



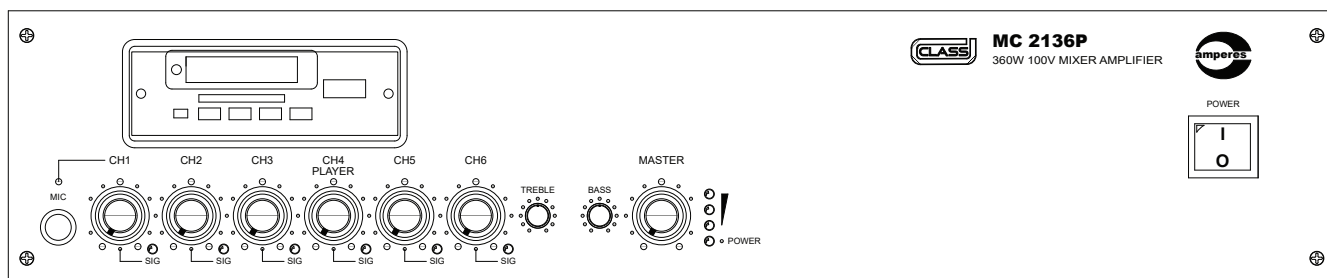
INSTRUCTION MANUAL

MC2112 / 2112P 120W 100V

MC2124 / 2124P 240W 100V

MC2136 / 2136P 360W 100V

6 Inputs Mixing Amplifiers



Thank you for choosing another quality product from Amperes Electronics.

MC2000 Series of basic mixing amplifiers has been improvised, incorporating Class D amplifier circuits for better performance, more compact, light weight and more energy efficient.

It is most suitable for small scale installations such as in conference or meeting rooms, boutiques, restaurants, etc., which requires premium sound reproduction without zone selection or back up inputs. They are now available with higher power ratings of up to 360W 100V with optional media players.

Please read through the manual to capture how MC2000 may serve your needs diligently and efficiently. We are confident that you are getting a product of excellence.



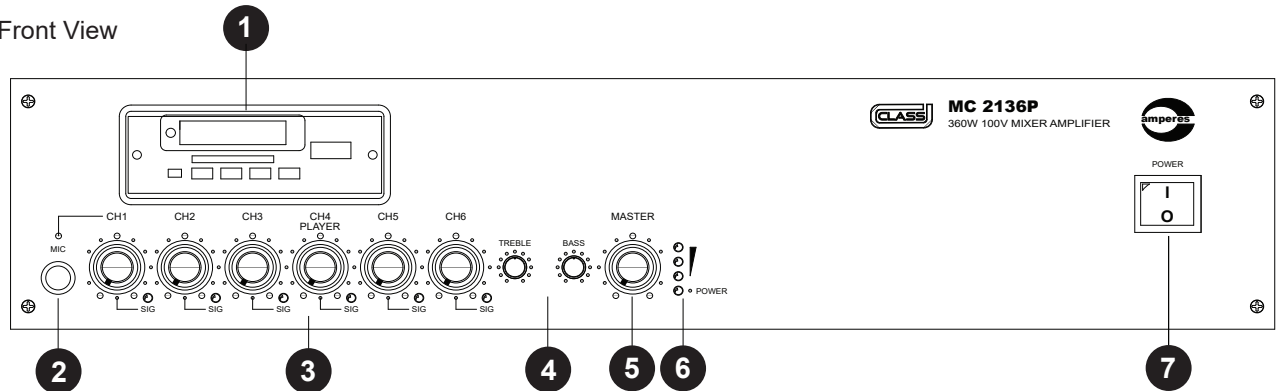
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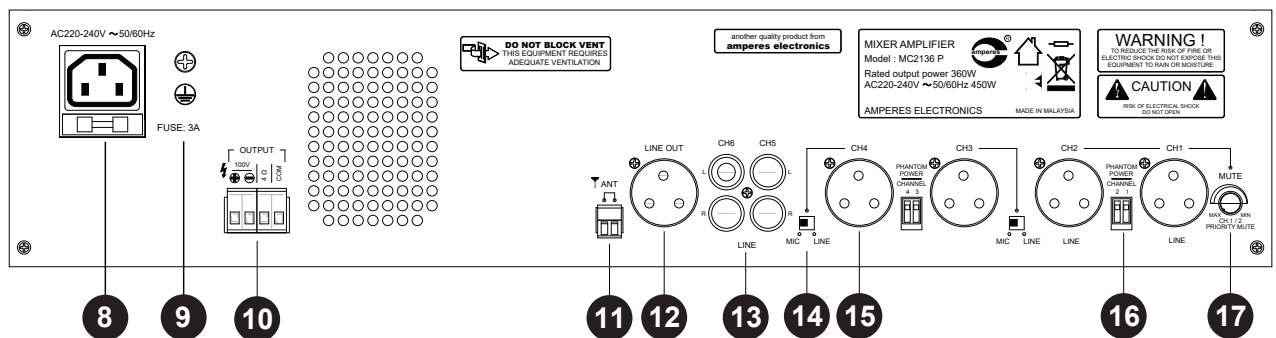
VER 4 / 2024

Parts Identification

Front View



Rear View



1. MEDIA PLAYER MODULE

Media player module only available in models with postfix "P", ie MC2124P. It enables music playback for FM tuner, SD Card / USB MP3 and Bluetooth audio.

2. FRONT MICROPHONE INPUT JACK (PHONE JACK)

The front jack accepts microphone audio and once inserted, the rear jack input will be bypassed. The volume adjustment is via Ch.1 knob.

3. CHANNEL INPUT VOLUME CONTROLLER

Individual input volume are adjusted with these knobs and signal presence is indicated by green LED. Ch.4 knob is for controlling media player input for versions with postfix "P".

4. BASS AND TREBLE CONTROLS

Bass and Treble for mixed inputs can be adjusted to suit listening preference.

5. MASTER VOLUME CONTROL

This is to adjust overall mixed volume.

6. SIGNAL LEDs

Output mixed signal is shown by 3 segment LEDs with input Power indicator

7. POWER SWITCH

The switch to turn ON ac supply to the unit

Parts Identifications (Con't)

8. AC INLET

Fuse AC inlet for 220 - 240V AC : 50 / 60 Hz. Use only max 3A rating.

9. EARTH CONNECTOR

This connector is to link the equipment body to earth.

10. AMPLIFIER AUDIO OUTPUT TO SPEAKER

100V output terminals and 4 Ohm speaker terminations are provided for connection to speakers. At any one time, use only one mode. Ensure load to match the capacity of the amplifier.

11. ANTENNA CONNECTOR

Available only with "P" version, for connecting to dipole antenna supplied.

12. XLR LINE OUT

Audio line level output (balanced) to link to external amplifier or another mixing amplifier for channel expansion or power capacity.

13. BGM SOURCE INPUTS (RCA)

Stereo inputs with RCA connectors for Channel 5 and 6

14. MIC / LINE SWITCH (CH 4)

Input to Channel 4 can be in Mic or Line level (balanced). Use this switch to suit the type of input source.

15. XLR INPUTS CONNECTORS (CH.1 TO CH.4)

Rear inputs sources are to connect to mixing amplifiers using XLR jacks.

16. PHANTOM POWER SWITCH (CH.1 TO CH.4)

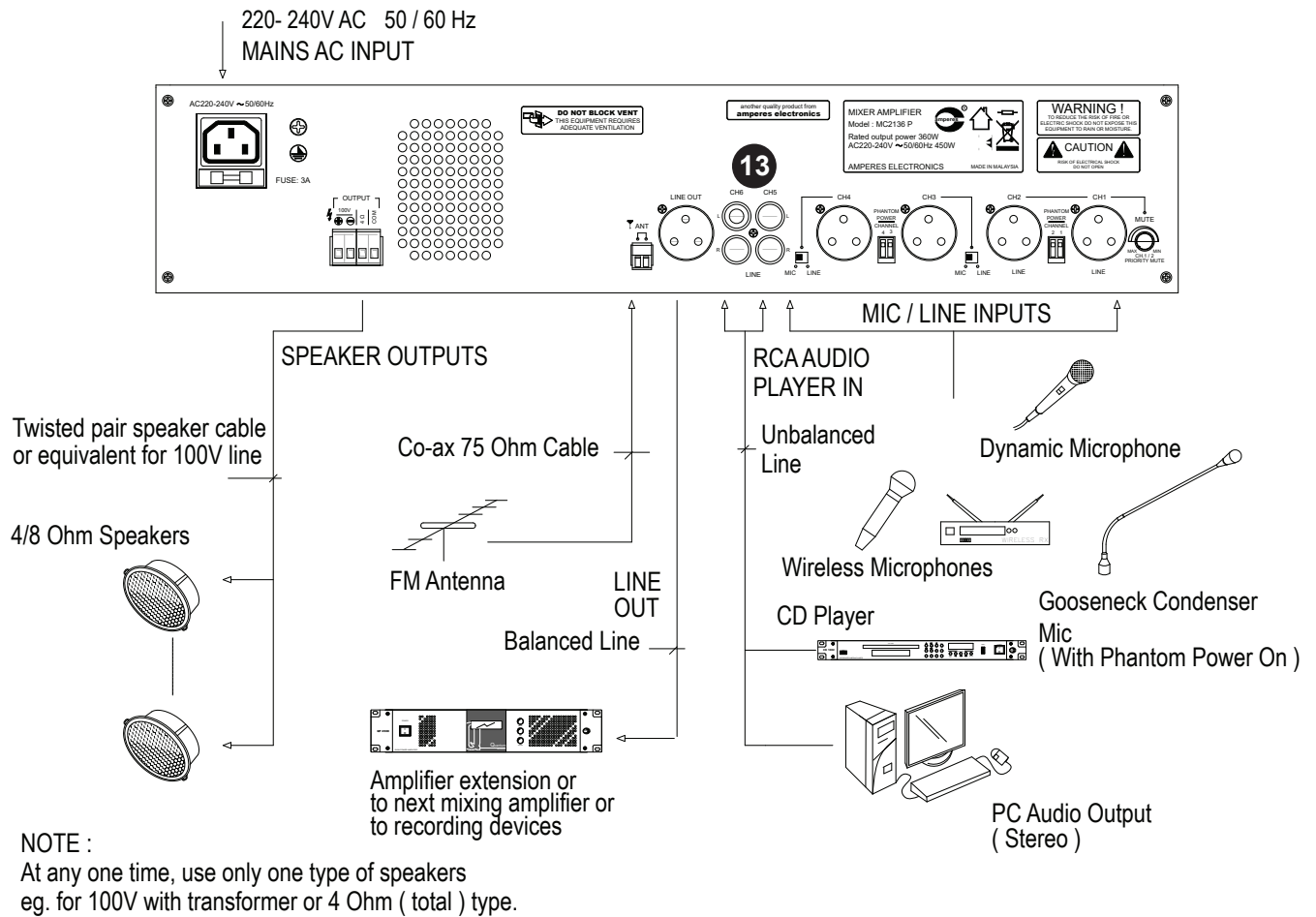
12V DC phantom power is available to enable electret condenser mic to be inserted directly to the mixer. Switch it to OFF position if dynamic microphones or other active sources are used., eg. wireless receiver.

17. MUTE LEVEL MIXER

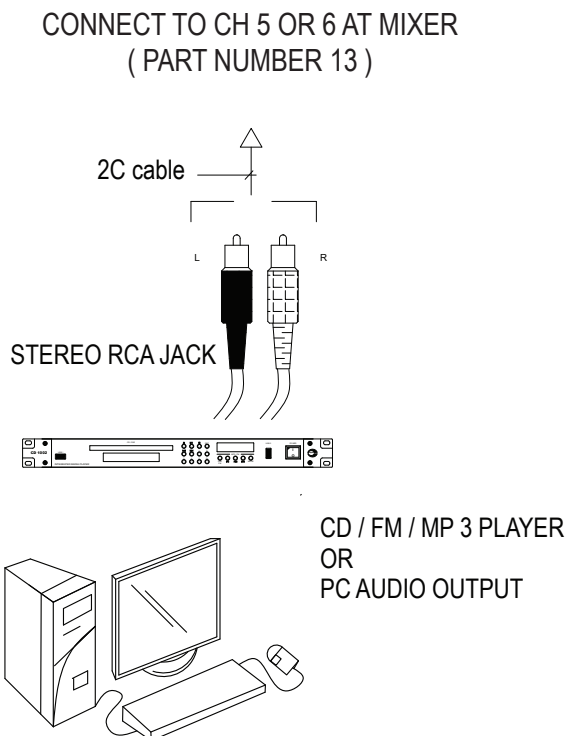
Ch.1 and Ch.2 has priority over other channels. The presence of audio at these channels can mute others or mix with them while ducking their levels. Use this knob to adjust the mixing level.

If both Ch.1 and 2 with signal presence, both of these audio shall mix.

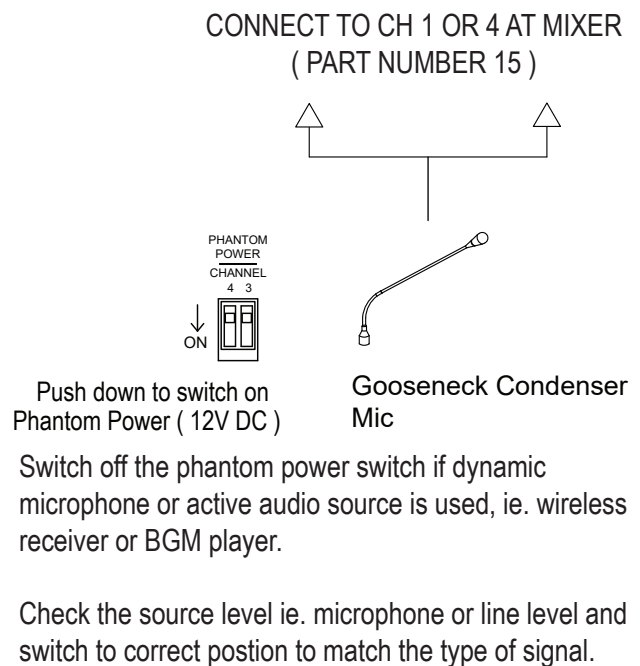
General Schematic



BGM Source

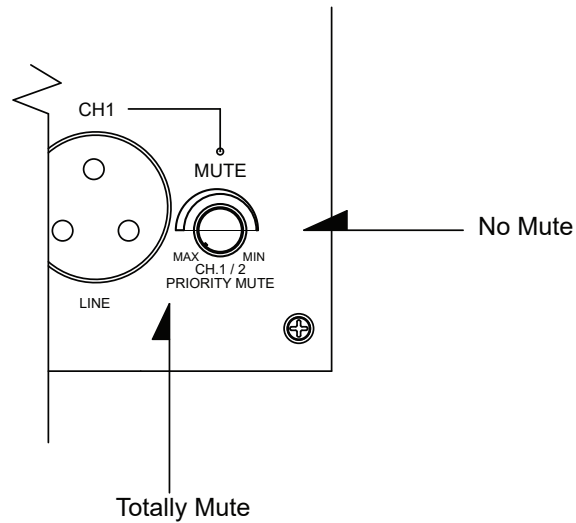


Condenser Microphones



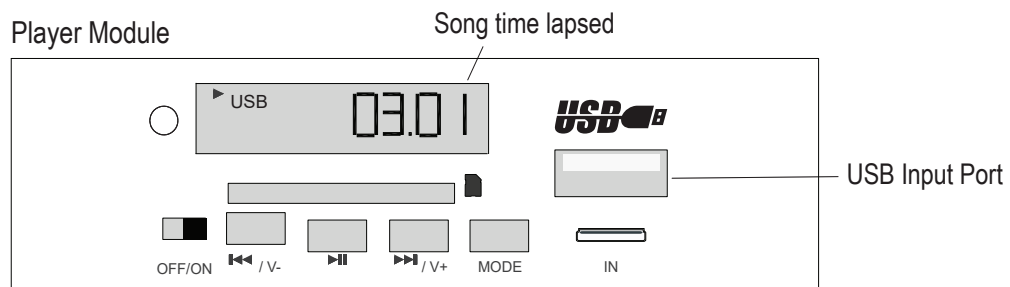
Priority Muting

Channel 1 and 2 are priority channels that can mute other channels (except audio from Paging Mic). The mixing level can be adjusted to totally mix or total mute. When both signals are present at Ch.1 and 2, they shall mix while muting other channels.



Operating the Unit (Playing USB / SD)

Insert a SD Card or USB into the slot and the unit shall automatically enter the playing mode.



OFF/ON Button

OFF/ON

Individual power OFF/ON for each module



◀◀ / V-



▶▶ / V+

Next, Prev & Volume Button

The top button for repeating the previous song and to decrease the song volume while the bottom one shall skip to the next song and to increase the song volume.



⏸

Play & Pause Button

Press this button to play or to pause.



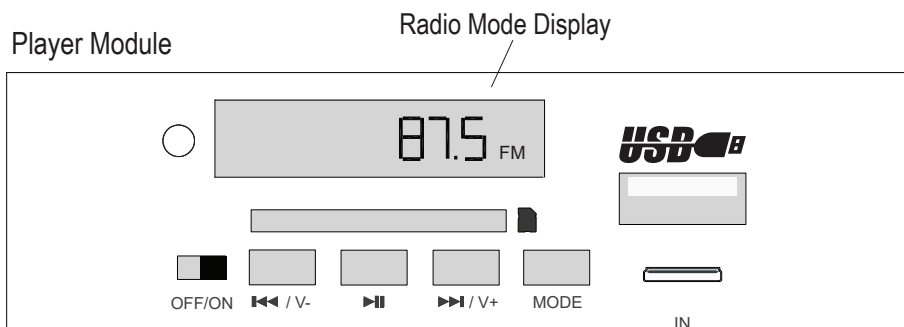
MODE

Mode Button

The menu at the display would switch between :-

RADIO ---- AUX ---- BLUETOOTH ---- SD ---- USB ---- RADIO

Operating the Unit (FM Radio)



To enter the radio mode, press Mode button & FM Radio reception mode shall be displayed.

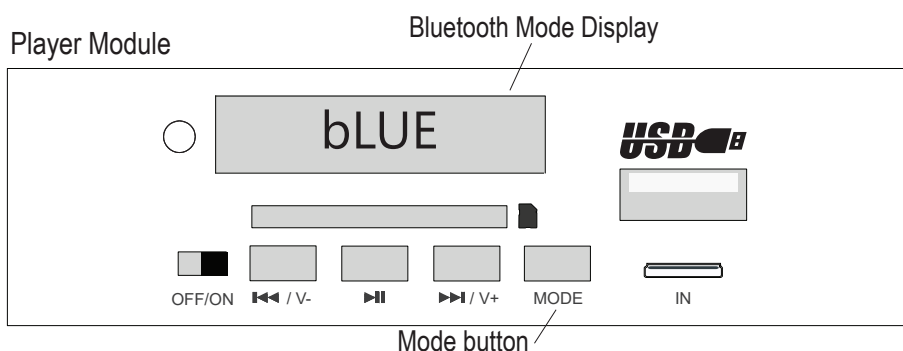


Use the 'Next' or 'Prev' button to manually select the station.

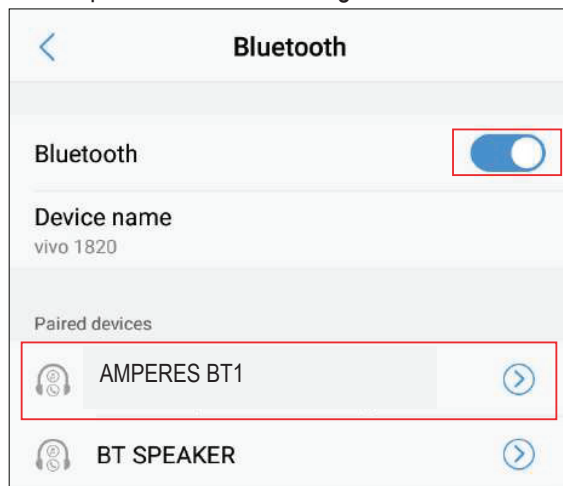


Auto program select. Press this button briefly and the tuner shall automatically search the stations.

Operating the Unit (Bluetooth)



Mobile phone bluetooth setting



1) On MC2000P series media player, press MODE button until 'bBLUE' show up on the LED display, indicates that the player is now in Bluetooth reception mode.

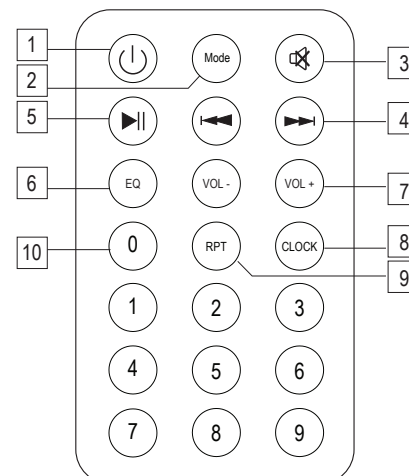
2) On a Bluetooth transmission device, turn On the Bluetooth mode. It will start searching for active reception device around the area.

Figure on the left shows a mobile phone running on Android detected a device named "AMPERES BT1" which is the MC2000P player. Click to pair the player with your device.

If the pairing is successful, we shall hear "Bluetooth successfully connected". Now we can play an audio file on our bluetooth device and stream it to MC2000P.

Remote Controller

1. Power Switch : Press once to switch ON, press again to switch OFF.
2. Mode : Pres this button to switch among the radio / bluetooth / AUX / USB or SD functions.
3. MUTE : Press once to mute audio output, press again to resume volume level.
4. Next / Previous Button : In USB / SD songs, press this button to select previous song or next song.
In the radio mode, it is for next / previous stations.
5. Play / Pause Button : Press this button to switch between Play and Pause.
6. EQ: Press this button to switch different EQ modes (Jazz, Pop, etc)
7. VOL +/-: Press this button to increase or decrease volume level.
8. CLOCK: Press this button to switch to clock mode.
9. RPT: During playback, press RPT button briefly to play the current track repeatedly, the LCD will display ONE.
Press RPT button twice to play the tracks in a folder repeatedly, the LCD will display FOLD.
Press RPT button twice to play all the tracks, the LCD will display ALL.
10. Numerical Buttons : In the radio mode, press this button to select a station. In the playback mode, press this button to choose desired track.



Technical Specifications

	MC2112 / P	MC2124 / P	MC2136 / P
Ratings (rms) 100V output	120 W	240 W	360 W
Operating voltage	220 ~ 240 V AC		
Power consumption (240V AC)	160 W / 0.7 A	285 W / 1.2 A	450 W / 1.9 A
Input - Ch 1 and 2	Balanced Line input with 12V Phantom Power (10 k Ohm) ; Adjustable mute priority		
Ch 3 and 4	Bal. Mic / Line selectable with 12V Phantom Power (Mic : 10 k Ohm, Line : 15 k Ohm)		
Ch 5 and 6	Unbalanced input (15 k Ohm) RCA 0 dBV		
THD + N (at rated power)	< 0.02 %		
S/N ratio	> 68 dB		
Tone controls	Bass (100 Hz), Treble (10 k Hz) +/- 15 dB		
Frequency response	120 - 20 k Hz (+/- 3 dB)		
Signal output	0 dBu balanced line		
Output voltage -			
4 Ohm @ 1V rms input	50 V rms		
100 V @ 1V rms input	100V rms		
Protections	Thermal, short circuit, AC and DC fuses		
Indications	Power, signal level		
Cooling system	Thermostat controlled fan at 45 Deg C		
Dimensions (WxHxD) mm	434 x 88 x 200 (without bracket)		
Net weight (kg)	3.40 / 3.45 (P version)		

Warranty Conditions

Only Amperes Electronics Service Centres are allowed to make warranty repairs : a list of Amperes Electronics authorized service centres may be asked by the purchaser or send directly to Amperes Electronics Sdn Bhd at 70 Jalan Industri PBP3, Tmn Perindustrian Pusat Bandar Puchong, 47100, Puchong, Selangor. This warranty is not valid if repairs are performed by unauthorized personnel or service centres.

This warranty covers only repairs and replacement of defective parts. Cost and risk of transportation as well as removal and installation of the product from the main system are for the account of the purchaser. This warranty shall not extend to the replacement of the unit.

This warranty does not cover damages caused by misuse, negligence in application as well as using the product with power supply voltage other than shown on the product, or any other power supply source / adapter not recommended by the manufacturer.

This warranty does not cover damages caused by fire, earthquakes, floods, lightning and every cause not directly related to the unit.

This warranty does not include any indemnity in favor of the purchaser or the dealer for the period out of use of the unit, moreover the warranty does not cover any damages which may cause to the people and things during the use of the product.

This warranty certificate is valid only for the described product, and is not valid if modifications are made on this certificate or identification labels applied to the unit or any other modifications to the physical unit other than its intended usage.

This warranty covers all the material and manufacturing defects and is valid for a period of 36 months from the date of purchase or for a specified period in countries where this is stated by a national law. In this case, the extension is valid only in the country where the product is purchased.

Amperes Electronics Sdn Bhd is not obliged to modify previously manufactured products under warranty if the design changes or improvements are made.

The purchaser is deemed to agree to the above warranty conditions once the product packaging is unpacked., Otherwise the product shall be returned to the seller in proper original condition.

Disclaimer

Information contained in this manual is subjected to change without prior notice and does not represent a commitment on the part of the vendor. Amperes Electronics Sdn Bhd shall not be liable for any loss or damages whatsoever arising from the use of information or any error contained in this manual.

It is recommended that all services and repairs of this product to be carried out by Amperes Electronics or its authorized service agents.

Amperes products must only be used for the purpose they were intended by the manufacturer and in conjunction with this operation manual.

Amperes Electronics Sdn Bhd cannot accept any liability whatsoever for any loss or damages caused by service, maintenance or repair by unauthorized personnel, or by use other than that intended by the manufacturer.



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