



THE UNIVERSE OF INSTALLATION

PUBLIC ADDRESS AMPLIFIER

User's Manual



MPA-30/30R/30H/30HR
PA-30/30C/30H/30CH

www.show-pa.com



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IMPORTANT!

Please read this manual carefully before operating this unit for the first time.

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SAFETY RELATED SYMBOLS



The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions.



The symbol is used in the service documentation to indicate that specific component shall be only replaced by the component specified in that Documentation for safety reasons.

⊕ Protective grounding terminal.

~ Alternating current /voltage.

⚡ Hazardous live terminal .

ON: Denotes the apparatus turns on.

OFF: Denotes the apparatus turns off, because of using the single pole switch, be sure to unplug the AC power to prevent any electric shock before you proceed your service.

WARNING: Describes precautions that should be observed to prevent the danger of injury or death to the user.



Disposing of this product should not be placed in municipal waste and should be separate collection.

CAUTION: Describes precautions that should be observed to prevent danger of the apparatus.

WARNING

• Power Supply

Ensure the source voltage matches the voltage of the power supply before turning ON the apparatus.

Unplug this apparatus during lightning storms or when unused for long periods of time.

• External Connection

The external wiring connected to the output hazardous live terminals requires installation by an instructed person, or the use of ready-made leads or cords.

• Do not Remove any Cover

There are maybe some areas with high voltages inside, to reduce the risk of electric shock, do not remove any cover if the power supply is connected.

The cover should be removed by the qualified personnel only.

No user serviceable parts inside.

• Fuse

To prevent a fire, make sure to use fuses with specified standard (current, voltage, type). Do not use a different fuse or short circuit the fuse holder.

Before replacing the fuse, turn OFF the apparatus and disconnected the power source.

• Protective Grounding

Before turning the product ON, make sure that it is connected to Ground. This is to prevent the risk of electric shock. Never cut internal or external Ground wires. Likewise, never remove Ground wiring from the Protective Ground Terminal.

Never cut off the internal or external protective grounding wire or disconnect the wiring of protective grounding terminal.

The apparatus shall be connected to a mains socket outlet with a protective earthing connection.



• **Operating Conditions**

This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on this apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Do not use this apparatus near water. Install in accordance with the manufacturer's instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not block any ventilation openings.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Follow all instructions.
- Keep these instructions.
- Heed all warnings.
- Only use attachments/accessories specified by the manufacturer.

• **Power Cord and Plug**

Do not defeat the safety purpose of the polarized or grounding type plug.

The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.

A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

• **Cleaning**

When the apparatus needs a cleaning, you can blow off dust from the apparatus with a blower or clean with rag etc.

Don't use solvents such as benzol, alcohol, or other fluids with very strong volatility and flammability for cleaning the apparatus body. Clean only with dry cloth.

• **Servicing**

Refer all servicing to qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

INTRODUCTION

The professional 30W public address amplifier series are designed for small hotels and super-markets. The series includes the following models, MPA-30, MPA-30R, MPA-30H, MPA-30HR, PA-30, PA-30C, PA-30H and PA-30CH. They have good performance and supply the excellent quality of sound. Besides, users can operate easily. Please refer to the following table for these models with different back ground music modules.

| Models | MP3 Player & Recording | MP3 Player | CD-201 | 25V,70V,100V |
|----------|------------------------|------------|--------|--------------|
| MPA-30 | | √ | | |
| MPA-30R | √ | | | |
| MPA-30H | | | | √ |
| MPA-30HR | √ | | | √ |
| PA-30 | | | | |
| PA-30C | | | √ | |
| PA-30H | | | | √ |
| PA-30CH | | | √ | √ |

Notes: letter "M" means items with MP3 player; "C" means items have built-in CD player. "H" means items with high voltage output. And MP3 player has USB interface and SD/MMC cards or has only USB interface for customer to choose.

Features:

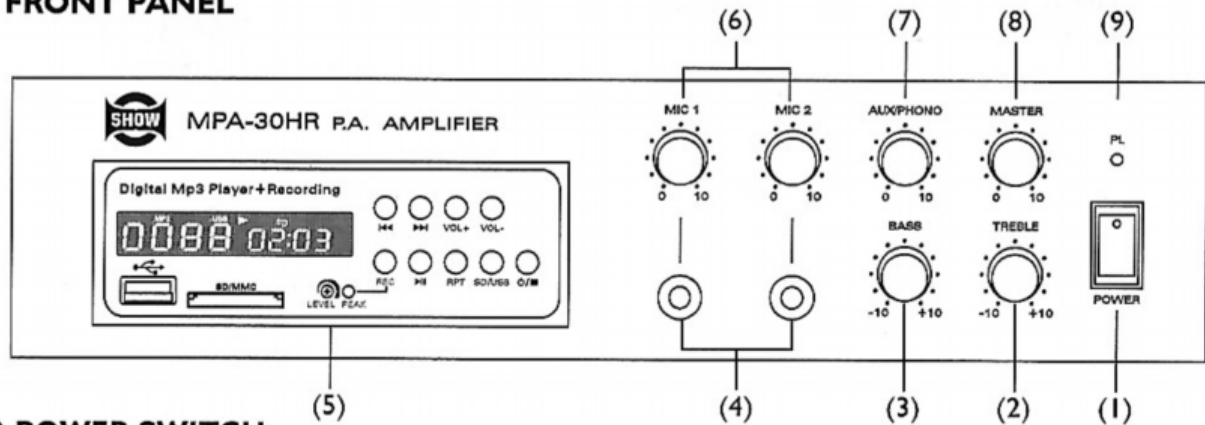
1. Output: RMS 30W
2. 1 AUX/PHONO (RCA) input; AUX/PHONO exchange SW
3. Two TONE (BASS/TREBLE) adjustments
4. 3 input volume adjustments
5. 2 MIC (6.3mm) inputs/MIC1 priority.
6. MP3 playing and recording; SD/USB interface.
7. PRE output and AMP input.
8. There are various modules like CD/MP3 for option.
9. Impedance output is 4Ω; constant voltage output is 25V, 70V, 100V
10. Power supply: AC 115V/230V 50 Hz /60Hz; DC 12V for external use.



CONTROL ELEMENTS

Take MPA-30HR for an example

I. FRONT PANEL



(1) POWER SWITCH

The main power can be switched on or off with it.

(2) TREBLE

Use the knob to control the high frequency at the range of ± 10 dB. Turn clockwise to boost and counterclockwise to attenuate the treble response. Tone is flat at centre.

(3) BASS

Use the knob to control the low frequency at the range of ± 10 dB. Turn clockwise to boost and counterclockwise to attenuate the BASS response. Tone is flat at centre.

(4) MIC1-2 INPUTS

Apply 6.3mm unbalanced MIC jack. They are connected to microphones. And MIC 1 has priority function.

(5) MP3 MODULE

Regarding its function and operation, please refer to BGM module description in detail.

Note: there are MP3 play, recording and CD player assembled to different models of this series.

(6) MIC 1-2 VOL Knobs

These controls let you individually set the volume of the sound source that are connected to the "MIC 1", "MIC 2". Turning a control clockwise increases the volume of the corresponding source. We recommend to leave the control of inputs not momentarily used at their minimal setting "0".

(7) AUX/PHONO VOL knob

AUX / PHONO knob let you individually set the volume of the sound source that are connected to the "AUX / PHONO". Turning a control clockwise increases the volume of the corresponding source. We recommend to leave the control of inputs not momentarily used at their minimal setting "0".

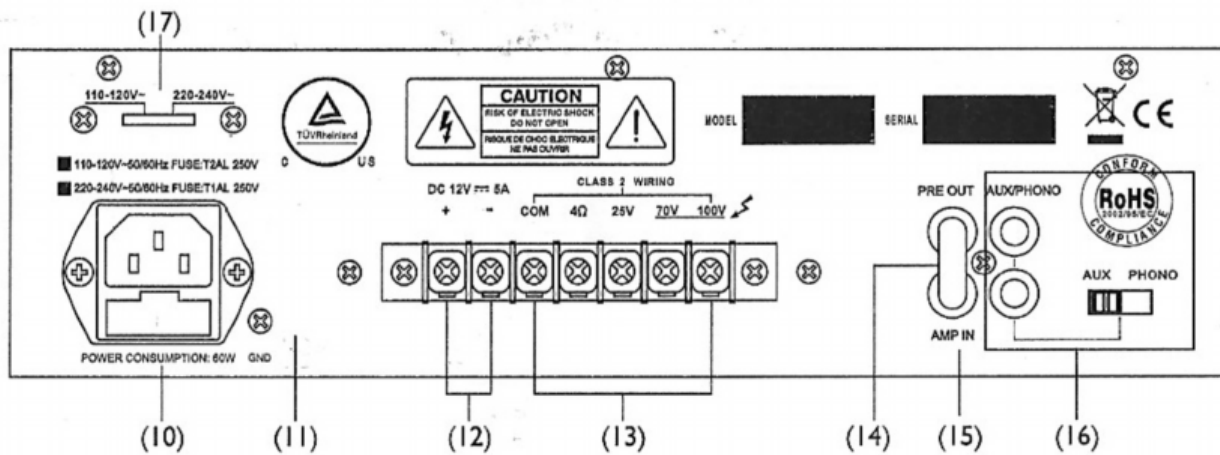
(8) MASTER

This knob is used to control main power.

(9) POWER LIGHT

It lights up when switching power on, and it goes out when switching power off.

2. REAR PANEL



(10) AC JACK

This connector is meant for connection of the supplied main cord. Do not insert the power cord into this unit until voltage has been correctly set.

(11) GND

It is ground connection.

(12) DC INPUT

It is used for DC power supply for 12V. You should pay attention to the polarity.

(13) OUTPUT TERMINALS

Low impedance output is 4Ω; constant voltage output is 25V, 70V, 100V.

(14) JUMPER

It is used to connect PRE OUT with AMP IN.

(15) PRE OUT/AMP IN

Jacks AMP IN and PRE OUT to insert an audio unit for signal processing.

(16) AUX INPUT

It is connected to AUX input. There is AUX/PHONE exchange switch.

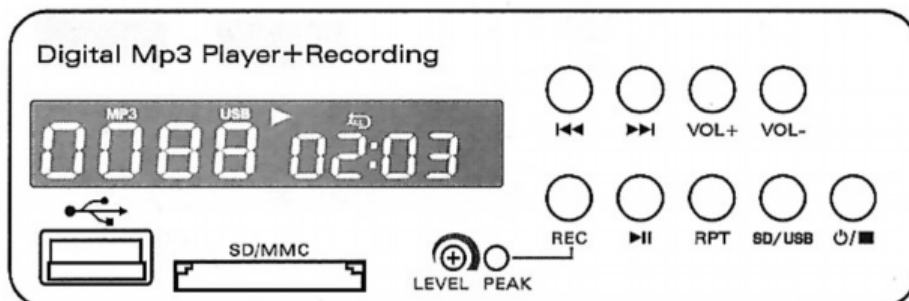
(17) POWER SELECT SWITCHES

There are two voltages to choose: 110-120V~/220-240V~.



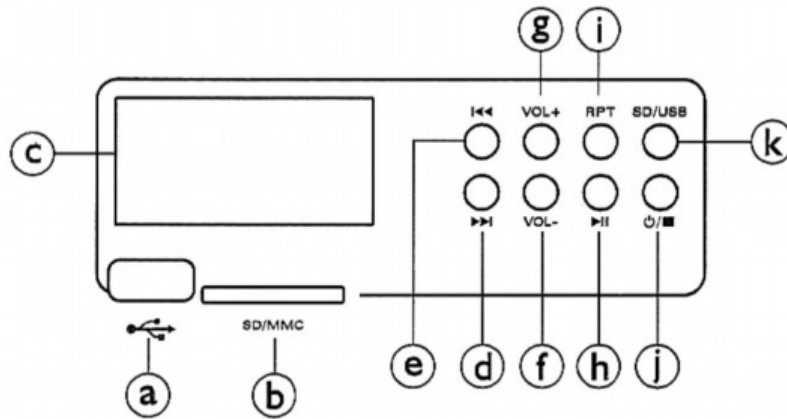
BACK GROUND MUSIC MODULE DESCRIPTION

I.MP3 PLAYER+RECORDING



| | | |
|-----|---------|--|
| (a) | | USB interface |
| (b) | SD/MMC | SD/MMC hole |
| (c) | DISPLAY | Display operation status of Mp3. |
| (d) | LEVEL | Control the volume of recording. |
| (e) | REC | After power on, press REC and prepare to record. Then select the save way with the USB/SD button .Press REC again. If "REC" lights about 3~4 times, record begins. During record, do not do other operations until press "STOP" to stop. If "Err" appears, press "STOP" to stop recording |
| (f) | >>II | If the model is connected to USB or SD clip, it can make a selective play automatically after powered on. And it plays the USB equipment prior. When the model is in waiting status, it plays automatically after inserting USB save equipment or SD clip. When it is in a stop or pause, begin to play after pressing PLAY/PAUSE. |
| (g) | RPT | After press REP, you can select the below four repeat mode: Play in order: no picture displays; Repeat single: REP I ; Repeat all: REP ALL; Random play: REP. |
| (h) | SD/USB | Select save device with the key USB/SD. |
| (i) | P/■ | Hold POWER button for 3 seconds.When the display of mold lights, it means that the model is powered on. Hold the button for 3 seconds again. When the display of model goes out, it means it is powered off. Start to search playable equipments after powering on. |
| (j) | VOL- | Press VOL- to decrease the volume and press VOL+ to increase the volume. Factory default : 10. |
| (k) | VOL+ | |
| (l) | >>>I | In the status of play or pause, the model plays next song or previous one when press >>>I or I<<<, and the status has no change. It plays the next file or previous file when hold >>>I or I<<< for about 2 seconds, and the status is as before. When the current file is recording one, "FrE" appears in the display. |
| (m) | I<<< | |

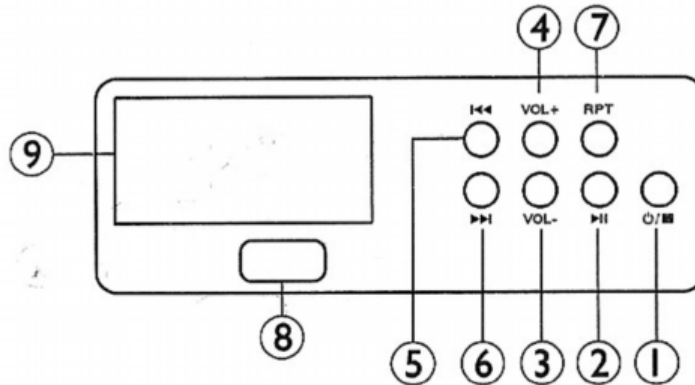
2.MP3 PLAYER(with USB, SD/MMC cards)



| | | |
|-----|-----------------------|---|
| (a) | USB CONNECTOR | Insert USB player |
| (b) | SD/MMC CARD CONNECTOR | Insert SD/MMC Card |
| (c) | DISPLAY | Display the status of USB playing |
| (d) | ▶▶ | Advance one title by pressing it. |
| (e) | ◀◀ | Reverse to the title beginning by pressing it. |
| (f) | VOL- | Press this key to decrease the sound level. |
| (g) | VOL+ | Press this key to increase the sound level. |
| (h) | ▶ | Press this key to start to play. |
| (i) | RPT | Press this key to repeat the title. |
| (j) | ⏻/■ | Press this key to switch the power or stop the title. |
| (k) | SD/USB | Press this key to select the SD Card or USB Player. |



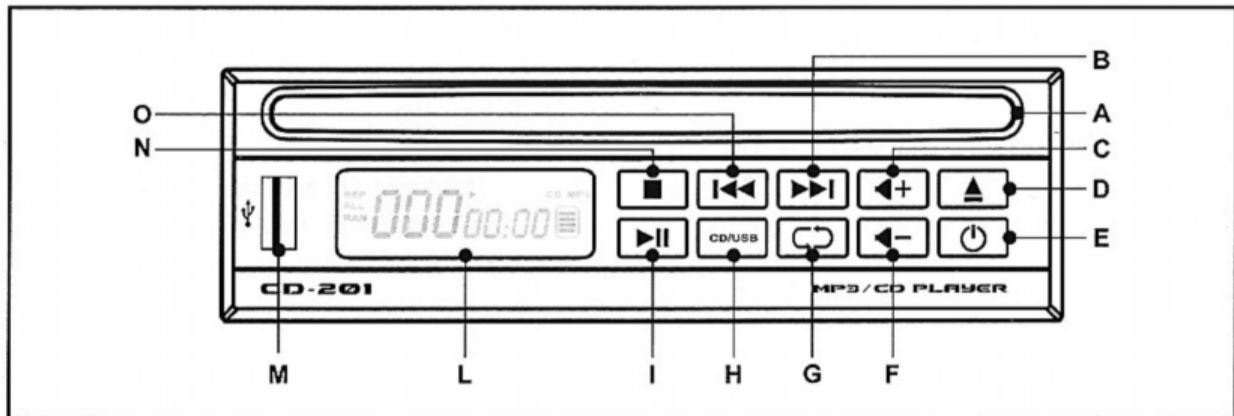
3. MP3-200(with USB)



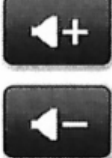





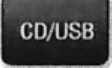


- (1) POWER/STOP: press it to power on or off.
- (2) PLAY/PAUSE: press it to play or pause.
- (3) VOL-: reduce the volume with it.
- (4) VOL+: add the volume with it.
- (5) PRE
In the status of play or pause, the model plays next title when you press NEXT button.
- (6) NEXT
In the status of play or pause, the model plays previous title when you press PRE button.
- (7) REP
After press REP button, you can select the below four repeat modes.
REP ALL: repeat all tunes in the memory.
REP 1: repeat one tune.
Ordering play.
Random play.
- (8) USB interface
It is connected to USB.
- (9) DISPLAY
The status of playing shows in the display.

4.CD-201

**USING THE CD/MPE PLAYER
DESCRIPTION OF THE CONTROLS**



| | |
|---|--|
|  | Key for switching on player. |
|  | This key enables the CD drive to be opened/closed.If it is pressed with the player at a standstill or while it is playing,the disc will be ejected from the drive. |
|  | Volume adjustment. |
|  | Next track. |
|  | Last track. |
|  | Pressed one with the player at a standstill or paused, the disc will be played or resumed. Pressed once with the player running, it will pause the playing untill the key is pressed agin. |
|  | By pressing this key, you will be able to repeat the track that has just been selected, the whole sequence or random order. |
|  | By pressing this key, the disc playing will be stopped. |
|  | By pressing this key, you will be able to switch from the CD mode to the USB mode and vice versa. |



- 1) Switch on the equipment and start the player by pressing the (E) key.
- 2) The player will activate and the display will light up, indicating whether there is already a compact disc in the drive or not.
- 3) Press the key again to close the drive. The display will show the total number of tracks.
- 4) The first track starts to play out automatically.
If this does not happen, press(I).

*.mp3 files

As already described for audio CDs, the *.mp3 files will start to play automatically once the CD has been inserted into the CD drive or after inserting a USB key in the socket provided for it (M). With the drive at a standstill, the display will show the number of folders present on the disk and the total number of tracks.

To switch from the CD mode to the USB mode and vice versa, press (H).

NOTE: To stop playing, press(N) once. If you press (D) the disk will be ejected, whether the player is off or is playing.

Description of the functions

A) REPEAT and RANDOM functions

These functions allow one or more tracks to be repeated as required or random selection of the track to be played.

To switch from one mode to another simply press (G).

Three symbols are associated with this mode:

.REP To repeat the track selected.

.ALL To repeat all the tracks.

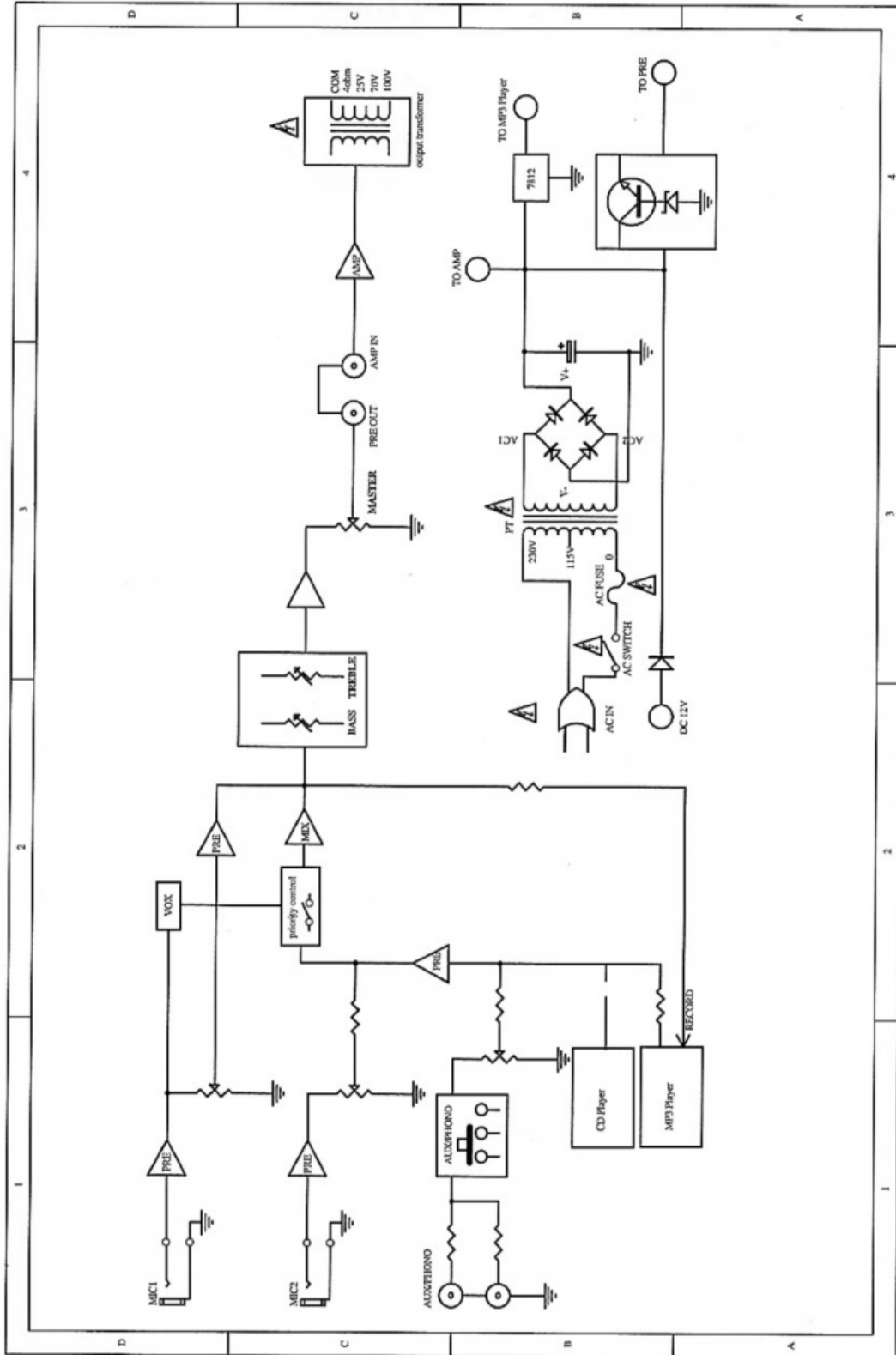
.RAN To play out the tracks in random order.

B) Normal playing

This is the standard operating mode, that is to say, playing the tracks in the pre-defined order. Press (I) to start playing track 1.



BLOCK DIAGRAM

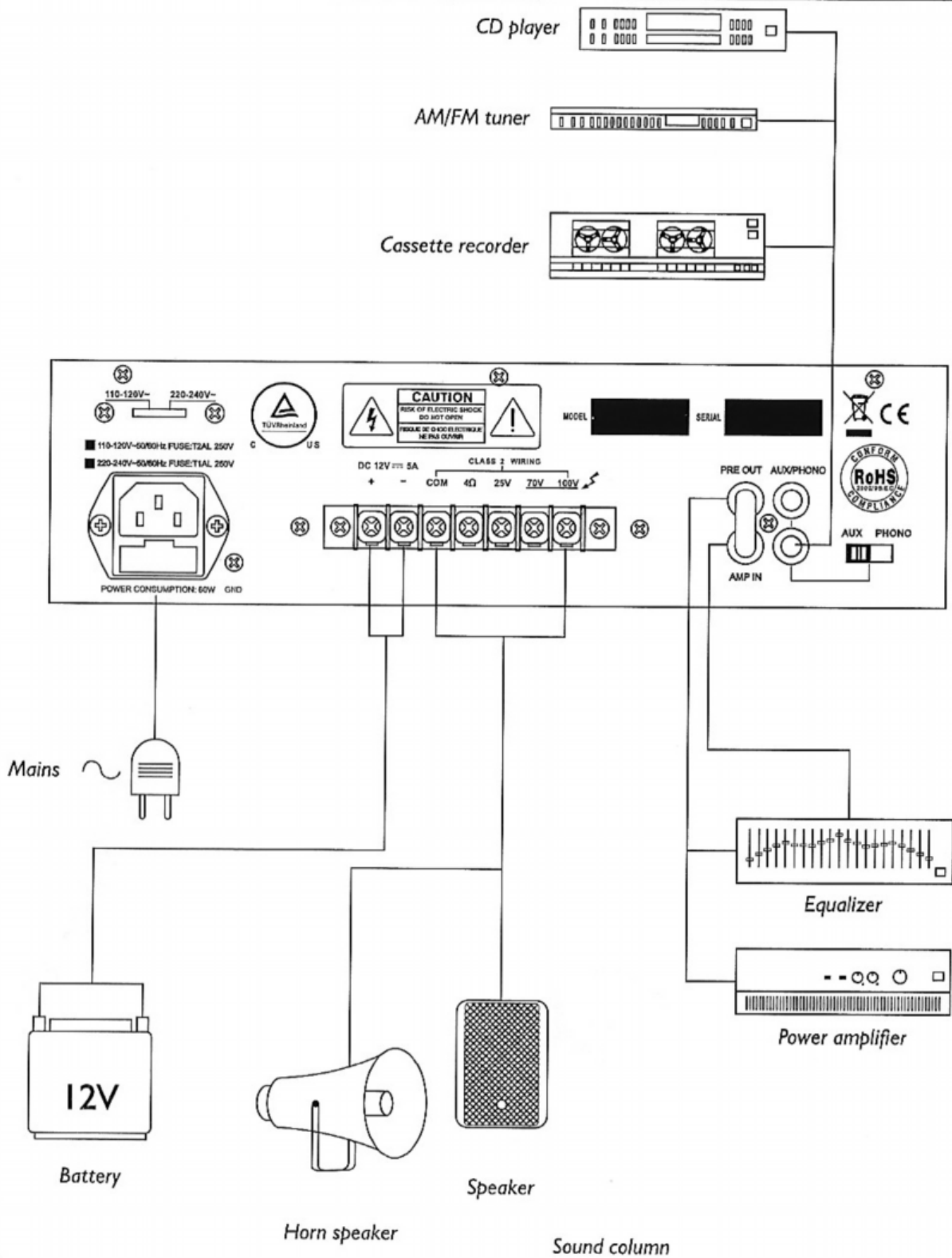




TECHNICAL SPECIFICATIONS

| | |
|-------------------------|---|
| RMS output | AC:30W(4Ω THD<1%); DC:23W(4Ω THD<1%) |
| Power consumption | AC: 60W; DC: 45W |
| Frequency response | 80Hz-18kHz(±3dB) |
| Power supply | 110-120V~/220-240V~ 50/60Hz ;DC 12V |
| Input/Sensitivity | MIC1~2(6.3 φ -jack) unbalanced -50dBV/1kHz AUX(RCA) -6dBV/1kHz PHONO -50dBV/1kHz |
| T.H.D. | ≤0.5% |
| S/N Ratio | MIC1~2≥65dB AUX≥75dB PHONO≥55dB |
| Impedance output(Ω) | COM 4Ω |
| Constant voltage output | 25V, 70V, 100V(only MPA-30H, MPA-30HR,PA-30H,PA-30CH) |
| Controls | 3 volume controls, bass, treble, master, MIC1 priority |
| BGM module | MP3 player+recording(MPA-30R, MPA-30HR) MP3 player(MPA-30H, MPA-30) CD player(PA-30C,PA-30CH) |
| Dimensions(WxDxH) | 280x190x75mm(MPA-30,MPA-30R,MPA-30H,MPA-30HR,PA-30&PA-30H) 320x280x75mm(PA-30C,PA-30CH) |
| Weight | 4.5kg(MPA-30,MPA-30R,MPA-30H,MPA-30HR,PA-30&PA-30H) 5.8kg(PA-30C,PA-30CH) |

CONNECTION DESCRIPTION





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