LOUNGE

MULTIPLAYER

USER MANUAL
REL. A

MADE IN ITALY

KETRON

INDEX

Getting Started

Welcome!

Thank you and congratulation for purchasing the KETRON Lounge Multimedia Player! This Instruction Manual will explain in detail every feature of the instrument. Please read carefully the Instruction Manual to get the best performance from your instrument either in a live session or in a recording studio.

Safety Instructions

- Read these instructions.
- Keep this Instruction Manual in a safe place.

RISK OF FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS

CAUTION: to reduce the risk of fire or electric shock, do not expose this instrument to rain or humidity.

IMPORTANT INSTRUCTIONS FOR SAFETY AND INSTALLATION

CAUTION: When using an electrical product it is important to take a number of precautions such as the following:

- Read the Instruction Manual before using the instrument.
- An adult should always supervise children when they play the instrument.
- Do not use the instrument in areas subject to seepage or water spray, such as next to a sink, a swimming pool, on a damp surfaces etc. Do not place containers with liquids on the instrument to prevent accidental seepage of liquid into the instrument.
- The instrument should be used only on a stand recommended by the manufacturer.
- Do not operate this instrument at a very high volume for a long period of time: that could cause permanent hearing loss.
- Position the instrument in such a way as to ensure appropriate ventilation.
- Keep away this instrument from heat sources, such as radiators, stoves or other products that produce heat.
- Connect the instrument to the mains only with the mains adapter. You will find the identification and power supply details under the instrument.
- Disconnect the power supply cable during storms or when not used for a long period of time.
- If necessary, disconnect the instrument using the power supply switch on the back panel. When positioning the instrument, always ensure that this switch is easy to reach.

- Take the instrument to a service centre if:
  - the power supply cable or plug are damaged.
  - objects or liquid have fallen into the instrument.
  - the instrument has been exposed to rain.
  - the instrument is not functioning properly or performance is impaired.
  - the instrument has been dropped or the chassis is damaged.
- Never attempt to repair the instrument on your own; all repairs should be carried out by a qualified technician.

PREVENTING RADIO/TV DISTURBANCE

This instrument operates on the radio frequency band. If it is not installed correctly and strictly in compliance with the instructions provided it may disturb the reception of radio-television appliances. Although the instrument you have purchased has been designed in compliance with applicable laws and in such a way as to provide reasonable protection against such disturbances, there is no guarantee that these will not occur. To check whether any disturbance you are experiencing is in fact produced by your instrument, turn it off to see if the disturbance disappears. Turn the instrument on again to see if the disturbance reappears. Once you are certain that your instrument is in fact causing the disturbance, take any of the following measures:

- Adjust the antenna of the radio or TV receiver.
- Place the instrument in a different position with respect to the radio or TV receiver.
- Place the instrument further away from the receiver.
- Connect the plug of the instrument to another socket so that the instrument and the receiver are connected to two different circuits.
- If necessary, call in a servicing technician.

POWER SUPPLY

- When you connect the instrument to other appliances (amplifier, mixer, MIDI instruments etc.), ensure that all the units are off.
- Read the recommendations regarding Radio and TV disturbances.

INSTRUMENT CARE

- Clean the surfaces of the instrument with a soft dry cloth. Never use gasoline, diluting agents or solvents of any kind.

OTHER PRECAUTIONS

If you wish to use your instrument in a foreign country and have doubts about the power supply, consult a qualified technician before you leave. The instrument should never be subjected to strong shocks.

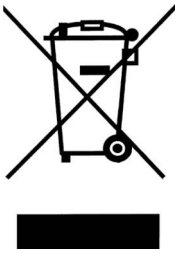
CURRENT ADAPTERS

When connecting this instrument to the mains socket, use only the KETRON current adapter supplied with the instrument. The use of different current adapters may damage the power supply circuits of the instrument. It is therefore of fundamental importance to use only an original adapter, requesting the correct model when ordering a new adapter.

INFORMATION FOR USERS

“Implementation of Directive 2002/95/CE, 2002/96/CE and 2003/108/CE on reduced use of dangerous substances in electrical and electronic appliances and waste disposal”.

The crossed bin symbol shown on the appliance means that at the end of its life the instrument must be disposed of separately from other waste. At the end of its life the user should therefore take the instrument to a separate waste centre for electronic and electrical products, or return the same to the dealer when purchasing a new and similar instrument, whichever is applicable. Disposing of the instrument correctly so that it may be consequently recycled and disposed of in an environmentally compatible manner helps to prevent possible negative effects to the environment and health and ensures that the components of the instrument are recycled. Unauthorised disposal of the product by the user entails the application of administrative penalties.



This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.

Specifications

- **Polyphony**: 128 notes, multitimbral (48 parts).
- **Display**: LCD colour TFT 7”, touch sensitive 800×480 resolution with Brightness control.
- **Multimedia**: wav, midi, mp3, mp4, avi, mov, flv, cdg, jpg, png, txt, pdf.
- **Player**: Transpose, Time Stretching, GM, Jukebox, Playlists, MyFolders, Drum Remix, Markers, Lyrics, Cross Fade, Search, PFL, Midi Mix, Karaoke Backgrounds.
- **Jukebox**: up to 7 programmable Sets.
- **Audio Multitrack**: 5+1 audio tracks with separate slider control.
- **Video**: external monitor output (DVI) for Lyrics, video files and Mirror.
- **Menu**: Play Modes, Midi, DSP, Audio Recording, Audio Edit, Video, Controls, Preferences, Metronome, Manual, Micro1/Vocalizer, Micro2/Guitar, Footswitch.
- **Media**: internal storage: SSD Card 8 GB, USB: 3 Host + 1 device.
- **Sounds**: 632 GM Sounds, 62 Drum Sets.
- **Voices**: 368 Preset Voices, Stereo Grand Piano, 368 User Voice, 2nd voice, V-Tone, Double up/down, EFX Insert, Voice Editing.
- **Drum Machine**: 391 Drum Styles. 269 Live Drums, 86 Midi Patterns, 372 Drum Loops, 397 Grooves, User Styles, Midi Drum Mixer, 4 Variation ABCD, 4 Fill, 4 Break, Intro, Ending.
- **Stem**: 4 Scenes, 5 audio tracks per scene to be played simultaneously, Lead track, Transpose, Time Stretching, Loop, Solo, Mute, Autoplay.
- **Play Modes**: Master keyboard, Accordion Classic.
- **DSP**: Chorus, reverb, flanger, phaser, tremolo, rotary, echo delay, tap delay, equalizer, distortion, amp simulator, compressor, filter, EFX Insert (54 types), 10 programmable Insert Chains.
- **Audio Recording**: 1 stereo audio track
- **Audio Edit:** Cut, Normalize, Autoloop.
- **Micro**: XLR input, gain control, volume, reverb, talk, equalizer, compressor, echo, pitch shift, noise gate,
- **Voicetron**: 3 Voice Voicetron, 6 Voicetron Presets + 4 User.
- **Midi Connections**: In 1 (GM), In 2 (Keyboard), Out, Thru.

- **Midi Modes:** Standard, Keyboard, Computer, Player Out, Accordion.
- **Audio Outputs**: Left/right stereo, pedal volume, micro1 out, stereo headphones.
- **Audio Inputs**: Micro 1, Micro 2, Guitar.
- **Optional**: Footswitch with 6 or 13 switches, volume pedal, sustain pedal, bag, SSD card.
- **Power Supply**: external 9 / 4A.
- **Dimensions**: 32 x 21 x 8 cm (13 x 8,2 x 3,1 inches).
- **Weight**: 2 Kg (4,4 lbs).

* All specifications and appearances are subject to change without notice.

Connections

Real Panel

- ON/OFF: press this key to turn on and off the instrument. The instrument will take up to 30 seconds to start up and 10 seconds to turn off.
- DC 9 V 4A: main power supply socket. Please use only the power supply supplied with the instrument. Output: 9 V, 4 A.
- VOLUME PEDAL: standard stereo jack port for Volume pedal connection (optional).
- MIDI: MIDI IN1 (GM), MIDI IN 2 (KEYBOARD), MIDI OUT and MIDI THRU ports for transmitting and receiving MIDI messages (see MIDI).
- MAIN OUT: standard mono jack port to connect the instrument to a PA STEREO system: Left (Left Mono) and Right (Right Mono). We strongly recommend using stereo connections to get the best performance.
- HEADPHONE: standard stereo jack for headphone connection. The headphone volume is controlled by the Master section.
- MICRO 1 IN: standard mono combo plug (TRS/XLR) for dynamic microphone connection.
- MICRO 1 GAIN: use this potentiometer to adjust the Micro 1 input signal gain.
- MICRO 1 OUT: replicates the MICRO 1 input signal.
- MICRO 2 IN: standard mono jack for connection of other auxiliary instruments such Keyboard, Expander, Guitar or Dynamic Microphone.
- MICRO 2 GAIN: use this potentiometer to adjust the Micro 2 input signal gain.
- FOOTSWITCH: use this port to connect the KETRON footswitch controller (optional).

Side

On the right side of the instrument you will find a slot for the SD Card and 3 USB Hosts for connection to external USB devices such as pen drives, hard disks, etc.

Front

- USB DEVICE: us this port to use the instrument as a memory device (see PC CONNECT) or to transmit and receive MIDI messages (see USB MIDI).
- VIDEO DVI: High Definition Multimedia Interface port for connection to an external video monitor.

Front Panel

1 – Volume potentiometers

- VOICE: adjusts the volume of the VOICE.
- PLAYER: controls the volume of the PLAYER and the volume of the first two tracks (Left and Right) of an AUDIO MULTITRACK file.
- MICRO/VOCALIZER: controls the volume of the MICRO 1 and VOICETRON, the volume of the third track of an AUDIO MULTITRACK file, and the volume of the first track of a STEM.
- ORCH: controls the volume of the ORCHESTRA SECTION of a MIDI file, the volume of the fourth track of an AUDIO MULTITRACK file, and the volume of the second track of a STEM.
- BASS: controls the volume of the BASS SECTION of a MIDI file, the volume of the BASS (the lowest part of the keyboard, if active), the volume of the fifth track of an AUDIO MULTITRACK file and the volume of the third track of a STEM.
- DRUM: controls the volume of the DRUM SECTION of a MIDI file, the volume of the DRUM, the volume of the sixth track of an AUDIO MULTITRACK file and the volume of the fourth track of a STEM.

2 – LCD Display

The touchscreen display is the main user interface of the instrument. By tapping on the buttons displayed on the screen, the user can navigate through menus, set parameters values, play songs, enable and disable functions and so much more.

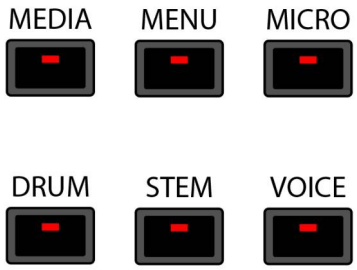
3 – Value Dial

Use to scrolls through lists (files or presets) and changes the selected parameter's value.

4 – Control Section

- EXIT: use to cancel an operation, go to the parent folder when scrolling through file lists, close pop-ups, hide the lyrics or go back to the previous screen. This button also support led of incoming activity on MID IN port.
- ENTER: use to enter a folder when scrolling through file lists, play files, select a preset from a list or confirm operations.
- SAVE: use to store the parameters of the instrument as a CUSTOM STARTUP, save some meta data (such as tempo, transposition, program change, etc.) into a MIDI or an audio file, save a DRUM REMIX, a PLAYLIST, a STEM project, and more.
- MIDI RESET: press EXIT and ENTER simultaneously to send a MIDI RESET to the instrument (it will reset all MIDI events and MIDI controller instantly). This function is sometimes called MIDI PANIC by others manufacturers.

5 – Navigation Section

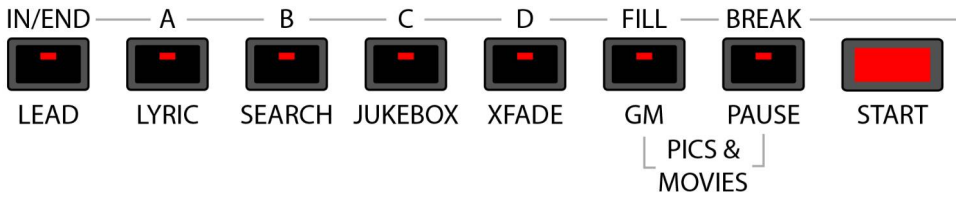


Use these buttons to navigate between all the different sections of the instrument.

- MEDIA: displays the memory devices installed on the instrument or connected via the USB ports.

- MENU: displays and provides access to the all sections of the instrument that cannot be accessed by an external tab.
- MICRO: activates the microphone connected to the MICRO 1 input port. Keep pressed to access the MICRO 1 and VOICETRON page.
- DRUM: enters in DRUM mode and displays on screen the relative page.
- STEM: enters in STEM mode and displays on screen the relative page.
- VOICE: displays the VOICE page, allowing browsing and choosing the sound to be played between the 11 families.

6 – Multifunction buttons

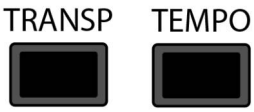


These buttons change their functions depending on if the instrument is currently in PLAYER mode or in DRUM mode.

- START/STOP: use to play or stop a file on the PLAYER, a STEM project (when in STEM mode) or a Rhythm (in DRUM mode).
- PAUSE: (PLAYER only) use to halt or resume the reproduction of a file playing.
- LEAD: (PLAYER only) use to mute the melody track of the MIDI file (generally it is track 4 but it may be changed, if the MIDI file does not comply with conventional MIDI protocol) or, when an audio file is playing, it attenuates the vocal line of the file. In other words, the main voice is considerably attenuated allowing singing over the original songs. This function operates in real time and does not affect the file playing. The result of this processing may vary depending on the mixing of the song (amount of reverb, pan, etc.) and the effects used. See SETTINGS to change the melody track number.
- LYRIC: (PLAYER only) displays or hides the lyrics on the display, if there are any. Also displays or hides a picture, txt or pdf document, if previously loaded.
- SEARCH: (PLAYER only) use to search files by name or by index.
- JUKEBOX: (PLAYER only) displays the JUKEBOX page. Use to fast access up to seven sets of songs.
- XFADE: (PLAYER only) enables or disables the cross fade between two audio or MIDI files.

- GM: (PLAYER only) displays the GM page. Use to manage the sounds assigned to the tracks of a MIDI file.
- PICS&MOVIES: (PLAYER only) press EXIT and ENTER simultaneously to display the PICS&MOVIES page. Use to scroll through video files and images.
- IN/END: (DRUM only) use to play the intro (if the DRUM is stopped) or the ending (if the DRUM is playing) of a DRUM Rhythm.
- A: (DRUM only) use to play variation A of a DRUM Rhythm.
- B: (DRUM only) use to play variation B of a DRUM Rhythm.
- C: (DRUM only) use to play variation C of a DRUM Rhythm.
- D: (DRUM only) use to play variation D of a DRUM Rhythm.
- FILL: (DRUM only) use to play a fill based on the current variation.
- BREAK: (DRUM only) Use to play a break based on the current variation.

7 – Transpose and Tempo buttons



- TRANSPOSE: use to change the pitch (key) of a song playing, the tuning of notes played on the keyboard or the pitch of a STEM Project.
- TEMPO: use to change the tempo (slow down or speed up) of a song, a DRUM Rhythm playing or a STEM Project.

8 – Master Volume

Use to control the volume of the LEFT/RIGHT and HEADPHONE audio outputs.

Player

The PLAYER can play several multimedia file types, such as wav, MIDI, mp3, mp4, avi, mov, flv, cdg, jpg, txt and pdf.

These files can be played from the internal memory (UserFs) or can be accessed from an external media device, such as an USB Disk or a SD memory card (see MEDIA to know how to access the content of an external memory device).

NB: just simply speaking, audio files and MIDI files will be referred to as a "songs" from now on.

The Main View

The PLAYER main view is shown below. This page is displayed at the start up and it is the most important page of the instrument. We can identify four different zones, each one of these serves a different purpose:

1. STATUS BAR
2. FILE BROWSER
3. RIGHT BAR
4. BOTTOM BAR

1 – Status Bar

The Status Bar at the top of the screen is always visible and shows some critical information, such as:

- The name of the current song, Rhythm or Registration.
- The current beat of the METRONOME.
- The current metronome TEMPO.
- The current TRANSPOSITION in semitones.
- The VOICE Preset name. Tap on the name to change the Preset.
- The VOICE volume.

2 – File Browser

Provides access to all files and folders on the connected memory devices. Use the Value Dial to scroll through the content of a folder and press ENTER to open a file or enter a directory (see PLAY A SONG and MEDIA to know more about accessing files and folders). At the instrument start up, the FILE BROWSER will show the content of the internal memory (UserFs).

In this area could also be displayed the LYRICS of a song or the content of a txt, pdf or a video file (see VIDEO to know how to display a video or Pdf file on the external monitor instead).

NB: enable KINETICS MODE in the PREFERENCES page to scroll through the content of a folder with a finger swipe.

3 – Right Bar

In this area is displayed the current position (in square brackets) and the total duration of an audio, video or MIDI file. The format depends on the file type:

- In minutes and seconds for an audio or video file.
- In bars for a MIDI file.

In the Right Bar you will also find some contextual buttons, such as:

- PLAYBAR: displays the PLAYBACK CONTROLS that can be used to change the playback position (for example jumping to the middle or right to the end of a song). Could not be available in certain circumstances (for example if a STEM is playing).
- FADE OUT: progressively decreases the volume of the current song, until it reaches 0. This button will turn on if there is a fade out in progress. Tap again while a fade out is in progress to cancel the operation.
- KARAOKE: it will appear only if there is a LYRIC displayed on screen. Displays the KARAOKE page on screen.

- PDF: it will appear only if there is a pdf file loaded on the PLAYER. Shows the controls needed to navigate the pdf.
- And more depending on the context.

4 – Bottom Bar

At the bottom of the screen you will find some buttons that can be used to access other functions, such as:

- REGIS: opens the Registration list.
- DRUM REMIX: links a Rhythm to a MIDI file.
- PLAYLIST: manages lists of songs.
- MY FOLDER: manages custom folder locations.
- MARKER: jumps to different sections of a song (the song must contain the markers meta data).
- SETTINGS: manages the PLAYER settings and options.

Example – Play a song

To play a file, follow the following steps:

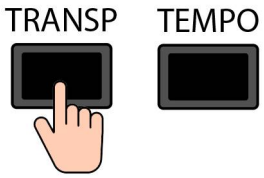
- Use the Value Dial to scroll through the list of files and folders and select a MIDI or an audio file. The currently selected file will be highlighted in orange. Press ENTER to enter a folder or EXIT to exit to the parent folder.
- Press ENTER or START to play the currently selected song. The led of the START button will turn on.
- Press START again to stop the song.
- Press PAUSE to pause the song. To resume, press again PAUSE or START.
- Press TRANSPOSE to change the pitch of the song.
- Press TEMPO to change the speed (BPM) of the song played.
- Use the PLAYER potentiometer on the left of the FRONT PANEL to adjust the volume.

NB: when the Auto Play function is enabled (see SETTINGS), the files in the folder are played automatically one after the other.

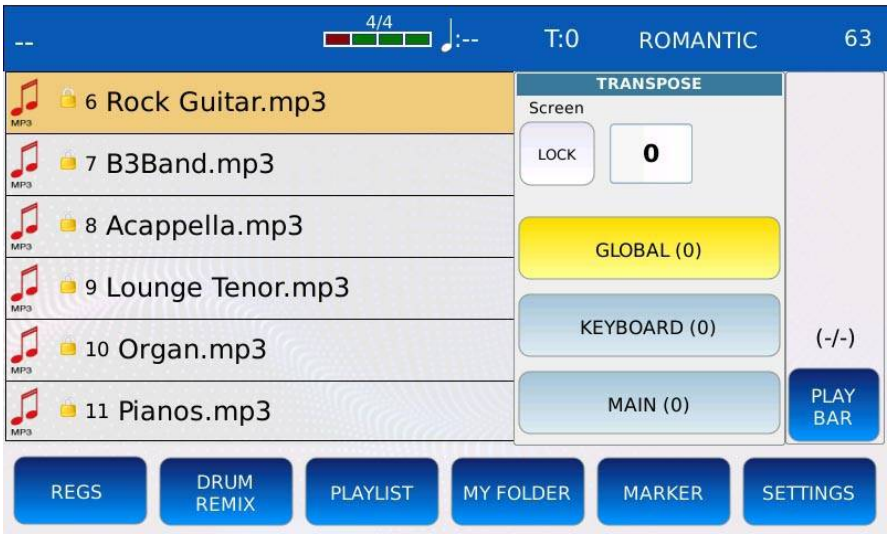
NB: in order to display a video file in the external monitor, remember to enable the Movie/PDF To RGB option in the SETTINGS page.

Transpose

The TRANSPOSE function can be used to change the pitch of a song or the tuning of the notes played via an external keyboard.



Press TRANSPOSE button to open the transposition window:



- LOCK: prevents the transpose window to be automatically hidden.

Select the desired configuration and use the Value Dial to change the transposition value:

- GLOBAL: applies the transposition to both the song and the keyboard (MIDI IN notes). **It is affected by the transposition meta data saved into the song**, meaning it will set to the value saved into the song when the song starts and will reset to 0 when the song ends.
- KEYBOARD: applies the transposition to the keyboard (MIDI IN notes) but not to the song. **It is affected by the transposition meta data saved into the song**, meaning it will set to the value saved into the song when the song starts and will reset to 0 when the song ends.
- MAIN: applies transposition to the keyboard and to the song (only MIDI files). **It is NOT affected by the transposition meta data saved into the song**. It stacks with the KEYBOARD transposition value.

NB: the MAIN transposition stacks with the KEYBOARD transposition. If there is a KEYBOARD transposition saved into the song, it will be added (or subtracted) to the MAIN transposition.

Press SAVE while the song is still playing, to save the transposition meta data into the song. A pop up window will be displayed on screen:

- NO: a virtual alphanumeric keyboard will appear on screen. Compose the new name and then tap on ENTER. The original file will be not modified.
- YES: overwrites the song.
- CANCEL: cancels operation.

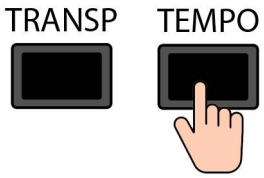
Example – Apply transposition to a Song but not to the keyboard

- Play a song (mp3 or MIDI).
- Press the TRANSPOSE button.
- Press the GLOBAL button and use the Value Dial to set the GLOBAL transposition to the desired value.
- Press the KEYBOARD button and use the Value Dial to set the KEYBOARD transposition to 0.

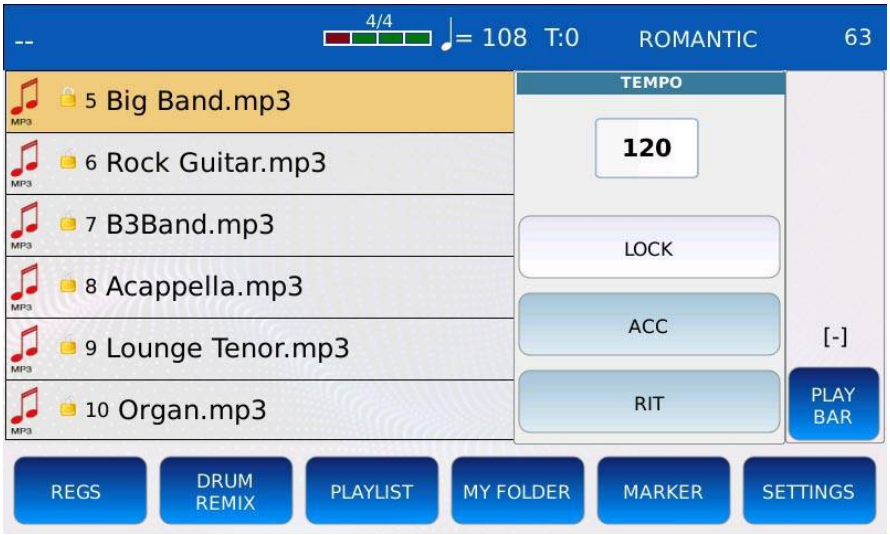
NB: remember that the GLOBAL transposition value will reset to 0 when the song ends.

Tempo

The TEMPO function can be used to change the speed at which a song is played. The tempo value is expressed in BPM for MIDI files and in percentile (+-%) for audio files.



Press TEMPO to display the tempo window:



Use the Value Dial to set the tempo to the desired value.

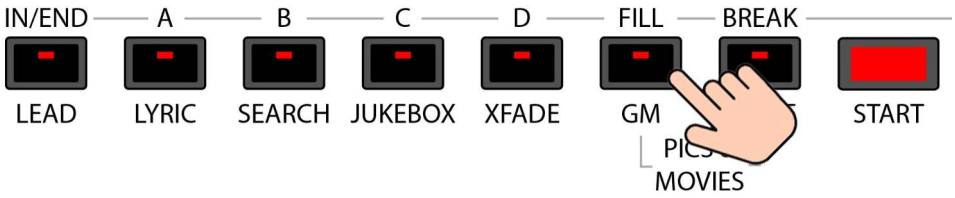
- LOCK: Lock the tempo between consecutive songs and ignore MIDI tempo change events (only MIDI files).
- ACC: (Accellerando) Speed up the tempo of the song at rate of 5 BMP/down beat (only MIDI files).
- RIT: (Ritardando): Slows down the tempo of the song at rate of 5 BMP/down beat (only MIDI files).

Press SAVE while the song is still playing, to save the tempo meta data into the song. A pop up window will be displayed on screen:

- NO: a virtual alphanumeric keyboard will appear on screen. Compose the new name and then tap on ENTER. The original file will be not modified.
- YES: overwrites the song.
- CANCEL: cancels operation.

GM

In GM mode you can see all the 16 MIDI tracks of the GM sound module and the instrument loaded in each track. You can change the sound, the level, the panning, the effects and the reverb send of each track. The GM sound module can be used by the PLAYER to play MIDI files or by an external MIDI device connected to the MIDI IN GM port (see MIDI).



Press the GM button to enter in GM mode. The GM button led will turn on. All the 16 GM tracks will be displayed on a grid and empty tracks will be displayed in white. A red bar below each track will monitor MIDI activity on the corresponding channel.

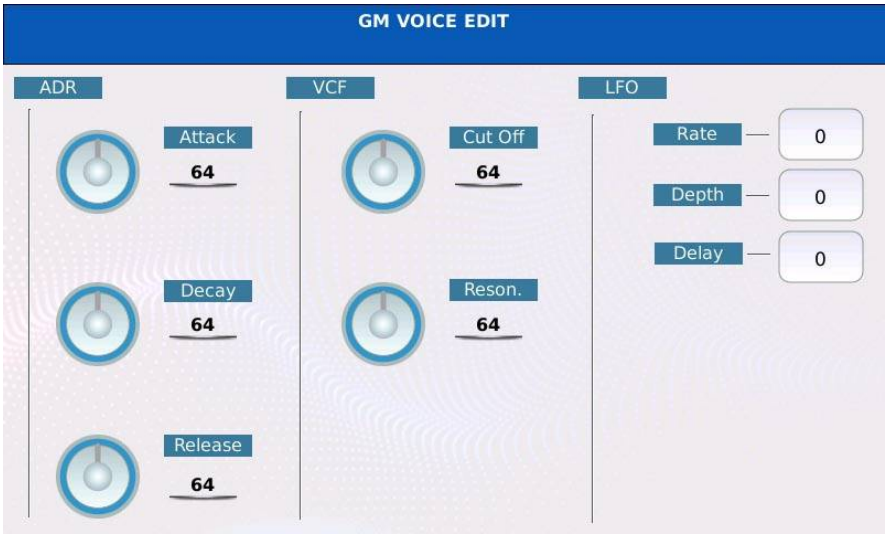
- GM MIXER: open the GM MIXER page.
- SOLO: isolates the desired track and mutes all the others. Tap on the SOLO button and then tap on the desired pad to solo the track (soloed parts will be identified by an “S” symbol).
- MUTE: mutes the desired track. Tap on the MUTE button and then tap on the desired part to mute the part (muted parts will be identified by an “M” symbol).
- If both the MUTE and the SOLO buttons are off, tap on one of the 16 tracks to open the GM VOICE EDIT page.

GM Voice Edit

If both the MUTE and the SOLO buttons are off, tap on one of the 16 tracks to edit the instrument playing on the track selected. You can change the sound (MIDI Program Change), the volume, the reverb sends and more.

- VOLUME: adjusts the volume of the track. Values range from 0 to 127.
- REVERB: controls the reverb send amount (see DSP to change the REVERB type). Values range from 0 to 127.
- CHORUS: controls the chorus send amount (see DSP to change the CHORUS type). Values range from 0 to 127.
- PAN: controls the position on the stereo panorama of the track. Values range from -64 (all to the Left) to 64 (all to the Right) with 0 being the centre position (>|<).
- SOLO: isolates the selected track.
- MUTE: mutes the selected track.
- SHIFT: (only on voice tracks) controls the tone transposition. Values range from -24 to +24.
- MIXER: (only on drums tracks) opens the GM DRUM MIXER page.
- VELO: controls the dynamics sensitivity (positive values make the track sounds louder, negative values make the track sound softer). Values range from -127 to +127.
- PART MODE: assigns a category type between Voice track (normal instrument track), Drum (drum track), Drum2 (groove track) and Voicetron (voice harmonisation track).
- EFX INSERT: selects the insert preset of the track (see DSP to know more on insert effects).
- ON/OFF: enable/disable the insert effect on the track.

- EDIT: opens a page on which you may adjust the attack, decay and release of the amplitude envelope (ADR), the cutoff and resonance of the filter (VCF) and the rate, depth and delay of the low frequency oscillator (LFO) used for the modulation effects.



- Tap on the image of the instrument to open a pop up on which you may select the instrument of the track.

- Press SAVE to save all the changes made to the MIDI file (see SONG SETUP).
- Press EXIT to go back to the previous page.

GM Drum Mixer

In the GM DRUM MIXER page, are displayed all the pieces of the drum set, along with the volume and reverb amount levels.

You can tailor the drum kit as you like, for example by increasing the reverb on the snare (if too dry), or by removing from the mix unwanted instruments, such as the congas. To mute and unmute an instrument, tap on the corresponding icon button.

Press EXIT to go back to the previous page.

GM Mixer

In the GM MIXER page, are displayed all the 16 tracks of the MIDI file, along with the volume, reverb and chorus amount, pan, solo and mute controls.

A led meter below each virtual dial will monitor MIDI activity on the corresponding channel.

The VOL, REV, CHO, PAN, SOLO and MUTE buttons work as the ones found in the GM VOICE EDIT page, but here are displayed all at once.

- VOL: adjusts the volume of the track. Tap on the VOL button, then tap on the desired track and use the Value Dial to adjust the volume of the selected track. Values range from 0 to 127.
- REV: adjusts the reverb send amount of the track. Tap on the REV button, then tap on the desired track and use the Value Dial to adjust the reverb send amount of the selected track. Values range from 0 to 127.
- CHO: adjusts the chorus send amount of the track. Tap on the CHO button, then tap on the desired track and use the Value Dial to adjust the chorus send amount of the selected track. Values range from 0 to 127.
- PAN: controls the position on the stereo panorama of the part. Tap on the PAN button, then tap on the desired track and use the Value Dial to adjust the position of the selected track. Values range from -64 (all to the Left) to 64 (all to the Right) with 0 being the centre position (>|<).
- MUTE: mutes the desired track. Tap on the desired track and the tap on the MUTE button to mute the track (muted parts will be identified by an “M” symbol next to the name).
- SOLO: isolates the desired track and mutes all the others. Tap on the desired track and the tap on the SOLO button to solo the track (soloed parts will be identified by an “S” symbol next to the name).

PLAYER

Press SAVE to save all the changes made to the MIDI file (see SONG SETUP).

Press EXIT to go back to the previous page.

Example – Increase the chorus amount of track 14

- Tap on the CHORUS button.
- Tap on the virtual dial of track 14. The dial will turn red.
- Use the dial to edit the value.

Example – Mute/Unmute track 5

- Tap on the virtual dial of track 5. The dial will turn red.
- Tap on the MUTE button.
- Tap again to the MUTE button to unmute the track.

Song Setup

With the SONG SETUP function is possible to save several parameters into a song (MIDI or audio files), such as:

- All modification done within the GM page (only MIDI files).
- The volume of the ORCH, BASS and DRUM sliders (only MIDI files).
- The transposition values (GLOBAL, KEYBOARD, see TRANSPOSE).
- The TEMPO value.

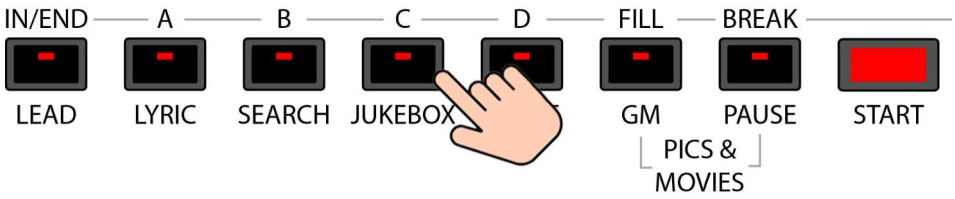
Press SAVE to save the changes. A pop up will be displayed on screen:

- NO: a virtual alphanumeric keyboard will appear on screen. Compose the new name and then tap on ENTER. The original file will be not modified.
- YES: overwrites the song.
- CANCEL: cancels operation.
- INITIAL: (only MIDI files) saves the meta data at the start of the MIDI file. Keeps any program changes, volume, pan, reverb, chorus, etc. variations in the rest of the MIDI file.
- GLOBAL: (only MIDI files) saves the modifications globally. Blocks any other program changes, volume, pan, reverb, chorus, etc. variations in the rest of the MIDI file.
- REMOVE SONG SET UP: (only MIDI files) removes old modification done to the MIDI file.

Jukebox

The Jukebox mode provides an alternative way to access files and songs. You can have up to 15 songs at the same time at your fingertips for easy and quick access allowing you to quickly navigate through song collections.

In Jukebox mode, a song collection is called a “Set”. Each Set is linked to a specific folder path and, when is selected, all the songs contained in that folder are loaded into the Jukebox virtual pads.



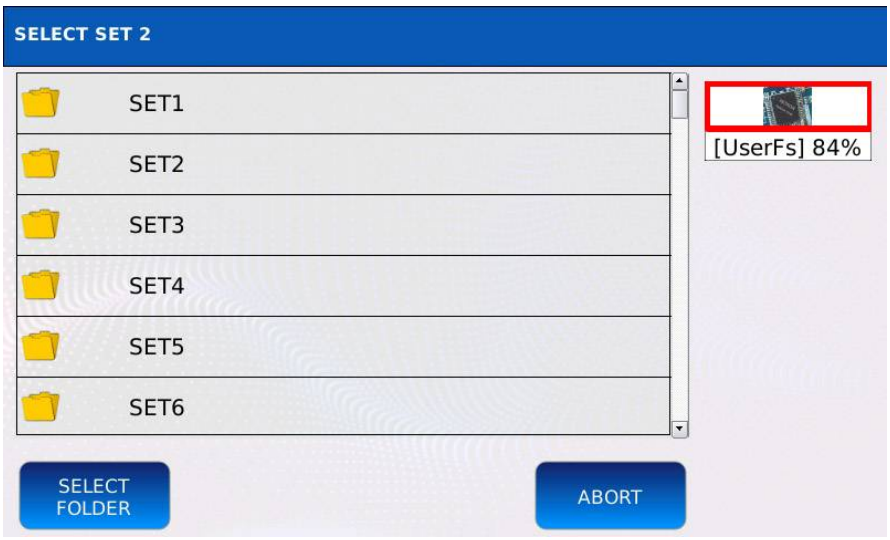
Press the JUKEBOX button to enter in JUKEBOX mode. The led of the JUKEBOX button will turn on and the JUKEBOX page will be displayed on screen.

1. VIRTUAL PADS: show the names of all the files contained in a the Set. Tap on a virtual pad to play a song. Tap again on the virtual pad to stop the song. Use the Value Dial to scroll through all the songs of the Set.
2. FOLDER LOCATION: displays the path of the currently selected Set.
3. SETS: tap on a Set button to load all the songs contained in the corresponding Set. To add songs to a Set, all you have to do is copying the songs into the folder linked to that Set. Tap on and keep pressed to change the folder path linked to that Set.

Press EXIT to go back to the PLAYER MAIN VIEW.

Edit a SET

To change the default Set location (/media/back/JUKEBOX/SET*), tap on and keep pressed one of the Set buttons. The browsing window will be displayed on screen:



- Use the Value Dial, the EXIT and the ENTER buttons to navigate through the folders.
- Tap on the SELECT FOLDER button to replace the current Set folder with the one selected (highlighted in orange). The songs contained in the selected folder will be loaded into the virtual pads when the Set is selected.
- Tap on ABORT to cancel operation and return to the previous screen.
- Press SAVE and then tap on YES to save the Set folder.

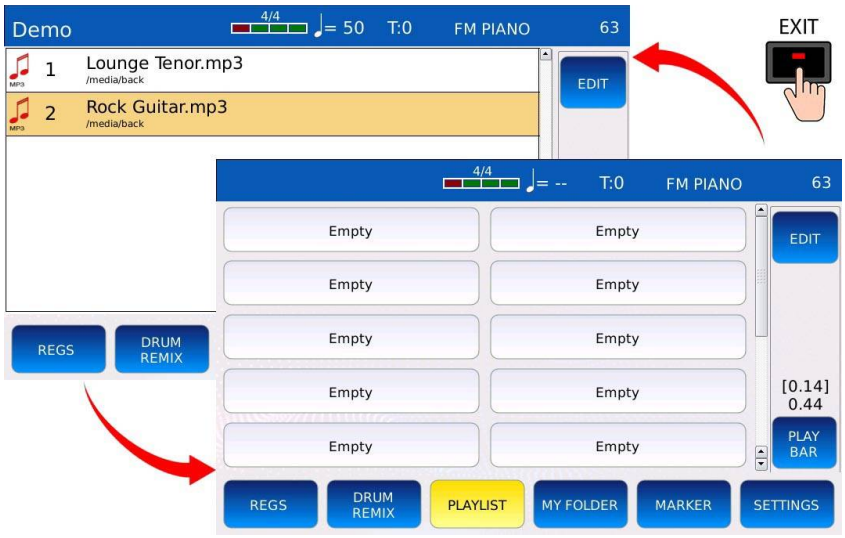
*NB: it is **NOT** possible to load a PLAYLIST into a JUKEBOX SET.*

Playlist

A playlist is basically a list of songs. It differs from the JUKEBOX because the songs order can be arbitrary, while in the JUKEBOX virtual pads the songs are displayed in alphabetic order. You can create up to 110 different playlists (10 per page) to be played in different occasions. Use the Value Dial to scroll through all the pages.

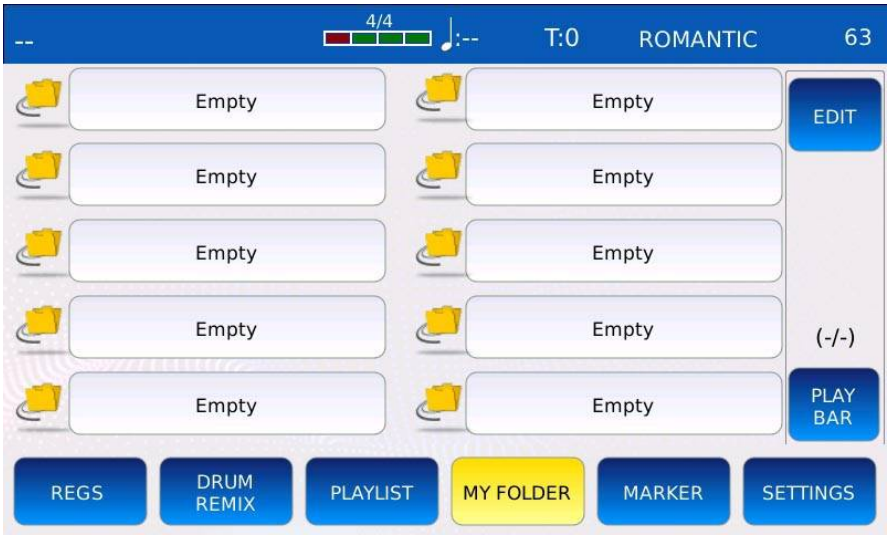
Tap on the PLAYLIST button of the PLAYER BOTTOM BAR to access the PLAYLIST SELECTION page. The PLAYLIST button will turn on.

Tap on one playlist entry to access the PLAYLIST page, in which are showed all the songs contained in the playlist. Press EXIT to toggle between the PLAYLIST SELECTION page and the PLAYLIST page.



Create a new playlist

To create a new playlist, select an “Empty” entry on the PLAYLIST SELECTION page. A pop up window will be displayed on screen. Tap on the YES button to confirm.

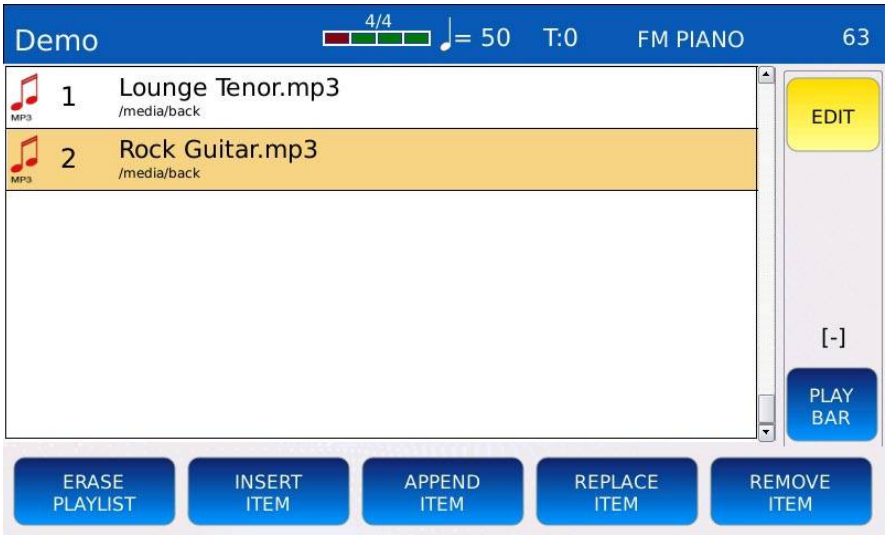


The browsing window will be displayed on screen:

- Use the Value Dial, the EXIT and the ENTER buttons to navigate through the folders.
- Tap on the INSERT ITEM button to add the selected file to the new playlist. The inserted items will be displayed in blue.
- Tap on the ERASE ITEM button to remove a previously inserted file from the playlist.
- Press SAVE to save the playlist.
- Tap on ABORT to cancel operation and return to the previous screen.

Edit existing playlists

Once a playlist is created, you can remove, add or replace songs or definitely delete the playlist. Tap on the EDIT button on the RIGHT BAR.



- ERASE PLAYLIST: deletes the playlist.
- INSERT ITEM: adds new songs to the playlist. Use the Value Dial, the EXIT and the ENTER buttons to navigate through the folders inside the browser window. Select the song and then press INSERT ITEM to add it to the playlist. Press ABORT to cancel the operation.
- APPEND ITEM: adds new songs directly at the bottom of the playlist
- REPLACE ITEM: replaces a song in the playlist with another. **Tap on the REPLACE ITEM button and then to the song you want to replace.** Use the Value Dial, the EXIT and the ENTER buttons to navigate through the folders inside the browser window. Select the song and then press CONFIRM to replace the old one. Press ABORT to cancel the operation.
- REMOVE ITEM: removes a file song the playlist. **Tap on the REMOVE ITEM button and then to the song you want to remove.** Press YES to confirm or press NO to cancel the operation.

NB: in PLAYLIST EDIT mode, it is possible to change the song order by using the DRAG&DROP (select the song by pressing on the screen and drag it file to the desired location).

My Folder

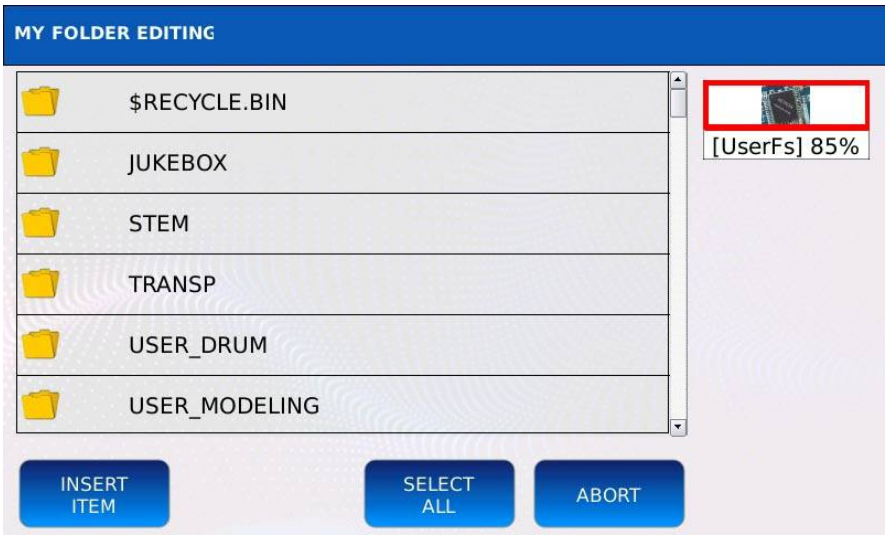
The My Folder mode provides a list of shortcuts to a set of folders. It allows you to quickly access your favourite directories without having to navigate through multiple layers of directories and subdirectories.

Tap on the MY FOLDER button of the PLAYER BOTTOM BAR to access the MY FOLDER page. The MY FOLDER button will turn on.

Create a new My Folder shortcut

To create a new My Folder shortcut, select an “Empty” entry of the list and confirm with YES on the dialogue window.

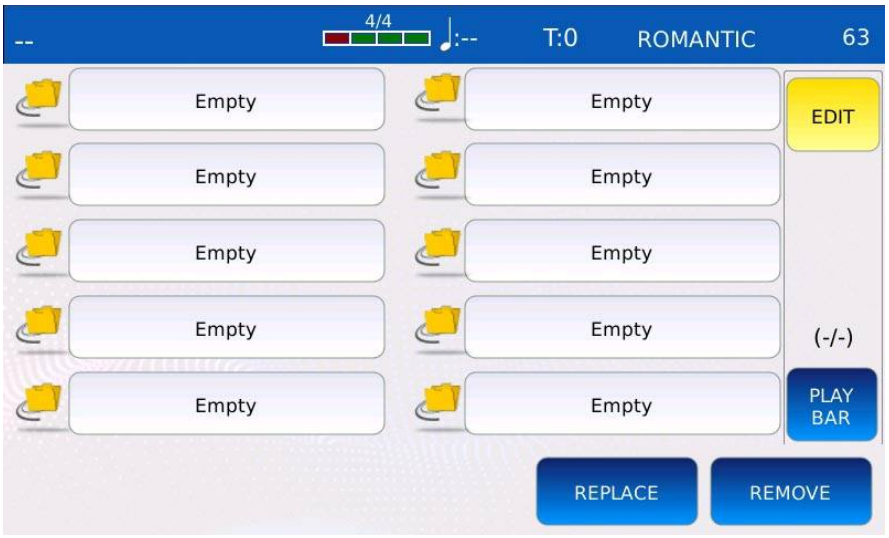
The browsing window will be displayed on screen:



- Use the Value Dial, the EXIT and the ENTER buttons to navigate through the folders.
- Tap on the INSERT ITEM to add the shortcut to the selected folder to the My Folder list.
- Tap on ABORT to cancel operation and return to the previous screen.

Edit or delete a My Folder shortcut

Tap on the EDIT button on the RIGHT BAR to change or delete a My Folder shortcut.

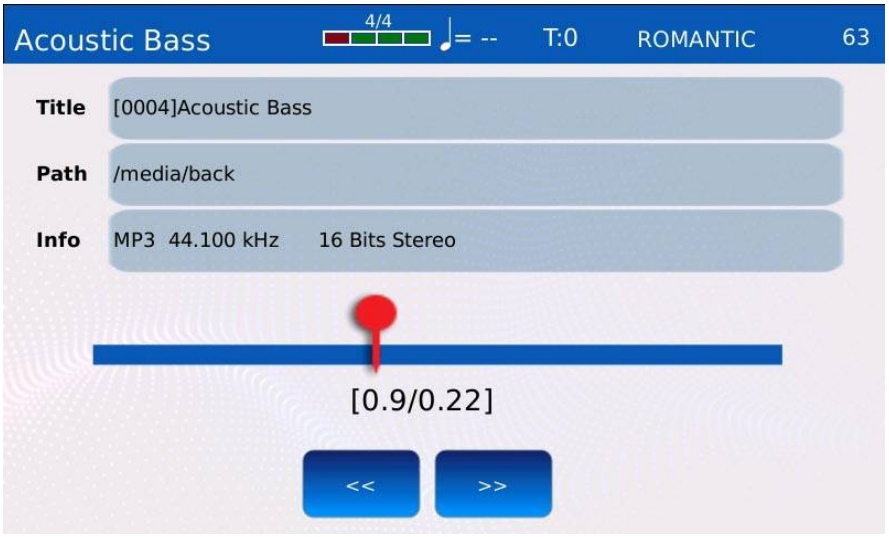


- REPLACE: changes the shortcut destination. **Tap on the REPLACE button and then to the shortcut you want to replace.** The browsing window will be displayed on screen.
- REMOVE: removes a shortcut from the list. **Tap on the REMOVE button and then to the shortcut you want to remove.** Press YES to confirm or press NO to cancel the operation. *NB: the actual directory and its content will not be deleted.*

Playback Controls

Within this page it possible to change the playback position and see some technical information about the song that is currently playing.

Tap on the PLAYBAR button of the RIGHT BAR to access the PLAYBACK CONTROLS page. The PLAYBAR button will turn on.



The song title, path and current position are displayed on screen, along with some technical information, such as file type, sampling frequency, bitrate, fps, quantization, coding, etc.

Tap on the position slider to change the playback position. For a more accurate control, tap on the JUMP FORWARD (>>) or JUMP BACKWARD (<<) buttons: the song will jump forward/backward by three seconds or one bar.

Drum Remix

This feature allows you to improve the drum track of a MIDI file by synchronizing a Rhythm to it. It is useful when the drum kit sounds weak or not powerful enough or when you want to add more realism to the track. You can play and record all the different Rhythm variations by pressing the A, B, C, D, FILL, BREAK or IN/END buttons.

Synchronize a Rhythm to a MIDI file

- Select a MIDI file with the Value Dial in the FILE BROWSER. The current selection is highlighted in orange.

- Tap on the DRUM REMIX button of the PLAYER BOTTOM BAR to enter in DRUM REMIX mode. The DRUM REMIX button will turn on and the list of the Rhythms will be displayed on screen.

- In DRUM REMIX mode, the A, B, C, D, FILL, BREAK and IN/END buttons will control the Rhythm variations and some buttons of the PLAYER BOTTOM BAR will change their functions.
    - LEAD MUTE: mutes the melody track of the MIDI file (see SETTINGS to change the melody track number).
    - LYRIC: displays or hides the LYRICS on the display, if there are any.
    - EDIT: open the DRUM REMIX SETTINGS.
    - DRUM ON/OFF: turn on/off the Rhythm and mute/unmute the drum track of the MIDI file.
- Press EXIT to close the Rhythm selection page.
- Press START to play the MIDI file synchronized with the Rhythm.
- Press the A, B, C, D, FILL, BREAK and IN/END buttons to play the desired variation. The instrument will keep track of the variations played.
- Press again START, SAVE or simply wait until the end of the MIDI file to save the variation sequence into the MIDI file.

- Press the SAVE button to save the changes or the CANCEL button to discard all the changes and exit form the DRUM REMIX mode.

NB: in DRUM REMIX mode, the instrument synchronizes the bpm of the Rhythm with the one of the MIDI file, without changing the original time signature. If the time signature of the MIDI file is 3/4, the Rhythm should have the same time signature.

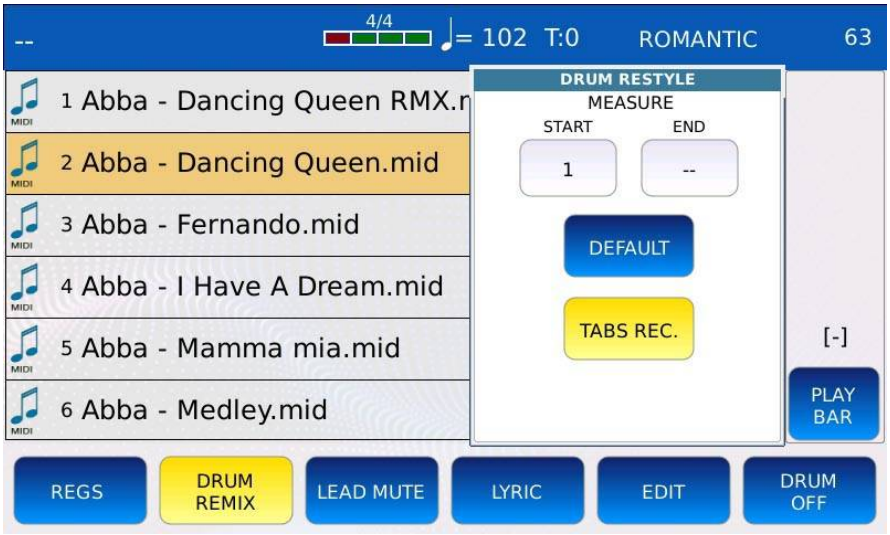
Remove the Rhythm synchronization from a MIDI file

- Select a remixed MIDI file with the Value Dial in the FILE BROWSER.
- Tap on the DRUM REMIX button of the PLAYER BOTTOM BAR. The following message will be displayed on screen:

- Tap on YES to remove the synchronization or tap on NO to cancel operation.

Drum Remix Settings

When in DRUM REMIX mode, press the EDIT button of the PLAYER BOTTOM BAR to display on screen the available remix settings and options.



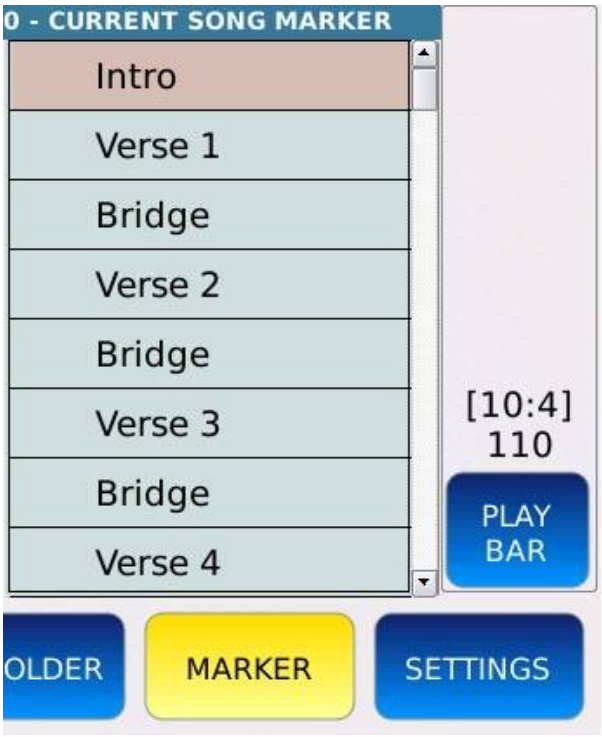
- MEASURE START/END: use of the Value Dial to define the starting and ending points of the Rhythm. For example, if START locator is set to 16 and END locator is set to 64, the Rhythm will play only from bar 16 to bar 64. Outside of this interval, the original drum track of the MIDI file will play as usual.
- DEFAULT: resets the START/END measure locators.
- TABS REC: enables the recording of the variations sequence. In other words, allows you to record the exact moment when the A, B, C, D, FILL, BREAK and IN/END buttons are pressed.

Markers

The MIDI marker meta message marks a point in time for a MIDI file. This point in time could be anything, such the beginning of a new verse, the start of the song or the beginning of the chorus. It is possible to add marker meta messages to a MIDI file with almost any DAW (Digital Audio Workstation) application.

Use the markers

- Play a MIDI file and tap on the MARKER button of the PLAYER BOTTOM BAR to open the MARKER selection window. The MARKER button will turn on.



- If the MIDI file contains marker meta messages, they will be displayed in the marker selection window.
- Tap on a marker to jump to the corresponding moment of the song (see SETTINGS to change the way the jump is executed).
- Tap on the MARKER button or press EXIT to close the marker selection window.

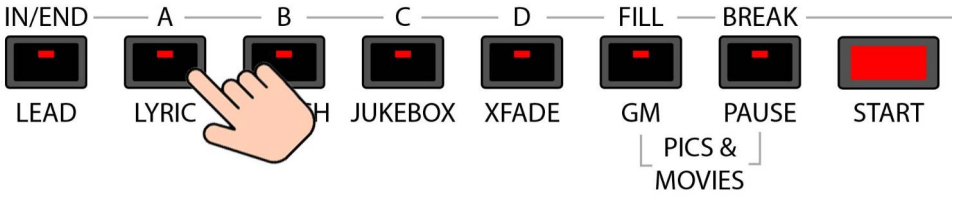
Lyrics and Scores

By definition, lyrics are words that make up a song, usually consisting of verses and choruses. The possibility of showing the lyrics on screen is vital during a karaoke night or at a wedding party. Lyrics could be interpreted and shown on screen in various formats, such as:

- MIDI lyrics meta messages (MIDI file)
- ID3 lyrics tags (mp3 file)
- plain text file (.txt file)

Scores, in the other hand, are a printed form of musical notation. Various musical symbols are used to indicate the pitch and duration of notes, the chord progressions and dynamic changes. A score can be displayed as an image on screen, in one of the following file types:

- pictures (.png, .jpg, etc.)
- portable document format files (.pdf)



Press the LYRIC button to display the lyrics on screen. If the song doesn't contain or is not linked to any lyrics, nothing will happen. Otherwise, the button will turn on and the lyrics will be shown on screen in the same area of the FILE BROWSER. The KARAOKE button will appear on the RIGHT BAR. Press again LYRIC or EXIT to hide the lyrics.

Lyrics Link

You can link a text file or a PDF file to any other file in the same folder by giving it the same name. If there is a text or a PDF file with the same name of the song when the song is started, the linked file will be opened as well together with the song.

See SKIP FILE LINK option in the SETTINGS page to enable or disable this feature.

Text Synchronization

If a text file is linked to an audio file (for example a wav or a mp3 file) as described in LYRICS LINK, it is possible to make it scroll automatically as the audio file plays.

- Make sure that the audio file and the text file have the same name (except for the extension).
- Make sure that the LYRICS AUTO SHOW option in the SETTINGS page is on.

- Assigns the Text Record option to one of the switches of the FOOTSWITCH

- Assigns the Text Page + and Text Page - options to two of the switches of the FOOTSWITCH (optional).
- Play the audio file normally as described in PLAY A SONG.
- Press the Text Record switch on the FOOTSWITCH to begin recording. A warning text “TXT Rec” will appear on the STATUS BAR at the top of the screen.
- Use the Value Dial or the Page + and Text Page - switches to turn the pages. The instrument will keep track of the moments in which the pages are turned.
- Once synchronization is complete, press the START button. You will be asked to save the test synchronization.

- Tap on the YES button to confirm.

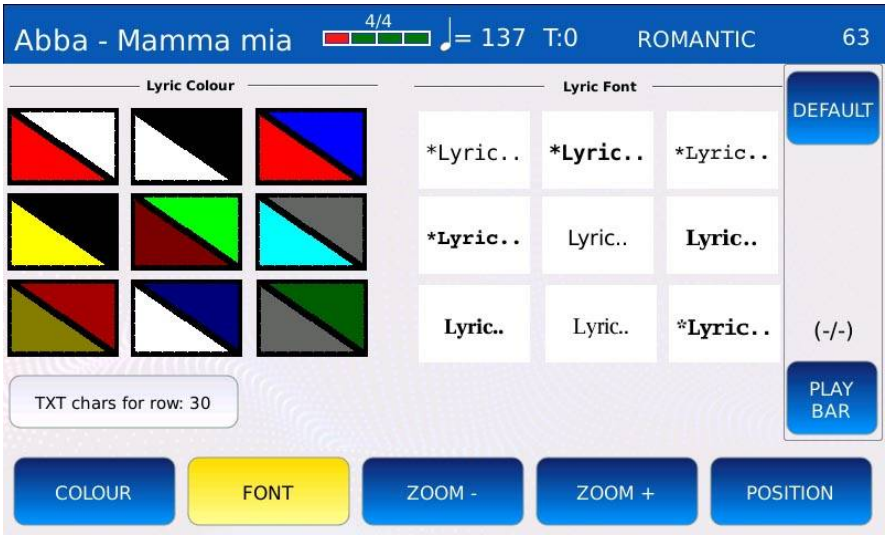
NB: you can play mp3 with synchronized text from previous KETRON instruments (Midjay and Midjay Plus) only if the mp3 file has fixed bit data rate and does not contain meta events

Customize the Lyrics

Tap on the KARAOKE button on the RIGHT BAR to show on the BOTTOM BAR the controls for customize the LYRICS appearance.

- COLOUR: changes the background image and the text colour. All the factory options are displayed on a grid. Tap on the DEFAULT button on the RIGHT BAR to restore the factory appearance.

- FONT: changes the text font and colour. Tap on the DEFAULT button on the RIGHT BAR to restore the factory appearance.

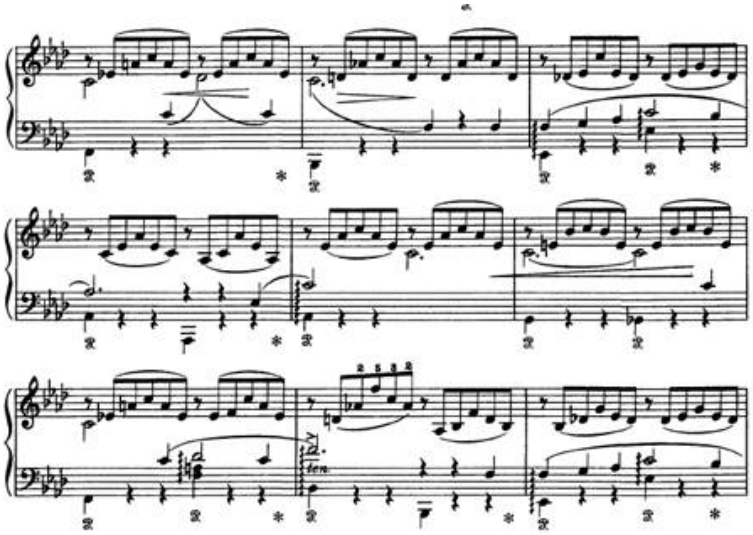


- ZOOM: tap on the ZOOM + button to increase the text font size and tap on the ZOOM – button to decrease the text font size.
- POSITION: aligns the text at the centre or to the left.

Press SAVE to save all the changes in a CUSTOM STARTUP.

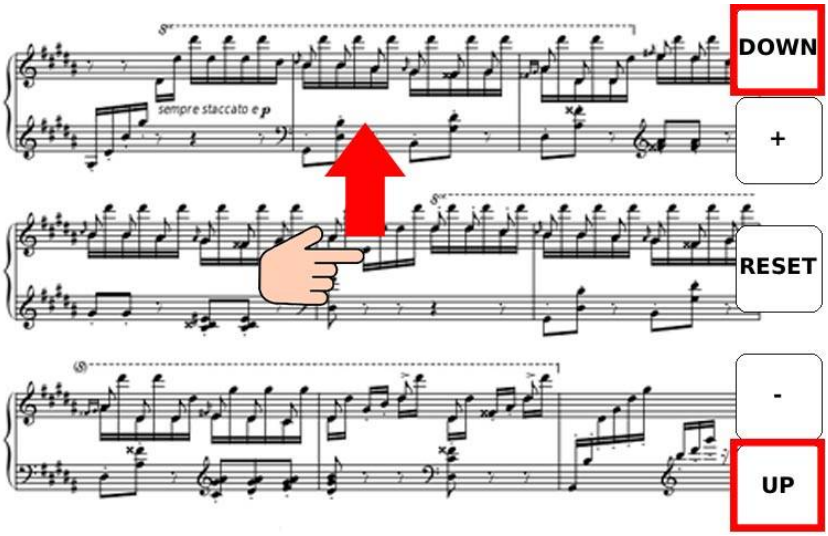
Display PDF files

Using the PDF format, you can show on screen some information otherwise impossible to display with only the LYRICS, such as music sheet notation, complex lyrics with indications about the song structure, guitar tabs, etc. You can open and display on screen a PDF file in the same way you play a song (see PLAY A SONG) by opening it in the FILE BROWSER. Use the LYRIC button to show or hide the PDF file on screen.

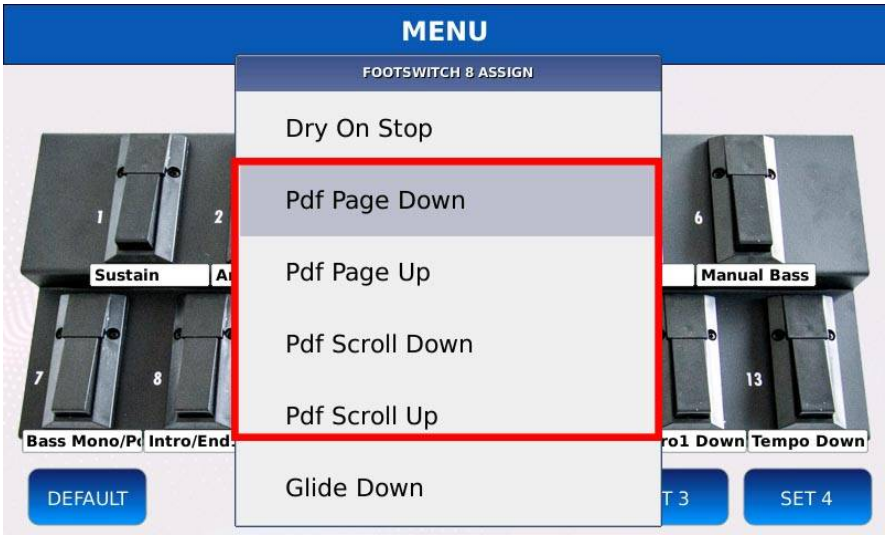


When you open a PDF file, the PDF button will appear on the RIGHT BAR. Tap on the PDF button to display on screen the PDF controls.

- 1/8: displays the current page and the total number of pages in the PDF file.
- ZOOM - +: increase or decrease the zoom level.
- CLEAR: close the PDF file.
- PAGE UP/DOWN - +: goes to the previous or to the next page.



You can scroll through the pages of the PDF file with a finger swipe on the touch screen display or by using the Value Dial. Tap on the lower right corner to go to the next page or to the top right corner to go to the previous page.

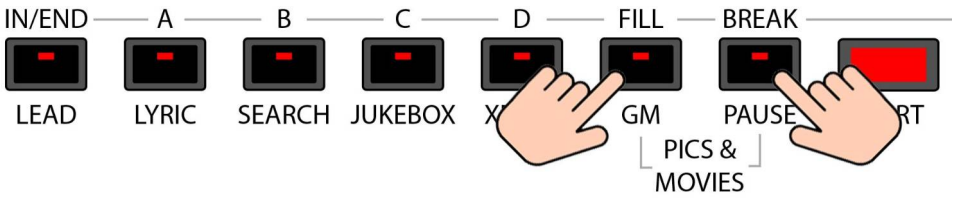


You can control the page scrolling also with the FOOTSWITCH, by selecting the Pdf Page Down, Pdf Page Up, Pdf Scroll Down and Pdf Scroll Up options on the FOOTSWITCH function list. Pdf Page Down and Pdf Page Up options will turn one page at the time, while the Pdf Scroll Down and Pdf Scroll Up will scroll continuously, until the switch is released.

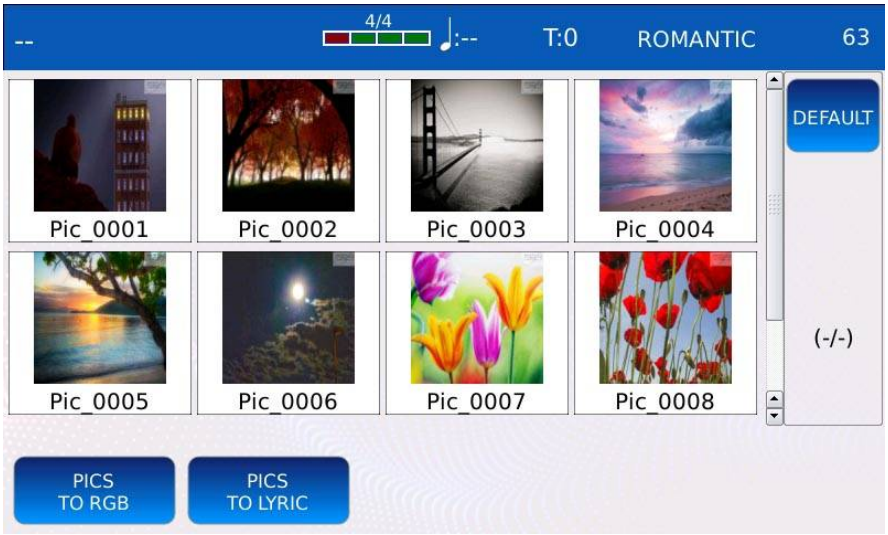
NB: in order to display the PDF file in the external monitor, remember to enable the Movie/PDF To RGB option in the SETTINGS page.

Pics & Movies

This feature provides an alternative way to access images and video files saved on the instrument or in other media devices, such as USB disk, etc. In addition to it, it allows you to set a custom background to the LYRICS.



Press at the same time the FILL and BREAK buttons to access the PICS & MOVIES page.



All the images and video files contained in the current directory will be displayed in a grid. Use the Value Dial to scroll through the images. Tap on one of the thumbnails (a thumbnail is a miniature icon which displays the contents of the image) to open the image and display it full screen. Once opened, use the touchscreen display to drag the image around.

At the bottom of the page, you will find the following buttons:

- TO RGB: loads the image as background of only the LYRICS of the external monitor.
- TO LYRICS: loads the image as background of only the LYRICS of the touchscreen display.
- DEFAULT: loads the default background images.

By activating both the TO RGB and TO LYRICS functions, the image selected will be displayed as background of the LYRICS on both the touchscreen display and the external monitor.

Audio Multitrack

In addition to normal stereo audio files, the instrument can play special audio files, called multitrack (or multichannel) audio files. A multitrack audio file consists of multiple, separate streams (channels) of sound and, similarly to MIDI files (see GM), these tracks could be mixed and balanced independently.

A typical application of this technology is found in home theatres, where six channel (5.1 surround ®) are used to create an immersive sound field, creating the illusion of sounds coming from all different directions.

The instrument can play multitrack audio files, as long as they have the following characteristics:

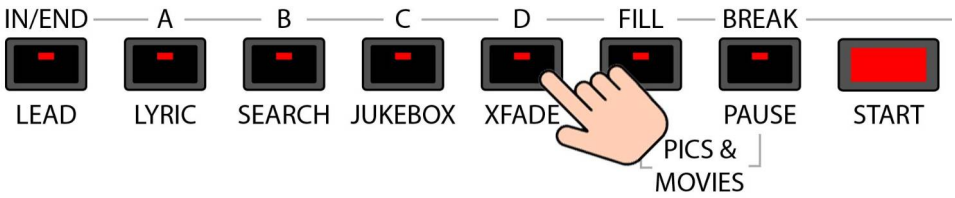
- 5.1
- 44.100 kHz sampling rate
- 16 bit resolution

Each track can be managed individually via the volume potentiometers on the left side of the instrument.

- PLAYER: volume of left and right tracks (#1 and #2)
- MIC/VOICETRON: volume of the #3 track
- ORCH: volume of the #4 track
- BASS: volume of the #5 track
- DRUM: volume of the #6 track

X-fade

In audio application, a fade is a gradual increase (or decrease) of the volume of an audio track. A cross fade (or x-fade) is a technique used to perform a smooth transition from a song to another: the first song is faded out and, at the same time, the second song is faded in.



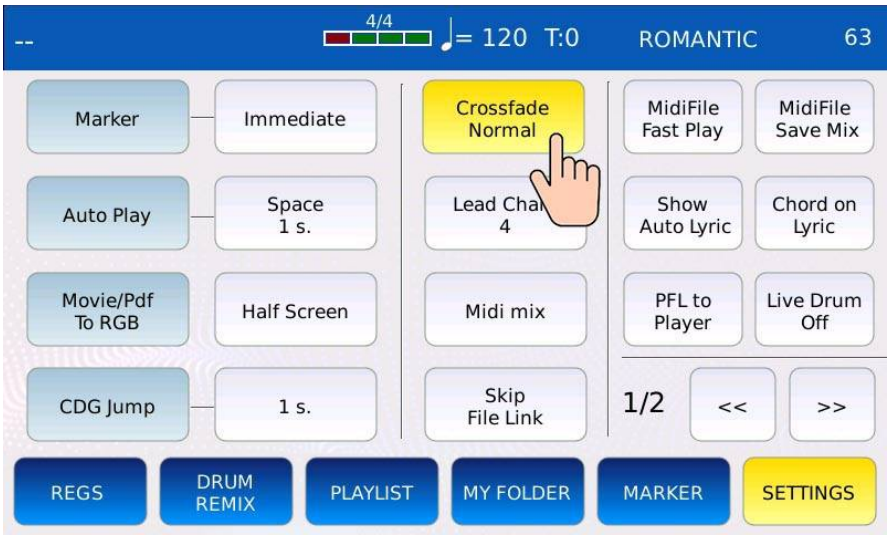
Press XFADE to enable the cross fading between songs. The XFADE button will turn on.

NB: it is not possible to cross fade between video files.

Change the x-fade speed

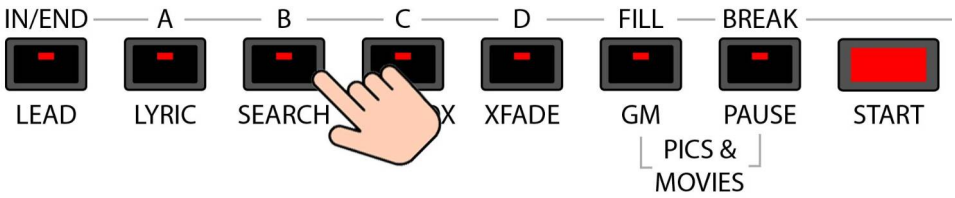
To modify the rate of the cross fade, follow the following steps:

- Tap on SETTINGS on the PLAYER BOTTOM BAR
- Tap on the CROSSFADE button. It will be highlighted in orange.
- Use the Value Dial to choose the speed from Normal, Slow1, Slow2, Fast1 and Fast2.



Search

The search feature allows an easy localization of a file by performing a search query by name or by index in the FILE BROWSER. It is useful when there are a lot of files saved on the memory and a fast access to a particular file or song is needed.



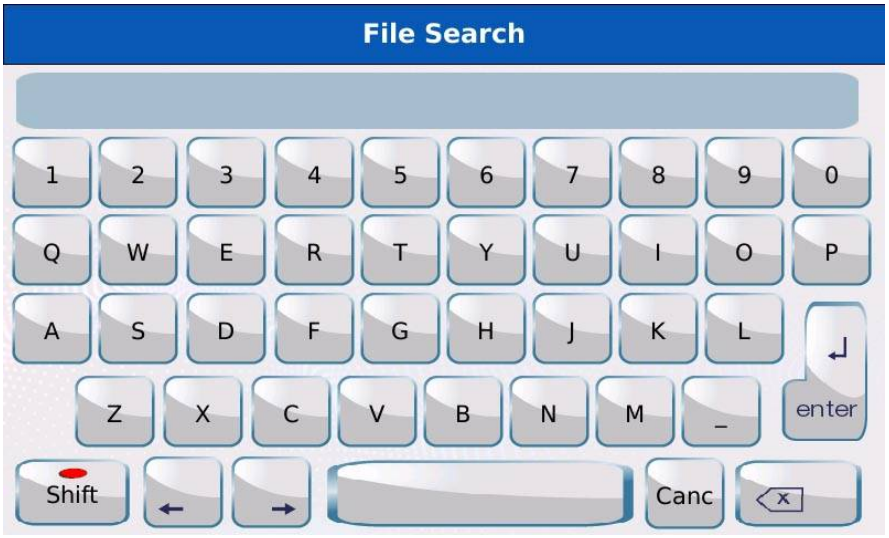
Press the SEARCH button to enter SEARCH mode and display the SEARCH page. The SEARCH button will turn on.

There are three different SEARCH modes:

- GLOBAL: performs a search by name in the entire instrument, including all media devices connected.
- QUICK: performs a search by name locally, only in the current folder.
- BY INDEX: performs a search by index locally, only in the current folder.

Global search

- Tap on the virtual alphanumeric keyboard on the left of the SEARCH page. The alphanumeric keyboard will be displayed on screen.



- Compose on the virtual keys the name of the file or the title of the song to find. For example, if you want to find all files containing the word “MAGIC”, you would type m-a-g-i-c on the virtual keys.
- Press ENTER and wait until the operation is complete. A list of items matching the string composed will appear on screen, along with the corresponding path.
- Press EXIT or SEARCH to quit the search.

NB: the path of the files will be displayed only if the number of items displayed on screen is five or less (see SETTINGS to know more about this).

NB: the search is not case sensitive.

Quick search

Sometimes, the global search could be inconvenient and time consuming, especially if there are a lot of files saved on the instrument memory. The quick search allows you to perform multiple searches faster but limited only at the current folder.

- Tap on one of the buttons at the bottom of the SEARCH page.

- Compose on the buttons the name of the file or the title of the song to find. For example, if you want to find all files containing the word “MAGIC”, follow this steps:
  - tap one time on button 4 → “M”
  - tap one time on button 0 → “A”
  - tap one time on button 2 → “G”
  - tap quickly three times on button 2→ “I”
  - tap quickly three times on button 0→ “C”
- If you make an error, press the DELETE button to go back one step.
- Press SEARCH to quit the search.

LOCK: check to skip the search mode selection and jump directly into quick search mode, when the SEARCH button is pressed.

NB: the quick search does not scan subfolders.

Search by index

At each file in a folder is assigned an index. The indexes are displayed on the left, next to the name (see SETTINGS to display or hide the file indexes). Sometimes is better to search for a song by position rather than by name, for example when a set of songs are already saved in a specified order defined by the user. Likewise to the quick search, the search by index is limited only at the current folder.

- Tap on the virtual numeric keypad on the right of the SEARCH page.

- Compose on the keypad the index of the file or song to find. For example, to find the fourteenth song, select first 1 and then 4.
- Press ENTER on the keypad to jump to the file or song at the selected index. The keypad will disappear.
- Press CANC on the keypad to clear the selection.
- Press EXIT or SEARCH to quit the search.

NUM. LOCK: check to maintain the keypad on screen, preventing it from disappearing.

NB: the search by index does not scan subfolders.

NB: see NUMBER ASSIGN to know how to assign an index to a file.

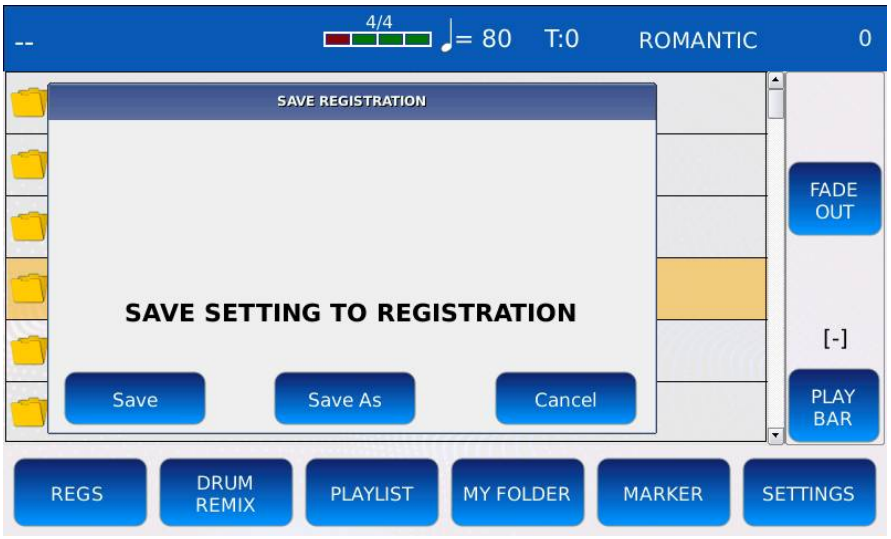
Registrations

A Registration is a file that contains all the information about the instrument current state. You can save the current state (volumes, current sounds, loaded text files, settings etc.) to a file with extension .srg and then recall it later when you need it. You can also save the current selected song, Rhythm or Stem Project and all the ACCORDION parameters defined in the ACCORDION page.

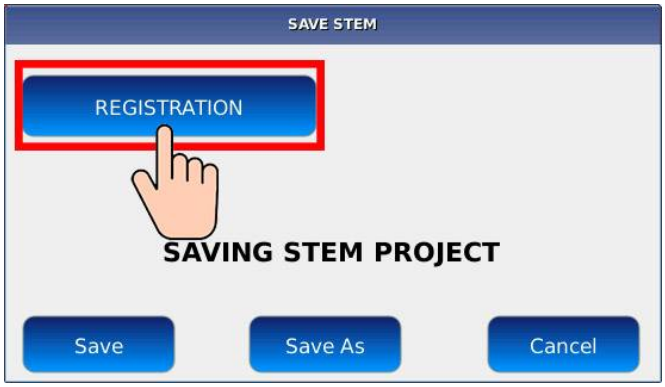
Save a Registration

When you save a Registration, in addition to all the other settings, you will also save if you were in PLAYER mode, STEM mode or DRUM mode.

- Press SAVE to save a Registration.
- If you are in PLAYER mode, the following pop up will be displayed on screen:



- If you are in STEM mode or in DRUM mode, a slightly different pop up will be displayed on screen. You have to tap on the REGISTRATION button to save the Registration, otherwise you will save a Rhythm or a Stem Project.



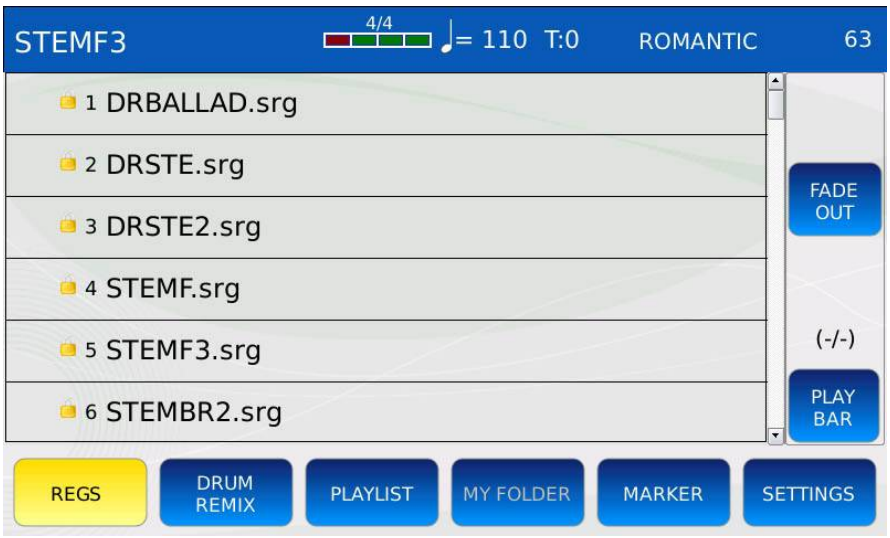
- Tap on the SAVE AS button to give a name to the Registration. A virtual alphanumeric keyboard will appear on screen. A Registration has the .srg extension. Compose the new name and then tap on ENTER. Tap on the CANCEL button or press EXIT to cancel the operation.

NB: you can save a Registration only if the PLAYER is stopped, otherwise you will save the SONG SETUP.

NB: you can save a Registration also in the ACCORDION page (see SAVE A REGISTRATION).

Load a Registration

Tap on the REGS button on the BOTTOM BAR to display on screen the Registration list.



- Tap on a Registration name to load the corresponding Registration.
- If the Registration was saved in STEM mode, the instrument will automatically enter in STEM mode. The STEM button led will turn on, the STEM page will be displayed on screen and the instrument will load the Stem Project saved with the Registration.
- If the Registration was saved in DRUM mode, the instrument will automatically enter in DRUM mode. The DRUM button led will turn on, the DRUM page will be displayed on screen and the instrument will load the Rhythm saved with the Registration.
- If the Registration was saved in PLAYER mode, the instrument will automatically show the PLAYER FILE BROWSER and select the song saved with the Registration.
- If the Registration was saved when a text file was displayed on screen, the instrument will automatically show the text file on screen.

NB: you can load a Registration also in the ACCORDION page (see LOAD A REGISTRATION).

Settings

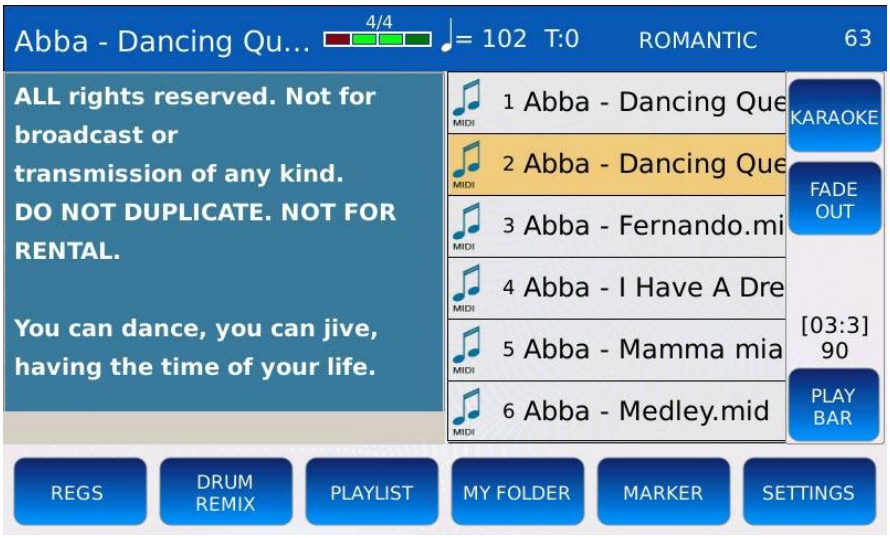
The SETTINGS mode allows you to adjust all the PLAYER settings and options. Tap on the SETTINGS button on the PLAYER BOTTOM BAR to display the SETTINGS page. Use the << and >> buttons to navigate between pages.

Page 1 – Player

This page contains all the parameters which affect the PLAYER behaviour when playing songs.

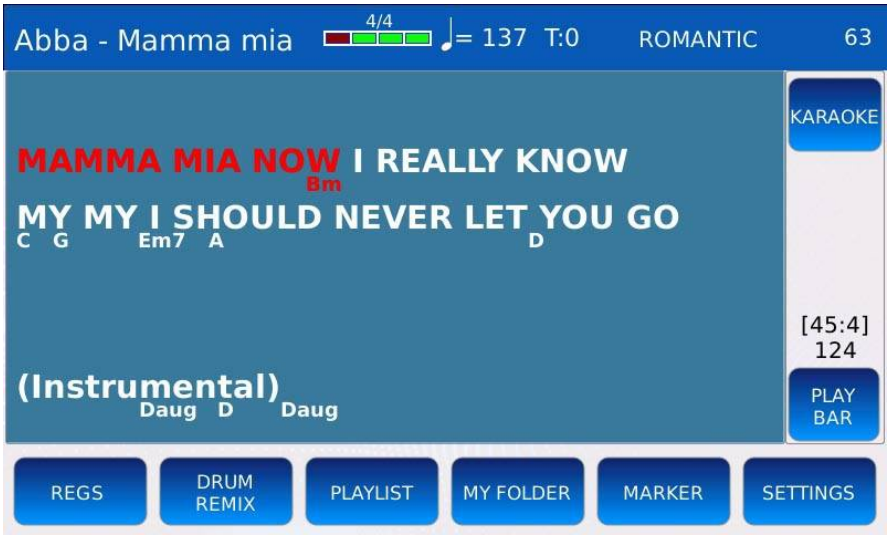
- AUTO SHOW MARKERS: show automatically the MARKER selection window when a song is started (only MIDI files).
- MARKER JUMP MODE: determines the way the PLAYER jumps to a MARKER locator. Tap on the button and use the Value Dial to choose between:
  - Immediate: jump to the selected marker point immediately.
  - End bar: jump to selected marker point after completing the current measure.
  - End Section: jump to selected marker point after completing the current section (e.g. after completing verse).
  - End Loop: jump to selected marker point after completing current loop.
- AUTOPLAY: automatically plays all the songs in the current folder. Tap on the AUTOPLAY button to enable or disable this feature.
- AUTOPLAY INTERVAL: defines the time interval between songs. Values ranges from 0 to 30 seconds. Tap on the button and use the Value Dial to change the value.
- MOVIE/PDF TO RGB: allows you to view a video file, a picture or a pdf on the external monitor instead on the touchscreen display.

- HALF SCREEN: displays the LYRICS in the left half of the screen.



- CDG JUMP: allows you to skip the initial part of the CDG files (often used for information purposes). Tap on the CDG JUMP button to enable or disable this feature.
- CDG JUMP INTERVAL: defines the initial skipped time of the CDG file. Values ranges from 0 to 30 seconds. Tap on the button and use the Value Dial to change the value.
- CROSSFADE: modifies the rate of the cross fade. You can choose between Normal, Slow 1, Slow 2, Fast 2 and Fast 1.
- LEAD CHANNEL: defines the melody track (channel) on MIDI files. Determines which channel is muted when the LEAD MUTE is enabled. The default value for the melody track is 4.
- MIDI MIX: allows you to adjust the main volumes of the MIDI file (grouped as DRUM, BASS, ORCH) using the VOLUME POTENTIOMETERS on the FRONT PANEL. When enabled, the volumes of the parts are controlled by the position of the sliders. When disabled, the MIDI file starts with the default values saved in the MIDI file itself without taking into account the position of the sliders.
- SKIP FILE LINK: disables the link between two files with the same name. If for example you have a mp3 file and a txt file with the same name, if this function is enabled, the txt file will not be automatically displayed on the screen (see LYRICS AUTO LOAD).
- MIDI FILE FAST PLAY: speeds up the loading of a MIDI file, by processing the first measures (which generally contain CC MIDI messages, program changes, etc.) more quickly.
- MIDI FILE SAVE MIX: enables or disables the storing of the slider position (DRUM, BASS, ORCH) into the MIDI file (see SONG SETUP for more information).
- AUTO SHOW LYRIC: show automatically the LYRICS (if any) when a song is started.

- CHORD ON LYRIC: show the chords (if any) under the LYRICS lines, instead at the bottom of the screen.



- PLAYER TO PFL: enables PFL playback. If enabled, a virtual button will appear at the top of the RIGHT BAR. If pressed, the audio output will be heard on the headphones, but not on the main outs.
- LIVE DRUM ON/OFF: adds more dynamism and realism in drum tracks by variating the execution of the drum tracks.

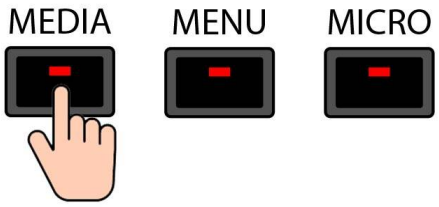
Page 2 – File Browser

This page allows you to customize the way the songs and files are displayed in the FILE BROWSER.

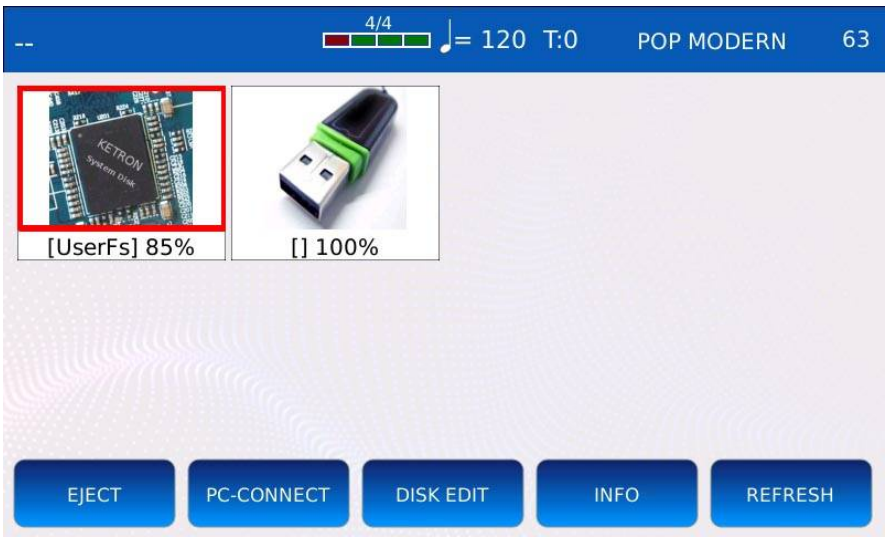
- FILTERS: define the type of files to be displayed or hidden.
- SORT: sorts the files by index (insertion date) or by name.
- DIR ON TOP/BOTTOM: displays the folders on top or at the bottom of the file list.
- ICONS: displays or hides the file icons.
- NUMBERS: displays or hides the file index. It is useful to perform a SEARCH BY INDEX.
- FILE ITEMS: defines the number of file and folders to be displayed (from 4 to 12). Tap on the box and use the Value Dial to change.

Media

In MEDIA mode, you can access the content of the memory devices (USB pen drives, hard disks, etc.) connected to the instrument and load, store and copy files between the instrument and the external devices.



Press the MEDIA button to enter in MEDIA mode. The MEDIA button led will turn on and the MEDIA page will be displayed on screen. All memory devices connected to or installed on the instrument will appear on a grid.



- EJECT: blocks further data transfer to and from the selected device. It allows you to safely remove the device, preventing potential data loss or damage to the device that may occur if the device is disconnected while an operation (copying or syncing files) is still in progress. Tapping on EJECT ensures that the changes have actually been saved.
- PC-CONNECT: allows you to connect the instrument to a computer as if it is an USB hard drive.
- DISK EDIT: enters in DISK EDIT mode. Allow you to make file operations, such as copying, deleting and renaming files.
- INFO: displays some technical information (free space, file system, etc.) of the selected memory device.

- REFRESH: scans all connected memory devices. Useful when the instrument does not immediately recognize a connected USB pen drive or hard disk.

Safely remove a media device (eject)

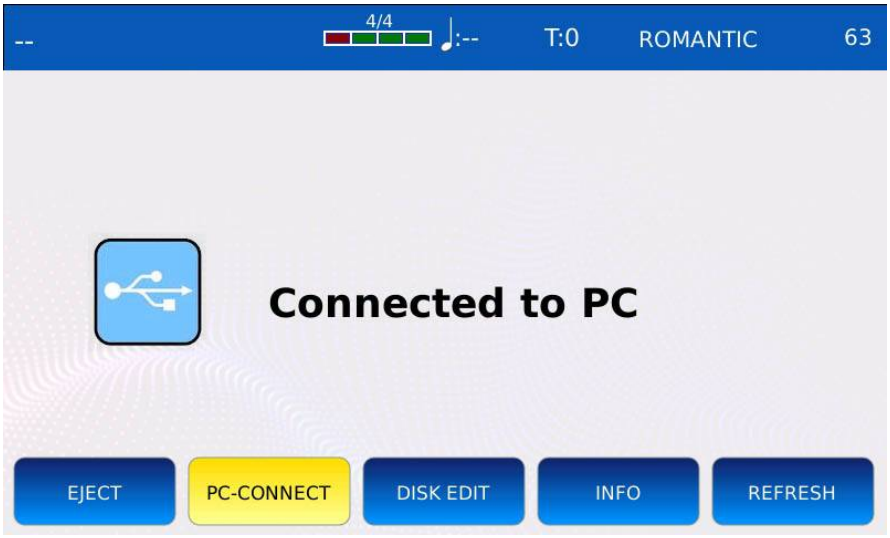
- Press MEDIA to enter in MEDIA mode.
- Use the Value Dial to select the memory device you want to safely remove. The media device will be highlighted in red.
- Tap on the EJECT button.
- Wait until the operation is complete. **Do not remove** the device until it is no more visible in the MEDIA page.
- Disconnect the device from the USB port.

NB: the internal SSD (UserFS cannot be ejected).

PC connect

Allows you to connect the instrument to a computer as like an external USB disk. You can see all the memory devices connected to or installed on the instrument and easily access their content from the computer.

- Connect an USB cable to the USB DEVICE port at the front of the instrument and to a free USB port of a computer.
- Tap on the PC CONNECT button to open the connection. All other functionalities of the will be **temporarily disabled**.



- A pop up window will appear on the screen of your computer. Choose the “Open folder to view files” option. This will allow you to navigate the instrument memory devices as removable disks.

- You can now copy any type of files form the computer to the instrument (and vice versa).
- Tap again on the PC CONNECT button to close the connection.

- Remember to safely remove the hardware device from the computer in order to avoid any damage or data loss. Tap on OK to continue.

Disk Edit

In DISK EDIT you can perform various file operation, such as creating new folders, copying, pasting, deleting, renaming files and more.

Tap on the DISK EDIT button of the MEDIA page to enter in DISK EDIT mode. All other functionalities of the will be **temporarily disabled**.

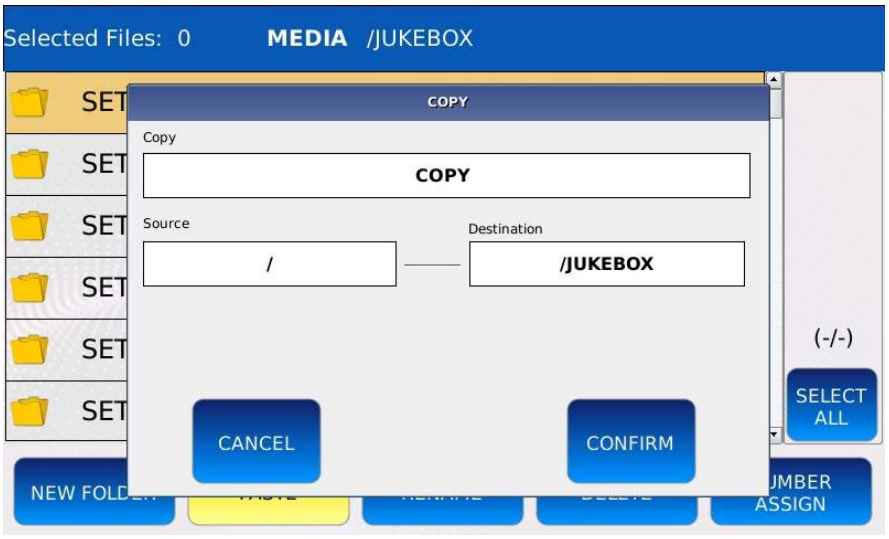
- NEW FOLDER: creates new directories.
- COPY: copy and paste files between directories or from external memory devices into the instrument internal memory.
- RENAME: change files and folders names.
- DELETE: remove files and folders.
- NUMBER ASSIGN: assign or remove the file indexes.
- SELECT ALL: selects all file and folders in the current directory.

Create a new folder

- Tap on the NEW FOLDER button to create a new folder in the current directory. The name “FOLDER 001” is assigned by default.
- Tap on CONFIRM to proceed with the creation of the folder. If a folder with the same name already exists, an error message will be displayed on screen.
- Tap on the RENAME button to assign a different name to the new folder. A virtual alphanumeric keyboard will appear on screen. Compose the new name and then tap on ENTER.
- Tap on CANCEL to cancel the new folder creation operation.

Copy and paste

- Tap on the items you want to copy, they will be highlighted in grey.
- Tap on the COPY button, a message will be displayed on screen.
- Tap on the OK button to close the message window. The COPY button will be replaced by the PASTE button.



- Navigate to the destination folder (the one in which you want to copy the files).
- Tap on the PASTE button.
- Tap on the CONFIRM button to proceed with the copy or tap on CANCEL to cancel the operation.

NB: copying multiple files and folders could take some minutes.

Rename files and folders

- Tap on the item you want to rename, it will be highlighted in grey.
- Tap on the RENAME button, a pop up window will be displayed on screen.
- Tap again on the RENAME button of the pop up window, a virtual alphanumeric keyboard will appear on screen.
- Compose the new name and then tap on ENTER.

Delete files and folders

- Tap on the items you want to delete, they will be highlighted in grey.
- Tap on the DELETE button, a pop up window will be displayed on screen.
- Tap on the CONFIRM button to proceed with the copy or tap on CANCEL to cancel the operation.

Number Assign

Usually, all the files in the FILE BROWSER are displayed in alphabetic order. An index next to the file name indicates the current file position file in the folder. Every time a new file is added to the folder, the index table is updated and the file indexes could change. For example, consider the following folder:

Copying and pasting a file named “Laura Palmer” will change the indexes of all the files after the fifth position:

You could prevent the indexes from changing by assigning permanently an index to the a file. To lock the position information to the file itself, follow the following steps:

- Tap on the NUMBER ASSIGN button. A pop up window will be displayed on screen.

- Tap on the ASSIGN NUMBER button and then tap on the CONFIRM button to permanently assign the current index to all the files in the folder. This operation will prepend a suffix (for example “[0023]”) to the file name. A small lock icon will appear next to the index of each file.

- If a new file is copied into the folder, it will have an index equal to the maximum locked index plus one. In this particular case it will be 11.

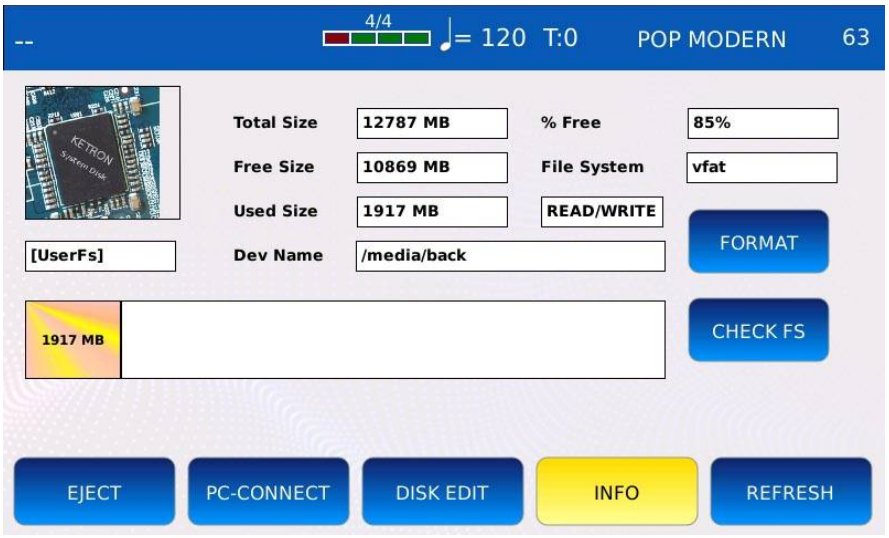
- The files could be displayed again in alphabetical order by removing the index lock or by enabling the ALPHABETIC SORT in the SETTINGS page.

- To remove the index lock, tap on the NUMBER ASSIGN button, then tap on the REMOVE NUMBER button and finally confirm the operation. All the files in the current folders will be displayed in alphabetical order.

NB: you can search a file by its index. See SEARCH BY INDEX.

Media Info

Displays technical information of the selected device, such as total, free and used space on disk, file system and name of the selected memory device

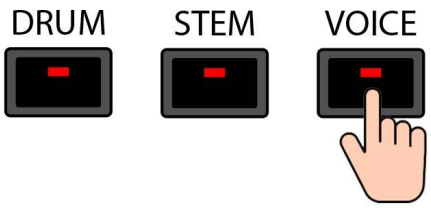


- FORMAT: formats the disk. **WARNING: all disk content will be erased!**
- CHECK FS: scans the selected memory device for errors. Run this check if you incur on anomalies or errors in accessing files. If a problem in the File System is found, this procedure will attempt to correct it. **WARNING: if found, damaged files will be deleted!**

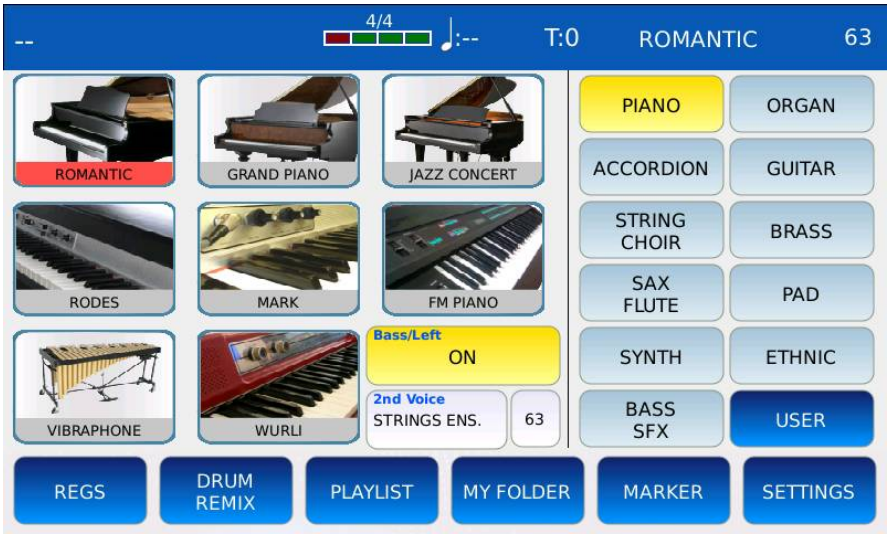
Voice

A VOICE Preset or Program is a single instrument sound or multiple instrument sounds layered together that can be played via an external MIDI keyboard connected to a MIDI IN (KEYBOARD) port. All MIDI messages coming to the MIDI IN (KEYBOARD) port will be sent to the VOICE sound engine.

All VOICE Presets are organized in 11 Families, each one of these is distinguished by a specific instrument sound. The Families are PIANO, ORGAN, ACCORDION, GUITAR, STRINGS/CHOIR, BRASS, SAX/FLUTE, PAD, SYNTH, ETHNIC and BASS/SFX.



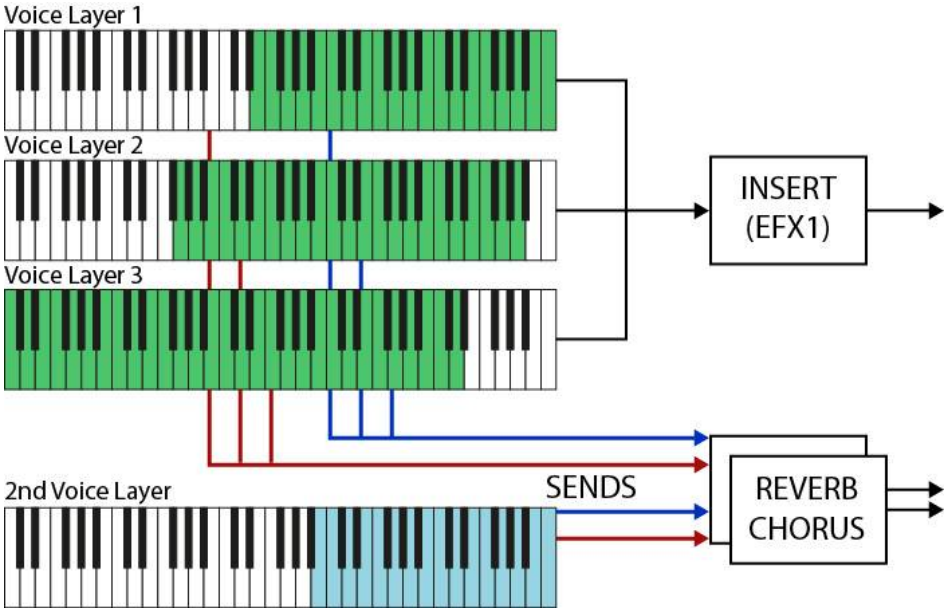
Press VOICE to enter in VOICE SELECTION mode. The VOICE button led will turn on and the VOICE SELECTION page will be displayed on screen.



- FAMILIES: on the right half of the page, the 11 Families names are arranged in two columns of buttons. Tap on a Family name to select the corresponding family.
- PRESETS: on the left half of the page, the Presets of the selected Family are displayed on a grid. Each Preset has its own name and icon. Use the Value Dial to scroll through all the Presets of the selected Family and tap on a Preset icon to load the corresponding Preset into the VOICE sound engine. The current Preset name is displayed in the top-right corner of the STATUS BAR. Tap on and keep pressed a Preset icon to enter in VOICE EDIT mode.

VOICE

- USER: toggles between Factory Presets and User Presets. To create a User Preset, press SAVE while being in VOICE EDIT mode (see SAVE AS USER VOICE).
- BASS ON/OFF: enables or disables the BASS. This will automatically SPLIT the keyboard in half and a BASS sound is automatically selected to be played on the lower half. Keep pressed to enter in BASS EDIT mode.
- SECOND VOICE: enables or disables the 2nd Voice Layer.
- SECOND VOICE VOLUME: adjusts the 2nd Voice volume.



A Preset contains 3+1 layers, each one of them can play a different sound. Each layer is mapped to a different zone of the keyboard, has its own velocity range, ADR amplitude envelope, and filter. Each layer has independent sends to a common REVERB EFFECT and CHORUS EFFECT and two LFOs: one is used for frequency modulation (VIBRATO RATE, DEPTH and DELAY) and another for both amplitude (TVA) and filter frequency (TVF) modulation.

There is a major difference between the first three layers and the fourth layer:

- The first 3 layers (“Voice” layers) are identical. They can be processed by a common INSERT EFFECT (EFX1) and can be used as MORPHING layers.
- The fourth layer (“2nd Voice” layer) has a reduced set of controls and cannot be processed by the INSERT EFFECT. It can be used as a variation of the main sound: for example, it could be a string ensemble sound for a piano Preset.

Voice Edit

In VOICE EDIT mode you can edit and customize VOICE Presets. You can adjust the VOICE parameters as you like and save the new Preset as a User Preset.

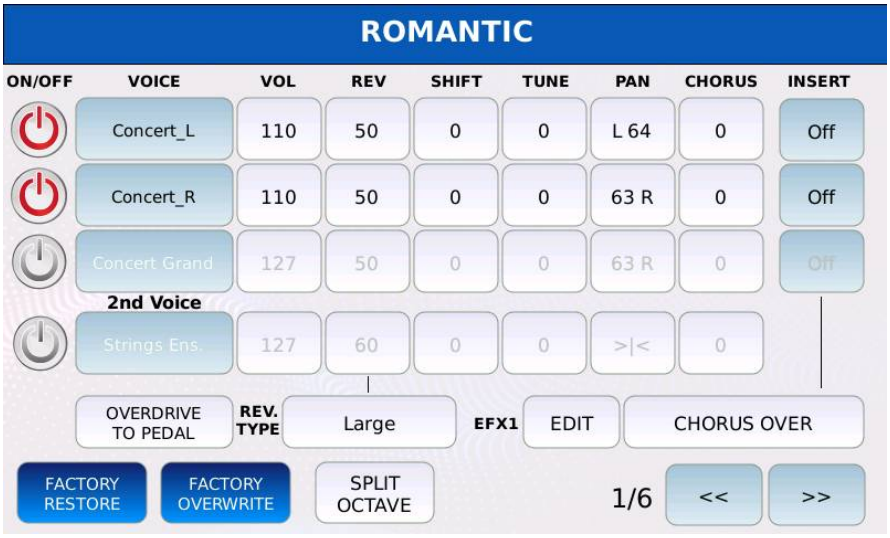
Tap on and keep pressed a Preset icon to enter in VOICE EDIT mode. The VOICE parameters are displayed in several pages and that can be edited by tapping on the corresponding button and the using the Value Dial to change the value. Tap on the >> and << buttons to switch between all the VOICE EDIT pages. Press EXIT to return to the VOICE SELECTION page.

On the left side of the pages, there are 4 ON/OFF buttons and 4 VOICE buttons.

- ON/OFF: enables or disable the layer. A disabled layer is muted and will produce no sound.
- VOICE: opens the GM VOICE SELECT page to selects the GM sound to be played on that layer. Tap on the family name on the right and then tap on the sound name on the left to load the desired sound.

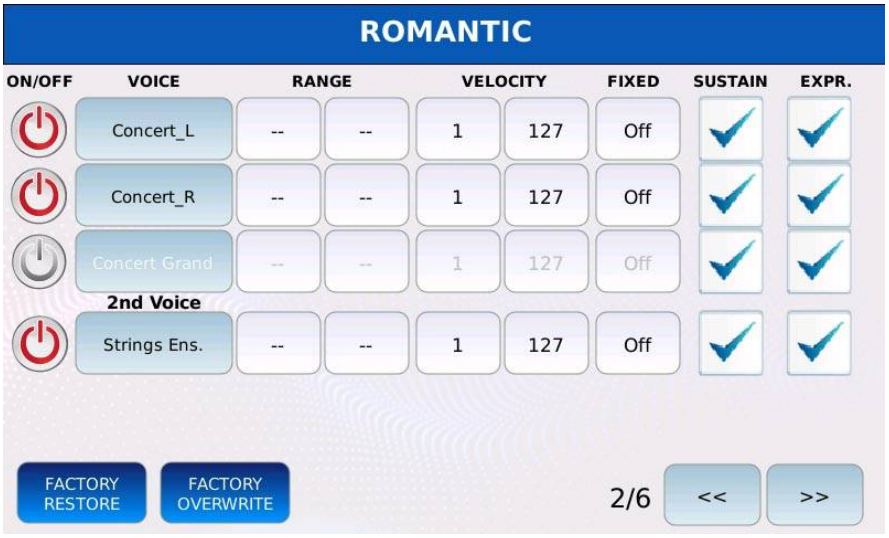
VOICE

Page 1



- VOL: adjusts the layer volume. Values range from 0 to 127.
- REV: adjusts the reverb send amount. Values range from 0 to 127. The sound is processed by the reverb selected in the REVERB TYPE box.
- SHIFT: adjusts the layer transposition. Values range from -24 to 24 semitones.
- TUNE: adjusts the layer fine tuning in cents. One cent is one hundredth of a semitone (100 cents comprise a semitone and 1200 cents comprise an octave).
- PAN: controls the position on the stereo panorama for the layer. Values range from -64 (all to the Left) to 64 (all to the Right) with 0 being the centre position (>|<).
- CHORUS: adjusts the CHORUS send amount. The sound is processed by the CHORUS effect selected in the DSP page. Values range from 0 to 127.
- INSERT ON/OFF: enables or disables the INSERT EFFECT for the layer. If disabled the INSERT EFFECT is bypassed (only “Voice” layers).
- OVERDRIVE TO PEDAL: allows you to control the overdrive value of the INSERT EFFECT with the expression pedal.
- REVERB TYPE: allows you to choose the reverb type for the preset.
- EFX1 PRESET: allows you to choose an INSERT EFFECT preset (see DSP to know how to create an INSERT EFFECT).
- EFX1 EDIT: allows you to make some fine tuning and modify some parameters of the INSERT EFFECT preset and to store them into the VOICE preset. The changes are stored into the VOICE preset, without the need of creating a new user INSERT preset.
- SPLIT OCTAVE: enables or disables the automatic transposition when BASS is enabled.

Page 2



- RANGE: defines the key range for the layer. Tap and use the Value Dial to set the lowest and highest active notes for the layer. Values range from C#-2 to G8. Middle C is C4.
- VELOCITY: defines the velocity range for the layer. Tap and use the Value Dial to set the lowest and highest velocities for the layer. Notes played with higher velocity than the highest velocity or lower velocity than the lowest velocity will be dropped. Values range from 1 to 127.
- FIXED: if enabled, the layer will play always with the same velocity. Use the Value Dial to change the value. Values range from Off to 127. Useful for velocity insensitive sounds, like organ or synth sounds.
- SUSTAIN: enables or disables the sustain pedal (CC 64 MIDI messages) for the layer.
- EXPRESSION: enables or disables the expression pedal (CC 11 MIDI messages) for the layer.

Page 3

- PORTAMENTO ON/OFF: enables or disables the portamento for the layer. Portamento is a pitch sliding between two consecutive notes. You can choose between:
  - Off: portamento is disabled.
  - Mono: portamento is disabled. The layer will become monophonic.
  - Poly: portamento is enabled. The layer will become polyphonic. The portamento is applied to every note.

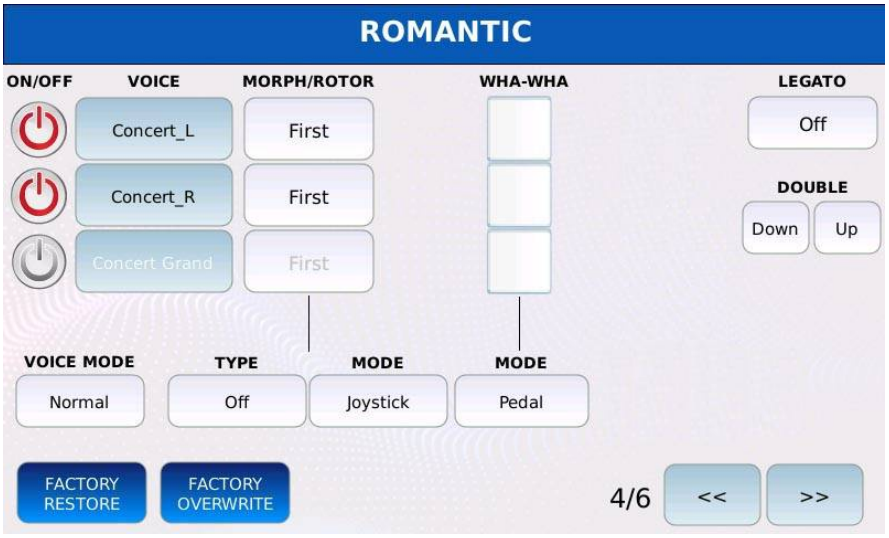
  NB: the portamento must be enabled in the CONTROL page of the MENU.
- PORTAMENTO TIME: adjust the rate at which the portamento slides the pitch between two consecutive notes. Lower values means faster rates, higher values means slower rates. Values ranges from 5 to 127.
- MODULATION: defines the Modulation Wheel (CC 01 MIDI messages) behaviour for the layer:
  - Off: moving the Modulation Wheel has no effect.
  - LFO: the Modulation Wheel controls the depth of the LFO that is used to modulate the pitch.
  - Soft LFO: the Modulation Wheel controls the depth of the LFO that is used to modulate the pitch. It has a reduced values range.
  - Filter: the Modulation Wheel controls the cutoff frequency of the filter.
  - LFO+Filter: the Modulation Wheel controls both the LFO depth and the cutoff frequency of the filter.
- PITCH: defines the Pitch Wheel (Pitch Bend MIDI messages) behaviour for the layer:

  - Off: moving the Pitch Wheel has no effect.
  - Pitch: the Modulation Wheel controls the pitch.
  - Pitch+LFO: the Modulation Wheel controls both the pitch and the LFO depth.

- PITCH RANGE: sets the maximum excursion in semitones for the Pitch Wheel. For example, if the pitch range is set to +-6, the pitch is increased by 6 semitones when the Pitch Wheel is moved all the way up and decreased by 6 semitones when the Pitch Wheel is moved all the way down.
- AFTERTOUCH: defines the aftertouch (Channel Pressure MIDI messages) behaviour for the layer:
  - Off: applying pressure to the keyboard has no effect.
  - LFO: the aftertouch controls the depth of the LFO that is used to modulate the pitch.
  - Soft LFO: the aftertouch controls the depth of the LFO that is used to modulate the pitch. It has a reduced values range.
  - Bend: the aftertouch controls the pitch. Applying a pressure to the keyboard makes the pitch higher.

  NB: the aftertouch must be enabled in the CONTROL page of the MENU.
- SLIDE: if enabled, produces a pitch bend effect, when a key is pressed with a velocity above a certain threshold (only “Voice” layers). You can choose between Off, Slide1, Slide2 and Slide3. They differ for the amount of bending applied.
- THRESHOLD: sets the threshold above which the slide effect is applied.

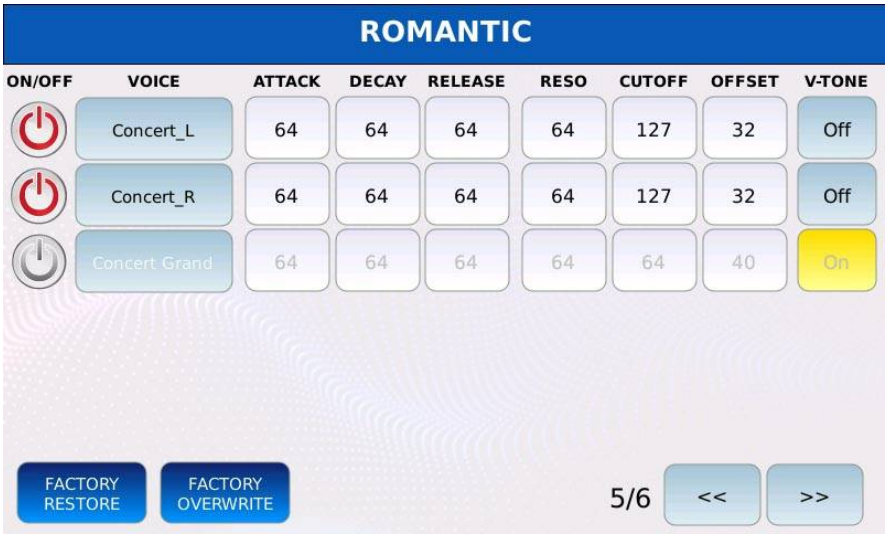
Page 4



- VOICE MODE: determines how the chords notes are played:
  - Normal: the default setting. All the notes are played at the same time on all layers.
  - Duet1, Duet2: when you play a chord, the first layer plays the highest note of the chord and the second layer plays the lowest note of the chord. All the other notes are played by all layers. If you play only one note, only the first layer will play. The only difference between Duet1 and Duet2 is the notes processing speed.
  - Trio1, Trio2: similar to Duet1 and Duet2 but for 3 notes chords.
  - Steel: the Pitch Wheel affects only the lowest note played. It is very useful when you want simulate the playing technique of some instruments such as the Hawaiian guitar, violin etc.
- MORPH/ROTOR TYPE: the morphing/rotor feature allows you to cross-fade between two “Voice” layers. If enabled, the “First” layer fades down while the “Second” layer simultaneously fades up. The cross-fade can be controlled manually (e.g. by changing the position of a potentiometer) or can be automatic. If a layer is set as “All”, the is will not be affected by the morphing.
  - Off: morphing is disabled.
  - Normal: the cross-fade is controlled manually. A physical controller continuously controls the cross-fade position.
  - Rotor: the cross-fade is automatic and it is triggered by activating the selected controller. This mode mimics the behaviour of the old Leslie speakers that gradually change the rotor speed by activating a switch.
  - Coupling: the first layer does not change, and the second one will fade in and out.

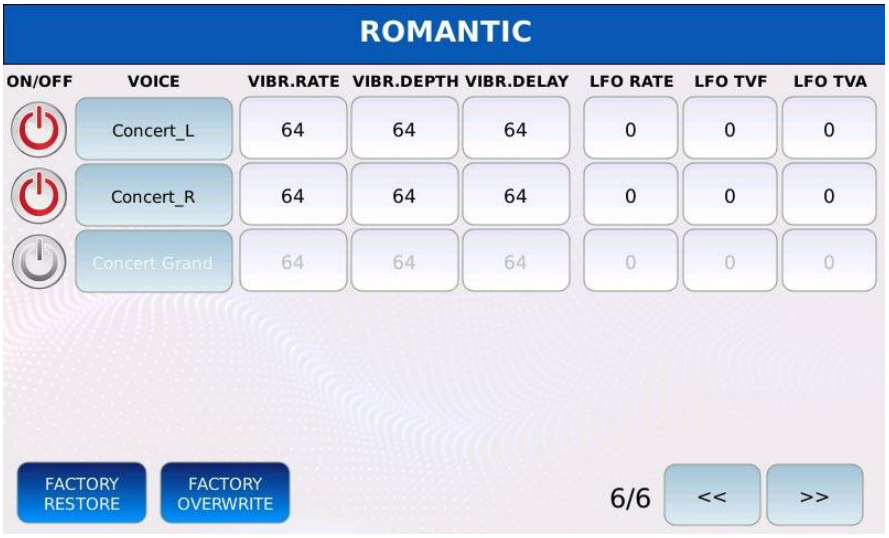
- MORPH/ROTOR MODE: selects the physical controller that controls the morphing. You can choose between Pedal, Sustain Switch, Aftertouch and Joystick.
- WHA-WHA: enables or disables the wha-wha for the layer (only “Voice” layers).
- WHA-WHA MODE: selects the controller which controls the wha-wha. You can choose between Pedal and Modulation Wheel.
- LEGATO: makes consecutive notes to be played smoothly and connected. You can choose between Off, Mono Slow, Mono Medium, Mono Fast, Poly Slow, Poly Medium and Poly Fast. Tap on the button to change value (only “Voice” layers).
- DOUBLE DOWN: doubles the voice an octave down for all the layers.
- DOUBLE UP: doubles the voice an octave up for all the layers.

Page 5



- ATTACK: controls the attack time of the ADR amplitude envelope for the layer. Lower values means faster attack, higher values means slower attack. Values range from 0 to 127. Default value is 64.
- DECAY: controls the decay time of the ADR amplitude envelope for the layer. Lower values means faster decay, higher values means slower decay. Values range from 0 to 127. Default value is 64.
- RELEASE: controls the release time of the ADR amplitude envelope for the layer. Lower values means faster release, higher values means slower release. Values range from 0 to 127. Default value is 64.
- RESO: controls the resonance of the filter for the layer. Values range from 0 to 127. Default value is 64.
- CUTOFF: controls the cutoff frequency of the filter for the layer. Lower values mean a more filtered sound, higher values mean a less filtered sound. Values range from 0 to 127. Default value is 64.
- OFFSET: add a velocity offset to Note On MIDI messages. Values below 64 add a negative offset, values above 64 add a positive offset. Values range from 0 to 127. Default value is 64.
- V-TONE (Vari-TONE): adds dynamics to the sounds. Changes the sample played for consecutive Note On events for the same note. This creates some variation and produces a more natural sound.

Page 6



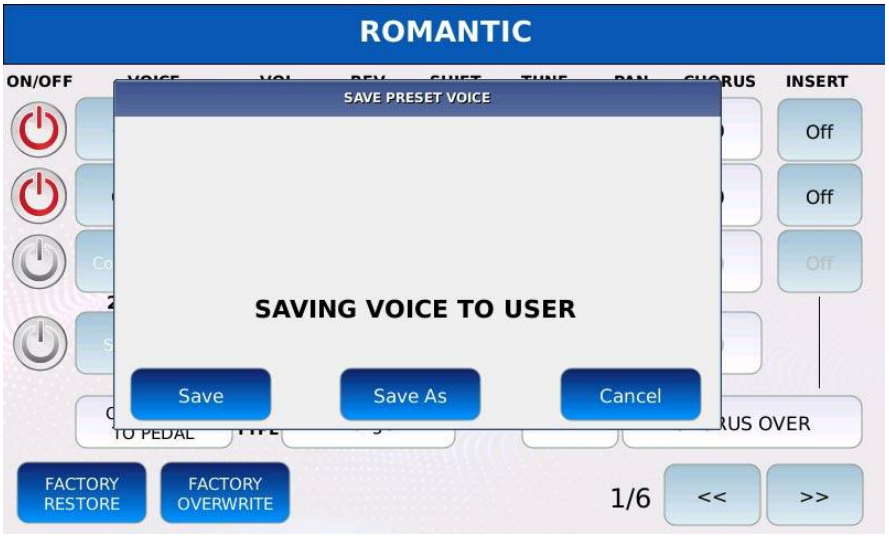
- VIBRATO RATE: controls the frequency modulation rate. Values range from 0 to 127. Default value is 64.
- VIBRATO DEPTH: controls the frequency modulation depth. Values range from 0 to 127. Default value is 64.
- VIBRATO DELAY: adjust the frequency modulation delay. Values range from 0 to 127. Default value is 64.
- LFO RATE: controls both the filter frequency modulation rate and the amplitude modulation rate. Values range from 0 to 127. Default value is 64.
- LFO TVF: controls the filter frequency modulation depth. Values range from 0 to 127. Default value is 64.
- LFO TVA: controls the amplitude modulation depth. Values range from 0 to 127. Default value is 64.

VOICE

Save a VOICE Preset

Save as USER voice

The Preset will be saved as a USER voice Preset. It can be accessed by pressing the USER button of the VOICE CHOOSE page.



- Press SAVE
- Tap on the SAVE or SAVE AS button
- Tap on the CANCEL button to cancel the operation

Save as FACTORY voice

Replace the factory voice Preset.

- Tap on the FACTORY OVERWRITE button

- Tap on the YES button
- Tap on the NO button to cancel the operation

Restore a FACTORY voice

Discard all the changes and restore the all the factory parameters.

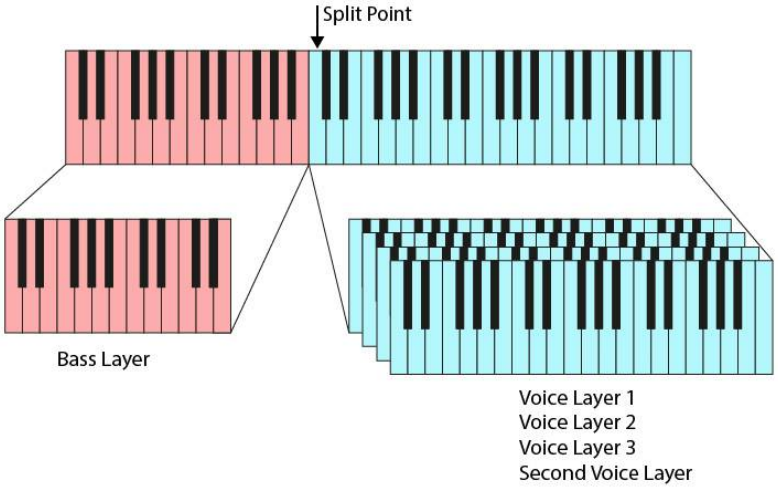
- Tap on the FACTORY RESTORE button
- Tap on the YES button
- Tap on the NO button to cancel the operation

Bass/Left

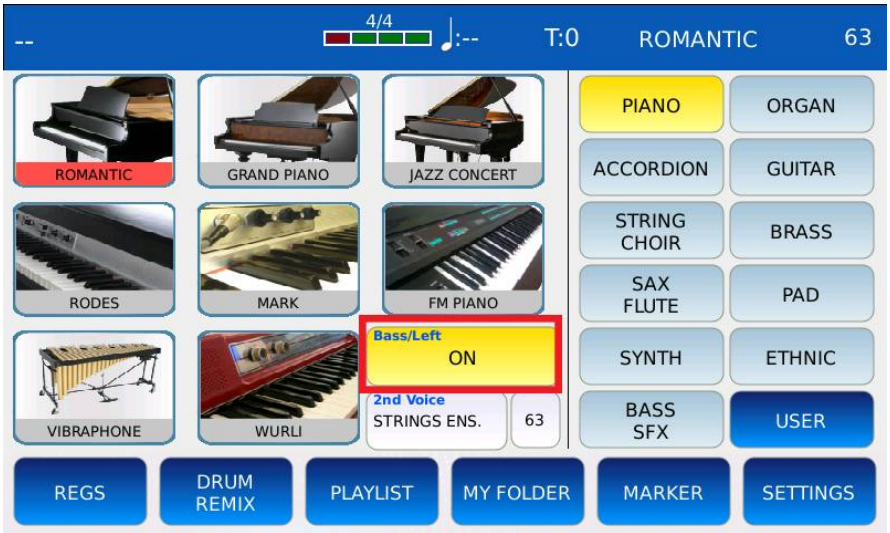
The BASS function allows you to quickly have different sounds on the keyboard, one to be played by the right hand, and one to be played by the left hand. Any notes received on the BASS channel (see MIDI) will play on the BASS part.

When BASS is on, the keyboard is automatically split in two parts:

- the right part will play the VOICE Preset as usual
- the left part will play a different sound (any GM sound). A bass sound is selected by default.



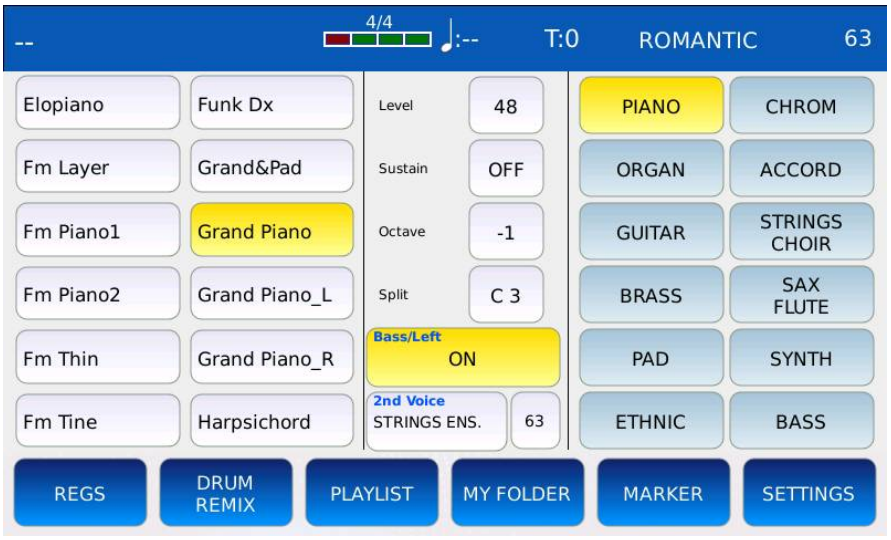
Tap on the BASS ON/OFF button of the VOICE SELECT page to enable the BASS. The BASS ON/OFF button will turn on and the keyboard will be split.



NB: when BASS is enabled, the volume of the BASS part is controlled by the BASS potentiometer on the left of the FRONT PANEL.

Bass Edit

Tap on and keep pressed the BASS ON/OFF button of the VOICE SELECT page to enter in BASS EDIT MODE. In BASS EDIT mode you can change the sound played on the left part of the keyboard and the relative parameters. Tap first on the family name on the right and then tap on the sound name on the left to load the desired sound. Tap again on the EDIT button or press EXIT to go back to the VOICE SELECT page.



- LEVEL: adjust the volume of the BASS layer. Values range from 16 to 63.
- SUSTAIN: sets the amount of sound that should be sustained after a Note Off MIDI message is received. If enabled, the sound will not stop immediately after a key is released, but it will decay to zero in a certain amount of time. Tap on the button to enable or disable the sustain and use the Value Dial to adjust the sustain time. Values range from OFF to 63.

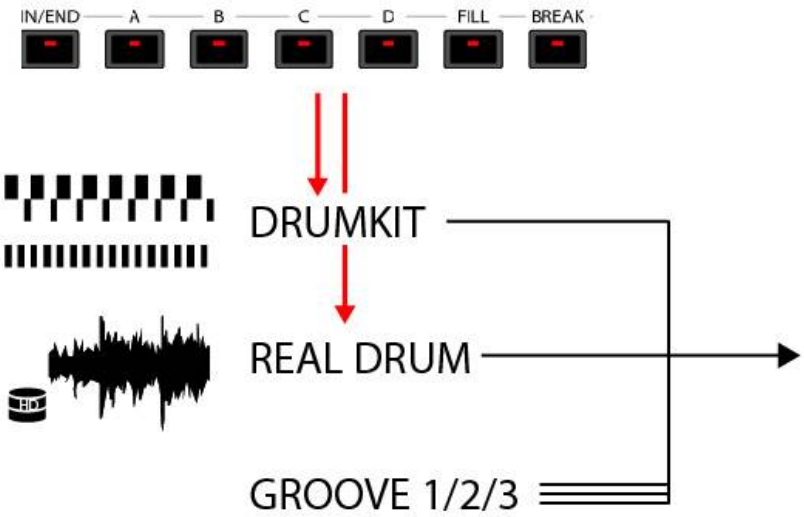
  NB: this sustain value is replaced by the one set in ACCORDION CLASSIC, if enabled.
- OCTAVE: sets the transposition of the BASS layer. Tap on the box next to the sound name and use the Value Dial to adjust the octave transposition. Values range from -2 to +2.
- SPLIT: sets the split point (the last note to the left of the right part of the keyboard). Tap on the SPLIT button and the use the Value Dial or press a key on the keyboard to select the split point.

NB: when BASS is enabled, the RIGHT part is automatically transposed down by 12 semitones. You can enable or disable the automatic transposition by turning on or off the SPLIT OCTAVE button in the VOICE EDIT page.

Drum

In DRUM mode you can create, select and play drum backing tracks (or Rhythms) to play along with. All Rhythms are organized in ten Rhythm Families, each one of these is distinguished by a specific music genre. The Rhythm Families are BEAT, DANCE, JAZZ&SWING, LATIN, POP/RNB, ROCK&ROLL SHUFFLE, ROCK&SOUL, COUNTRY, PARTY and TRADITIONAL. A Rhythm is composed by 5 parts or sections that play at the same time and can be mixed together to create complex drum patterns. These parts are:

- DRUMSET
- REAL DRUM
- GROOVE 1 (LOOP)
- GROOVE 2
- GROOVE 2

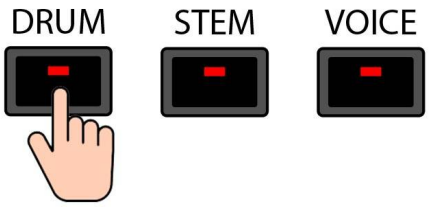


The DRUMSET and the REAL DRUM parts are the backbone of the Rhythm: they are complete rhythmic patterns that play a different pattern depending on the arrangement selected (INTRO/END, ARR A, ARR B, ARR C, ARR D, FILL and BREAK). The main difference between the DRUMSET section and the REAL DRUM parts is that the former is MIDI based (it is a MIDI drum kit controlled by MIDI Note On / Note Off messages, similarly to the MIDI drum tracks of MIDI files), while the latter exploits audio streaming techniques to play audio files directly from the local hard drive.

The GROOVE parts are simpler than the DRUMSET and the REAL DRUM ones. They are MIDI patterns or MIDI controlled audio sequences that play in loop patterns of one (e.g. tambourine or

hand claps) or more percussive instruments. They are used to add complexity and depth to the DRUMSET and REAL DRUM parts.

- The GROOVE 1 are mixed instruments grooves. Within the GROOVE 1 sounds we can further distinguish between:
  - LOOPS: MIDI controlled audio grooves grouped by music genres. You can choose between DANCE, HIP HOP, HOUSE, LATIN, POP, PERCUSSION, SWING and TRADITIONAL grooves.
  - PATTERNS: MIDI grooves that works similarly to the DRUMSET part. You can choose the drum kit to use and load your custom MIDI patterns.
- The GROOVE 2 and GROOVE 3 are single percussive instrument grooves. Within the GROOVE 2 and GROOVE 3 sounds we can further distinguish between:
  - GROOVES: audio grooves grouped by instrument. You can choose between ONGAS, SHAKER, CLAP, TAMBOURINE, COWBELL/GUIRO, MARACAS/CABAZA, BONGO/CAJON and ETHNIC grooves.
  - SINGLE SHOTS: similar to PATTERNS but they play a single note of a single drum piece once in a while (e.g. only at the first beat of the measure).



Press DRUM to enter in DRUM mode. The DRUM button led will turn on and the DRUM page will be displayed on screen.

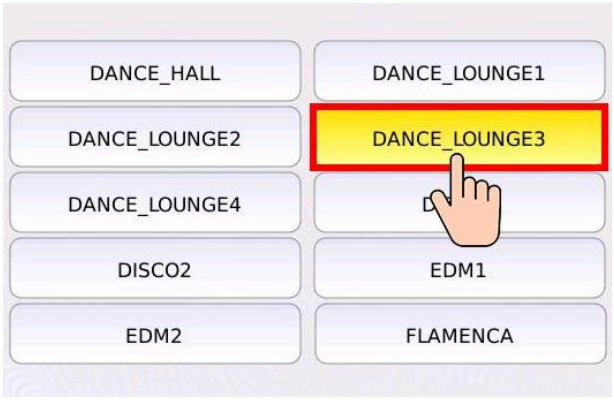
DRUM

- RHYTHMS FAMILIES: on the left half of the page, the ten Rhythm Families names are arranged in two columns of buttons. Tap on a Family name to select the corresponding family.
- RHYTHMS: on the right half of the page, the Rhythms of the selected Family are displayed on a grid. Use the Value Dial to scroll through all the Rhythms of the selected Family and tap on a Rhythms name to load the corresponding Rhythm. The current Rhythm name is displayed in the top-left corner of the STATUS BAR.
- USER: toggles between Factory Rhythms and User Rhythms. To create a User Rhythm, press SAVE (see SAVE A RHYTHM).
- VIEW: opens the DRUM EDIT page and enters in DRUM EDIT mode.
- AUTOPLAY: when playing cycles through all the arrangements (A, B, C and D).

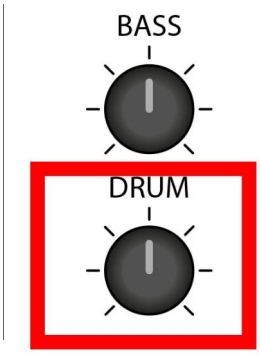
Play a Rhythm

- Press DRUM. The DRUM button led will turn on and the DRUM page will be displayed on screen.
- Tap on a Rhythm Family name to select the desired family.

- Tap on a Rhythm name to select the desired Rhythm.



- Press START to play the selected Rhythm. Press again START to stop.
- Press TEMPO and use the Value Dial to slow down or speed up the tempo.
- Use the DRUM potentiometer to adjust the volume of the Rhythm.



Save a Rhythm

- Press SAVE while being in DRUM mode. A confirmation window will appear on screen.

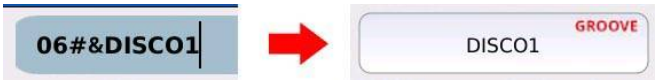
NB: tap on the REGISTRATION button to save the Rhythm as a REGISTRATION.

- Tap on the SAVE or the SAVE AS buttons to save all the changes as a User Rhythm. Tap on the CANCEL button to cancel the operation.

- Tap on the USER button on the DRUM page to view the User Rhythms.

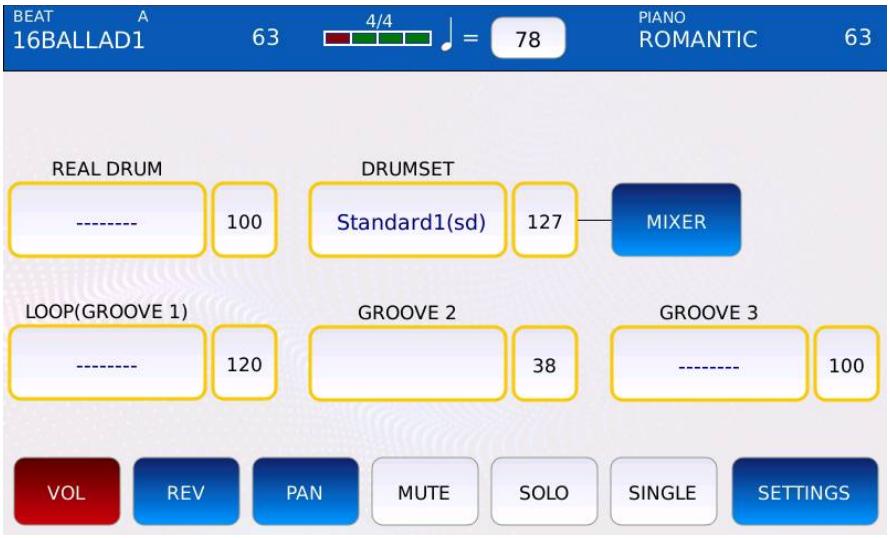
NB: if you begin to write the name with an $ character, the instrument will recognize the Rhythm as a "REAL" Rhythm (By default a Rhythm is considered "MIDI").

NB: if you begin to write the name with an & character, the instrument will recognize the Rhythm as a "GROOVE" Rhythm (By default a Rhythm is considered "MIDI").



Drum Edit

In DRUM EDIT mode you can edit and customize Rhythms. You can adjust the parts sounds, volumes, pan positions and reverb sends.



- REAL DRUM: selects the REAL DRUM sound.
- DRUMSET: selects the DRUMSET sound.
- MIXER: opens the DRUMSET MIXER.
- GROOVE 1, 2 and 3: selects the GROOVE 1, 2 and 3 sounds.
- SETTINGS: opens the DRUM SETTINGS page.
- VOL: adjusts the volume of the part. Tap on the VOL button, then tap on the desired part and use the Value Dial to adjust the volume of the selected part. Values range from 0 to 127.
- REV: adjusts the reverb send amount of the part. Tap on the REV button, then tap on the desired part and use the Value Dial to adjust the reverb send amount of the selected part. Values range from 0 to 127.
- PAN: controls the position on the stereo panorama of the part. Values range from -64 (all to the Left) to 64 (all to the Right) with 0 being the centre position (>|<).
- MUTE: mutes the desired part. Tap on the MUTE button and then tap on the desired part to mute the part (muted parts will be identified by an “M” symbol next to the name).
- SOLO: isolates the desired part and mutes all the others. Tap on the SOLO button and then tap on the desired part to solo the part (muted parts will be identified by an “M” symbol next to the name).
- SINGLE/GLOBAL: determines if the changes are done globally for all the arrangements (A, B, C, D, etc.) or only to the current arrangement. For example, if SINGLE is selected and

you mute the GROOVE 1 while being on ARR A, the GROOVE 1 part will be muted only on ARR A. Instead, if GLOBAL is selected and you set the volume of the REAL DRUM to 64, the REAL DRUM will have the volume set to 64 on all arrangements.

*NB: the REAL DRUM and the PATTERN sounds are **always in global mode**.*

Import a User Real Drum

Tap on the REAL DRUM button on the DRUM EDIT page to open the REAL DRUM SELECT page. All the available REAL DRUM sounds are displayed in a grid. Tap on the REAL DRUM name to load it into the Rhythm.

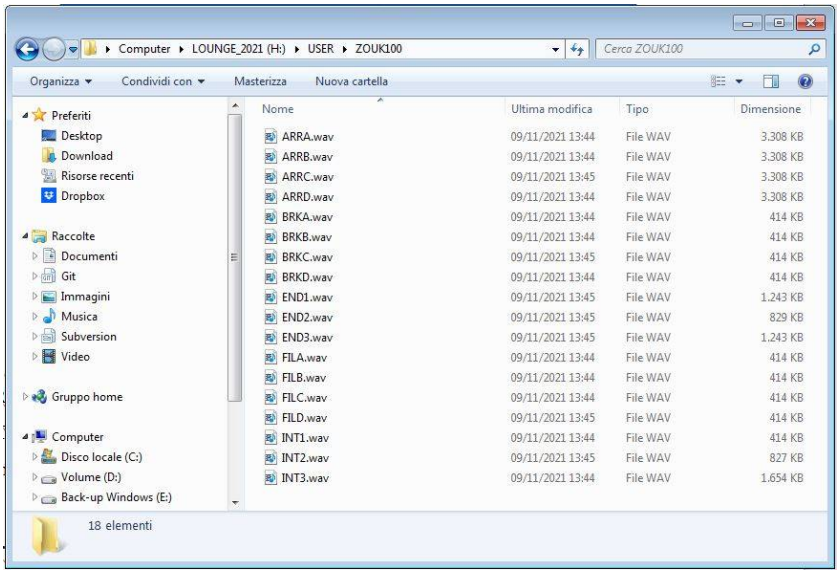
- USER: toggles between factory and USER REAL DRUMS.

*NB: the REAL DRUM sounds are **always in global mode**.*

User REAL DRUMS are like Factory REAL DRUMS, but are created by the user. This allows you to create custom drum patters to be played along with the regular factory content.

To add your User REAL DRUM to the instrument, follow the following steps:

- create a set of .wav files (ARRA.wav, ARRB.wav, ARRC.wav, ARRD.wav, BRKA.wav, BRKB.wav, BRKC.wav, BRKD.wav, FILLA.wav, FILLB.wav, FILLC.wav, FILLD.wav, INT1.wav, INT2.wav, INT3.wav, END1.wav, END2.wav, END3.wav), one for each arrangement section. Al the .wav files must be stereo and must be PCM encoded with 44100 Hz sampling rate and 16 bit resolution. All the ARR*, FILL*, BRK* must have the same dimension in bytes
- Copy all the .wav files into a folder.

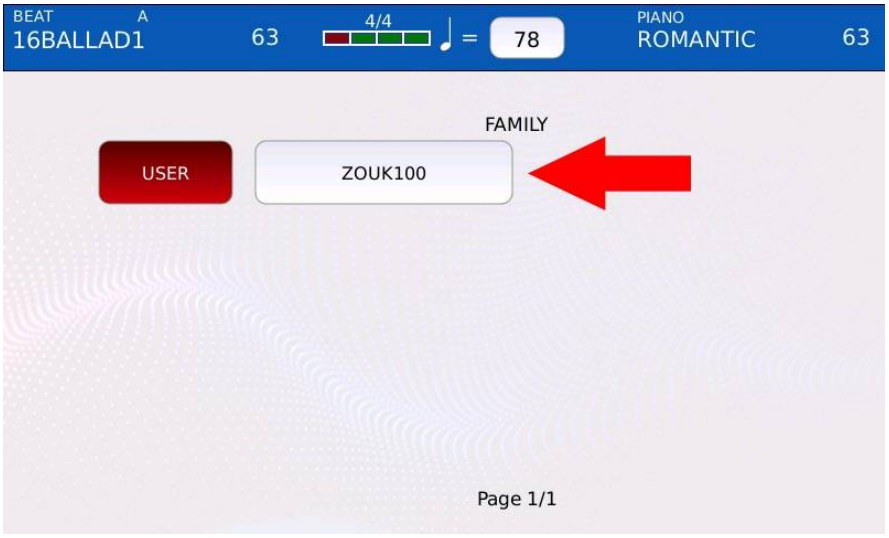


- The folder name will be used to get both the REAL DRUM name and the tempo information (it must end with two or three numbers). Rename the folder accordingly.

- Copy the folder and all its content to the following location on the local disk of the instrument (see DISK EDIT):

  "/media/back/USER_MODELING/LiveDrum"

- Reboot the instrument.
- Tap on the USER button of the REAL DRUM SELECT page to load the new User REAL DRUM.



DRUM

Settings

Tap on the SETTINGS button of the DRUM EDIT page to open the DRUM SETTING page.

- DRUM BOOST ON/OFF: increases the volume of all DRUM parts.
- REAL DRUM EQ: set an equalizer for the REAL DRUM part. You can choose between FLAT, LOUDNESS 1, LOUDNESS 2, BASS GAIN 1, BASS GAIN 2, MID GAIN, HI DAMP, BASS DAMP, HI GAIN 1 and HI GAIN 2.

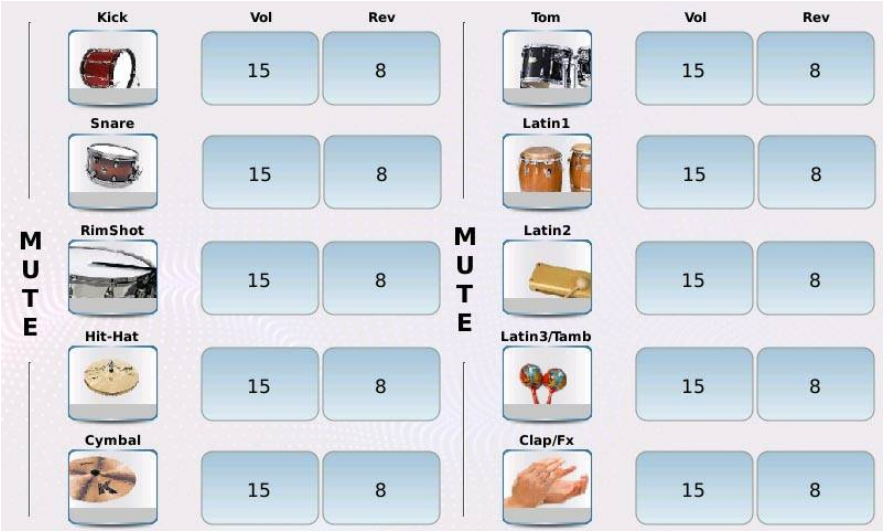
- TEMPO RANGE: defines the lower and upper limit for tempo changes.
- AUTOCRASH: if enabled, plays a single note of one of the drum cymbals when the corresponding arrangement is played:
  - INTRO: enables or disables the autocrash for the intro part.
  - ENDING: enables or disables the autocrash for the ending part.

- INTRO/ENDING NOTE: sets the cymbal instrument to be played for the intro and ending parts.
- INTRO/ENDING VELOCITY: sets the velocity of the note played for the intro and ending parts.
- FILL: enables or disables the autocrash for the fill part.
- FILL NOTE: sets the cymbal instrument to be played for the fill part.
- FILL VELOCITY: sets the velocity of the note played for the fill part.

Drumset Mixer

Tap on the MIXER button of the DRUM EDIT page to open the DRUMSET MIXER page.

In the DRUMSET MIXER page, are displayed all the pieces of the drum set, along with the volume and reverb amount levels.

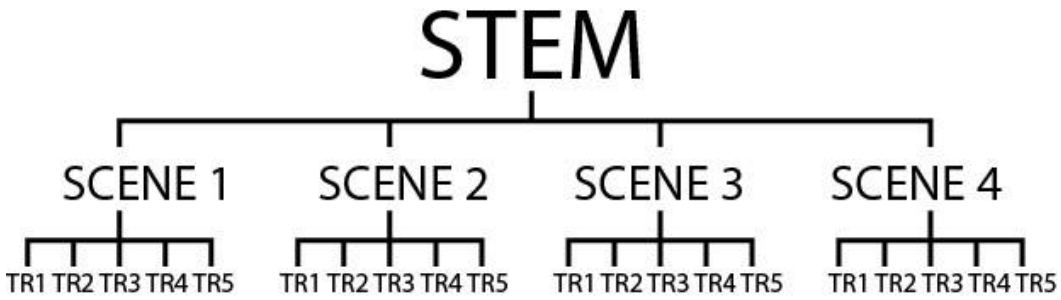


You can tailor the drum kit as you like, for example by increasing the reverb on the snare (if too dry), or by removing from the mix unwanted instruments, such as the congas. To mute and unmute a piece, tap on the corresponding icon button.

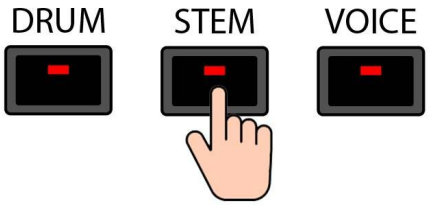
Press EXIT to go back to the DRUM EDIT page.

Stem

In music mixing, it is common practise to create groups of audio tracks to be processed together before combining them into a final master mix. These groups are usually referred to as submixes, subgroups or stems and are used by audio engineers to facilitate the mixing process. A stem could be the mix of all audio signals coming from the drums microphones or the mix of all the voices of a choir.



In this instrument, a Stem (or Stem Project) is composed of four scenes and each scene is composed of five audio tracks for a grand total of 20 tracks. Within each scene, the five audio tracks can be played in loop at the same time, just like the samples of a launchpad.

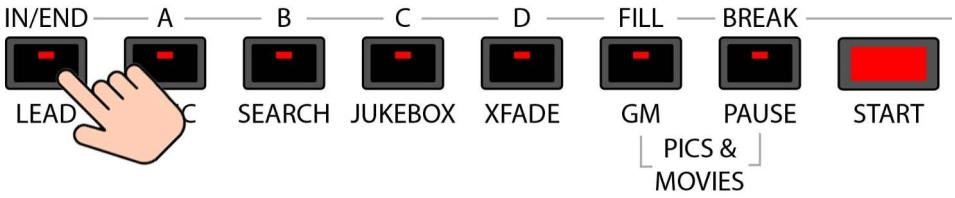


Press STEM to enter in STEM mode. The STEM button led will turn on and the STEM page will be displayed on screen.

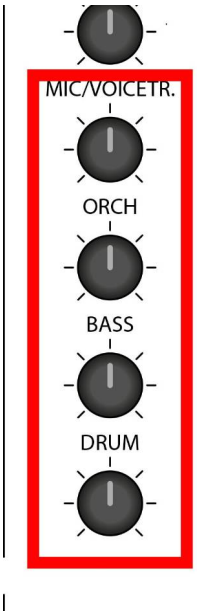
- PADS: on the left side of the STEM page there are five big virtual pads. On each pad you can load a different audio file (only .wav files) that will play in loop, synchronized with the other tracks. Tap on a pad to mute or unmute a track (muted tracks will be greyed out). Tap and keep pressed to load an audio file.
- VOL: adjusts the volume of the lead track. Tap on the VOL button and use the Value Dial to adjust the volume. Values range from 0 to 127.
- SCENE A/SCENE B/SCENE C/SCENE D: load the corresponding scene. On each scene you can load up to five synchronized audio files.
- LOAD: load a previously saved Stem Project.
- NEW: clear all the scenes and the pads and initialize a new Stem Project.
- AUTOPLAY: enables the automatic switch from a scene to another. When a loop cycle is completed, the instrument will automatically switch to the next scene.
- SOLO: isolates the desired track and mutes all the others. Tap on the SOLO button and then tap on the desired pad to solo the track (muted tracks will be greyed out).
- LEVEL: adjusts the volume of a track. Tap on the LEVEL button and then tap on the desired pad. Use the Value Dial to adjust the volume of the selected track. Values range from 0% to 200%.
- CLEAR: unloads a track from a pad. Tap on the CLEAR button and then tap on the desired pad to remove the audio file from the pad.
- FIXED: enables or disables the transposition on a track. Tap on the FIXED button and then tap on the desired pad to make the track unaffected by the transposition. This is useful for the drums and percussion tracks whose pitch should never be changed.

Play a Stem Project

- Press START to play the audio tracks of the selected scene. Muted (greyed out) tracks will not play.
- Press again START to stop.
- Press TEMPO and use the Value Dial to adjust the tempo (BPM). It is strongly recommended to write the BPM value of the audio track at the end of the file name, similarly to REAL DRUMS. When an audio file with the tempo information in the name is loaded, the Stem Project tempo will be set to the tempo of the loaded track.
- Press TRANSPOSE and use the Value Dial to change the pitch of the audio tracks (fixed tracks will not be affected by the transposition).
- Tap on one of the SCENE buttons to load another scene. The scene will change at the end of the current measure. You can change scene by pressing the A, B, C and D buttons on the FRONT PANEL.



- Press the LEAD button on the FRONT PANEL to mute or unmute the lead track.

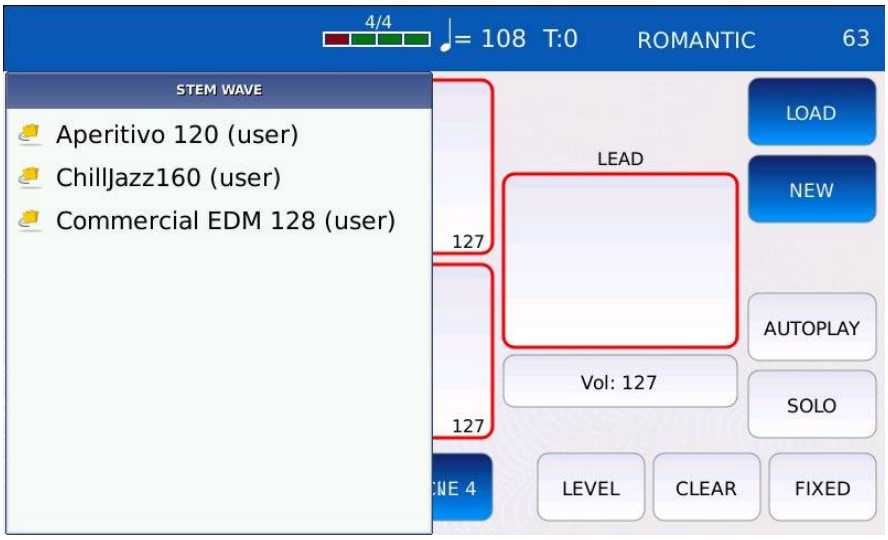


- Use the last four potentiometers on the FRONT PANEL to adjust the volume of the first four tracks.

Create a Stem Project

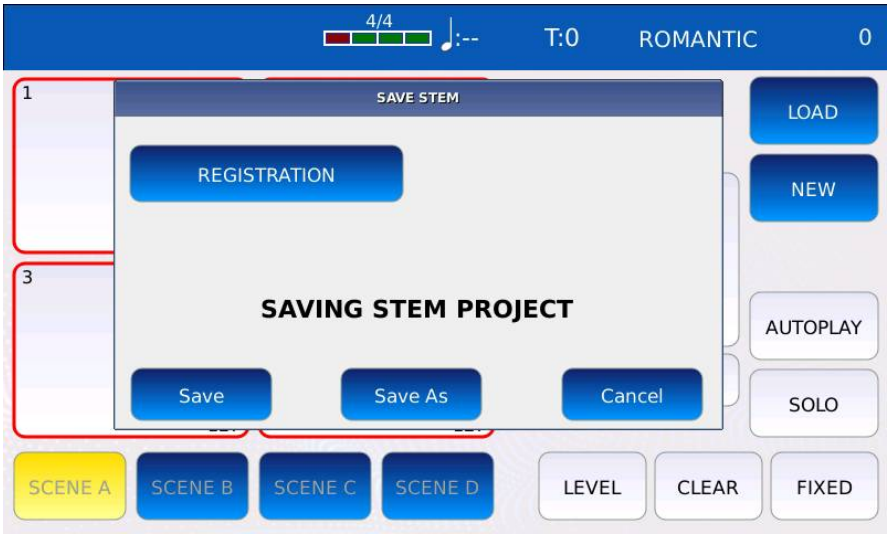
- Tap on the NEW button to create a new Stem Project. A warning window will appear on screen.

- Tap on the CONTINUE button. All the scenes and the pads will be cleared. Tap on the EXIT button or press EXIT to cancel the operation.
- Tap on and keep pressed a pad to load an audio file on that position. The list of all available audio files will appear on the left. Tap on the name to load the track. Press EXIT to close the track selection windows.



NB: all audio files used in Stem Projects must be saved in a special location (/media/back/STEM/WAVE) to be used in a Stem Project. It is strongly recommended to write the BPM value of the audio track at the end of the file name (e.g. a file named Sax_120.wav).

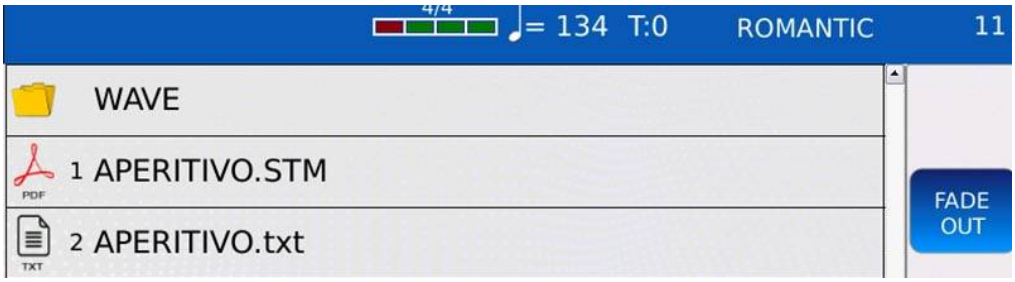
- Repeat the operation for the other pads.
- If one or more drums tracks have been loaded, tap on the FIXED button and then on the pads corresponding to the drums track to make them unaffected by the transposition.
- Adjust the volumes of the tracks. Tap on the LEVEL button, tap on the pad corresponding to the desired track and then use the Value Dial to set the volume.
- Repeat this operation for the other scenes. Tap on the buttons SCENE 1, SCENE 2, SCENE 3 and SCENE 4 to change the scene.
- Press SAVE to save all changes. Tap on the SAVE AS button to give a name to the Stem Project. A virtual alphanumeric keyboard will appear on screen. A Stem Project has the .STM extension. Compose the new name and then tap on ENTER. Tap on the CANCEL button or press EXIT to cancel the operation.



NB: tap on the REGISTRATION button to save the Stem Project as a REGISTRATION.

- Once you saved a Stem Project, you can load it by tapping on the LOAD button. The list of all Stem Project will appear on the left. Tap on the name to load the project.

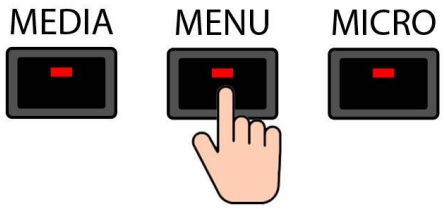
NB: if you save a .txt file with the same name in the same folder of the Stem Project, the text file will be displayed as a LYRIC when a Stem Project is loaded, as described in LYRICS LINK.



NB: when you load a Stem Project, the not-empty scenes will be displayed at the top-right corner of the PLAYER STATUS BAR, next to the Stem Project name.

Menu

The MENU page provides access to all options and settings which affect the general behaviour of the instrument. It also makes available other features and functionalities, such as the AUDIO RECORD or the AUDIO EDIT, otherwise not accessible via external buttons.



Press the MENU button to access the MENU page. The led of the MENU button will turn on.

All different pages of the MENU will be displayed in a grid on the display:

- PLAY MODES: selects the instrument type to be connected to the MIDI IN ports.
- MIDI: manages all MIDI configurations (channels, filters, ports, etc.).
- DSP: manages the instrument effects. You can select and edit insert effect chains, adjust the reverb and chorus volumes and tune the global equalizer.
- AUDIO RECORD: displays the audio recorder window, which allows you to record the main output into a .wav file.
- AUDIO EDIT: manipulates and edits an audio file. You can cut, normalize or amplify the file as well as define loop points.
- VIDEO: manages all the external monitor settings, such as the background image, the monitor resolution and the monitor type. You can also enable the MIRROR mode and CALIBRATE the touchscreen.

- CONTROLS: manages all keyboard settings, such as global tune, aftertouch, portamento, velocity curves and output levels.
- PREFERENCES: manages other miscellaneous options, such as display brightness, date, buzzer volume, skin, etc.
- METRONOME: opens the metronome page.
- MANUAL: opens the user manual.
- MIC1/VOICETRON: opens the MICRO 1 and VOICETRON settings.
- MIC2/GUITAR: opens the MICRO 2 and GUITAR settings.
- FOOTSWITCH: assign the functions to the optional pedals connected to the FOOTSWITCH input on the BACK PANEL.

Play modes

This instrument can be controlled via MIDI by any device that could transmit MIDI messages, such as master keyboards, MIDI accordions, etc. To get the best performance from these devices, you should select in this page the appropriate MIDI controller connected to the MIDI IN ports.

Tap on the PLAY MODES button on the MENU page to display the PLAY MODES page.

- MASTER: the default mode. You can connect any type of MIDI controller.
- ACCORDION CLASSIC: mode programmed specifically for MIDI accordions. Optimizes the MIDI message parsing in order to increase the compatibility with MIDI accordions. Tap on the icon once to enable the mode, tap twice to open the ACCORDION CLASSIC page.

Accordion Classic

Tap twice on the ACCORDION CLASSIC icon of the PLAY MODE page to open the ACCORDION CLASSIC page.

In this mode, you can control and play:

- A VOICE Preset with the right keyboard by sending MIDI messages to the RIGHT channel.
- Two layered GM sounds with the BASS keys (all MIDI messages received to the BASS channel). Each sound has independent volume, chorus send, reverb send, octave and panorama controls. The volume of these sounds can be controlled by the volume pedal, if the option LEFT/DRUM is enabled in the CONTROLS page.
- Three layered GM sounds with the CHORD keys (all MIDI messages received to the CHORD channel). Each sound has independent volume, chorus send, reverb send, octave and panorama controls. The volume of these sounds can be controlled by the volume pedal, if the option LEFT/DRUM is enabled in the CONTROLS page.

All the channels numbers are set up in the MIDI page of the MENU.

- RIGHT VELOCITY: sets the velocity curve that will be applied to MIDI Note On messages generated by the right keyboard keys. This works only with velocity sensitive controllers. Different velocity curves generate different MIDI velocity values for the same force applied to the key. Tap on the button to choose between the following curves:
  - SOFT: makes higher velocities harder to play.
  - MEDIUM: the default curve, follow a linear response.
  - HARD: makes higher velocities easier to play.
  - FIXED: regardless of the force applied to the key, the MIDI velocity value generated is always the same. Use the Value Dial to change the value.

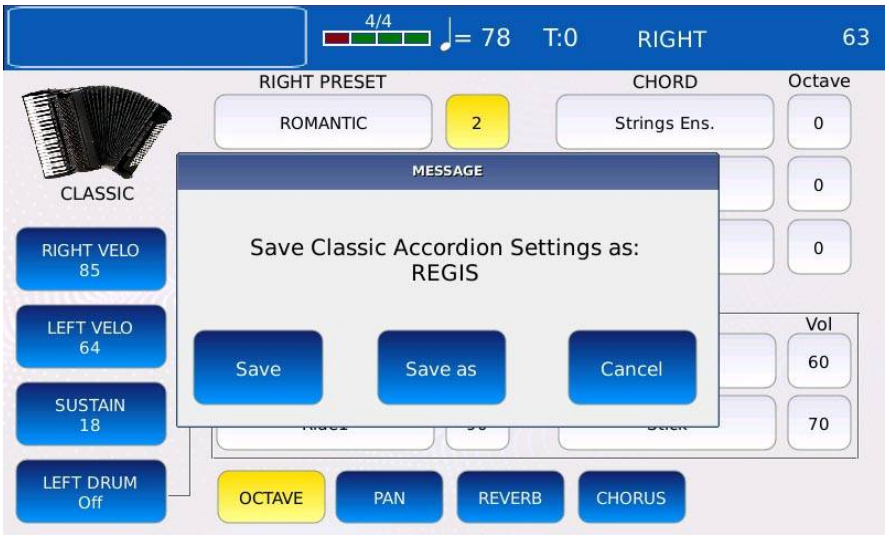
NB: this velocity curve replaces the one set in the CONTROLS page.

- LEFT VELOCITY: same of RIGHT VELOCITY, but is applied to MIDI Note On messages generated by the basses and chords keys instead.
- SUSTAIN: sets the amount of sound that should be sustained after a Note Off MIDI message is received on the BASS channel. If enabled, the sound will not stop immediately after a key is released, but it will decay to zero in a certain amount of time. Tap on the button to enable or disable the sustain and use the Value Dial to adjust the sustain time.

  NB: this sustain value replaces the one set in the BASS EDIT page.
- LEFT DRUM: allows you to the manually play drums and percussion sounds using the bass and chords keys. All Note On events received on the BASS channel will trigger the two sounds on the **left** side of the box. All Note On events received on the CHORD channel will trigger the two sounds on the **right** side of the box. For example pressing a BASS key will play the Kick1 and the Ride1, while pressing a CHORD key will play the Snare1 and the Stick. To select the sounds to be played, tap on the corresponding box and then tap on the desired sound on the pop up window that will open up. Tap on the box next to the sound name and use the Value Dial to adjust the percussion levels. Values range from 0 to 127.
- OCTAVE: sets the transposition of all sounds. Tap on the box next to the sound name and use the Value Dial to adjust the octave transposition. Values range from -2 to +2.
- PAN: sets the position on the stereo panorama of the BASS and the CHORD sounds. Tap on the box next to the sound name and use the Value Dial to adjust the panorama position. Values range from -64 (L) to 64 (R) with 0 being the centre position (>|<).
- REVERB: sets the reverb send amount of the BASS and the CHORD sounds. Tap on the box next to the sound name and use the Value Dial to adjust the reverb send amount. Values range from 0 to 127.
- CHORUS: sets the chorus send amount of the BASS and the CHORD sounds. Tap on the box next to the sound name and use the Value Dial to adjust the chorus send amount. Values range from 0 to 127.
- REGIS: displays the REGISTRATION list on screen.

Save a Registration

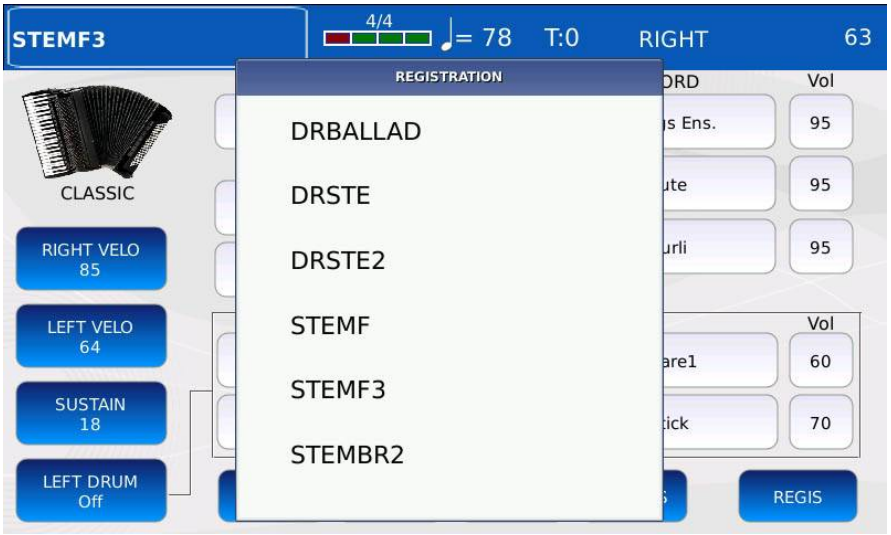
Press SAVE to save all the parameters defined in the ACCORDION CLASSIC page as a REGISTRATION. This will save a special REGISTRATION to be used specifically in the ACCORDION CLASSIC mode.



- Tap on the SAVE AS button to give a name to the Registration. A virtual alphanumeric keyboard will appear on screen. A Registration has the .srg extension. Compose the new name and then tap on ENTER. Tap on the CANCEL button or press EXIT to cancel the operation.

Load a Registration

Tap on the REGIS button to load a previously saved REGISTRATION.



MIDI

MIDI (an acronym for Musical Instrument Digital Interface) is a technical standard that defines a communications protocol that is used worldwide to connect a vast variety of electronic musical instruments, computers, and other audio devices. These devices communicate via MIDI messages that are interpreted and translated into notes, program changes, control changes, events and more.

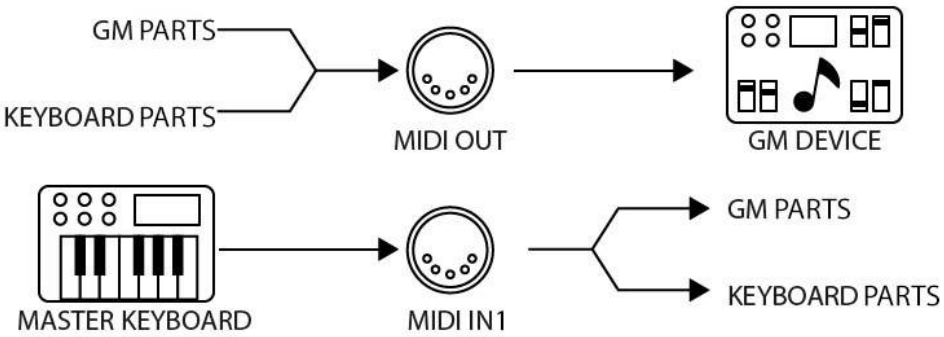
This instrument features 32 independent MIDI parts (corresponding to as many different MIDI channels), each one of these can play a different sound at the same time. The first 16 parts (GM parts) are used by the GENERAL MIDI sound module of the PLAYER, while the last 16 (KEYBOARD parts) are used by the VOICE sound engine.

In the BACK PANEL you can see four different physical MIDI ports:

- two are labelled IN1(GM) and IN2(KEYB) and are used to **receive** MIDI message from other devices, such as MIDI master keyboards, accordions or sequencers;
- one is labelled OUT and is used to **transmit** MIDI messages from this instrument to other devices;
- one is labelled THRU and is used to **replicate** incoming messages. All incoming MIDI data to the IN ports is passed directly to the THRU port. This allows many MIDI devices to have their MIDI connections daisy chained together, all being driven by a common device.

Because only 16 channels can be transmitted/received at the same time through a port (as defined by the MIDI standard), each one of the OUT and IN1 ports can operate either as GM port or as KEYBOARD port:

- MIDI OUT as GM port: passes MIDI messages coming from the GM parts (the messages generated by the GENERAL MIDI sound module when a MIDI file is playing) to other devices.
- MIDI OUT as KEYBOARD port: passes MIDI messages coming from the KEYBOARD parts to other devices.
- MIDI IN1 as GM port: receives MIDI messages coming from other devices and passes them to the GM parts (to the GENERAL MIDI sound module).
- MIDI IN1 as KEYBOARD port: receives MIDI messages coming from other devices and passes them to the KEYBOARD parts (to the VOICE sound engine).



NB: the MIDI IN2 port operates always as a KEYBOARD port.

NB: the led of the EXIT button is used to notify MIDI activity. A blinking led means incoming MIDI messages to the MIDI IN port.

Tap on the MIDI button on the MENU page to display the MIDI page.

At the very top of the page is shown if the IN1 and OUT ports are working as GM or KEYBOARD ports.

The central part of the page is split in half: the upper half shows the 16 GM parts used by the GENERAL MIDI sound module, while the bottom half shows the KEYBOARD parts used by the VOICE sound engine. Each part can be freely assigned to a MIDI channel (numbers range from 1 to 16), which is displayed in the corresponding cell. If the value shown is “off”, all messages coming from/to that part are dropped.

- IN: displays the configuration of the IN1 and IN2 MIDI ports.
- OUT: displays the configuration of the OUT MIDI port.
- SHIFT: displays the transposition (in semitones) applied to Note On and Note Off messages. Tap on the part buttons and use the Value Dial to change the transposition applied to that part. Values range from -24 to 24 semitones.

MENU

- STATUS: displays the destination of MIDI data generated by the PLAYER, when playing MIDI files.
- FILTER: displays the filters applied to each part.
- CLOCK USB: manages the MIDI Clock and USB MIDI options.
- PORT SELECT: determines if the IN1 and OUT ports should operate as GM or KEYBOARD ports.
- MIDI PRESET: choose one of the MIDI presets available between STANDARD, KEYBOARD RIGHT VOICE, COMPUTER & SEQUENCE, PLAYER OUT ONLY and ACCORDION.

MIDI Preset

Tap on the MIDI PRESET button to open the list of the available MIDI configurations:

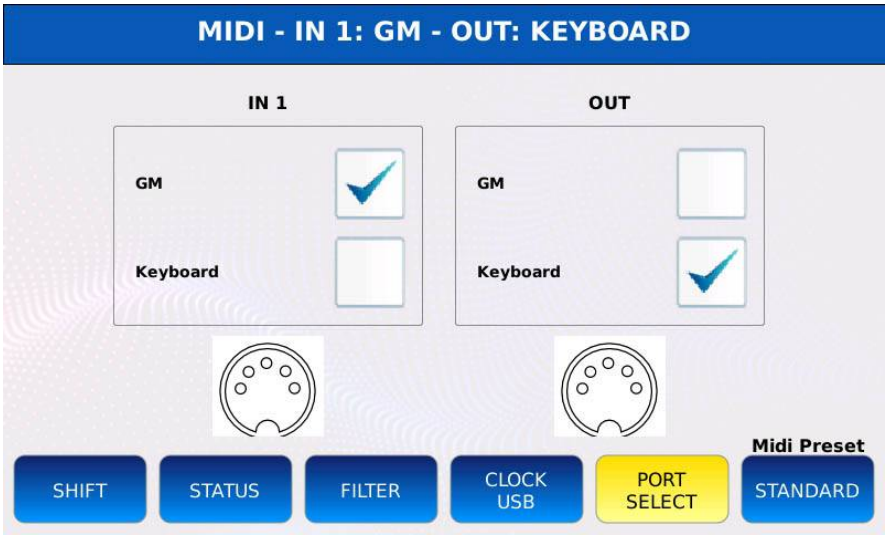
- STANDARD: the default MIDI configuration.
- KEYBOARD: optimised configuration that allows you to control the Voice Lead via the external keyboard. It is substantially a variation of the Standard mode.
- COMPUTER: configuration that operates the instrument as a GENERAL MIDI sound module. Select this mode when the instrument is connected to a computer or to a sequencer via the MIDI IN port.
- PLAYER: use this configuration to play a MIDI file on the PLAYER using only an external sound module connected to the MIDI OUT, without using the internal GENERAL MIDI sound module.
- ACCORDION: configuration specific for MIDI accordions. Optimizes the MIDI message parsing in order to increase the compatibility with MIDI accordions (see the ACCORDION CLASSIC page for more information on ACCORDION CLASSIC mode).

You can modify the MIDI presets as you like. Press SAVE to save the changes and overwrite the current preset.

Port select page

Within this page, you choose if the MIDI IN1 and MIDI OUT ports operate as GM or KEYBOARD ports.

Tap on the PORT SELECT button on the MIDI page to display the PORT SELECT page.

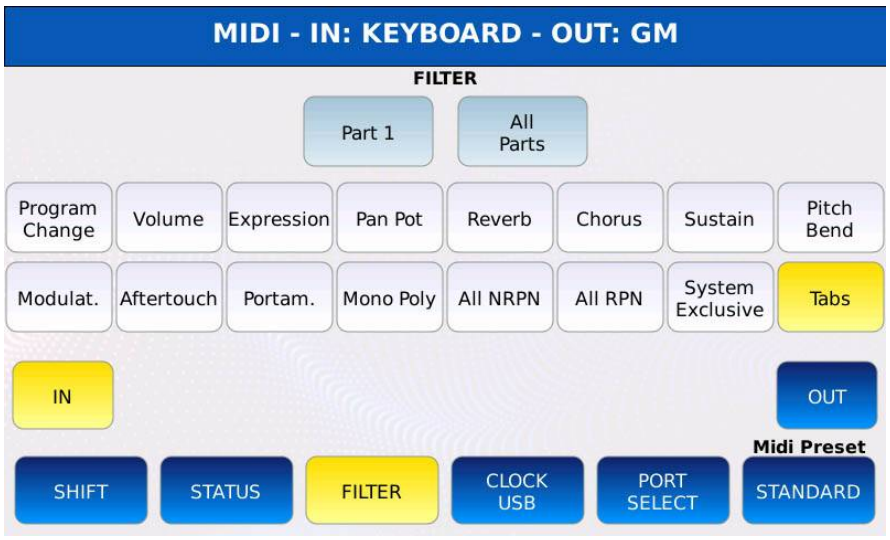


- GM IN1: configures the IN1 port as a GM port. All messages incoming to the IN1 port will be sent to the GM parts (to the GENERAL MIDI module instead to the VOICE sound engine).
- KEYBOARD IN1: configures the IN1 port as a KEYBOARD port. All messages incoming to the IN1 port will be sent to the KEYBOARD parts (to the VOICE sound engine instead to the GENERAL MIDI module).
- GM OUT: configures the OUT port as a GM port. All messages going through the OUT port will be coming from the GM parts.
- KEYBOARD OUT: configures the OUT port as a KEYBOARD port. All messages going through the OUT port will be coming from the KEYBOARD parts.

Filter page

Sometimes it can be useful to exclude certain types of MIDI messages from being sent or received by the instrument. For example, you may want that the Modulation Wheel couldn't affect the sound, or prevent the Sustain Pedal to keep the notes on. When a particular filter is enabled, all MIDI messages of that type will be discarded.

Tap on the FILTER button on the MIDI page to display the FILTER page.



- OUT: applies a filter to **transmitted** MIDI data.
- IN: applies a filter to **received** MIDI data.
- PART: selects the MIDI part to which apply the filter. The possible values range from 1 to 16.
- ALL PARTS: when on, the filter will be applied to all the parts at the same time.

The MIDI messages that can be filtered are:

- PROGRAM CHANGE: discards all Bank Select messages (CC 00 and CC 32) and Program Change messages (1100nnnn 0ppppppp, where nnnn = 0-15 is the channel number and ppppppp = 0-127 is the program number).
- VOLUME: discards all Channel Volume messages (CC 07).
- EXPRESSION: discards all Expression Controller messages (CC 11).
- PAN POT: discards all Pan messages (CC 10).
- REVERB: discards all Reverb Send Level messages (CC 91).
- CHORUS: discards all Chorus Send Level messages (CC 93).
- SUSTAIN: discards all Sustain On/Off messages (CC 64).

- PITCH BEND: discards all Pitch Bend messages (1110nnnn 0xxxxxxx 0yyyyyyy, where nnnn = 0-15 is the channel number, xxxxxxx are the least significant 7 bits and yyyyyyy are the most significant 7 bits).
- MODULATION: discards all Modulation Wheel messages (CC 01).
- AFTERTOUCH: discards all Channel Pressure (Aftertouch) messages (1101nnnn 0xxxxxxx where nnnn = 0-15 is the channel number and xxxxxxx are the pressure value).
- PORTAMENTO: discards all Portamento On/Off messages (CC 65).
- MONO/POLY: discards all Mono Mode and Poly Mode messages (CC 126 and CC 127).
- ALL NRPN: discards all Non-Registered Parameter Number messages.
- ALL RPN: discards all Registered Parameter Number messages.
- SYSTEM EXCLUSIVE: discards all System Exclusive (SysEx) messages.

Example 1

Discard incoming Modulation Wheel messages on part 5:

- Press MENU to display the MENU page.
- Tap on the MIDI button to display the MIDI page.
- Tap on the FILTER button to display the FILTER page
- Tap on the IN button. The IN button will turn on.
- Tap on the PART button and use the Value Dial to select the desired part (in this example will be Part5)
- Tap on the MODULAT. button to apply the filter. The filter is applied and the MODULAT. button will turn on.
- Press SAVE to save the changes.

Example 2

Prevent transmission of Program Change messages on all parts:

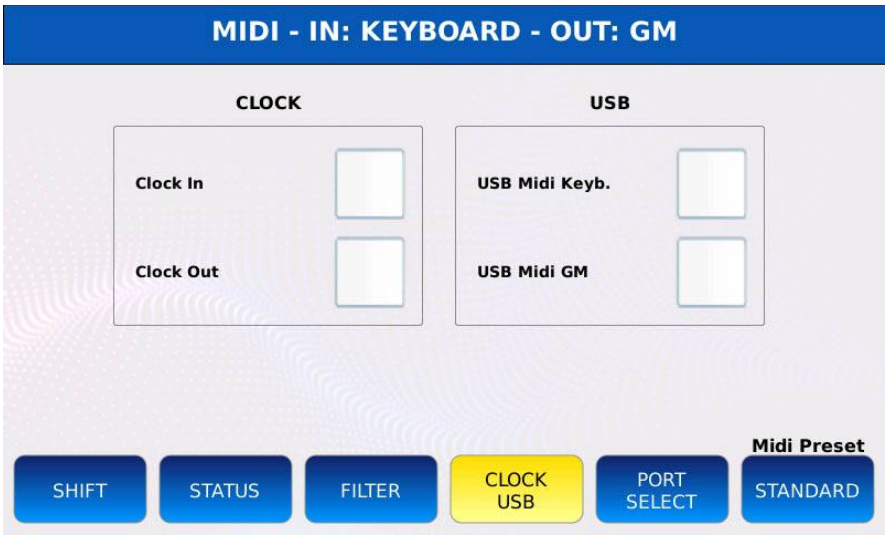
- Press MENU to display the MENU page.
- Tap on the MIDI button to display the MIDI page.
- Tap on the FILTER button to display the FILTER page
- Tap on the OUT button. The OUT button will turn on.
- Tap on the ALL PART button. From now on all the changes to the filters will be applied to all the 16 parts.

- Tap on the PROGRAM CHANGE button to apply the filter. The filter is applied and the PROGRAM CHANGE button will turn on.
- Press SAVE to save the changes.

Clock / USB page

Within this page, you can manage the MIDI Clock settings and configure the USB port in the FRONT PANEL as a MIDI IN/OUT port.

Tap on the CLOCK USB button on the MIDI page to display the CLOCK USB page.



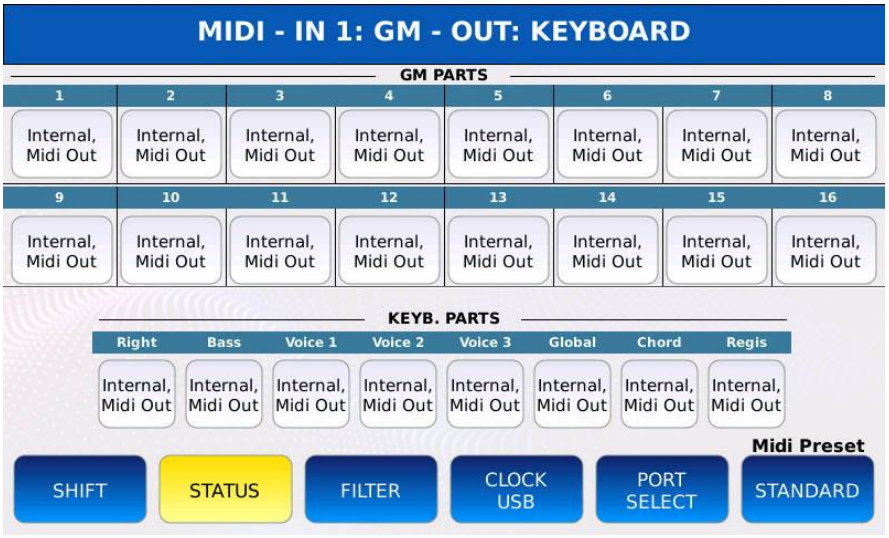
- CLOCK IN: when checked, the instrument will accept the MIDI Clock data from external MIDI devices and will synchronize to that signal.
- CLOCK OUT: when checked, the instrument will transmit the MIDI Clock data to external MIDI devices.
- USB MIDI KEYB: turns the USB Device port on the FRONT PANEL into a MIDI port for transmission and reception of MIDI messages on the KEYBOARD parts. In this mode the MIDI connection to external sequencer software can be made directly using a USB cable without the use of the MIDI IN/OUT ports and traditional MIDI cables.
- USB MIDI GM: turns the USB Device port on the FRONT PANEL into a MIDI port for transmission and reception of MIDI messages on the GM parts.

NB: when used as MIDI port, the USB port cannot be used to transfer files between the instrument and a computer (see PC CONNECT).

Status page

This page shows the destination of MIDI data generated by the PLAYER when playing a MIDI file. This data can be sent to the internal GENERAL MIDI module, through the OUT port, or both.

Tap on the STATUS button on the MIDI page to display the STATUS page.



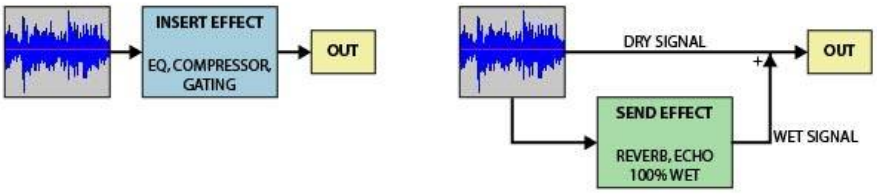
To change the destination of a part:

- Tap on the corresponding part button.
- Use the Value Dial to choose the desired destination between:
  - INTERNAL: MIDI data is sent only to the internal GENERAL MIDI module.
  - MIDI OUT: MIDI data is sent only to the OUT port.
  - INTERNAL, MIDI OUT: MIDI data is sent both to the internal GENERAL MIDI module and through the OUT port.

Dsp

In all musical instruments, audio effects are a powerful tool to shape the sound: by combining together different types of effects, a musician can bring life to a sound and let it stand out in the mix.

In DSP mode you can manages the effects settings, edit the effect chains, adjust the reverb and chorus levels and tune the global equalizer. This instrument is equipped with three SEND EFFECTS modules, two INSERT EFFECTS modules (EFX1 and EFX2) and a GLOBAL PARAMETRIC EQUALIZER.



The main difference between an INSERT EFFECT and a SEND EFFECT is that:

- An INSERT EFFECT processes the audio signal in its entirety.
- A INSERT EFFECT processes a copy of the audio signal (wet) that later is mixed or blended with the original (dry) signal.

Tap on the DSP button on the MENU page to display the DSP page.

The DSP page shows the six different effect modules, which may be turned on and off by tapping on the virtual buttons ON/OFF on the left of the page. Tap on the central buttons to select the effect preset and use the virtual knobs to adjust the volume of the corresponding effect. To edit the effects parameters, tap on the VIEW buttons on the right of the page.

Send effects

This instrument features three SEND EFFECTS, which affect the GM, DRUM and VOICE parts:

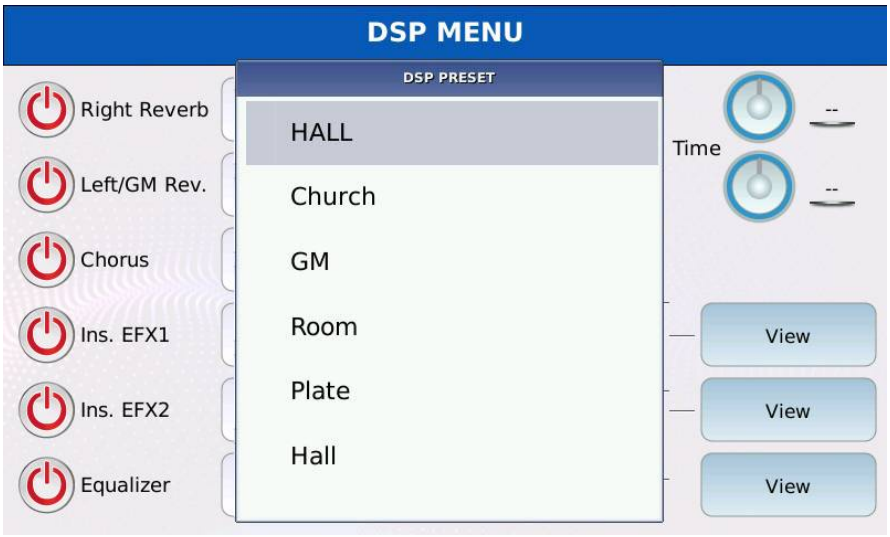
- REVERB (one unit for the VOICE part and one for the GM and DRUM parts)
- MODULATING EFFECT (CHORUS)

NB: the actual amount of sound that is fed into these effects is set in the EDIT pages of the single parts (see GM MIXER, DRUM EDIT and VOICE EDIT).

Reverb

A reverberation, or reverb, is created when a sound is reflected by surfaces in the space, causing numerous reflections to build up. The reflections will then decay as the sound is absorbed by the surfaces of the objects in the space. We hear this series of reflections as a single, continuous sound, which we call reverb. In general, the reverb effect is used to make a sound more natural and pleasant.

How to select a reverb preset



- Tap on the rectangular box right to the “Reverb” label to display the reverb presets.
- Choose a preset between the available ones (Hall, Church, GM, Room, Plate, Hall, Slap Delay and Pan Delay).
- Tap on the preset name or press ENTER to load the preset into the unit.
- Tap on the AMOUNT virtual knob and use the Value Dial to adjust the reverb send amount.
- Tap on the TIME virtual knob and use the Value Dial to adjust the reverb length.
- Press SAVE. A dialogue window will be displayed on screen.
- Tap on the CUSTOM STARTUP button to save the changes.

Modulating effects (chorus)

The modulating effects, such as chorus, flanger, tremolo and phaser are used to add motion and depth to the sound.

NB: for simplicity, all modulating effect will be referred as chorus effects.

How to select a chorus preset

- Tap on the rectangular box right to the “Chorus” label to display the modulating presets.
- Choose a preset between the available ones (GM, Chorus1, Flanger1, Chorus2, Tremolo, Chorus3, Flanger2 and Phaser).
- Tap on the preset name or press ENTER to load the preset into the unit.
- Tap on the virtual knob and use the Value Dial to adjust the chorus send amount.
- Press SAVE. A dialogue window will be displayed on screen.
- Tap on the CUSTOM STARTUP button to save the changes.

MENU

Insert effects

Chains

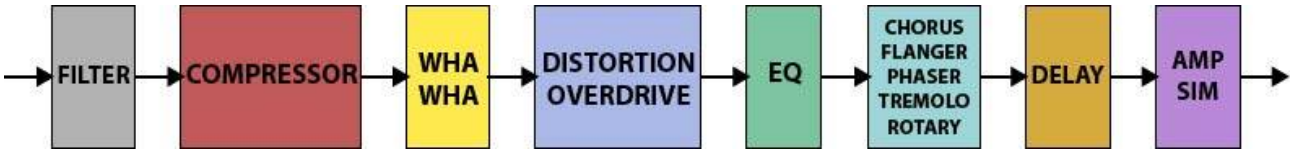
An INSERT EFFECT is composed by multiple stages, each one of them alters the sound in a different way. All the stages are connected together in series and the audio signal goes through all the stages from the first to the last before reaching the main outputs.

The series of all the stages is called a “chain”. Typical examples of effect chains are the guitar pedalboards, in which a variable number of effect pedals are arranged in a predefined order to achieve a specific sound.

The two available INSERT EFFECTS (EFX1 and EFX2) have a slightly different signal path:

- INS EFX1: processes the MICRO2/GUITAR input and the VOICE sound engine output. It is equipped with a high definition distortion module.
- INS EFX2: processes the GM sound module output. Same of EFX1 but it does not have the high definition distortion module.

A chain is built as follows: the audio signal first goes through the dynamic effects (filter compression and distortion), then is fed to the equalizer and at last is processed by the modulation effects (chorus and delay). At the very end of the chain, there is an amp simulator that can be used to imitate the sound of a guitar cabinet. Each stage of the chain works independently from the others

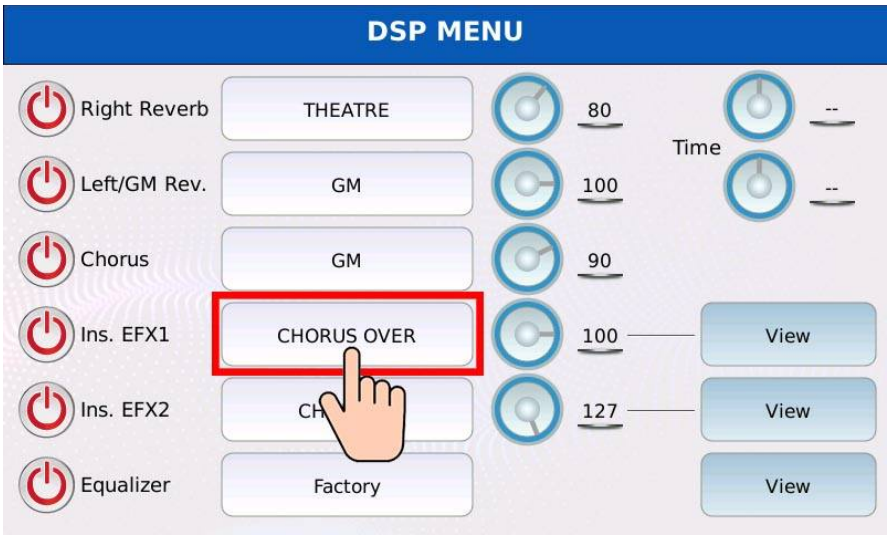


A brief description of all the available effects in the chain is given below:

- FILTER: filters out the high frequency components of the signal. Can be used to remove unwanted noises or to darken the sound.
- COMPRESSOR: reduces the dynamic range. In other words, amplifies the volume of soft sounds, without affecting the loud sounds (or reduces the loud sounds without affecting the soft sounds).
- WHA WHA: typical guitar effect, alters the resonance and central frequency of a band pass filter to shape the sound, imitating a human voice saying the syllable “wah”.
- OVERDRIVE: imitates the sound of a tube amplifier pushed into saturation, creating what is known as soft clipping. It introduces a little distortion, without drastically changing the sound.
- DISTORTION: amplifies the signal, producing a constant and consistent clipping of the peaks of the waveform, creating what is known as hard clipping. This generally results in a much more square-wave, saturated and distorted sound.

- EQ: alters the frequency components of the signal, amplifying some frequencies and reducing others.
- CHORUS: adds to the original signal detuned copies of itself, giving the illusion of multiple voices playing in unison.
- FLANGER/PHASER: adds to the signal a time-displaced replica of itself, resulting in a series of notches in the frequency spectrum (comb filter effect). The time difference between the original signal and its replicas is modulated by al LFO (Low Frequency Oscillator).
- TREMOLO: modulates the signal amplitude using an LFO.
- ROTARY: imitates the sound of a Leslie speaker, a rotating loudspeakers system most commonly associated with Hammond organs. It takes advantage of the Doppler Effect to produce a tremolo and a variation in pitch at the same time.
- DELAY: adds to the signal delayed replicas of itself, creating an echo-like effect.

How to select an insert chain



- Tap on the rectangular box right to the “Ins. EFX1” or the “Ins. EFX2” label to display the insert presets.
- Choose a preset between the 64 available (54 factory and 10 user).
- Tap on the preset name or press ENTER to load the preset into the unit.
- Tap on the virtual knob and use the Value Dial to adjust the chorus send amount.

How to edit an insert chain

Tap on the VIEW buttons right to the “Ins. EFX1” or the “Ins. EFX2” label on the DSP page to display the INSERT EDIT page.

Each stage of the chain is displayed as a stomp pedal with a different colour and works independently from the others.

- Tap on a pedal to enable the corresponding effect. A virtual red led at the top right corner will turn on.
- Tap on the box at the bottom of the pedal and use the Value Dial to choose a preset from the available ones.
- Tap on the BYPASS button to momentarily turn off the effect.
- Turn on the TAP DELAY functionality to synchronize the delay with the tempo of the DRUMS or the tempo of a MIDI file.
- Use the Value Dial to adjust the level of an effect (if preset).
- Press SAVE to save the edited chain as a user chain.

NB: to enable the INSERT EFFECT on the VOICE, see VOICE EDIT.

NB: by turning on the INSERT EFFECT for the VOICE, the signal path will become mono.

Global equalizer

The global equalizer affects all the sound coming out from the instrument. The signal is processed by two shelving filter, one for the low frequencies (LOW or BASS) and one for the high frequencies (HIGH or TREBLE).

- Tap on the GAIN virtual knob and use the Value Dial to cut or boost below or above the central frequency. The range is -12 to +12 dB.
- Tap on the FREQ virtual knob and use the Value Dial to set the central frequency. The range is 20 to 800 Hz (LOW) and 1 to 5.8 kHz (HIGH).
- Press SAVE, a dialogue window will be displayed on screen.
- Tap on the CUSTOM STARTUP button to save the changes.

Audio Recorder

The audio recorder can be used to record in real time the main output audio signal into a stereo .wav file (44100 Hz and 16 bit resolution).

Tap on the AUDIO RECORDER button on the MENU page to display the AUDIO RECORDER window on screen.

1. VU-meters: give a visual representation of the audio signal level. If the meters are green or yellow the input signal is under the distortion threshold. If the meters are red, the input signal is too loud and the recording will clip.
2. WAVEFORM: shows the recorded audio waveform.
3. CURRENT RECORDED TIME and MAX AVAILABLE DURATION: shows the total recorded time and the maximum duration of a recording. If a recording lasts more than the maximum available duration, the instrument will stop recording.
4. GAIN KNOB: adjusts the recorder input gain. Positive values increase the input signal level, negative values reduce it. Be careful to not exceed the distortion threshold (the VU-meters should never be red): if the gain is too high the signal will be distorted and the recording will clip.
5. REC: starts and stops recording. When the instrument is recording, the MENU button led and the REC button will slowly blink.
6. PLAY: replays the recorded file.

Example – Record a MIDI file

- Tap on the AUDIO RECORDER BUTTON of the MENU page. The AUDIO RECORDER window will be displayed on screen.
- Tap on the REC button to start the recording. The REC button will begin to blink.
- Press EXIT to close the recording window. The MENU button led will continue to blink even if the window is closed.
- You can press MENU at any time during the recording to open again the AUDIO RECORDER window.
- Play a MIDI file by selecting it with the Value Dial in the FILE BROWSER and by pressing ENTER (see PLAY A SONG).
- Tap again on the REC button again to stop the recording. If you want to edit the recording, tap on the WAVEFORM to open the AUDIO EDIT page.
- Press SAVE to save the recording. A dialogue window will appear on screen.
- Tap on the YES button. A virtual alphanumeric keyboard will appear on screen. Compose the new name and then tap on ENTER. Tap on the NO button or press EXIT to discard the recording.
- Compose the name and tap on the ENTER button to save the recording as a .wav file.

*NB: start the recording **before** playing the MIDI file (or any other file), otherwise you won't be able to start the recording.*

NB: When saving the recording, terminate the name with the "(L)" suffix to make the file loopable.

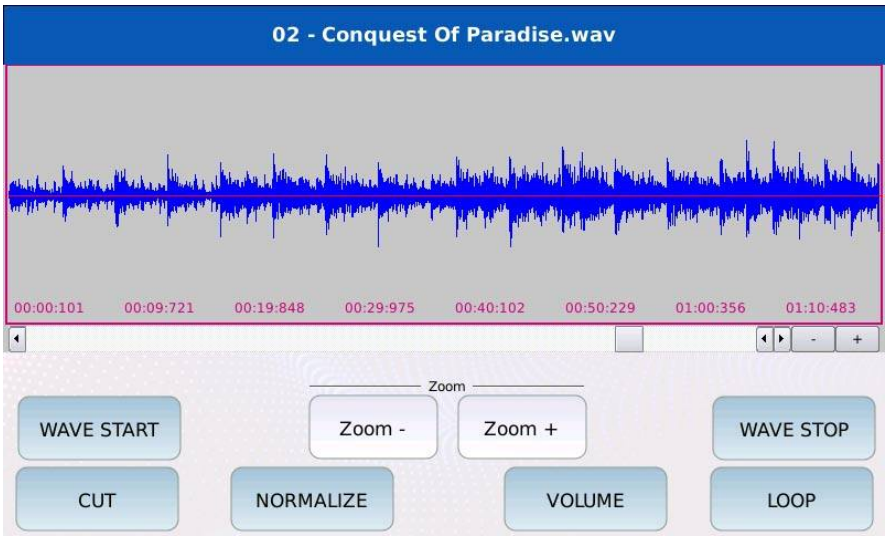
Audio Edit

Within the AUDIO EDIT page, you can cut, copy and splice an audio file (only .wav files, 44100 Hz and 16 bit resolution).

To edit an audio file follow the following steps:

- Use the Value Dial to select an audio file in the FILE BROWSER, it will be highlighted in orange.
- Press MENU.
- Tap on the AUDIO EDIT button of the MENU page. The AUDIO EDIT page will be displayed on screen.

NB: you can also access the AUDIO EDIT page also by tapping on the WAVEFORM of the AUDIO RECORDER window.



The name of the opened audio file is shown at the top of the page. The waveform is shown just below the name.

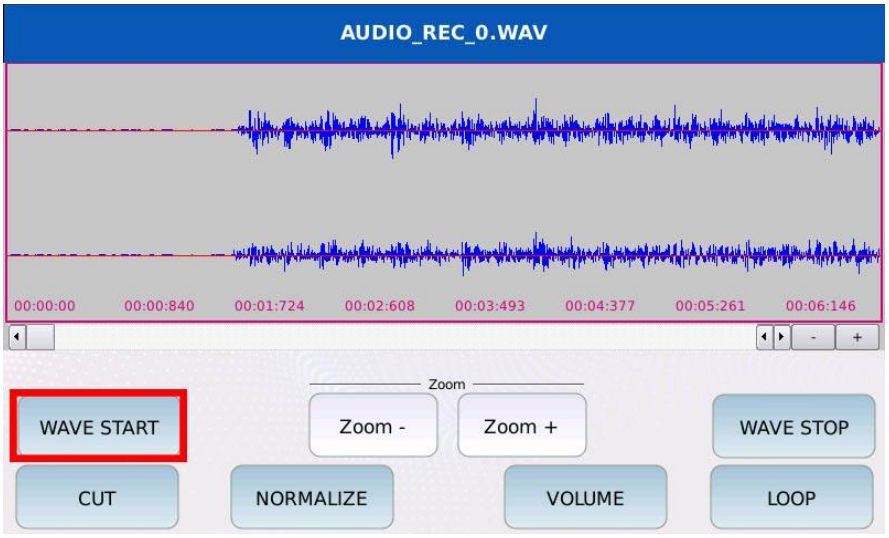
- WAVE START: moves the locator at the beginning of the file.
- WAVE STOP: moves the locator at the end of the file.
- CUT: cuts the file form the beginning to the locator position. The cut portion of the file will be deleted.
- NORMALIZE: adjust the volume based on the highest signal level present in the recording. Amplifies the signal until the highest peak is at 0 dB.
- VOLUME: adjust the volume of the file in percentages.
- LOOP: assigns metadata loop data to an audio file.

- ZOOM +/- zoom in and out the waveform.

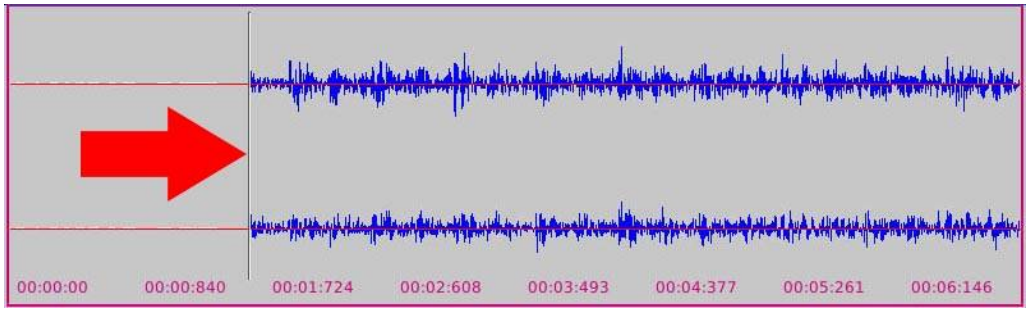
Press START to play the file. A virtual locator will move progressively from left to right along the waveform, showing the current position. Use the Value Dial to change the locator position.

Example – Cut a recorded file

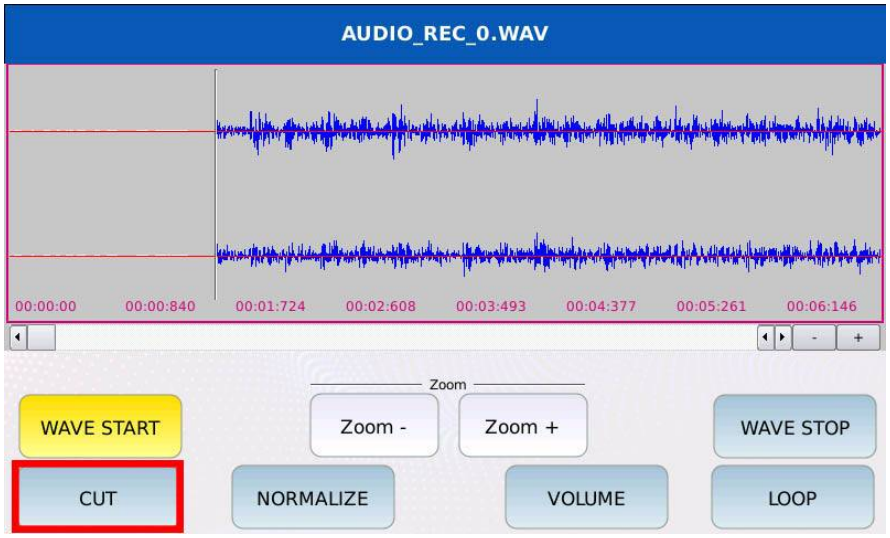
- Tap on the AUDIO RECORDER button of the MENU page. The AUDIO RECORDER window will be displayed on screen.
- Tap on the REC button to start the recording. The REC button will begin to blink.
- Tap again on the REC button again to stop the recording.
- Press SAVE. A dialogue window will appear on screen.
- Tap on the YES button to save the recording.
- Compose the name and tap on the ENTER button.
- Press MENU to display the MENU page on screen.
- Tap on the AUDIO EDIT button. The recorded file will be loaded into the AUDIO EDIT page.
- You could notice a silence at the beginning of the file. To cut out the first part of the file, tap on the WAVE START button to set the locator position at the beginning of the waveform.



- Use the value Dial (rotate clockwise) to move the locator form the starting position to the position when the recording actually begins. The selected part of the waveform will be coloured in white.



- Tap on the CUT button to delete the selection.

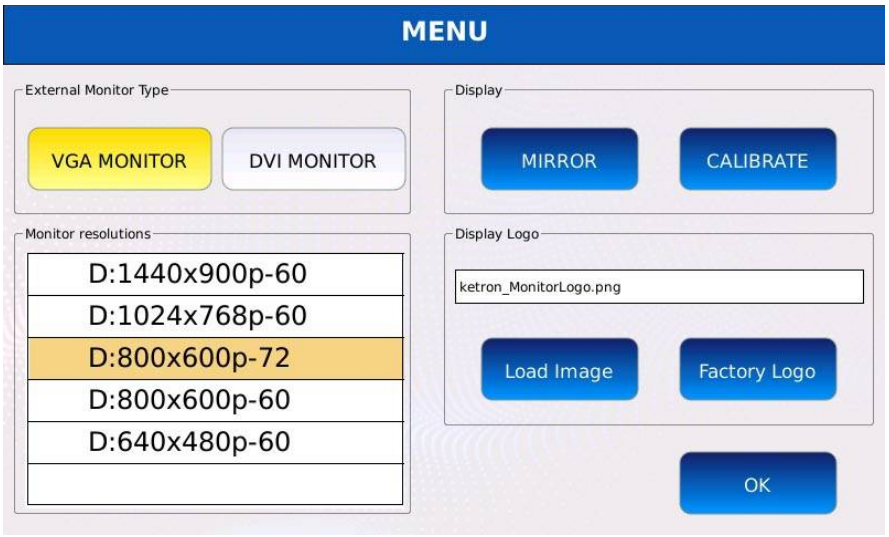


- Press SAVE to save the changes.
- Tap on the Yes button.

Video

You can connect an external monitor to the instrument via the DVI port at the front of the instrument to show the LYRICS of a song in a bigger screen or to play a video file.

Tap on the VIDEO button on the MENU page to display the VIDEO page.



- VGA MONITOR/DVI MONITOR: selects the type of monitor to connect to the instrument. A dialogue box will appear at the centre of the display. Tap on YES to apply the changes and restart the instrument (any changes that have not been saved will be lost if you switch off the instrument).
- MONITOR RESOLUTION: adjust the external monitor resolution. Use the Value Dial to select the desired resolution and press ENTER to submit the changes. A dialogue box will appear at the centre of the display. Tap on YES to apply the changes and restart the instrument.
- MIRROR: duplicates the display on the external monitor. Switch it off in order to display only the LYRICS and the video files output.
- CALIBRATE: calibrates the touch screen display. You should calibrate the touchscreen display whenever you update the instrument or if the touch input is not accurate. A black screen with several pointers will be displayed on screen. Tap carefully on each one of them and restart the instrument to apply the changes. See TOUCHSCREEN CALIBRATION for a more accurate description of the calibration procedure.
- LOAD IMAGE: loads a custom background image and sets it as the external monitor background.
- FACTORY LOGO: resets the external monitor background. The factory logo will be set as background.

Mirror mode

If enabled, all the content of the touchscreen LCD display is also shown in the external monitor. This mode can be useful if a bigger screen is needed to operate the instrument or if you need to show to others the steps you are following in using the instrument.

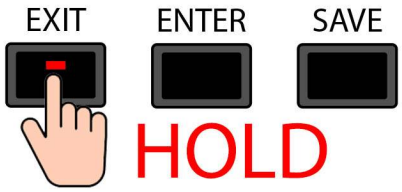
To enable (or disable) the mirror mode, follow the following steps:

- Tap on the VIDEO button of the MENU page. The VIDEO page will be displayed on screen.
- Tap on the MIRROR button. A dialogue window will appear at the centre of the display.
- Tap on the YES button to apply the changes and restart the instrument.

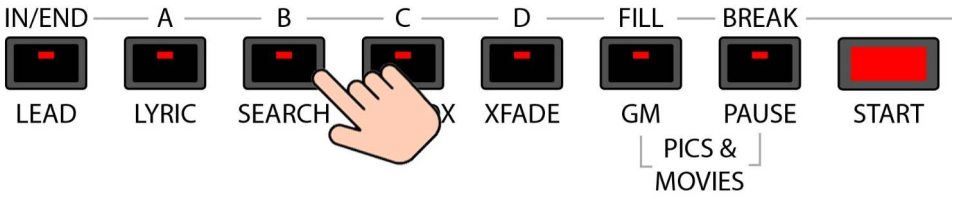
Touchscreen calibration

You can calibrate the touchscreen by tapping on the CALIBRATE button on the VIDEO page of the MENU, or, if it is not possible to use the touchscreen, by pressing the B (or SEARCH) button while holding pressed the EXIT button.

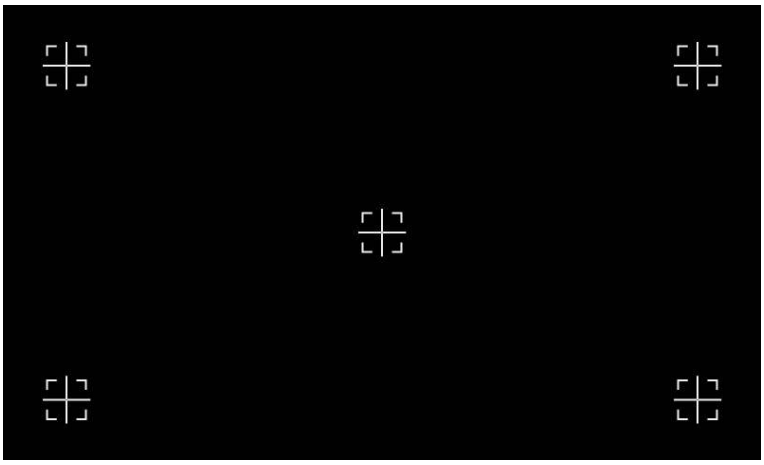
- Press and hold the EXIT button.



- Press the B/SEARCH button while holding the EXIT button.



- The instrument will automatically reboot and will show five crosshairs on display, four on the corners and one on the centre of the touchscreen display.

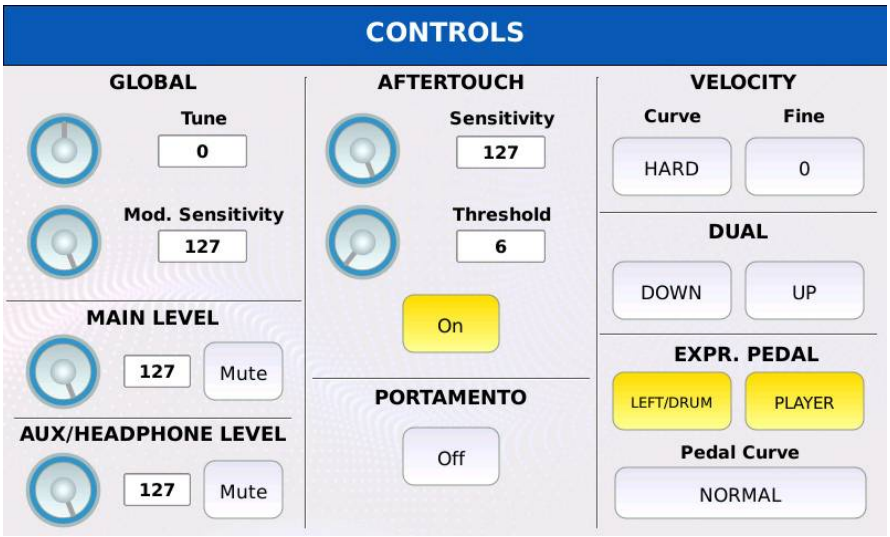


- Carefully tap on these marks, one at the time, starting from the first one on the top left. The last one will be on the centre of the display.
- The instrument will automatically reboot.
- **Switch the instrument on and off again using the power switch on the BACK PANEL.**

Controls

Within this page, you can manage all the settings which affect the keyboard behaviour.

Tap on the CONTROLS button on the MENU page to display the CONTROLS page.



- GLOBAL TUNE: allows you to fine-tune the unit in cents. One cent is one hundredth of a semitone (100 cents comprise a semitone). The range goes from -100 cents to 100 cents. By default this parameter is set to 0.
- GLOBAL MOD. SENSITIVITY: scales down incoming MIDI modulation wheel messages (MIDI CC 1 and MIDI CC 33) by multiplying the received value by a weight coefficient. By default this parameter is set to 127 (full scale).
- MAIN LEVEL: controls the volume of the main output. The main output can be muted.
- AUX/HEADPHONES LEVEL: controls the volume of the aux/headphone output. The aux/headphone output can be muted.
- AFTERTOUCH SENSITIVITY: scales down incoming MIDI channel pressure (aftertouch) messages by multiplying the received value by a weight coefficient. By default this parameter is set to 127 (full scale).
- AFTERTOUCH THRESHOLD: set the value above which the aftertouch could trigger the MORPHING, the ROTOR or the LFO (see VOICE EDIT for more information).

  NB: aftertouch controls must be enabled in VOICE EDIT.
- AFTER TOUCH ON/OFF: globally enables or disables the aftertouch messages. If disabled all channel pressure (aftertouch) MIDI message coming from an external MIDI keyboard will be ignored.
- PORTAMENTO ON/OFF: globally enables or disables the portamento.

- VELOCITY CURVE: determines how the MIDI velocity messages are generated when a key is pressed. Different velocity curves generate different MIDI velocity values for the same force applied to the key. You can choose between the following curves (default is SOFT):
  - SOFT: makes higher velocities harder to play.
  - MEDIUM: the default curve, follow a linear response.
  - HARD: makes higher velocities easier to play.
  - FIXED: regardless of the force applied to the key, the MIDI velocity value generated is always the same.

  NB: if the ACCORDION CLASSIC mode is enabled, this curve is replaced by the one defined in the ACCORDION CLASSIC page.
- VELOCITY FINE: makes fine adjustments to the velocity curve slope. Positive values make easier to play higher velocities, negative values make harder to play higher velocities. Default is 20.
- VELOCITY FIXED: set the constant MIDI velocity value generated by a key press.
- DUAL DOWN: duplicates MIDI note on and MIDI note off incoming messages generated by an external MIDI keyboard. The duplicate notes will play an octave down (-12 semitones). This button is a duplicate of the one you can find in the VOICE EDIT page.
- DUAL UP: duplicates MIDI note on and MIDI note off incoming messages generated by an external MIDI keyboard. The duplicate notes will play an octave up (+12 semitones). This button is a duplicate of the one you can find in the VOICE EDIT page.
- LEFT/DRUM: enables or disables the volume pedal for the DRUM and the LEFT parts (the LEFT parts are the BASS part (anything that is received on the BASS channel) and the CHORD part (anything that is received on the CHORD channel, see ACCORDION CLASSIC to know more about the CHORD part). Default is off.
- PLAYER: enables or disables the volume pedal for the PLAYER and the STEM. Default is on.
- PEDAL CURVE: sets the curve that will be applied to messages generated by the volume pedal in order to distribute high and low values over different ranges of controller positions. Tap on the button and use the Value Dial to choose between NORMAL, SMOOTH, FAST, CLOSE1, CLOSE2 and CLOSE3. Default is NORMAL.

Preferences

Tap on the PREFERENCES button on the MENU page to display the PREFERENCES page.

- BRIGHTNESS: controls the screen brightness. Values range goes from a minimum of 0 (darkest) to a maximum of 7 (brightest). Default is 7 (High). Press SAVE and tap on the CUSTOM STARTUP button to save the changes.
- BUZZER ON/OFF: Enables or disable the buzzer output. If this parameter is set to On, you will hear a “beep” sound when tapping on a button on the display or when pressing a button. This sound is played by a small speaker (buzzer) inside the instrument and is not heard on the main output. Default is Off. Press SAVE and tap on the CUSTOM STARTUP button to save the changes.
- KINETICS MODE: enables the scrolling through the content of the FILE BROWSER with a finger swipe. Default is Off. Press SAVE and tap on the CUSTOM STARTUP button to save the changes.
- MAC OLD VERSION: enables compatibility mode for older macOS versions. Enable if you have troubles connecting the instrument via USB. Default is Off. Press SAVE and tap on the CUSTOM STARTUP button to save the changes.
- DATE/TIME: allows you to change the date and the hour. Displays the DATE/TIME page. In order to make the changes effective, you must restart the instrument. Tap on the SAVE/RESTART button to apply changes and restart the instrument.
- SKIN: allows you to change the graphical aspect of the UI (User Interface). You can choose between the following themes: CLASSIC, DARK, LIGHT. Each theme different background and button colours. In order to make the changes effective, you must restart the instrument. Tap on the SAVE/RESTART button to apply changes and restart the instrument.
- VOICE SELECT: allows you to choose how the instrument will react to a family change:

  - VOICE SELECT 1: when you select a new VOICE family, the instrument will load the previously selected Preset of that family.
  - VOICE SELECT 2: when you select a new VOICE family, the instrument will not change the VOICE Preset, allowing you to browse freely between the Presets.

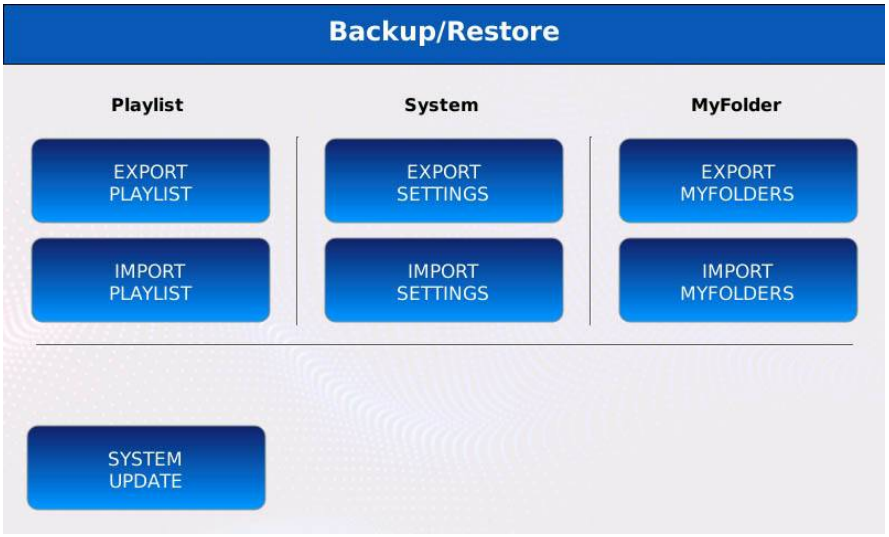
- LANGUAGE: defines the language of the user manual. You can choose between ENGLISH, GERMAN, FRENCH, ITALIAN and SPANISH. In order to make the changes effective, you must restart the instrument. Default is ENGLISH. Tap on the SAVE/RESTART button to apply changes and restart the instrument.
- FIND IP ADDRESS: displays the IP address of the instrument, if connected to a network.
- UPDATE/BACKUP: displays the UPDATE/BACKUP page. Use to export or import all instrument settings and to update the software and sounds.
- SAVE/RESTART: saves the language, date/time and skin settings and reboot the application.

Update/Backup

Within this page, you can export or import the settings of the instrument (all the options set in the SETTINGS, in the PREFERENCES and in the VIDEO pages), the MYFOLDER lists and the PLAYLIST data. All data is stored as an archive with a different extension for each data type:

- .sysbk for all settings data.
- .plsbk for all playlist data.
- .myfbk for all my folder data.

Tap on the UPDATE/BACKUP button on the PREFERENCE page to display the UPDATE/BACKUP page.



- EXPORT PLAYLIST: saves all PLAYLIST data (playlists names and contents) into a .plsbk file.
- IMPORT PLAYLIST: recalls all PLAYLIST data (playlists names and contents) from a .plsbk file. All previous data will be replaced.
- EXPORT SETTINGS: saves all settings into a .sysbk file.
- IMPORT SETTINGS: recalls all settings and options from a .sysbk file. All previous settings and options will be replaced.
- EXPORT MYFOLDERS: saves all MYFOLDER data (names and contents) into a .myfbk file.
- IMPORT MYFOLDERS: recalls all MYFOLDER data (names and contents) from a .myfbk file file. All previous data will be replaced.
- SYSTEM UPDATE: updates the software or restores the instruments PCM sounds.

Date/Time

Within this page, you can set the current date (year, month and day) and adjust the clock (hour and minutes).

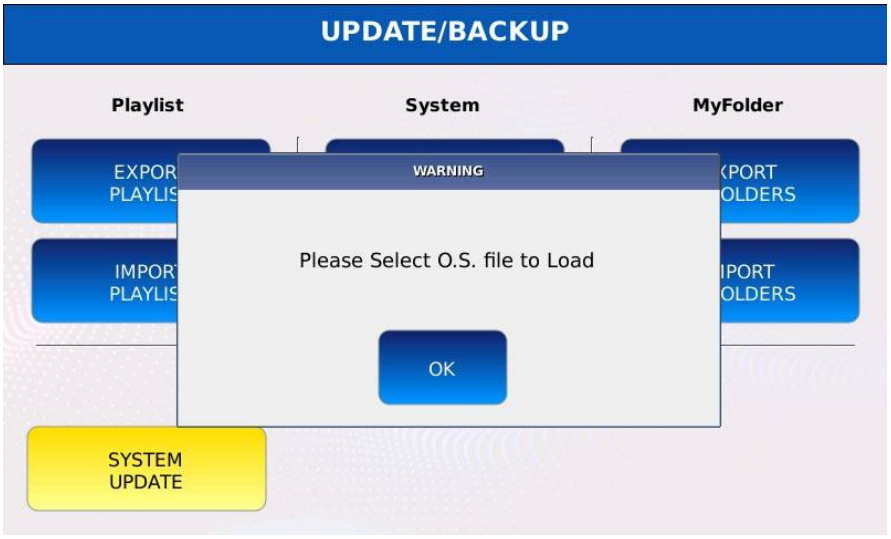
Tap on the DATE/TIME button on the PREFERENCES page to display the DATE/TIME page.

- Tap on the green arrow buttons on the top of the page to change the year
- Tap on a cell of the table to change the day
- Tap on the grey arrow buttons at the bottom of the page to change the hour and the minutes.
- Tap on the UPDATE button to save the changes.
- Tap on the SAVE/RESTART button of the PREFERENCES to apply the changes and restart the instrument.

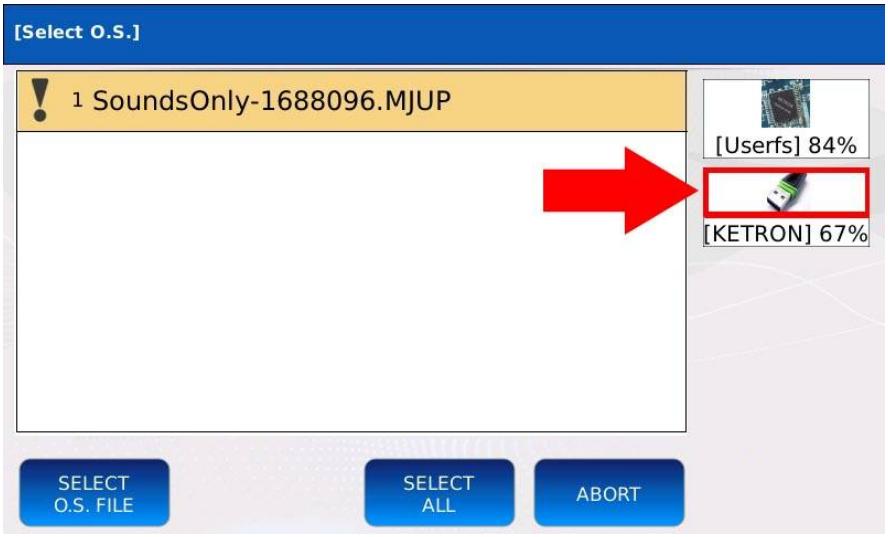
System update

Allow the installation of .MJUP files (OS updates and PCM sounds). You can download the latest OS from internet (visit www.ketron.it).

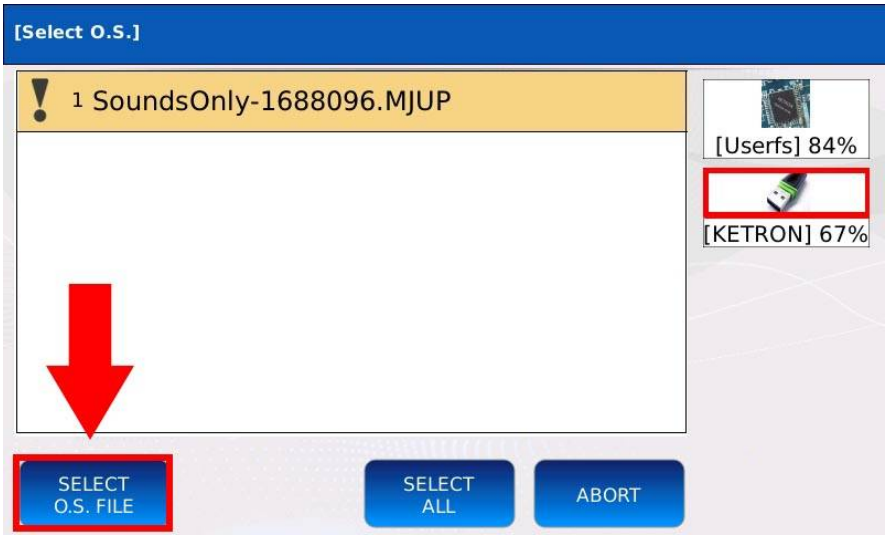
- Copy the .MJUP file to an USB pen drive.
- Insert the USB pen drive in one of the available USB ports.
- Tap on the SYSTEM UPDATE button of the UPDATE/BACKUP page.



- Tap on the OK button to confirm.



- Select the media device in which the .MJUP file was saved.
- Use the Value Dial to select the .MJUP file



- Tap on the SELECT O.S. FILE button to install the update.

NB: the installation procedure could take several minutes. Do not turn off the instrument until installation is complete.

NB: some installation could clear the user memory. ***Always back up*** *any custom data before installing an update.*

Metronome

The metronome is a device that produces an audible sound (click) at regular intervals. It can be used to practise, to play in synchronization with another source, such as a MIDI file or a DRUM Rhythm, or to have a click track when recording an execution. The rate at which the metronome runs is often expressed in BPM (Beats Per Minutes) and could vary from a minimum of 40 BPM (Largo) to a maximum of 250 BPM (Prestissimo). The downbeat (the first beat of the bar) is is accentuated to notify the beginning of a new measure. The metronome will be heard only on the HEADPHONES output and not on the main LEFT and RIGHT outputs.

Tap on the METRONOME button on the MENU page to display the METRONOME page.

- VOL: controls the metronome volume. Tap on the virtual knob and use the Value Dial to increase or decrease the volume.
- TIME SIGNATURE*/ and TIME SIGNATURE/*: define the time signature. The time signatures indicate the number of beats in each measure (the top number */) and what type of note represents a single beat (the bottom number /*). Tap on the box and use the Value Dial to modify the value. Common time signatures are 4/4, 3/4 and 6/8.
- LINK/RUN MODE: controls the synchronization of the metronome with other sources. The metronome will set to the tempo of the source. Tap on the box and use the Value Dial to select a mode:
  - FREE RUN: no synchronization.
  - MIDIFILE: synchronizes the metronome to the MIDI file currently playing.
  - DRUMS: synchronizes the metronome to the DRUM Rhythm.
- ENABLE: turns on and off the metronome.

MENU

- BPM: controls the metronome speed. Tap on the box and use the Value Dial to increase or decrease the rate at which the metronome is running.
- OUT: controls if the metronome would be heard with or without the music. This could prove useful in a live session, where you can send only the click track to the drummer monitor. Tap on the box and use the Value Dial to select a mode:
    - SOLO: you will hear only the metronome.
    - ALL: you will hear both the metronome and all the other audio generated by the instrument.
- TYPE: selects one of the three available tones for the metronome click. Tap on the box and use the Value Dial to select a tone.

Micro 1 / Voicetron

You can connect up to two different microphones at the MICRO1 and MICRO2 inputs located on the BACK PANEL of the instrument. To achieve optimal signal to noise ratio, you need to adjust the input gain with the potentiometers located next to the input ports. To set the optimal gain level, talk or sing into the microphone: if the gain is too high the signal will be distorted, if the gain is too low, the signal level will be too soft and could be inaudible. Always use good microphones and cables.

When connecting a microphone to the instrument, basic precautions should be followed, including the following:

- Always turn the volume down, before connecting a microphone.
- Keep the microphone away from the loudspeakers to avoid feedbacks (Larsen effect).
- Prefer microphone with a cardioid polar pattern to minimize feedback chances.
- Keep the microphone far from cables and power lines.
- Use heavy duty, robust microphone stands.
- To avoid damage, remember that the loudspeakers are the first piece of equipment to be powered down and the last to be powered on.

Microphone signal path

Both MICRO1 and MICRO2 signals go through an additional effect chain, composed of:

- NOISE GATE: attenuate signals that below a defined threshold. Used to filter out floor noise.
- 4 BANDS PARAMETRIC EQUALIZER
- COMPRESSOR: reduces the dynamic range.
- ECHO: creates replica of a signal after some duration of time.
- PITCH SHIFT: increase or decrease the pitch of the voice, changing drastically the voice timbre.
- TALK REVERB: reverb unit to be used when the TALK mode is enabled. In general, the length of this reverb is short to increase the intelligibility of the speech.

To edit these and modify these effects, see MICRO EDIT. After the effect chain, the MICRO1 and MICRO2 signal paths slightly differs:

- Because the MICRO1 input port is built specifically for the voice, the audio signal is processed by the VOICETRON.

- Because the MICRO2 input port is also suitable for high impedance instruments, such as guitar or bass, instead of being processed by the VOICETRON, the audio signal is processed by the same effects that are used for the VOICE (see INSERT EFFECTS).

Tap on the MICRO1/VOICETRON button on the MENU page (or o keep pressed the MICRO button on the FRONT PANEL) to display the MICRO1/VOICETRON page.

Within this page, you can adjust the settings of the first analogical audio input of the instrument. The page is subdivided into two sections: the first is labelled MICRO 1 and displays the microphone settings while the second is labelled VOICETRON and displays the voicetron settings.

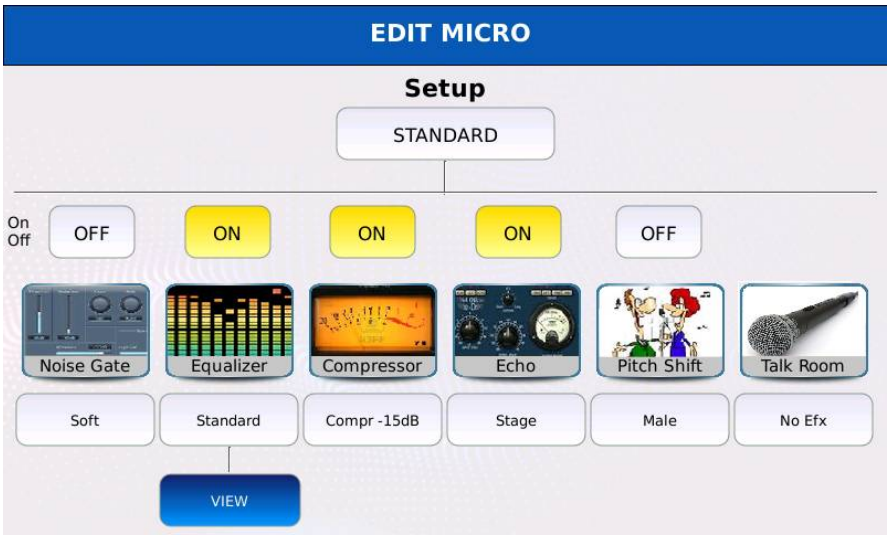
Micro 1

- ON/OFF: enables or disables the microphone input (same of pressing the MICRO button of the FRONT PANEL).
- PRESET: tap on the box to select a microphone preset between STANDARD, MELLOW, SMALL, LARGE, GATED, LIVE, SOLO ECHO, SPECIAL EFX1, SPECIAL EFX2, DOUBLE VOICE, STAGE, STUDIO, FLAT, HI-FI, ROBOT. Each preset features different volume, reverb and echo amounts, effects and equalizer parameters. Use the Value Dial to scroll through the available ones and tap on the name to load a preset.
- EDIT: modifies the microphone preset. Displays the MICRO EDIT page.
- VOL: controls the output volume. Tap on the virtual knob and use the Value Dial to adjust the value.
- REV: controls the reverb send amount. Tap on the virtual knob and use the Value Dial to adjust the value. The reverb type and global volume are set in the DSP page.
- ECHO: controls the echo send amount. Tap on the virtual knob and use the Value Dial to adjust the value. The echo type is set in the MICRO EDIT page.

- TALK: disable or reduces the reverb amount. Useful when you want to make the speech more intelligible. The reverb length in TALK mode is set in the MICRO EDIT page.
- DRY ON STOP: triggers the TALK functionality when a song ends.
- EDIT: modifies the currently selected microphone preset. Displays the MICRO EDIT page.

Micro Edit

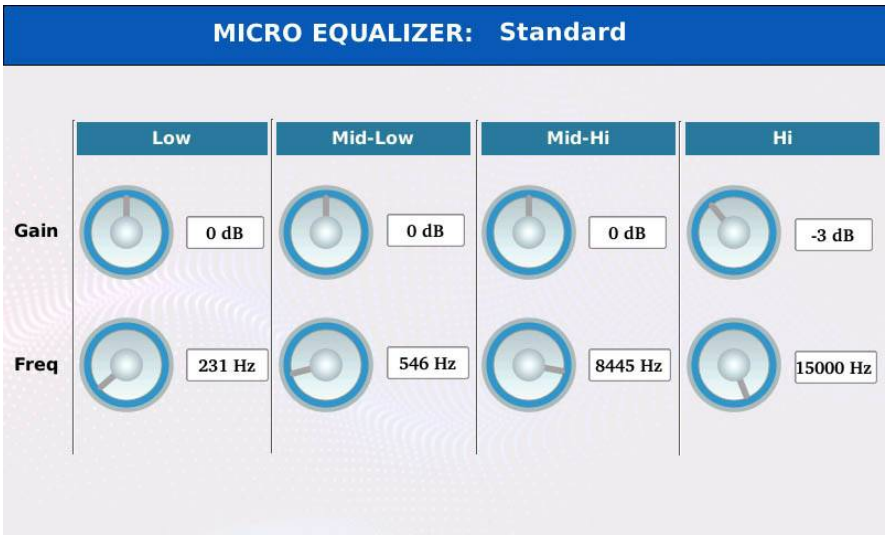
Tap on the EDIT button on the MICRO1/VOICETRON page to display the microphone effect chain. Within this page, you can turn on/off and configure the single stages of the chain. Tap on the box below the effect icon to display the presets of the corresponding stage. Use the Value Dial to scroll through the available ones and tap on the name to load a preset.



- NOISE GATE: tap on the box to select a compressor preset between Soft, Medium1, Medium2 and Hard. Each preset features a different threshold.
- EQUALIZER: tap on the box to select an equalizer preset between Standard, Flat, Hi-Fi, Studio, User Eq.1, User Eq.2, User Eq.3 and User Eq.4. The first four are factory presets and cannot be modified; the last four are user presets that can be freely edited by the user.
- COMPRESSOR: tap on the box to select a compressor preset between Compr -15dB, Compr -18dB, Compr -21 dB, Compr -24dB, Limiter -6dB and Limiter -18 dB. Each preset features a different threshold and ratio values (limiters have a ratio value of infinity).
- ECHO: tap on the box to select an echo preset between Mono, Stereo, Triplet, Multitap, Reflection, Stage, PingPong and EchoTap. Each preset features a different delay value.
- PITCH SHIFT: tap on the box to select a pitch shift preset between Male, Female, Robot, Duck, Bear, Mouse, Dark, Cartoon, Double Choir.
- TALK: tap on the box to select a talk preset between No Efx, Short1 and Short2. Each preset features a different reverb length.

Micro equalizer

Tap on the VIEW button on the MICRO EDIT page to display the microphone equalizer page. The signal is processed by two shelving filter, one for the low frequencies (LOW) and one for the high frequencies (HIGH) and by two peak filters, one for the mid-low frequencies (MID-LOW) and one for the mid-high frequencies (MID-HIGH).



- Tap on the GAIN virtual knob and use the Value Dial to cut or boost below or above the central frequency. The range is -12 to +12 dB.
- Tap on the FREQ virtual knob and use the Value Dial to set the central frequency. The ranges of the different bands are 80 to 2000 Hz (LOW), 60 to 3000 Hz (MID-LOW), 60 to 10300 Hz (MID-HIGH) and 500 to 15000 Hz (HIGH).
- Press SAVE to store the changes into a user preset.

Save a Microphone Preset

All the parameters related to the microphone such as volume, reverb and echo amounts, effects and equalizer parameters can be saved into a so called “Microphone Preset”.

- Press SAVE to store these value into a Preset. A dialogue window will be displayed on screen.
- Tap on the MICRO button to proceed, or tap on the CANCEL button to cancel the operation.
- Select the destination preset (in which position it will be saved).
- Tap on SAVE or tap on SAVE AS to overwrite the destination preset or tap on CANCEL to cancel the operation.

MENU

Voicetron

The voicetron (also known as “Harmonizer” or “Vocalizer”) is a special effect that harmonizes the input audio by creating pitch shifted replicas of the original signal, creating chords out of the melody. The pitch shift amount is controlled by the notes played on the keyboard or by the notes saved in a MIDI track. The vocalizer is equipped with its own 4 band parametric equalizer.

- ON/OFF: enables or disables the voicetron.
- PRESET: tap on the box to select a voicetron preset between RIGHT, UNISON, MIDI, 2ND UP, 2ND DOWN. Use the Value Dial to scroll through the available ones and tap on the name to load a preset.
- VOL: controls the voicetron volume. Tap on the virtual knob and use the Value Dial to adjust the value.
- REV: controls the reverb send amount. Tap on the virtual knob and use the Value Dial to adjust the value. The reverb type and global volume are set in the DSP page.
- EQUALIZER ON/OFF: enables or disables the voicetron equaliser.
- EQUALIZER PRESET: tap on the box to select an equalizer configuration. Use the Value Dial to scroll through the available ones and tap on the name to choose a configuration.
- VIEW: edit the equalizer parameters.
- LOCK: prevents MIDI files from changing the Voicetron preset.
- OCTAVE: modifies the octave of the harmonization (works only with the MIDI preset).

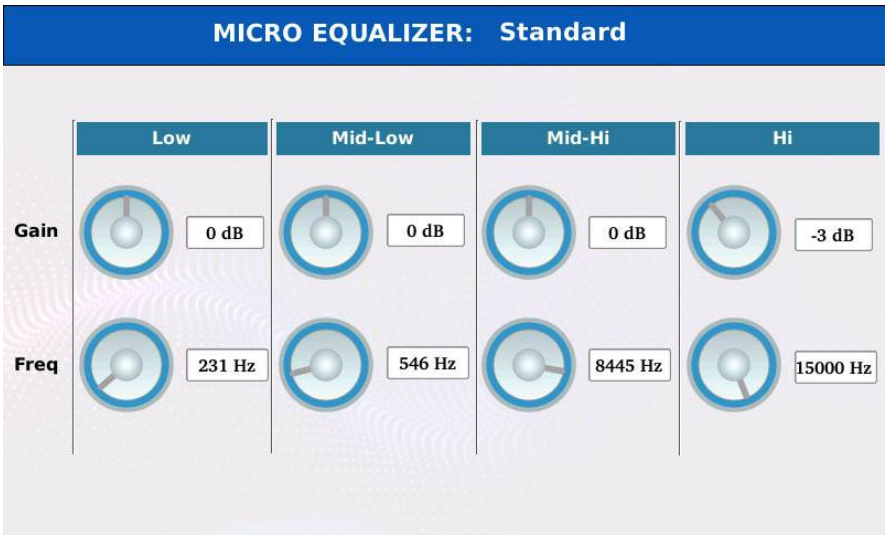
Voicetron preset description

You can load one of the VOICETRON presets by tapping on the VOICETRON PRESET button. There are 5 factory presets and 5 user presets.

- RIGHT: the harmonization is controlled by the notes played on the right part of the keyboard.
- LEFT: the harmonization is controlled by the notes played on the left part of the keyboard.
- UNISON: doubles the voice.
- MIDI: the harmonization is controlled by the voicetron track of the MIDI file.
- OCTAVE DOWN: doubles the voice an octave down.
- OCTAVE UP: doubles the voice an octave up.

Voicetron equaliser

Tap on the VIEW button on the MICRO1/VOICETRON page to display the voicetron equaliser page. The signal is processed by two shelving filter, one for the low frequencies (LOW) and one for the high frequencies (HIGH) and by two peak filters, one for the mid-low frequencies (MID-LOW) and one for the mid-high frequencies (MID-HIGH).



- Tap on the GAIN virtual knob and use the Value Dial to cut or boost below or above the central frequency. The range is -12 to +12 dB.
- Tap on the FREQ virtual knob and use the Value Dial to set the central frequency. The range is 80 to 2000 Hz (LOW), 60 to 3000 Hz (MID-LOW), 60 to 10300 Hz (MID-HIGH) and 500 to 15000 Hz (HIGH).
- Press SAVE to store the changes into a user preset.

Save a Voicetron Preset

All the parameters related to the voicetron such as volume, reverb amount and equalizer parameters can be saved into a so called “Voicetron Preset”.

- Press SAVE to store these values into a Preset. A dialogue window will be displayed on screen.
- Tap on the VOICETRON button to proceed, or tap on the CANCEL button to cancel the operation.
- Select the destination preset (in which position it will be saved).
- Tap on SAVE or tap on SAVE AS to overwrite the destination preset or tap on CANCEL to cancel the operation.

Micro 2 / Guitar

Within this page, you can adjust the settings of the second analogical audio input of the instrument. It has high input impedance, so it can be connected with passive guitar pickups, which usually have much greater output impedance than microphones. In general, devices with impedances up through 600 Ohms are said to be “low impedance”, while devices with impedances of several thousand Ohms and up are considered “high impedance”. You can choose to operate this input as a microphone input or a guitar input, but not both simultaneous. Enabling the microphone input, disables the guitar input and vice versa.

Tap on the MICRO2/GUITAR button on the MENU page to display the MICRO2/GUITAR page.

The page is subdivided into two sections: the first is labelled MICRO 2 and displays the microphone settings while the second is labelled GUITAR and displays the guitar settings.

Micro 2

- ON/OFF: enables or disable the microphone input. If the guitar input is enabled, the latter will be disabled.
- PRESET: tap on the box to select a microphone preset. Use the Value Dial to scroll through the available ones and tap on the name to choose a preset.
- VOL: controls the input volume. Tap on the virtual knob and use the Value Dial to adjust the value.
- REV: controls the reverb send amount. Tap on the virtual knob and use the Value Dial to adjust the value. The reverb type and global volume are set in the DSP page.

MENU

Guitar

- ON/OFF: enables or disable the guitar input. If the microphone input is enabled, the latter will be disabled.
- VOL: controls the input volume. Tap on the virtual knob and use the Value Dial to adjust the value.
- REV: controls the reverb send amount. Tap on the virtual knob and use the Value Dial to adjust the value. The reverb type and global volume are set in the DSP page.
- CHO: controls the chorus send amount. Tap on the virtual knob and use the Value Dial to adjust the value. The chorus type and global volume are set in the DSP page.
- PRESET: tap on the box to select a guitar preset. Use the Value Dial to scroll through the available ones and tap on the name to choose a preset.
- INSERT EXF1: tap on the box to select an insert chain to use on the guitar input. Use the Value Dial to scroll through the available chains and tap on the name to choose a chain (see DSP to know more about INSERT EFFECTS).
- FX BYPASS: momentarily turns off the insert effect.
- EDIT: modifies the insert chain currently selected. Displays the INSERT EDIT page.
- GUITAR TUNER: displays the tuner page.

Save a Guitar Preset

All the parameters related to the guitar such as volume, reverb and chorus amounts and insert chain can be saved into a so called “Guitar Preset”.

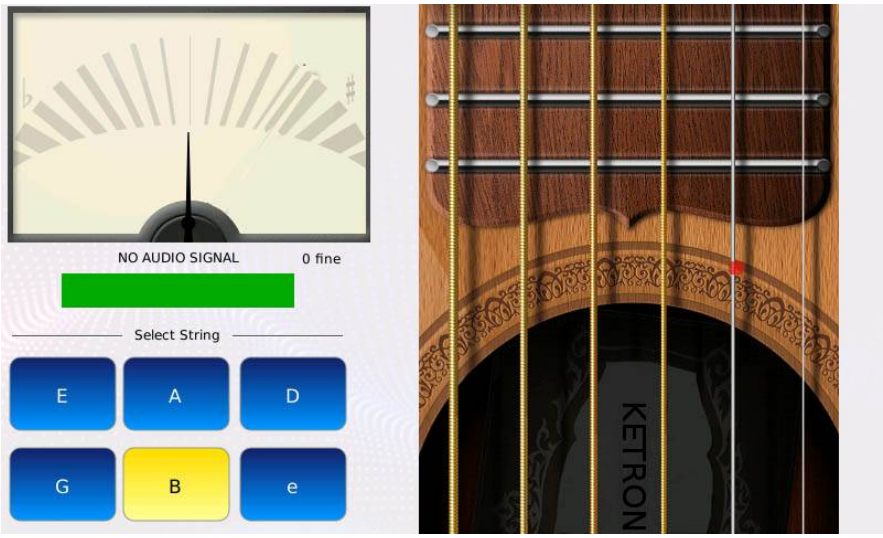
- Press SAVE to store these value into a Preset. A dialogue window will be displayed on screen.

- Tap on the GUITAR button to proceed, or tap on the CANCEL button to cancel the operation.
- Select the destination preset (in which position it will be saved).
- Tap on SAVE or tap on SAVE AS to overwrite the destination preset or tap on CANCEL to cancel the operation.

Guitar Tuner

The guitar tuner allows you to tune your guitar without using any external devices.

Tap on the GUITAR TUNER button of the MICRO2/GUITAR page to display the GUITAR TUNER page.



Tap on the virtual strings on the right of the display to hear the reference notes (E A D G B e).

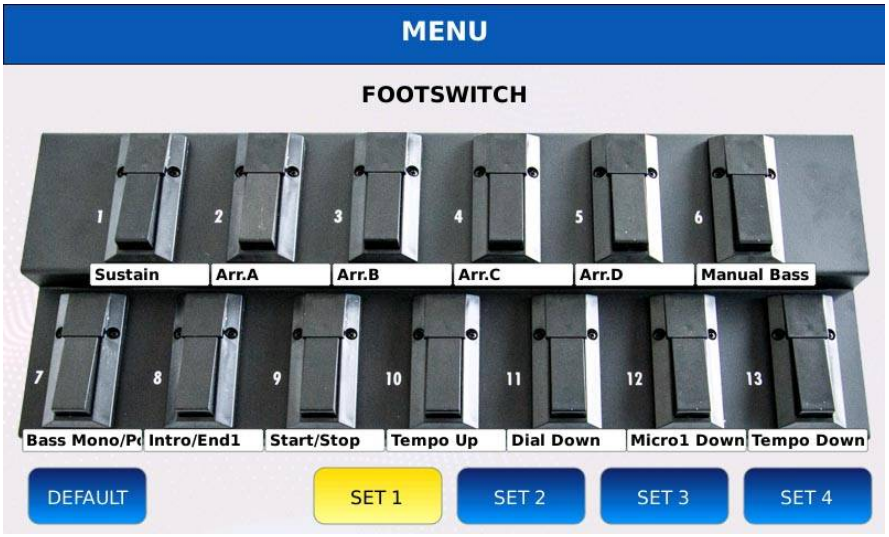
To use the tuner follow the following steps:

- Connect the guitar to the MIC2/GUITAR input.
- Turn on the guitar input.
- Tap on one of the six buttons (E A D G B e) to select the reference note.
- Play a single note on your guitar (the same of the reference note).
- Tune the guitar until the central bar is green and the pitch meter is centred. The meter will move farther toward the left as the pitch gets flatter, or farther toward the right as the pitch gets sharper. Blue or red colour of the central bar will suggest how to correct your instrument tuning.
- Press EXIT to return to the MICRO2/GUITAR page.

Footswitch

The optional footswitches board FS6 (6 switches) and FS13 (13 switches) allows you to assign at each switch a different function, such as start, stop, program change, fill, break, variation change and more. This is particularly useful for any musician, because keeps their hands free for the performance of your music.

Tap on the FOOTSWITCH button on the MENU page to display the FOOTSWITCH page.



How to assign a function to a pedal

- Tap on one of the switches. A list of available functions will be displayed on screen (see FOOTSWITCH FUNCTIONS to see the complete list).
- Scroll with the Vale Dial to select a function.
- Tap on the function name to assign the function to the switch.
- Press EXIT to close the pop up.

Footswitch configurations

You can store and choose up to four different function configurations. Each configuration assigns to each switch a different function.

- Tap on the SET buttons to select a configuration.
- Press SAVE to save the current configuration.
- Tap on the DEFAULT button to load the default configuration.

Footswitch functions

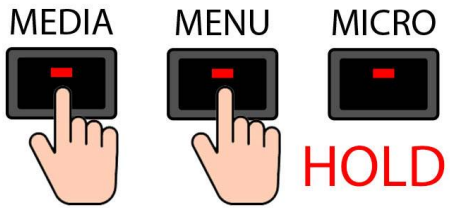
Following there is the complete list of all the assignable functions:

Sustain	Exit	Guitar Setup Up	Record
Soft	Fade	Guitar FX Bypass	Play
Sostenuto	Micro1 On/Off	Text Page -	DoubleDown
Arr.A	Micro1 Down	Text Page +	DoubleUp
Arr.B	Micro1 Up	Gtr CLEAN	Micro1 Edit
Arr.C	Voicetr. On/Off	Gtr CHORUS 1	Micro2 Edit
Arr.D	Voicetr. Down	Gtr CHORUS 2	Bs Sust Pedal
Fill1	Voicetr. Up	Gtr PHASER 1	Set Down
Fill2	Micro2 On/Off	Gtr PHASER 2	Set Up
Fill3	EFX1 On/Off	Gtr TREMOLO 1	Arr. Down
Fill4	EFX2 On/Off	Gtr TREMOLO 2	Arr. Up
Break1	Dry On Stop	Gtr OVERDRIVE 1	Left Drum
Break2	Pdf Page Up	Gtr OVERDRIVE 2	STEM A On/Off
Break3	Pdf Page Down	Gtr DISTORTION 1	STEM B On/Off
Break4	Pdf Scroll Up	Gtr DISTORTION 2	STEM C On/Off
Intro/End	Pdf Scroll Down	Gtr DISTORTION 3	STEM D On/Off
Start/stop	Lead Mute	Gtr WHA DISTORTION	STEM Lead On/Off
Tempo Up	2nd On/Off	Gtr WHA CLEAN	STEM Scene A
Tempo Down	Pause	Gtr SHORT DELAY	STEM Scene B
Fill	Talk On/Off	Gtr FUZZ	STEM Scene C
Break	Voice Down	Autocrash	STEM Scene D
Bass On/Off	Voice Up	Tansp Down	STEM Autoplay
Dial Down	EFX1 Preset Down	Transp Up	
Dial Up	EFX1 Preset Up	Text Record	
Enter	Guitar Setup Down	Pdf Clear	

Utilities

Screenshot

A screenshot is a digital image that shows the contents of the touchscreen LCD display.



Keep pressed at the same time both the MEDIA and MENU buttons to make a screenshot. You will hear a “beep sound” (make sure that the BUZZER option is set to On in the PREFERENCES page). The screenshot will be saved as a .png file in the current folder and can be copied to an external memory device by enabling the DISK EDIT mode.

Reboot

Push the ENTER button while keeping pressed the LYRIC button to reboot the instrument.

Disk Check

Push the ENTER button while keeping pressed the SEARCH button to perform a check of the integrity of the disk. This check will search for errors on the file system and will try to repair them. This operation could take some time.

Notes

LOUNGE

MULTIPLAYER

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