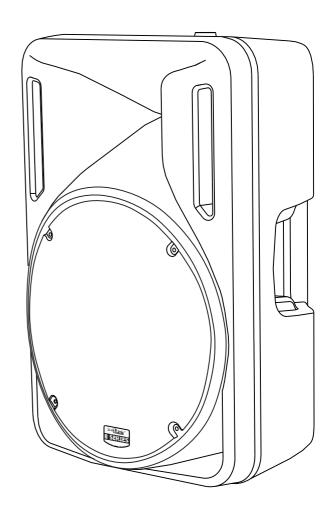


PROFESSIONAL ACTIVE SPEAKER





Models: B 200, B 400 and B 410

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





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, or near a swimming pool 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 instructions 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 and 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, and 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 and secure way in order to avoid any dangerous conditions for persons or objects.

CONNECTION



CAUTION

- For connecting the speaker, use only qualified and experienced personnel having sufficient technical knowledge or specific instructions for making the connections correctly and 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 and installed in compliance with the current standards and 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.

DESCRIPTION

The "B" series consist of 3 models B 200, B 400 & B 410 of small dimension two way full-range diffuser studied for the sonorization of small to medium environments.

FIG. 1

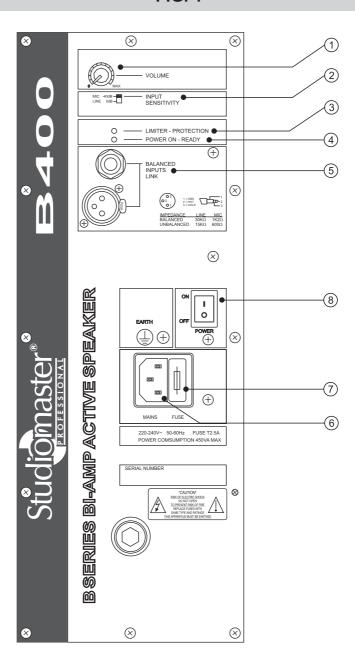
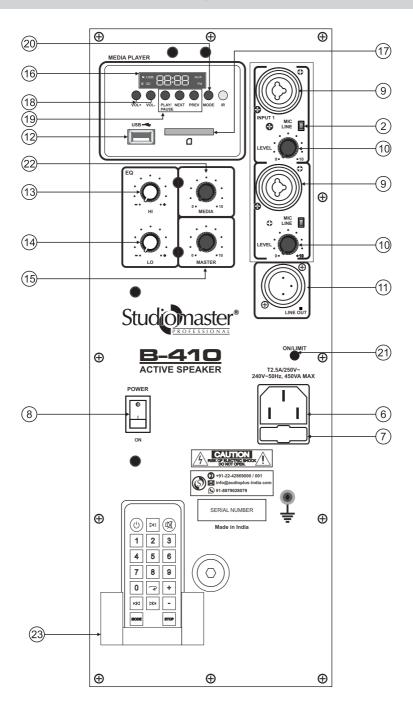


FIG. 2



COMMANDS AND FUNCTIONS

FIG-1

1) "VOLUME" CONTROL FOR B 200/B400

The knob regulates the diffuser's volume. This control does not affect the output "LINK" levels.

2) "INPUT SENSITIVITY" SWITCH

Position the switch in LINE to use a line level source (0 dB) or MIC to use a microphone.

3) "LIMITER-PROTECTION" INDICATOR LIGHT

The "LIMITER-PROTECTION" indicator light comes on red during start (for a few seconds) & when the internal audio limiter engages. This avoids the amplifier's distortion & protects the loudspeakers against overloads.

4) "POWER ON - READY" INDICATOR LIGHT

The "POWER ON - READY" indicator light comes on green to indicate that the amplifier is switched on and it is working properly.

5) "BALANCED INPUTS LINK" CONNECTORS FOR B 200/B 400

These balanced inputs can be used to connect balanced or unbalanced microphones or audio sources at line level (0dB) (eg. preamplifier, mixer, recorder, CD player, musical instrument, ...).

The balanced connector is connected in parallel and can be used to send the audio signal to other amplifier speakers, recorders or supplementary amplifiers.

6) POWER CABLE SOCKET "MAINS"

Used for connecting the power cable supplied with the speaker.

7) FUSE CARRIER "FUSE"

Mains fuse housing.

8) POWER SWITCH

Used for switching the unit on and off.

410 (FIG. 2)

9) INPUT "MIC/LINE BALANCED INPUT"

Balanced input that can be used for connecting a low impedance dynamic microphone or an audio source with high level signal output (e.g. preamplifier, mixer, cassette recorder, CD player, musical instrument, etc.).

10) LEVEL

This knob is used for adjusting the speaker volume. This control also affects the level of the "Line Out".

11) LINE OUT

This output is used for sending the audio input signal to another amplified speaker, to a recorder, or to a supplementary amplifier. The output accepts 3 XLR plug or a stereo jack (balanced). Used for cascading amplifier. This output is after EQ & controlled by Master control.

12) USB INPUT

Use this connector to plug in your pen drive. (USB MP3 flash memory)

Terms of use: Studiomaster Professional respects intellectual property rights, & we request our users to do the same. Please use MP3 downloads only for program which you have legally purchased. PLEASE DO NOT USE PIRATED MUSIC OR PROGRAM.

Disclaimer: Your acceptance and use of this product will be treated as your agreement to the following clause: Studiomaster Professional, Audioplus & all associated companies & sellers are indemnified from liability the end-user may incur by using illegally procured material or immoral content or any other such similar program selection.

13) HI

High frequency can be cut or boosted by this control.

14) LO

Low frequency can be cut or boosted by this control.

15) MASTER

Controls the main output level in B 410 and levels of slave units, when connected in daisy chain as explained in figure 2.

16) USB/BT DISPLAY

It Indicates track number from USB, Bluetooth, SD MMC card input.

17) SD/MMC Card

To plug in SD/MMC card (For mini SD card use SD adaptor).

18) Vol + & -

Use these switches to decrease or increase music volume from USB, SD/MMC Card or Bluetooth.

19) USB/BT function switches

Use these switches to either play, pause or to go to the previous or next track.

20) MODE SELECTION

Mode switch is used to switch between USB, Bluetooth and SD/MMC card operation.

21) ON / LIM - PROTECTION INDICATOR LIGHT

When unit switch on green LED indicate, The "LIMITER-PROTECTION" indicator light comes on red during start (for a few seconds) & when the internal audio limiter engages, This avoids the amplifier's distortion and protects the loudspeakers against overloads.

22) MEDIA LEVEL

Volume control for USB, Bluethooth and SD/MMC input.

23) REMOTE HOLDER

To hold remote control.

BLUETOOTH OPERATION & INDICATION

ACTION	INDICATION	
1) When Power On	It displays '0⊓' and then ""	
2) Bluetooth mode	'blue' on display.	
3) USB mode (Default mode)	USB 88:88	
4) SD/MMC mode	se 88:88	

B 410 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.
- 10 meter range line of sight for Bluetooth connection gives you room to room around your premises.

Setting up your Bluetooth Connection

- Press mode button to switch from USB mode to bluethooth mode.
- From your phone or any of the Bluetooth device turn Bluetooth ON & search for device "SM UB / SM". Pair & connect to it.
- Now any music or audio you play on your device will be played through B 410 & the music can be controlled (Play, Pause, Volume+ & 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 (SM UB / SM) 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 SM UB / SM 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 (B 410 *Bluetooth*).

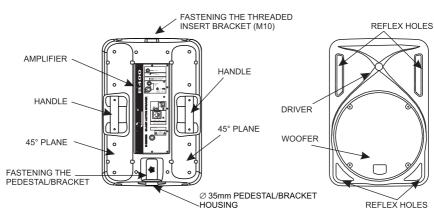
Out of Range or Lost Signal

If the music device (Mobile phones, Laptops, Tablet phones etc.) is out of range (beyond 17 feet) of the *Bluetooth* Receiver (B 410) 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 17 feet), 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".

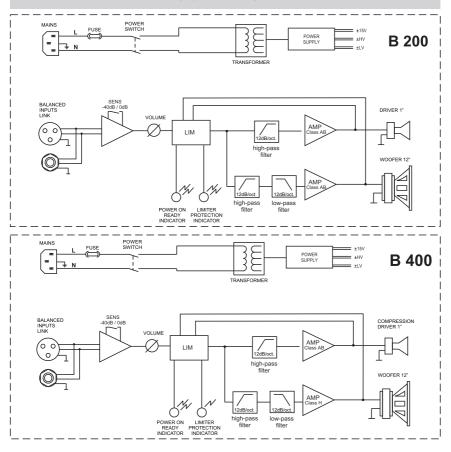
TROUBLESHOOTING BLUETOOTH CONNECTION

PROBLEM	POSSIBLE SOLUTION		
Paired <i>Bluetooth</i> 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 <i>Bluetooth</i> device.		
	Make sure that the BT module on the B 410 panel is not muted and the volume is up.		
	Make sure your <i>Bluetooth</i> transmitting device is playing audio & the volume is up.		
	Your <i>Bluetooth</i> device may be out of the specified range, try moving it closer to the B 410.		
	Make sure that you work within the <i>Bluetooth</i> range of 17 feet, taking care that there is no metal or human body interference.		
Cannot pair the speaker with your <i>Bluetooth</i> device	Make sure you select "SM UB / SM" in the pairing list on your device to finalize the connection. (required by some devices)		
	Your <i>Bluetooth</i> device may be out of range-try moving it closer to the B 410.		
	Already paired to other BT device. Unpair from it and then pair & connect again.		

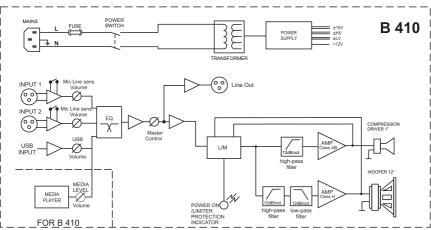
SPEAKER CABINET DESCRIPTION



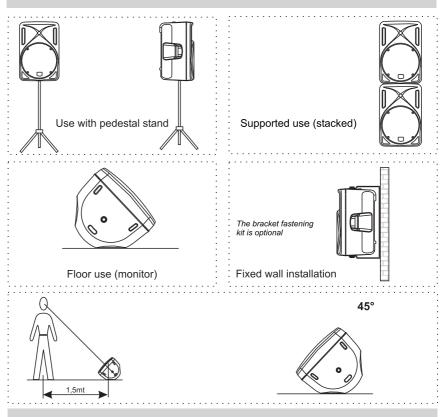
BLOCK DIAGRAM



BLOCK DIAGRAM



USES AND INSTALLATIONS



TYPICAL APPLICATION

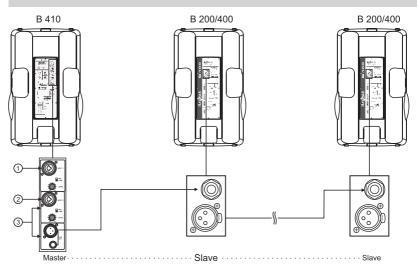
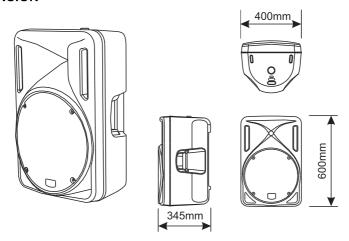


Fig.3

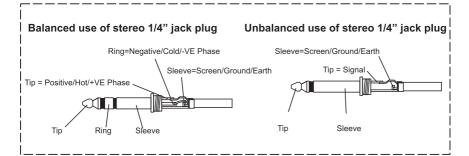
All B Series powered speakers can be connected in daisy chain as shown above.

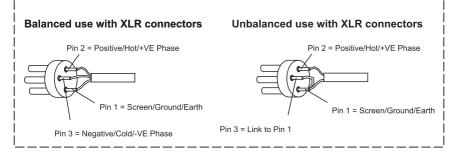
- Connect the Line Out of B 410 to the input of B 400/200 and the Link Out of the B200/400 can be connected to further amplifiers.
- Keep the volume control of the cascaded amplifier at maximum position.
- The output of all the daisy chain amplifiers are controlled by master control of B 410.
- · EQ effect can be seen on the cascaded amplifier as well.

DIMENSION



CONNECTIONS





TECHNICAL SPECIFICATION

TECHNICAL FEATURES	B 200	B 400	B 410
System	bi-amp	bi-amp	bi-amp
Amplifier type	High F class AB Low F class AB	High F class AB Low F class H	High F class AB Low F class H
RMS power	120W LF+40W HF	225W LF+50W HF	225W LF+50W HF
Musical section power	240W LF+80W HF	450W LF+100W HF	450W LF+100W HF
Frequency response	65Hz - 18 KHz	60Hz - 18 KHz	50Hz - 20 KHz
Crossover	Ft 2000 Hz TW 12dB/oct W 12dB/oct	Ft 2000 Hz TW 12dB/oct W 12dB/oct	Ft 3500 Hz TW 12dB/oct W 12dB/oct
Sound pressure (SPL)	118 dB max	125 dB max	125 dB max
Loudspeakers	1 woofer 12" coil 38mm (1,5") 1 driver 1"	1 woofer 12" coil 50mm (2") 1 com- pression driver 1"	1 woofer 12" coil 50mm (2") 1 com- pression driver 1"
Input sensitivity	-40dB/0dB (switch)	-40dB/0dB (switch)	-30dB/0dB (switch)
Impedance LINE/MIC Balanced Unbalanced	30ΚΩ/1Κ2Ω 15ΚΩ/600Ω	30ΚΩ/1Κ2Ω 15ΚΩ/600Ω	30ΚΩ/1Κ2Ω 15ΚΩ/600Ω
Power supply	240V/50Hz	240V/50Hz	240V/50Hz
Dimension (LxHxP)	400x600x345 mm	400x600x345 mm	400x600x345 mm
Weight	14.5 Kg	16.5 Kg	16.5 Kg

Do not attempt to make any repairs yourself. This would void your warranty. Do not make any changes to the unit. This would also void your warranty.

The warranty is not applicable in case of accidents or damages caused by inappropriate use or disrespect of the warnings contained in this manual. *Studiomaster Professional* can not be held responsible for personal injuries caused by a disrespect of the safety recommendations and warnings. This is also applicable to all damages in whatever form.

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