TPM SERIES

USER'S MANUAL

POWER MIXER
TPM8.2000
12-Channel
Stereo Powered Mixer

TOPP PRO MUSIC GEAR

www.topppro.com

USB ENABLED

NOTES

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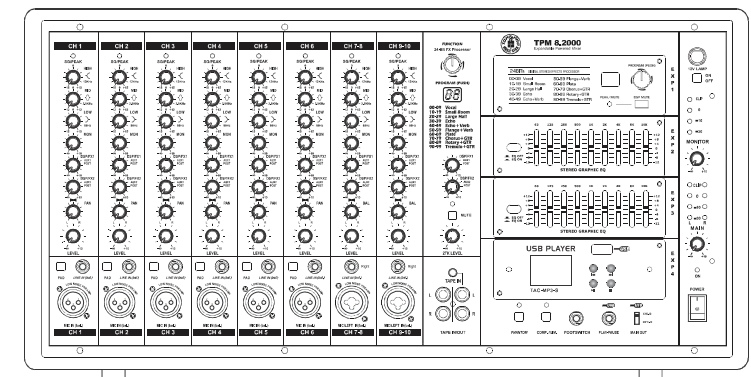
9 TECHNICAL SPECIFICATIONS

Compressor	Threshold	-40dB~+22dB
	Comp/Lim.	Ratio(variable)2:1 to ∞:1(limit);attack Time:1ms;release time:2s
Power Section (1000W mode)	Power continuous 1KHz, THD 0.5%	2*390W @4ohm
		2*270W @8ohm
	Power EIAJ 1KHz, THD 1%	2*500W @4ohm
Protection	Bridged mode	1000W @8ohm EIAJ
		738W @8ohm RMS
	Thermal protection	Over-temperature power limiting
		Thermal shutdown
		Temperature controlled 12V DC fan output
	Short protection	Short-circuit protection
		Overload output protection
	Limiter	Clip limiter
		Permanent signal limiter
		High frequency protection
Static Power Consumption	No output power State at 230V	≦ 35W
Power Supply	Main voltage	AC110-120V~50/60Hz
		AC220-240V~50/60Hz
Physical	Dimension(W*D*H)	557*296*280mm
	Weight	NW:15.95kg GW:18.59kg

SAFETY RELATED SYMBOLS

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

This symbol, wherever used, alerts you to the presence of un-insulated and dangerous voltages within the product enclosure. These are voltages that may be sufficient to constitute the risk of electric shock or death.

This symbol, wherever used, alerts you to important operating and maintenance instructions.
Please read.

⏚ Protective Ground Terminal
∼ AC mains (Alternating Current)
⚡ AC mains (Alternating Current)
ON: Denotes the product is turned on.
OFF: Denotes the product is turned off.

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

CAUTION
Describes precautions that should be observed to prevent damage to the product.

Disposing of this product should not be placed in municipal waste but rather in a separate collection.

WARNING

Power Supply
Ensure that the mains source voltage (AC outlet) matches the voltage rating of the product. Failure to do so could result in damage to the product and possibly the user. Unplug the product before electrical storms occur and when unused for long periods of time to reduce the risk of electric shock or fire.

External Connection
Always use proper ready-made insulated mains cabling (power cord). Failure to do so could result in shock/death or fire. If in doubt, seek advice from a registered electrician.

Do Not Remove Any Covers
Within the product are areas where high voltages may present. To reduce the risk of electric shock do not remove any covers unless the AC mains power cord is removed. Covers should be removed by qualified service personnel only.

No user serviceable parts inside.

Fuse
To prevent fire and damage to the product, use only the recommended fuse type as indicated in this manual. Do not short-circuit the fuse holder. Before replacing the fuse, make sure that the product is OFF and disconnected from the AC outlet.

Protective Ground
Before turning the unit 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.

Operating Conditions
Always install in accordance with the manufacturer's ints-instructions.
To avoid the risk of electric shock and damage, do not subject this product to any liquid/rain or moisture.
Do not use this product when in close proximity to water.
Do not install this product near any direct heat source.
Do not block areas of ventilation. Failure to do so could result in fire.
Keep product away from naked flames.

IMPORTANT SAFETY INSTRUCTIONS
Read these instructions
Follow all instructions
Keep these instructions. Do not discard.
Heed all warnings.
Only use attachments / accessories specified by the manufacturer.

Power Cord and Plug
Do not tamper with the power cord or plug. These are designed for your safety.
Do not remove Ground connections!
If the plug does not fit your AC outlet seek advice from a qualified electrician.
Protect the power cord and plug from any physical stress to avoid risk of electric shock.
Do not place heavy objects on the power cord. This could cause electric shock or fire.

Cleaning
When required, either blow off dust from the product or use a dry cloth.
Do not use any solvents such as Benzol or Alcohol.
For safety, keep product clean and free from dust.

Servicing
Refer all servicing to qualified service personnel only.
Do not perform any servicing other than those introductions contained within the User's Manual.

PORTABLE CART WARNING
Carts and stands - The component should be used only with a cart or stand that is recommended by the manufacturer.
A component and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the component and cart combination to overturn.

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Don't forget to visit our website at **www.topppro.com**
for more information about this and other **Topp Pro** products.

TECHNICAL SPECIFICATIONS   9

		TPM8.2000
Mono Channels	Microphone input	Electronically balanced, discrete input configuration
	Frequency response	20Hz to 22KHz, +/-3dB
	Distortion(THD&N)	0.1% at 1KHz
	Sensitivity	-30dBu
	SNR	≧102 dBu
	PAD	-10dB
	Phantom power	+15V with switch control
	Line input	Electronically balanced
	Frequency response	20Hz-22KHz, +/-3 dB
	Distortion(THD&N)	0.1% at 1KHz
	Sensitivity range	-10dBu
Stereo Channels	Line input	Electronically balanced, discrete input configuration
	Frequency response	20Hz-55KHz, +/-3 dB
	Distortion(THD&N)	0.1% at 1KHz
	Sensitivity range	-30 Bu
	SNR	≧98dBu
	Phantom power	+15V with switch control
	Line input	Electronically balanced
	Frequency response	20Hz-22KHz, +/-3 dB
	Distortion(THD&N)	0.1% at 1KHz
	Sensitivity range	4dBu
Impedances	Microphone input	1.4K Ohm
	All other input	10K Ohm or greater
	Tape out	1K Ohm
	All other out	120 Ohm
Channels EQ(mono)	High	+/-15dB@12KHz
	Mid	+/-12dB@2.5Hz
	Low	+/-15dB@80Hz
Channels EQ(stereo)	High	+/-15dB@12KHz
	Mid	+/-12dB@2.5Hz
	Low	+/-15dB@80Hz
DSP Section	A/D and D/A converters	24bit
	DSP resolution	24bit
	Type of effects	VOCAL,SAMLL+ ROOM,LARGE HALL,ECHO,ECHO+VERB
		FLANGE+VERB,PLATE,CHORUS+GTR,ROTARY+GTR,TREMOLO+GTR
	Presets	100
	Controls	100 position preset selector(10 presete*10variation)
		Mute s+witch ith LED idicator, CLIP LED
LAMP	Pin2(+) and pin1(-)	+12V DC/0.5A
Main Mix Section	Main, Aux, output	0dBu unbalanced, 1/4" jacks
	Noise (BUS noise)	≦-75 dB @ 20KHz~22KHz(channel&MAIN level at 0dB, other at minimum, DSP mute)

8 BLOCK DAIGRAM

TPM8.2000 BLOCK DIAGRAM

(block diagram)
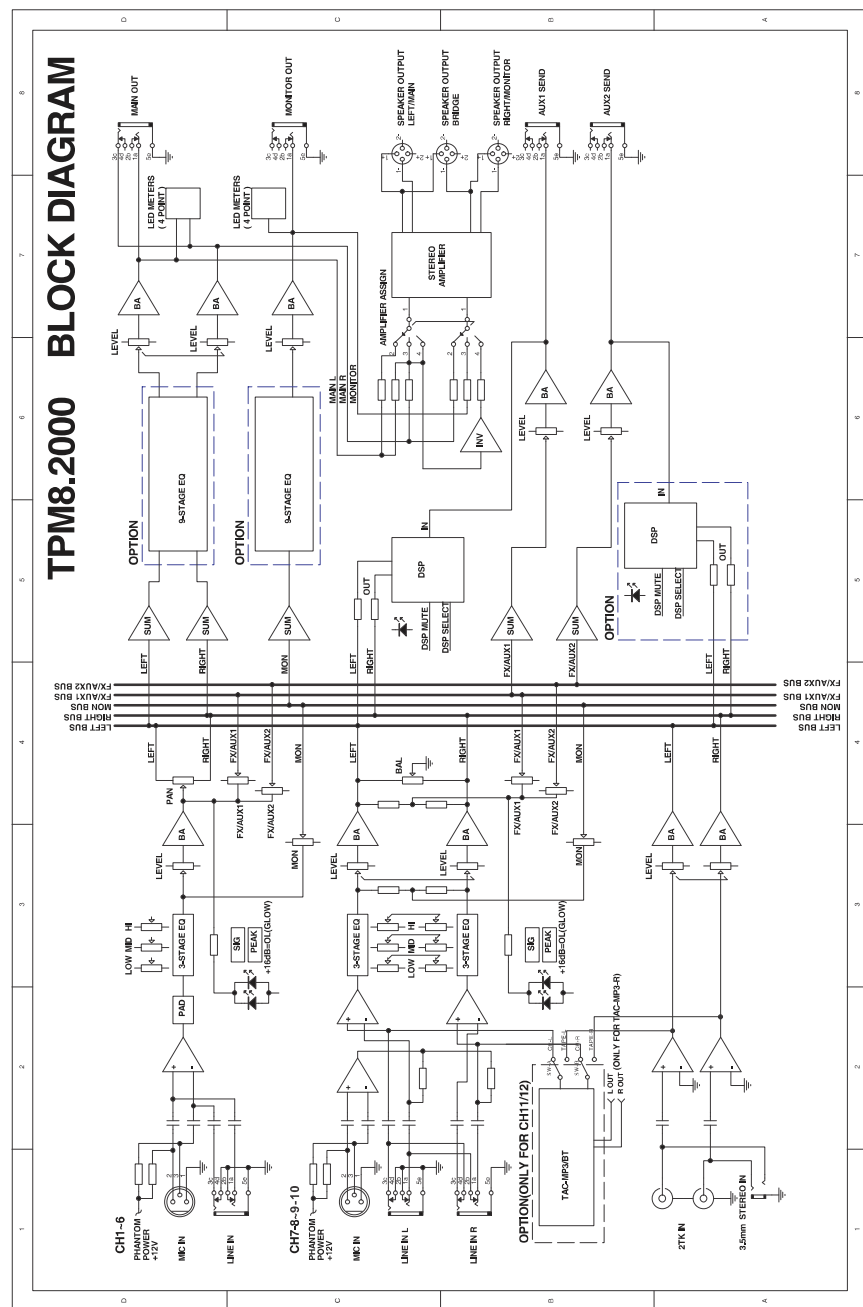
1 INTRODUCTION

Thank you for your purchasing of TOPP PRO TPM8.2000. The TPM8.2000 is designed to be a portable solution that includes a mix, an amplifier. It builds with 2*500W power amplifier and available with 12-channel configurations, 24-bit multi-effects processor with 100 presets, built-in compressor/ limiter, 9-band EQ and RCA I/O with dedicated volume control. They are designed to be rugged, powerful and filled with quality features that would usually be found in much large systems.

Please read this manual carefully so you can take advantages of all the features of TPM8.2000.

Thanks again for choosing TOPP PRO.

2 FEATURES

*8MIC/LINE input channels, 7/8,9/10 channels are stereo channels, the remaining are mono channels

*Each input channel with volume, left & right, DSP volume, high/mid/low volume controls and +10dB PAD
*+15V phantom power for condenser MIC
*2-way RCA channel input R/L stereo signal in 11/12 channel by TAPE IN
*2-way RCA channel output R/L stereo signal for external effect or other device
*Mp3 works in 9/10 or 11/12 channel controlled by MP3IN switch
*STEREO, MONITOR, and BRIDGE outputs
*Built-in DSP effect with 100 presets
*Option 9-band EQ
*500W*2(4ohm load) maximum power for amplifier
*Toroidal transformer, bridge rectifier, filter and 78, 79 series voltage regulator
*Mains power can switch between 115V/230V

3 QUICK START

This is the fastest way to get something out from your TPM8.2000, if you have a keyboard and a microphone
a. Plug the microphone into Channel 1MIC IN.
b. Turn down AUX and LEVEL controls on the input channel.
c. Put the EQ controls on center position.
d. Connect 2 passive cabinets to the rear speaker cabinets.
e. Turn on your TPM8.2000
f. Sing or speak into the microphone with normal volume and adjust the channel LEVEL control of half.
g. If you like, you can adjust the EQ at this stage.
h. The LED on the Master LED meter should flash only occasionally, otherwise you will hear distortion.
If this LED is not active and you still hear distortion, please turn down a little the input LEVEL control or reduce the output level of your source instrument.
i. Connect your stereo keyboard into channel 7/8 and repear the sequence.

Here you are. It is your first gig with your TPM8.2000.

4 CONTROL ELEMENTS

MONO/STEREO Input Channel Section

Your TPM8.2000 comprises 6 mono input channels and 2 stereo input channels, each of them including -10dB PAD, 3-band equalizer, AUX sends, PAN and LEVEL controls.The following content will detail the each part.

1- MONO Input Channels(1~6)

Ch1 through Ch6 are provided of MIC IN and LINE IN connector. Use the XLR MIC IN connector to connect low noise microphones preamp and low level signal, which also feature +15V phantom power, allowing you to connect condenser microphones. Use the 1/4" TRS LINE IN connector to connect either a microphone or a line level instrument such as synthesizer, drum machine, effects processors...

Note: when +15V phantom power is already on, you shall never connect an unbalanced microphone to the XLR connector if you do not want to damage both the microphone and the mixer.

2- STEREO Input Channels(7~12)

Ch7 through Ch12 are organized in stereo pair. Via the 1/4" TRS input connectors,you can connect the outputs from stereo devices such as synthesizers, effects processor or any stereo line level signal. If only the left jack was connected, the input will operate in mono mode. Via the XLR MIC IN connector, you can connect the low level sources.

3- 10dB PAD Button

Pressing this button will attenuate the input signal by 10dB. In such way you can produce increased headroom and reduce the risk of distortion due to quite "hot" signals.

4- SG/PEAK LED

Inside your TPM8.2000, the audio signal is monitored in several different stages and then sent to this LED. When the LED is red illuminated, it warns that you are reaching signal saturation and possible distortion, then you should reduce the input level for avoiding distortion.

5- EQUALIZER

Your TPM8.2000 features a 3-band equalizer allowing you to adjust the high,mid and low frequencies separately on each channel. High and low frequencies provides a boost or cur up to 15dB, 12dB for mid frequency, flat at the center detent.

HIGH

This is the treble control. You can use it to get rid of high frequency noises or to boost the sound of cymbals or the high harmonics of the human voice.
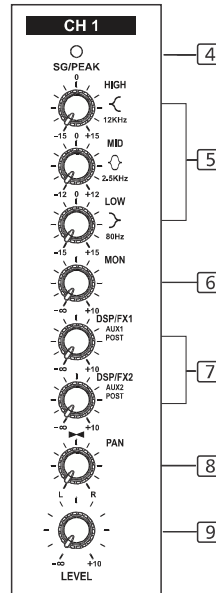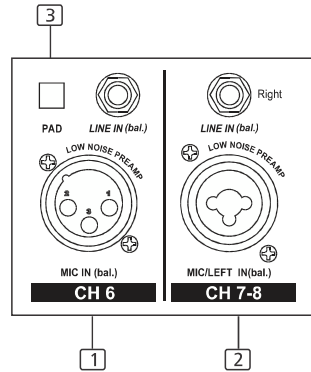
7 COMPUTER SET-UP DIAGRAM
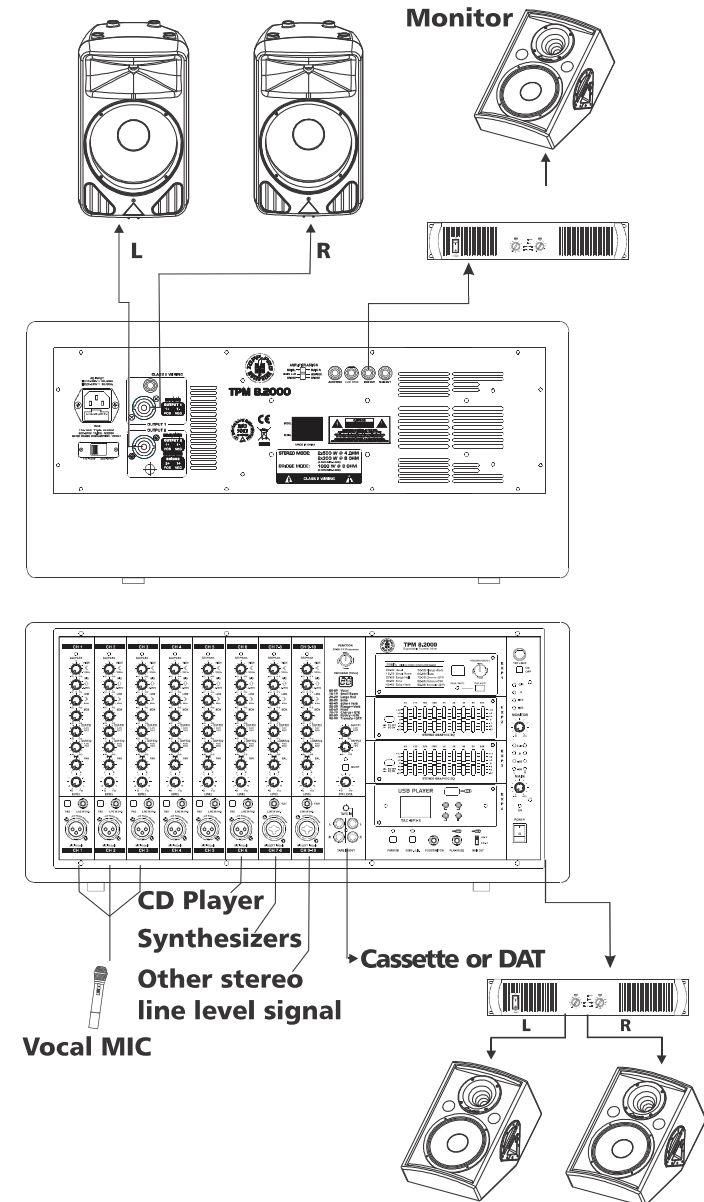
6 PRESET LIST

No.	Preset	Description	Parameter
00~09	Vocal	Simulate a small space with slight	Rev.delay time: 0.8~0.9s Pre-delay: 0~45ms
10~19	Small Room	Simulate a bright studio room	Decay time: 0.7~2.1s Pre-delay: 20~45ms
20~29	Large Hall	Simulate a large acoustic space of the sound	Decay time: 3.6~5.4s Pre-delay: 23~55ms
30~39	Echo	Echo/Delay effect	Delay time: 145~205ms
40~49	Echo+Verb	Echo & Reverb combination	Delay time: 208~650ms Decay time: 1.7~2.1s
50~59	Flanger+Verb	Flanger effect & Reverb combination	Decay time: 1.5~2.9ms Rate: 0.8Hz~2.52Hz
60~69	Plate	Simulate classic bright vocal plate	Decay time: 0.9s~3.6s
70~79	Chorus+GTR	Guitar Effect: Chorus	Rate:0.92Hz~1.72Hz
80~89	Rotary+GTR	Guitar Effect: Rotary	Modulation depth: 20%~80%
90~99	Tremolo+GTR	Guitar Effect: Tremolo	Rate : 0.6Hz~5Hz

4 CONTROL ELEMENTS

MID
This is the midrange control. It affects most fundamental frequencies of all musical instruments and human voice. An attentive use of this control will give you very wide panorama of sound effects.

LOW
This is the bass control. It is used to boost male voice, kick drum and bass guitar. Your system will sound much bigger than what it is.

6- MON Control
Your TPM8.2000 has three auxiliary sends which can be used for sending signals to external or internal effects device or for creating a monitor mix, these sends are used to adjust the level of respective channel signal sent to AUX bus, and the adjustable range goes from -∞ to +10dB. The control is configured as PRE-FADER, which means that the signal is sent out before reaching the channel fader. It is used for a stage monitor mix in a live set, or for a headphone mix in recording application.

7- DSP/FX 1&2 Control
The controls are configured as POST-FADER, so the AUX send level will be affected by channel fader. Via the AUX OUT jack, the AUX signal can be sent to an external effects device, furthermore, the AUX signal can also be assigned to internal onboard effect module.

8- PAN Control
Abbreviation of PANORAMA control for mono and stereo channels. It is used to determine the amount of channel signal sent to main mix left and right outputs. Keeping this control in center position, the signal will be positioned in middle of "stereo field". Turn this control fully counterclockwise, the signal will be present only on the left of main mix and vice-versa.

9- Channel LEVEL Control
This control is used to adjust the overall level of respective channel. The adjustable range goes from -∞ to +10dB.

10- 2TK LEVEl Control
This control is used to adjust the level of 11/12 channel. The adjustable range goes from -∞ to +10dB.

11- AUX IN
It is ψ3.5mm stereo jack,which enjoys the same mix bus with Tape IN. It can be connected to Mp3,Mp4,CD player, computer,ect.
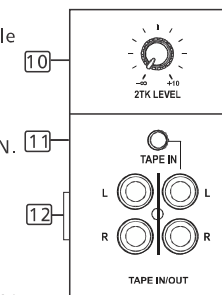
12- 2-TRACK IN / OUT

-TRACK IN
Use the Tape input if you wish to listen to you mix from a Tape Recorder or DAT.

-TRACK OUT
These RCA jacks will route the main mix into a tape recorder.

4 CONTROL ELEMENTS

13- LAMP Jack & Switch

This lovable LAMP is very convenient for your operation, it is located in the top right corner of the front panel, and provides the 12V socket that can drive standard BNC-type lamp.(PIN1 is connected to negative terminal, PIN2 is connected to positive terminal). By pressing this switch, you can turn on the lamp.

14- LED METER Display

This LED meter display indicates the output signal level.

15- MONITOR Control

Controls the level of the signal output to the MONITOR jack.

16- MAIN Control

Controls the level of the signal output to the MAIN OUT jack.

17- POWER ON / OFF Switch

This switch is used to turn the main power ON and OFF.

18- +15V Phantom Power & LED

It is available only to the XLR MIC sockets. Never plug in a microphone when phantom power is already on. The LED illuminates when the switch is ON. Before turning phantom power on, make sure that all faders are all the way down. In this way you will protect your stage monitor and main loudspeakers.

19- COM. / LIN.Switch & LED

Press this button, the LED lights up and you will active the COM. / LIM.Function.
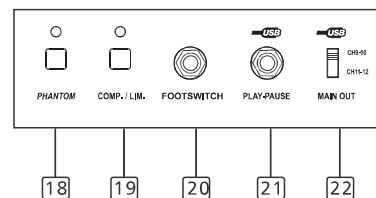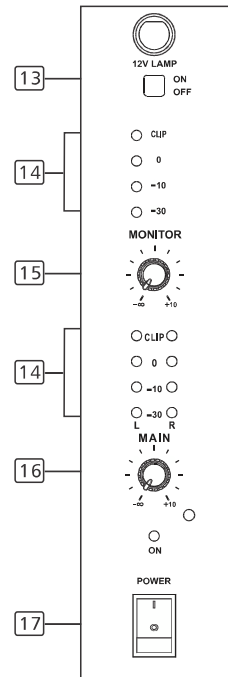
20- FOOTSWITCH Jack

This 1/4" jack can be used to connect an external footswitch to turn on / off the onboard effect module.

21- PLAY-PAUSE Jack

This 1/4" can be used to connect an external footswitch to swtich between PLAY and PAUSE mode.

22- MAIN OUT Select Switch

Pushing this switch up will route the signal from to CH9-10,MIC and LINE of CH9-10 path are disconnected, and the signal will be affected by channel level control, while down will route the signal from MP3 to CH11-12 path, and the signal will be affected by channel level control.

5 INSTALLATION AND CONNECTION

Main Speaker

AMPLIFIER ASSIGN
MAIN L ——— MAIN R
MAIN L+R ——— MONITOR
BRIDGE ——— BRIDGE
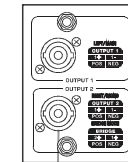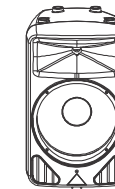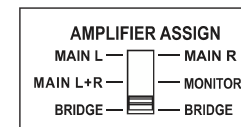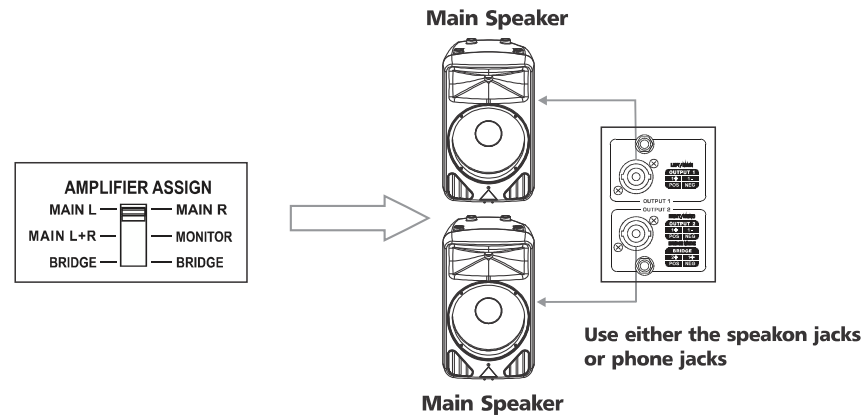
Use the speakon jacks only

Bridge Mode

With the AMPLIFIER MODE switch in BRIDGE position, the two power amplifiers in your TPM8.2000 drive together a single speaker cabinet with the sum of the power of the 2 amps. Usually this solution is used to drive a single subwoofer and the main out output on the front panel are used to feed a pair of powered speakers as mid-high units.
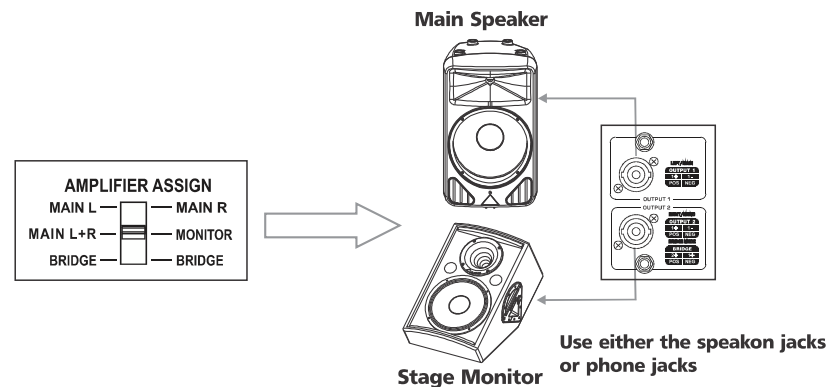
5 **INSTALLATION AND CONNECTION**

12 Channel LEVEL Control
And now some tips how to use the AMPLIFIER MODE switch

Main Speaker

AMPLIFIER ASSIGN
MAIN L ——— MAIN R
MAIN L+R ——— MONITOR
BRIDGE ——— BRIDGE

Use either the speakon jacks or phone jacks

Main Speaker

MAIN L + MAIN R Mode

This is the most common application. The built-in amplifier drives two main speaker cabinets Left and Right. The AMPLIFIER MODE is on MAIN L+MAIN R position.

Main Speaker

AMPLIFIER ASSIGN
MAIN L ——— MAIN R
MAIN L+R ——— MONITOR
BRIDGE ——— BRIDGE

Use either the speakon jacks or phone jacks

Stage Monitor

MAIN L+R + MONITOR Mode

With the AMPLIFIER MODE in MAIN L+R + MONITOR position, channel1 drives a Main speaker cabinet while channel2 drives a stage monitor.

CONTROL ELEMENTS **4**

DSP Section
There is a powerful 24-bit / 100 presets digital multi-effects include in your TPM8.2000.Effect include ECHO, FLANGER+VERB,PLATE and combinations of the above.

23- PRESET Selector
Adjust this knob to select the right effect you wish to perform.There are totally 100 options for you: ECHO,VOCAL, PLATE and Versatile two-effect combination. When you are satisfied with the right preset, please push this knob to store this preset you want.

24- DISPLAY
It displays the selected preset.

25- DSP/FX Control
This control is used to control the volume of effect signal sent to AUX SEND, which can be varied from $-\infty$ to +10dB.

26- DSP MUTE Switch & LED

This switch is used to activate / deactivate the effect facility.sometimes,you can also use the FOOTSWITCH jack for convenient operation. The LED lights up when the signal sent to effect is too strong, in case of the digital effect module being muted, the LED also lights up.

4 CONTROL ELEMENTS

9- band EQ module
install

Take out the short circuit wire which connects 9-band EQ module interface. Plug in the 9-band EQ module connection wire to the EQMOD CONNECTOR. Fix the 9-band EQ module at one of the two module places with the two attached screws (Safekeeping the short circuit wire. Put the short circuit wire back into the EQ MOD CONNECTOR when you take out the 9-band EQ module, or the output will be cut)

function

1- EQ Switch

Engage this button to add the stereo graphic EQ to the main mix output circuit. It can be used to modify the frequency "contour" of a sound. If you release the button, the stereo graphic EQ will be bypassed

2- STEREO GRAPHIC EQ

Each one of these faders will boost or attenuate (+/-12 dB) the selected frequency at a preset bandwidth. When all the faders are in the center position, the output of the equalizer is flat response.
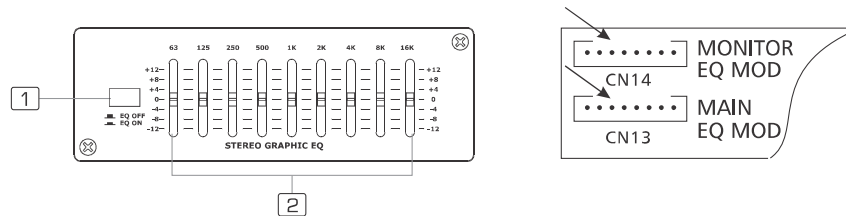

DSP module
install

Take out the short circuit wire which connects DSP module interface. Plug in the DSP module connection wire into DSPMOD CONNECTOR. Fix the DSP module panel at one of the two module places with the two attached screws (Safekeeping the short circuit wire. Put the short circuit wire back into the DSPMOD CONNECTOR when you take out the DSP module, or it will make distortion)
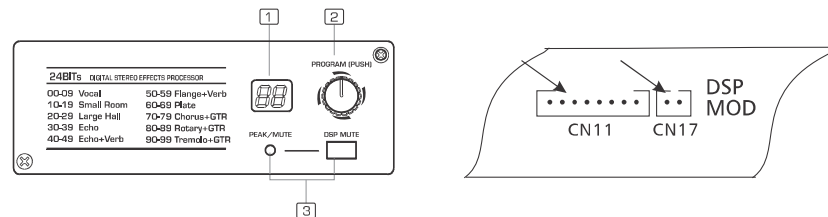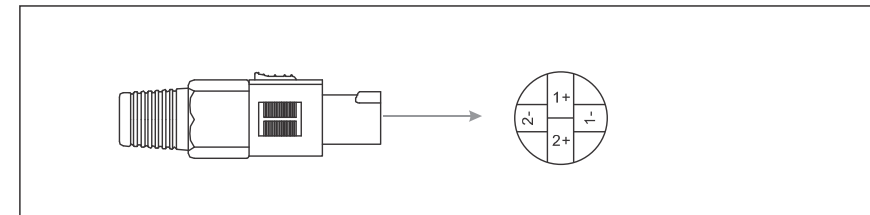
5 INSTALLATION AND CONNECTION
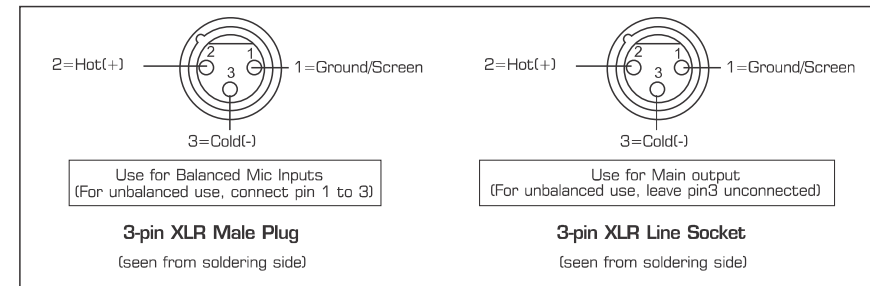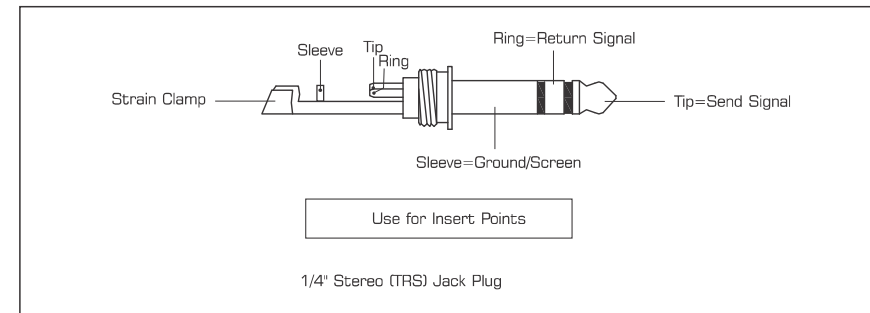
MAIN SPEAKERS CONNECTION

Please use only the power connectors to make connections with other signal source equipment for the passive speaker cabinets. The power connector has four terminals:1+, 1-, 2+, 2-.


Speakon connector

CONTROL ELEMENTS

OK, You have got to this point and you are now in the position to successfully operate your TPM8.2000 however, we advice you to read the following section carefully to be the real master of your own mix. Not paying enough attention to the input signal level, the routing of the signal and the assignment of the signal will result in unwanted distortion, a corrupted signal or no sound at all. So you should follow this procedure for every single channel:

1- Turn down all input and output gain controls.

2- Connect phantom powered microphones before switching on the +15V phantom power switch.

3- Set the output level of your TPM8.2000 or the connected power amplifier at no more than 75%.

4- Position EQ controls on middle position.

5- Position panoramic (PAN) control on center position.

6- Increase the input gain properly for maintaining the good headroom and ideal dynamic range.

7- Depending on the actual application, turn slowly the input and output level controls for obtaining the maximum gain before distortion.

8- NOw repeat the same sequence for all input channels. The main LED meter could move up into the red section. In this case you can adjust the overall output level through the main mix control.

Audio Connections

You can connect unbalanced equipment to balanced inputs and outputs. Simply follow these schematics.

1/4" Stereo (TRS) Jack Plug

1/4" Mono (TS) Jack Plug
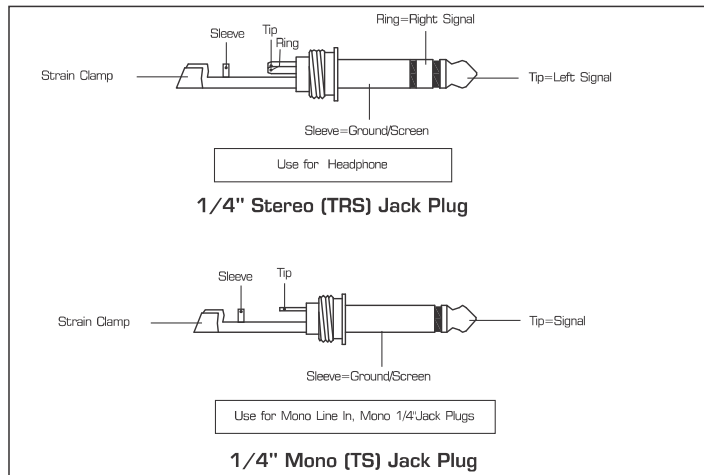
CONTROL ELEMENTS

function

1- DISPLAY

It displays the selected preset.

2- PRESETS SELECTOR

Adjust this knob to select the right effect you wish to perform. There are totally 100 options for you: Echo, Vocal, Plate and versatile two-effect combination. When you are satisfied the right preset, please push this knob to store this preset you want.

3- DSP MUTE Switch & PEAK LED

This switch is used to activate/deactivate the effect facility. This LED lights up when the input signal is too strong. In case of the digital effect module being muted, this LED also lights up.

Preset list for DSP effect

No.	Preset	Description	Parameter
00~09	Vocal	Simulate a small space with slight	Rev.delay time: 0.8~0.9s Pre-delay: 0~45ms
10~19	Small Room	Simulate a bright studio room	Decay time: 0.7~2.1s Pre-delay: 20~45ms
20~29	Large Hall	Simulate a large acoustic space of the sound	Decay time: 3.6~5.4s Pre-delay: 23~55ms
30~39	Echo	Echo/Delay effect	Delay time: 145~205ms
40~49	Echo+Verb	Echo & Reverb combination	Delay time: 208~650ms Decay time: 1.7~2.1s
50~59	Flanger+Verb	Flanger effect & Reverb combination	Decay time: 1.5~2.9ms Rate: 0.8Hz~2.52Hz
60~69	Plate	Simulate classic bright vocal plate	Decay time: 0.9s~3.6s
70~79	Chorus+GTR	Guitar Effect: Chorus	Rate:0.92Hz~1.72Hz
80~89	Rotary+GTR	Guitar Effect: Rotary	Modulation depth: 20%~80%
90~99	Tremolo+GTR	Guitar Effect: Tremolo	Rate : 0.6Hz~5Hz

CONTROL ELEMENTS

Bluetooth Version 2.1
Can be paired with mobile phones, tablets or PC Bluetooth adapter to play stereo audio with two LED status indicator.

1 - Display
These two LEDs use to display different working state:
a. For the first time that module power on, the module change to the matching state, two LED's alternately flash quickly.
b. After connected device, the right LED flashing slowly, flash about 5 seconds once.
c. When the device is not connected, the right LED flashes about 2 seconds once.

2 - ◄◄ PRE
Press this key, it will go to the previous track and start playing.

3 - ►► NEXT
Press this key, it will go to the next track and start playing.

4 - VOL -
Press **VOL -** key to decrease volume during Power on state. The default factory setting is maximum.

5 - VOL +
Press **VOL +** key to increase volume during Power on state.

6 - ►II PLAY/PAUSE
In play state, press ►II **PLAY/PAUSE** key to pause the player. In pause state, press ►II **PLAY/PAUSE** key to start playing.
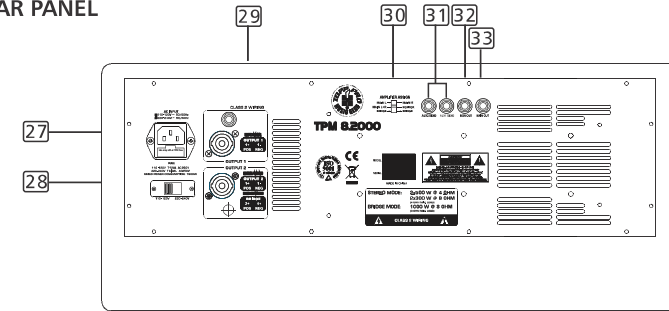
7 - PAIR
Press this key and hold for 2-3 seconds, the player will change to matching state. In this state,the two LEDs alternately flash quickly, and you can use your mobile phone, tablet or PC Bluetooth adapter to find devices, **TAC-BT2.1.** If your device's Bluetooth version lower than 2.0, you should enter the password "0000". If your device's Bluetooth version higher than 2.0, you do not need to enter a password.

(1)   (2)   (3)   (6)

(4)   (5)   (7)

TAC-BT2.1B   Bluetooth Audio Interface

VOL-   VOL+   PAIR
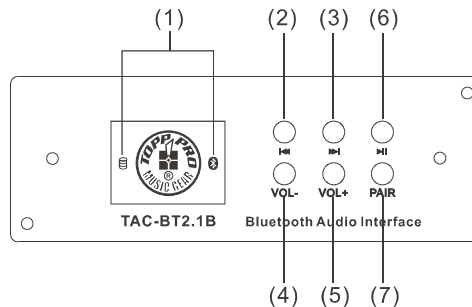
CONTROL ELEMENTS

REAR PANEL

29   30 31 32
33

27

28

TPM 8.2000

27- AC INPUT with FUSE Holder
Use it to connect your TPM8.2000 to the main AC with the supplied AC cord. Please check the voltage available in your country and how the voltage for your unit is configured before attempting to connect your unit to the main AC.

28- VOLTAGE Selector
There are two kinds of voltages for your operation. From this switch you can select the voltage at 110~120VAC or 220~240VAC.

29- SPEAKERS Jacks
These jacks are used to connect speakers. They are configured with 4-way speakon connectors and 1/4" phone jacks. You can determine the signal that is output to these jacks according to the setting of the AMPLIFIER MODE select switch.

30- POWER AMP. MODE Switch
This switch provides three modes: LEFT / MAIN; MAIN L+R / MONITOR; BRIDGE.Select any one of these modes to specify the signals to be routed to the corresponding jacks according to the speaker connection at speaker jacks on the rear panel. the details refer to later content.

31- AUX SEND Jack
This control is used to send out the signal from AUX bus.

32- MONITOR OUT Jack
Use the balanced MONITOR jack to connect the input of external monitor amplifier or activate monitor speaker.

33- MAIN OUT Jack
This jack is used to output the main mix signal to an external monitor amplifier or activate monitor speaker.

Note: in order to avoid damage to the built-in amplifier, please pay attention to the allowed impedance of the speaker. Very low load impedances may damage the amplifier.

4 CONTROL ELEMENTS

5-REC

In power on state, press this key, it will go to the recording preparation state. Press REC again to start recording. Any other operations are not available in recording state until press POWER to stop recording; if th e word Err appears during recording, press POWER to stop.

6-▶‖ PLAY/PAUSE

In play state, press ▶‖PLAY/PAUSE key to pause the player. In pause state, press ▶‖PLAY/PAUSE key to start playing.

7-↩ RPT

Press this key, the player will change between the following four modes:
REP ALL means to repeat all tracks in the memory, mark on the screen is ⒶLL
REP1 means to repeat one track, the mark on the screen is ↩
Play in order means to play the tracks according to the order, the mark on the screen is blank. Random play means to play the tracks at random, the mark on the screen is A.

8-POWER(Push & Hold)

When the unit is off, press this key and hold for about 2 or 3 seconds to turn on the power supply of the player.Repeat the above operation, you can turn off the power supply of the player.
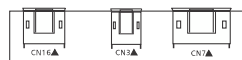
9- DISPLAY

All the USB player information are monitored through this sexy & magic display.
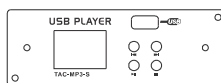
USB Module Installation

-No selective mode

At normal state, there is no selective mode on the front panel, only a piece of panel without function.
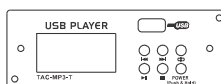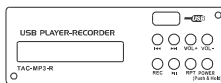
-USB PLAYER selective mode

Please connect the 5PIN row-wire on the USB module to the CN3 header and 2 PIN row-wire to CN 7header on front panel. For Recording module, you also need to connect the 3 PIN row-wire to CN16 header to start recording   function. Then fix the USB module on the front panel with two screws.
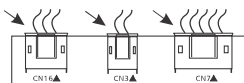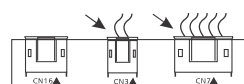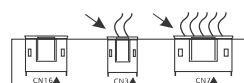
A)Song Module

B)Track Module

C)Recording Module

4 CONTROL ELEMENTS

USB Player Section (Optional)

This section can be selected and installed according to user's requirement. Please see the installation procedure . (USB Module Installation)

Option One - Song Module

The file system of USB memory for USB players is FAT16 and FAT32, and these players can only decode MP3. It has 7 rank subordinate folders at most.
1- USB port: For connecting with USB memory equipment.
2- ◄◄ PRE: In pause state, press this key, it will go to the previous song and still keep in pause state; In play state, press this key, it will go to the previous song and start playing; Furthermore, press this key and hold for a few seconds to decrease the volume.
3- ►► NEXT: In pause state, press this key it will go to the next song and still keep in pause state; In play state, press this key it will go to the next song and start playing; Furthermore press this key and hold for a few seconds to increase the volume.
4- ▶‖ PLAY/PAUSE:In play state, press this key to pause the player; In pause state, press it to start playing.
5- ■ STOP: In play state, press this key to stop playing and all the songs in USB memory will appear on the display ; In stop state, press ■ STOP/ ◄◄ PRE/ ►► NEXT keys again to go to first song and the player will keep in pause state, then press ▶‖ PLAY/PAUSE key to play the song.
6- DISPLAY: All the USB player information are monitored through this sexy and magic display.
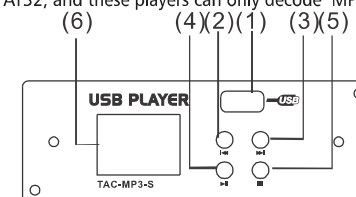
Operation Instruction for Song Module

1- When no USB key inserted, the display will show as Fig. 1.
2- Inserted the USB key, the USB player starts to search the songs in USB key, and the display shows "Searching". At the end of the search, the display will show as Fig. 2.Using ◄◄ PRE/ ►► NEXT keys, you can select one of following   three menu options ("Playing", "Program" and "Folder List"). Press Playing, the unit will enter into the corresponding operation mode.
3- "Playing" mode - single song play
   a). In Fig 2, selecting the Playing mode to recall following interface. This display shows the name of all the folders containing MP 3 files. Using the ◄◄ PRE/ ►► NEXT keys, you can scan the folders, then press ▶‖ PLAY/PAUSE key, you will open corresponding folders. Press ■ STOP to return to Fig 2 interface.
   b). After opening the folder, the display will show as Fig 3. This display shows MP 3 file list, and scrolling list using ◄◄ PRE/►► NEXT keys you can choose the desired song. Press the ▶‖PLAY/PAUSE key, the selected song playback will start. In order to stop playback, you just need to press the ■ stop key. Then, if you press the ▶‖PLAY/PAUSE key, the song playback will start from the pause point, if you press again the ■ stop key, the system will return to Fig 3 interface.

INSERT USB KEY — Fig 1

MENU: PLAYING PROGRAM FOLDER LIST — Fig 2

■FOLDER: classic music / jazz music / pop music — Fig 3

[002] 00 : 05 / 01. Plena pop 01.mp / 02. Pop 02.mp3 / 03. Plena pop 03.mp — Fig 4
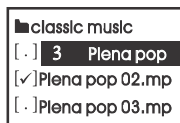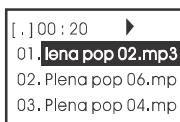
CONTROL ELEMENTS

4- "Program" mode

a) In Fig 2, select "Program" to enter into the following interface:

"Play list Set": Set the playing list.

"Playing List": Play list.

Press ⏮PRE / ⏭ NEXT key to select, press ⏹ STOP key to return the Fig 2 interface.

b) After entering into the "Play List Set", the display will show as Fig 3. Selecting the desired folder, the display will show the following interface. The display will show all the MP 3 files, the selected song will be inserted into the playing list and a mark will appear. Press again you're going to delete the song from the playing list, and the mark will disappear. Press the ⏹STOP key, you will return to Fig 2 interface. The playing list can accept up to 20 songs, and it will display the list according to song insert order.

c) The display will show the following interface. Press the ⏮ PRE / ⏭ NEXT key, you can select the starting song, then press the ⏯ PLAY/PAUSE key, the selected song playback will start. Press ⏯ PLAY/PAUSE key again, or press ⏹STOP key, the playback will stop. Press ⏯ PLAY/PAUSE key again, or press ⏹STOP key, the playback will start again from the same point. Twice press ⏹ STOP, the USB player will return to Fig 3 interface.

Fig 5

PLAYLIST SET
PLAYING LIST

Fig 6

■classic music
[.] 3   Plena pop
[✓]Plena pop 02.mp
[.]Plena pop 03.mp

Fig 7

[.] 00 ; 20   ▶
01. lena pop 02.mp3
02. Plena pop 06.mp
03. Plena pop 04.mp

5-Folder List:

See the Fig 3, the display shows MP 3 files folders names. Use ⏮ PRE/⏭ NEXT key to scan, press PLAY/PAUSE key, you'll enter into corresponding folder. In order to return to Fig 5 interface, you just need to press the ■ STOP key.

Option Two - Track Module

The file system of USB memory for USB players is FAT16 and FAT32, and these players can only decode MP3. It has 7 rank subordinate folders at most.

(8)   (2)(1)(3) (4)

USB PLAYER
TAC-MP3-T
POWER (Push & Hold)

(5)(6)   (7)
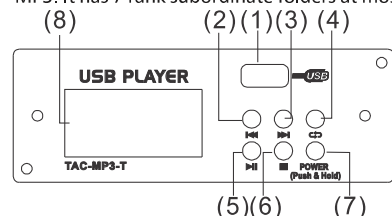
1- USB PORT
For connecting with USB memory.

2- ⏮ PRE
In pause state, press this key, it will go to previous track and keep in pause state. In play state, press this key, it will go to the previous track and start playing.

3- ⏭NEXT
In pause state, press this key, it will go to next track and keep in pause state.
In play state, press this key, it will go to the next track and start playing.

4- ↻RPT
Press this key, the player will change between the following four modes:
REP ALL means to repeat all tracks in the memory, mark on the screen is ↻ALL
REP1 means to repeat one track, the mark on the screen is ↻
Play in order means to play the tracks according to the order, the mark on the screen is blank.
Random play means to play the tracks at random, the mark on the screen is A.

CONTROL ELEMENTS

5- ⏯ PLAY/PAUSE
In play state, press ⏯ PLAY/PAUSE key to pause the player. In pause state,press ⏯ PLAY/PAUSE key to start playing.

6- ■ STOP
In play state, press this key to stop playing and all the songs in USB memory will appear on the display ; In stop state, press ■ STOP/ ⏮ PRE/ ⏭ NEXT keys again to go to first song and the player will keep in pause state, then press ⏮ PLAY/ ⏭ PAUSE key to play the song.

7- POWER(Push & Hold)
When the unit is off, press this key and hold for about 2 or 3 seconds to turn on the power supply of the player.Repeat the above operation, you can turn off the power supply of the player.

8- DISPLAY:
All MP3 player information are monitored via this sexy & magic display.

NOTE: basic interface instruction
When the player isn't connected to a USB memory equipment, the interface is as follows:

No USb

When the player is searching for USB tracks, the interface is as follows:

- - - -

When the player is in pause state, the interface is as follows:

000 /00:00

When the player is in use, the interface is as follows:

000 /00:05

Option Three - Recording Module

The file system of USB memory for USB players is FAT16 and FAT32, and these players can only decode MP3. It has 7 rank subordinate folders at most.

1- USB PORT
For connecting with USB memory.

2- ⏮ PRE
In pause state, press this key, it will go to previous track and keep in pause state. In play state, press this key, it will go to the previous track and start playing.

3- ⏭ NEXT
In pause state, press this key, it will go to next track and keep in pause state. In play state, press this key, it will go to the next track and start playing.

4- VOL-/VOL+
Press VOL-/VOL+ key to increase or decrease volume during Power on state. The default factory setting is 10.

(9)   (2)(1)(3)(4)

USB PLAYER-RECORDER
TAC-MP3-R
REC   RPT POWER (Push & Hold)
VOL+ VOL-

(5)(6)(7)   (8)