IMPORTANT



Please keep it from humidity in case of fire or electric shock .

Do not block ventilation openings or stack other equipment on top.

To prevent electric shock, do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.



CAUTON:TO REDUCE THE RISK
OF ELECTRIC SHOCK,DO NOT
REMOVE COVER(OR BACK).
NO USER-SERVICEABLE PARTS
INSIDE.REFER SERVICING
TO QUALIFIED SERVICE
PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.



Public address systems & Commercial sound systems

AP-200M, 300M, 600M, 1000M

Mixer amplifier with USB, Tuner, Mp3

Operation manual

www.t-koko.com







Specifications

Model	AP-2	00M	AP-300M	AP-600M	AP-1000M	
Rated Power	70	W	130W	260W	360W	
	4-16 ohms(Ω) Constant impedance					
	70W 70V(70 ohms(Ω)) 100V(143 ohms(Ω)) Constant voltage					
Speaker Output	130W	130W 70V(38 ohms(Ω)) 100V(77 ohms(Ω)) Constant voltage				
	260W	260W 70V(19 ohms(Ω)) 100V(39 ohms(Ω)) Constant voltage				
	360W 70V(14 ohms(Ω)) 100V(28 ohms(Ω)) Constant voltage					
	MIC1:600 ohms(Ω) 5-8 mV , Unbalanced					
Inputs	MIC2:600 ohms(Ω) 5-8 mV , Unbalanced					
	MIC3:600 ohms(Ω) 5-8 mV , Unbalanced					
Line Inputs	AUX1:10k ohms(Ω) 150-470 mV , Unbalanced					
	AUX2:10k ohms(Ω) 150-470 mV , Unbalanced					
Auxiliary Output	0.775V (0 dB)					
Freq. Response	60 Hz ~ 15k Hz (± 3 dB)					
THD	≤ 1% at 1kHz,1/3 rated power; ≤ 2%, full rated power					
S/N Ratio	Line:85 dB , MIC:>72 dB					
Tone Control	BASS:100 Hz (\pm 10 dB) , TREBLE:12k Hz (\pm 10 dB)					
Mute Function	MIC1 Input ,MIC2、MIC3、AUX1、AUX2 0~30 dB attenuation					
Output Control	< 3 dB, From no signal to full load					
Control Function	5 volume adjustment, 1 treble and 1 bass, 1 mute, 1 power switch					
Cooling	DC 12V FAN Cooling					
Indicator	Power indicator, Level: 2,4,6,8,10					
Protection	AC FUS	E×4A	AC FUSE×4A	AC FUSE×8A	AC FUSE×8A	
- 1010011011	AC FUSE×1,Overload,, short circuit, high heat					
Cable	$(3\times0.75 \text{ mm}^2)\times1.5\text{M}$ (Standard)					
Power Requirements	AC 220V ± 10% 50 -60Hz					
Power Consumption	95\	W	175W	350W	485W	
Dimension	89(H)×483(W)×366(D) mm					
Packing Dimension	185(H)×520(W)×435(D) mm					
Net Weight	10.0	4kg	11.36kg	13.68kg	14.08kg	
Gross Weight	11.7	2kg	13.02kg	15.32kg	15.7kg	

9

Notice



Heat

 Keep it from bright sunshine or heat.

Cabinet installation

•It should not be a closed cabinet. Sufficient ventilation holes is a must for heat dissipation.



Do not open the cover

Please do not open the cover in case of electric shock. Unplug when malfunction happens and refer servicing to qualified personnel.



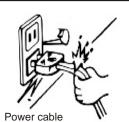
Cover protection

Cover surface should not be exposed to insecticide, gas, thinner or other solvents which may damage the device and color. Clean it with soft cloth and be aware of solvent usage.



Humidity, water and dust

 Keep it away from humidity and dust.



 Do not drag the cable when unplug.

2



Leaving

 Unplug when the device is not used for a long time.

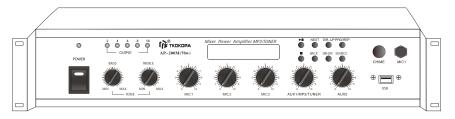
PA apm MP3/Tuner included

AP-200M

AP-300M

AP-600M

AP-1000M



Manual

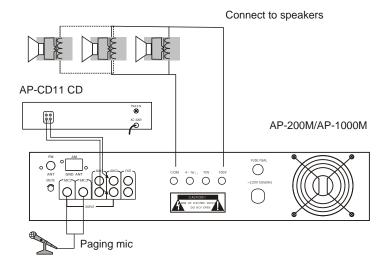
Features

- 1. 3 microphone and 2 line in, 1 auxiliary out, suitable for mini PA.
- 2. 100V, 70V and 4-16 Ohms (balanced, ungrounded) outputs.
- 3. Mute function, PA priority.
- 4. Independent volume control.
- 5. Treble and bass tone control.
- 6. 5-element LED level meter makes it easy to view the output level.
- 7. Output short circuit protection and warning.
- 8. Mp3, FM/AM audio source and 4 tones chime prompt tone.
- 9. FM/AM switchable, manual/auto search function; memory for 20 FM and 20 AM radio
- 10. LCD to display MP3/tuner working state.
- 11. A single unit is as a complete mini PA system.

Installation notes

- 1. Do not block ventilation holes.
- 2. Check power cables before using.
- 3. The power cord plug should be appropriate for the power outlet.
- 4. Power supply should be sufficient, with independent ground lead.
- 5. Keep it away from humidity, dust, heat and vibration. Operating environment 5-28°, relative humidity <90%. If long time use, cooling solution is recommended to reduce high heat.
- 6. Voltage supply is 220V+-10% 50/60 Hz. If high or low voltage or strong fluctuation happens, an installation of DC power supply is recommended.
- 7. The amplifier will produce a warning sound if the outputs are shorted. Please turn the power off and check the speaker wires before turning the power on.
- 8. Before the amplifier is on, turn the volume to the minimum. Turn it up slowly after amplifier is on so as to protect the speakers. When turn off, firstly turn the volume to the minimum and then turn the power off.

Rear panel and connection



Output connection

- Output terminal is on the rear panel, banana or spade-shaped plug can be used.
 Black for public terminal, red for heat terminal.
- Rated voltage terminal output should be used. Speakers should be with line transformer, and their total power should be less than the rated power of the amplifier.
- If speakers nearby the amplifier, rated impedance (4-16Ohms) terminal input can be used, and their total impedance should be 4-16Ohms correspondingly.

FM features

Receiving frequency	87.00MHz~108.00MHz		
Stepped-frequency	100KHz		
Medium frequency	10.70MHz (Upper Heterodyne)		
Operating environment	-5℃~+70℃		
Input impedance	75 Ω Unbalanced 75 Ω unbalanced		

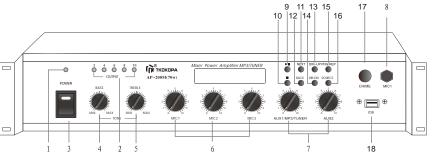
AM features

Receiving frequency	522KHz ~ 1611KHz		
Stepped-frequency	9/10KHz		
Medium frequency	450KHz (Upper Heterodyne)		
Operating environment	-5℃ ~+70℃		
Antenna	Use dummy antenna which specified. If there discrepancy happened. should use loop antenna.		

LCD features

Mode	STN blue film,QS, white LED	
Operating environment	0℃ ~+50℃	
Storage environment	-10℃ ~+60℃	
View angle	12: 00	
Vision size(W x H)	66.0 X 13.4mm	

Front panel



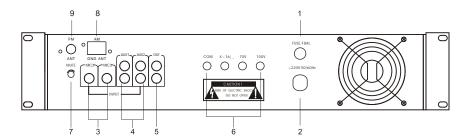
1 Power indicator 3 Power switch 5 Treble control 7 Mp3、radio line volume 2 LED level 4 Bass control 6 Mic volume 8 No.1(priority) Mic port 9 Play/pause 10 Stop 11 Next 12 Back 13 DIR-UP 14 DIR-DN 15 Save 16 Mp3/FM/AM/AUX1 audio switch 17 4 tones chime 18 USB port

Notes: Brightness of 5 LED lights signifies strong input signal, should adjust the volume to keep No.4~5 light flashing.

Buttons on Mp3, FM, AM audio source

Key	Mp3 source	FM source	AM source
►II	Play/pause	Invalid	Invalid
	Stop	Invalid	Invalid
NEXT	Last file	Next channel	Next channel
ВАСК	Next file	Next channel	Next channel
DIR-UP	Last folder	Up fine-turning, continuous 4 press for auto search	Up fine-turning, continuous 4 press for auto search
DIR-DN	Next folder	Dn fine-turning, continuous 4 press for auto search	Dn fine-turning, continuous 4 press for auto search
PRG/REP	Invalid	Save channels	Save channels
SOURCE	Switch to FM audio source	Switch to AM audio source	Switch to AUX1 audio source

Rear panel



1 Fuse 2 AC power interface

3 #2,#3 Mic input

5 Line out 6 Output terminal

7 Mute control

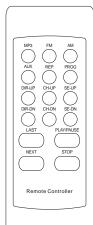
8 AM antenna

4 Aux1,2 input

9 FM antenna

Note: Only two of the four output terminals should be used.

Remote control



Features:

1、MP3: MP3 audio source

2、FM: FM audio source

3. AM: AM audio source

4、AUX: AUX1 audio source

5、REP: MP3 loop play (full loop and shuffle)

6. PROG: save channel

7、DIR-UP: last file

8, DIR-DN: next file

9, CH-UP: FM, AM audio source, last channel

10、CH-DN: FM、AM audio source, next channel

SE-UP: FM. AM audio source, up fine-turning,
 4 continuous press for auto search

12. SE-DN: FM. AM audio source, down fine-turning 4 continuous press for auto search

13 LAST: MP3 audio source, last play

14 NEXT: MP ausio source, next play

15、PLAY/PAUSE: MP3 audio source, play/pause

16 STOP: MP3 audio source, stop

Mute function

MIC 1 takes priority over and mutes all other inputs. The mute may be adjusted with the MUTE sensitivity control knob on the rear panel. The factory default setting is -30dB.

U disk connection

Before turning the power on, connect U disk to USB port. When the power is on, U disk can be inserted randomly; the default setting of Mp3 play mode is full loop.

4 tones chime

Beyond any volume control, prompt tone takes priority same as MIC1.

FAT analysis

- 1. Support FAT16 and FAT32
- 2. Support VFAT (long file name)
- 3. Not support multi-zone U disk
- 4. Support 99 folders max.
- 5. The maximum number of playable files within each folder is 9999.
- 6. The playable folder hierarchy is up to 8 layers including the root directory.
- 7. The playable folders extension support*.mp3, *.mp2 and *.mp1.

For *.mp2 and *.mp1, enabled/disabled mode is optional.

8. Can obtain up to 64 bytes as the folder name or file name.

Mp3 decode

- 1. Support MPEG audio and 1, 2 and 2.5
- 2. Supports layer 1, 2 and 3
- 3. Supports sample rates 8k, 16k, 32k, 11.025k, 22.05k, 44.1k, 12k, 24k and 48kHz
- 4. Supports bit rate 8 to 320 kbps and VBR (Variable Bit Rate), except free format