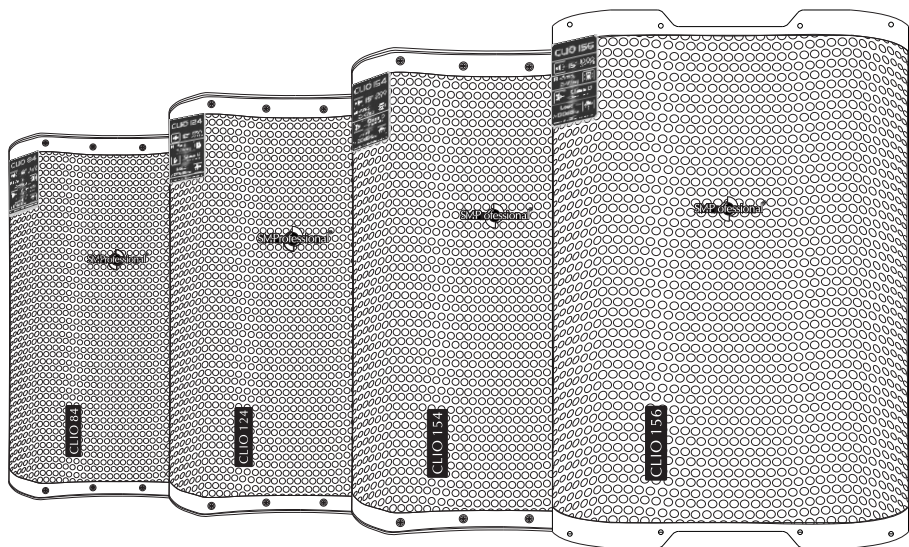# SMProfessional®

CLIO SERIES
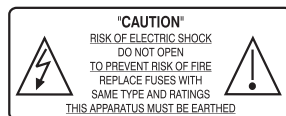
Professional Active Speaker

- Thank you for purchasing the SMProfessional Clio Series Active Speakers.
- To ensure optimum performance and safety, please follow this instruction manual carefully.
- Please retain this manual for future reference.
- For any complaint, feedback or testimonials please contact our distributor / dealer.

1. Safety Instructions

CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE THE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE; REFER SERVICING TO QUALIFIED PERSONNEL.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRICAL SHOCK. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

"CAUTION"
RISK OF ELECTRIC SHOCK
DO NOT OPEN
TO PREVENT RISK OF FIRE
REPLACE FUSES WITH
SAME TYPE AND RATINGS
THIS APPARATUS MUST BE EARTHED

This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.

This symbol wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.

DETAILED SAFETY INSTRUCTIONS:

All the safety and operation instructions should be read before the appliance is operated.

Retain instructions
The safety and operating instructions should be retained for future reference.

Heed Warnings
All warnings on the appliance and in the operating instructions should be adhered to

Follow instructions
All operation and user instructions should be followed

Water and Moisture
The appliance should not be used near water (e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement etc.)

Heat
The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliance (including amplifiers) that produce heat.

Ventilation
The appliance should be situated so that its location or position does not interfere with its proper ventilation. The appliance should not be situated to impede the flow of air through the ventilation opening.

Power Source
The appliance should be connected to a power supply only of the type described in the operating instructi- ons or as marked on the appliance. In order not to jeopardize the safety of the speaker, it must only be connected to the mains using the power cable provided. If the power cable plug does not fit your electrical outlet, contact a qualified electrician to replace the outlet with a suitable one.

Grounding or Polarization
Precautions should be taken so that the grounding or polarization means of an appliance is not defeated. To prevent the risk of electrical shock, the metallic parts of the speaker must be earthed. If the current outlet used for supplying the speaker, is equipped with an earth terminal, the speaker is earthed by means of the power cable.

Power Cord Protection
Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles & the point where they exit from the appliance.

Cleaning
Do not use solvents, alcohol, benzene or volatile substances for cleaning the exterior parts.

Non-use Periods
The power cord of the appliance should be unplugged from the outlet during lighting storms or when left unused for a long period of time.

Carts, stands and accessories
The component should be used only with a cart or stand that is recommended by the manufacturer. The Component should be moved with care.

Object and Liquid Entry
Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
Damage Requiring Service
- 	The appliance should be serviced by qualified service personnel when:
- 	The power supply cord or the plug has been damaged; or
	Objects have fallen, or liquid had been spilled into the appliance; or
- 	The appliance has been exposed to rain; or
- 	The appliance does not appear to operate normally or exhibits a marked change in performance; or
- 	The appliance had been dropped, or the enclosure damaged.
Servicing:
The user should not attempt to service the appliance beyond that is described in the Operating Instructions. All other servicing should be referred to qualified service personnel.

IMPORTANT NOTES

This manual is to be considered an integral part of the product, & must always accompany the speaker when it changes ownership as a reference for correct installation and operation as well as for the safety regulations. Studiomaster will not assume any responsibility for incorrect installation of the speaker.

OPERATING PRECAUTIONS
- 	Do not force the amplifier incorporated in the speaker to work in overload for extended periods of time.
- 	Never force the control elements (switches, controls, etc.).

⚠ **CAUTION**

- 	Make sure that the speaker is positioned in a stable & secure way in order to avoid any dangerous conditions for persons or objects.

CONNECTION

⚠ **CAUTION**

- 	For connecting the speaker, use only qualified & experienced personnel having sufficient technical knowledge or specific instructions for making the connections correctly & thus preventing electrical dangers.
- 	To prevent the risk of electrical shock, the speaker must only be supplied from the mains after all connections have been completed.
- 	Before powering up the speaker, it is advisable to re-check all the connections, making sure in particular that there are no short circuits.
- 	The entire sound system must be designed & installed in compliance with the current standards & regulations regarding electrical systems.

⚠ **CAUTION**

- 	To prevent inductive phenomena from giving rise to hum or disturbance which would jeopardize efficient speaker operation, the cables that transmit microphone signals or line level signals (e.g. 0 dB/V) must be screened and should not be run in the vicinity of:
	1) 	Equipment that produces strong magnetic fields (e.g. large power supply transformers)
	2) 	Electrical energy conductors
	3) 	Lines that supply speakers.

PROTECTION SYSTEM

The speaker is equipped of a exclusive system, which protects the loudspeakers against overheating, ensuring the maximum reliability in all professional applications. In addition, a sophisticated system incorporated in the amplifier handles the limiter circuits and the protection against overheating and short circuits.

2. Features

- High-performance 2-way Bi-Amplified design active loudspeakers.
- Driven by an efficient class D amplifier.
- Integrates powerful LF & HF drivers to deliver high SPL and a wide dispersion area.
- Easy DSP sound presets (flat / speech / music / live / club).
- USB/SD MP3 player and Bluetooth.
- True Wireless Stereo (TWS) for pairing two units.

- Input for Clio 124 / 154 / 156: 1 x Stereo RCA, 1 x XLR-Jack (line) and 1 x Switchable XLR-Jack (mic/line).
- Input for Clio 84: 1 x Stereo RCA,1 x Jack (line) and 1 x Switchable XLR-Jack (mic/line).
- XLR line out for linking additional speakers.
- Built-in soft clip limiter for speaker protection.
- Integrated stand mounting socket
- Ergonomically-shaped handles for easy transportation.
- Durable plastic moulded enclosure with a wood grain finish.

3. Rear Panel Commands And Functions
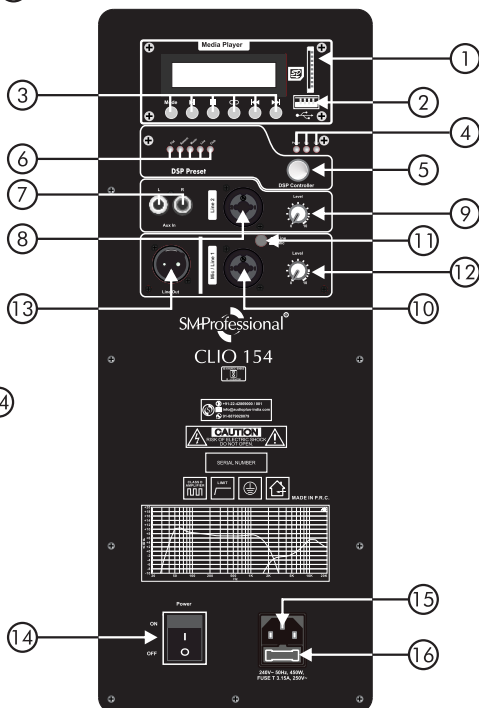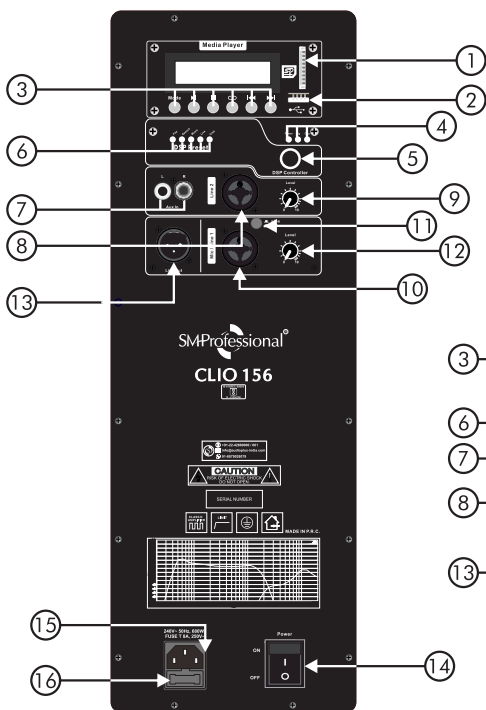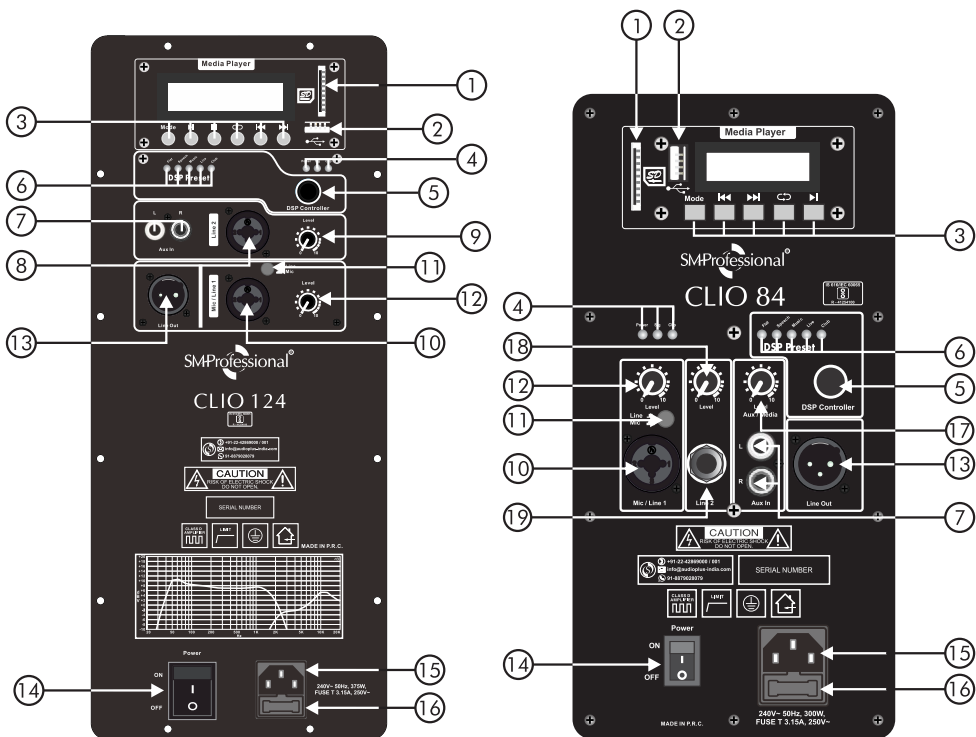
1) **SD Card Slot:** Use it to insert an SD card with MP3 files for playback.

2) **USB Disk:** Use it to insert a flash-based USB storage device (pendrive) with MP3 files for playback.

3) **Mode Selection and Playback Control:** Use the "Mode" switch to toggle between USB/SD and Bluetooth modes. Use the play/pause, stop, repeat, previous/rewind and next/forward knobs to take full control of your music playback.
   Terms of Use: Studiomaster Professional respects intellectual property rights and we request our users to do the same. Please use MP3 downloads only from sources which you have legally purchased. PLEASE DO NOT USE PIRATED MUSIC OR PROGRAMS.
   Disclaimer: Your acceptance and use of this product will be treated as your agreement to the following clause: Studiomaster Professional, Audioplus and all associated companies and sellers are indemnified from any liability the end-user may incur by using illegally procured material or immoral content or any other such similar program selection.

4) **Status LEDs:** The Power LED indicates the ON and OFF status of the speaker. The Signal LED indicates the presence of audio signals at any of the connected inputs. The Clip LED indicates clipping or distortion at any of the connected inputs. Kindly reduce the input volume level on the speaker or reduce the output level on the connected device/equipment.

5) **DSP Preset Controller:** The loudspeaker integrates the following DSP-based EQ sound presets - Flat, Speech, Music, Live and Club. Use this rotary knob to toggle between the various DSP presets.

6) **DSP Preset LEDs:** These LEDs light up based on the respective DSP preset selected.

7) **Aux In:** This is a stereo RCA line input to connect devices such as CD/media players, iPods, MP3 players and DJ mixers etc.

8) **Line 2:** This combo XLR-Jack input accepts line-level signals from various sources.

5

9) **Line 2 / Aux In / Media level Control:** Use this rotary knob to control the volume level of the line 2 / Aux in / Media inputs (Clio 124 / 154 / 156) (see Pt. 7 & 8).

10) **Mic / Line 1:** This combo XLR-Jack input accepts both mic and line-level signals from various sources.

11) **Mic / Line 1 Input Sensitivity Selector:** Use this switch to change the input sensitivity between mic and line. The mic mode is ideal to connect a dynamic microphone.
    Note: Do not use a microphone in the line mode. Doing so may damage your equipment.

12) **Mic / Line 1 Level Control:** Use this rotary knob to control the volume level of the mic / line 1 input (see Pt. 10).

13) **Line Out:** Use this balanced XLR (M) output to connect/link this speaker to an additional speaker.

14) **Power Switch:** Use this switch to power the speaker ON or OFF.

15) **Power Cord Input:** Use the supplied cord to power up the speaker. Kindly check and match the voltage requirement indicated on the rating plate of the unit. Connect the power cord only to a mains socket outlet with a protective earthing connection.

16) **Fuse Carrier:** Houses a fuse to protect the unit from unwanted power surges.

17) **Aux/Media Level Control:** Use this rotary knob to control the volume level of the Aux/Media input. (Clio 84)

18) **Line 2:** This jack input accepts line level signal from various sources. (Clio 84)

19) **Line 2 Level Control:** Use this rotary knob to control the volume level of the line input. (Clio 84)

Bluetooth Operation and Indication

Action	Indication for Clio 124 / 154 / 156	Indication for Clio 84
1) When Power On	It displays 'on' and then "Well Come Please Wait"	"Blue Display"
2) Bluetooth mode	'Bluetooth Unconnected' on display.	"Blue Display"
3) USB mode (Default mode)	USB 88:88	USB 88:88
4) SD/MMC mode	SD 88:88	SD 88:88

Clio Series Features

☞ Plays any Mobile phone or other smart device with Bluetooth wirelessly.

☞ Connect your smart device (Mobile phones, Laptops, Tablet phones etc.) & control music directly from the palm of your hand.

☞ 13 meter range line of sight for Bluetooth connection gives you room to roam around your premises.

Setting up your Bluetooth Connection for Clio Series

● Press mode button to switch from USB mode to bluethooth mode.

● Clio 156, 154 & 124: From your phone or any of the Bluetooth device turn Bluetooth ON and search for device "Clio 156 / 154 / 124".

● Clio 84: From your phone or any of the Bluetooth device turn Bluetooth ON and search for device "Clio 84". Pair and connect to it.

● Now any music or audio you play on your device will be played through Clio 84 / 124 / 154 / 156 and the music can be controlled (Play, Pause, Volume + and Volume -, Reverse & Forward) by either your device or controls on the panel.

Reconnecting Your Device

If you move out of range or turn off the Bluetooth feature on your mobile device, the Bluetooth Receiver will get disconnected from your device. To reconnect, click on the device name (Bluetooth) on your paired device list.

Changing Connected Device

If you want to switch from one device to another, follow these steps:
1) End the existing *Bluetooth* connection from your device by either disconnecting within your "settings" or turning off *Bluetooth*.
2) The *Bluetooth* can now be connected to a different BT device.
3) Follow the directions in **''Setting up your Bluetooth Connection''.**

ATTENTION: 1) Please ensure that there isn't any obstruction between *Bluetooth* Transmitter (Mobile phones, Laptops, Tablet phones etc.) & Receiver (Clio 84 / 124 / 154 / 156. Bluetooth).

Out of Range or Lost Signal

If the music device (Mobile phones, Laptops, Tablet phones etc.) is out of range (beyond 13 meter) of the *Bluetooth* Receiver (Clio 84 /124 / 154 / 156) or if there is something blocking the *Bluetooth* signal, which shall be indicated by loss of audio or audio intermittency. To avoid a lost connection, move the music device back into range (within 13 meter), or reduce obstruction between the receiver and your smart phone. The connection will automatically be reestablished and audio signal will be through. If the connection does not restore you will need to establish it again as mentioned in ''Setting up your Bluetooth Connection''.

Troubleshooting Bluetooth Connection

PROBLEM	POSSIBLE SOLUTION
Paired *Bluetooth* device does not connect	Already connected to other BT device. Disconnect from it and pair & connect again.
No or poor audio from *Bluetooth* connection	Move your BT device away from devices that generate electromagnetic interference, such as microwave ovens, cordless phones, WIFI networks or other *Bluetooth* device.
	Make sure that the BT module on the Clio 84 / 124 / 154 / 156. panel is not muted and the volume is up.
	Make sure your *Bluetooth* transmitting device is playing audio & the volume is up.
	Your *Bluetooth* device may be out of the specified range, try moving it closer to the Clio 84 / 124 / 154 / 156.
	Make sure that you work within the *Bluetooth* range of 13 meter, taking care that there is no metal or human body interference.
Cannot pair the speaker with your *Bluetooth* device	Make sure you select "*Bluetooth*" in the pairing list on your device to finalize the connection. (required by some devices)
	Your *Bluetooth* device may be out of range-try moving it closer to the Clio 84 / 124 / 154 / 156.
	Already paired to other BT device. Unpair from it and then pair & connect again.

Media Player Description

Clio 124 / 154 / 156

Clio 84
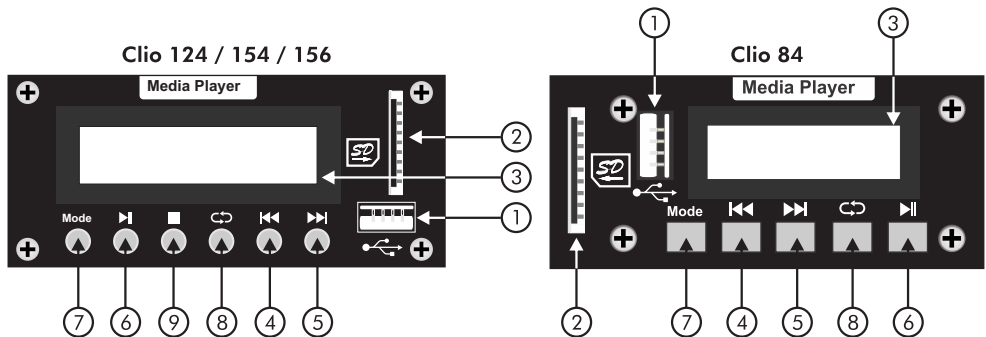
1) **USB Input Socket:** For inserting the USB drive.

2) **SD Card Input Socket:** For inserting the SD Card.

3) **LED Display:** For displaying track Number.

4) **Previous (⏮):** Press button to select previous song & long press of this button will decrease volume level.

5) **Next (⏭):** Press this button to select next song & long press of this button will increase volume level.

6) **Play / Pause (⏯):** Press this button to Play or pause the MP3 songs.

7) **Mode:** This button use for either USB or Bluetooth.

8)   **⟳ :** This button have four functions showing on display one by one

    1. Single : play one song continue again & again (repeat).

    2. Folder : To select song from folder, if there is any folder.

    3. Random : Select song or track randomly.

    4. All : Play all song one by one.

9)   **■:** Press this button to stop song & then press play / pause button to play song from start.

    (Clio 124 / 154 / 156)

True Wireless Stereo (TWS) Function & Operation

True Wireless Stereo (TWS) technology lets you use two Clio series speaker units (same models) paired via Bluetooth to form a wireless left and right channel system to deliver true stereo sound. Apart from a louder output, TWS empowers a wide stereo imaging and natural, more pleasing sound.

Requirements:
- 2 x Clio series speaker units with TWS compatibility.
- Bluetooth device (smartphone,laptop and TV etc)

Note:
The TWS functionality is only compatible with between two units of the same model. Kindly refer to the compatibility chart below.

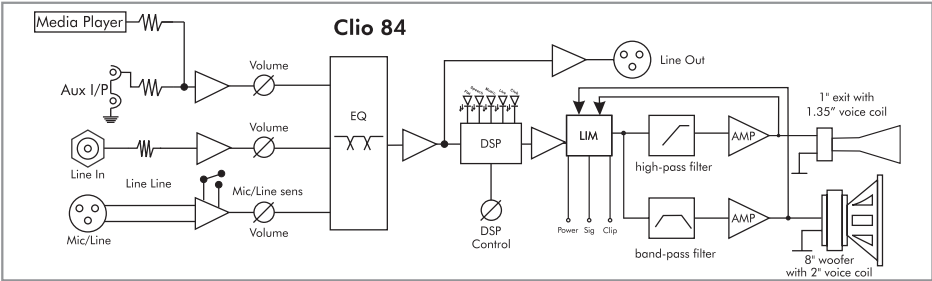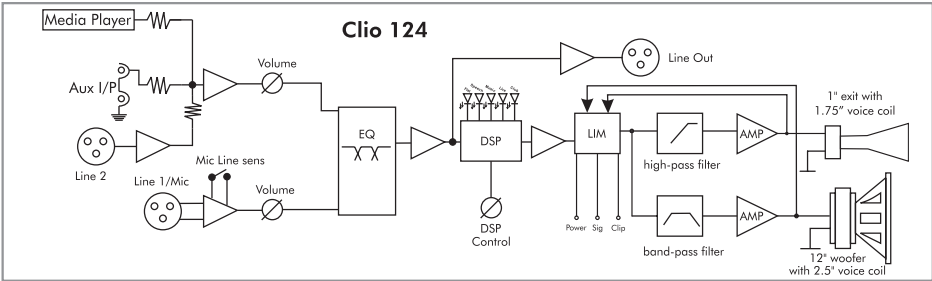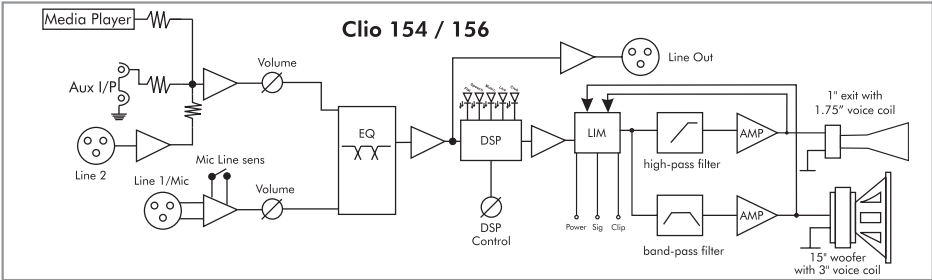| Configuration	TWS Compatibility
Clio 84 + Clio 84	✔ Compatible
Clio 124 + Clio 124	✔ Compatible
Clio 154 + Clio 154	✔ Compatible
Clio 156 + Clio 156	✔ Compatible
Clio 84 + Clio 124 + Clio 154 + Clio 156	✖ Not Compatible

TWS Connection:
Note: Steps to connect via Bluetooth are mentioned on Page 6.

TWS Master   **TWS Slave**

Bluetooth
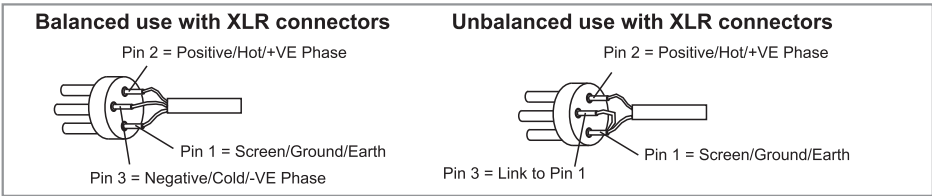
Left Channel   **Right Channel**
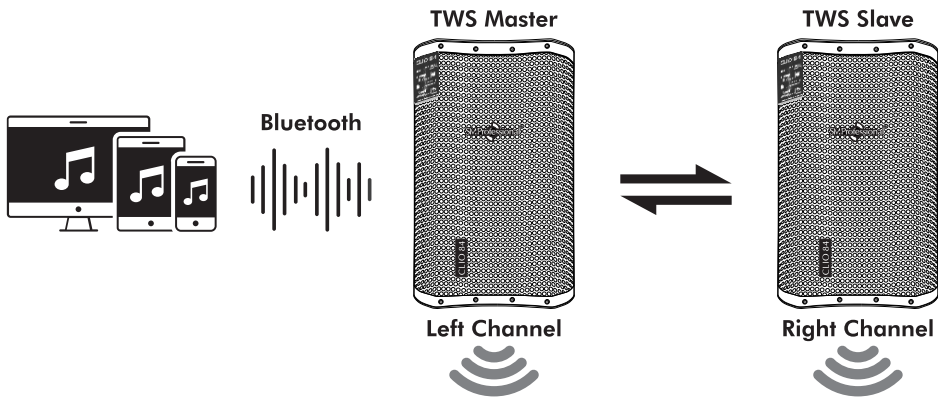
1. Press the Mode button on the rear to select the Bluetooth mode. Long press the Mode button of the first Clio series speaker unit. This will pair it as the master device to the selected audio source (smart phone, player, PC, TV etc).

2. After successfully pairing the first unit with the audio sources, now move to the second unit. Press the Mode button on the rear panel to select the Bluetooth mode. Long press the mode button of the second unit. This will pair the second (the so-called" slave") unit to the master device i.e. the master Clio series speaker unit, not the sources. This way, you will get a stereo system, which plays separate left and right channels.

3. For optimal results, ensure both the units are at the same volume level. You can also place the speaker apart for a more spatial stereo sound and a wide dispersion area.

4. Block Diagram

Clio 154 / 156

Media Player

Aux I/P
Line 2
Line 1/Mic
Volume
Volume
Mic Line sens
EQ
DSP
DSP Control
Power Sig Clip
LIM
Line Out
high-pass filter
band-pass filter
AMP
AMP
1" exit with 1.75" voice coil
15" woofer with 3" voice coil

Clio 124

Media Player

Aux I/P
Line 2
Line 1/Mic
Volume
Volume
Mic Line sens
EQ
DSP
DSP Control
Power Sig Clip
LIM
Line Out
high-pass filter
band-pass filter
AMP
AMP
1" exit with 1.75" voice coil
12" woofer with 2.5" voice coil

Clio 84

Media Player

Aux I/P
Line In
Mic/Line
Line Line
Volume
Volume
Volume
Mic/Line sens
EQ
DSP
DSP Control
Power Sig Clip
LIM
Line Out
high-pass filter
band-pass filter
AMP
AMP
1" exit with 1.35" voice coil
8" woofer with 2" voice coil

5. Connections

Balanced use of stereo ¼" jack plug

Ring=Negative/Cold/-VE Phase
Sleeve=Screen/Ground/Earth
Tip = Positive/Hot/+VE Phase
Tip   Ring   Sleeve

Unbalanced use of stereo ¼" jack plug

Sleeve=Screen/Ground/Earth
Tip = Signal
Tip   Sleeve

Balanced use with XLR connectors

Pin 2 = Positive/Hot/+VE Phase
Pin 1 = Screen/Ground/Earth
Pin 3 = Negative/Cold/-VE Phase

Unbalanced use with XLR connectors

Pin 2 = Positive/Hot/+VE Phase
Pin 1 = Screen/Ground/Earth
Pin 3 = Link to Pin 1

6. Technical Specifications

Model	Clio 84	Clio 124	Clio 154	Clio 156
System	Bi-Amp			
Amplifier Type	Class D DSP			
Protection	Short Circuit, Open Circuit and Thermal			
RMS Power	200W @ 1% Distortion	325W @ 1% Distortion	400W @ 1% Distortion	500W @ 1% Distortion
Inputs	1 x Stereo RCA, 1 x Jack (line) and 1 x Switchable XLR-Jack (mic/line)	1 X Stereo RCA, 1 x XLR-Jack (line) and 1 x Switchable XLR-Jack (mic/line)		
Input Sensitivity Mic	-36dBu			
Line	0dBu			
Aux	0dBu			
Output Connector (Line output)	Balanced XLR			
LF Driver Size	1 x 8" woofer with 2" voice coil	1 x 12" woofer with 2.5" voice coil	1 x 15" woofer with 3" voice coil	
HF Driver Size	1" exit with 1.35" voice coil	1" exit with 1.75" voice coil	1" exit with 1.75" voice coil	
Frequency Response	40Hz-20kHz ±3dB	55Hz-19kHz ±3dB	40Hz-20kHz ±3dB	
Total Coverage		90° / 60° (Horizontal / Vertical)		100° / 60° (Horizontal / Vertical)
Max SPL	121dB	123.5 dB	128dB	129dB
Limiter	Independent HF and LF			
Main Voltage	240V ~ 50Hz			
Fuse Rating	T 3.15A/250V			T 8A/250V
Dimensions (W x D x H) mm	280 x 240 x 435	385 x 345 x 615	440 x 390 x 715	430 x 405 x 700
Net Weight (Kg)	9	15	21	22

⚠️ **IMPORTANT NOTES**

• If the speaker suddenly stop working during operation kindly check the AC Mains supply voltage, whether it is above 248V.

• For better & smooth operation please ensure the Mains supply Voltage is 240V AC.

Range of Products.

Wired Microphones
SM 100XLR
TRIO 100
SM 200XLR
TRIO 200
SM 300I
SM 400XLR
SM 450XLR
SM 500XLR
SM 600XLR
SM 650XLR (Silver)
SM 650XLR (Black)
Flex 3
Flex 4

Wireless Microphones
BR 28 Series
ER 31 Series
ER 58 Series
XR 20 Series
XR 40® Series
XR 60 Series
XR 80 Series
XR 100 Series
NT 50 Series
NT 60 Series

Conference System
Vāk 10 System
Vāk 10d / Vāk 10c
Vāk 20
Vāk 30
Vāk 30d / Vāk 30c

Crossovers
SX-2
SX-321
SX-341

Processors
SEQ 302F
SEQ 312
SEQ 341
Multi 3

Mixers
~ **Mini Series**
Mini 6 / Mini 6U
Mini 8 / Mini 8U
Mini 12 / Mini 12U

~ **Air Series**
AiR® 2
AiR® 4
AiR® 4F
AiR® 6
AiR® 6R
AiR® 8
AiR® 12
AiR® 16
AiR® 2U
AiR® 4U
AiR® 6U
AiR® 8U
AiR® 12U
AiR® 16U

Mixers
~ **AQUA Series**
Aqua 6
Aqua 8
Aqua 10
Aqua 14

~ **Orb Series**
Orb 1222
Orb 1822
Orb 402 SC
Orb 822 SC

~ **Digital Mixer**
D. Mix 20

~ **Diamond Club Series**
Diamond Club 8.2
Diamond Club 8.2 EFX
Diamond Club 12.2
Diamond Club 12.2EFX
Diamond Club 12.2UX
Diamond Club 16.2
Diamond Club 16.2EFX

~ **Club 2000 Series**
Club 2000 142
Club 2000 182

~ **Diamond Pro-3 Series**
Pro-3 12.3
Pro-3 16.3

~ **DJ Mixers**
X35
X55

Amplifiers
~ **P - Series**
PA 1.5
PA 2.0
PA 3.0
PA 4.5
PA 6.0
PA 7.5

~ **XPA - Series**
XPA 30
XPA 40
XPA 60

~ **DPA Series**
DPA 2000
DPA 3200
DPA 4500

~ **RAX Series**
RAX 5020
RAX 7020

~ **DJA Series**
DJA 800
DJA 1600
DJA 2500
DJA 3200

Amplifiers
~ **DJA Series**
DJA 4000
DJA 5000
DJA 6000

~ **Industrial Amplifier**
ARC 120A
ARC 240A
ARC 120UB
ARC 240UB

Speaker Component
~ **S-Series**
SWF 18140
SWF 18120
SWF 18100
SWF 1880
SWF 1560
SMB 1565
SMB 1545
SMB 1530
SMB 1250
SMB 1230
SMB 1220
SHF 0104
SHF 0106
SHF 0210

~ **E-Series**
EMB 1225
EMB 1530
EMB 1535

~ **TITAN Series**
TWF 2115
TWF 1815
TWF 1810
TWF 1580
TWF 1570
TMB 1555
TMB 1535
THF 0208

~ **FURY Series**
F18.120
F15.70
F15.40
F15.50X
F15.40X
F12.30X

Passive Speakers
~ **S-Series**
S8018
S8118
S8218
S8128
S8028

~ **Fire Series**
Fire 21
Fire 51
Fire 55
Fire 57
Fire 59
Fire 82
Fire 84

Passive Speakers
~ **XVP Series**
XVP 1540
XVP 2550
XVP 2585MK2
XVP 1808
XVP 1810
XVP 2820

~ **ELAN Series**
ELAN 181

EKS 151

Q 400

~ **ARIA Series**
Aria 8
Aria 12
Aria 15

Powered Speaker
Clio Series
Clio 84
Clio 124
Clio 154
Clio 156

~ **B Series**
B 200
B 400V2

~ **OP Series**
OP 415

~ **SUB Series**
12SUB
15SUB

~ **Muse Series**
MUSE 61
MUSE 81
MUSE 101
MUSE MIC LHM 100

Line Array System
FIRE 92
S 9022

Stabilizers
SVC - S1000
SVC - S2000
SVC - S3000
SVC - S5000
SVC - S8000
SVC - S10000
SVC - S12000