameter values. All note trigs of a synth track could for example have different pitch or filter settings. Parameter locks can be applied to all types of tracks.

1 In GRID RECORDING mode, press and hold the [TRIG] key of a trig to apply parameter locks.
2 Adjust the parameters you want to lock using the *DATA ENTRY* knobs. The graphics in LCD will become inverted for the locked parameter and the locked parameter value will be displayed. The <TRIG> LED of the locked trig will begin to flash rapidly, indicating the trig now contains a parameter lock.
3 Remove a single parameter lock by holding [TRIG] + pressing the *DATA ENTRY* knob of the locked parameter. By removing a note trig and entering it again, all parameter locks will be erased from the trig.
4 In LIVE RECORDING mode, turn a *DATA ENTRY* knob to input parameter locks to the active track. Note trigs will be locked accordingly and trigless locks containing the locks will be placed on the sequencer steps not containing note trigs.

TRACK TRANSPOSE

Tracks can be transposed in real time. The tracks that will be affected by this functionality are set in the NOTE SETUP menu, which is accessed by pressing [FUNCTION] + [NOTE]. The TRK TRANSPOSABLE setting in this menu needs to be activated for the track to be affected by the transpositions.

To transpose, press and hold [TRANSPOSE] + a *KEYBOARD* key. Select a different octave range to transpose to by pressing [OCTAVE UP] or [OCTAVE DOWN].

If [FUNCTION] + [TRANSPOSE] are pressed, the transpose lock functionality will be activated. Transpose lock is indicated by a full-bright <TRANSPOSE> LED. When this function is activated, the [TRANSPOSE] key will act as if constantly pressed, enabling one-handed transpositions when pressing the *KEYBOARD* keys.

MULTI MAP

Multi map allows custom mapped keyboards splits, pattern triggering per key, Sound trig per key, MIDI trig of external synths, and more. In the Multi map mode, for example, full analog drum kits, bass lines, and lead sounds can be played simultaneously. Ideal for performances and live improvisations. The internal multi map trigs can also be recorded in the sequencer. To activate the default multi map of the *KEYBOARD*, press the [MULTI MAP] key. To deactivate, press again. A red LED above the button indicates if the multi map is activated (full bright) or deactivated (off).

FACTORY RESET

When performing a factory reset on the Analog Keys it will overwrite and re-initialize the active project (including all pattern, kit, sound pool and global data). The +Drive project slot 1 will be overwritten and re-initialized. Sound bank A and B will be overwritten with the factory Sounds. Factory preset patterns, kits, Sounds and settings will be re-initialized.

If you wish to keep the active project, remember to save it to a +Drive project slot higher than 1 before you perform a factory reset. To perform a factory reset, hold **[FUNCTION]** pressed while turning on the Analog Keys. In the menu that appears, press **[TRIG]** key 3.

TECHNICAL INFORMATION

SPECIFICATIONS

THE SEQUENCER

4 synth tracks
1 FX track
1 CV/Gate track
128 projects (+Drive)
4096 sounds (+Drive Sound library)
128 patterns (per project)
Up to 64 steps per pattern
128 Sounds (per project)
128 Kits (per project)
16 Songs (per project)
6 × arpeggiators
Individual track lengths
Swing, slide and accent functions
Track transpose
Micro timing
Parameter locks
Live friendly Performance mode
Sound-per-step change
Instant kit, pattern, track and Sound reload
Full real-time control

SYNTH VOICE × 4

Fully analog signal path
2 × analog oscillators
Variable waveshape on all waveforms
Oscillator AM and Sync modes
2 × sub-oscillators
1 × noise generator
1 × 4-pole analog lowpass ladder filter
1 × 2-pole analog multi-mode filter
1 × analog overdrive circuit
Filter feedback
2 × assignable LFOs
1 × dedicated vibrato LFO
2 × dedicated waveshape LFOs
1 × amp envelope
2 × assignable envelopes
2 × dedicated LFO fade envelopes
1 × dedicated noise fade envelope
1 × dedicated vibrato envelope
1 × dedicated autobend envelope
3 × individual effect sends
Full MIDI control

SEND EFFECTS

Wideshift Chorus
Saturator Delay
Supervoid Reverb

FEATURES

Up to 4-Note Polyphony/Multitimbral/Unison
Dynamic voice allocation for the 4 tracks
+Drive enables multiple (×128) projects

IMPEDANCE BALANCED AUDIO OUTPUTS

Main outputs level: +19dBu
Output impedance: 440 Ω unbalanced

UNBALANCED AUDIO INPUTS

Input level: +19dBu maximum
Audio input impedance: 9 k Ω
Digital S/N Ratio: 102dBFS (20-20.000Hz)

HEADPHONES OUTPUT

Headphones out level: +19dBu
Output impedance: 55 Ω

STEREO INDIVIDUAL TRACK OUTPUTS

Output level: +19 dBu
Output Impedance: 1.2 k Ω

ELECTRICAL SPECIFICATIONS

Acceptable power supply: 100-250 VAC, 50-60 HZ
Unit power consumption: 14 W typical, 25 W maximum.
Power inlet type: IEC 60320 C8
Recommended power cable type: IEC 60320 C7, rated for 240V and at least 2.5A

HARDWARE

122 × 32 pixel backlit LCD
MIDI In/Out/Thru with DIN Sync out
2 × ¼" impedance balanced audio out jacks
2 × ¼" audio in jacks
1 × ¼" stereo headphone jack
4 × ¼" individual track stereo outputs
2 × ¼" dual CV/Gate outputs
37-key semi-weighted, velocity sensitive Keyboard with aftertouch
Assignable omnidirectional *JOYSTICK* with pushbutton
48 kHz, 24-bit D/A and A/D converters
Flash-EEPROM upgradable OS
Electrically isolated USB 2.0 port

PHYSICAL SPECIFICATIONS

Aluminum casing
Dimensions: W660× D309×H93mm (26×12.2×3.7")
(including, audio outputs, knobs and rubber feet)
Weight: approximately 5.4 kgs (11.9 lbs)

CREDITS AND CONTACT INFORMATION

PRODUCT DESIGN AND DEVELOPMENT
Oscar Albinsson
Magnus Forsell
Anders Gärder
Jimmy Myhrman
Jon Mårtensson
David Revelj
Mattias Rickardsson
Daniel Troberg

ADDITIONAL DESIGN
Thomas Ekelund

FACTORY DEFAULT SOUND DESIGN
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Richard Devine
Nicholas Lem
Jimmy Myhrman
Jon Mårtensson
Cenk Sayinli
Alex Schetter
Charlie Storm
Daniel Troberg

REFERENCE MANUAL
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Thomas Ekelund
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RECOMMENDED CONNECTORS

Power in (100-250 V AC, 50-60 Hz): Use the included C7 power cable, or equivalent, connected to a power outlet.

Full-speed USB 2.0 Connection: Connect using the included A to B USB 2.0 connector cable to a computer host.

MIDI Thru: Use standard MIDI cable to connect another MIDI unit in chain. Duplicates incoming MIDI In data stream.

MIDI Out: Use standard MIDI cable to connect to MIDI In of an external MIDI unit in order to control it.

MIDI In: Use standard MIDI cable to connect MIDI Out of an external MIDI unit in order for it to control the Analog Keys.

CV outputs: Connect to external synth with CV inputs. Use either standard ¼" mono phone plug or ¼" insert/Y cable.

Audio input L/R: Use standard ¼" mono phone plug to input sound from other synthesizers or mixers.

Individual stereo outputs Track 1-4: Use ¼" insert/Y cable in order to access both left and right channels.

Main Out L/R: Use either ¼" mono phone plug (unbalanced connection) or ¼" stereo (Tip/Ring/Sleeve) phone plug (balanced connection).

Headphones Output: Connect standard headphones with ¼" stereo phone plug.