

OPERATIONS MANUAL



EUROTECH 1226
3-way self-powered system

Introduction:

Congratulations on your purchase of the amplified loudspeaker; The trapezoidal design was used for a more precise and accurate sound and will add increased sound definition on vocal frequencies. This state of the art speaker will give you years of enjoyment.

Technical parameter:

Operating Frequency Range: 50Hz - 18KHz (@-3dB)

Frequency Response: 45Hz - 20KHz (@-10dB)

Maximum Peak SPL: 131dB /137dB(Peak)

Horizontal Coverage: 100°

Vertical Coverage: 25°

HF: 2 x 2.75" Neodymium , 1" output with 1.4"VC

MF: 3 x 6.5" Neodymium with 2"VC

LF: 2 x 12" Neodymium with 3"VC

Audio Input: Combo XLR female input + Jack 6.35

Input Impedance: 10KΩ between Pin 2 and Pin 3

Nominal input sensitivity: 0dBV(1.0V rms, 1.4V PEAK)

Type: 3 channel, Class-D

Output power: 1000W + 450W + 100W

Total Output: 1550W RMS

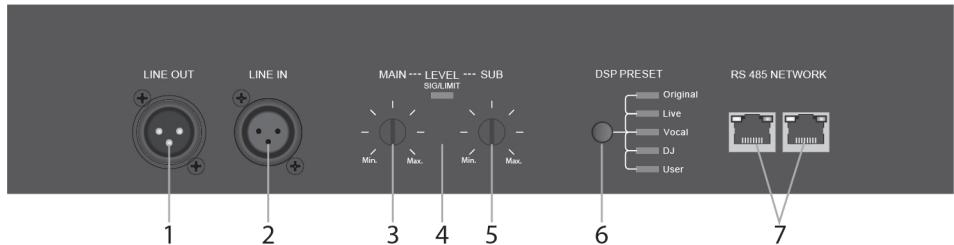
DSP: DSP processor 48KHz - 56 bits with 5 presets

Control: 0dBV(1.0V rms, 1.4V PEAK)

Cautions:

1. All operating instructions should be read before using this equipment.
2. To reduce the risk of electric shock, do not open the unit. There are NO REPLACEABLE PARTS INSIDE. Please refer servicing to a qualified service technician.
3. Do not expose this unit to direct sunlight or to a heat source such as a radiator or stove.
4. This unit should be cleaned only with a damp cloth. Avoid solvents or other cleaning detergents.
5. When moving this equipment, it should be placed in its original carton and packaging. This will reduce the risk of damage during transit.
6. DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
7. DO NOT USE ANY SPRAY CLEANER OR LUBRICANT ON ANY CONTROLS OR SWITCHES.
8. Make sure ALL of your equipment is completely OFF and lower ALL VOLUME, LEVEL & GAIN controls before connecting the speaker.
9. ONLY LINE LEVEL SIGNALS CAN BE SENT TO YOUR SPEAKER.

Disregarding any of the above will void your warranty!!!!



1. Line Output – Use XLR 3pins connector balanced or unbalanced.
2. Line Input – Use XLR 3pins connector balanced or unbalanced.
3. Volume control for main sound level.
4. Signal/Limiter indicator: LED. signal = Green light , Limiter ON= Red light

Signal indicator illuminates to indicate signal present at the input.

Limiter indicator illuminated just before the amplifier begins to clip and distort. Adjust the level control and signal level from your source, so this illuminates only briefly on peaks in the music. Using the system with this on all or much of the time will result in poor sound quality and damage the speakers and electronics.

5. Volume control for SUB sound level.

6. DSP Preset selection: Original/Live/Vocal/DJ/User

Whether it's a live performance, disco or presentation, the built-in DSP technology gives you the optimum sound for your event.

- Original : A neutral and unprocessed sound, with a full frequency range. Ideal for playback recorded music.
- Live : Enhances clarity and projection by reducing the lowest frequencies and adding a slight treble boost to bring out detail.
- DJ : Ideal for parties and DJs. This DSP setting emphasizes low frequencies – giving you a more pronounced bass that's perfect for dance music.
- Vocal: Reduces the low end greatly, while emphasizing the upper mid-range (which is where the human voice sits on the frequency spectrum). This enhances speech clarity and ensures your audience can hear every word.
- User: This DSP mode can be customized using the Pro Speaker Management System software available with the EUROTECH 1226. Easily adjust bass, middle and treble frequencies.

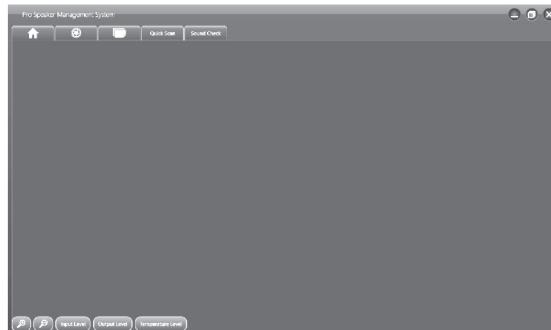
7. RS485 Input/Output interface: Use the RJ45 connector to connect to the computer, then you can operate on the computer through **Pro Speaker Management System**.

Download link: <https://we.tl/t-DjWD2A0F7b>

Pro Speaker Management System

OPERATION

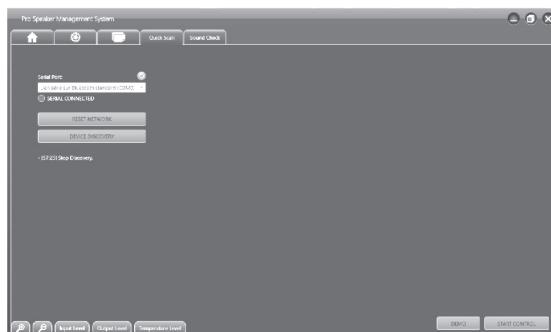
Home page



The Home screen is the first screen which appears after you launch the Pro Speaker Management System software. Access to main menu/System information/Load & Save/Quick Scan/Sound Check. Also 5 quick access functions:

- Zoom + : To maximize blocks on main menu page.
- Zoom - : To minimize blocks on main menu page.
- Input Level : Press this button for a quick view of input level in all speaker blocks.
- Output Level : Press this button for a quick view of output level in all speaker blocks.
- Temperature level: Press this button for a quick view of amplifier temperature level in all speaker blocks.

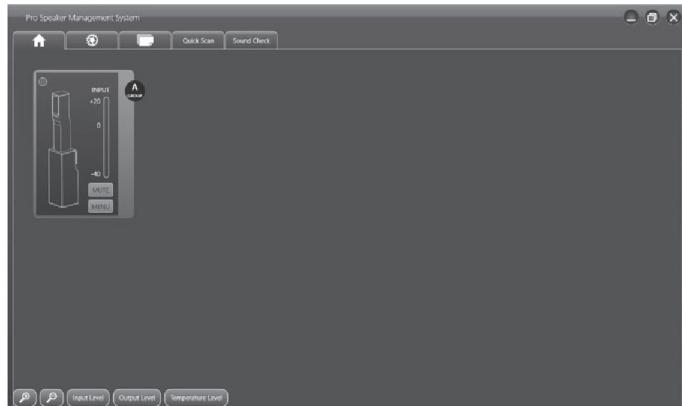
Quick Scan page



- Connect your speaker(s) to the RS485 computer interface.
- Check if the right PORT is selected for your RS485 interface.
- Press "RESET NETWORK".
- Press "DEVICE DISCOVERY" button, to find the speaker(s) connected to the RS485 network.
 - Once the discovery finished, the message "Stop Discovery" will appear.
 - The connected speakers will appear.
- Press "START CONTROL" to access speaker's features and controls.

NOTE: In this Quick Scan page , you have the DEMO function which allows you to have a look on general features and functions of the "Pro Speaker Management System" without connecting any speaker.

Home page with SPEAKER BOX



Once your speaker detected on the RS485 network, you can START CONTROL.

The "speaker box" of your EUROTECH 1226 is now accessible.

- The green light on top left of the box confirms your EUROTECH 1226 system is well connected on network.

- 3 main functions are available:

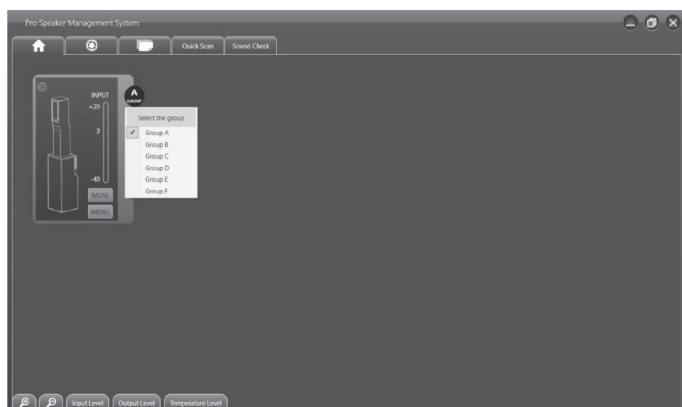
- **(Group selection)**
- **(MUTE)**
- **(MENU)**

Group selection:

Very convenient if you want to adjust several speakers at same time.

Example: If you have 2x EUROTECH 1226 systems connected. one on right side and one on left side, you can adjust crossover parameters, EQ parameters, levels ... on both speakers at same time.

Just select the same group for the 2 systems.



NOTE: Up to 6 groups of speakers can be created.

MUTE:

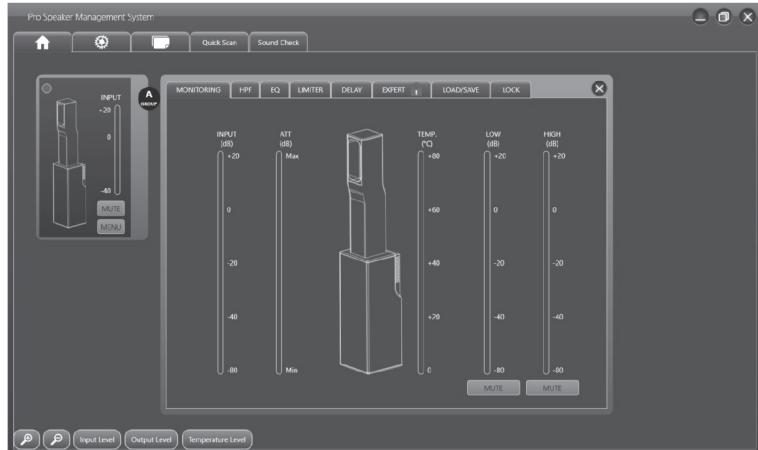
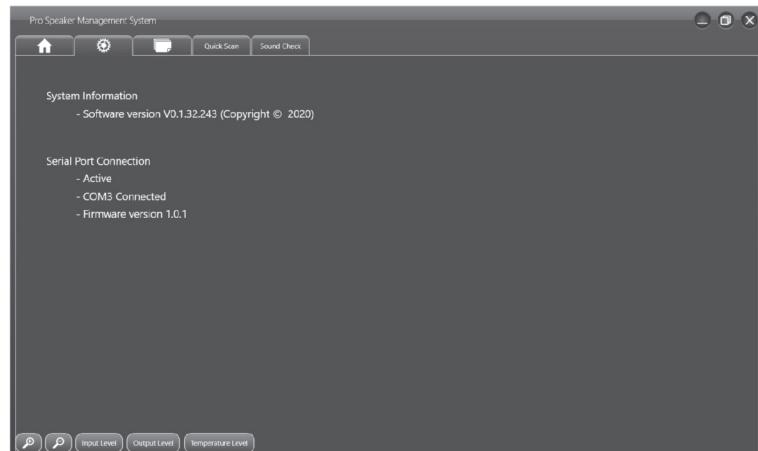
Press this button to mute the complete system.

NOTE:

You can press any “quick access button” (Input LEVEL, Output LEVEL or Temperature LEVEL) at any time. The speaker box will display the LEVEL selected.

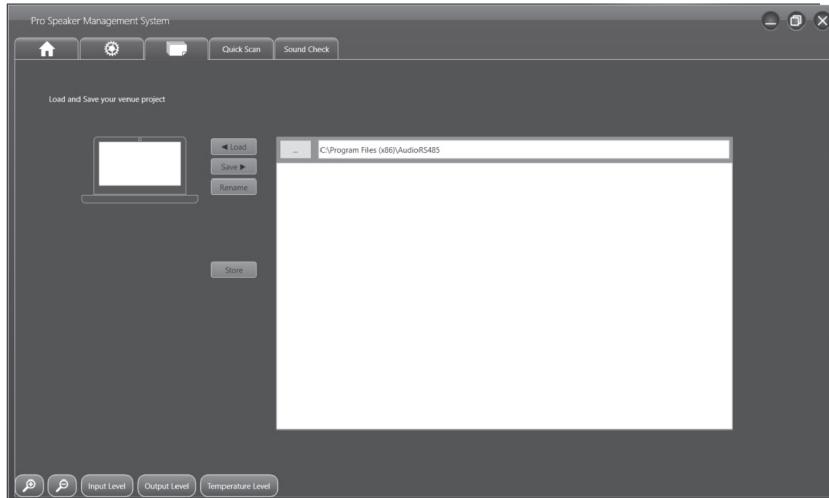
MENU:

Press this button to access speaker parameters. (Please see details on page 5-7)

**System information page**

Displays your connection status and the software version.

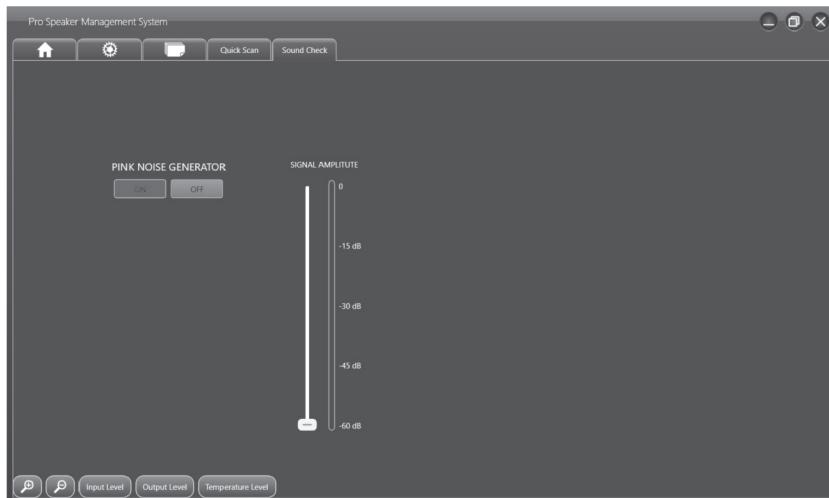
Load & Save page



- Save your project, Load a project, Rename a project

Project files will be saved in your computer system file, in folder "AudioRS485" automatically created when you have installed the Pro Speaker Management System in your computer.

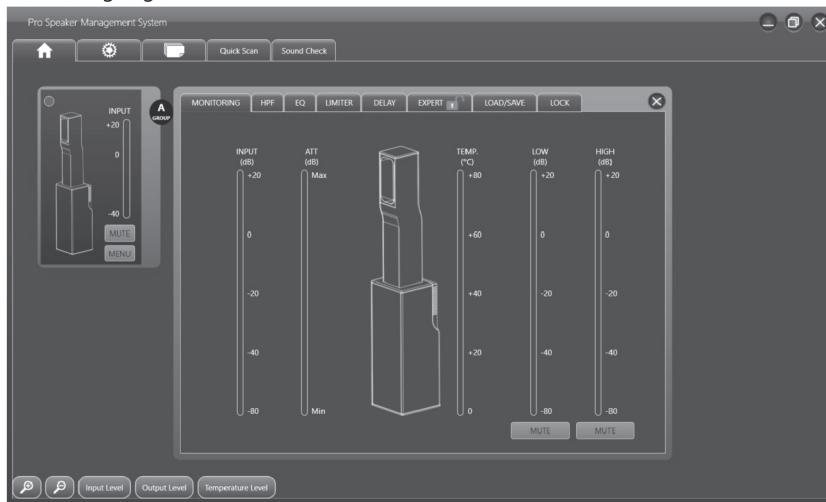
Sound Check Page



Very useful tool for your sound checking. Turn "ON" PINK NOISE GENERATOR and adjust your speaker SPL curve with external spectrum analyzer.

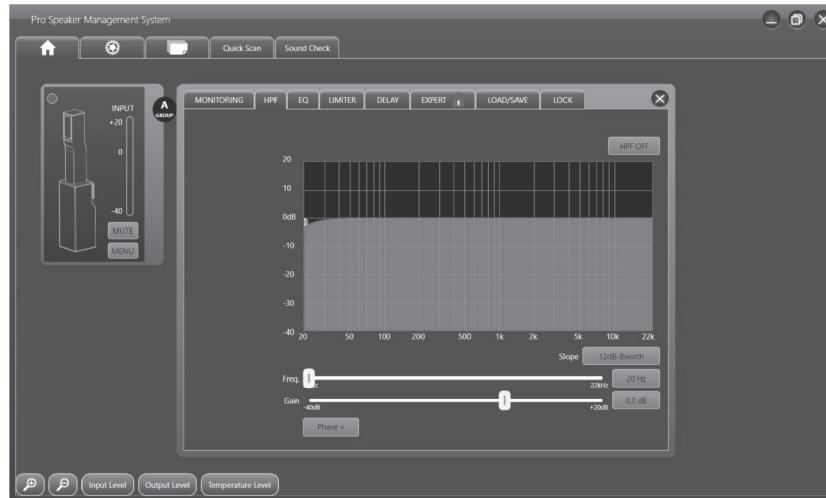
SPEAKER BOX (MENU)

Monitoring Page



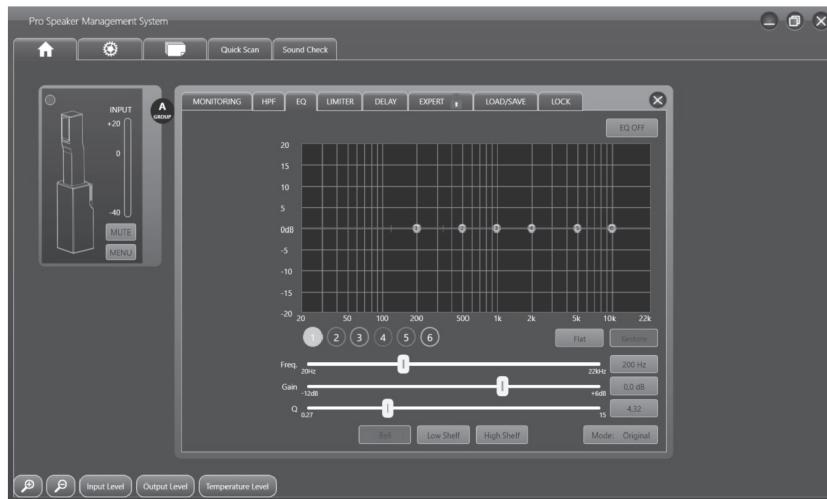
Monitor your system in real-time. From this page you can separately MUTE the top speaker and the Sub bottom speaker.

HPF Filter Page



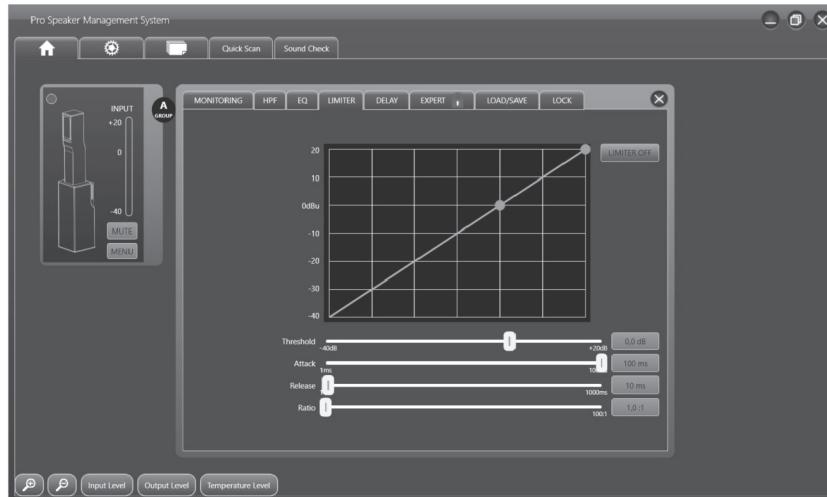
Adjust here the low-cut frequency to protect your system or to adjust low cut frequency if you use an extra SUBWOOFER.

EQ Page



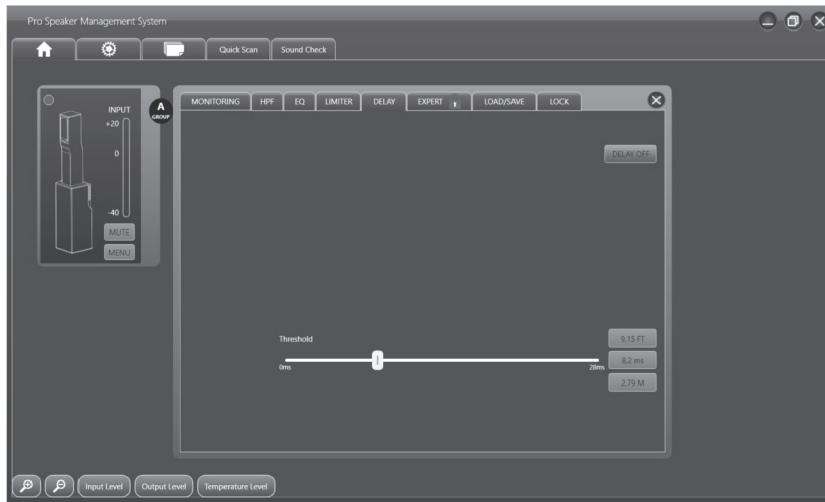
This EQ page is for general EQ of your system. This is a parametric EQ with 6 EQ points. You can adjust Frequency, Gain and Slope for each separate EQ point. You can select "Bell", "Low Shelf" or "High Shelf" curve. Also available on this page the "MODE" button, to select one of the 5 EQ presets.

Limiter Page



Protect your system. As a professional limiter section, you can adjust: Threshold, Attack, Release and Ration adjustments.

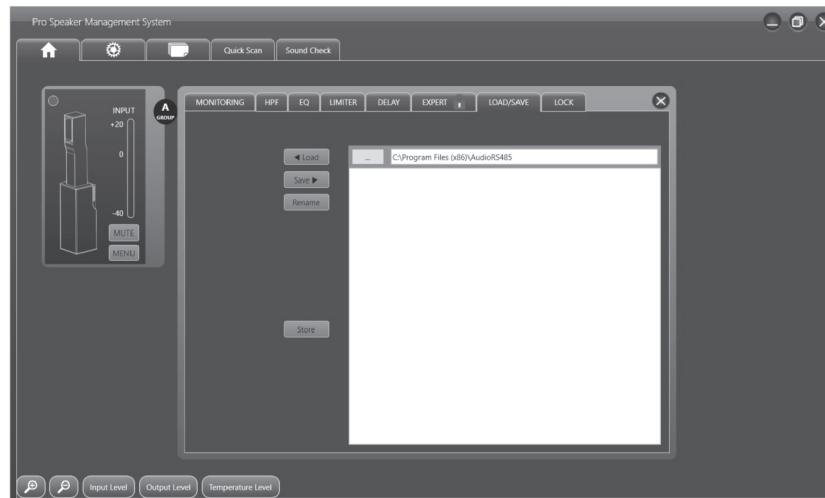
Delay Page



You may need to add delay on your speaker system depending on its position in your installation. You don't need external speaker management system. You can do it directly with the EUROTECH 1226 software.

To help you on delay adjustment , the delay is displayed in M(meter), ms(Millisecond time) and FT(feet)

Load & Save page



-Save your project, Load a project, Rename a project

Project files will be saved in your computer system file, in folder "AudioRS485" automatically created when you have installed **the Pro Speaker Management System** in your computer.

Expert Menu

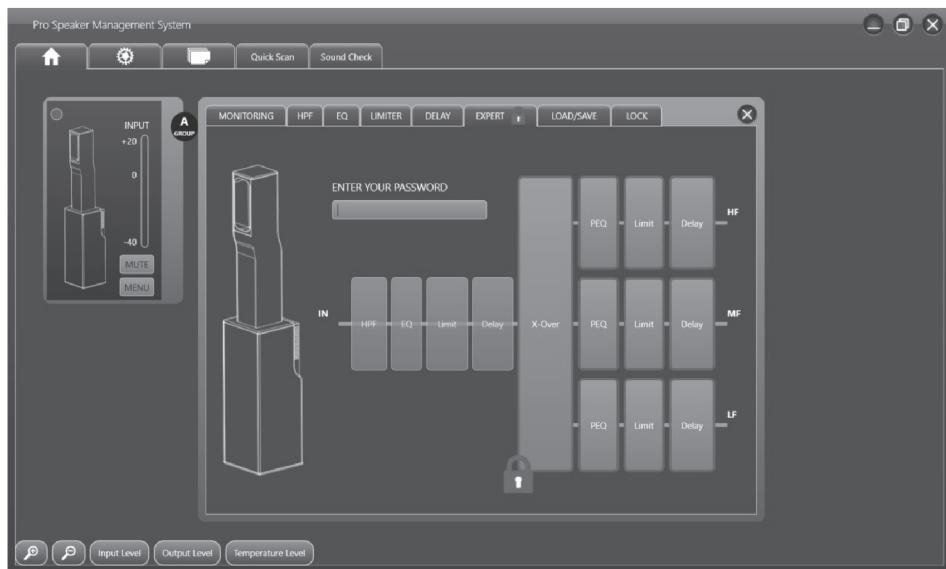
This protected menu is exclusively dedicated to Sound engineer or qualified service department.
It is not for end user !

WARNING!

All parameters from this EXPERT menu must be carefully adjusted. Wrong adjustments can definitively damage the speaker system.

PASSWORD : 88333942

This EXPERT menu gives you access to the deeper parameters of the speaker system. You will be able to change internal electronic crossover parameters, to add limiter , delay or parametric EQ for each separate driver.



NOTE: From this menu, you cannot adjust the general HPF, EQ, LIMITER or DELAY parameters.
If you need to adjust them , you need to go back to main menu and exit the EXPERT mode.

EXPERT X-OVER PAGE



A crossover is used to divide the broadband signal into separate frequency bands. This allows each driver in a speaker system to be operated within its optimal frequency range. Using active crossover increase the efficiency of each driver but also of the amplifier by lowering the intermediation distortion.

The Pro Speaker Management System software crossover module provides a combination of high pass and low-pass filters.

Each LF, MF or HF filter have selectable Butterworth, Linkwitz-Riley or Bessel filter types and filter slopes ranging from 12dB/octave to 48dB/octave.

A (PHASE) button is available. Phase or Polarity inversion is used to match driver polarity in systems which require it. It depends on the filter type you have selected.

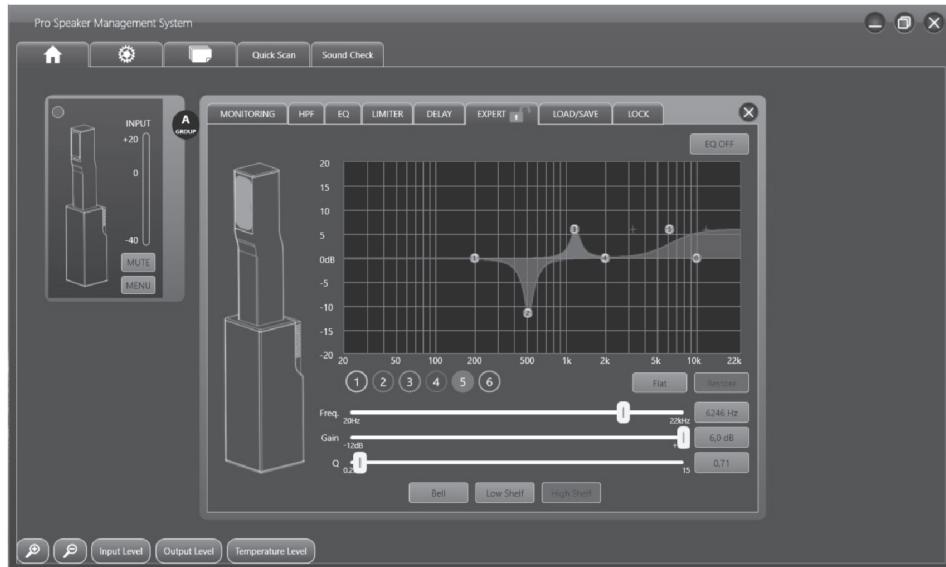
Each adjustable frequency band : LF, MF and HF will contain their own set of parameters :

- High-Pass, from 20Hz to 22KHz with Butterworth, Linkwitz-Riley or Bessel filter types and filter slopes ranging from 12dB/octave to 48dB/octave.

- Low-Pass, from 20Hz to 22KHz Butterworth, Linkwitz-Riley or Bessel filter types and filter slopes ranging from 12dB/octave to 48dB/octave.

- Gain :from -40dB to +20dB

EXPERT PEQ PAGE



Access to Parametric EQ for each driver: HF, MF and LF .

They are all based on same 6-bands output processing interface designed exclusively for speaker tuning.

In a perfect world, each loudspeaker driver would show a ultra-flat frequency response. Unfortunately, loudspeaker drivers don't have extremely flat response by design and require some adjustments to achieve a more flat frequency response. These output Parametric EQ can be adjusted to manually improve frequency response for each driver.

For each EQ point, you can adjust :

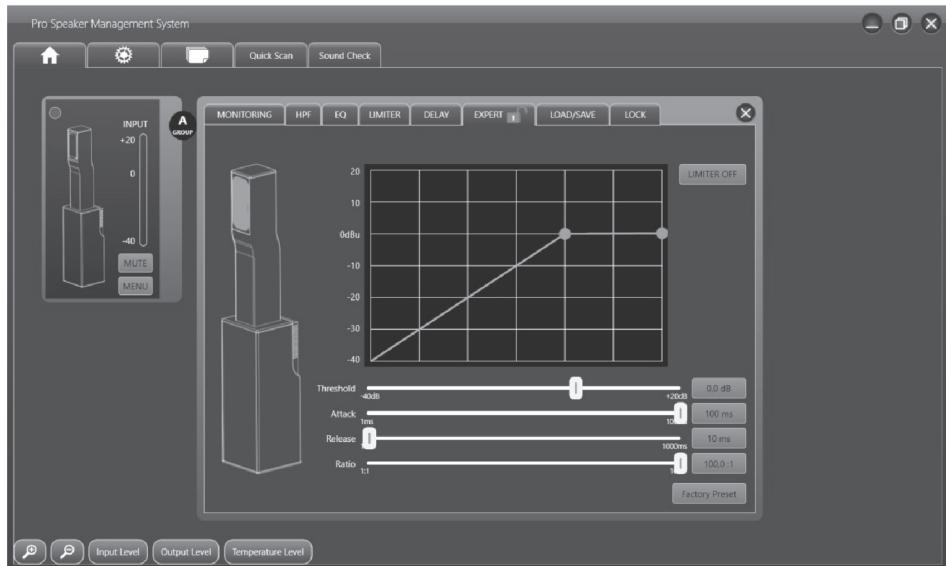
- Frequency – From 20Hz to 20,000Hz
- Gain – From -12dB to + 6dB
- Q-ratio – From 0.27 to 15

You can also choose between 3 shelving EQs: Bell, Low Shelf and High Shelf.

NOTE:

To come back to main EXPERT menu page, just press again on "EXPERT" top page label.

EXPERT LIMITER PAGE



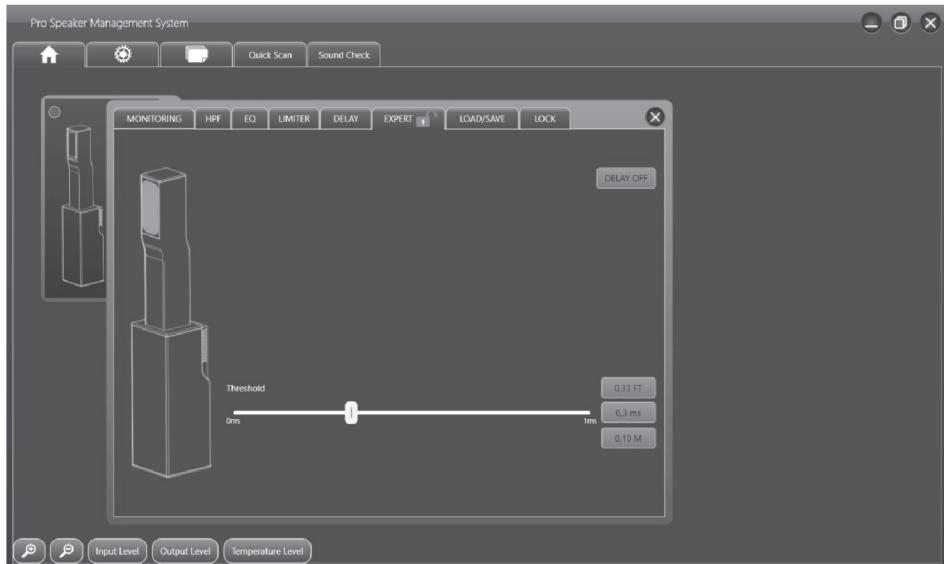
Powerful limiter for each separate driver.

you can adjust : Threshold, Attack, Release and Ration parameters.

NOTE:

Limiter page interface is same for HF, MF and LF section.

EXPERT DELAY PAGE



Each driver may need internal delay to have correct time alignment with the other drivers .

To help you on delay adjustment, the delay is displayed in M(meter), ms(Millisecond time) and FT(feet)

NOTE:

Delay page interface is same for HF, MF and LF section.