STUDIOLOGIC

NUMA

It's a feel Thing

Manual Version 1.2

Important Safety Instructions

DANGER! High Voltage

Risk of electric shock
Do not open chassis. No user serviceable parts inside.
Refer service to qualified service staff only.

Mains

Only use the proper adapter (click-on) for main power supply.

Humidity:

To reduce the risk of fire or electric shock do not expose this device to rain or moisture. Never place containers with liquid on the unit. Do not use this product near water, e. g. swimming pool, bathtub or wet basement.

If this device is moved from a cold place to a warm room condensation can occur inside the unit. To avoid damage please allow the unit to reach room temperature before switching on.

Installation

Always use a stable rack to place the keyboard on.
Take care of size and weight.

Cleaning / Maintenance

Never use any aggressive detergent. Surface may become stained.
We recommend a slightly moist micro-fiber-cloth.

Only use accessories that are specified by the manufacturer. Follow the instructions in the manual. Warranty void if unauthorized work is executed to the NUMA.

Read the entire manual. There you find all the information needed for using this device.

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Progressive Grand Hammer

The new NUMA from Studiologic® plays like a Grand Piano. Our most sophisticated graded touch action with an increased throw gives you an absolute realistic feeling.
All 88 keys use full solid body material and are perfectly weighted. The action is graded, heavier at the bottom , and a little lighter at the top.
The keyboard can be divided into 4 separate zones, each with its own set of parameters.

Easy Control System
Play Mode

Editing is handled by the Easy Control System with a backlit LCD display and touch-sensitive pads. ***Play*** Mode gives you direct access to the most important parameters - perfect for quick changes on stage.

Edit Mode

Edit Mode offers more detailed changes to all parameters that can be saved in 65 patches (presets).

YouPlay Mode

What's really unique about the NUMA is the so called ***YouPlay*** Mode, which allows you to create your own velocity curves and save them to 15 presets. These customized curves are available to every patch then.

Variable Slide-Cover
Aluminum made

The brushed aluminum surface that curves round the rear panel can be slid backwards to give you an extra depth of the top surface. Suitable for the included music stand or any other device.

Interactive NUMA
USB <> Computer

(starting 7.2008)

Due to the integrated USB connection, the NUMA can communicate with a computer. It offers two modes of operation: With USB MIDI the NUMA is recognized as a „USB-Audio-Device" by the computer. More interesting is the USB Virtual Com mode, enabling the computer to edit and store presets. Even an update of the NUMA operating system is possible.

Connections

1 x MIDI Out (DIN 5-pin)
2 x Pedal (TS-Jack)
1 x USB
1 x Power Supply (9 V– / 500 mA)

Scope of supply

NUMA keyboard
External power supply
Footswitch VFP-1
Perspex music stand
User manual

Operation of the NUMA is done with 4 touch-sensitive pads, a virtual dial and the LCD display.

Image 1

Control Elements

While in ***Play*** ore ***Edit*** Mode, these pads select the single pages for different parameters.
Touching both simultaneously activates the ***Edit*** Mode.

Navigation

Selecting a patch in ***Play*** Mode is done with these two pads. In ***Edit*** Mode they select the sub-pages.

Navigation

Control Keys 1-4 activate the corresponding parameter above the pad. For example Zone, Reset, Store, No or Yes. Touching both ❶+❷ simultaneously activates the ***YouPlay*** Mode. The combination of ❸+❹ initializes a reset of all MIDI data.

Control Keys
❶ ❷ ❸ ❹

The Virtual Dial selects the patches in ***Play*** Mode and changes the selected parameter in ***Edit*** Mode.

Virtual Dial

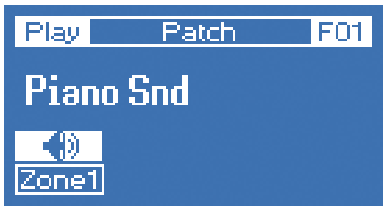


Image 2

Image 3a

Image 3b

After power-up (Image 2) the NUMA automatically loads a patch in ***Play*** Mode. This patch is the last one used in a saved Edit-Mode (page 13).

***Play*-Mode**: Possible changes

Loading Patches
Using the pads ▲ ▼ (Image 3a) or the Virtual Dial ◎ (Image 3b) you can select single Patches. The sequence is in numerical order, Factory-Patches (F01 up to F05) are followed by User-Patches (001 up to 064). Only already used patches are displayed. This prevents you from searching through not used patches.

Note: Patches are immediately active, no need for an extra confirmation!
Factory-Patches cannot be erased.

Zones On/Off
Control Keys ❶-❹ can be used for direct access to Zone On/Off. The corresponding state is illustrated through an active (on) or cancelled (off) loudspeaker.
Image 4 shows:

- ***Play*** Mode
- Factory-Patch F04
- Zone 2 off
- Zone 3 off

Quick-Edit of Patches (Live-Edit)
The arrow pads ◁ ▷ give you access to the basic parameters of a patch and the particular zones.
The following parameters can be changed:

- Patch Midi
  Choosing the MIDI-Channel (1-16)
- Patch Program
  Choosing the Program (0-127)
- Patch Volume
  Adjusting the volume (0-127)
- Patch Transpose
  Adjusting the pitch (-24 bis +24)

All settings are separate for each zone and are only effective for the active patch.

Note: Changes made in ***Play***-Mode are not saved!
Permanent changes can only be made in ***Edit*** Mode.

Example:

Choose patch F04 with the pads ▲▼. Try to switch the respective zone on and off, using the Control Keys ❶-❹.
At last, leave On Zone 1 and 4 (Image 4).
Now touch pad ▷:
The display changes the upper row to Patch Midi, the line above the zones shows the respective MIDI channel.
Now touch pad ❹ two times.
The display (Image 5) shows Patch Volume in the upper row. Now you can change the volume of all zones with the Virtual Dial ◎.

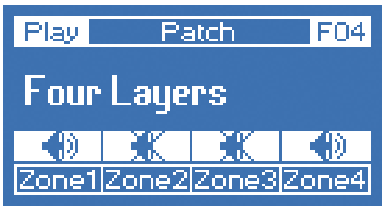


Image 4

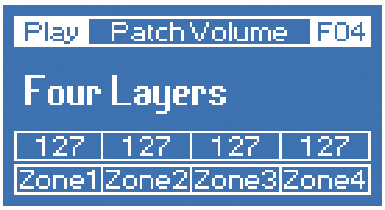


Image 5

If you want to change the volume of zone 4 only, then you have to select it with pad ❹ first. The display now pictures Zone Volume and zone 4 gets activated (Image 6). Volume of zone 4 can be changed with the Virtual Dial ◎ . Deselecting zone 4 results in changes to all zones at once.

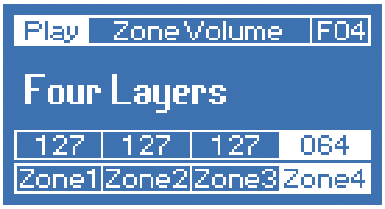


Image 6

This procedure is the same for all other parameters. Feel free to try different setups (Image 7-8).

Note: Do not forget that changing the patch-preset resets all currently made settings!

How to store changes >> Page 12

To get out of the Live-Edit-Mode - just touch one of the pads ▲▼.

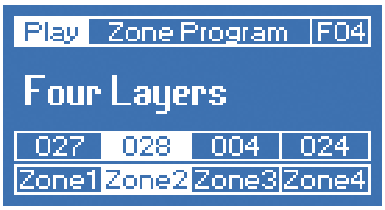


Image 7

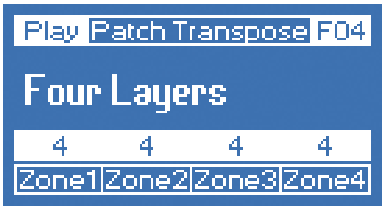


Image 8

Edit Mode

In Edit Mode you can make very detailed changes and create new patches.
These are the single parameters, available for each zone:

Page 9

- **Midi**
  Selecting the right MIDI-Channel (1-16)
- **Program Change**
  Assigning the sounds of external Sound modules

Page 10

- **Key Range**
  Adjusting the Zone-Area (A0 - C8)
- **Volume**
  Setting up the volume(s) (0-127)
- **Transpose**
  Adjusting the pitch (-24 bis +24)
- ***Play* Mode**
  Selecting the basic mode
- **Shapes**
  Setting up the dynamics envelope

Page 11

- **Wheel Control**
  Choosing the operation of the modulation-wheel
- **Aftertouch Control**
  Setting up the Aftertouch details

Page 12

- **Control Jack 1**
  Choosing the operation of Control Jack 1
- **Control Jack 2**
  Choosing the operation of Control Jack 2
- **Store**
  How to save changes and creating a new patch

Page 13

- **Patch Name**
  How to edit the patch name
- **System**
  Displays the system wide settings:
  Software Version, LCD-Contrast, sensitivity and speed of the Virtual Dial.

Edit Mode
is activated by touching both pads ◁ ▷ simultaniously. The display now shows Edit, the respective parameter and the patch name.
Selecting pages is handled by the pads ◁ ▷, navigation on a single site is with touching △▽, choosing the zones is with the 4 Control Keys, parameter changes are done with the Virtual Dial.

All following examples and images are based on factory patch F04.

Touching both ◁ ▷ gets you out of the ***Edit*** Mode again - don't forget to save your changes!

Midi

This is where you can setup the right MIDI-Channel for every zone. Range is from 1 to 16. If you choose „0“, the zone gets inactive and won‘t be displayed on other pages (Image 9).

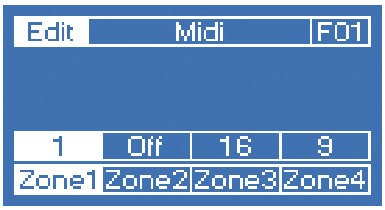


Image 9

Program Change

Assigning the preset of an external sound generator to a Numa zone is done with the parameters Program Change, LSB Bank Select und MSB Bank select.
Three sub-pages (Image 10-11-12) can be selected with pads ▲▼ and displayed in the top row. Values are „Off“ and „0“ up to „127“.
Please check the manual of your external sound-module to find out which sound is on which preset.

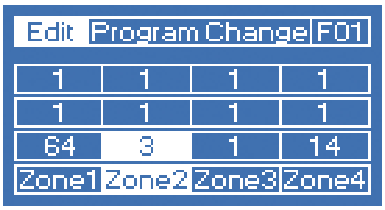


Image 10

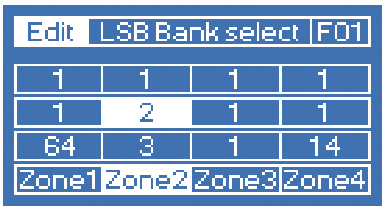


Image 11

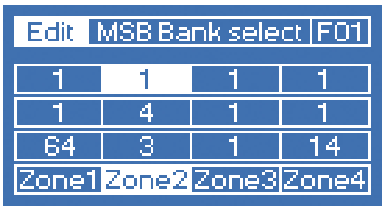


Image 12

Key Range

It´s very easy to split the Numa keyboard into 4 separate Zones. Choose one zone with the corresponding Control Key ❶-❹ . Now press the first and the last key of the desired Range - done.

The display gives you a feedback of your selection (Image 13). Range is from A0 up to C8.

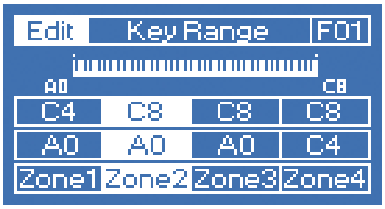


Image 13

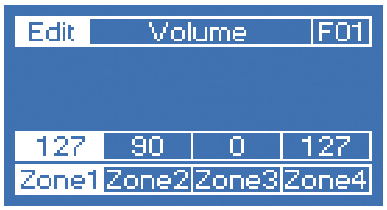


Image 14

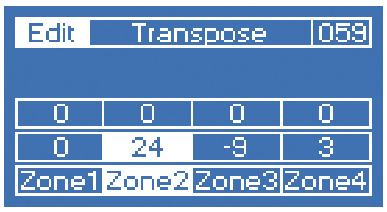


Image 15

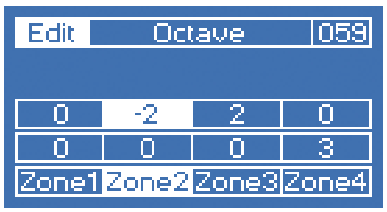


Image 16

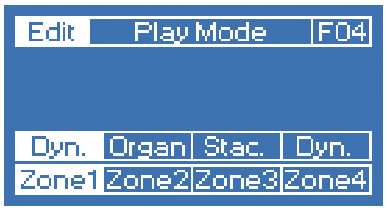


Image 17

Image 18

Volume

On this page you can adjust the Volume of each zone. The range is „0“ up to „127“ (Image 14).

Note: Changing one parameter for all zones, at the same time, is not possible in ***Edit*** Mode.

Transpose/Octave:

This Page offers you two different settings:
Transpose (Image 15) for changing the pitch for ± 2 octaves in small 48 steps and the direct selection (Image 16) in fixed octave steps.
Selecting a sub-page is handled via the pads▲▼.
Note: Both parameters can be combined but, the maximum change is ± 2 Octaves.

Play Mode

This mode enables you to assign an individual dynamic to each zone: Dynamic, Organ and Staccato (Image 17).
You can find detailed settings on the next pages.

Shapes

Here you can do the fine tuning of the three ***Play*** Modes (Image 18):

- **Dynamic**
  Three factory presets (Soft, Medium, Hard) and 15 User-Presets are possible.
- **Organ**
  Only one setting without dynamic.
- **Staccato**
  Three factory presets (Soft, Medium, Hard) and 15 User-Presets are possible.

The main difference between „Dynamic“ and „Staccato“ lies in the use of different sensors for the dynamic measurement. The Note-Off-Command for the „Staccato-Setup“ is initiated a little earlier and the dynamic is therefore much faster. This results in a more percussive, even a little aggressive Sound.

How to create your own dynamic curves is explained on page 14.

Wheel Control/Polarity

This page for the Modulation-Wheel is divided in two sections: Wheel Control and Polarity (Image 19-20). The selection is handled via the two pads ▲▼, and - as always - via the Virtual Dial ◎ .

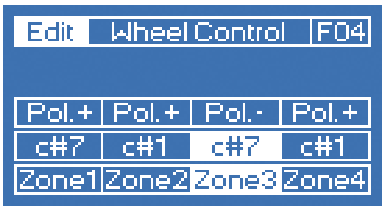


Image 19

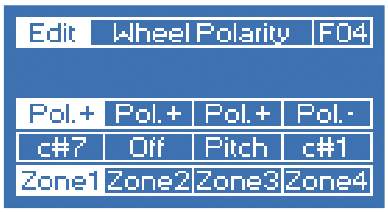


Image 20

Wheel Control enables the following parameters:

- **Off**
  Modulation wheel is out of operation
- **Pitch**
  Make pitch changes with the modulation wheel
- **C#0-C#127**
  Moving the wheel generates a control change command from 0 up to 127

The Polarity parameter defines the direction of the changes. Pol.+ for an upward change, or Pol.- for a downward change.

Note: Any changes will take place only after a full movement of the Modulation-Wheel.

Aftertouch Control / Polarity

Again you can find two settings here for Aftertouch control (Image 21) :

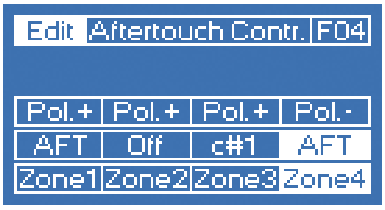


Image 21

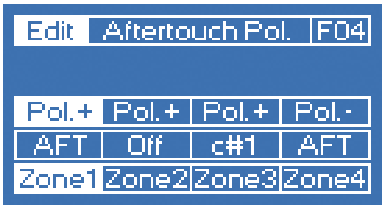


Image 22

- **Off**
  No Aftertouch at all
- **AFT**
  This activates the standard aftertoch of the external sound module.
- **C#0-C#127**
  The changing parameter can be assigned to a control change command.

The direction of the change is controlled with Aftertouch Polarity (Image 22).

Note: The Aftertouch function is monophon.

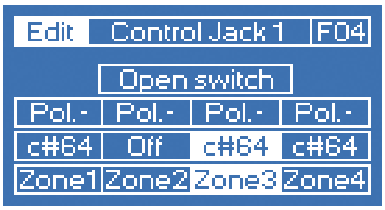


Image 23

Jack 1&2 Conrol / Polarity / Type

There are three separate pages for setting up the foot-switches. Choose it with ▲▼, change it with ◎ .

The Control parameter (Image 23) enables you to assign a distinctive controller to every zone, activated by operation. Data range is „Off“ and C#0-C#127.

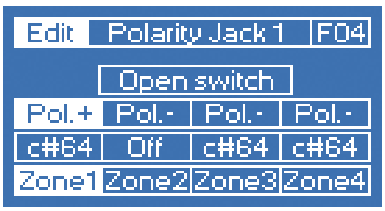


Image 24

The Polarity (Image 24) parameter changes the action of the switch from positive (+) to negative (-). This makes it easy to use a closed switch as an open one.

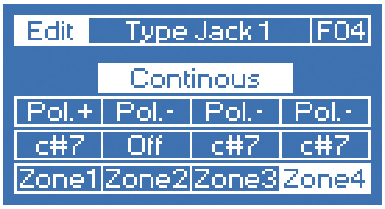


Image 25

On the page Type Jack (Image 25) choose which type of switch you use:

- **Continuous**
  Like a volume Pedal
- **Open switch**
  Open in static condition
- **Closed switch**
  Closed in static condition

Image 26

Store

Here you can find everything you need to manage and store Patches 1-64.

This is how it works:
Choose a patch with the virtual dial ◎ (Image 26) and select between Save (❶) und Erase (❷). Confirmation is done via touching Yes (❹) - See Image 27.

Image 27

Note: There‘s a security query before final save or erase (Image 28).

Image 28

Patch Name

This page (Image 29) is for renaming patches. Select the letter in the patch name you want to change with the Function Keys ❷ and ❸. Then choose a New letter with the Virtual Dial. Function Key ❶ (cap) switches between small and capital letters. When you´ve finished the entry, choose Yes (❹). Confirm the upcoming security query with Yes and that's it.

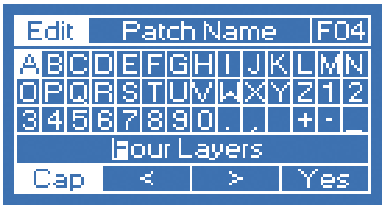


Image 29

Note: No extra store command necessary.

System

Here you can adjust all common parameters to your personal needs (Image 30).
LCD Contrast controls the contrast of the display in a range from -64 up to +64.
The Dial Sensitivity (1-10) is for the sensitivity of the Virtual Dial ◎ . Parameter Dial Velocity (1-20) controls the speed of the Virtual Dial ◎ .

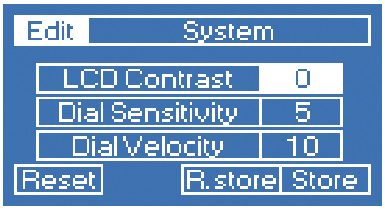


Image 30

ATTENTION: Touching pad Reset ❶ brings the whole system back to factory start. All your settings and patches are erased - irrevocably!!

Touching PC starts a USB connection between the NUMA keyboard and a computer. There are two different modes:

- **USB Connection - Midi** (Image 31)
  Transferring MIDI Data from the PC to the MIDI port of the NUMA
- **USB Connection - VCom** (Image 32)
  This enables a communication between NUMA and PC with the software „Interactive NUMA". Possibilities range from backup/restore to editing patches and shapes in realtime.
  PC Monitor and Keyboard can be used instead of the NUMA display and capacitive keys.

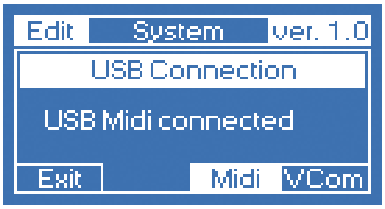


Image 31

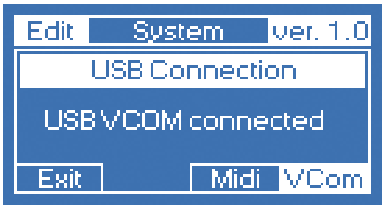


Image 32

Restore ❸ enables a restart under factory condition without erasing user patches and shapes (Image 30).

Touching Store ❹ saves all your system changes to memory, including the patch that comes up when you turn the NUMA on. This is the patch you started the ***Edit*** Mode from (Image 30).

Image 33

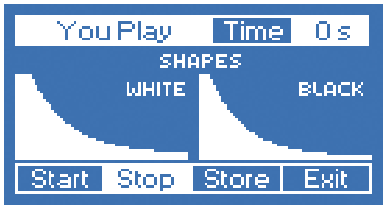


Image 34

Image 35

Image 36

Image 37

YouPlay

With ***YouPlay*** Mode you get the exciting possibility to generate and Store your own dynamic curves. This is how it woks:

Press Function-Key ❶ + ❷ simultaneously and hold them for a little while. The display now switches to ***YouPlay*** Mode (Image 33).
Now press Start ❶ and play a melody – there is a maximum of 30 seconds. The display shows the remaining time in the upper right corner.
When time is expired or you pressed Stop ❷ , a new dynamic shape is displayed (Image 34).
These shapes can be stored in 15 memories (Image 35):
Choose one with the Virtual Dial ◎ .
Activate name entry with touching pad ▷. Function keys ❷ and ❸ now show the arrows for navigating in the display (Image 36). The new letter itself is chosen with the Virtual Dial ◎ .
Press Yes ❶ , if you are ready with the label. Pressing Yes again stores the shape to the selected memory (Image 37).

If you are not satisfied with your entry, press Exit ❹ .
The window is closed without anything saved.

Erase ❸ enables you to erase single shapes.

Note:
A good start is to generate 3 different shapes:

- Fast melody with maximum dynamic
- Medium speed with "normal" dynamic
- Slow melody with a very soft, laid back dynamic

Assign this shapes to corresponding songs and you'll get the perfect results.

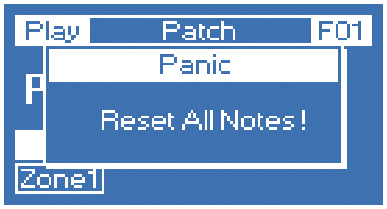


Image 38

Panic

Simultaneously touching (with a short hold) of Function Keys ❸ + ❹ activates ***Panic*** Mode (Image 38). All channels are releasing the following commands:

- Note Off
- Volume to 127
- Modulation to 0
- Pitch to 64
- Sustain to 64

Warranty

Every product from Studiologic bay Fatar product has been carefully manufactured, calibrated and tested. All this enables a warranty of two years. Please register your NUMA to get full support. Damages due to incorrect transport, mounting or handling are not covered by this warranty. Compensation of more than the price of the device is excluded.
All this is based on general terms and condition of the local distributor / FATAR srl, Italy.

CE-Conformity

FATAR srl
Zona Ind.le Squartabue
62019 Recanati MC Italy

declares that this product complies with the European Directives:

- 73/23/EWG Low Voltage Directive
- 89/336/EWG EMC Directive
- DIN EN 55103-1&2 Electromagnetic compatibility of audio equipment

Recanati, 14.2.2008 Dario Ragni, Managing Director

This declaration becomes invalid by modification on the device without approval.

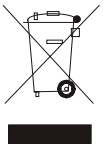
RoHS-Conformity

This product is manufactured according to the 2002/95/EC directive.

RoHS
compliant
2002/95/EC

Disposal

The purpose of this EG Directive 2003/108/EG is, as a first priority, the prevention of waste electrical and electronic equipment (WEEE), and in addition, the reuse, recycling and other forms of recovery of such wastes so as to reduce the disposal of waste. Please assist to keep our environment clean.



State of the art

To ensure maximum audio quality all devices of Studiologic by Fatar are always engineered to be state-of-the-art products, therefore updates, modifications and improvements are made without prior notice. Technical specification and product appearance may vary from this manual.

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