Dear Customer,

thank you for purchasing a Crumar Seventeen, a high quality instrument that was entirely conceived, developed and built in Italy with premium quality parts. This instrument is the the result of years of research in sound design and quality electronics, and has been assembled with first class craftsmanship. We wish you many years of enjoyment and good music with your new Crumar Seventeen, and, if we may give you a small advice... you guessed it... please read this manual in its entirety and keep it in a safe place for future reference.

The Crumar Team.

SAFETY INFORMATION

- Do not open the instrument. The instrument can be opened and repaired only by qualified personnel. Unauthorized opening voids the warranty.
- Do not expose the instrument to rain or moisture.
- Do not expose the instrument to direct sunlight.
- Be careful not to infiltrate powders or liquids inside the instrument, nor on the outside.
- If liquids get inside the unit, remove the power immediately to prevent the risk of electric shock and contact a Crumar service center as soon as possible.
- Do not clean using abrasive cleaners as they may damage the surface.
- Please keep all packaging in case you need to transport the instrument to a service center.
- This instrument can be used in any Country that has a mains voltage between 100 Vac and 240 Vac.
- Do not touch the AC cord with wet hands.

ABOUT THIS MANUAL

This is not only an instruction manual that just explains how the instrument works and how to use it. Also, we hope that you find some interesting information about how the sound synthesis works and how to get the best out of your new keyboard. Therefore, the first part of this manual, contain theoretical notions that we wish you read carefully before proceeding with the actual use of the instrument.
Crumar Seventeen is offered in two variations, one with 73 keys (simply Crumar Seventeen) and one with 88 keys (Crumar Seventeen "Parsifal"). Basically it is the same instrument with the same operating system and this instruction manual will cover them both. There are differences in the pre-installed factory sounds but the main differences between the two can be listed below:

Crumar Seventeen 73 keys	**Crumar Seventeen "Parsifal" 88 keys**
1. Italian 73 notes hammer-action keyboard with two sensors.	1. Italian 88 notes hammer-action keyboard with three sensors.
2. Wooden vintage construction with external tolex.	2. Metal construction.
3. First sound (Bank 1 preset 1) : modeled "tine" piano.	3. First sound (Bank 1 Preset 1) : acoustic grand piano.
4. Dimensions: cm 111 x 38 x 16 - inches 43,7 x 15 x 6,2.	4. Dimensions: cm130 x cm14 x cm38,5 - 51" x 15" x 5,5"
5. Weight: 12 Kg - 26,5 lbs.	5. Weight: 22,5 Kg - 50 lbs
6. PLS-04 (4 metal legs), can be installed in the instrument.	6. PLS-04 (4 metal legs), can't be installed in the instrument.

You will find that some concepts might be repeated more than once, this happens because there could be a mention in a chapter, and a detailed explication in a later chapter.
We recommend you to read this manual with the instrument in front of you, so you can put into practice what you are reading and can have an instant feedback of the notions here explained.

TABLE OF CONTENTS:

CHAPTER 1. INTRODUCTION.

Crumar Seventeen and Crumar Seventeen "Parsifal" are the culmination of years of experience in sound designing, ergonomic and careful research into the uniqueness of the sensations that the musician feels when he approaches a musical instrument. A digital piano often feels cold and sterile, lacking all those nuances typical of the real instrument: our goal, not only with Crumar Seventeen, but also with the entire line of Crumar products, was and still is to fill the gap between a digital musical instrument and the real ones. We believe that this goal has been achieved. The sound and feel is as close to the real instrument as you can get today.

Crumar Seventeen main features:

2 synthesis engines:	**Effects:**	**Other features:**
1. Tine Electric Piano 100% Physical modeled. 2. Sample Playback: Acoustic Grand pianos like D-274, C5, CFX, Reed EP, DX EP, Clavi EP, MKS EP+ AP, Felt piano, Vibraphone, Harpsichord. (Subject to variations). All acoustic and electric piano multisamples don't use loops. Most samples use from 6 up to 12 velocity layers and have sympathetic resonances and modeled noises.	1. FX1: Tremolo, Stereo auto-panner, LFO Wah Wah, Dynamic (auto) Wah Wah 2. FX2: Stereo Chorus, Stereo Flanger, Stereo Phaser 1 (4 stages), Stereo Phaser 2 (6 stages) 3. AMP: 5 models + overdrive 4. DELAY: mono or ping-pong 5. REVERB: Several types + adjustable level and decay 6. EQ: Stereo semi-parametric 3-band	1. 64 presets 2. MIDI OUT and USB-MIDI port 3. internal PSU 4. Easy user interface with 16x2 LCD, preset buttons and integrated editor 5. Balanced output L & R 6. System USB type A port 7. Sustain pedal jack

CHAPTER 2. WARRANTY NOTICE (see also our WARRANTY AGREEMENT AND SOFTWARE EULA DOCUMENT).

- Crumar Seventeen is covered under 12 months manufacturer's warranty.
- Warranty extensions are at the discretion of the retailer.
- Damages caused by misuse, improper maintenance or transportation are not covered by this warranty.
- During the warranty period, the customer is entitled to repair or replacement of any parts considered defective at no charge.
- The possible replacement of the entire product is at the manufacturer's discretion.

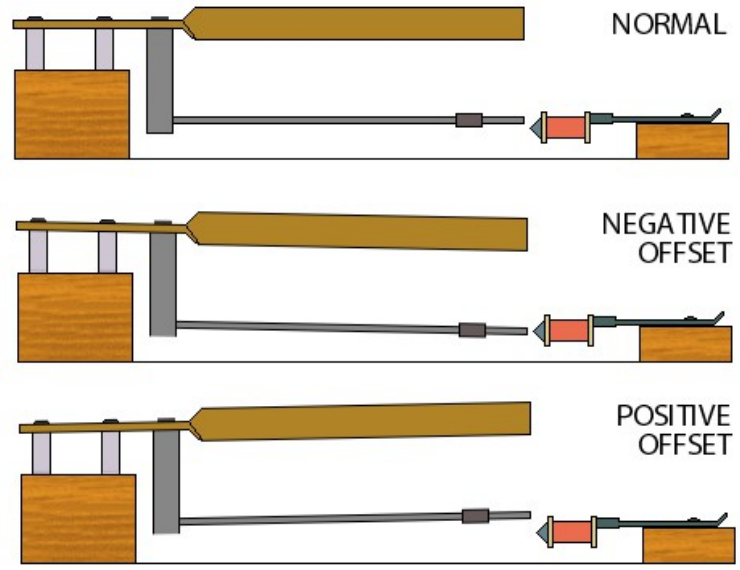
Notes about the main structure of the instrument.

- Do not place heavy loads on the Seventeen top.
- The paint job is subject to wear and is not covered by this warranty. Do not clean with abrasive materials and do not use thinner to clean the metal surface.
- The "Tolex-style" covering is intended for aesthetic reasons and does not offer shock protection. No cuts and bumps in it is covered by this warranty.
- The plastic CRUMAR badge at the back of the instrument (if present) is fragile and can crack if the instrume is set down on an irregular surface.
- All other parts subject to wear (keys, encoders, buttons, switches, plugs) are covered under 12 months warranty.
- Accessories shipped with your instruments for free are not covered by this warranty.

CHAPTER 3. SOUNDS: TINE ELECTRIC PIANO.

This is a simulation of the famous *Rhodes Electric Piano*. It's not specific to a Mark I, Mark II or Mark V model because it can do them all. This is the only sound present on your instrument that is totally physically modeled.
The parameters (showed in the screen as "EP") that you can modify are:

- TYPE: This lets you select one of the 9 different variations.
- WOOD LEVEL: Adjusts the volume of the wooden noises.
- FELT LEVEL : Adjust the volume/action of the felt of the hammers.
- RELEASE LEVEL: Adjusts the volume of the damper noises you can hear every time a key is released.
- HAMMER TIPS : Adjusts the hardness of the hammer tips; a higher value produces a snappier attack, a lower value produces a softer attack. This also affects the amount of metallic component you hear at the attack of each note.
- BITE AND BARK: Adjusts the aggressiveness of the virtual tines. This aspect also varies according the selected variation.
- METALLIC: Adjusts the metallic component of the tine sound.
- RESONANCES: Adjusts the level of the sympathetic resonances. When the sustain pedal is held down, the whole harp is free to vibrate so each key stroke puts the harp into self-resonance.
- PICKUP OFFSET: Adjusts the average offset of the pickups in front of the tines. This parameter affects the balance between the fundamental and its overtones. The picture at the right shows the correlation between the tine, the tonebar and the pickup in a real *Rhodes* piano.



- HI-PASS FILTER: Adjusts the hi-pass filtering, similar to the original "BASS BOOST" knob, which is indeed a passive high-pass filter.
- PEDAL NOISE LEVEL: Adjusts the volume of the noise produced by the

CHAPTER 4. SOUNDS: SAMPLED MATERIAL.

The main sound engine of your instrument is the sample player GSP-01. This player can only play back custom Crumar and GSi sample sets, can't import user created samples and other common formats, but can be updated with new sounds whenever these are released. The sample sets inside Crumar Seventeen and Crumar Seventeen "Parsifal" are mainly dedicated to acoustic grand pianos, electro-acoustic and electro-mechanical pianos, digital pianos from the '80 and the '90. Some combos are also available. They are sampled using a proprietary technology and they don't use loops, most of them use from 6 to 12 velocity layers. Physical modeling are used in order to add resonances and interactions between the strings, pedals and wood. Please check www.crumar.it for sample-sets compatible with your model. **Please note that, sounds that are considered "Factory" on Crumar Seventeen, can be expansions for the Crumar Seventeen "Parsifal" and contrary. This means that some sounds can't be uninstalled or that some sounds, even if you can download them from www.crumar.it, can't be installed in your instrument because they are already present. Sample expansions for Seventeen and for Seventeen "Parsifal" are compatible with Seven.**

The parameters (showed in the screen as "SMP") dedicated to sampled material are:

- LEVEL: Volume of the sample set.
- ATTACK TIME: Attack time relative to the sample-set built-in attack value.
- RELEASE TIME : Release time relative to the sample-set built-in release value.
- FILTER: Modifies the low-pass filter response.
- VELOCITY: Adjusts the MIDI velocity response.
- PIANO RESONANCE: If a piano sample is selected, this parameter adjusts the piano resonance level; does nothing for other kind of samples.
- RELEASE LEVEL: Adjusts the level of the release sample (if any).
- PEDAL LEVEL: Adjusts the level of the pedal noise sample (if any).

CHAPTER 5. EFFECTS.

Crumar Seventeen offers 2 main effects slots plus an AMP simulator, a delay, a reverb and a 3-band semi-parametric equalizer with bass, treble, middle and selectable middle frequency. FX1, FX2 and AMP simulator are displayed in the main screen of the instrument when you are in "performance" mode, showing the kind of effects (if ON) and if the AMP is activated or deactivated.
Here follows a detailed description of each parameter.

FX1 : here you can toggle the effect and choose between Stereo Auto-Panner, LFO Wha-Wha and auto Wha-Wha. The two parameters DEPTH and SPEED are common to all effects in this section.

FX2: here you can toggle the effect and choose between Stereo Chorus, Stereo Flanger and Stereo Phaser 1 & 2 (different phasing stages). The DEPTH and SPEED parameters are common to all effects in this section.

AMP SIMULATOR: this section emulates a number of well known guitar and bass amplifiers, each with overdrive amount. The choice is among a TWIN, an AC30, a JCM, a JAZZ CHORUS (sans the chorus!), and a BASS amp.

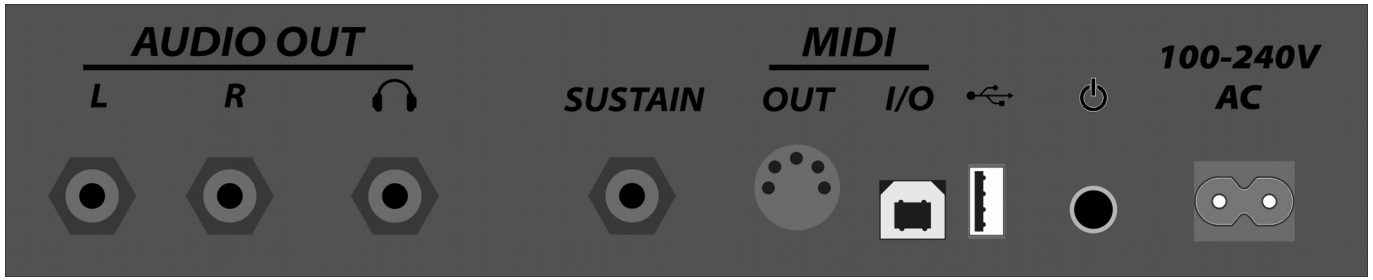
DELAY: this has 4 parameters, LEVEL, TIME, FEEDBACK and the type of DELAY that can be MONO or PING-PONG.

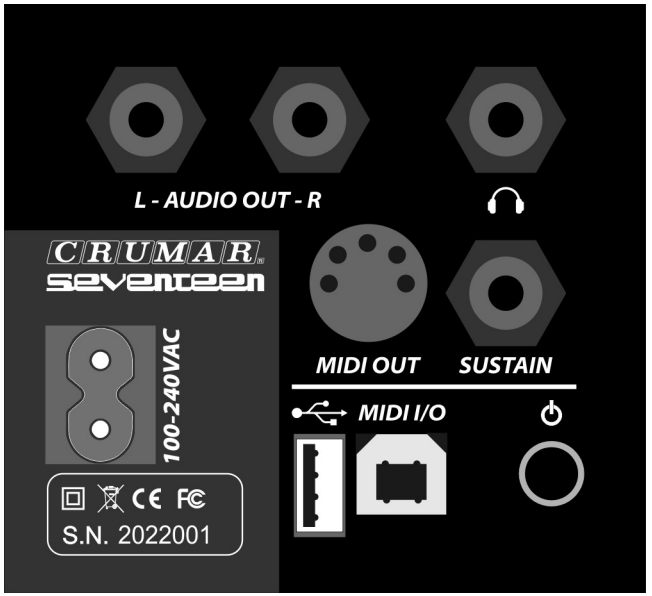
DIGITAL REVERB : this great sounding reverb has 3 parameters you can choose from. LEVEL, DECAY and 9 types of different emulations: DEFAULT, HALL 1 & 2, STUDIO, ROOM, STADIUM, TUNNEL, CHURCH andCATHEDRAL.

EQUALIZATION: standard set of parameters are available for it: BASS, TREBLE, MIDDLE AND MIDDLE FREQUENCY.

CHAPTER 6. CONNECTIONS.

The following pictures shows the connections panel located at the left of the piano (Seventeen) and on the back of the piano (Seventeen "Parsifal"). They offer the same connections and possibilities, they are only arranged in a different positions.



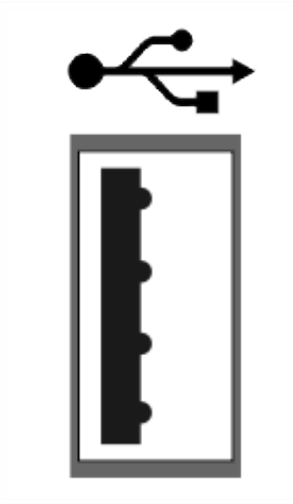


- LEFT OUTPUT, RIGHT OUTPUT: these are 1/4" TRS Jack sockets for the balanced outputs.
- SYSTEM USB: used to accept a USB Thumb Drive to update the firmware, load the sample contents and the presets.
- HEADPHONE: Connect your stereo headphone to this 1/4" TRS Jack socket.
- POWER SWITCH: the fun starts here.
- AC SOCKET: Connect the supplied AC power cable here.
- USB MIDI IN-OUT: this is a USB port that carries bi-directional MIDI-USB connection to your computer.
- MIDI OUT: standard DIN5 MIDI output port.
- SUSTAIN: connect the sustain pedal to this input.

PLEASE NOTE: We suggest to use Crumar original accessories.

DIFFERENCE BETWEEN USB PORTS.

SYSTEM USB - TYPE-A



Seventeen includes a Type-A "host" USB 2.0 port. This is mainly used to update the software in case a new release is available, to load sample content and for import/export presets. **In order to be able to perform these operations you need to plug here a USB dongle drive FAT32 formatted, be sure that the files inside the drive are not zipped.**
Another interesting use for this port is the possibility to connect a "Class-compliant USB-MIDI device", i.e. one of the many MIDI devices that don't need special drivers when they are connected to a computer. Seventeen will automatically recognize USB-MIDI devices and will use them to control parameters or play notes. Any MIDI unit can be connected, for example a keyboard, a pedalboard or a control surface. ***Avoid connecting unsupported devices to these port. This port can supply a max of 250mA of current. We cannot guarantee the full compatibility of equipments connected to this USB port. Seventeen does not support the Crumar WIFI dongle and a WIFI editor is not available for this model. You can edit the instrument using the integrated display and navigation buttons in the control panel. Do not use these ports to charge mobile devices.***

MIDI I/O USB

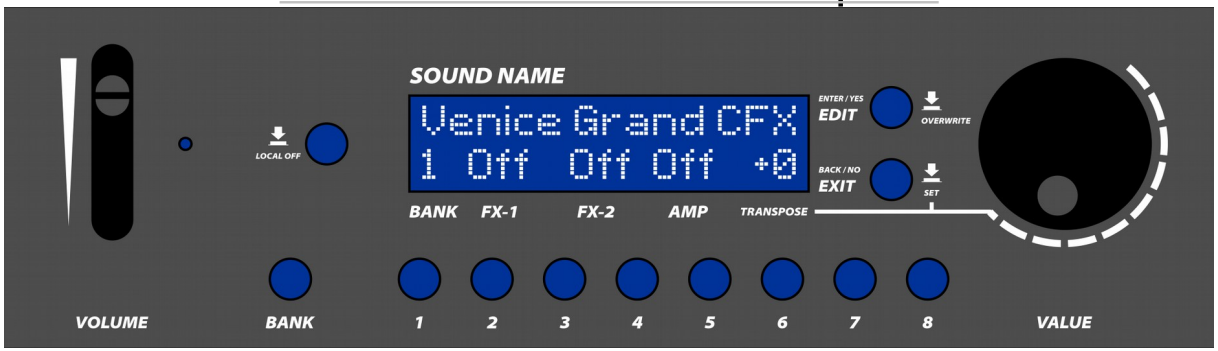
An additional Type-B USB 2.0 port is present: it provides Class-compliant USB-MIDI IN/OUT connection to your computer. Use this port to connect the Seven to your computer software. No drivers are needed for Windows, OS X and Linux. ***Seventeen does not support the online wired USB editor and it is not necessary because you can edit the instrument using the integrated display.***

CHAPTER 7. CONTROL PANEL AND DISPLAY NAVIGATION.

The front panel of your Crumar Seventeen is the main and only interface with the instrument. You can do everything there: from performance controls like volume or presets selection to deep editing of the sounds and global setting of the instrument. The front panels of Seventeen and Seventeen "Parsifal" are a little bit different but they share the same concept. Firmwares are compatible, sampled materials are the same. Regarding sampled materials please note that some sounds that are factory installed on Seventeen can be separate expansions for the Parsifal, it can also be the contrary.

Crumar Seventeen front panel:

Crumar Seventeen "Parsifal" front panel:

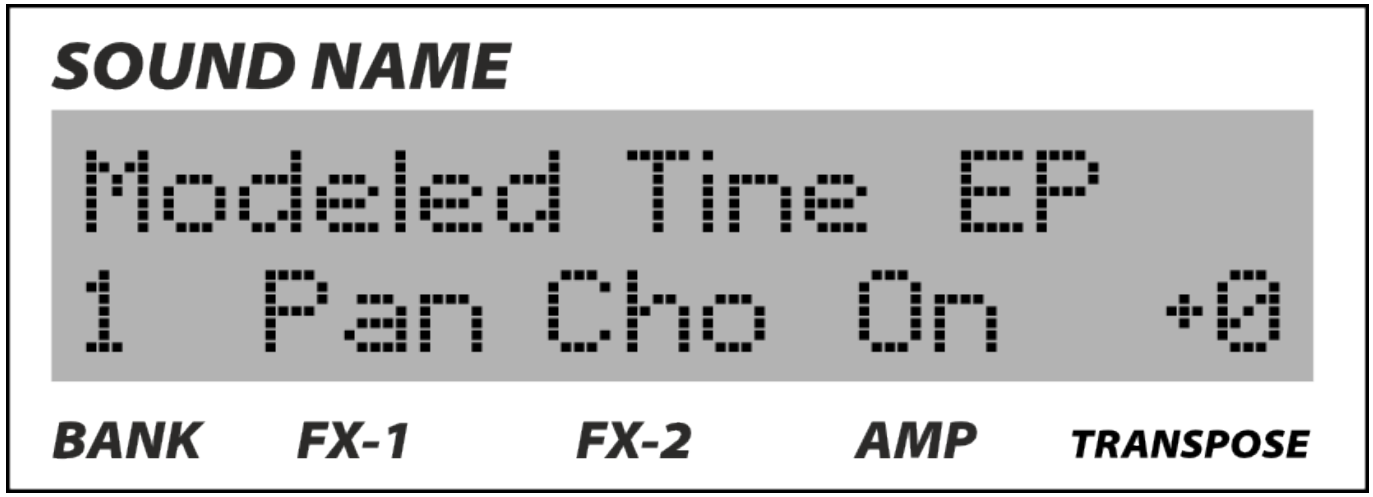


The front panel main differences are:

Crumar Seventeen 73 keys	**Crumar Seventeen "Parsifal" 88 keys**
1. Rotary knob for volume.	1. Linear slider for volume.
2. RGB value encoder with integrated push button.	2. Flat large encoder knob without push button.
3. Push encoder knob for local off.	3. Dedicated illuminated button for local off.
4. Normal 16x2 display RED.	4. Large (JUMBO) 16x2 display BLUE

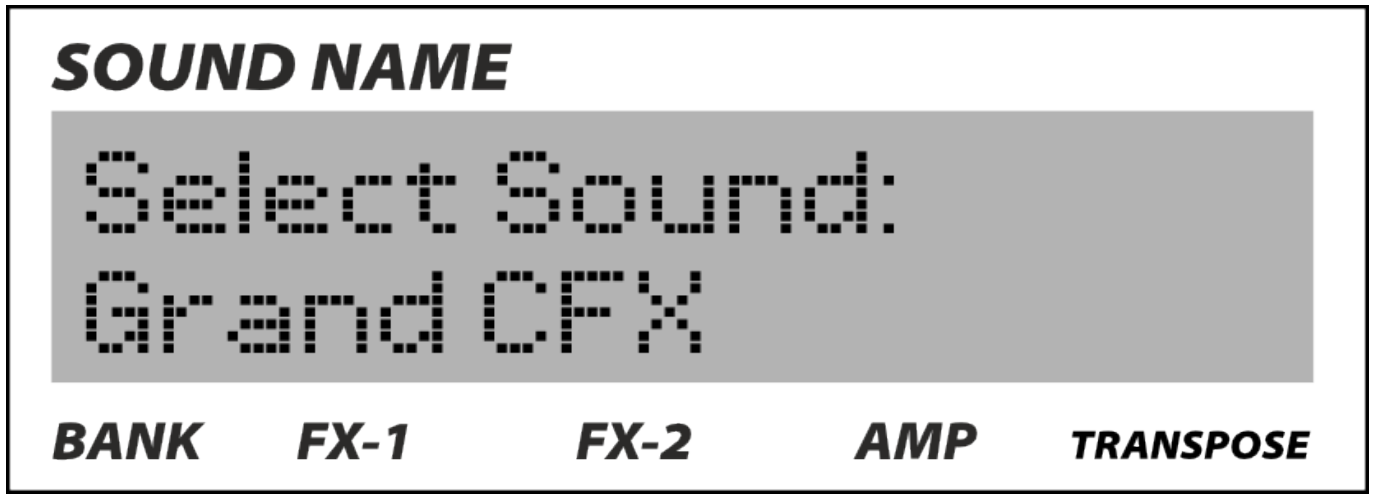
The basic functions of the instruments are explained in the quick guide you received with your instrument. In this manual we are going to deep explore the functions and options of the main menu/display. The navigation of the display is very easy and is performed with the value encoder, the button labeled EDIT - ENTER/YES and the button labeled - EXIT - BACK/NO.
The instrument has 2 statuses: "performance" mode and "edit" mode. When you power the instrument on and when you are not in edit mode, you are in "performance" mode, this is the normal status of the instrument, when you play, when you are "performing". The other status is when you are entering the "edit" mode. This mode is used for changing settings of sounds, effects, global settings like MIDI, import and export presets etc etc. Of course even if you are in "edit" mode, the instrument can still emit sounds, you can play it and, actually, this is sometimes necessary to check the differences of the various settings for example between one effect or another.

Performance mode



In "performance" mode, in the upper part of the screen, the display will show the name of the sound you are using: if you switch to a preset that is using another sound, that name will change. If you are in "edit" mode, you select another sound and then you exit from the "edit" mode with the new sound selected, the screen will still show the name of the old sound until you save the new preset. In the lower part you can see the number of the bank you are now, the status of the FX-1and FX-2 (if they are ON, it will also show the type of effect), the status of the AMP simulator (ON or OFF) and the amount of transpose.
The transpose is considered a "performance" function, like the volume for example, that's why you don't have to enter the "edit" mode in order to modify it, just hold the EXIT button, turn the value encoder and you will see the amount of transpose changing there. The range is +/- 7 semitones.

Edit mode: first screen.

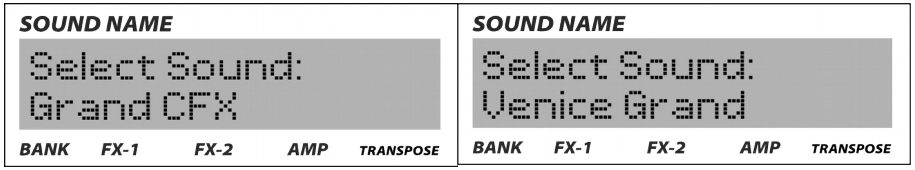


To access the "edit" mode, just press the "EDIT" button: the first screen that will appear is the selection of sound. In order to navigate the other options of the "edit" mode, just scroll the value encoder; instead, if you would like to enter that specific section (in this case the selection of sound), just press the EDIT button again (Enter): now moving the encoder knob will scroll through the different sounds available. To confirm press "EDIT" (enter/yes) again. If you want to go back just press the "EXIT" button (back/no). If you would like to completely exit the "edit" mode and go back to "performace" mode, simply use the EXIT button again. The entire menu works exactly like that, very simple.
Every setting has its own value and these can be expressed in different ways: they can be "names", text values, "OFF and ON", values between 0 and 127, values expressed in Hz or milliseconds or decibell, values typical of MIDI like for example number of channel; some important selections need a double confirmation.

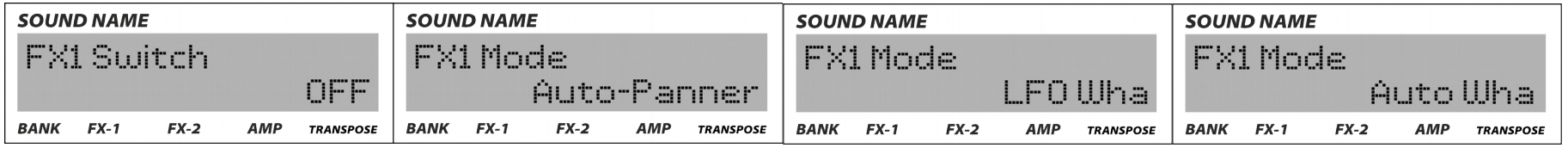
Basically the "edit" mode can be divided into 8 parts:

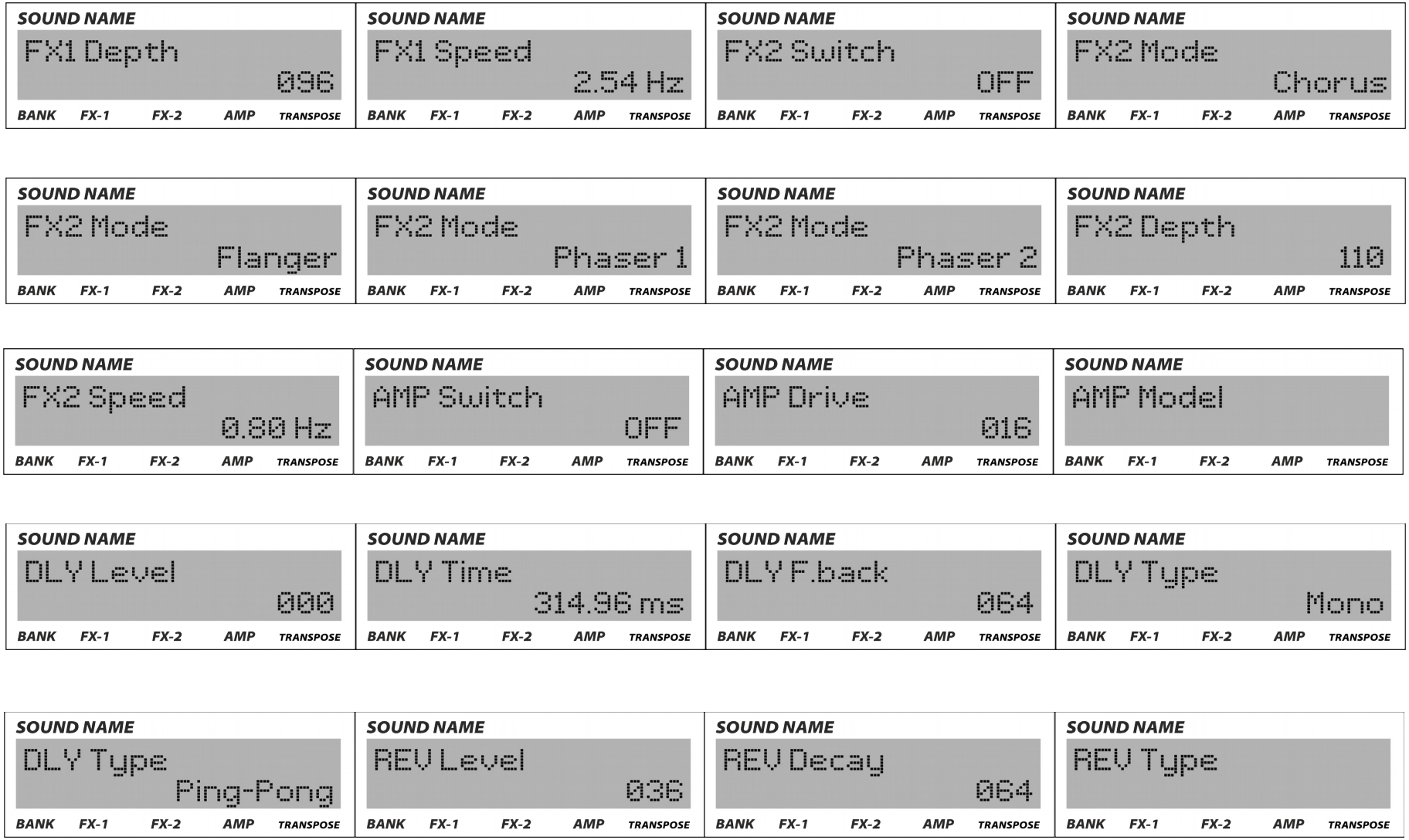
1) Sound selection.
2) Effect section: FX-1, FX-2, AMP, DELAY, REVERB, EQUALIZATION.
3) Tine piano section (EP).
4) Sample section (SMP).
5) Presets management section.
6) Global settings: MIDI, VELOCITY, TUNING, LIGHT INTENSITY.
7) Expansions management.
8) System settings: FIRMWARE UPDATE, FACTORY RESET.

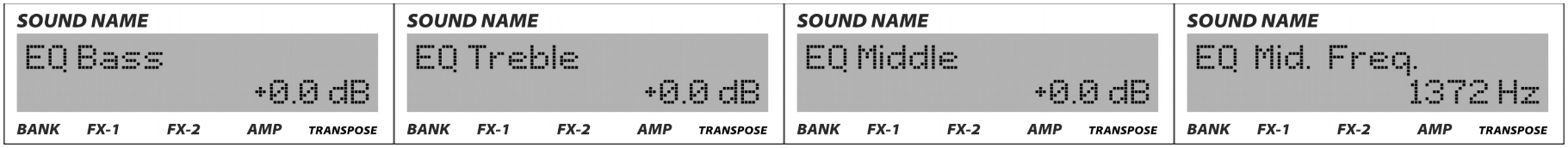
1) Sound selection: screen examples



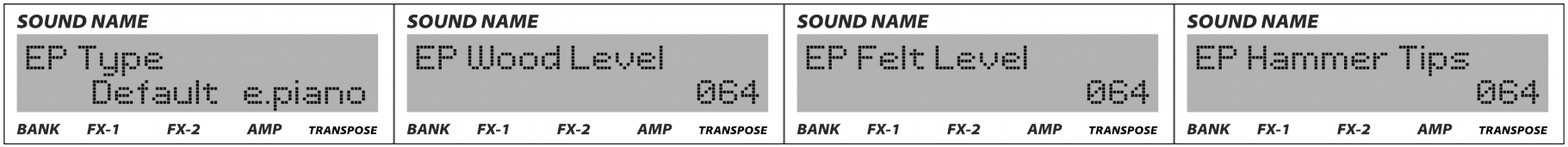
2) Effect section: pages and options.

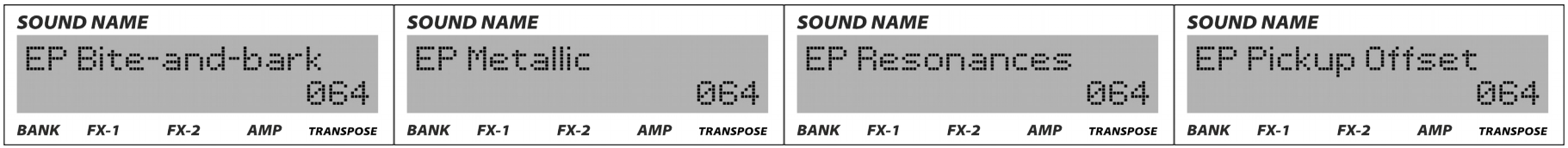


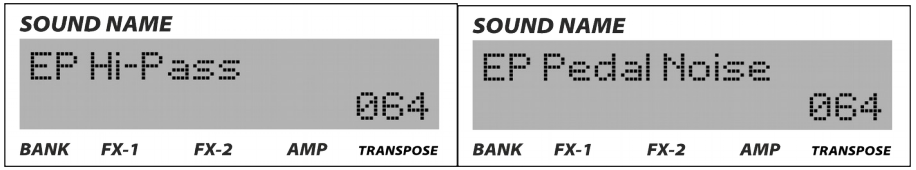

SOUND NAME
FX1 Depth 096
SOUND NAME
FX1 Speed 2.54 Hz
SOUND NAME
FX2 Switch OFF
SOUND NAME
FX2 Mode Chorus
SOUND NAME
FX2 Mode Flanger
SOUND NAME
FX2 Mode Phaser 1
SOUND NAME
FX2 Mode Phaser 2
SOUND NAME
FX2 Depth 110
SOUND NAME
FX2 Speed 0.80 Hz
SOUND NAME
AMP Switch OFF
SOUND NAME
AMP Drive 016
SOUND NAME
AMP Model
SOUND NAME
DLY Level 000
SOUND NAME
DLY Time 314.96 ms
SOUND NAME
DLY F.back 064
SOUND NAME
DLY Type Mono
SOUND NAME
DLY Type Ping-Pong
SOUND NAME
REV Level 036
SOUND NAME
REV Decay 064
SOUND NAME
REV Type
BANK FX-1 FX-2 AMP TRANSPOSE



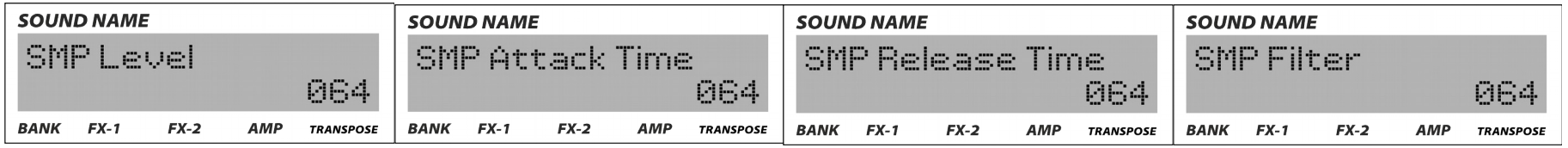
3) Tine piano section (EP): here you will find all the parameters of the physical modeled tine piano.



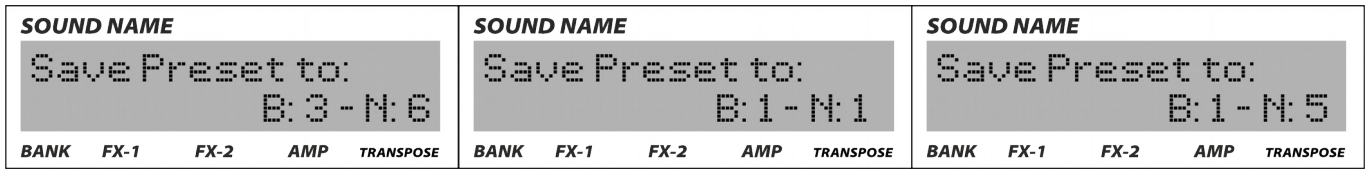




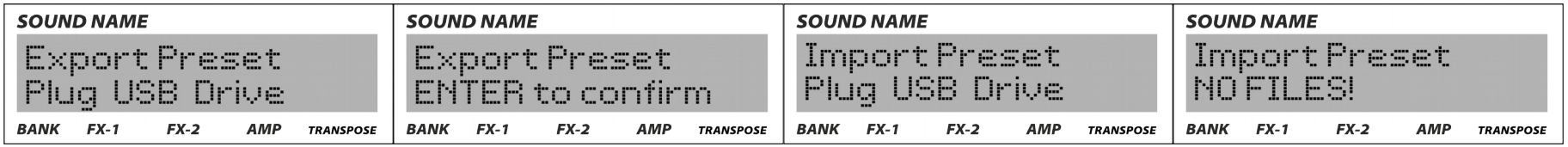
4) Sample section (SMP): these are all the settings you can modify for the sampled sounds.



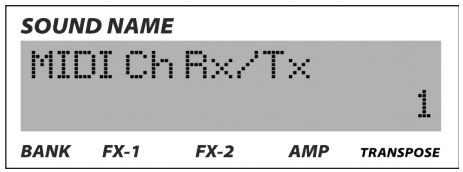
5) Presets management section: in this section you can move presets to difference locations (bank and preset number), store custom modified sounds, export presets on a USB dongle connected to the system port or import from it. For re-allocate the presets, overwrite and existing one or simply to save a new one you have to go in the page of the menu called "Save Preset to:" You first have to select the bank number (B) and then the number of the preset (N). There's a quick way to "overwrite" the existing preset without entering this page of the menu: while in "performance" mode, just press and hold the "EDIT" button for a few seconds.



For import/export operations you first need to plug a compatible USD drive to your instrument, and a confirmation is asked. If the USB drive is not found or the files are not compatible, the display will return an error message:

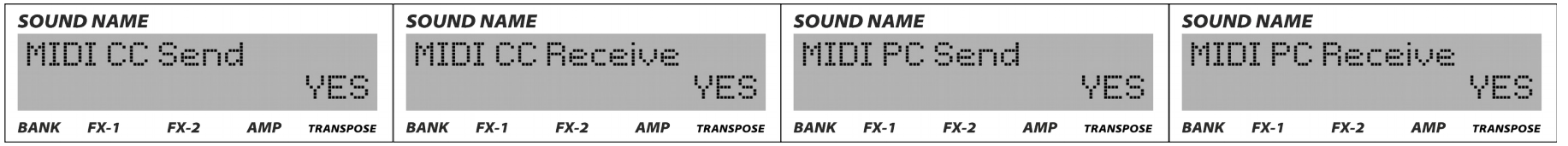


6) Global settings: here you can modify the MIDI settings of your instrument: the first option is the MIDI receiving and trasmitting channel. The instrument can't send and receive MIDI datas from different channels, you can choose from Channel 1 to Channel 16.

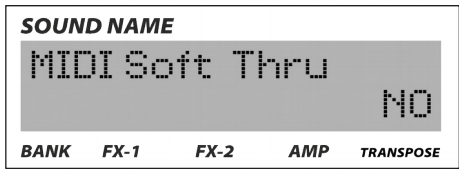


Seventeen has a dedicated button in the panel for MIDI LOCAL OFF: when this function is engaged, the instrument does not produce sound anymore and it will start sending MIDI messages on a MIDI channel that you can choose between 1 and 16.

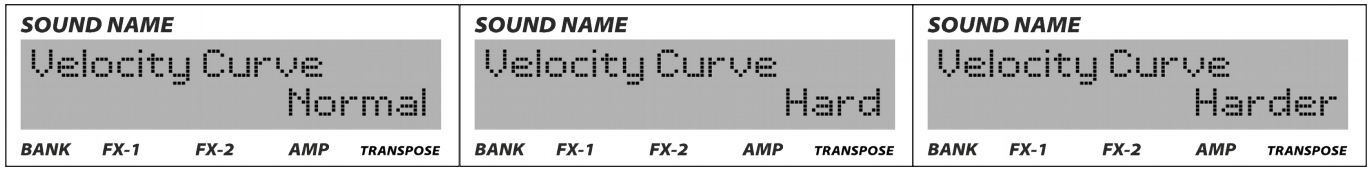
You can also choose if you want your instrument to send and receive MIDI control messages and MIDI program change messages (see MIDI section at the end of this manual for details).



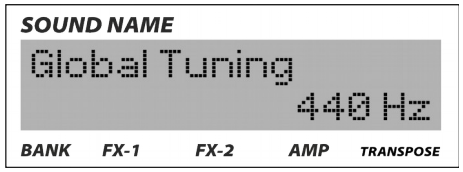
The last MIDI option is the "Soft Thru". when "YES" is selected, every MIDI messages received by the unit from the MIDI USB PORT IN will be forwarded to the MIDI OUT port and the MIDI USB PORT OUT. When "NO" is selected, the same messages will of course reach the unit but won't be forwarded in the MIDI OUT ports.



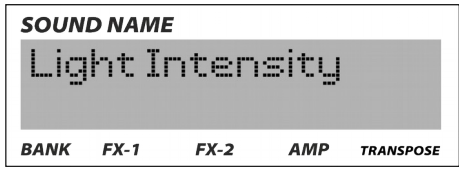
Seventeen has 3 different velocity curves you can choose from: the integrated keyboard will respond differently when you play it if you play softly or heavily: choose the one that will fit more your playing style.



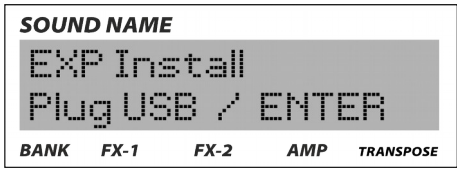
Tuning option: standard is 440 Hz



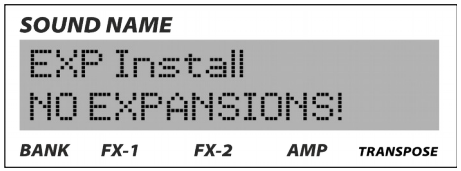
You can select 5 different patterns of the light intensity of the display and the leds in the front panel: normal, medium, soft, dark and bright.



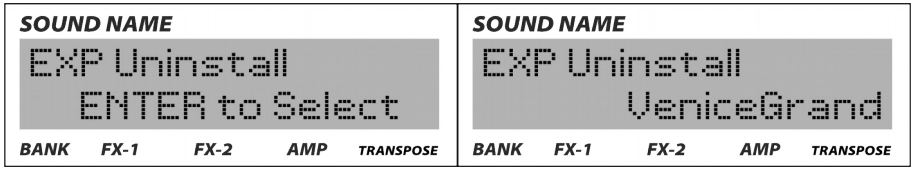
7) Expansions management: expansions or sampled content are additional sounds that can be imported into your Crumar Seventeen. We regularly release new sounds (please check www.crumar.it for this) and these can be imported in your instrument (if not already present). Please note that the instrument has "Factory" sounds that, even if they are indeed expansions, can't be removed from the instrument because they are stored inside the system.
If you want to install a new sound in your Crumar Seventeen, the first thing you have to do is to download the sound on your computer, unzip the file and transfer it to a compatible USB drive. Plug that USB drive to the system USB port of your instrument, enter the "edit" mode and reach this page:



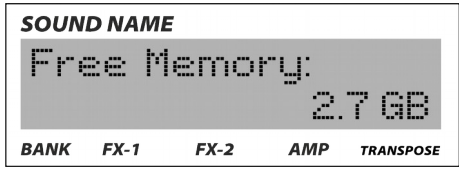
If the file is corrupted, still zipped, non-compatible or if the unit is unable to read from that USB drive, you will receive an error message:



If you want to unistall sounds, you need to go in the section of menu dedicated to EXP unistall: a confirmation message will appear:



The space available for the expansions is not unlimited, there's why a page in the menu is present showing the amount of space left (free memory).

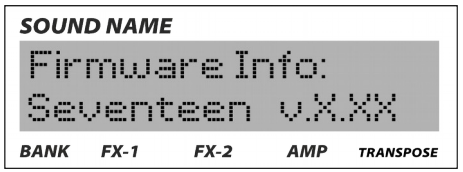


In case the free memory is not enough to install all the expansions you would like to have, you need to unistall one or more sounds to create additional space. **Please note that, sounds that are considered "Factory" on Crumar Seventeen, can be expansions for the Crumar Seventeen "Parsifal" and contrary. This means that some sounds can't be uninstalled or that some sounds, even if you can download them from www.crumar.it, can't be installed in your instrument because they are already present. Sample expansions for Seventeen and for Seventeen "Parsifal" are compatible with Seven.**

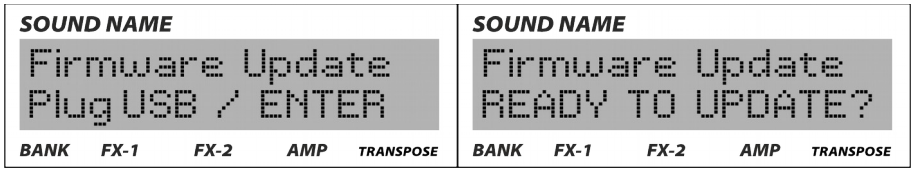
8) System settings: FIRMWARE UPDATE, FACTORY RESET.

Please note: the operations you can do here can drastically modify the behaviour of your instrument. For example a factory reset will completely cancel user sounds and settings, a firmware update can change the working logic of your instrument. Always read the documentation that is provided together with the firmware update before performing it. These operations are usually irreversible.

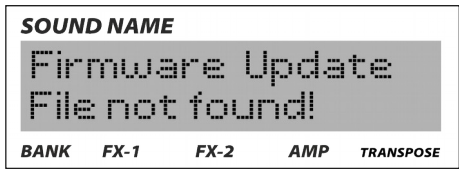
In the fist page of this section, you can see the actual firmware revision installed on your Seventeen (vX.XX is the firmware version):



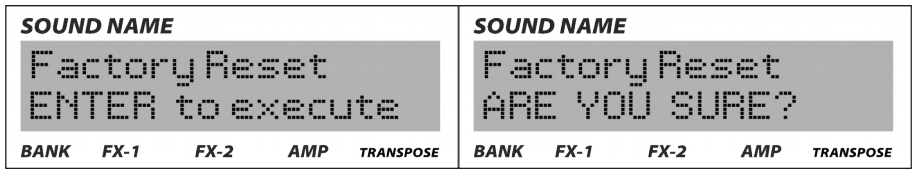
If a new firmware update is released for your Crumar Seventeen, you have to first download it from www.crumar.it on your computer, unzip the file and transfer it to a compatible USB drive. Plug that USB drive to the system USB port of your instrument, enter the "edit" mode and reach the firmware update page. A confirmation is required.



If the file is corrupted, still zipped, non-compatible or if the unit is unable to read from that USB drive, you will receive an error message.



Factory reset: the name says it all. With this option, your instrument will revert back exactly like when it left the factory. Every user-defined preset, setting, expansion installed will be erased. The only exception is the firmware. If you previously installed a new firmware update, the new one will stay in the instrument also after the factory reset. This is a irreversible operation, that's why a confirmation is asked.



CHAPTER 8. MIDI SPECIFICATIONS.

Please note: The keyboard of Seventeen "Parsifal" is using the three sensors technology, this means that every key has three sensors instead of the usual two. When you connect your instrument to an external sound module or keyboard or to a computer via MIDI or USB, normally these devices (receivers) are able to manage those MIDI NOTE ON/OFF messages even if they are not exactly "standard" : modern devices can handle them. We can not guarantee the perfect MIDI compatibility with every device in the market, especially if we are talking about old ones.

The instrument is capable of sending and receiving MIDI messages with these remarks:
- It receives NOTE messages from NOTE 21 to NOTE 108.
- Does not handle PITCH BENDER messages.
- Does not handle AFTERTOUCH messages.
- Does not send and receive NRPN, RPN and Sysex messages.
- The send/receive MIDI channel is unique and selectable (see page 20).
- PROGRAM CHANGE messages: you can decide if the instrument must receive and send them (see page 21). On Seventeen PROGRAM CHANGE messages will handle presets.
- CONTROL CHANGE messages: you can decide if the instrument must receive and send them (see page 21 and see the following table for CONTROL CHANGE numbers).

PARAMETER NAME	C.C. NUMBER
Volume	7
Sustain	64
FX1 Switch	20
FX1 Mode	21
FX1 Depth	22
FX1 Speed	23
FX2 Switch	24
FX2 Mode	25
FX2 Depth	26
FX2 Speed	27
AMP Switch	28
AMP Drive	29

PARAMETER NAME	C.C. NUMBER
AMP Model	30
DLY Level	32
DLY Time	33
DLY F.Back	34
DLY Type	31
REV Level	91
REV Decay	92
REV Type	94
EQ Bass	12
EQ Treble	13
EQ MIddle	14
EQ Mid. Freq.	15

CHAPTER 9. GENERAL SPECIFICATIONS.

- Power rating: 100V AC ~ 240V AC
- Output level: +4 dBu (~ +10 dBu)
- Headphone output max load: 32 ohm

Crumar Seventeen 73 keys:

- Dimensions : 111x38x16 cm 43,7x15x6,2 inches
- Weight : 12 Kg 26,5 lbs

Crumar Seventeen "Parsifal":

- Dimensions : 130x14x38,5 cm 51x15x5,5 inches
- Weight : 22,5 Kg 50 lbs

Last update: March 20 2024