

# DIGITAL FEEDBACK EXTERMINATOR

Attention To reduce the risk of fire or Electrics Shock, Do not expose this apparatus to rain or moisture!



**User Manual** 

# SAFETY PRECAUTIONS

#### Please read these safety precautions before proceeding.

**Power:** This device is designed to operate on  $230V_{\sim}$  AC. Please see the package or the back of the unit to confirm that the configuration is right for your location.

**Power Cord:** Do not allow the cord or the plug to be crushed or damaged.

**Humidity:** Do not expose this unit to moisture or liquid of any kind. Do not allow liquid to enter the unit through the vent holes or the edges of the case.

**Temperature:** Do not install near any heat sources such as radiators, stoves, or any other appliances that produce heat.

**Internal Components:** Refer all repairs or service to a qualified service professional. Do not attempt to repair or service this unit yourself. Opening the cover may expose you to dangerous voltage or other hazards.

**Cleaning:** Do not clean the surface of the unit with any harsh chemicals. Use only a dry cloth to remove accumulated dust.

**Odor:** If you smell something burning and suspect a malfunction, turn off the power and unplug the unit immediately.

If you will not use the unit for an extended period of time, turn off the unit and unplug the power cord. Do not allow foreign objects to fall into the unit. Do notinsert foreigh objects into the vents or the cooling fans. If a foreign object should fall into the unit, unplug the power cord and take the unit to a qualified service professional.

Warning: Do not route the power cord under the unit or between several units in the same equipment rack or on the same shelf. Do not route the power cord in a manner that may create a tripping hazard or where it may be exposed to damage.

Thank you for choosing this product.

Be sure to inspect packaging and contents for any damages incurred during shipping and transit.

Please read this User Manual before you connect or operate this device.

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## Features

▼ Each channel is equipped with up to 24 dynamic filters, 12 bands PEQ. 1Hz resolution precision, operating frequency range: 20Hz-20KHz.

▼ high-performance 24-bit A/D&D/A converter.

▼ The response time can be set to fast, medium or slow speed. Two Q values for Notch filter can switch automatically.

▼ Automatically scanning and suppressing the howling points.

▼ Noise gate function can suppress the interference of slight system noise.

▼ Input compression function can eliminate feedback and expand voice dynamics.

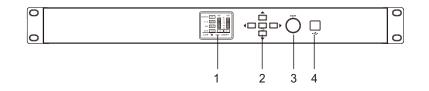
▼ Gain(-64dB to +6dB) for each channel.

▼ Howling can be avoided very effectively with four selectable frequency shift of each channel working with notch filter.

#### Attention:

When it doesn't work, it is not always the problem of the device itself, maybe it is damaged in the shipment. Please check carefully by the following ways before you take the device to repair. If you sent the device back to our company for repairing, please package it, we will provide you with good services.

Failure	Reason	Solution
	X Power socket has no power.	Repair the power supply system.
Output and screen doesn't work.	X Power plug is not in.	Connect the power plug correctly, and make sure it is connected well.
	X Overload protection	Pull out power plug and change the same type of fuse.
	X Signal wires don't connect well.	Connect signal wires well according to this user manual.
Output works but the screen doesn't	X Main volume is turned down.	Adjust the volume.
work.	Signal wires don't connect correctly.	Connect input correctly.
	X There is no output signal.	Check the sound input system.
	Signal wires don't connect well.	Connect signal wires well according to this user manual.
Only one output	Balanced potentiometer is to the extreme.	Adjust the balanced potentiometer to the middle.
works.	Signal wires don't connect correctly.	Connect signal wires correctly.
	X Signal wires doesn't work.	Check if the signal wires are open circuit.
	X MIC hasn't been turned on.	Turn on the MIC.
There is no sound in the MIC or the	MIC hasn't been plugged in completely.	Plug in the MIC completely.
sound is so low.	X MIC volume has been turn down.	Adjust the MIC volume to the reasonable level.
	X MIC doesn't work.	Change the MIC.
	X MIC is too near to the loudspeaker.	Keep the MIC far away from the loudspeaker.
Feedback happens	MIC volume is too high.	Adjust the MIC volume to the reasonable level.
or there is a lot of noise.	X MIC index is not the right one.	Change the MIC of the same index.
	MIC hasn't been plugged in completely.	Plug in the MIC completely.



## 1. Color LCD touch screen

Display information or the parameters which are being set.

Direction keys for selecting and setting the menus.
Select and set any parameters in menus, enter by pressing the center button.

## 3. Edit knob

Rotate to set the parameters, and exit by pressing it.

## 3. USB interface

For connecting the device to computer for program updating or operating by PC software.

1 2	3	4 5	

1.Power Switch

2.Power Socket---AC input

A power cable is offered with the device in original package.

3.Outputs

4.Inputs

5. Sensitivity switch: pressed is Line, flipped is MIC

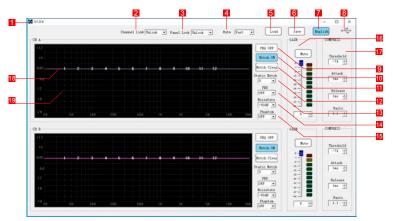
Analog input	2CH-XLR and 1/4"TRS(female) input, electronic balance/unbalance	
Input Impedance	Balance 4.7K $\Omega$ , Unbalance 2.3K $\Omega$	
MAX Input Level	+18dBu	
Analog output	2CH-XLR and 1/4"TRS(female) input, electronic balance/ unbalance	
Output Impedance	Balance >120 $\Omega$ , Unbalance >60 $\Omega$	
MAX output Level	+15dBu	
Frequency response	20Hz-20KHz,±0. 3dB	
S/N	>102dB(A)	
Sensitivity	Mic:-20dB/1KHz Line:0dB/1KHz	
THD+Noise	103dB	
Dynamic range	0.007%,1KHz;20Hz-10KH,<0.01%;10KHz-20KHz,<0.025%	
Working voltage	110V/220V/AC 50Hz/60Hz	
Port	Input:3-core XLR Female /6.3 socket,Output:3-core XLR Male/6.3 socket, USB interface, Power socket:3-core IEC socket, Power supply:90~240V, 50/60Hz, Power consumption<30W	
Net Weight	2. 3Kg	
Dimension	535*80*250mm	

The specifications are subject to change as product performance continues to improve

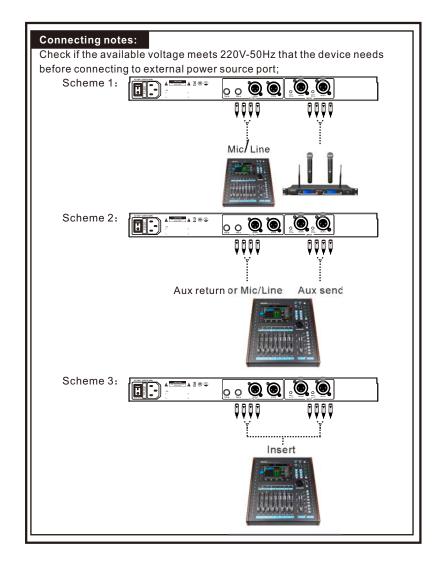
	Standard package	
NO.	N a m e	Quantity
1	F200 unit	1pcs
2	2 User manual 1pcs	
3	Power cable	1pcs

PC software operating instruction:

PC interface is concise and lively, the parameter in channel A/B is adjustable. PEQ, Gain, frequency point can be set for each channel. As shown in the picture:



- 1.PC Software version number
- 2.Channel joint adjustment: A&B joint adjustment can adjust two channels at the same time
- 3.Panel lock: Panel lock one level and two level locks prevent data from being manipulated
- 4. Rate: The sensitivity in scanning feedback points of automatic notch filters.
- 5. Load: Load the saved user data.
- 6. Save: Save the current user data.
- 7. English/Chinese: Language selection
- 8. Link: The button to link PC
- 9. PEQ Bypass: Bypass or restore the adjustment of PEQ frequency point.
- 10. Notch Bypass: Bypass or restore the auto scanning of feedback points of automatic notch filters.
- 11. North Clear: Clear the auto scanning of feedback points of automatic notch filters.
- 12. Static notch filter: Fix the feedback points, total 8 static notch filter.
- 13. Frequency shift (FBX): Suppress feedback points through frequency shift.
- 14. Noise gate: Start level signal threshold.
- 15, Phantom power supply: +48V phantom power switch.
- 16. Gain: Control or Mute of the signal size.
- 17. Compress: Compress the signal size over the threshold.
- 18. Status curve of automatic notch filters.
- 19. Status curve of PEQ adjustment.



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Edit interface and parameter instructions Switch on the device, then LCD screen displays as below:

	48V 48V
NOTCH ON	1 N 1
F. S OFF	6-
EQ OFF	36-
SYS ···	0 0
Link 🖻 (	Cur: USER1

Boot interface displays the basic parameters and status clearly and concisely, which can be set easily.

When the device receives music signals on this interface, the indicator light will be flashing. When the trap is on, the current notch point will be displayed. The screen displays 48V when the 48V phantom power is turned on. Select the menu you want by operating the direction keys on the panel and enter the system sub-menu by pressing the center key. Return to the main menu by pressing EDIT knob.

## System Menu

After selecting the system menu, press the center key of the direction keys to enter system modulation menu, as belows:

System	
language	EN
Channel	Link
Static Notch Num	0
Notch Speed	Default
Clear Notch	

Syste	m
+48V	OFF
Noisegate	OFF
Compressor	OFF
Load	User2
Save	User2

System	
Panel lock	User2
Factory Def	PW Reset
Ver sion	1.0.4

Main menu instructions Frequency shift: OFF, FBX2, FBX4, FBX6, FBX8

System menu instructions

- 1. Language: Chinese or English
- 2. The quantity of Static notch filter: 0~12 adjustable static notch filters
- 3. Detection speed of the notch filters: Fast, Default, Slow
- 4.48V phantom power: OFF / ON
- 5. Noise Gate, range: OFF, -80 to 0dB
- 6. Compressor, range: OFF, -80 to 0dB
- 7. Load, 20 groups
- 8. Save, 20 groups

Panel lock instructions

- 1. Password Reset: The default initial password is "1111".
- 2. One level lock: Only Gain can be adjusted on this level.
- 3. Two level lock: All the parameters can not be adjusted on this level.