The SYNTHR10

User Manual

Version 1.0 EN

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Welcome.

Welcome to the SYNTHR user community.

After making our mark in monophonic and paraphonic analog synthesizers, all that remained was to venture into polyphony. That's now a reality with the SynthR10. As you've guessed, 10 stands for 10 voices. Why not 8 or 12? So that musicians wouldn't say to me, "Ah, 8 isn't enough for long sounds..." So 10, like 10 fingers, and no more, because analog means a lot of components, which means a bigger power supply, more heat...

I would like to thank my friend Jean Luc LARTIGUE, without whom this project would never have seen the light of day, because managing 10 analog voices in all modes and with my requirements, plus full MIDI implementation, is not something just any programmer can do.

Thanks also to Yves USSON for programming the effects. I would also like to thank the people behind the scenes who helped me with the case and finally my wife, who put up with my many moods during development.

SYNTHR SAS – Rémy WASSELIN

Connections.

The desktop comes with a manual in French (English available on the synthr.fr website), a UE IEC13 power cord, a set of side supports, and screws for attaching these supports.

All connections are made on the rear panel. Starting with a separate standardized power socket with an On/Off button.

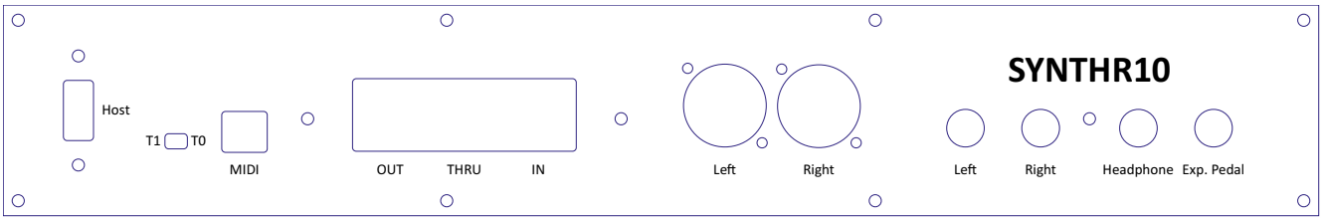
Four 6.35mm jacks: one for stereo headphones, one for an expression pedal (wiper on the TIP), and two for unbalanced right and left line outputs.

Two XLR jacks for balanced right and left line outputs.

Three DIN MIDI jacks: In, Out, and Thru.

One USB B MIDI jack for connecting a computer and one USB A Host jack for connecting a host keyboard.

A 2-position switch for updating firmware. Always leave in position T1 for normal operation in MIDI_USB mode. See Appendix.



Warning.

This device must be used in accordance with the conditions of use for electronic devices, i.e., certain precautions must be taken to avoid damage.

Avoid moisture and splashes, do not place on or near a heat source, avoid excessive dust. The connection to the mains must be made with a standard cable. Do not open without disconnecting it. Ensure stable installation.

Reading and general use advice.

The first tip is to read this manual.

- Throughout this manual, buttons and controls are generally highlighted in GRAY. References to screen or menu functions are highlighted in blue.
  The left-hand Select encoder allows you to select the parameter by turning it and to select or tab through the categories by pressing it. The right-hand Value encoder allows you to select the value of this parameter or to browse through the different patches and load them automatically. Depending on the screen, pressing this encoder allows you to move more or less quickly, e.g., x10 or x1, or to confirm an option or display a chronological list of patches.
- Most functions are directly accessible via memory buttons and potentiometers. Some functions require the SHIFT button, which doubles the function of certain buttons that have two definitions. This button also serves to go back in the screens. Depending on the configuration, it may be necessary to press it twice. If it remains lit, press it again to turn it off.
- A screen is called up either by pressing a button or by turning a knob. It is displayed for a certain amount of time, and a scroll bar at the top indicates the time remaining. This time can be adjusted in the Global Inactivity menu. Once the time has elapsed, the screen will return to game mode. To deliberately shorten the display time, simply press the SHIFT button.
  By pressing Patch or Perf., the screen remains in these modes until SHIFT is pressed.
- The information at the bottom of the screen and in front of the encoders relates to the action of pressing one or other of the encoders. The rotation functions are always Select and Value.
  The information at the bottom center of the screen shows the value of the last activated potentiometer and the activity of the 10 voices if the option is selected in the Global System menu.
- All modulations can be adjusted on screen from 0 to 100% in increments of 1 or 10%.

The Assign buttons (white LED).

There are six of them, allowing you to add up to four assignments per button. To make an assignment, press one of the Assign buttons and simultaneously turn a destination knob. All knobs on the front panel are assignable except for Glide speed and amount, headphone volume, and master volume. The link is created. And so on, up to a maximum of four. If a fifth assignment is applied, it will overwrite the fourth. The Select encoder allows you to choose one of the four possible assignments, either to delete it by pressing it or to point to the assignment that the value encoder allows you to adjust.

The modulation matrix is defined by pre-assignments in each module. These Assign buttons enhance the modulation possibilities available to the user.

We will also encounter these free assignments for the Expression Pedal. Once in the Global Assign Expression Pedal menu, simply turn the desired potentiometers.

The different notes of an arpeggio or sequencer can also be assigned.

Architecture.

The SYNTHR10 is a 10-voice polyphonic analog synthesizer. It includes two 5-voice cards, called A and B.

Each voice consists of 2 VCOs (SSI2130 circuit), inter-VCO cross-modulation, a sub-oscillator, and 2 VCFs: a low-pass (SSI2140) and a multimode (AS3320). Cards A and B are connected to a final VCA and a pan VCA. The stereo output is then sent to an output card comprising two effects circuits that terminate in two unbalanced line outputs or two balanced outputs and a stereo headphone output.

The audio chain is purely analog except for the LFOs, envelopes, and effects, and is controlled by control voltages.

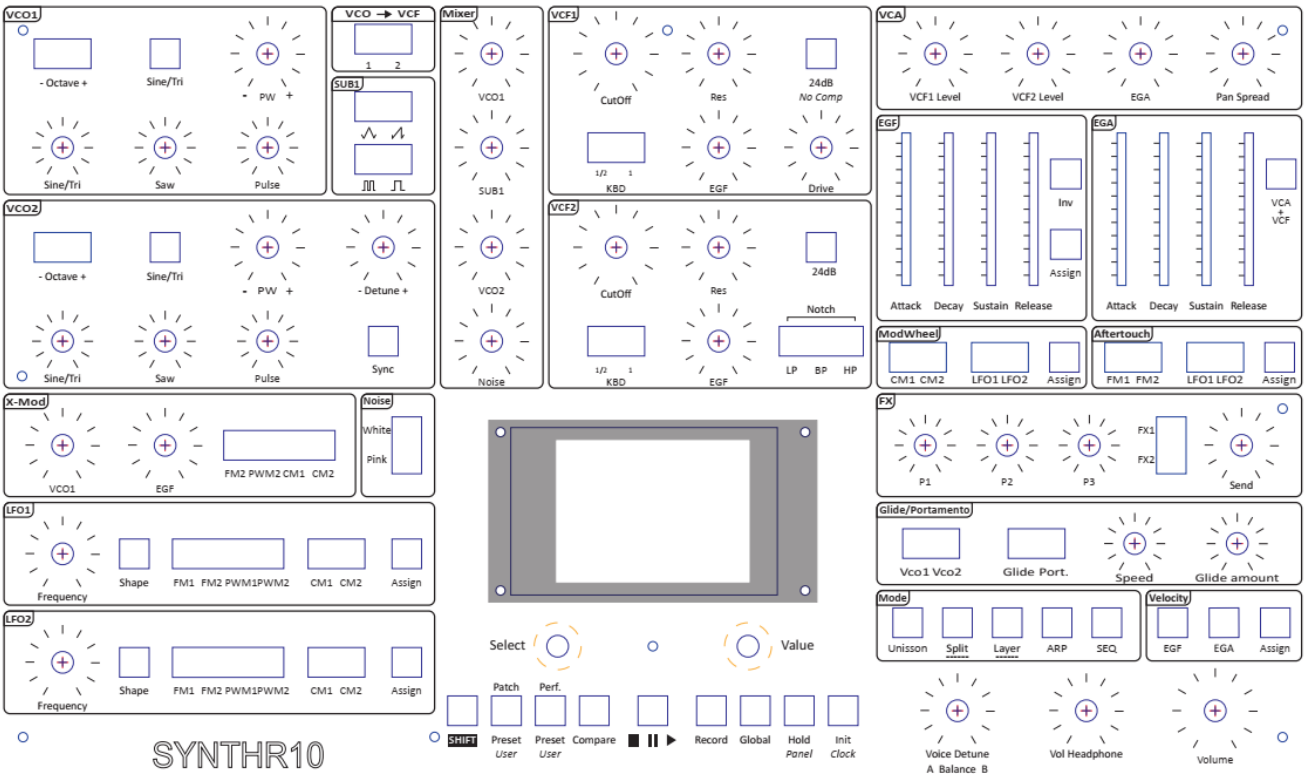
Each voice has two envelopes, one for the VCF and one for the VCA, and two LFOs.

We will see more detail on how they work as we progress through this manual.

With this architecture, we have the following modes: 10-voice polyphonic, 5-voice split and layer (i.e., bi-timbral), 5-voice arpeggiator in split mode, 5-voice sequencer in split mode, looper, and unison (1 to 10 voices).

The SYNTHR 10 can be controlled by one or two keyboards at the same time with monophonic or polyphonic velocity and aftertouch. In this case, set the second keyboard to a different MIDI channel. It can also be controlled by music software. In the Global Keyboard Utilities menu, you can decide whether to use poly aftertouch or not, release velocity, and MPE with options, provided you have a compatible controller. When using MPE, only one keyboard will be possible and the Looper will be disabled.

FRONT PANEL



Detail Review.

The VCOs.

VCO1 and 2.

Equipped with an octave selector (+ or -) that can be pressed repeatedly up to 2 octaves, a pulse width (PW) control, and a waveform mixer. This mixer has 3 knobs: the first controls either the sine or triangle wave depending on the button above it, and the next two control the sawtooth and pulse waves.

The **VCO2** also has a Sync button and a **Detune** knob. By default, Detune is set to continuous and + or - 7 semitones. This can be changed in the Global Parameters menu.

VCO1 provides the source for a **SUB1** sub-oscillator, which can be set to triangle, sawtooth, or square waveforms at octave -1 and square waveforms at octave -2, and these can be combined.

A **cross-modulation** section allows VCO2 to be modulated in frequency or PWM by VCO1 as well as by the filter envelope.

A white or pink **Noise** section can be activated. All these sources are found in the **MIXER**.

SUB1 accompanies VCO1 to the various VCF destinations. Noise is directed only to VCF2.

The VCFs.

Depending on the position of the two knobs located at the top right of VCO1, the VCOs are routed to the filters.

Both buttons off (default position): VCO1 and SUB1 are routed to VCF1, VCO2 and NOISE are routed to VCF2. Parallel mode.

Button 1 lit: All sources except Noise are sent to VCF1. Button 2 lit: All sources are sent to VCF2.

Buttons 1 and 2 lit: all sources are sent to VCF2 then VCF1. Series mode.

VCF1.

This is a 12 or 24dB low-pass filter, 24dB button, clone of the SSM2040, with Cutoff, Resonance, EGF filter envelope level, keyboard tracking of 50% ½ button, 100% button 1, 150% buttons ½ and 1, and a soft **overdrive**.

This filter is **resonance compensated**, which allows you to maintain the bandwidth before resonance. Pressing SHIFT then No Comp causes the knob to flash briefly to indicate that compensation has been disabled (shown on the screen). To re-enable it, press SHIFT then No Comp.

VCF2.

This is a multi-mode filter clone of the CEM3320 processed by a method known in the MATRIX 12 as "pole mixing," with Cutoff, Resonance, EGF filter envelope level, and keyboard tracking of 50%, 100%, and 150%. The modes are LP 12dB and 24dB, BP 12dB and 24dB, HP 12dB and 18dB, Notch +LP6 dB, LP+N 12dB by pressing LP and HP simultaneously.

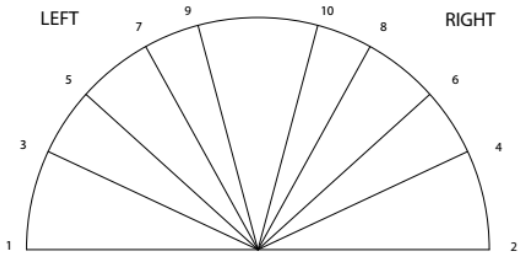
This filter is **resonance-compensated**, which allows the pre-resonance bandwidth to be maintained for all modes.

The two VCFs are summed in the VCAs.

The VCAs.

The outputs of VCF1 and 2 can be adjusted using the **VCF Level** potentiometers, followed by the EGA envelope level. A **Pan Spread** potentiometer completes the output to spread the voices across the stereo field. In the 0

position, all voices are centered, which is equivalent to a mono output. The closer you turn towards 10, the more you spread the even voices to the right and the odd voices to the left.



Position 10 of the Pan Spread potentiometer.

The LFOs.

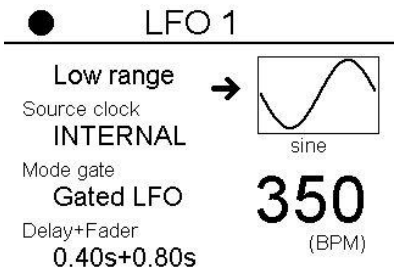
LFO1.

This LFO is global to all voices. Pre-assignment buttons allow you to send it to:

- FM1: frequency modulation of VCO1.
- FM2: frequency modulation of VCO2.
- PWM1: pulse width modulation of VCO1.
- PWM2: pulse width modulation of VCO2.
- CM1: cutoff modulation of VCF1.
- CM2: cutoff modulation of VCF2.

Each of these modulations calls up a dosage screen (Value encoder) from 0 to 100%.

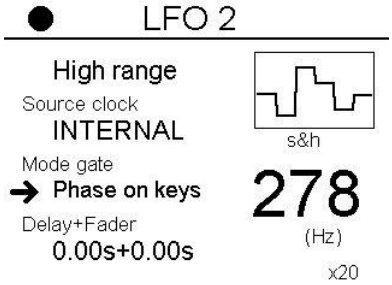
Turning the **frequency** knob or pressing Shape brings up a screen that allows you to access different parameters with the Select encoder:



- **Range Low**: 6 to 580 bpm, High: 10 to 500Hz.
- **Clock source**: Internal, MIDI*coefficient (/4, /3/, /2, 1, *2, *3, *4).
- **Gate mode**: trigger mode: free or gated (on the note)
- **Delay+fader**: 0 to 5 seconds delay with 0 to 5 seconds input and output fader, adjustable with the Value encoder. Requires Gated LFO.
- **Shape**: sine, ramp, saw, square, triangle, sample & hold, variable.

LFO2.

This LFO is polyphonic for VCO frequency modulation.



The parameters are identical plus 2 parameters for Gate mode:
Phase on keys: which starts the LFO at 0 on each note.
All in phase: where all notes will receive the same LFO phase.

The LED lit on the screen indicates that an assignment is in progress. Similarly, the Shape button flashes at a frequency and indicates that an assignment is in progress.

These two LFOs also have an Assign button that allows up to four free assignments to any destination potentiometer and adjusts this assignment via the screen from 0 to 100%.

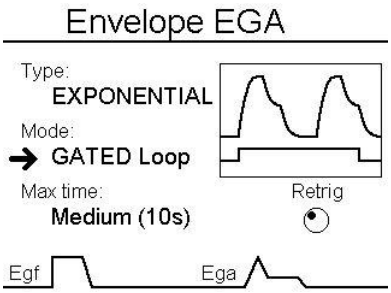
For example, you can send LFO1 to the noise mixer knob at 20% and the filter envelope attack knob at 50%.

When the parameter screen disappears, you can recall it by pressing one of the current selections or by modifying a knob. Pressing a selection a second time removes it.

The EG envelopes.

EGA.

Envelope assigned by default to the output VCAs, the amount of which can be adjusted in the VCA section. Modifying one of the A, D, S, or R potentiometers displays a screen allowing access to various parameters (see EGF). The VCA+VCF button disables the EGF envelope of the filters, and in this case, the EGA envelope controls the VCFs and VCAs.

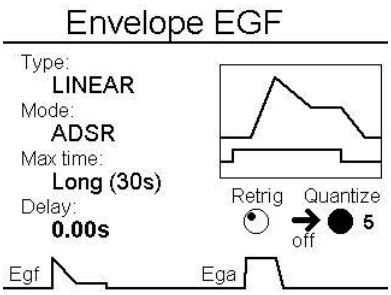


EGF.

Envelope assigned by default to both filters, the amount of which is adjustable for each filter. Changing any of the A, D, S, or R knobs brings up a screen allowing access to various parameters. The INV button reverses the envelope, while the Assign button assigns the envelope to any knob. Its use should be combined with the VCA+VCF button of the EGA envelope.

The parameters on the screen that are common to these two envelopes are:

- **Type**: linear, exponential.
- **Mode**: ADSR (standard), Gated Loop, Loop free.
- **Max time**: - Short 3s for Decay and Release, 1.5s for Attack.
  - Medium 10s for D and R, 5s for A.
  - Long 30s for D and R, 15s for A.
- **Delay** only for the EGF envelope: from 0 to 5s

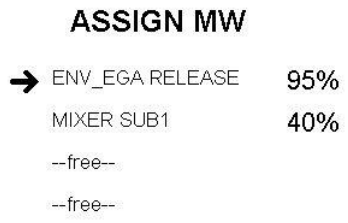


The **Retrig** function, accessible via the Select encoder, is useful in Unison mode.

The **Quantize** function is accessible via the Select encoder, and the value encoder allows you to choose the height of the steps on the EGF.

ModWheel.

Predefined assignments on the cutoff of VCF1 (CM1 button), VCF2 (CM2 button), the amplitude of LFO1 (LFO1 button) or LFO2 (LFO2 button). With the Assign button, 4 assignments are possible.



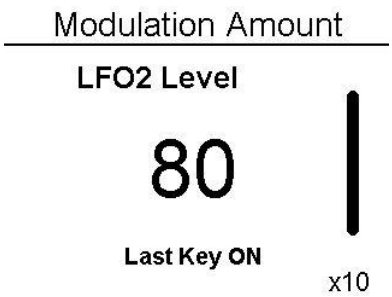
Example of using the Assign knob: the frequency of an LFO.

Double-pressing a pre-assignment removes it.

Aftertouch.

Preset assignments on the frequency of VCO1, VCO2, the amplitude of LFO1 or LFO2. With the Assign button, 4 assignments are possible.
If you are using a keyboard with global aftertouch, there is an option to have aftertouch only on the last note played by turning the Select encoder.

Example of using the Assign button: the resonance of a VCF.



Double-clicking on a pre-assignment removes it.

Velocity.

The keyboard velocity is assigned to the envelope amplitude or has 4 free assignments. EGF, EGA, and Assign buttons.

Double-pressing a pre-assignment removes it.

See "About velocity" in the appendix.

Glide and Portamento.

Effect applicable to either or both VCOs. Pressing the Portamento button activates portamento with adjustable speed, and pressing the Glide button activates glide with adjustable speed and number of semitones ascending or descending. A screen appears allowing access to various parameters. The LED lit on the screen indicates which effect is active. Display of speed and number of semitones. There are two options: one for **quantizing** the effect, and the other, called **Nexus**, which allows legato only on the last semitone or on the last tone.

Example of using the Nexus function: a sound in Unison mode.

To review the settings, press the current effect; to delete it, press a second time.

See the appendix for the definition of these effects.

FX Effects.

There are two effects called FX1 and FX2. The effects are global and can be applied at the Patch or Performance level. An option in the Global Parameters menu allows you to choose whether to load Patches with or without Effects. The default setting is on.

FX1 includes various effects, and FX2 includes reverbs and echoes. They can be activated independently, or both groups of effects can be used in parallel if necessary. Three knobs**, P1, P2**, and **P3**, allow you to adjust the desired effect, and a **Send** knob allows you to adjust the amount of each effect. A screen is displayed allowing access to the various effects and their parameters.

The Select encoder allows you to switch between FX1 and FX2. The four possible settings for each are displayed on the screen.

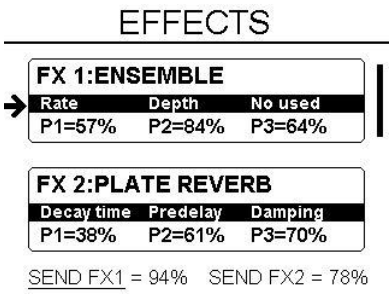
With certain sounds, it is possible to saturate the effects input, particularly in 10-voice Unison mode. To adjust the input level, use the VCF1 Level, VCF2 Level, EGA Level, and EGA Sustain knobs.

FX 1:

- Digital Echo
- BBD Echo
- Chorus
- Ensemble
- Leslie
- Phasing
- Flanger
- Ring Modulator

FX2:

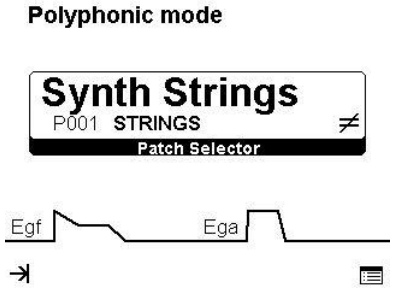
- Spring Reverb
- Plate Reverb
- Large Hall Reverb
- Echo reverb
- Bright Shimmer
- Dark Shimmer
- Ping Pong Delay
- Echo Shimmer



Adjust **Send** to your liking, but it may be necessary to push it to 100%.
Some effects are stereo, which can interfere with Voice Spreading. In this case, leave it at 0.

Configuration.

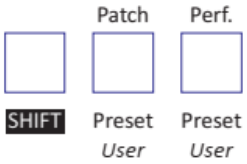
Default screen.



The Value encoder allows you to scroll through the patches. Pressing it displays a list for faster searching, and pressing the Select encoder allows you to switch between categories.

The "different" symbol will appear when an action that may modify the sound is performed.

A Patch is a sound created using the front panel, with or without effects. A setting in the Global Parameters menu allows you to choose between loading Patches with or without the recorded effect. A Performance is the combination of one or two sounds with a mode, a range, a balance between these sounds, an effect, a sequence number, or an arpeggio. Presets are factory settings, while User settings are your own.



Preset Patch / User Patch.

A Patch is a "sound" defined by a name, a category, a set of voltages set by potentiometers (except for the master volume and headphone volume), all the parameters in the LFO, EGA, and EGF menus, and a set of choices defined by push buttons, as well as effects or no effects.

The playing mode is not stored in a Patch because a sound can be used in all modes. The default mode is 10-voice Polyphonic, the other modes are: 1 to 10-voice Unison, 2 x 5-voice Split, 2 x 5-voice Layer, Arpeggio with Split, and Sequencer with Split. (see Playing Modes below).

Patches can be accessed either directly from a mode by turning the Value encoder or by pressing the Patch button, which displays a screen that also allows you to perform the following actions:

-**Load**: Load a patch	
-**Save**: Save.	Only available for User patches
-**Copy**: Copy a patch to another location.	
-**Erase**: Erase.	Only available for users.
-**Edit Name**: Edit the name using the on-screen keyboard.	Only available for Users.
-**Edit Cat**.: Edit the category of this patch.	Only available for Users.
-**Favorite**: Add this patch to your Favorites list.	

Press and hold Patch to access your 128 **personal User Patches**.

When **using these menus, the** INIT **button is disabled**.

Categories and Favorites.

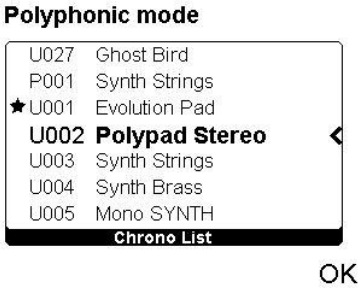
Each User Patch or Preset can be associated with a category. The available categories are:

Arpeggio, Bass, Brass, FX, Keyboards, Lead synth, Monophonic, Pads, Sequencer, Strings, Woodwinds, User1, User2, and No cat.

It is also possible to mark a User Patch or Preset as a **Favorite** (filled star). Go to the desired Patch, turn Select to Favorite, and press OK. To remove it from the Favorites list, return to the Patch, go to Favorite again, and press OK.

On the main page, the patches are sorted by category, with the favorites at the top, and are displayed in layers A and B or in a single layer for unison and polyphonic modes. From this page, you can add or remove a patch from the favorites list by pressing and holding the Value button.

A **numerically sorted** list of Users and Presets is available by pressing the Value encoder. The star on the left indicates a Favorite Patch. By rotating and pressing it, you can easily change the Patch.



Preset Performance / User Performance.

A Performance is the combination of one or two patches called A and B with a Mode. It is defined by a Name and a number. The Balance between the 2 layers or the Voice Detune for Unison mode, the split point, the keyboard range, a sequence number and its clock, and an effect that **replaces** the effect associated with the Patch.

They can be accessed by pressing the Perf. button, which displays a screen that also allows you to:

- **Load**: load a performance.
-**Save**: Save. Only available for User performances.
-**Copy**: Copy a performance to another location.
-**Erase**: Erase. Only available for users.
-**Edit Name**: Edit the name using the on-screen keyboard. Only available for users.

Press and hold Perf. to access your 128 **personal performances**.

When you are in Performance mode, rotating Value and then pressing **LOAD** OK allows you to scroll through all the performances. Press SHIFT to return to the performance content, press Perf or SHIFT then Perf to return to the previous screen.

When using these menus, the INIT **button is disabled**.

Warning: If the patch or patches used by a performance are deleted, the performance will use the neutral "Patch Init" sound as a replacement. When deleting a patch, consider the consequences for the performance.

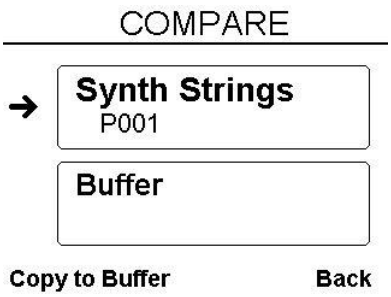
Notes:

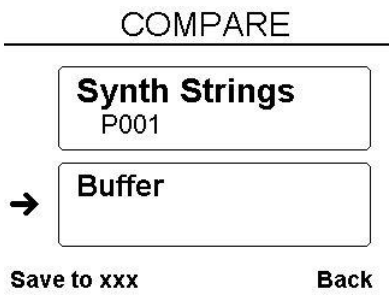
- If a Performance containing effects has been loaded, then you load a Patch, the performance effect is retained if the load option is set to NO in the Global Parameters Menu. If this option is set to YES, the Patch will be loaded with its own effect or none if it does not have one.

- The default mode is polyphonic, so if a Patch is loaded with its effects (Global Parameters Menu), it is comparable to a polyphonic Performance recorded with its effects, except that these effects may be different from those recorded with the Patch.
- If you switch to Patch Preset or User from a Performance, the mode of that performance is retained. To return to the basic Polyphonic mode, press Unison once.

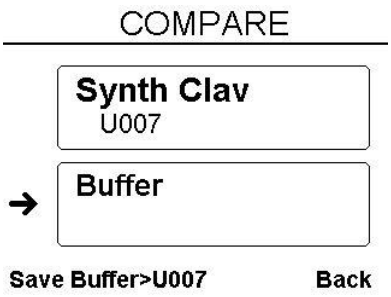
Compare.

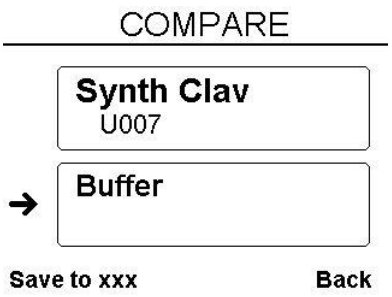
This function allows you to work on a Patch in relation to a reference Patch Preset or User. In the upper window, display the reference Patch.





Press the Select encoder to copy this Patch to the buffer, then modify the sound as desired using the front panel. If the modification requires a fleeting screen, a dotted frame indicates that you are in the Compare function. Use the Select encoder to switch back and forth between the reference Patch and the modified Patch. If the reference patch is a preset, you can save the modified patch to any free or occupied user location. If the reference patch is a user patch, you can save it to the same location as the reference or by turning the Value encoder to any other location. Pressing Back returns you to the last patch you listened to.





Global.

The Global button displays a menu. Select an option using the Select encoder and press it. The different parameter values are selected using the Value encoder. Pressing the Value encoder, called "Back" here, takes you back to the global menu. Pressing Shift returns you directly to the current patch or to the Global menu.

Global Parameters:

- **Detune VCO2 max**: detune VCO2 from 1 to 12 semitones, default is 7.
- **Detune quantized**: Yes/No. No by default.
- **Pitchbend Range**: pitch wheel range from 1 to 12 semitones, default is 2.

-**Glide amount Range**: amplitude from 1 to 12 semitones, 4 by default.
-**Glide / Portamento Max Time**: 1s, 3s, 10s, 30s. Default is 1 s.
-**Round Robin**: On, voices are chosen based on their occupancy. Off, voices are chosen sequentially from 1 to 10. Note that this parameter is saved individually in each patch.
-**Load FX with Patch**: Yes/No. FX are saved in each patch. This option allows you to load a patch with or without its associated FX. Yes by default.

Assign Expression Pedal:

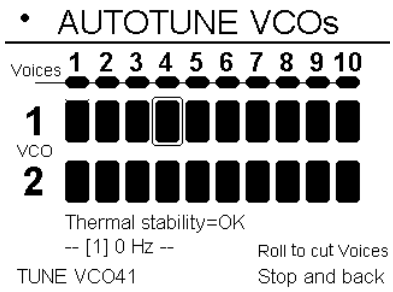
Free assignment of the expression pedal to a potentiometer with its own setting. Up to 4 assignments are possible. Pressing the Value encoder switches between factors 1 and 10. Pressing it again introduces an offset of 0 to 50% on the pedal's travel. This assignment is saved in the Patch and is indicated by an icon next to the patch name.

When a Patch displays the Pedal icon, press **Global-Assign Expression Pedal** to see its assignment**.**

Only connect an expression pedal when it is turned off.

Autotune:

This page allows you to readjust all 20 VCOs at once or select the VCO to be readjusted by turning the Select encoder. You can delete or reactivate one of the voices by selecting one of the voice's VCOs with the Select encoder and then turning the Value encoder.



Wait 15 minutes for the device to warm up before performing an Autotune.

Recommendations: Wait for the message "Thermal stability=OK" and preferably do all 20 VCOs in a single pass. It is always possible to adjust a single VCO. Reload the desired patch or performance. The fan will start up after about 15 minutes.

Keyboard Utilities:

-**Translate MIDI**: -1 octave, No (0 octave), +1 octave**.** This option allows you to adapt the keyboard's range to your needs. The most common setting is to have C4 (263 Hz) centered.
For example, a 61-key keyboard does not have the same C in the center position; it can be C4 or C5.
-**PolyAftertouch**: Polyphonic aftertouch, Yes/No.
- **Release Velocity**: Yes/No
- **MPE:** Yes/No
  - **CC Y axis (slide)**: 74 (0…127) Defines the Command Control number for Slide analysis
  - **Modulation Y Axis**: Allows you to choose the modulation destination:
  Off, LFO2, EGF Decay, EGF Sustain, EGF Decay+sustain, VCF1 Cutoff, VCF2Cutoff, or VCF1+VCF2 Cutoff.

These options depend on your MIDI controller.

Reminder: In Aftertouch channel mode, there is an option to apply Aftertouch only to the last key pressed.

Caution: Be sure to set the keyboard type in the Global Keyboard Utilities menu, otherwise the effect will not be active.
To take full advantage of poly-aftertouch, use LFO2 on FM1 and/or FM2.

Sysex:

The Select encoder allows you to choose whether to send or receive from a computer: a patch, all user patches, a performance, all performances, a sequence, one or all arpeggio profiles, or a looper. Make sure the switch on the rear panel is set to T1.

Inactivity:

This is the amount of time a screen is displayed if no action is taken before returning to the main screen. From 1s to 300s.

Brightness:

- **Light**: Brightness of the LED buttons from 5 to 100%.
- **Screen**: Screen brightness from 10 to 100%.

Color theme: choose a color theme and graphics to suit your taste.

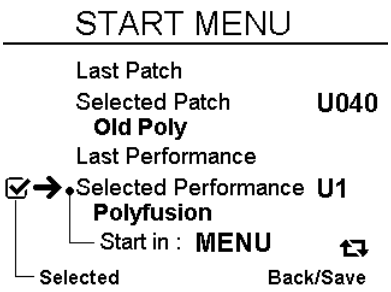
Global MIDI:

MIDI input is via the MIDI DIN IN, HOST, and USB connectors. These three inputs are logically mixed to create a MERGER.

- **MIDI Channel A In**: Auto channel then from 1 to 16. If Auto: automatic detection at each startup. This channel is the default for all modes and both layers.
- **MIDI Channel B In**: Off channel then 1 to 16. If Off: channel B is disabled; otherwise, this channel allows the use of a 2nd keyboard for split modes (split, arpeggiator, sequencer) or the second zone of a multi-channel keyboard. When removing this 2nd keyboard, set the channel to Off. (See appendix).
- **MIDI Channel Out**: Channel Off then from 1 to 16. If Off: no output, otherwise MIDI messages are sent to the DIN Out and USB MIDI for all modes.
- **MIDI Clock Out (x24)**: Activates or deactivates the real-time MIDI Clock message used with 24 pulses per BPM.
- **Send CC Panel**: when MIDI Channel Out is active, ON allows the SYNTHR10 to send MIDI messages from the front panel knobs.
- **Send Sysex by**: either via MIDI USB by default or via MIDI Out DIN jack.

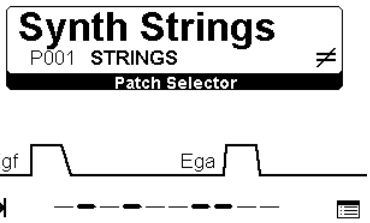
Global System:

- **Set Default parameters**: Resets the parameters.
- **Set Start Menu**: Determines the status of the SynthR10 at startup. You can choose between a patch, a performance, the last patch, or the last performance. By default, startup will be performance P001 in the Performance Preset menu.



- **Balance cursor**: Allows you to choose the Balance cursor graph between voices A and B.
- **Delete Favorites**: Clears the favorites list.
- **User Memories**: Provides graphical information on the usage rate of patches, poly sequencers, performances, and arpeggio profiles.
- **Display Voices Monitor**: On/Off, displays a bar of 10 LEDs representing the 10 voices on the game mode pages. On by default.

Polyphonic mode



Global Tuning: Default 440Hz with fine and coarse adjustments.

VCOs Fine tuning: Default 0. Allows you to adjust the detune of the VCOs between them, voice by voice. The voice can be changed using the keyboard. Make this adjustment after an autotune. It will be cleared at the next autotune.

About: Indicates software versions and usage time.

Hold / Panel.

In Unison and Poly modes, the Hold button acts like a sustain pedal, maintaining the sound at the EGA sustain level.

In Split and Layer modes, the Hold button also maintains the EGA sustain level for both layers A and B. If a sustain pedal is connected to the keyboard, its role will be to maintain the level of the currently selected layer, A or B.

In ARP mode, the Hold button maintains the arpeggio. The right keyboard is not affected. This arpeggio can be transposed by a long pressing on Init/Clock. Pressing this again cancels the transposition and returns to the normal Arpeggio mode

The sustain pedal (CC64) can be used in Unison, Polyphonic, Layer, and Looper modes. In Split mode, it only affects the selected panel (A or B). For ARP and SEQ modes, its use is limited to panel B (right hand).

If notes remain ON against your will, double-pressing Hold generates the MIDI command: All notes Off and stops all voices.

- Pressing SHIFT then Hold/Panel loads the front panel status, i.e., the physical position of the knobs and buttons.

Init/Clock.

Pressing Init loads a basic sound (Patch Init) consisting of a triangle without filtering from VCO1. Please note that the physical position of the knobs may not correspond to this sound but to the previous sound. Get into the habit of returning a knob to 0 before moving to the desired value.
Button does not work in Patch, Performance, Arpeggiator, or Poly Sequencer modes.

- Pressing SHIFT then Init/Clock displays the clock speed and allows you to change it. The clock speed can be accessed directly from the Arpeggiator or Poly Sequencer.

Play Modes.

About the play mode screens.

The name of the play mode is always displayed at the top left of the screen.
In the center is the "Patch Selector," which can take various forms depending on the play modes.

Each frame shows the patch name, its number (Uxxx for User, Pxxx for Preset), layer number A or B, category (e.g., BASS, BRASS, etc.), and favorite information (star). The sounds are sorted by User Favorite, then Preset, then by User Category, then Preset, and finally without category. Turn the Value encoder to change patches. Pressing the Value encoder displays a chronological list of all patches. Pressing OK loads the selected patch.

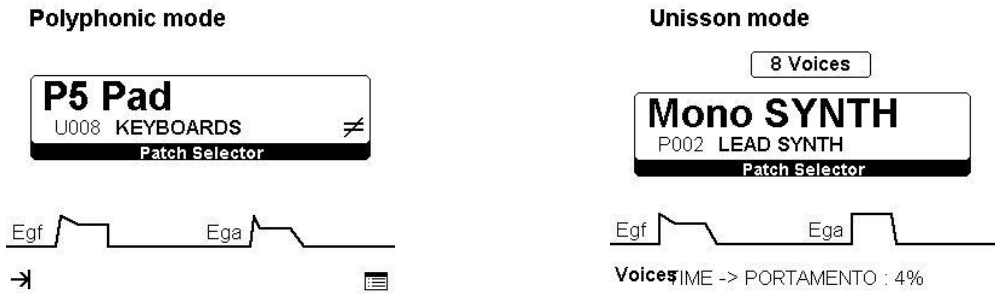
Each frame refers to a layer, and between the frames, depending on the mode, you will find the value of the SPLIT key, the range of the keyboards, and the value of the A/B balance between layers.

The ≠ sign indicates that there has been a change from the original patch.

An expression pedal icon is displayed if the patch uses such a pedal.

10-voice polyphonic.

None of the Mode buttons are lit: the default mode is polyphonic mode.



The playing mode buttons act as toggles. Pressing one of these buttons will take you from the current mode to the newly selected mode. To go to the default Polyphonic mode, press Unison once, button off. Press Unison again to enter this mode, button on.

Unison.

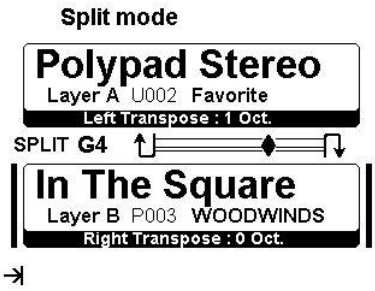
Press Unison: a screen will appear. The Select encoder determines the number of voices used for unison (between 1 and 10, **4 by default**). Pressing this encoder allows you to switch between categories. The Value encoder allows you to change patches.
A patch can be monophonic or polyphonic in nature; in this mode, it will be played in mono. The **Voice Detune** knob allows you to shift the frequency of the voices used to a greater or lesser extent.

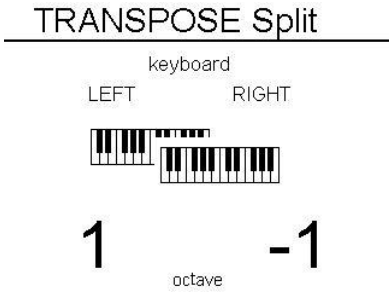
Please note that Unison mode with 10 voices can very quickly saturate the effects. Adjust the **VCA level** or reduce the number of voices.

Split.

Press Split: the 5 voices of card A are sent to the left of the split point and the 5 voices of card B are sent to the right. Press and hold the Split button to select the pivot note.

The screen displays a double panel corresponding to the two patches used. The Select encoder allows you to switch between them, while the Value encoder allows you to select the patch. In this mode, two different patches will be used and balanced with the **A balance B** potentiometer**.**





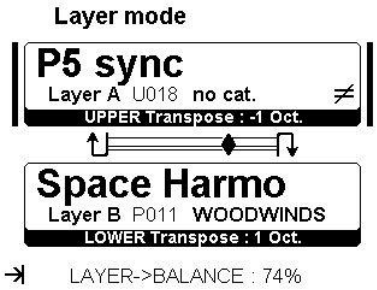
The physical panel is virtually duplicated into two layers (A and B) to produce the sounds of patches A and B. The sound of sound A can only be modified if panel A is selected, and the sound of sound B can only be modified if panel B is selected. This applies to Split, Layer, Arpeggiator, and Poly-sequencer modes.

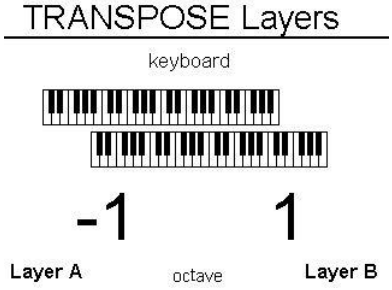
Press SHIFT then Split to select the right and left keyboard ranges. Do not hold down any notes while making changes.

Modwheel and Aftertouch actions are located on the selected Layer. Pitch Bend is then reserved for right-hand playing.

Layer.

Press Layer: The 5 voices of card A are superimposed on the 5 voices of card B, each on a different patch and balanced with the **A balance B** potentiometer**.** 5-voice bi-timbral mode. Press SHIFT then Layer to select the keyboard range for each layer. Do not hold down a note while making changes.





In the mode display, you can press and hold the Value encoder to mark the patch indicated by the selector as a **favorite**, and press and hold again to remove it from your favorites. This saves you from having to go back to the Patch menu.

Arp.

Pressing the ARP button automatically switches the keyboard to split mode, where an arpeggio accompanied by four additional voices plays to the left of the split point. To the right of this point, five voices are available to accompany the arpeggio.

A screen appears and the Select encoder allows you to set the following parameters and the Value encoder allows you to set their values:

- **BPM** * **coefficient** (/4, /3/, /2, 1, *2, *3, *4).
-Clock: Internal, MIDI, LFO1.
-**Type**: Several interlocks/note combinations are possible. It's up to you to explore.
-**Dir**; Up, down, up & down, random, brownian
-**Octave**: from 0 to +3.
-**Swing**: from -20 to +20%.
-**Gate**: 5 to 95% width.
-**Save to sequence**: Saves all 5 arpeggio voices to the 64-step poly sequencer. Swing is not saved. Allow at least one arpeggio cycle to complete before saving. Sequence location 65.
-**Modulation**: press the Value encoder to assign the pitch of the notes to a potentiometer.

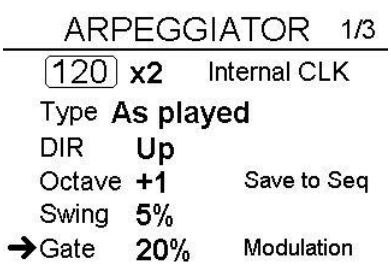
Continuing with the Select encoder, a second page appears that allows you to choose what the next 4 voices do and their level.

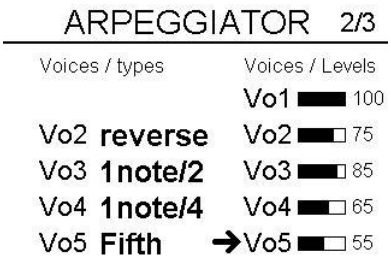
-**Vo2**: Off does not play, Voice 1 copies the current voice, Reverse plays backwards, plays every 2nd, 3rd, or 4th note, plays 2, 3, or 4 notes late, plays 1 semitone above, a minor third, a major third, a fourth, a fifth, a seventh, or an octave above.
-Same for **Vo3**, **Vo4**, **Vo5**.
-**Voice level** from 10 to 100% for Vo1 or from 0% to 100% for the other Vo.

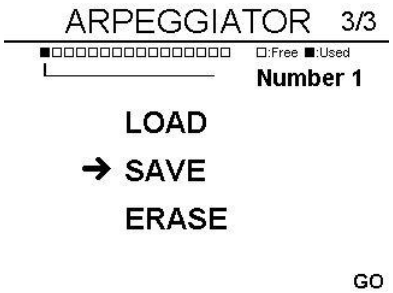
Continuing with the Select encoder, a third page appears, allowing you to save up to 16 arpeggio profiles. The Value encoder allows you to move through the profiles using the three options accessible via the Select encoder: LOAD, SAVE, ERASE. Return to Page 1 of the arpeggio by continuously rotating the Select encoder. Profiles 8 to 16 are provided as examples.

Pressing SHIFT returns you to the selected patches.

Pressing SHIFT then Split allows you to choose the right and left keyboard ranges as in Split mode.







Pitch Bend is then reserved for right-hand playing.

Polyphonic Sequencer.

Pressing the Seq button automatically switches the keyboard to split mode, where a default 5-note polyphonic sequencer is ready to record a polyphonic sequence to the left of the split point. To the right of this point, 5 voices are available for accompanying the sequence. The first screen allows you to:

- **Load**: Load a sequence
- **Edit/Record** *: Record a sequence for the first time and then edit it (see screen below).
- **Save**: Save.
- **Copy**: Copy
- **Erase**: Erase
- **Edit Name** *: Edit the name using the on-screen keyboard.

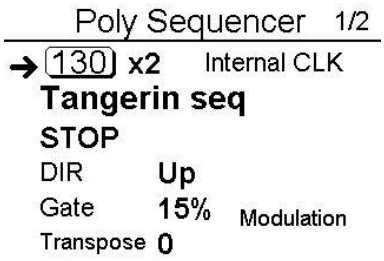
***** Only these two options are available when the sequencer has not been recorded.

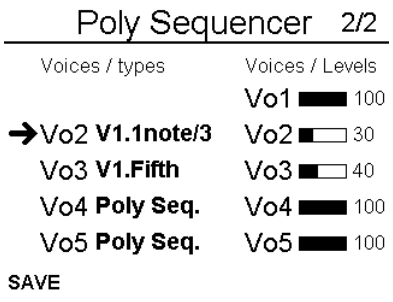
The sequence editing screen allows you to modify a note, its duration, add notes by modifying the counter, its velocity (use EGA Velocity), and add or correct notes on the other 4 tracks. Changes can be saved from the edit screen by pressing the Select encoder or by pressing the SEQ button and then selecting Save.

Once the sequence is loaded, a first page appears and the Select encoder can be used to set the following parameters and the Value encoder to set their values:

- **BPM** * **coefficient** (/4, /3/, /2, 1, *2, *3, *4).
- **Clock**: Internal, MIDI, LFO1.
- **Dir:** Up, down, up & down, random, brownian
- **Gate:** from 5% to 90%.
- **Modulation**: press the Value encoder to assign the pitch of the notes to a potentiometer.

Turning the Select encoder once more brings up a second page. This page allows you to either stay in "Polysequencer" mode or choose the set of voices 2, 3, 4, 5 and their respective volumes as in arpeggio mode.





Either all 5 tracks are recorded on the fly, or a single track is recorded and, as with the arpeggiator, you choose the role and volume of the remaining 4 tracks. By default, the recorded note is Off, not played. Conversely, 1 note out of 2, 3, or 4, delayed by 1, 2, 3, or 4 notes, at the minor third, major third, fourth, fifth, or lower or upper octave.

The button■ II► allows you to play the sequence, pause it with a short press, and stop it with a long press. When the screen returns to the current sound, a short press redisplays page 1.

To exit **Poly-sequencer** mode, simply press the button for another play mode.

64 sequences can be saved. Position 65 is reserved for the sequence named "ARP_to_SEQ," which comes from the arpeggio: "Save to Seq." Beyond this position are the demo sequences.

Pressing SHIFT then Split allows you to choose the right and left keyboard ranges as in Split mode.

Pitch Bend is then reserved for right-hand playing.

Caution: If the Load patches with effects option is set to ON, each split patch will load the effects recorded with it, which may interfere with the sequence.

Looper.

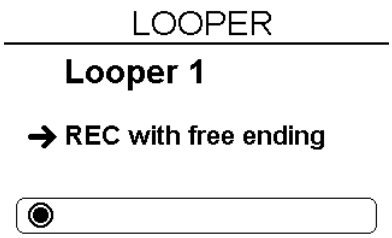
This is not a mode but direct access to the Record button. A screen displays a transport bar and any keyboard or potentiometer action is recorded in Polyphonic mode. Four loops of 4094 MIDI events can be recorded, numbered from 1 to 4 as desired with Value. **Rec**ording will start on the **first note** played. Pressing the■ II▶ , or Record button stops recording.

Depending on the option selected,

- **Rec with free ending**: stopping the recording will end the loop.
- **Rec with ending like a step sequencer**: stopping the recording will position a time equivalent to the previous times before looping.

In playback mode, the Looper can be played in a loop or once (Run as one shoot).

If no action has been taken, pressing Record again exits the Looper and returns to Polyphonic mode.



The Looper is not compatible with MPE.

The Looper's recorded notes can be retrieved via the MIDI Out or via SYSEX.

When the Velocity EGA button is active, the -**Balance**- knob allows you to decrease the volume of the recorded part relative to the volume of the live performance.

To exit the Looper, press another Mode.

APPENDICES.

Using two keyboards.

Connection: The syntheR10 is equipped with 3 MIDI inputs: Host, IN DIN, and USB. You must connect your keyboards/devices to two of these three inputs. If your keyboards have the same type of connections, you will need to put a merger on the MIDI DIN input or a USB switch on the HOST input.

In the "MIDI TOOLS" menu, set channel B to the MIDI channel number of the keyboard that will be used for the right hand, then set channel A to the MIDI channel number of the keyboard that will be used for the left hand. It is preferable to set a channel number (1-16) rather than the automatic channel (Auto) to avoid confusion.

In this configuration, the concept of "SPLIT," i.e., splitting a single keyboard into two playing zones, disappears, and the entire range of the "left hand" keyboard can be used for the sequencer, the Arpeggiator, or any other playing mode, and the entire range of the "right hand" keyboard can be used for polyphonic playing with the sequencer, the Arpeggiator, or the "split" mode. Each keyboard uses one layer, one patch, and one sound.

About Glide and Portamento.

Portamento: This is a continuous slide between two notes. The effect is smooth, with no abrupt transition, and depends solely on the speed set by the "Speed" potentiometer. This is a typical effect of monophonic synthesizers, but it can also be applied polyphonically on certain instruments.

Glide: This is an anticipation of the note with a glissando starting from an interval defined by the "Glide amount" knob. The speed is also defined by the "Speed" knob. This may be reminiscent of certain techniques used to simulate the attack of acoustic instruments (such as brass instruments). The SynthR10's Glide is similar to effects such as pitch envelope or scoop, typical of synthetic brass sounds.

About MPE

Channel 01 is reserved as the general channel, and all other channels are assigned to decoding MPE messages.

The slide controller (Y-axis) is decoded by default on MIDI Control Change 74. This can be modified depending on your controller.

About velocity

Velocity is a modulation derived from the notes played on a MIDI keyboard that affects the volume. This modulation is only active when one of the Velocity EGA, EGF, or Assign modulation buttons is active.

In sequencer, looper, and arpeggiator modes, even if the modulation buttons are not active, velocity is recorded for later use, provided that Velocity EGA, EGF, or Assign is used.

MIDI implementation.

The SynthR10 can receive MIDI signals from three different sources: MIDI DIN, MIDI USB, and MIDI HOST. The three sources can be mixed. All channels can be used.

The SynthR10 can transmit via MIDI DIN and MIDI USB. All channels can be used.

MPE (Midi Polyphonic Expression) technology can be used. In this case, only one keyboard can be used. Channel 1 is the general channel.

MIDI Out: In ARP and SEQ modes, arpeggiated and sequenced notes are sent to MIDI Out along with CC, aftertouch, pitch bend,

Most of the SynthR10's controls are mapped by CC (Command Control) commands:

Message	Assignment
Note ON	The velocity received is transmitted and can be used according to the Panel options.
Note OFF	The release velocity received is transmitted and usable according to the Panel options
Pitch bend	14 bits received and transmitted.
Clock, Start, Stop, Cont	Recognized and transmitted
	GLOBAL
CC1 Modulation Wheel	Recognized and transmitted
CC64 Sustain	Sustain Pedal
CC3	SPREAD knob control
CC7	Expression pedal control
CC109	VOICE DETUNE (or A BALANCE B) knob control
CC123	Generates an All Notes Off
	VCO1
CC15	Controls the PWM potentiometer of VCO1
CC19	Control of the SINE potentiometer of VCO1
CC20	SAW potentiometer control for VCO1
CC21	Control of the PULSE potentiometer of VCO1
CC29	Control of the XMOD potentiometer of VCO1
	VCO2
CC25	Control of the PWM potentiometer of VCO2
CC26	Control of the VCO2 SINE potentiometer
CC27	SAW potentiometer control for VCO2
CC28	Control of the PULSE potentiometer of VCO2
CC23	VCO DETUNE potentiometer control
	MIXER
CC22	MIXER SUB potentiometer control
CC34	MIXER VCO1 potentiometer control
CC36	MIXER VCO2 potentiometer control
CC37	MIXER NOISE potentiometer control
	LFO
CC31	Control of the RATE potentiometer of LFO1
CC33	Control of the RATE potentiometer of LFO2
	VCF1
CC38	Control of the VCF1 CUTOFF potentiometer
CC39	Control of the VCF1 RM potentiometer
CC40	VCF1 EGF knob control
CC42	Control of the DRIVE potentiometer of VCF1
	VCF2
CC43	Control of the CUTOFF potentiometer of VCF2
CC44	Control of the RM potentiometer of VCF2

CC45	Control of the EGF potentiometer of VCF2
CC30	Control of the XMOD potentiometer of the EGF
	VCA
CC86	Control of the VCF1 potentiometer in VCA
CC87	Control of the VCF2 potentiometer in VCA
CC88	Control of the EGA potentiometer in VCA
	EGA
CC93	EGA ATTACK potentiometer control
CC94	EGA DECAY knob control
CC95	EGA SUSTAIN knob control
CC103	EGA RELEASE knob control
	EGF
CC89	Control of the EGF ATTACK potentiometer
CC90	Control of the DECAY potentiometer of the EGF
CC91	EGF SUSTAIN knob control
CC92	Control of the EGF RELEASE potentiometer
	FX
CC104	Control of the FX1 P1 potentiometer
CC105	Control of FX1 potentiometer P2
CC106	Control of FX1 potentiometer P3
CC107	Control of the SEND potentiometer on FX1
CC110	Control of FX2 potentiometer P3
CC111	Control of the P2 potentiometer on FX2
CC112	Control of FX2 potentiometer P1
CC113	Control of the SEND potentiometer on the FX2
	GLIDE/PORTAMENTO
CC84	Control of the PORTAMENTO knob
CC108	GLIDE knob control

Software update.

The directory https://www.synthr.fr/SynthR10 (be sure to include "**www**") provides the latest updates.

In this directory, you will find firmware, sysex utilities, a copy of the TyTools software, patch/performance PACKs, and this manual.

Using the TyTools software tool.

Depending on your computer system:

- On Windows, download https://www.synthr.fr/SynthR10/tytools/win/tytools_0.9.9_win64.zip
- On MAC, downloadhttps://www.synthr.fr/SynthR10/tytools/mac/tytools_0.9.9_macos.dmg
- On Linux, find your package at: https://koromix.dev/tytools

Unzip and install these files in the same folder where you installed the update files.

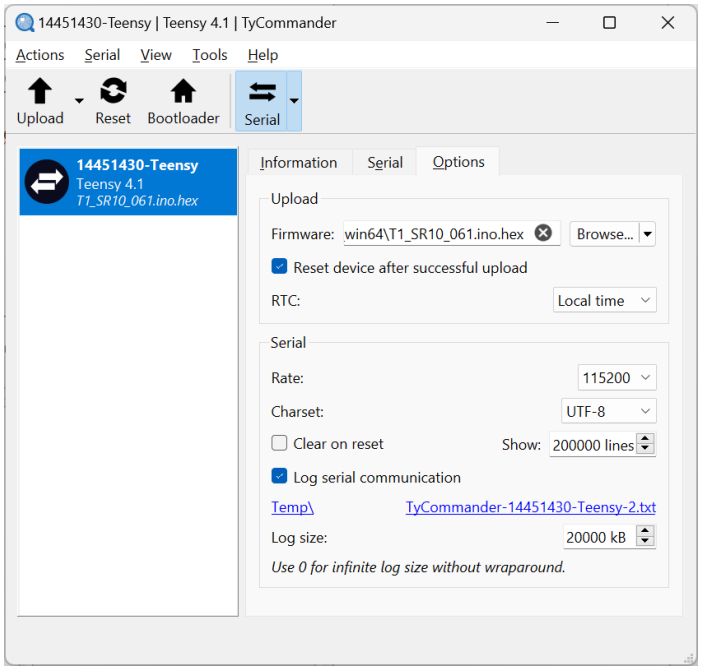
Updating the SynthR10 firmware.

Connect a USB cable between the SynthR10 and your computer system.

Set the T0/T1 switch on the back of the SynthR10 to the desired position:

T0 Updating the "Panel" and associated functions.
T1 Updates the "Control" and associated functions.

Launch the TyCommander application, which should display the following:



Click **Actions**, then **Upload new firmware**. A file selection window will open. Select the file corresponding to the Panel (T0_SR10_xxx.hex) or the main CPU (T1_SR10_xxx.hex), then click **Open**. A gauge will indicate when the update process is complete. Don't forget to switch between T0 and T1 to update both. Switch back to T1
Once completed, turn off the SynthR10, turn it back on, then check the software versions in the Global - About menu: XX . YY . ZZ . XX for T1, YY for T0.

The third digit ZZ indicates the version of a third processor, which you can ignore.

Update the SynthR10 PACKs and/or Sysex.

Connect a USB cable between the SynthR10 and your computer system.
Set the T0/T1 switch on the back of the SynthR10 to the T1 position.
We recommend **using** the free **SendSX** software to transfer Sysex files between your computer system and the SynthR10.

Factory settings of the SynthR10.

Status	Reset
Default settings.	- Global System menu -> Set default parameters - Sysex: "reset_all_parameters.syx" - Press Noise W+P when powering up until startup is complete.
Erase empty User Patches (U001->U128).	Sysex: "erase_all_user_patches.syx"
Deletes empty User Performances (1->128).	Sysex: "erase_all_user_performance.syx"
Deletes empty User Sequencers (1-64).	Sysex: "erase_all_sequencers.syx"
Erase all empty Loopers (1-4).	Sysex: "erase_all_loopers.syx"
Deletes favorites	- Global System Menu -> Delete Favorites - Sysex: "erase_all_favorites.syx"
Delete arpeggio profiles.	Sysex: "erase_all_arpeggios.syx"
Loading demo sequencers.	Sysex: "DEMO_1_Ricofear.syx" "DEMO_2_Tangerin Seq.syx" "DEMO_3_Kurz polyseq1.syx" "ARP_to_SEQ.syx"
Loading Preset Performances.	Sysex: "PACK_PERFORMANCE_PRESET_1_12.syx"
Loading Patch Presets.	Sysex: "PACK_PATCH_PRESET_1_65.syx"
Loading arpeggio profiles	Sysex: "PACK_init_all_arpeggios.syx"

Dimensions / Electrical specifications.

Dimensions (L x W x H): 51.5 x 33 x 13.5 cm
Weight: 7 kg.
Electrical power: 100V-240V. 75W. 3.15 A fuse.
Operating temperature: 15°C - 45°C (internal alarm at 55°C) If the alarm message appears, it is strongly recommended that you turn off the SynthR10, ventilate the area, or place the SynthR10 in more suitable temperature conditions.

Presets

The presets were developed by:

Jean-Luc BRIANCON, alias Kurtz Mindfield.

Rémy WASSELIN, aka SynthR.

Other Patch and Performance presets will be made available via Sysex to download.

Some patches will reveal their full potential with a poly-aftertouch keyboard. Others indicate the use of an expression pedal.

LIST OF PATCHES

Number	Number	NAME	Category	Comments	
1	P001	JP8 Polysynth	Pads	MdW: Reso2, Aft: LFO1; LFO2	
2	P002	Synth Wurly	Keyboards	MdW: LFO2	
3	P003	SK Organ	Pads	MdW: LFO1	
4	P004	OB Bass	Bass	MdW: CutOff1	
5	P005	Moog Lead	Lead Synth	MdW: Reso1, Aft LFO1	
6	P006	In The Square	Pads	MdW: LFO2	
7	P007	Slow Pad Chord	Pads	MdW: LFO1, Aft: Reso1	
8	P008	Synth Strings	Strings		
9	P009	Phased Strings	Strings	MdW: Phasing Rate	
10	P010	Stack Pad	Keyboards	Pedal: Reso1	
11	P011	Soft Pad	Pads	MdW: LFO1, Aft: Reso1	
12	P012	OB8 Jump	Brass	MdW: LFO1	
13	P013	OB Brass	Brass	MdW: CutOff1; CutOff2, Aft: LFO2	
14	P014	A.r.p Lead	Lead Synth	MdW: LFO2, Aft: LFO1	
15	P015	Phased Clav	Keyboards	MdW: Drive	
16	P016	Ring FX	FX		
17	P017	Keith Woods	Woodwinds	MdW: Reso1	
18	P018	Evolution Pad	FX	MdW: Sub Mix, Aft: LFO2	
19	P019	Polypad Stereo	Pads	MdW: Cutoff1; LFO1, Aft LFO2	
20	P020	Quantize Harmony	FX		
21	P021	FM Lead	Lead Synth	MdW: LFO1	
22	P022	Synth Clav	Keyboards	MdW: Send FX1	
23	P023	P5 Pad	Pads	MdW: CutOff1, Aft: LFO1; LFO2	
24	P024	Pedal Pad	Pads	MdW: LFO2, Pedal: Mix Sub; Mix VCO2	
25	P025	Xpad	Pads		
26	P026	Woodwind 1	Woodwinds	MdW: CutOff1; Sub Mix, Aft: LFO1; LFO2	
27	P027	Pading Env Mod	Strings	MdW: CutOff1	
28	P028	Newave Bass	Bass	MdW: LFO2, Aft: Reso1	
29	P029	Harpsiglass	Keyboards	MdW: LFO2, Pedal: CutOff1; CutOff2	
30	P030	Detune Mono	Monophonic	MdW: LFO1	
31	P031	Bass Odyssey	Bass		
32	P032	Osmose	Keyboards	MdW: LFO2; Reso1; Aft: LFO2; Reso1; Reso2	*
33	P033	Space Harmo	Lead Synth	MdW: LFO2; Aft: LFO2; Reso1; Reso2	
34	P034	HP Pads	Pads	MdW: LFO1	
35	P035	Singing Pad	Pads	MdW: LFO2	
36	P036	Bass Seq1	Sequencer	MdW: CutOff1; CutOff2; LFO2	
37	P037	Ghost Bird	FX		
38	P038	Shore	Pads	MdW: LFO1; Pedal: EGA Release, Velocity EGA	
39	P039	Woodwind 2	Woodwinds	MdW: CutOff1; Mix Sub	
40	P040	Auto PWM	Pads	MdW: CutOff1	
41	P041	Xmod Pad	Pads	MdW: CutOff1	
42	P042	Celest Trumpet	Monophonic	MdW: LFO2	
43	P043	Complex Pad	Pads	MdW: LFO2; Reso2	
44	P044	Bass seq2	Sequencer		
45	P045	Hard Lead	Lead Synth	MdW: CutOff2; Aft: LFO1	
46	P046	Bach Wendy	Keyboards		
47	P047	CS90	Pads	MdW: LFO1, Aft: LFO2; Reso1; Reso2	*
48	P048	Triangle Lead	Lead Synth	MdW: LFO1, Aft: LFO2	
49	P049	Old Poly	Pads	MdW: CutOff1; LFO2, Aft: LFO1	
50	P050	Moog ftBass	Bass	MdW: LFO2, Aft: Reso1, Pedal: CutOff1; CutOff2	
51	P051	Sweep Poly	Pads	MdW: LFO2	
52	P052	Cyborg Trauma	FX	MdW: CutOff2; LFO2, Aft: LFO1	
53	P053	Echo Sync	Arpeggio	MdW: LFO2, Aft: Drive	
54	P054	Sync Lead	Lead Synth	MdW: LFO2, Aft: Drive	
55	P055	Bass Seq3	Sequencer	MdW: Reso2, Aft: LFO1; LFO2	
56	P056	JP8 Bass	Bass		

57	P057	TD Bass	Bass	MdW: Reso2; Release EGA, Velocity EGF	
58	P058	Solo	Lead Synth	MdW: CutOff1, Aft: LFO1; LFO2	
59	P059	Syntotron	Woodwinds	MdW: Leslie Rate, Velocity EGA	
60	P060	Cinematic Pad	Pads	MdW: CutOff2, Pedal: CutOff1	
61	P061	Vox Organ	Keyboards	MdW: LFO2	
62	P062	Horns	Brass	MdW: CutOff1, CutOff2; Aft: LFO2	
63	P063	TD Mod LFO	Monophonic	MdW: LFO1	
64	P064	PS 3300 Strings	Strings		
65	P065	Sync P5	Pads	MdW: LFO1, LFO2; Aft: LFO1	

* More interesting in Poly-Aftertouch.

Reminder: Patches are set to Polyphonic Mode with effects by default.

List of Performances

Number	Number	NAME	Type
1	P001	Polyfusion	Layer
2	P002	Greek Patch	Layer
3	P003	Oldstaff Keys	Layer
4	P004	Strange pad	Layer
5	P005	Bass/Brass	Split
6	P006	Pad/Lead	Split
7	P007	Bach Switch	Arp
8	P008	Sync PLead	Unison
9	P009	Elka610Flavor	Layer
10	P010	Berlin Mood	Seq
11	P011	Rubycom	Seq
12	P012	Arpeggio Jam	Arp


SYNTHR10
Host
T1
T0
MIDI
OUT
THRU
IN
Left
Right
Left
Right
Headphone
Exp. Pedal

SYNTHR