



# Neve 8803 Dual EQ User Manual

**527 - 370**  
**Issue 3.4**



The 8803 is a Dual Equaliser with both of the two independent audio paths, featuring four bands of EQ plus high & low pass filters.

**Health & Safety Notice****For your own safety and for the protection of others,  
please observe the following safety instructions**

- Read these instructions.
- Heed all safety warnings.
- Do not use near water.
- Clean only with a dry cloth.
- Do not install near heat sources.
- Do not block ventilation openings.
- Protect the power cord.
- Only use accessories specified by the manufacturer.
- Unplug when unused for long periods of time.
- Refer all servicing to qualified personnel only.
- This equipment can only be used with the power supply provided:  
**XP Model Number PCM80PS36 or SWITCHBOX Model Number SPU-110/36.**

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### Appendix: Block Diagrams 8803

#### Customer Service

In the unlikely event that this unit should malfunction or develop a fault, then please register the fault details on our website, by clicking the link below.

You will also need to enter the unit's serial number when you do this, so please have this to hand.

[http://www.ams-neve.info/crm/fault\\_report.html](http://www.ams-neve.info/crm/fault_report.html)

Once the fault details have been registered, one of our technical support team will be in touch via email.

This link should also be used for further operational or technical help, or any general enquiry about the unit.

## Introduction



The 8803 is a Dual Equaliser in a 1U rack mounting box. The operation of the left side and the right side of the unit is identical.

Each of the two independent audio paths features high and low pass filters and four bands of EQ.

8803 settings may be stored and recalled via USB using the Recall software.

Up to sixteen 88 series units may be connected to a Recall system simultaneously in any combination.

When connecting to a PC (or a Mac), it should either be connected directly via USB or via a powered USB hub, **not** a passive hub.

## System Requirements

The 8803 may be used as a standalone unit.

If you wish to use the units Recall facility, it should be connected directly to the computer or via a powered USB hub but **not** via a passive USB hub.

If you wish to use the Neve Recall software to store and reload user configurations you must have one of the following supported operating systems:

### PC:

- Windows 2000, Service Pack 4 or later
- Windows XP, Service Pack 3 or later
- Vista, Service Pack 1 or later

### Mac:

- Mac OS 10.3.9 or later

## Front Panel Controls



### On/Off

The Neve Logo Switch on the right hand side of the unit switches the unit on and off.

## Input Section



### Input trim

Sets the level of the input signal.

The trim range is from  $-20\text{dB}$  to  $+20\text{dB}$  and can encompass signals from sources referenced to  $+4\text{dBu}$  or to  $-10\text{dBV}$ .

### Signal led

The yellow led will light to indicate that a signal is present at the unit input. The trigger level is  $-30\text{dBu}$ .

### Clip led

Will light red to indicate that the signal is  $>25\text{dBu}$  and there is danger of clipping occurring.

The signal level is monitored at three stages:

- Input pre-trim;
- Input post-trim;
- Output.

The Led is triggered by any one of these levels reaching  $>25\text{dBu}$ .

## Filter Section



### High Pass Filter

The high pass filter has a  $12\text{dB}$  per octave ( $20\text{dB}$  per decade) slope and a frequency range from  $30\text{Hz}$  to  $300\text{Hz}$ .

- ▶ It is switched into circuit by pressing the **Hi Pass** frequency control.

The **Hi Pass** led will light.

### Low Pass Filter

The low pass filter has a  $12\text{dB}$  per octave ( $20\text{dB}$  per decade) slope and a frequency range from  $1.5\text{kHz}$  to  $18\text{kHz}$ .

- ▶ It is switched into circuit by pressing the **Lo Pass** frequency control.

The **Lo Pass** led will light.

## EQ Section



## EQ Switch



► The square EQ switch beneath the input leds activates the EQ section.

- When lit, all four bands of EQ are in circuit.
- When un-lit all four bands of EQ are bypassed.

This switch does not bypass the filters.

## Low Frequency Band

LF Gain

The **LF Gain** control sets the cut or boost for the low frequency band of EQ with a range of +/-18dB.

► Pressing the **LF Gain** control switches the Low Frequency EQ band between **Bell** and **Shelving** modes.

The adjacent led will light to indicate when **Shelving** is selected.

LF Hz

The **LF Hz** control sets the low frequency between 33Hz and 440Hz.

► When the LF EQ band is set to **Bell**, pressing the **LF Hz** control switches the band between **Low** and **High Q**.

A led lights to indicate the selection of High Q.  
Low Q is 0.7 and High Q is 1.8.

► When the LF EQ band is set to **Shelving** mode, pressing the **LF Hz** control switches between **Standard** shelving mode and **Resonant** shelving mode.

A led lights to indicate the selection of Resonant shelving.

In **Standard** mode the selected frequency will be the +/- 3dB point.

In **Resonant** mode, when boosting a slight extra lift occurs in frequencies around the selected frequency, when cutting a slight extra dip occurs around the selected frequency.

This has the effect of emphasising the selected frequency.

## Low Mid Frequency Band

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### Lo Mid Gain

The **Lo Mid Gain** control sets the cut or boost for the low medium frequency band of EQ with a range of +/-18dB.

### LMF Hz

The **LMF Hz** control sets the low medium frequency between 120Hz and 2kHz.

### Lo Mid Q

The **Lo Mid Q** control adjusts the Q continuously variable between 0.3 and 7.

## High Mid Frequency Band

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### Hi Mid Gain

The **Hi Mid Gain** control sets the cut or boost for the high medium frequency band of EQ with a range of +/-18dB.

### HMF Hz

The **HMF Hz** control sets the high medium frequency between 800Hz and 9kHz.

### Hi Mid Q

The **Hi Mid Q** control adjusts the Q continuously variable between 0.3 and 7.

## High Frequency Band

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### HF Gain

The **HF Gain** control sets the cut or boost for the low frequency band of EQ with a range of +/-18dB.

Pressing the **HF Gain** control switches the High Frequency EQ band between **Bell** and **Shelving** modes.

A led lights to indicate when **Shelving** is selected.

### **HF Hz**

The **HF Hz** control sets the high frequency between 1.5kHz and 18kHz.

► When the HF EQ band is set to **Bell**, pressing the **HF Hz** control switches the band between **Low** and **High Q**.  
A led lights to indicate the selection of High Q.

Low Q is 0.7 and High Q is 1.8.

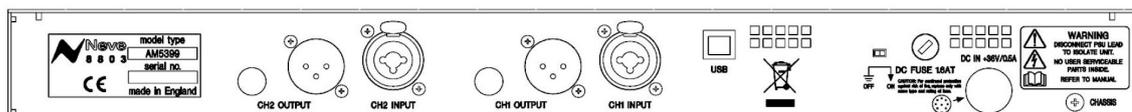
► When the **HF EQ** band is set to **Shelving** mode, pressing the **HF Hz** control switches between **Standard** shelving mode and **Resonant** shelving mode.  
A led will light to indicate the selection of Resonant shelving.

In **Standard** mode the selected frequency will be the +/- 3dB point.

► In **Resonant** mode, when boosting a slight extra lift occurs in frequencies around the selected frequency, when cutting a slight extra dip occurs around the selected frequency.

This has the effect of emphasising the selected frequency.

## Rear Panel



### Warning Symbols Explained



There are no user serviceable parts inside the unit.



Disconnect the power lead to isolate this unit.



Please refer to the manual before operating this unit

### Audio Connections

#### Audio Inputs

The input combo socket for each channel accepts input signals from either male XLR or male 1/4" jack connectors.

Connection can be balanced or unbalanced on jack and XLR.

#### Audio Outputs

Separate male XLR socket and female 1/4" jack socket for each channel provide simultaneous output to female XLR and male jack connectors.

Connection can be balanced or unbalanced on jack and XLR.

### Electrical Connections

#### Technical Earth Switch

The grounding of the unit can be set to two different points:

- The mains earth from the power supply, or
- The studio technical earth via the **Chassis** screw on the back of the unit.

With the switch in the **Off** position the chassis of the unit is connected to the mains earth via the power supply.

With the switch in the **On** position the chassis of the unit should be connected to the studio technical earth using the **Chassis** screw on the back of the unit.

For safety reasons the chassis is NOT disconnected from the main Earth but is connected through a filter (a 10 Ohms resistor in parallel with a 680nF capacitor).

**!!!WARNING!!!!**  
**Connections to the technical earth and changes to the grounding of the unit should only be carried out by qualified personnel.**

**Fuse**

The removable fuse holder houses a 1.6 AT fuse

**Power DIN socket**

The 8 pin DIN socket should only be used to connect the power supply provided with the 8803 unit.

*NB: for technical reasons the orientation of the socket is the opposite way up to normal. The "top" of the DIN connector will therefore be underneath. It is not possible to connect the plug the wrong way up.*

**USB**

The USB socket is a Type B connector used to connect the 8803 to a PC or Mac for Recall store and recall of unit settings.

Unit Specifications	
<b>Audio Specifications:</b>	
<b>Max Output Level</b>	+26 dBu
<b>Frequency Response</b>	+/- 0.3 dB 10Hz - 20kHz +/- 0.5 dB 10Hz - 35 kHz
<b>Distortion</b>	<0.006 (10Hz to 20kHz using window of 10hZ - 80kHz)
<b>Noise</b>	<80dB 20hz - 20kHz (Using measurement window of 10hZ - 22kHz)
<b>Input Impedance</b>	>20kΩ
<b>Output Impedance</b>	50Ω
<b>Dimensions:</b>	
<b>Width</b>	48.2cm / 19 inches
<b>Height</b>	4.4cm / 1¾ inches
<b>Depth</b>	24cm / 9½ inches (without power socket plugged in)
<b>Weight</b>	2.5kg / 5½ lbs

## Recall Software Installation

### Installation for PC

Insert the CD into the drive and the **Setup** program should automatically launch.

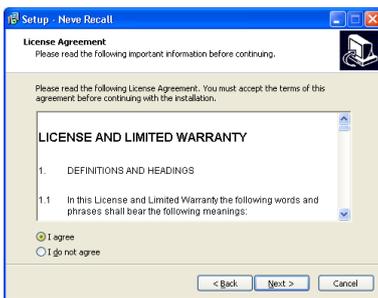
If the application fails to launch automatically on inserting the CD, then go to the CD Drive in Windows Explorer and double-click the **NeveRecall.msi** file or the **setup.exe** file to launch the Setup program manually.

► Click **Next**.



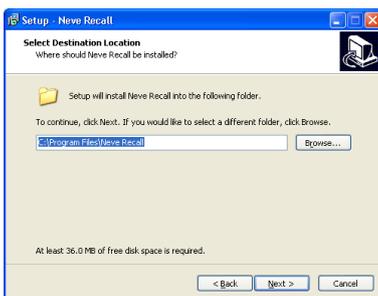
► Click **I Agree**, then click **Next**.

If you click **I Do Not Agree**, the install procedure will terminate.

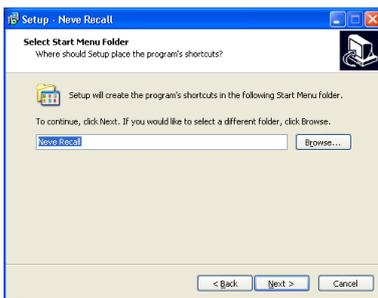


The installation programme will select a default location for files to be copied and created to.

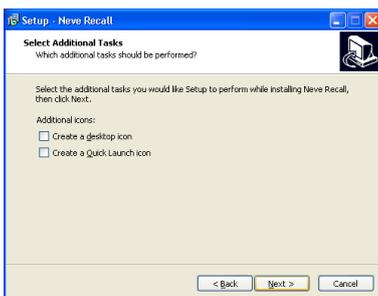
► Click **Next** to keep the default location, or click **Browse** to select another location.

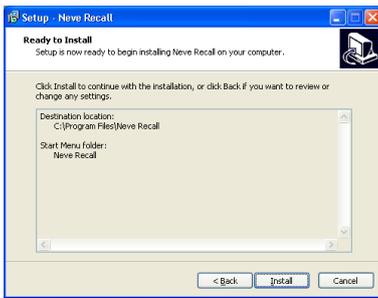


► Click **Next**.

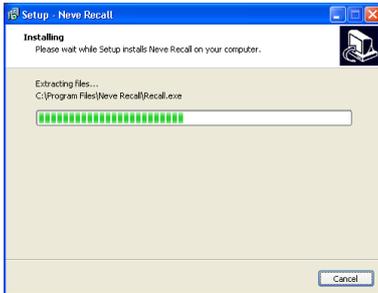


► Tick as desired then click **Next**.





► Click **Install**.



The install will start and the progress displayed.



If you wish to launch Recall, tick the **Launch Neve Recall** box.

► Click **Finish**.

The software will now be ready to use, and will be accessible from **Start Menu / Programs / Neve Recall / Neve Recall**, or from the **Recall** icon on the Windows Desktop.

## Installation for Mac



Insert the CD containing the software into the Mac, and the install programme will launch automatically.

► Click **Continue**.



Select the location where you wish the software to be installed to.

► Click **Continue**.



► Click **Upgrade**, and the software will start to install.



The progress bar will show the state of the installation.

► Once completed, click **Close**.

The software is now ready to use.

## New Versions of Recall Software for Mac

Where you wish to install a new version of the Recall software on a Mac, you will need to uninstall the previous version first and remove some files:

- From the **Applications** folder, move the **Neve Recall** folder to the **Trash**;
- From the **//System Library/Extensions** folder, move **Neve8816.kext** to the Trash (move this file, regardless of the actual outboard units you may have connected via USB)
- From the **//Library/Receipts** folder, move **Neve Recall.pkg** to the Trash.

You will now be able to install the new version

## Firmware Upgrades

In order to get the most from your Neve unit, the latest firmware should be installed.

Upgrading your software is a simple process with on screens prompts to guide you.

- ▶ Start the **Recall** software.
- ▶ On the main screen, right-click the window title bar (Mac users select **Recalls**)
- ▶ Click **Upgrade Firmware**.
- ▶ Select the file to transfer.

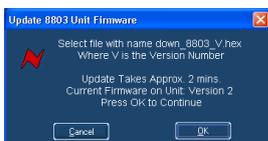


You will be prompted about removing other units.



*When updating units, only the unit that is being updated should be connected via USB. All other units should have their USB disconnected.*

*Even if you are updating two units of the same model, they should be connected individually and updated in two separate operations. If more than one unit is connected via USB when the Update is about to be performed, a screen will prompt you to disconnect the other units.*



A prompt screen will confirm the software number & version you should select, and display the current version of firmware for the unit.

- ▶ Click **OK**.

### Selecting a File for Transfer

The **Open File** dialog will appear.

To locate the firmware file, browse to the location:

- PC users: C:\Program Files\Neve Recall\Firmware
- Mac users: Applications\Neve Recall\Firmware



The file names follow the format **down\_88XY\_V.hex** where XY are the last two digits of the 88 unit name (e.g. '16' for 8816) and **V** is the software version number.

A typical filename could be **down\_8804\_3.hex**.

- ▶ Double click on the latest filename which matches your unit.

If an incorrect file is selected the user will be prompted to select another file.

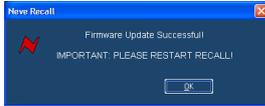
## File Downloading

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Once the file is selected, the transfer will begin and the Recall screen will display that the download is under way.

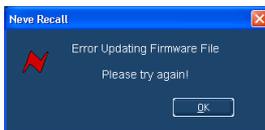
This process may take up to two minutes for each unit.



Upon completion, the message **Firmware Update Successful** will be displayed.

► Click **OK** to continue.

You can continue to update other units successfully without restarting Recall, but the Recall software must be restarted once this process is finished.



If the transfer fails (for example if the USB is removed by accident or power is lost to the unit), a warning message will prompt to the user to try again.

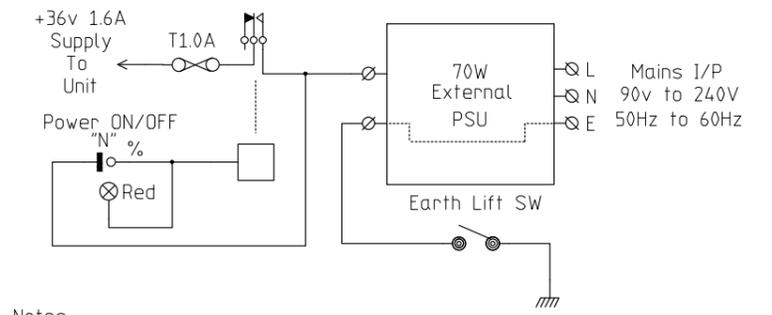
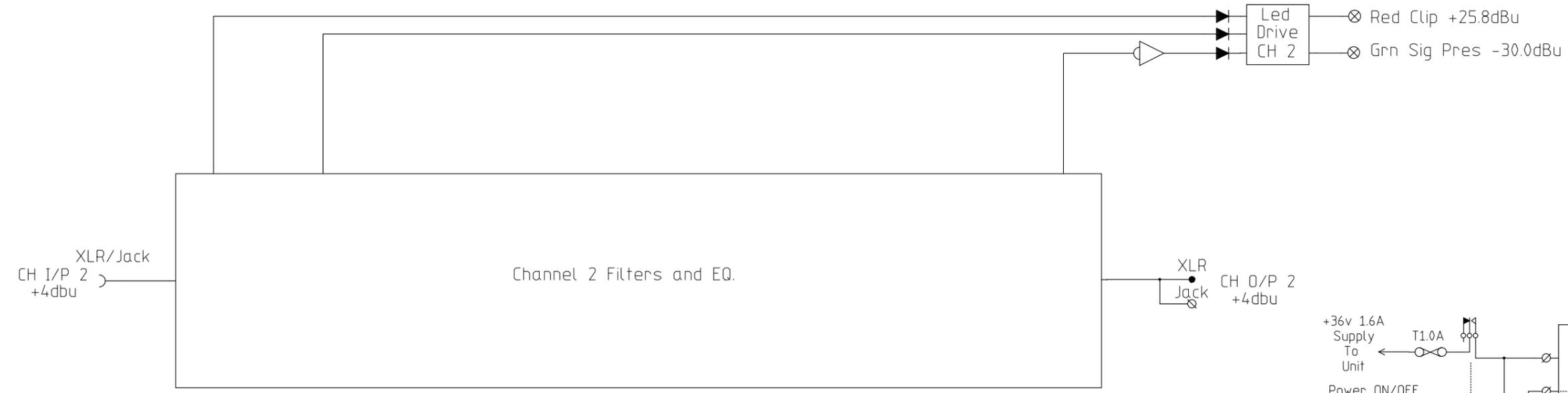
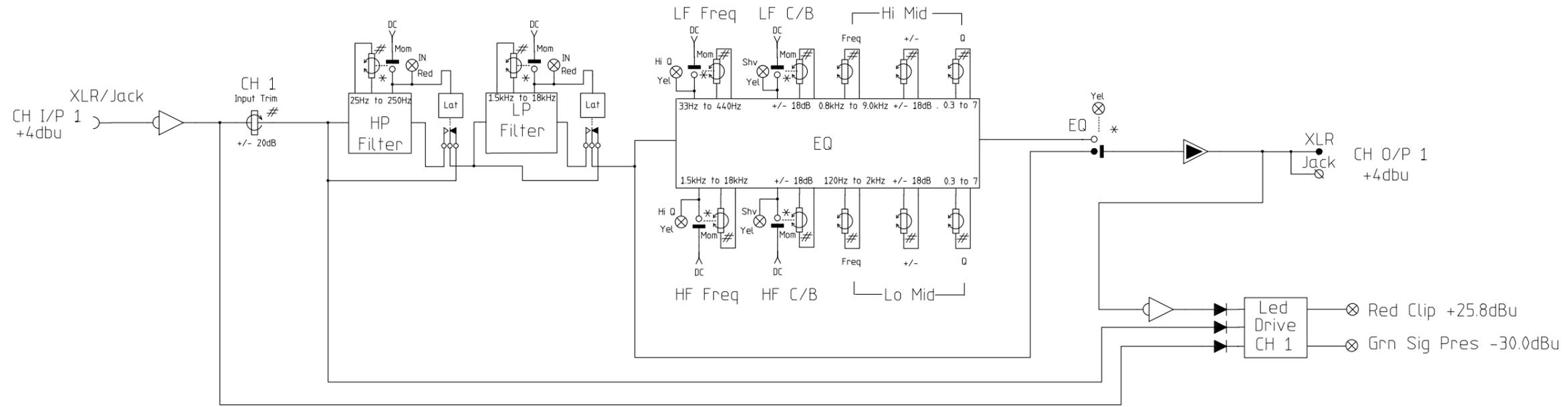
If Recall is started with a unit that has no firmware, the user will be prompted to upgrade the firmware, as the unit cannot be used in Recall unless the firmware installation is successful.

## Corrupted or Old Firmware

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If the firmware is corrupted or the unit has an old version of firmware, a prompt will appear upon starting the Recall software to indicate that firmware must be updated before the user can proceed.

The process described above can then be followed to update the latest firmware.



- Notes:
1. All I/P's and O/P's marked +4dbu are electronically Balanced.
  2. Controls marked with a # can be recalled.
  3. Controls marked with a \* can be reset.
  4. All switches are Momentary except where marked a %.
  5. Switching is achieved electronically with latching relays, FET's or gates.

	B	Issue	Drn.	RAP	TITLE 8803	USED ON	
	10/5/06	Date	Traced	RAP	Dual Channel	Dr. No.	EB20552
		C.N. No.	Checked		Equaliser	SHT.	1 of 1
		Checked		AMS NEVE LTD		20 06 ©	A1