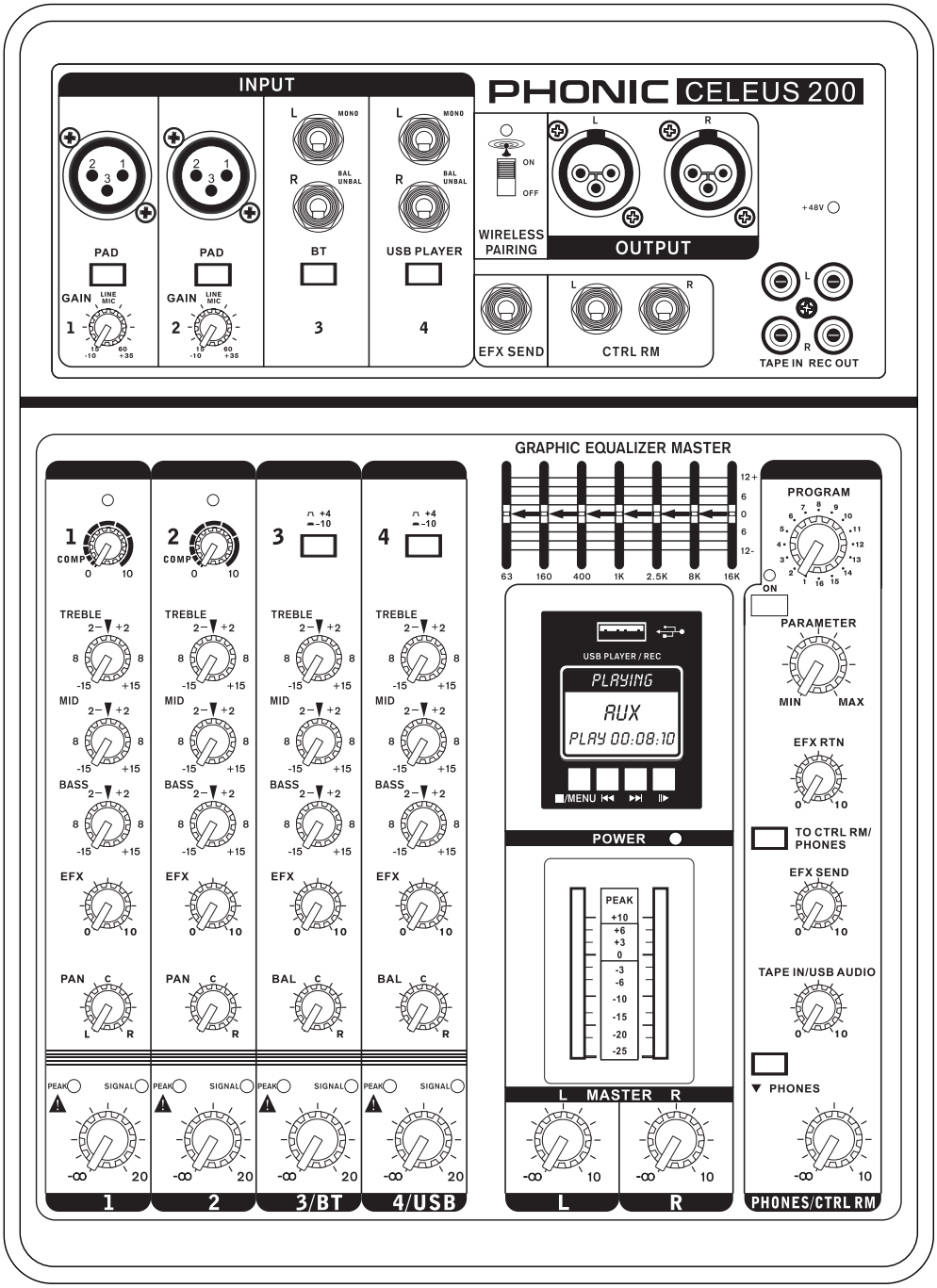
PHONIC



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CELEUS 200

☑ User's Manual

☑ Manual del Usuario

MAKING CONNECTIONS

Front Panel

1. XLR Jacks

These jacks accept XLR inputs for balanced signals. They can be used in conjunction with microphones – such as professional condenser, dynamic or ribbon microphones – with standard XLR male connectors. With low noise preamplifiers, these inputs serve for crystal clear sound replication.

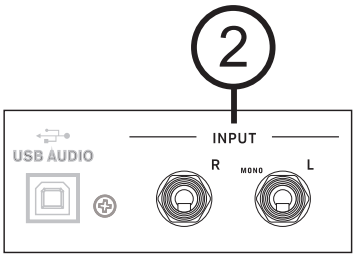
NB. When using an unbalanced microphone, please ensure phantom power is switched off. However, when using condenser microphones the phantom power should be activated.

2. Stereo Channel Inputs

The CELEUS 200 features 2 stereo input channels (channels 3 and 4), the inputs of which differ slightly to the mono channels. Each channel includes two ¼" TRS phone jacks ideal for use with keyboards, drum machines and electric guitars.

If you wish to use a mono device on a stereo input, simply plug the device's ¼" phone jack into the left (mono) input jack and leave the right input bare. The signal will be duplicated to the right due to the miracle of 'jack normalizing'.

Channels 1 and 2 also includes line-level inputs, conveniently located on the rear of the CELEUS 200 mixer, that can double as a single stereo channel if needed. The "L" port is routed to channel 1 while "R" is routed to channel 2.



Stereo channels can also be used with return signals from external digital sources. Channel 3 doubles as the Bluetooth channel, while channel 4 also works with the on board USB playback module. When channels are used for these signals, the stereo inputs are effectively disengaged.

3. EFX Output

These 1/4" TS phone jack is the final output of the EFX mix, as controlled by the individual EFX rotary controls found on each channel. This can be used to feed any number of external signal processors. The signal can then be returned to the CELEUS 200 through a stereo line input channel.

4. Main Output Connectors

These balanced XLR connections will send the final stereo line level signal sent from the main mix. These outputs can be connected to an amplifier for sending the signal out to speakers, or directly to active speakers.

5. Control Room Output Connectors

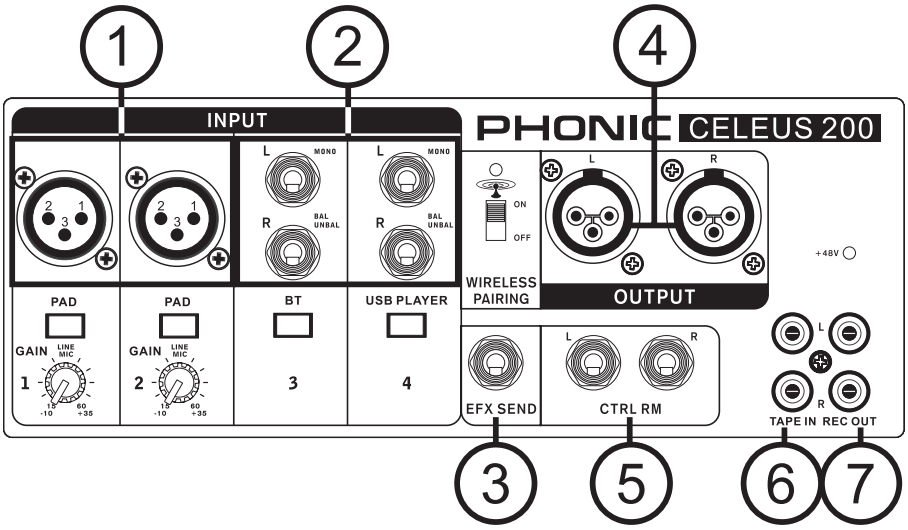
These 1/4" TS phone jack outputs are fed from the Control Room / Phones mix as controlled by the Control Room / Phones level control. This output has extensive use, as it can be used to feed the signal from the mixer to an active monitor, for the monitoring of the audio signal from within a booth, among many other possible uses.

6. Tape In (L and R)

These inputs accommodate RCA cables from such devices as tape, CD and MP3 players. The line from this feed is directed to the Tape In mix and controlled by the Tape In / USB Audio level control.

7. Record Out (L and R)

As with the Tape In ports, these outputs will accommodate RCA cables, able to be fed to a variety of recording devices. This may include cassette recorders or even laptop computers. Phonic suggests the use of a y-cable for connection of consumer electronics that feature mini-stereo jacks.



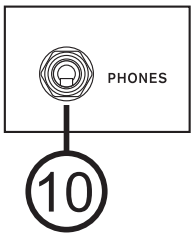
English

Rear Panel

8. USB Connector
This USB-B connection is for the USB computer interface. Use the included USB cable to connect this to your computer's USB port.

9. DC Power Input
This standard DC power input port is for connection of the included power supply. Please use the included power supply only as using the incorrect voltage can cause irreversible damage to the mixer.

10. Headphones Jack
This stereo output port, found on the very front of the mixer, is suited for use with headphones, allowing monitoring of the mix. The audio level of this output is controlled using the Phones/Control Room control on the front panel.



CONTROLS AND SETTINGS

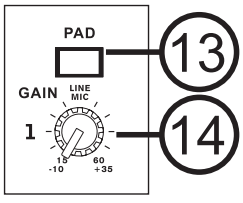
11. Phantom Power Switch
When this switch is in the on position, it activates +48V of phantom power for XLR microphone inputs, allowing condenser microphones to be used on these channels. Activating Phantom Power will be accompanied by an illuminated LED above the mic input. Before turning Phantom Power on, turn all level controls to a minimum to avoid the possibility of a ghastly popping sound from the speakers.

NB. Phantom Power should be used in conjunction with balanced microphones. When Phantom Power is engaged, single ended (unbalanced) microphones and instruments should not be used on the Mic inputs. Phantom Power will not cause damage to most dynamic microphones, however if unsure, the microphone's user manual should be consulted.

12. Power Switch
This switch is used to turn the mixer on and off. Ensure you turn all level controls down before activating. This ensures no audio is inadvertently sent through your system.

Channel Controls

13. PAD Button
The PAD button is used to attenuate the input signal by 25 dB. This should only be pushed in when using line-level input devices.



14. Gain Control
This controls the sensitivity of the input signal of the Line/Microphone input of the first and second input channels. The gain should be adjusted to a level that allows the maximum use of the audio, while still maintaining the quality of the feed. This can be accomplished by adjusting it to a level that will allow the peak indicator occasionally illuminate.

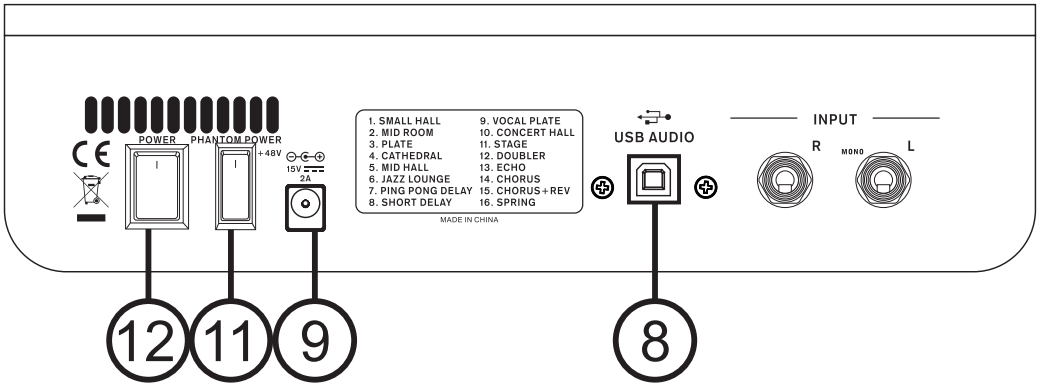
15. Compressor Control and Indicator
This controls the onboard compressor function on channel 1. Turning this control up towards the 12 o'clock position will adjust the threshold and ratio of the compressor at varying degrees. Once you reach the 12 o'clock position, the control will then adjust the compression settings along with an onboard expander (or, in other words, a 'compander'). The LED that accompanies this control will light up when the compressor is triggered.

16. TREBLE (High Frequency) Control
This control is used to give a shelving boost or cut of ±15 dB to high frequency (12 KHz) sounds. This will adjust the amount of treble included in the audio of the channel, adding strength and crispness to sounds such as guitars, cymbals and synthesizers.

17. MID (Middle Frequency) Control
This control is used to provide a peaking style of boost and cut to the level of middle frequency (2.5 KHz) sounds at a range of ±15 dB. Changing middle frequencies of an audio feed can be rather difficult when used in a professional audio mix, as it is usually more desirable to cut middle frequency sounds rather than boost them, soothing overly harsh vocal and instrument sounds in the audio.

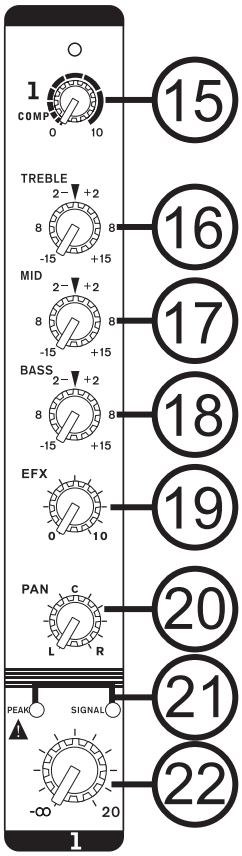
18. BASS (Low Frequency) Control
This control is used to give a shelving boost or cut of ±15 dB to low frequency (80 Hz) sounds. This will adjust the amount of bass included in the audio of the channel, and bring more warmth and punch to drums and bass guitars.

19. EFX Control
This control alters the signal level that is sent to the EFX output, which can be used in conjunction with external signal processors (this signal of which can be returned to mixer via the stereo return inputs), or simply as additional auxiliary outputs for any means required. This control also adjusts the level of audio that is sent to the built-in digital effect panel.



20. Pan / Balance Controls

This alternates the degree or level of audio that the left and right side of the main mix should receive. On mono channels, the PAN control will adjust the level that the left and right should receive (pan), where as on a stereo channel, adjusting the BAL control will attenuate the left or right audio signals accordingly (balance).



21. Peak & Signal Indicators

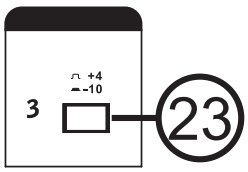
These LEDs will light up when signals reach certain levels. The Signal LED on the right will light up when an any audio signal is present on the channel. The indicator on the left (Peak) will light up when the channel hits high peaks, 6 dB before overload occurs.

It is best to adjust the channel level control so as to allow the Peak indicator to light up on regular intervals only. This will ensure a greater dynamic range of audio.

22. Channel Level Control

This control will alter the signal level that is sent from the corresponding channel to the main mix.

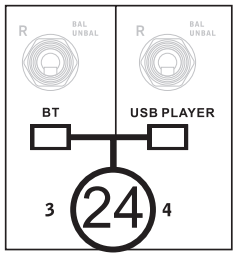
23. +4 / -10 Buttons



These buttons, located on stereo channels, are used adjust the input sensitivity of the corresponding channel, which will adapt the mixer to external devices dependeing on their operating levels. If the input source is -10 dBu (consumer audio standard), it is best to engage the switch, giving the signal a slight boost. If the input source is +4 dbV (professional audio standard) the button should be disengaged. If you are unsure of the source's operating level, leave the switch disengaged until you test the source's signal level.

24. 'BT' and 'USB Player' buttons

Located on channels 3 and 4, these buttons enable their corresponding channels to be used for their respective digital audio signals. The BT button allows channel 3 to be used for the Bluetooth audio streaming function, while the USB Player button allows channel 4 to control the signal from the onboard USB audio player.



Digital Effect Processor

25. Program Control

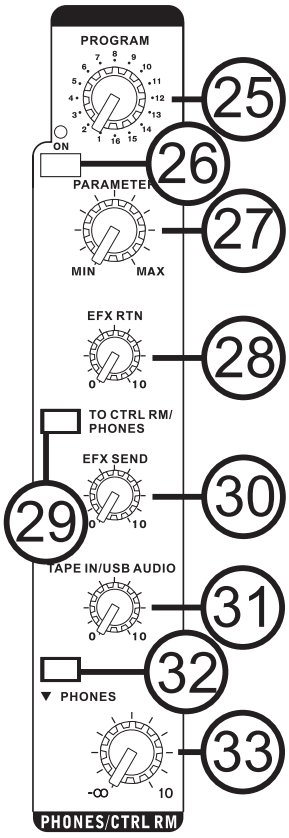
This control will allow users to select one of the 16 built-in digital effects of the CELEUS analog mixer. The effect names that correspond with the numbers can be found on the top of the mixer's face, or in the digital effect table.

26. Effects On Button and Indicator

Pushing this button will turn the built-in effect processor on and off. When the effect processor is activated, the corresponding LED will light up to indicate so.

27. Parameter Control

Turning this control will adjust the one main parameter of the selected effect. Each effect's parameter can be found on the digital effect table.



28. EFX RTN Control

This control adjusts the final output level of the DFX processor as sent to the main mix. For more EFX in your signal ('wet'), turn this control up and your channels' level controls down. For 'dryer' audio, turn the individual channel level controls up and reduce the EFX control.

29. "To Phones / Control Room" Button

This button will allow you to send your EFX signal to the Headphone and Control Room mixes for monitoring.

30. EFX Send Control

This is the final level control for the EFX Send mix. Your EFX mix is created by using the individual EFX controls found on input channels 1 through 4.

Main Section

31. Tape In/USB Audio Control

This control adjusts the incoming signal from both the RCA "Tape In" jacks and the USB audio interface return signal. The signals are then sent to the main mix. If there are input signals from both the USB interface and the Tape In, the two signals are combined and controlled simultaneously.

32. Tape In/USB To Phones/Control Room Button

Pushing this button in will send your Tape In/USB signal to the Headphone and Control Room mixes for monitoring.

33. Phones/Control Room Control

This level control determines the final output level of both the Headphone jack as well as the stereo Control Room outputs. The default signal for this mix is the main mix unless the "EFX TO MAIN" or "TAPE IN/USB TO MAIN" buttons are engaged.

34. Graphic Equalizer
This graphic equalizer allows you to adjust the frequency response of the main signal, with a maximum of ±12 dB of signal boost or cut for each of the frequencies.

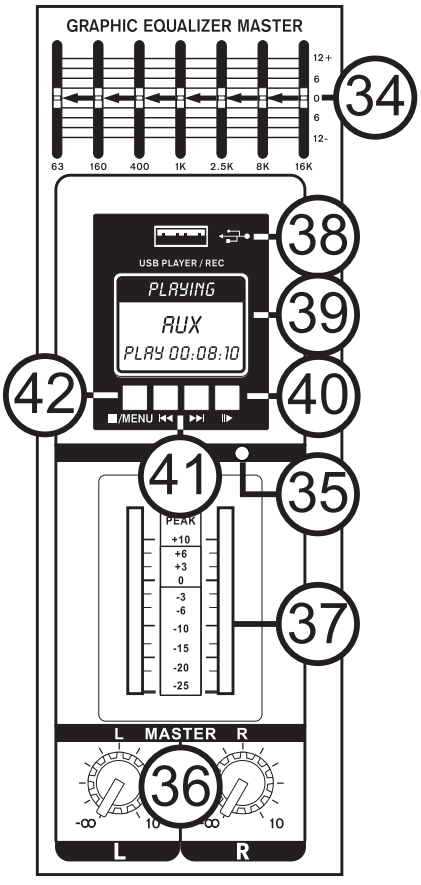
35. Power Indicator
This indicator illuminates when power is activated.

36. Master L/R Level Controls
These rotary controls are the final level control for the Master Left and Right audio sends, sent to the Main Outputs on the rear. When turned all the way up, the Main L/R controls provide 10 dB of gain to the signal. When set all the way down, the signal is effectively muted. These will also adjust the final output level of the signal sent through the USB interface to the computer.

37. Level Meter
This dual 41 segment level meter gives an accurate indication of when audio levels of the Main L/R signal reach certain levels. The 0 dB indicator illuminates is approximately equal to an output level of +4 dBu (balanced), and the PEAK indicator illuminates about 1.5 dB before the signal is dynamically clipped. To make the maximum use of audio, set the various level controls so that it sits steadily around 0 dB to make full use of audio, while still maintaining fantastic clarity.

USB Recorder Description

The USB Recorder's source signal is taken directly from each individual input channel. When playing audio, the signal will pass through Channel 4 when the USB PLAYER button is engaged. The CELEUS 200 supports playback of WMA and MP3 files with bit rates of up to 320 kbit/s.



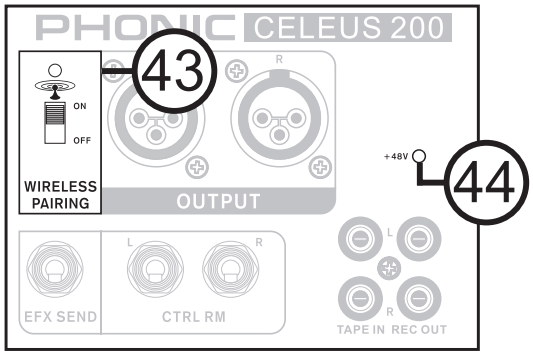
38. USB Port
Connect your USB flash drive to this input. Once a drive is connected, the files will initiate and the main menu will appear on screen. Users are advised to format their USB memory sticks with a FAT-32 file system. This connector can also be used to connect to your PC to take advantage of the onboard storage.

39. Display
This display will display the track number currently being played. It also offers play, pause and record indicators as well as the current play/record time.

40. Play Button
Push this button to start and stop playback and recording of the currently displayed track. Starting a track after it is paused will resume the track from the point at which it was paused (in both record and playback mode).

41. Back/Next Buttons
Pushing these buttons will allow users to skip back and forwards between tracks. When the menu is activated, these buttons are used to scroll through on screen options.

42. Stop/Menu Button
Push this button to stop playback or recording when applicable. Push and hold the button to access the USB recorder/player's main menu.



43. Wireless Pairing Switch and Indicator
This switch turns the Bluetooth function of the CELEUS 200 on and off. The "WIRELESS READY" LED will light up when a connection is established between most Bluetooth-enabled Smartdevice and the CELEUS. The bluetooth signal is fed through channel 3. Ensure the channel's "BT" button is engaged on this channel. The CELEUS 200 will appear as Phonic.BT in your device's bluetooth selection menu.

44. +48V Indicator
This LED indicator will light up when Phantom Power is activated on microphone inputs.

SPECIFICATIONS

Total Channels	4
Balanced Mono XLR Channels (Mic/Line)	2 (one with stereo line inputs)
Balanced Stereo Line Channels	2
2T Input	Stereo RCA
Main L/R Stereo Output	2 x XLR
Control Room Output	2 x 1/4” TS
EFX Send	1 x 1/4” TS
Rec Out	Stereo RCA
Phones	Stereo TRS
USB Interface	Stereo In/Out
USB Connector Type	USB Type B
USB Audio Bitrate	16-bit
USB Audio Sampling Rate	48 kHz
USB Module Onboard Storage	70MB
Wireless Frequency (Streaming Audio)	2.4 GHz
Phones Level Control	Yes
Main L/R Level Control	2 x Rotary
Metering	2 x 41
Phantom Power Supply	+48V DC
Frequency Response (Mic input to any output)	
20Hz - 60KHz	+0/-1 dB
20Hz - 100KHz	+0/-3 dB
Crosstalk (1KHz @ 0dBu, 20Hz to 20KHz bandwidth, channel in to main L/R outputs)	
Channel fader down, other channels at unity	<-90 dB
Noise (20Hz to 20KHz; measured at main output, Channels 1-3 unit gain; EQ flat; all channels on main mix. Reference=+6dBu)	
Master @ unity, channel fader down	80 dB
Master @ unity, channel fader @ unity	-84 dBu
S/N ratio, ref to +4	>90 dB
Microphone Preamp E.I.N. (150 ohms terminated, max gain)	<-129.5 dBm
THD (Any output, 1KHz @ +14dBu, 20Hz to 20KHz, channel inputs)	<0.005%
CMRR (1 KHz @ -60dBu, Gain at maximum)	80 dB
Maximum Level	
Mic Preamp Input	+10 dBu
All Other Input	+21 dBu
Balanced Output	+28 dBu
Impedance	
Mic Preamp Input	2 K ohms
All Other Input (except insert)	10 K ohms
RCA 2T Output	1.1 K ohms
Channel Equalization	3-band, +/-15dB
Low EQ	80Hz
Mid EQ	2.5 KHz
Hi EQ	12 kHz
Compressor	2
32/40-bit Digital Effect Processor	16 effects each with one adjustable parameter
Power Requirement	100-240 VAC, 50/60 Hz External
Dimensions (H x W x D)	87 x 250 x 341 mm (3.4” x 9.8” x 13.4”)
Weight	1.69 kg (3.7 lbs)