User Manual

Feedback Suppressor TCI-F202

Chapter 1 Introduction

- Thank you for trusting and choosing our products!
- This device is a high-performance dual-channel feedback suppressor equipped with 2 analog balanced inputs and 2 analog balanced outputs. It is designed for sound reinforcement of medium and large professional venues with high quality sound reinforcement. Provide professional feedback suppressor effect, patented frequency shift + wave limiting algorithm to achieve high sound quality and low noise feedback suppression effect. Simple and clear operation, and equipped with RS-485/USB interface for fast configuration and remote debugging and monitoring.

- Application
- Conference room
- Courts
- Auditorium
- Multifunctional hall
- Performance

- Features
- High-performance professional audio processor with DSP technology
- Using 32-bit floating-point DSP, 24-bit AD/DA, 96K sampling frequency
- The device provides RS-485/USB connection management function
- 2-way balanced input, 2-way balanced output
- Frequency shift ±10Hz adjustable
- Built-in 48 notch filters, 12 static notch filters + 12 dynamic notch filters per channel
- Fully automatic feedback suppressor function, 5-level preset
- Input and output provide compressor, noise gate function
- Each channel provides 7-segment PEQ and high-pass settings
- One key BYPASS, panel key lock function

Chapter 2 Technical Parameters

Signal processing	32-bit fixed/floating-point DSP
Audio system delay	< 1.9ms
Digital to analog conversion	24-bit
Sampling Rate	96kHz
Frequency Range	20Hz~20kHz
Total harmonic distortion	＜0.014% THD+D
Signal to noise ratio	108dB (A-weighted), 106dB (unweighted)
Dynamic Range	110dB
Input interface	2 x XLR / 2 x 1/4" TRS (female) balanced inputs
Input Impedance	Balanced 50Ω, Unbalanced 10KΩ
Output interface	2-way XLR / 2-way 1/4 "TRS (female) balanced output
Output impedance	120Ω
Maximum input level	2V RMS
Maximum output level	1.6V RMS
Functions	Noise Gate, Frequency Shift, Notch, EQ, Compression Limiter
Feedback suppression	Method Frequency shift + automatic wave limit, optional
Communication interface	RS-485 interface, USB Type-B
Display	LCD2002
Indicator light	Power, input and output audio signal, pass-through
Power Requirements	AC 220V-50Hz
Working temperature	-20℃~+60℃
Dimensions	482x44.5x265mm
Package size	550x80x395mm
Net weight	3.2 kg
Gross weight	4.2 kg

Chapter 3 Functional Structure

Front Panel

Display Indicator light Function button

Rear Panel

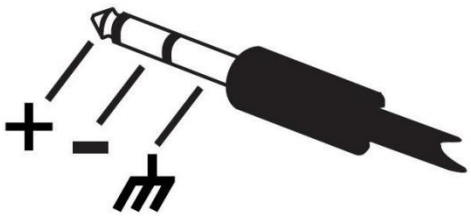
2 way output sockets 2 way input sockets RS-485 Power USB Power switch

Chapter 4 Quick Use

1、Audio input and output connections

XLR socket connection instructions

1/4″ TRS Socket Connection Instructions



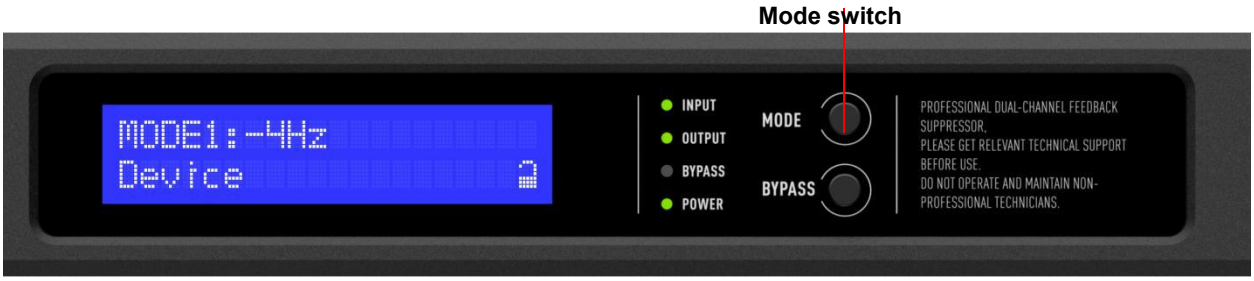
2、RS-485 connectoins

The RS-485 of this device adopts dual RJ45 network ports to facilitate serial connection

3、Feedback Mode Selection

The MODE button on the panel is used to switch the feedback suppression mode function.

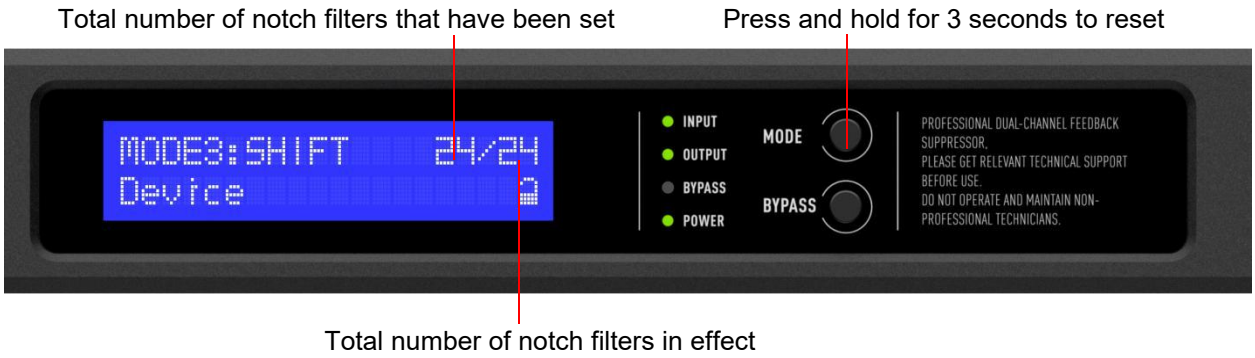
Five gear modes are optional, among which MODE1, MODE2 and MODE3 are preset modes that cannot be changed. MODE4 and MODE5 can be set and stored by dedicated PC software.



Note: The device will be silent for 3 seconds when the mode is switched!

4、Debug and reset the notch filter

In MODE3 or the custom mode with notch function, the upper right corner of the display screen will display the total number of notch filters set by the dual channel/the number of notch filters that have taken effect.
Debugging: Gradually increase the microphone gain until howling occurs. After the device captures the notch point, slowly increase the gain until all the set number of notch filters are captured, and then reduce the gain appropriately.
Reset: When the notch mode needs to be re-adjusted, press and hold the "MODE" button for 3 seconds, the notch filter that has taken effect in the upper right corner of the screen will reset and display 00.



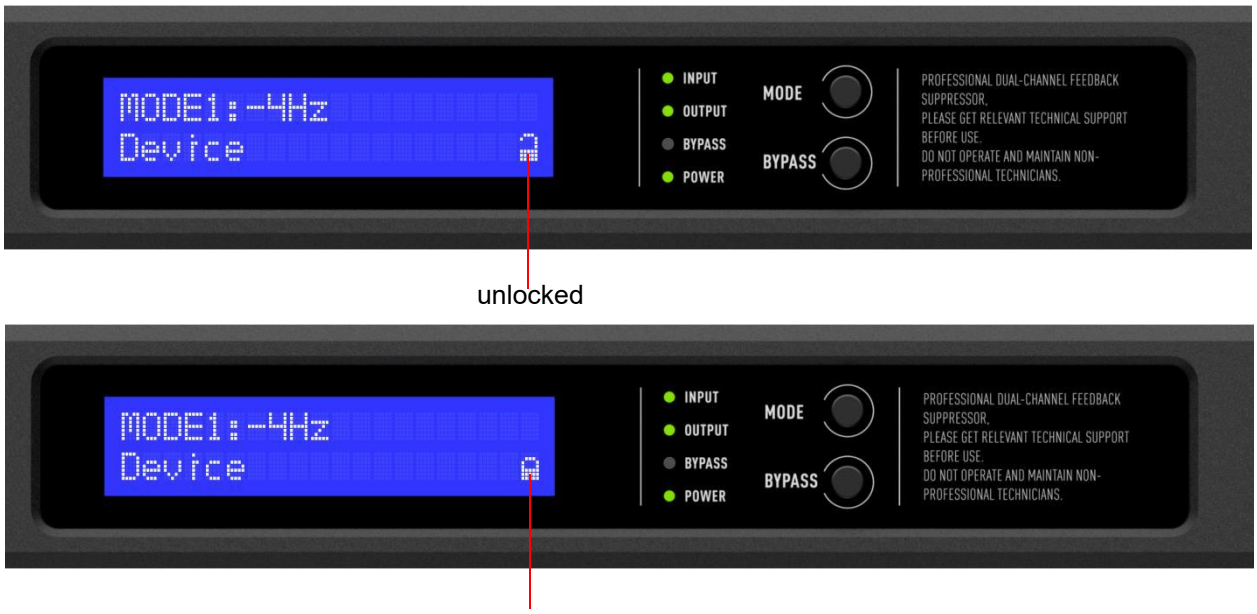
5、BYPASS function switch

Press the "BYPASS" button on the panel when you need to pass through during debugging, the BYPASS red indicator indicates that it is currently in the BYPASS pass-through state. Pressing the "BYPASS" button again will disable this function.

Warning: In the BYPASS state, all functions are suspended and the signal is in a direct state. Pay attention to the system volume to avoid howling damage to the products in the system!

6、Key lock function

When debugging is completed, the panel keys can be locked as required to avoid misoperation. Press and hold "BYPASS" for 3 seconds to lock the panel keys, and press and hold again for 3 seconds to unlock.



unlocked

CAUTION: Do not open the equipment cover arbitrarily, so as not to electric shock. Please contact the professionals to maintian if necessary.

The products are constantly improving,subject to change without prior notice.