User Manual GCA Total Recall Producer Channel

Thank you for purchasing the GCA Total Recall Producer Channel
We hope you have as much fun using it as we had designing it !

Introduction

The GC Audio Total Recall Producer Channel is a motorized recall channel strip featuring a fully analog audio signal path.
It is designed for audio engineers, recording studios, live FOH applications, mixing environments, and mastering facilities working with high-end analog equipment.
It allows you to:

- instantly store complete analog settings,
- automatically recall full sessions,
- synchronize the hardware with a DAW plugin,
- automate motorized potentiometer positioning,
- save and restore analog switch states.

The system preserves the sound, depth, and workflow of true analog processing while adding the speed, flexibility, and convenience of modern digital recall technology.
The Total Recall system only controls the parameters — the audio itself never passes through AD/DA or VCA conversion.

Connectivity

The GC Audio Total Recall Producer Channel features a rear-panel Neutrik combo XLR/TRS balanced input capable of accepting both microphone and line-level signals, allowing the unit to be used either for recording applications or as an insert processor during mixing.
The rear panel also includes a balanced Neutrik XLR output connector, as well as a USB port used to connect the rack unit to the optional remote-control plugin.
On the front panel, a dedicated high-impedance instrument input is provided for direct connection of guitars, basses, and other instruments. When a jack is inserted into the front-panel instrument input, the rear combo input is automatically bypassed, making overdub and tracking sessions faster and more convenient.

One of the major advantages of the GC Audio Total Recall Producer Channel is that it operates entirely as a standalone piece of professional analog hardware.
All core functions — including preset storage, motorized recall, calibration, menu navigation, and session management — are handled directly by the unit itself through its integrated display and onboard operating system, with absolutely no dependency on a computer or plugin. This means the channel strip remains fully operational in any studio environment, exactly like traditional analog equipment, while still offering modern Total Recall capabilities. For users who want deeper DAW integration, a dedicated control plugin is also available via the supplied shielded USB connection, but its use is completely optional.

The motorized recall system only controls potentiometers positioning, switch states and session management, this preserves analog integrity, continuous signal flow, real hardware interaction and genuine analog behavior.

The result is a workflow combining:

- analog sound quality,
- instant session recall,
- DAW integration,
- modern production efficiency.

Class A Microphone Preamplifier :

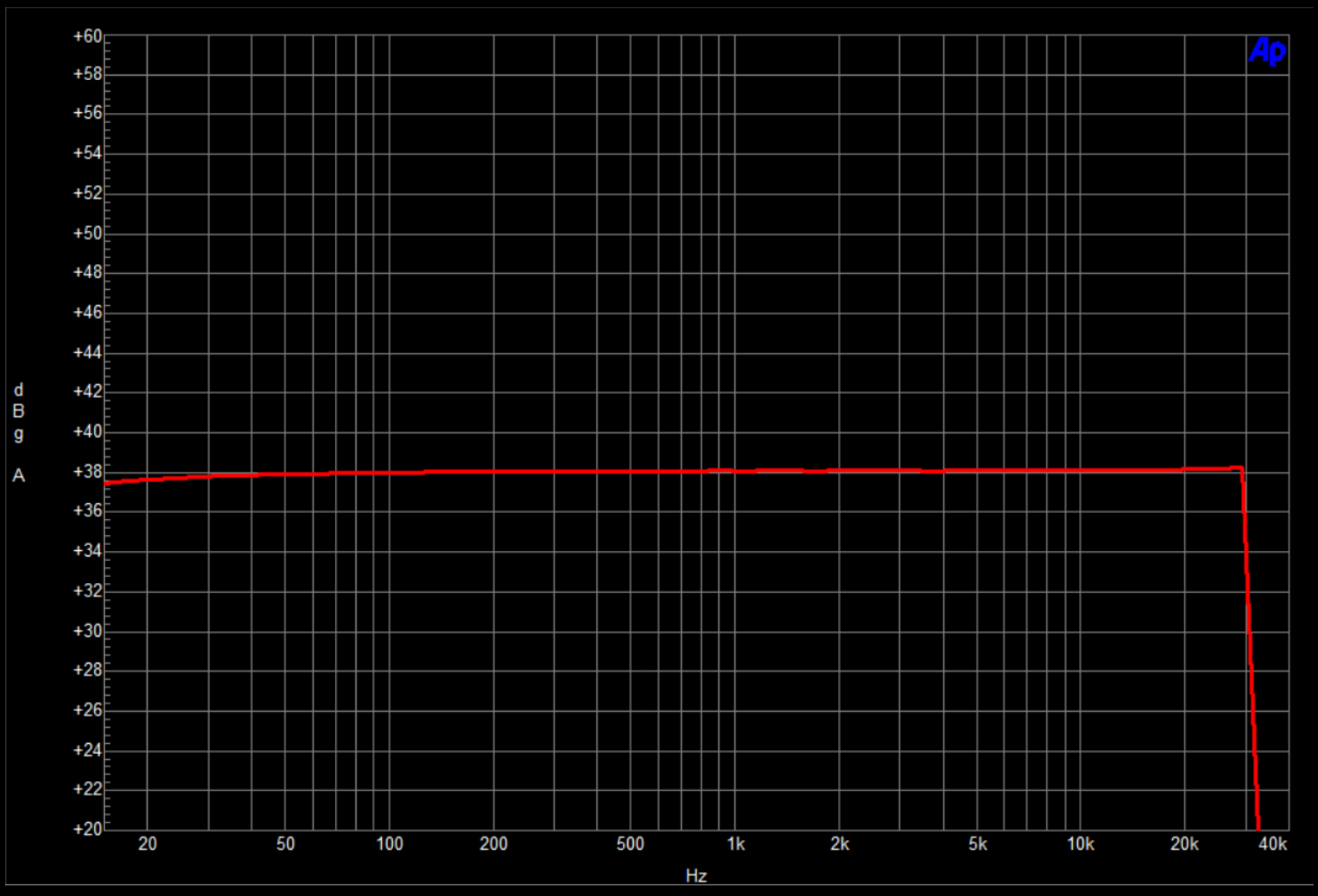
At the front end, the Producer Channel uses a low-noise Class A microphone preamp built around matched ultra low noise SSM2212 transistor pairs and a Lundahl transformer 1585 output stage. The sonic character combines:

- precision and transparency,
- transformer weight and density,
- detailed transient response,
- low-noise operation,
- rich low-mid texture.

The Lundahl transformer contributes:

- analog depth,
- subtle harmonic coloration,
- enhanced dimensionality,
- smooth saturation under higher input levels.
    - Gain: 20 to 60dB, Up to 80dB with additional dynamics preamp stage, Up to 86dB with Tube Stage.
    - Phase inverser
    - Pad -25dB
    - Combo rear Input XLR / Jack balanced: Hybrid Z 5K For Mic or Line Input
    - Jack front input for unbalanced instrument input High Z – 100K
    - High Pass filter 80Hz
    - Ultra low noise EIN: -129 dBu with 150 ohms load.

Typical Curve:



Four-Band Parametric EQ :

The EQ section is a fully parametric 4-band optical control (ROHS) design with independent:

- gain,
- frequency,
- Q controls.

The EQ behavior as inspired by optical control response, favoring smooth and musical frequency shaping rather than aggressive digital-style correction.
Sonically, the EQ was designed for:

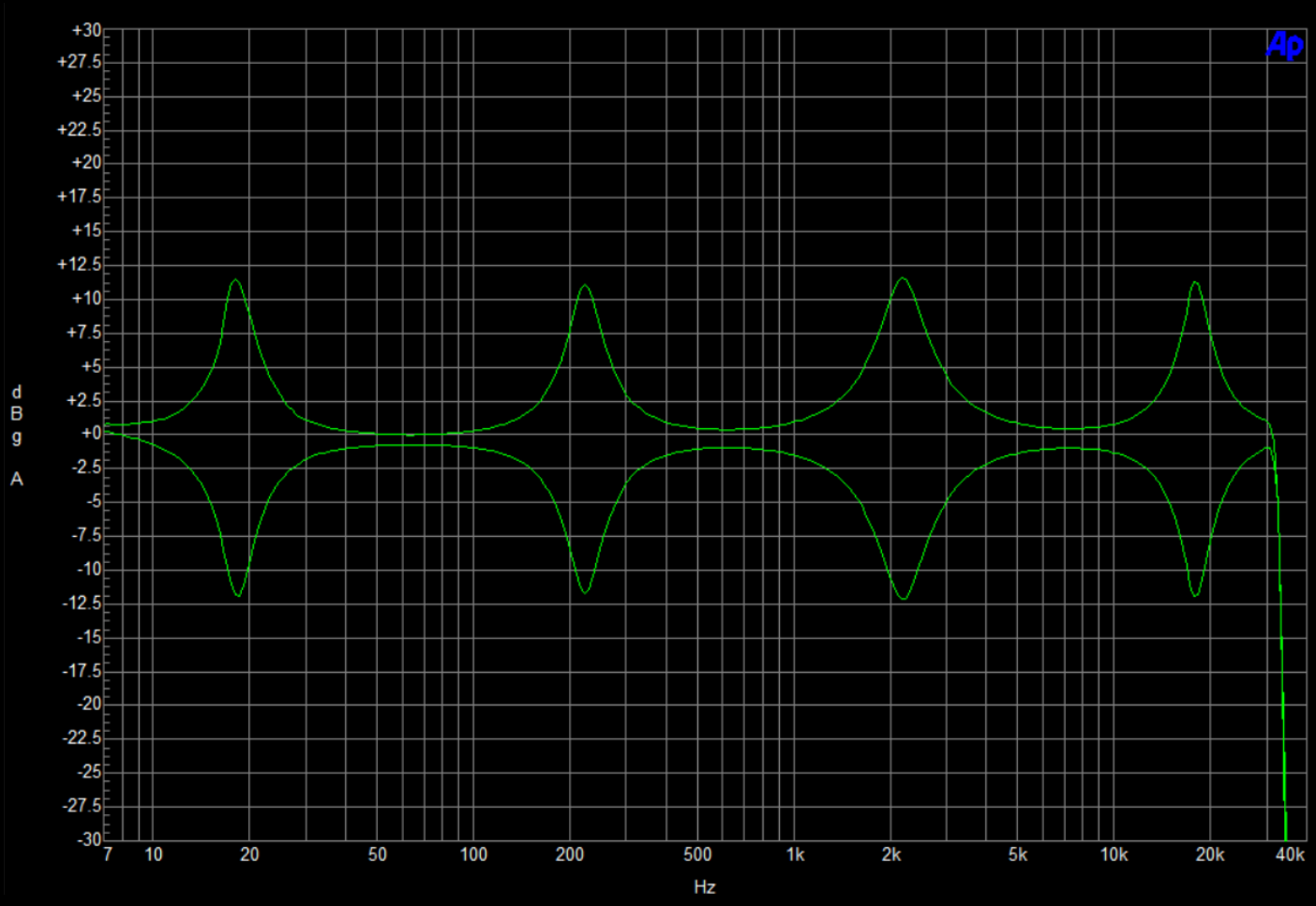
- broad musical shaping,
- surgical correction when required,
- smooth proportional curves,
- natural phase behavior,
- analog tonal depth.

The equalizer remains particularly suited for:

- vocals,
- acoustic instruments,
- mix bus enhancement,
- mastering tone shaping.

  - Low : 20Hz - 420Hz / -12dB + 12dB
  - Low M : 220Hz – 2K4Hz / -12dB + 12dB
  - High M : 1K8Hz - 5K8Hz / -12dB + 12dB
  - High : 3Khz – 19Khz / -12dB + 12dB

Typical Curves with high Q:



VCA Compressor & De-Esser :

The dynamics section combines:

- a fully adjustable VCA compressor,
- an independent de-esser circuit.

The compressor architecture offers:

- fast transient control,
- stable gain reduction,
- modern punch,
- precise dynamic management.

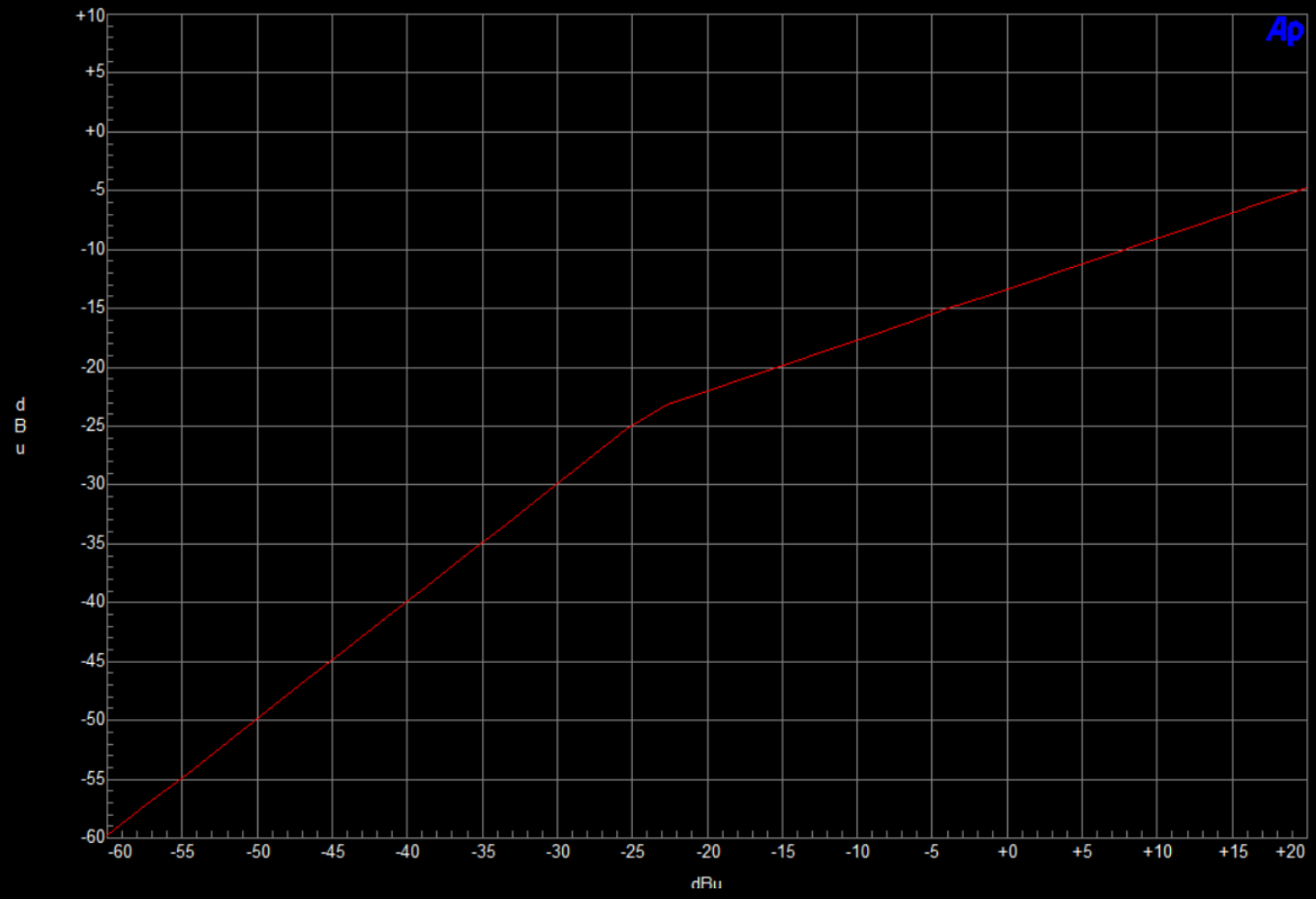
Meanwhile, the independent de-esser / de-popper allows targeted sibilance control without compromising the overall tonal balance.

Applications include:

- vocal tracking
- drum overhead control,
- bass management…

  - Ratio : 1 - 10
  - Threshold : -25dB / +12dB
  - Attack 0.1 ms to 0.5 s
  - Release 1.5 ms to 1.5 ms
  - Make Up -20dB to +20dB
  - Hard / Soft Knee Setting
  - Pre Eq / Post Eq setting
  - De-sseur setting.

Typical Comp Curve:



High-Voltage Tube Harmonics Stage :

One of the defining sonic features of the Producer Channel is its dedicated high-voltage Class A tube stage.

This stage can be activated independently to introduce:

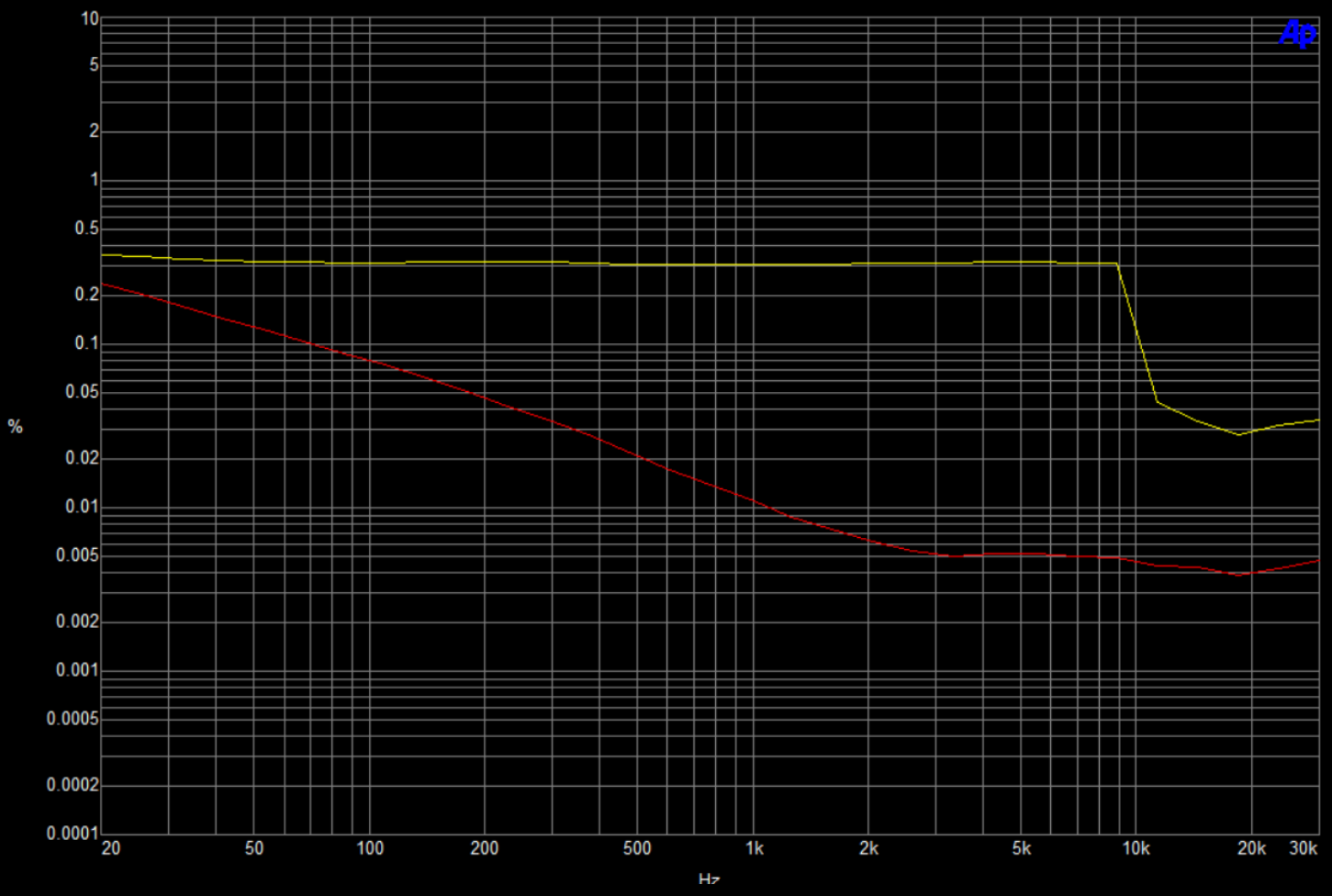
- harmonic richness,
- warmth,
- analog saturation,
- depth,
- glue and cohesion.

Unlike low-voltage "starved plate" tube designs, the high-voltage implementation preserves:

- dynamic integrity,
- low-frequency solidity,
- smooth harmonic texture,
- natural saturation progression.

The tube section is intended as a musical enhancement tool rather than an overt distortion effect.

Typical Curve: Red = THD without Tube Stage, Yellow = Harmonic THD with Tube Stage In.



1. Power Up

When the unit is powered on:

1. the system initializes automatically,
2. a full calibration routine starts,
3. all motorized potentiometers move automatically,
4. the SAFE startup preset is loaded.

During calibration:

- do not touch the potentiometers,
- allow the process to finish completely.

The display will show:

- Calibration Left
- Calibration Right
- Calibration Center

Once completed, the system is ready for operation.

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2. Main Display

The screen displays:

- current preset number,
- preset name,
- Recall mode,
- plugin connection status,
- last modified parameter.

Example:
P03 VOCAL CHAIN

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3. Main Controls

ENTER
Opens the main menu and confirms actions.

EXIT
Returns to the previous screen or cancels an operation.

UP / DOWN

- browse presets,
- navigate menus,
- edit characters while renaming presets.

STORE
Saves the current preset instantly.

RECALL
Automatically recalls the selected preset.
All motorized potentiometers reposition themselves automatically.

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4. Saving a Preset

1. Adjust the channel strip normally.
2. Press STORE.
3. The preset is saved immediately.

The system stores:

- all potentiometer positions,
- all switch states,
- the preset name.

5. Recalling a Preset

Manual Recall

1. Select a preset using UP/DOWN.
2. Press RECALL.

The system will:

- temporarily mute certain functions,
- reposition all potentiometers,
- restore stored switch states.

The recall process is fully automatic.

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6. Recall Modes

The Recall Option menu allows different recall behaviors.

R1 — One Press Recall

The preset is recalled immediately.
Ideal for standard studio operation.

R2 — Two Press Recall

Requires confirmation before recall.
Prevents accidental recalls during sessions.

RD — Direct Recall

The preset recalls automatically as soon as it is selected.
Useful for fast A/B comparisons.

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6. Renaming a Preset

Edit Preset Name

Allows custom naming for presets.
Examples:

- VOCAL LEAD
- KICK…

Procedure

1. ENTER
2. Edit Preset Name
3. ENTER
4. Use UP/DOWN to select characters
5. Press ENTER to validate each character
6. Press EXIT to finish

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7. Copying a Preset

Copy Preset

Copies:

- all settings,
- switch states,
- preset name.

Useful for creating alternate versions quickly.
Example:
P12 VOCAL CLEAN
→
P13 VOCAL SAT

8. Position Mode

Position Mode displays in real time:

- the last adjusted potentiometer,
- its current value,
- its graphical position.

Useful for:

- manual recalls,
- quick verification,
- tracking sessions.

9. Lock Function

Lock Mode protects the system against:

- accidental recalls,
- unintended changes,
- session mistakes.

Activating Lock

Menu:
Recall Option → Lock Device

Unlocking

Hold:

- UP + DOWN

for several seconds.

11. Using the DAW Plugin

The system can synchronize with a dedicated software plugin
On PC: Stand Alone Plugin, VST3, AAX are available.
On MAC: Stand Alone Plugin is available (AAX and AU for Mac to come).

The plugin allows:

- automatic session recall,
- preset management,
- remote control,
- parameter display,
- recall automation.

When connected:

- a green LED indicator appears on the display.

10. Recall During Sessions

The system is designed for modern professional studio workflows.

Typical Examples

Vocal Tracking

- create one preset per singer,
- instantly recall recording settings.

Mixing

- compare analog chains quickly,
- recall multiple processing variations.

Mastering

- store EQ and compression curves,
- retrieve exact client recalls.

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11. What the System Stores

The Total Recall system saves **All Potentiometers and all switches**

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12. Studio Best Practices

Recommended

- save presets before shutdown,
- allow recalls to complete fully,
- recalibrate after maintenance,
- use clear preset names.

Avoid

- blocking the motors manually,
- forcing potentiometers during recall,
- powering off during motor movement.

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13. Internal Statistics

The Hour Device menu displays:

- total operating time,
- motor usage statistics,
- system activity information.

Useful for:

- preventive maintenance,
- monitoring usage,
- long-term reliability tracking.

Safety Instructions
GC Audio Total Recall Producer Channel

Important Safety Information
Please read these instructions carefully before operating the unit.
The GC Audio Total Recall Producer Channel contains:

- high-voltage analog circuitry,
- motorized mechanical components,
- precision analog electronics,
- internal power supply sections.

Improper use may result in equipment damage, malfunction, or risk of electric shock.
Keep these instructions for future reference.

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1. General Safety

- Use the unit only for professional audio applications.
- Do not expose the unit to rain, moisture, or excessive humidity.
- Do not place liquids near the unit.
- Do not operate the device in explosive or unstable environments.
- Do not block ventilation openings.

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2. Power Supply Safety

- Use only the specified mains voltage indicated on the rear panel.
- Connect the unit to a properly grounded AC outlet.
- Disconnect power before servicing or moving the unit.
- Do not use damaged power cables.
- Avoid sharing unstable power circuits with high-current equipment.

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3. High Voltage Warning
The Producer Channel contains internal high-voltage analog circuits.
To reduce the risk of electric shock:

- never remove the top cover while connected to AC power,
- never operate the unit with exposed internal parts,
- servicing must only be performed by qualified technicians.

Even after power-off, internal capacitors may retain dangerous voltages.

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4. Motorized Potentiometer Safety
The system includes automated motorized potentiometers.
During calibration or recall:

- keep fingers away from moving controls,
- do not block or restrain motor movement,
- never force potentiometers manually while motors are active.

Blocking motor movement may:

- damage the motors,
- damage the potentiometers,
- cause calibration errors.

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5. Calibration Precautions
During startup calibration:

- allow the full routine to complete,
- do not touch controls,
- do not interrupt power.

Interrupting calibration may result in:

- incorrect recalls,
- position errors,
- improper motor synchronization.

If abnormal behavior occurs, run:
Menu → Boot (Calibr.)

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6. Ventilation & Heat

The unit generates heat during normal operation.

- Ensure adequate airflow around the chassis.
- Do not install near heat sources.
- Do not cover ventilation areas.
- Avoid enclosed racks without airflow.

Excessive heat may reduce component lifespan.

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7. Cleaning

Before cleaning:

- disconnect the AC power cable.

Use only:

- a dry soft cloth,
- non-abrasive cleaning materials.

Do not use:

- solvents,
- alcohol,
- sprays,
- liquids directly on the unit.

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8. Transportation

Before transport:

- power down the unit properly,
- disconnect all cables,
- use protective packaging when possible.

Avoid:

- heavy vibration,
- strong impacts,
- extreme temperatures.

After transport, recalibration is recommended.

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9. Operating Environment

Recommended operating conditions:

Parameter	Recommended Range
Temperature	10°C – 40°C
Humidity	30% – 70% non-condensing
Ventilation	Free airflow required

Avoid:

- condensation,
- direct sunlight,
- dust accumulation.

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10. Service & Maintenance

There are no user-serviceable internal components.
Do not attempt to:

- modify internal circuitry,

- replace components,
- bypass protections.

Servicing must be performed by qualified personnel only.

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11. Recall & Automation Safety

During automated recall:

- allow all motor movements to finish,
- avoid touching controls,
- do not disconnect USB or power during movement.

Interrupting recall operations may lead to:

- incorrect parameter positions,
- preset corruption,
- synchronization loss.

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12. Hearing Safety

This device is capable of professional studio signal levels.

Always:

- reduce monitoring volume before recall,
- verify gain staging,
- monitor output levels carefully.

Unexpected level changes may occur when recalling presets.

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13. Tube Stage Precautions

The Producer Channel includes high-voltage tube circuitry.

During operation:

- internal temperatures may become high,
- avoid prolonged continuous maximum drive levels.

Allow adequate cooling before transport or servicing.

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14. Electromagnetic Compatibility

To minimize interference:

- use balanced audio connections whenever possible,
- avoid running audio cables alongside AC power cables,
- use high-quality shielded cables.

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15. In Case of Malfunction

Immediately power off the unit if:

- smoke appears,
- unusual smells occur,
- abnormal heat is detected,
- motors become mechanically blocked,
- liquids enter the chassis.

Disconnect the power cable immediately and contact qualified service personnel.

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16. Intended Use

The GC Audio Total Recall Producer Channel is intended for:

- professional recording studios and live show,
- mixing environments,
- mastering facilities,
- professional audio production.

The manufacturer is not responsible for damage caused by improper use or unauthorized modifications.