



MA1060 & MA1120

100V Mixer Amplifiers

User Manual



Order codes:

CRAM60 - MA1060 60W

CRAM61 - MA1120 120W

WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

- Before your initial start-up, please make sure that there is no damage caused during transportation.
- Should there be any damage, consult your dealer and do not use the equipment.
- To maintain the equipment in good working condition and to ensure safe operation, it is necessary for the user to follow the safety instructions and warning notes written in this manual.
- Please note that damages caused by user modifications to this equipment are not subject to warranty.



IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

- Speaker & Amplifier systems can produce high sound pressure levels, please operate all controls with caution to ensure people are not exposed to excessive or dangerous sound pressure levels.
- Never let the power cable come into contact with other cables. Handle the power cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the unit.
- Do not open the equipment and do not modify the unit.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is 240V, 50Hz AC or 24V DC.
- Make sure that the power cable is never crimped or damaged. Check the equipment and the power cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately and have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not connect power or switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- If your product fails to function correctly, stop use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs, servicing and power connection must only be carried out by a qualified technician. **THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.**
- **WARRANTY:** Three years from date of purchase.

OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void. Incorrect operation may lead to danger e.g: short-circuit, burns and electric shocks etc.

Do not endanger your own safety and the safety of others!

Incorrect installation or use can cause serious damage to people and/or property.

MA1060 60W & MA1120 120W Mixer Amplifier

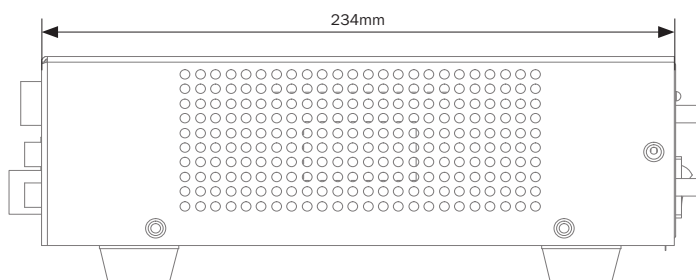
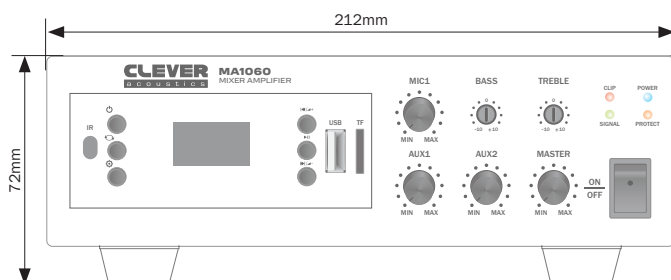
The desktop mini constant-voltage power amplifier is beautiful in appearance, light in weight, and easy to carry. It can be used for background music playback and broadcasting in homes, casual cafes, classrooms, and other small indoor venues.

- 4-16Ω output or a 100V selectable output
- Power efficient switch-mode power supply
- Class D digital power amplifier technology
- One XLR microphone input with switchable +48V power supply and independent volume adjustment control
- 2 line audio inputs, each with independent volume control
- LCD screen display, with automatic playback of MP3 audio format songs and power-off memory function
- MP3 player and remote control function supports playback from U disk and Micro SD card
- FM Radio receiver
- Bluetooth receiver for audio playback from computers, mobile phones and other devices
- Priority function for microphone 1 input mutes all other audio inputs
- Indicator LEDs for power, signal, distortion and protect
- Automatic protection from short circuit, overload and over-temperature
- IR remote included
- Seetronic PowerTwist TR1 input
- Supported file types: MP2, MP3, WMA, APE, FLAC, AAC, MP4, M4A, WAV, AIF, AIFC and other file formats
- Input sensitivity and source impedance: MIC input: +5mV, balanced XLR, AUX1-2 input: 350mV, unbalanced RCA sockets



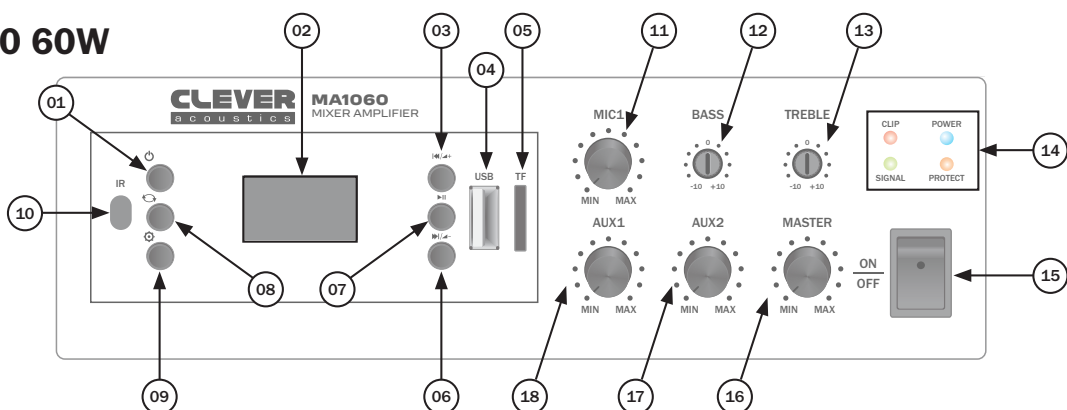
Specifications	MA1060 60W
Power output	60Wrms
Speaker output	100V & 4~16Ω
Frequency response	80Hz-16kHz
Tone control	Bass - 100Hz±10dB, Treble - 10KHz±10dB
S/N ratio	≥75dB
Power consumption	120W
Power supply	240V AC 50Hz
Dimensions	72 x 212 x 234mm
Weight	2.3kg
Order code	CRAM60

Specifications	MA1120 120W
Power output	120Wrms
Speaker output	100V & 4~16Ω
Frequency response	80Hz-16kHz
Tone control	Bass - 100Hz±10dB, Treble - 10KHz±10dB
S/N ratio	≥75dB
Power consumption	180W
Power supply	240V AC 50Hz
Dimensions	72 x 212 x 234mm
Weight	2.1kg
Order code	CRAM61

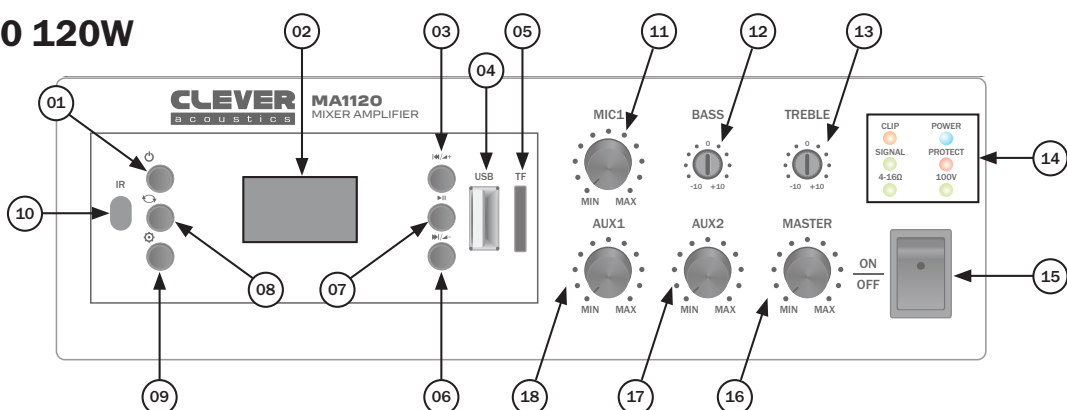


Front Panel Layout:

MA1060 60W



MA1120 120W



01 - Media player on/off button

02 - LCD display Note. The LCD display has a power save feature and will blackout after a period of inactivity. Press any button on the media player to wake from the power save mode.

03 - Previous Track - press to return to the start of the track or press twice to jump the track selection on music playback from MicroSD or USB to the previous track. In all modes, press and hold this button to increase the playback volume.

04 - USB interface - accepts most USB flash drives up to 32GB

05 - TF card slot; accepts most MicroSD cards up to 32GB

06 - NEXT TRACK - press to advance the track selection on music playback from MicroSD or USB to the next track. In all modes, press and hold this button to decrease the playback volume.

07 - PLAY/PAUSE - this will start or pause playback of a music track from the MicroSD card or USB drive. In FM Radio mode, press and hold to start an automatic station search.

08 - MP3 playback - function button; the user can select from playback modes such as Repeat One, Repeat ALL, Random or Repeat Folder

09 - MODE function button - press to switch between FM Radio, USB/SD Card and Bluetooth (BT) modes

10 - IR infrared receiver

11 - MIC1 microphone volume adjustment knob. Turn clockwise to increase or anticlockwise to decrease the microphone level.

12 - BASS - to adjust the bass (low) frequencies, turn clockwise to increase or anticlockwise to decrease.

13 - TREBLE - to adjust the treble (high) frequencies turn clockwise to increase or anticlockwise to decrease.

14 - Power/status indicator lights:
MA1060/MA1120

CLIP - the CLIP light will flash red with the onset of clipping (overload) and stay illuminated when clipping is constant. The audio signal should be reduced until the clip light no longer illuminates. Running the amplifier with the CLIP light constantly flashing or illuminated may cause damage to the amplifier and or speakers.

POWER - this will illuminate blue when the amplifier is powered on.

SIGNAL - the signal LED will flash green at low levels and also then illuminate constantly with a strong audio signal as a visual confirmation of normal operation

PROTECT - the PROTECT LED will illuminate orange if the amplifier detects a problem such as overheating or short circuit on the output.

MA1120 ONLY

4-16Ω - the LED will illuminate green when the amplifier is switched to 4-16Ω mode. In this mode, loudspeakers should only be connected to the 4-16Ω terminals

100V - the LED will illuminate green when the amplifier is switched to 100V mode. In this mode, loudspeakers should only be connected to the 100V terminals

15 - Master ON/OFF - to switch the amplifier on flick the switch to the ON (*) position. Amplifiers should be powered on last after any music sources and powered off first before any music sources to avoid any pops or bangs in the audio signal.

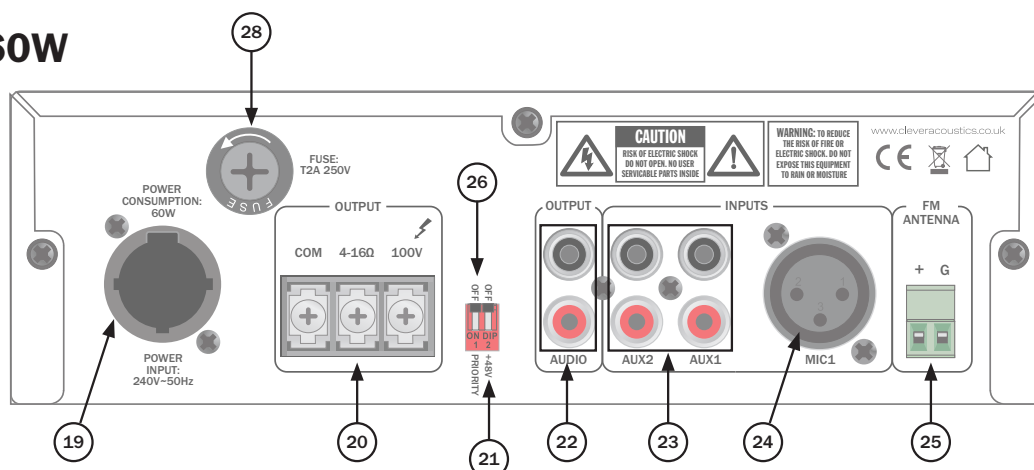
16 - MASTER - to adjust the overall master volume, turn clockwise to increase or anticlockwise to decrease.

17 - AUX2 line input volume adjustment, turn clockwise to increase or anticlockwise to decrease.

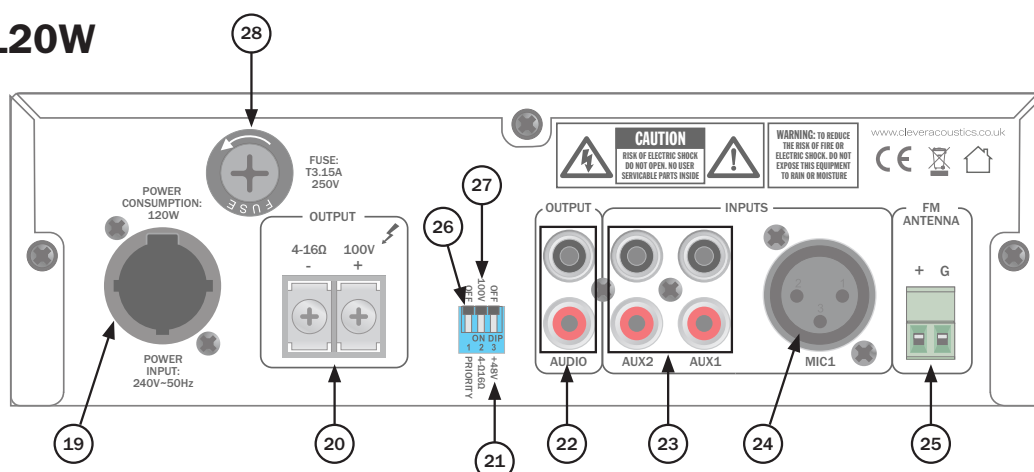
18 - AUX1 line input volume adjustment; turn clockwise to increase or anticlockwise to decrease.

Rear Panel Layout:

MA1060 60W



MA1120 120W



19 - AC power input; 240V~50Hz via Seetronic PowerTwist TR1 IP65

20 - OUTPUT—speaker output port, used to connect low impedance 4-16Ω or 100V constant voltage speakers. To avoid stray wires or short circuit, it is best practice to use insulated fork terminals/ferrules when making wire connections. The speaker circuit should be tested and verified with an impedance meter before making connection to the amplifier. The amplifier must be powered off and isolated from the mains power before connecting any loudspeakers.

21 - +48V Phantom Power Switch. Set the switch to the down position to enable Phantom Power on the MIC1 XLR. Caution: Must only be used with fully balanced audio sources.

22 - Line output interface. Unbalanced phono outputs for connection to external slave amplifiers or recording equipment.

23 - AUX1/AUX2 Inputs: Unbalanced stereo phono sockets for connection of line level sources such as CD players, Radio Tuners or MP3 players. The amplifier must be powered off before connecting or disconnecting any audio sources.

24 - MIC1 signal input. Designed to accept most dynamic or condenser microphones using a balanced XLR connection. +48V Phantom power is available and can be selected using switch 21 on the back panel. Note: Before switching phantom power on/off or making any connections the amplifier powered off.

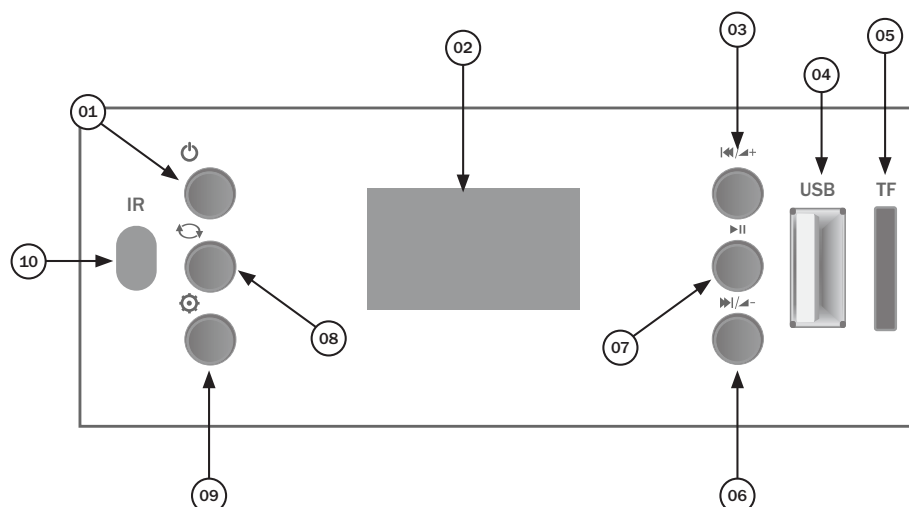
25 - FM radio antenna port. For the optimum radio signal reception, an external 2 wire antenna should be used. Signal reception may vary depending on the location and surrounding buildings/metalwork.

26 - Priority – Selectable for MIC1 input. When switched off (upper position) the microphone input will be mixed with the line level sources. When switched on (lower position) the microphone input will override the line level sources.

27 - 100V / Low Impedance Selector (MA1120 ONLY) Before connecting loudspeakers, the output type must be selected for either 100V line or 4-16ohm low impedance use.

28 - Fuse

FRONT PANEL IDENTIFICATION & OPERATION:

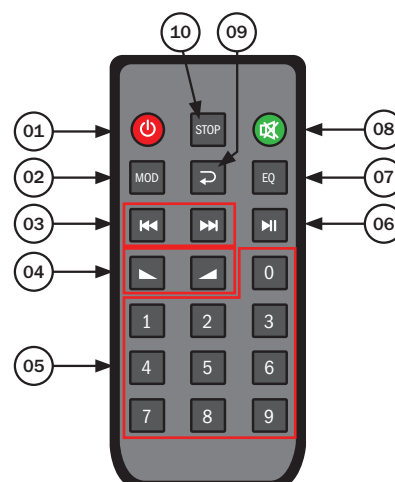


Media Player Controls:

01. Power On/Off button: Press and hold this button to turn the Media Player on or off.
02. LCD display to show information.
03. Previous Song: Press to advance playback to the next track or press and hold to increase the volume of the track being played on the media player.
04. USB Port: Insert a USB flash drive (less than 32GB). MP3/WAV/WMA/APE/FLAC formats are supported.
05. Micro SD (TF Card) Port: Insert the TF card (less than 32GB). MP3/WAV/WMA/APE/FLAC formats are supported.
06. Next Song: Press to advance play to the next track or press and hold to reduce the volume of the track being played on the media player.
07. Play/Pause: Press to play or pause a music track from the USB or Flash card. Press and hold to start an automatic station search. The station reception may vary depending on amplifier location, antenna location and any metalwork within the local vicinity.
08. MP3 Playback Function: Press to cycle between the playback modes Repeat One/Repeat All/Random/Repeat Folder.
09. Mode Button: Press to switch between BT (Bluetooth), USB or FM Radio modes.

Remote Control:

- | | |
|-------------------------------|-----------------------|
| 01 - Power switch | 06 - Play/pause |
| 02 - Mode select | 07 - Equaliser Preset |
| 03 - Previous/Next | 08 - Mute |
| 04 - Volume increase/decrease | 09 - Play Mode |
| 05 - 0-9 select buttons | 10 - Pause |



Remote Control Identification:

- 01 - When installing the battery (Type CR2032) please ensure the battery is orientated to maintain correct polarity following the + and – symbols.
- 02 - The remote control should be aimed directly at the IR receiver window from a distance of up to 8m.
- 03 - Should the working distance or the remote become reduced, or the remote becomes unresponsive, please change battery talking care to install a high-quality replacement.
- 04 - Please remove the battery and store safely when unused for long periods of time.
- 05 - The remote control should be handled carefully and protected from damage.

Media Player Operation:

FM (radio) function

Press the MODE button to select the FM mode, and then press and hold the play/pause button to automatically close the station. The number of valid stations received (subject to the sound received) depends on the venue.

Bluetooth function

Press the MODE button to select the Bluetooth mode, turn on the Bluetooth of the mobile phone for pairing, and after the pairing is completed, the music on the mobile phone can be played normally, 10 meters line of sight. The Bluetooth default name is "AC69-BT".

Functional memory function

The media play will power on it its last used mode.

Volume up and down

Long press the previous song button to quickly increase the volume, and long press the next song button to quickly decrease the volume.

Loudspeaker Connection:

Warning. Before making any loudspeaker connections, the amplifier must be switched off and isolated from the power supply.

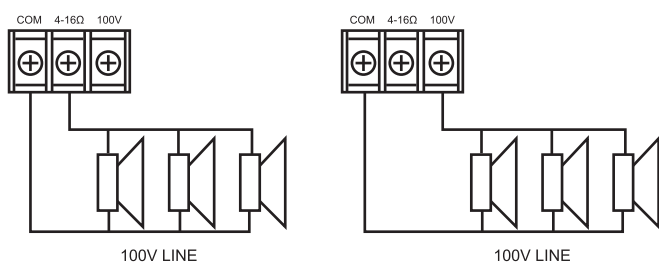
Connect the loudspeakers using good quality speaker cable. Care should be taken to terminate all cables into the correct loudspeaker terminals and to avoid any potential for short circuits. Loudspeaker circuits should be tested and verified for impedance before connection to the amplifiers output terminals. Do not connect any loudspeaker circuits that fall below the amplifiers rated minimum impedance. Low impedance (4-16 ohm) and constant voltage (70/100V) loudspeakers must not be connected in the same circuits.

Before connecting loudspeakers, the output type must be selected for either 100V line or 4-16ohm low impedance use.

MA1060

Minimum impedance 4Ω in 4-16Ω mode or 166Ω in 100V line mode.

Note: the amplifier cannot operate in both 4-16Ω and 100V simultaneously.



Maximum output
voltage: 15.5V
(60W)

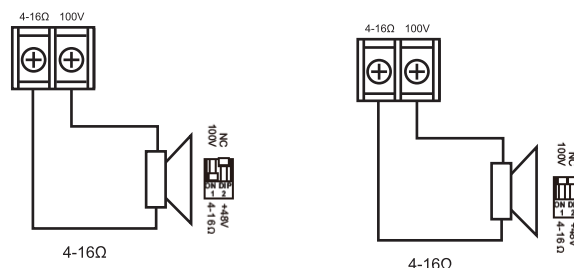
Maximum output
voltage: 100V

Minimum
impedance 166Ω

MA1120

Minimum impedance 4Ω in 4-16Ω mode or 61.83Ω in 100V line mode.

Note: the amplifier cannot operate in both 4-16Ω and 100V simultaneously.



Maximum output
voltage: 22V

Maximum output
voltage: 100V

Minimum
impedance 61.83Ω

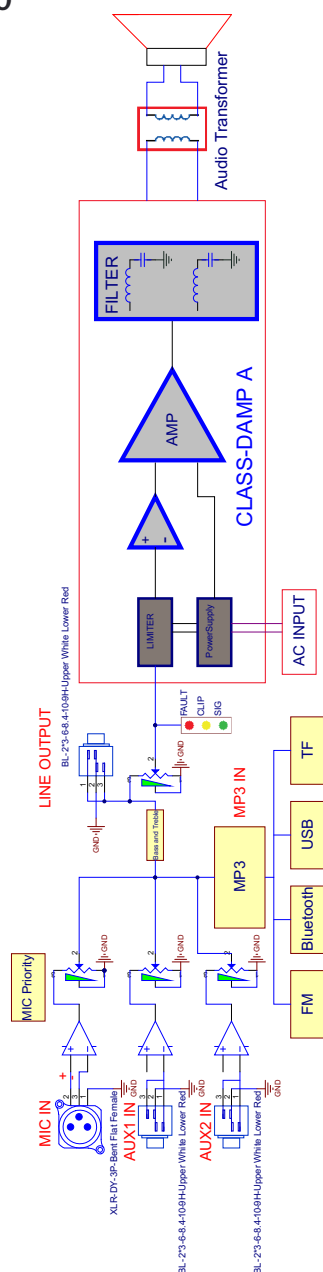
NOTE: The Media Player Module will power on automatically when the amplifier is powered on. If the media player is not required, it is best practice to turn the volume to zero using the remote control.

Error Codes:

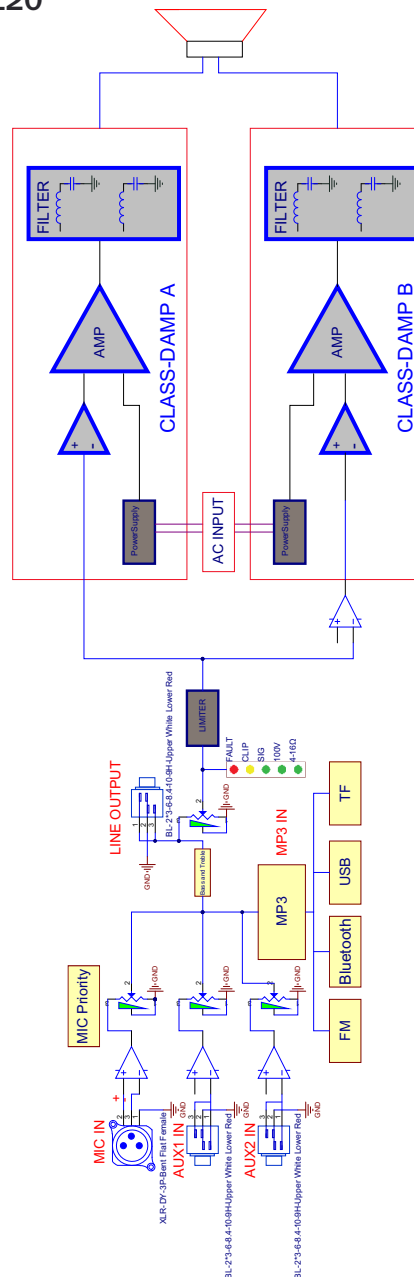
Potential cause	Solution
All lines are connected, but there is no sound.	1. The power switch is not opened or the power plug is bad contacted. 2. The fuse is burnt 3. The volume knob is not opened or turned down to a extra low level 4. There is no audio signal input 5. There is short-circuit in the speaker line.
The sound suddenly disappears in normal status.	1. The equipment is in very high temperature to make it into protection status. 2. The connection wire is bad contact.
Low sound	The equipment is set to be low impedance connection, but the speakers connected is with high impedance.
Sound is distorted	The input level of Mic or external equipment is too high

Block diagram:

MA1060



MA1120





***Correct Disposal of this Product
(Waste Electrical & Electronic Equipment)***

(Applicable in the European Union and other European countries
with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



CLEVER
a c o u s t i c s