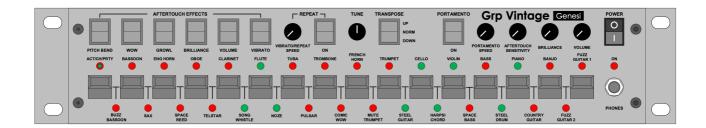
# SYNTHESIZER Grp Vintage Genesi MUSICIAN'S HANDBOOK V. 1.2



Grp Vintage Genesi - User Manual

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# **PREFACE**

Thank you for purchasing the **Grp Vintage Genesi** synthesizer; this instrument will reward you with years of sonic satisfaction; to ensure the correct functioning of the instrument, please read this manual. The instrument perfectly reproduces the timbre and operational behaviors of the historic ARP Pro Soloist produced from 1971 to 1977.

The original ARP Soloist model was developed in 1971 to offer quick access to eighteen *preset sounds* divided into orchestral families (Reeds, Woodwinds, Brass, Strings, Percussion) that could be recalled via dedicated mechanical selectors located in the lower part of the instrument under the keyboard; in this way, the first block of analog sounds responded to dedicated panel controls and the second could be activated by selecting the bank by sequentially acting *on two switches*. The instrument was equipped with three pressure-sensitive octaves and the pressure evaluation was used to activate Pitch Bend, Wow, Growl, Brilliance, Volume and Vibrato modulations applied indiscriminately to all the resident sounds. In addition, it was possible to influence the overall behavior of the instrument with the Volume, Brilliance, Touch Sensitivity and Portamento On/Off Speed adjustments.

The significant instability of the first analog sound generation made it necessary to adopt a second **Pro Soloist model** in which a complex - and much more stable - generation mechanism based on analog logic division circuits was used; inside the instrument the results of original technologies covered by numerous ARP patents were put into operation which finally allowed the error-free management of 30 resident timbres (divided into two banks of 15 Presets each) recallable via mechanical toggle switches. The instrument, still with a three-octave pressure-sensitive keyboard, now finally offered an upper panel for access to the timbre selection, the activation of the six Touch Sensor Effects and Repeat; to the left of the keyboard, there were four sliders for adjusting Volume, Brilliance, Touch Sensitivity, Portamento Speed plus an octave Up/Normal/Down transposer which brought the useful excursion to five octaves. Adopted by musicians such as Tony Banks (Genesis), Josef Zawinul (Weather Report), Billy Preston, Vangelis, Edgar Froese and Chris Franke (Tangerine Dream), Gary Numan and many others.

In 1977-78, the instrument had a third revision, called **Pro/DGX** which modified the aesthetic appearance of the instrument and the circuit used for the resonant low-pass filter. The instrument, now housed in the metal body characterized by orange silk-screening and leather-covered sides, gained balanced XLR audio output, fast electronic touch switches for direct selection of the first bank of 15 Presets and, through the pressure of two adjacent switches, for the selection of the sounds of the second bank of Presets (speeding up direct access during performance ); the set choice was confirmed by the generous provision of LEDs for signaling.

The user community has always considered the intermediate version Pro **Soloist** as the best from the point of view of timbre and the third version **PRO/DGX** as the most practical from the point of view of access to sounds and parameters.

Today, **the Grp Vintage Genesis** brings together the best of the best, offering the sound generation of the second model combined with the ease of access of the third model.

Welcome to the **Grp Vintage Genesi**: the perfect Soloist.

## **SOME USEFUL ADVICE**

Please read the following advice carefully! It is always necessary to observe some basic precautions when dealing with electronic equipment, for your safety and for the safety of the equipment itself.

#### **OPERATING CONDITIONS**

- Never use the synthesizer near swimming pools, bathtubs and other potential water flows.
- Do not use the instrument in extremely dirty or dusty environments.
- Do not place the instrument near heat sources such as radiators, fireplaces, etc.
- Do not expose the instrument to direct sunlight; the wooden cabinet is painted with traditional and reliable procedures, but the ultraviolet rays of the sun can quickly fade the original color.
- Do not expose the appliance to extreme vibrations.
- Keep the original packaging for future transport of the instrument.

#### DIET

- Your Grp Vintage Genesi synthesizer has already been set for the correct AC voltage for your geographic area, you can check on the label on the rear panel.
- the appliance when not in use for long periods.
- Never touch the plug with wet hands.
- When unplugging the instrument, always grasp the power cord at the end, never pull the cord itself.

#### **DURING USE**

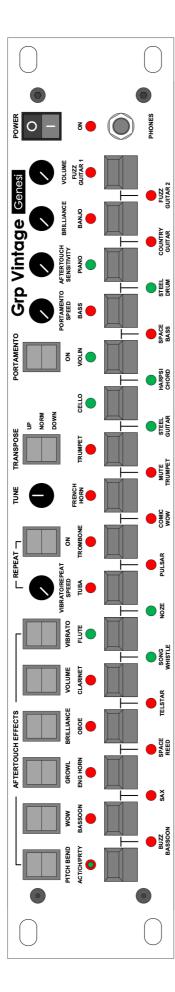
- Even if you are a rock star, NEVER place cans of beer, coke, water (?) or other liquids that could potentially end up on, in or near the instrument.
- The Grp Vintage Genesi synthesizer is a heavy synthesizer: place it on a sufficiently solid surface or mount it in a 19 " rack cabinet the instrument takes up two rack units. Provide sufficient ventilation at the back of the rack cabinet.
- The Grp Vintage Genesi synthesizer can get very LOUD: please be careful with the Volume control located on the top right of the front panel near the power switch.

# **MAINTENANCE**

• Do not open the instrument; do not unscrew the front, top and rear panels. There are no user -serviceable or adjustable parts inside the instrument.

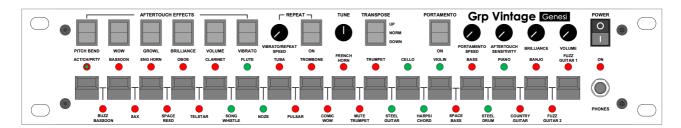
## **CORRECT USE**

• This synthesizer is designed exclusively to produce audio-band signals for musical purposes. Any other use is prohibited and violates the warranty provided by Grp Synthesizer. Grp Synthesizer is not responsible for damages due to incorrect use.



# **ACTIVATION**

Thank you for choosing the Grp Vintage Genesi synthesizer: a respectful reinterpretation of the great classic ARP Pro Soloist which, in the late '70s, became indispensable for its almost unique ability to quickly access thirty preset analog sounds, equipped with personality and ready for performance modifications by the musician.



The **Grp Vintage Genesi** faithfully reproduces, in the convenient 2U Rack format, the tonal behavior of the Pro Soloist combining it with the more convenient user interface of the subsequent Pro/DGX model, favoring a MIDI implementation that expands, in a non-invasive way, the performance possibilities even when you are far from the control panel.

## PRELIMINARY CONNECTIONS

It is necessary to connect the supplied power supply to the **DC 12V 1A socket** . On the front panel, the instrument is equipped with a **POWER switch** : make sure that the switch is in the OFF/0 position



before connecting the external power supply.

Connect a MIDI Master Keyboard (or a PC or other controller) to the MIDI IN input.

Connect the MAIN **OUT** output to a suitable amplification system (amplifier, mixer, etc.) using an unbalanced 1/4 " TS jack cable.

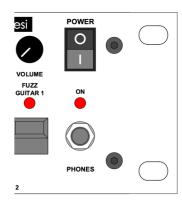
Alternatively, you can connect stereo headphones to the PHONES **output** located at the bottom right of the front panel. The **VOLUME** control affects the two **MAIN OUT outputs** on the rear panel and **PHONES** on the front panel.

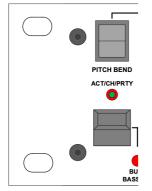
## **POWER ON AND MIDI SETTINGS**

After making the audio and control connections, you need to follow these are the essential steps.

#### **POWER**

Make sure you have set the **VOLUME control** on the front panel to minimum (**Grp Vintage Genesi** can play very *loudly* ... never underestimate this precaution); turn the unit on using the POWER **switch**; the **power** is confirmed by the red lighting of the **ON** LED and one of the fifteen tone selection LEDs.





## **ACTIVITY/CHANNEL/PRIORITY**

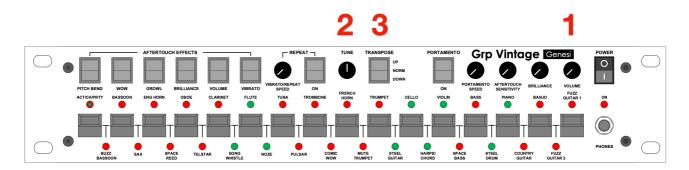
Locate ACT/CH/PRTY button on the left side of the front panel.

ATTENTION! The button is the circular one; the plate switch underneath, without a label, acts as **a RESET** (further details later).

The backlit circular button performs three essential tasks:

- MIDI CHANNEL SELECT . Press the button to activate its *red flashing* . At this point, the first MIDI Channel Message (Note, Program Change, Pitch Bend, Controller) received at the MIDI IN input defines the MIDI Channel on which **Grp Vintage Genesi** works. The button stops flashing *red* confirming the reception of the message and the selection of the MIDI Channel. The setting remains in memory even when the machine is turned off.
- **MIDI ACTIVITY** . After choosing the MIDI Channel, the button flashes *red* whenever the synthesizer receives any MIDI message.
- PRIORITY SELECT. The procedure allows you to choose Low Note Priority (as in the original instrument) or Last Note Priority. To choose the desired behavior, you must: hold down the button for three seconds, activating a green flash. The two behaviors Low Note Priority (slow green flash) or Last Note Priority (fast green flash) can be reached one after the other by pressing the button again. Wait three seconds to confirm your choice: the button exits the selection mode and resumes its normal red lighting.

## **ESSENTIAL ADJUSTMENTS**



It is necessary to act on the listening volume, the tuning and the transposition of the synthesizer

1. **VOLUME**. The adjustment acts on the **MAIN OUT** output on the rear panel and on the **PHONES** output on the front panel.

WARNING! **Grp Vintage Genesi** can easily reach very loud audio levels. Proceed with caution.

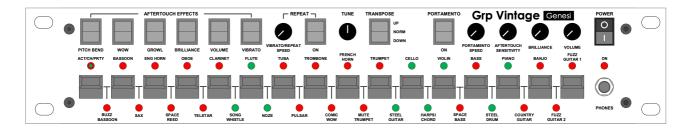
WARNING! The MIDI implementation of **Grp Vintage Genesi** uses MIDI CC #7 for remote control of the Volume and MIDI CC # 11 for management of the Expression .

- 2. **TUNE**. The instrument's (incredibly stable) circuitry can be adjusted to match other instruments within a range of +/- 1 semitone.
- 3. **TRANSPOSE**. The three -position switch allows you to choose the octaves **UP**, **NORMAL** or **DOWN** to transpose the entire instrument.

ATTENTION! TRANSPOSE can be activated remotely using MIDI CC #71. To facilitate "landing" on the desired octave, the Control Change excursion has been divided into three portions of different range. In this way, when MIDI CC #3 has a value between 0 and 15, the LOW octave is selected; when the value is between 16 and 114, the NORMAL octave is selected; when the value is between 115 and 127, the UP octave is selected.

Please refer to the MIDI IMPLEMENTATION section of the manual.

# **INSTRUMENT SECTIONS AND THEIR OPERATION**



We provide the description of all the controls available on the front panel of the instrument. While reading, it is recommended to refer to the hardware instrument and the graphics reproduced.

# PRESET TIMBRAL SELECTORS

Like the original instrument, the Grp Vintage Genesi features thirty analog tones that can be accessed via fifteen selection switches; each tone is identified by its own red or green reference LED depending on the type of circuitry used.

The fifteen directly selectable *upper* timbres include:

1	Raccoon	

2. English Horn

3. Oboe

4. Clarinet

5. Flutes

6. Tuba

7. Trombone

8. French Horn

9. Trumpet

10. Cello

11. Violin

12. bass

13. Floor

14. Banjo

15. FuzzGuitar 1

The fifteen directly selectable *lower* timbres can be reached by pressing two adjacent selection keys together (to select Space Reed, you must simultaneously press the Eng Horn and Oboe keys) and include:

1. Buzz Bass

2. Sax

3. Space Reed

4. Telstar

5. Song Whistle

6. Noze

7. Pulse

8. Comic Wow

9. Mute Trumpet

10. SteelGuitar

11. Harpsichord

12. Space Bass

13. Steel Drum

14. Country Guitar

15. FuzzGuitar 2

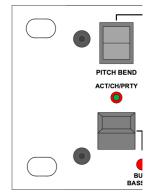
Attention! The selection of the 30 resident timbres can be done remotely using the MIDI Program Changes from 00 to 29.

Please refer to the MIDI IMPLEMENTATION section of the manual.

#### THE RESET BUTTON

The button is unlabeled and allows you to *quickly deactivate* any tone selection made for one of the 15 *upper tones* (using one of the 15 selectors) or the 15 *lower tones* (made using the pairings of two adjacent selection buttons).

The activation of the **RESET** behavior is confirmed by the switching off of any tone identification LED.



#### TUNE

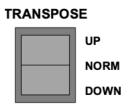


#### **TUNE**

Present in the form of an internal trimmer in the original instrument, the TUNE adjustment on the front panel facilitates the tuning of the **Grp Vintage Genesi** in relation to the other instruments present. As previously specified, the useful excursion is between +/- 1 semitone.

## **TRANSPOSE**

As mentioned in the previous section, the three -position switch allows you to choose the desired octave of transposition **NORMAL**, **UP** or **DOWN**. The command acts *in relation to the MIDI reception* and does not influence the range of the timbre generations which - as we will see later - have peculiar characteristics foreseen in the original project.



We remind you of what was specified in the previous section ESSENTIAL ADJUSTMENTS in relation to the selection of the TRANSPOSE octave via MIDI CC # 71: 0 to 15 DOWN, 16 to 114 NORM, 115 to 127 UP.

For this and other useful excursions, please refer to the MIDI IMPLEMENTATION section of the manual.

#### **BRILLIANCE**

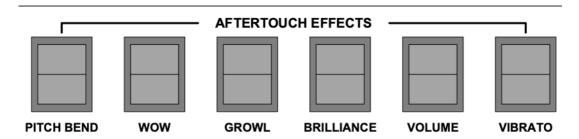
The instrument is equipped with an LP4 filter that cannot be reached directly by the musician, but can be influenced *independently of the preset timbre settings* by using the **BRILLIANCE** control. The sound "brilliance" parameter acts simultaneously on the Envelope Amount provided for in the single Preset and adding an electrical constant value directly proportional to the physical position of the **BRILLIANCE** control.



In addition to the local **BRILLIANCE** adjustment, it is possible to intervene on the parameter by activating the corresponding **AFTERTOUCH EFFECT BRILLIANCE** (see the next section) or by acting with the MIDI CC # 74 *Cutoff*. In both cases, to reach the maximum excursion from a distance, it is necessary to set the **BRILLIANCE** control on the panel *to a minimum*.

## AFTERTOUCH EFFECTS

As in the original instrument, **Grp Vintage Genesi** uses the pressure sensor present in the keyboards to govern the amount of effect *applicable* to the different timbres. In this way, by pushing on the previously pressed note, it becomes possible to enrich the basic timbre selected from the 30 avail-



able by applying effects of:

- **PITCH BEND**. With positive excursion *only*, it is possible to bend the pitch up to +1 semitone.
- WOW . Opening of the resonant low pass filter with simultaneous increase in Resonance.
- GROWL . Fast modulation (32 Hz) applied to the cutoff frequency.
- BRILLIANCE . Opening the cutoff frequency.
- **VOLUME** . Intervention on the signal level
- **VIBRATO** . Depending on the sound, modulation is applied to the pitch (the true vibrato) or for example in the Flute sound to the cutoff frequency.

### **AFTERTOUCH SENSITIVITY**

The range of the selected behaviors can be adjusted via the **AFTERTOUCH SENSITIV-ITY control** which, especially during the learning phases, we recommend leaving set to the maximum achievable value, corresponding to full clockwise rotation.



WARNING!!! The MIDI implementation of **Grp Vintage Genesi** uses the Channel Aftertouch to manage the amplitude of the intervention, but for greater convenience compared to the original (and to guarantee operation even in the case in which the Master Keyboard does not transmit Aftertouch) it <u>also</u> uses the Pitch Bend (positive range only) to control the excursion of the activated AFTERTOUCH EFFETS.

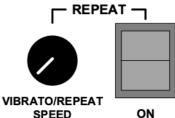
Please refer to the MIDI IMPLEMENTATION section of the manual.

## **REPEAT**

The circuit uses a low frequency oscillator used to automatically repeat the Envelope triggering and (with a parallel path) to modulate the oscillators' pitch through Vibrato.

## **REPEAT ON**

Activate automatic repeat. The performance of the REPEAT effect: sounds with a slow attack (ENG HORN or VIOLIN) will perform less well than sounds with a sharper attack (PIANO or STEEL DRUM).



## **REPEAT SPEED**

After activating the circuit with the ON **switch**, it is possible to adjust the REPEAT SPEED speed at **which** the instrument repeats the envelope articulation of the sound. The default settings for the Envelopes of the 30 sounds can significantly vary - at the same **SPEED** - the final result.

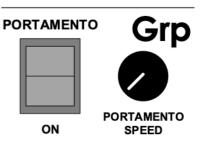
WARNING!!! The **REPEAT SPEED control** also acts as a **VIBRATO SPEED control** to speed up or slow down the speed of the **VIBRATO** modulation that can be activated via **AFTERTOUCH**, as illustrated in the previous **AFTERTOUCH EFFECTS section**.

## **PORTAMENTO**

Portamento *integrates* pitch jumps between notes, producing a smooth, continuous transition without any quantization.

## **PORTAMENTO ON**

The switch activates the **PORTAMENTO**. As an alternative to the panel switch, you can activate the circuit using a footswitch connected to the PORTAMENTO **FOOT SWITCH** input on the rear panel or by sending a MIDI Control Change #65.



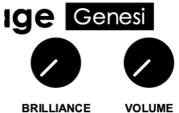
## **PORTAMENTO SPEED**

The control regulates the speed at which the note passes from one pitch to another; the higher the value set with the knob, the slower the transition.

Please refer to the MIDI IMPLEMENTATION section of the manual.

## **BRILLIANCE**

The command acts on the cutoff frequency of the instrument, making the sound brighter. It can be managed *remotely* with the MIDI Control Change # 74



WARNING!!! If the **BRILLIANCE** panel control is set to maximum, the action of the corresponding **AFTERTOUCH EFFECT - BRILLIANCE** will be zeroed ( it is not possible to open a filter that is already completely open further ).

## **VOLUME**

The control adjusts the output volume of the instrument, acting both on the **MAIN OUT connection** on the rear panel and on the **PHONES** output on the front panel.

The instrument responds to MIDI CC #7 (Volume) and #11 (Expression).

Please refer to the MIDI IMPLEMENTATION section of the manual.

# **REAR PANEL**



The rear panel includes the essential connection ports of the device.

## **12V DC 1A**

Is the connection port for the external 12V DC 1A power supply, barrel connector, center positive, supplied. Under no circumstances should the instrument be connected to a different power supply.

#### MIDI IN and MIDI THRU

The two Din-5 connections allow you to manage MIDI signals received from outside (MIDI IN) and to transmit a compliant copy to other devices connected in cascade (MIDI THRU).

#### **MAIN OUT**

This is the *monaural* audio output of the instrument.

## **FOOT SWITCH CARRY**

Allows connection to a footswitch to control the activation of Portamento.

## MIDI IMPLEMENTATION

Grp Vintage Genesi responds to the following MIDI messages:

- Note On/Off. Only MIDI Notes between C2 #36 and A5 #81 are interpreted.
- **Pitch Bend.** *Positive range* alone controls the AFTERTOUCH SENSITIVITY panel for Aftertouch Effects. Negative Pitch Bend excursion is ignored.
- **Channel Aftertouch** . This control is also assigned to the AFTERTOUCH SENSITIVITY panel for the Aftertouch Effects.
- **Program Change**. The instrument receives Program Change Messages from 00 to 29 to recall the internal Presets.
- MIDI CC #1 Modulation Wheel. This control is also mapped to the panel AFTERTOUCH for Aftertouch Effects.
- MIDI CC #7 Volume. Adjusts the output level VOLUME of the instrument.
- MIDI CC #11 Expression. Adjusts the output level of the instrument.
- MIDI CC #64 Damper. Extends the Gate On of received MIDI Notes ( ≤ 63 off, ≥ 64 on ).
- MIDI CC #65 Portamento On/Off. Turns PORTAMENTO on or off ( ≤ 63 off, ≥ 64 on ).
- MIDI CC #71. Adjust the OCTAVE selection (0-15 Low er 16-113 Norm 114-127 Upper).
- MIDI CC # 74. Adjusts the BRILLIANCE value of the instrument.

**NOTE:** The importance of the AFTERTOUCH SENSITIVITY parameter for the functioning of the instrument, and therefore its indispensable remote control, has made it necessary to provide <u>two</u> different MIDI possibilities (Pitch Bend Positive only range and Channel Aftertouch) all active on the same destination. As you can easily imagine, we recommend using <u>only one</u> of the two possible MIDI control sources at time.

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