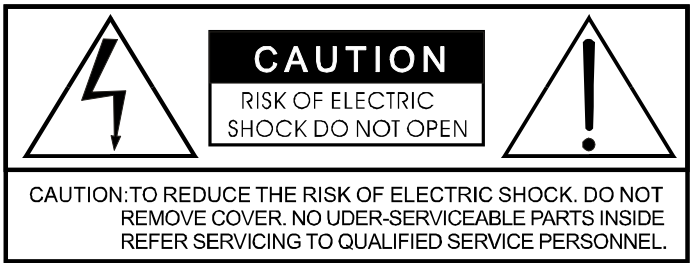
AMERICAN PRO

BLUE-6 BLUE-8 BLUE-12

PROFESSIONAL AUDIO MIXER

Contents

Before operating, please read this manual completely.



http://www.americanpro-audio.com

Mono input channels

1. MIC INPUT

The MIC input accepts XLR-type connectors and is designed tousit a wide range of BALANCED or UNBALANCED signal; it has 48V idol power supply and it can connect capacity MIC.

Pin 1 =Shield the ground Pin 2=signal+ Pin 3=signal-

2. LINE INPUT

Accepts 3-pole 'A' gauge (TRS) jacks. Use this high impe dance input for sources other than mics,such as keyboards, drum machines , synths, tape machine or guitars. The input is BALANCED for low noise and top quality from professional equipment, but you can useUNBALANCED sourcesby wiring up the jacks as shown,although you should the keep cable lengths as short as possible.

Unplug anything in the MIC input if you want to use this socket. Set the input level using the SENS knob.

3.INSERT

The unbalanced, pre-EQ insert point is a break in he channel signal path, allowing limiters, compressors, special EQ or other signal processing units to beadded in the signal path.The insert is a 3-pole 'A' gauge jack socket which is normally bypassed. When a jack is inserted, the signal path is broken, just before the EQ section. The send may be tapped off as an alternative pre-fade, pre - EQ direct output if required, using a lead with tip and ring shorted together so that the signal path is not interrupted.

4. GAIN

This knob sets how much of the source signal is sent to the rest of the mixer. Too high, and the signal will distort as it overloads the channel. Toolow, andthe level of any background hiss will be more noticeable and you may not be able to get enoughsignal level to the output of the mixer. Setting the knob to the “U” mark gives unity gain for the LINE input. Note that some sound equipment, particularly the intended for domestic use, operates at a lower level(-10d BV) than professional equipment and will there for eneed ahig her gain setting to give he same output l evel. See ‘Setting UP & T roubleshooting' on page 20 to learn how to set SENS correctly.

5. HI

Control more than 12 kHz frequency, provide ±15dBs upgrade or attenuation.

6. FREQ

Control of the frequency, can adjust from 140Hz to the 3 kHz.

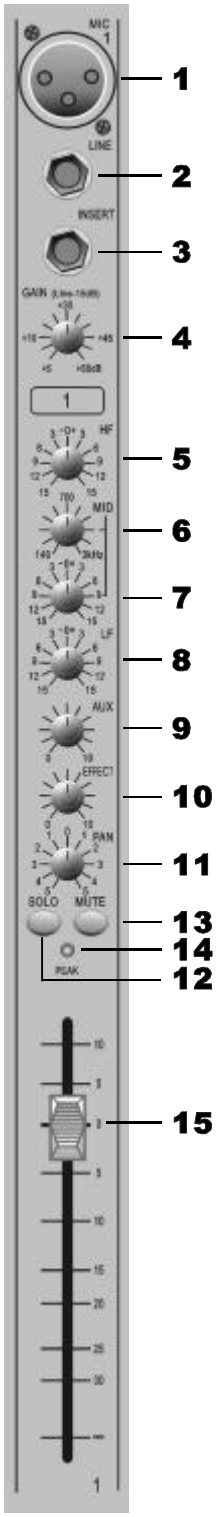
7. MID

It provides ± 15dBs upgrade or attenuation in the intermediate frequency.

8. LOW

Adjust signals below 80Hz with the Lf control, which features ± 15d Bof gain adjustment (cut or boost).

Mono input channels



9. AUX
It used for monitor of the stage or playback room's return.

10. EFFECT
Adjust this knob can let the signal sent to inside or outside effectors.

11. FX
Adjust this knob can let the signal sent to inside oroutside effectors. It canlso used for monitoring of the stage or the return of record.

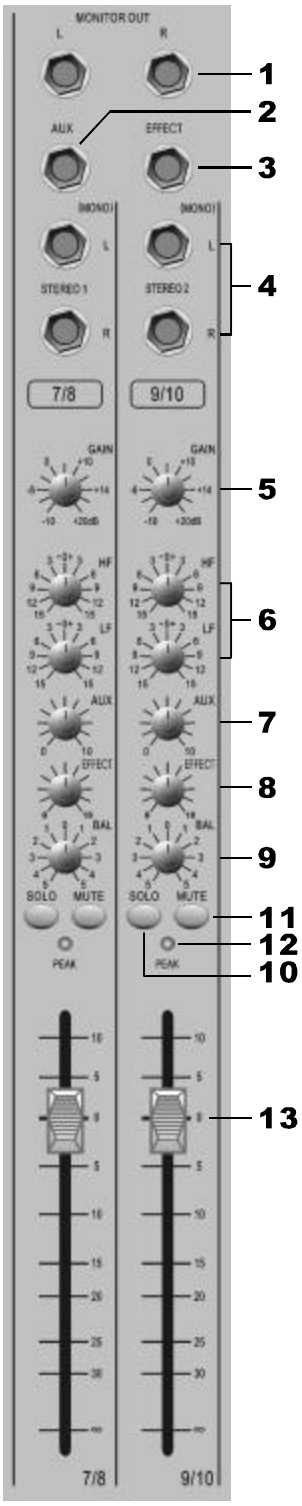
12. SOLO
The 100mm FADER allows pretse balancing of the various source signalsbeing mixed to the Master section.You get most control when the input Sensitivity is set up correctly; giving full travel on the fader, see the 'Setting Up & Troubleshooting' section on page 20 for help in setting a suitable signal level.

13. MUTE
All outputs from the channel except inserts are active when the MUTE switch is released and muted when the switch is down, allowing levels to be pre-set before the signal is required.

14. PEAK
This is the lamp which indicates the input signal level of this appliance (regardless of output) when GAIN volume is adjusted.

15. FADER
The 00mm FADER allows pretse balancing of the various source signals being mixed to the Master section. You get most control when the input Sensitivity is set up correctly, giving full travel on the fader. See the 'Setting up &Troubleshooting' section on page 20 for help in setting a suitable signal level.

Stereo input channels



1.MONITOR OUT

This jack is to be connected with the input jack of monitor amplifier when using separate monitor amplifier.

2/3. AUX1

Each of the six AUX out puts has a master output level control and assocl.

4.L/R PIN JACK

This use for connection into line level equipment. (Tape machines etc.)

5.GAIN

The GAIN control sets the input leve l to the channel, allowing matching to a wide range of line level sources.

6.HF EQ

Turn clockwise to boost high (treble) frequencies, adding crispness to percussion from d rum machines, synths and electronic instruments. Turn anticlockwise to cut these frequencies, reducing hiss or excessive brilliance. Set the knob in the centre-detented position when not required. The control has a shelving response giving 15dB of boost or cut at 12 kHz and above.

LF EQ

Turn clockwise to boost low (bass) frequencies, adding extra punch to synths, guitars and drums . Turn anticlockwise to reduce hum, boominess or improve a mushy sound. Set the knob to the centre - detented position when not required. The control has a shelving response giving 15dB of boost or cut at 60Hz and below.

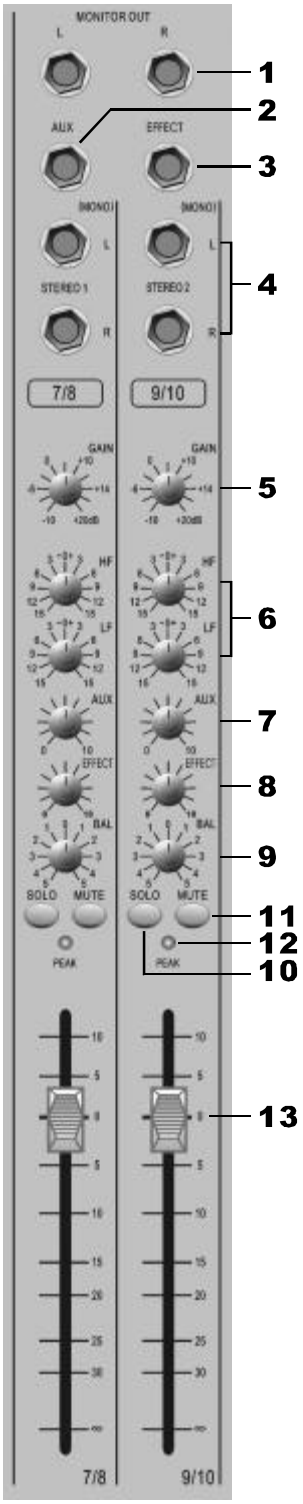
7.AUX

This socket sends out the signals from aux bus.

8.EFFECT

Adjust this knob can let the signal sent to inside or outside effectors.

Stereo input channels



9.BAL

This control sets the amount of the channel signal feeding the Left and Right MIX buses, allowing you to move the source smoothly across the stereo image. When the control is turned fully right or left you are able to route the signal at unity gain to either left or right outputs individually.

10. SOLO

When you want monitor echo sound and external effectors sound, you can adjust this control through the headphone.

11. MUTE

All outputs from the channelexcept inserts are active when the MUTE switch is released and muted when the switch is down, allowing levels to be pre-set before the signal is required.

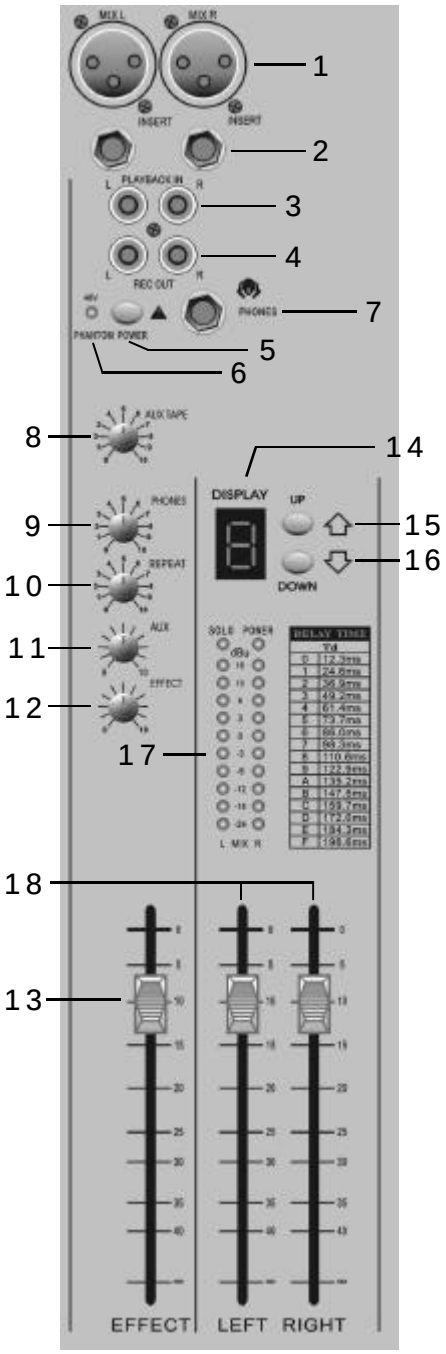
12. PEAK

This is the lamp which indicates the input signal level of this appliance (regardless of output) when GAIN volume is adjusted.

13. FADER

The 100 mm FADER allows pretse balancing of the various source signals being mixed to the Master section. You get most control when the input Sensitivity is set up correctly, giving full travel on the fader. See the 'Setting up & Trouble shooting' section on page 20 for help in setting a suitable signal level.

OUTPUT CHANNELS



1. BALANCE OUTPUT (MAIN L/R)

These sockets send line level signals from the mixer to external devices (for example: EQ or a power amplifier).

2. MIX INSERT (1/4 JACK)

This is a pre-fade break in the signal path which can be used to feed a dynamics or mastering device.The signal is sent from the tip of the jack plug and the return pathcomes back in on the ring of the jack plug.

3. PLAYBACK INPUTS (RCA RHONO)

Here you can connect the play back from your recording device

4. RECORD OUTPUTS

Here you can connect the input to your recording device

5. PHANTOM +48V

This slide-switch turn the master phantom power on and off.

6. PHANTOM +48V LAMP

The lamp will bright when you press this phantom +48V lamp.

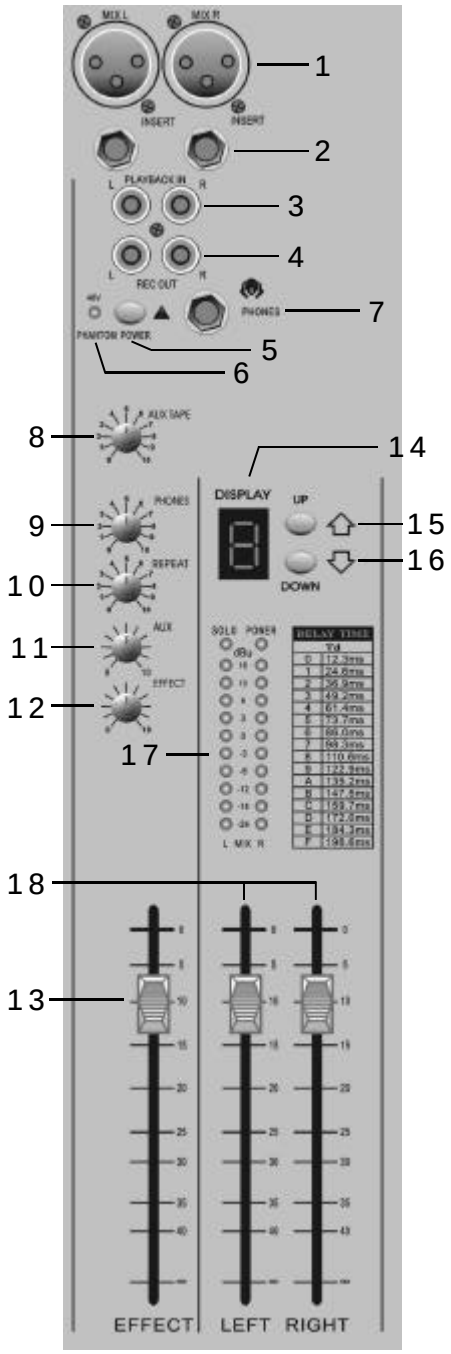
7. PHONES

Plug your headphones into this socket

8. AUX TAPE

This controls the level of the signal sent to your tape.

OUTPUT CHANNELS



9.PHONES
This controls the level of the signal sent to your headphones

10.REPAT
This is used for adjusting frequency of echo repeat. Since too much echo repeat may cause a howl. Please adjust frequency properly.

11.MONITOR CONTROL
This controls the level of the signal sent to your monitoring system.

12.EFFECT
This used for adjusting volume of echo sound when connecting sound to RETURN jack.

13. EFFECT FADER
This used for adjusting volume of echo sound when connecting sound to RETURN jack.

14. DISPLAY
The effect of mix has 16 kinds of mode.

15.UP
This controls can choose the result mode if necessary.

16. DOWN
This controls can choose the result mode if necessary.

17. BARGRAPH METERS
3-colorur peak reading BARGRAPH METERS are provided to monitor the four Subgroup outputs and the selected. Monitor + Phones source (2TK, Mono Mix or Groups), giving you a constant warning of excessive peaks in the signal which might cause overloading.Aim to keep the signal within the amber regments at peak levels for best performance. Similarly, if the output level is too ow and hardly registering at all on the meters, the level of background noise may become significant.Take care to set up the input level for best performance. When any PFL of AFL switch is pressed, the L&R meters automatically switch to show the selected PFL/AFL signal both meters, in mono.

18. MASTER FADERS
These faders control the overall level of the mix bus

Specifications

Frequency response

Mic/Line Input to any Output..... +/-1 dB 20Hz-20kHz

T.H.D

Mic Sensitivity +30dBu, +20dBu@ all Outputs .....<0.008%@1kHz

Noise

Mic input E.I.N (maximum gain, measured 22Hz, unweighted).....-128dBu

Aux and Mix Outputs (8ch.routed. faders down, 22Hz,unweighted) ..... <-84dBu

Crosstalk

Channel Mute .....<90dB 20Hz-10kHz, <80dB 10kHz-20kHz

Fader Cut-Off (ref. Fader 0dB) ..... < 90dB 20Hz-10kHz, <80dB 10kHz-20kHz

Routing Isolation .....<90dB 20Hz-10kHz, <80dB 10kHz-20kHz

Input&output impedances

Microphone Input .....~2kΩ

Mono Channel Line Input.....>40kΩ

Stereo Input (Stereo Mode).....>30kΩ

Stereo Returns.....>10kΩ

Headphones Output..... ~40Ω

All Other Audio Outputs 75Ω

Input & output levels

Microphone Input Maximum Level .....+12dBu

Mono Channel Line Input Maximum Level..... .+38dBu

Stereo Input Maximum Level .....+21dBu

Headphones Output(into 200Ω).....150mVV

All Other Audio Outputs ....+21dBu into 10kΩ

Filter

HP.....100Hz, 18dB/octave

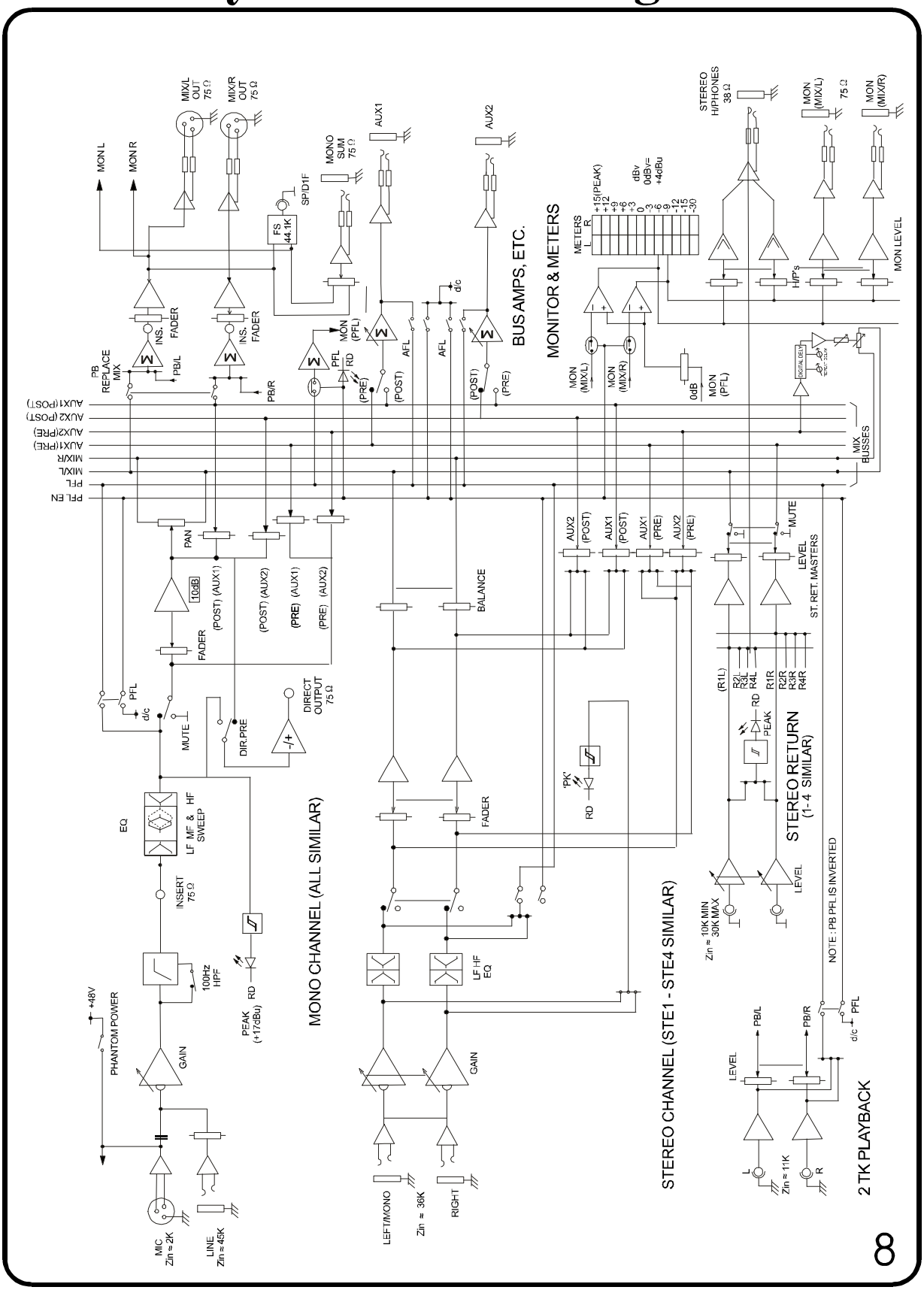
EQ

HF ..... 12 kHz, +/-15dB

MF.....240Hz-6 kHz, +/-15dB

Lf..... .....60Hz, +/-15dB

System block diagram



Warning and attention

Read all the instructions before using the product. And should be keep for future reference.

1.Do not use this product near water (e . G., Near a bathtub, washbowl, kitchen sink, in a wet basement, near a swimming pool, etc.)

2.The product should be located so that its location or position does not interfere with its proper ventilation. (E .g., put in the bed, sofa, footcloth or surface.) That will plug up ventilation, and block air flow.

3.The product should be located away from heat sources such as radiators, heat vets, or other devices (including amplifiers) that product heat.

4.The product should be connected to a power supply only of the t ype described in the operating instructions or as marked on the product.

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

6.The product should be clean with the user-maintenance instr-uctions.

7.Unplug this apparatus when unused for long periods of time.

8.Avoid the object and liquid influx the product.