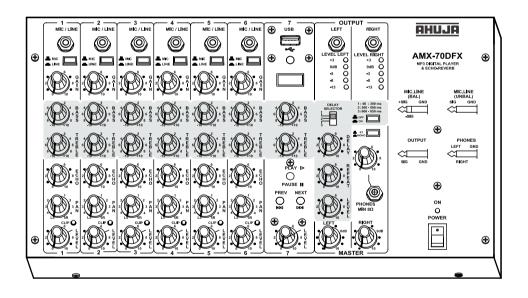


# 7 CHANNEL PA AUDIO MIXER with Digital Effects

# AMX-70DFX



- ♦ Thank you for purchasing the AHUJA PA Audio Mixer.
- Please read this manual thoroughly before making connections and turning on the power.
   Following the instructions in this manual will enable you to obtain optimum performance from your new AHUJA PA Audio Mixer.
- Please retain this manual for future reference.

# Safety Instructions

**Read the Instructions:** Please read all the instructions in this section carefully before installation or use of the product. All the safety instructions must be followed.

**Retain the Instructions:** Please retain this Instruction Manual for future reference.



This symbol, wherever it appears, alerts you to the presence of uninsulated hazardous voltage that may be sufficient to constitute a risk of electric shock. External wiring to any terminal marked with this symbol must be done by a trained and instructed person only.



This symbol, wherever it appears adjacent to a component, alerts you that the concerned component can only be replaced by another of the exact same specifications.

#### WARNING

• To reduce the risk of electric shock, do not remove the top plate. No user serviceable parts inside. Refer all servicing to qualified personnel only.

#### **CAUTIONS**

**Water & Moisture:** To reduce the risk of fire or electrical shock, do not expose this set to rain or moisture. Do not use this set near water or in a wet location. Do not keep any object filled with liquid, such as a vase, on top of this set. Do not insert or remove the AC mains plug with wet hands.

**Power Source:** The voltage & frequency of the AC mains supply, and the voltage of the external battery, (if applicable) to which this set can be connected, is marked on the rear panel of the set. Do not connect this set to any power source other than those specified on the rear panel.

**Power Cord Protection:** Do not cut, kink, damage or modify the AC power cord supplied with this set. Keep the AC power cord away from heaters and harmful chemicals. Do not keep any heavy object on the power cord.

**Operation on Generator:** When operating this set on a generator, make sure the set is switched off till the generator voltage has stabilized.

**Stability:** This set must be kept in a stable and flat horizontal position, and never in a tilted position. Do not place this set on an unstable stand, tripod, bracket or mount. Do not use attachments which are not supplied or explicitly recommended by the manufacturer.

**Earthing:** This set must be earthed properly before use. A wire from the Earth terminal on the rear panel must be connected to electrical earth.

**Cleaning:** Disconnect this equipment from the AC mains before cleaning. Clean with a damp cloth, but do not allow any liquid to enter the set. Do not clean with liquids or aerosols.

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# • Features | General Description of Product

- Attractive, robust and reliable professional PA Mixer which is light-weight and easily portable.
- Upto six low impedance microphones can be connected in either balanced or unbalanced configuration, through a 1/4" stereo jack socket.
- Alternatively, each channel input can accept a balanced or an unbalanced line source like CD Player, Keyboard, Guitar Pre-amp., etc.
- Each channel has a push switch for selecting between MIC and LINE input.
- GAIN Control on each channel for optimum adjustment of the input sensitivities.
- Active BASS & TREBLE circuit in each channel for desired equalisation of the input signal.
- Separate ECHO level control for each input channel.
- Each channel has a CLIP LED which glows when the level of input signal is excessive.
- PAN control on each channel for desired distribution of the signal to left and right outputs.
- Built-in digital effect processor with DELAY, REPEAT, LEVEL controls and three selectable delay ranges.
- Dedicated channel for MP3 digital player with remote control.
- Line level LEFT & RIGHT outputs through 1/4" jack sockets.
- Individual 5-segment LED array indication for accurate setting of L&R line output levels.
- Individual MASTER volume controls for left & right line outputs.
- Option of MONO/STEREO mode of operation through a push switch.
- Headphone output with volume control.
- Power ON indication through a blue LED.
- Operates on 220 240V, 50Hz AC Mains.

# Input Channel Controls and Features

#### 1. MIC/LINE INPUT

This is a 1/4" stereo jack socket which is electronically balanced for connecting a balanced or an unbalanced input source through a suitable (stereo or mono) 1/4" jack plug. The input source can be a microphone (wired or wireless), CD Player, DVD Player, Electronic Instrument etc.

#### 2. MIC/LINE SWITCH

For selecting the desired input sensitivity which is appropriate for the type of equipment connected to the mixer.

#### 3. GAIN CONTROL

For adjusting the optimum gain levels of the input signal. Reduce the GAIN setting when CLIP LED glows continuously.

#### 4. BASS CONTROL

For attenuating or boosting the signal level of low frequencies.

#### 5. TREBLE CONTROL

For attenuating or boosting the signal level of high frequencies.

#### 6. ECHO CONTROL

For routing the signal to the built-in digital effect processor in desired proportion.

#### 7. PAN CONTROL

For routing the signal to the left & right output channels in appropriate proportion.

#### 8. CLIPLED

The red LED glows to indicate that the input signal is approaching the saturation (overload) levels.

Occasional blinking of clip LED during loud sounds is normally acceptable, but this LED should not glow continuously.

#### 9. LEVEL CONTROL

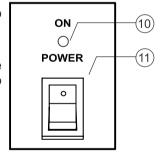
For adjusting the signal level of a channel in the overall mix of all the channels.

#### 10. POWER 'ON' LED

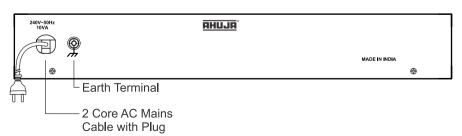
This blue LED glows when the AC power to the mixer is switched ON.

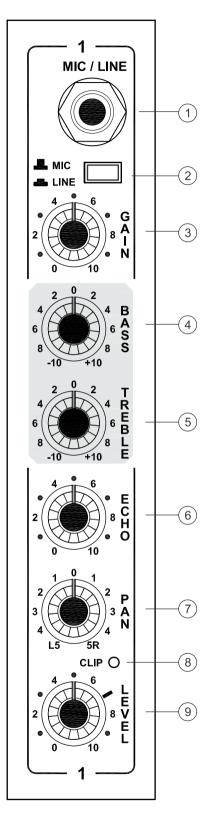
#### 11. POWER SWITCH

Push the top part of the knob to switch the mixer ON. Push the bottom part of the knob to switch the mixer OFF.



#### **VIEW OF REAR PANEL**

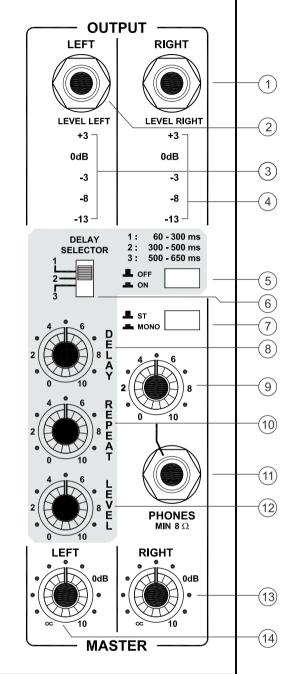




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## Output & Echo Channel: Controls & Features •

- 1. **OUTPUT 'RIGHT':** Provides unbalanced line output of 'RIGHT' channel through 1/4" mono jack socket. This line level output is suitable for connecting to the line input of a two zone amplifier, booster amplifier etc.
- 2. **OUTPUT 'LEFT':** Provides unbalanced line output of `LEFT' channel through 1/4" mono jack socket. This line level output is suitable for connecting to the line input of a two zone amplifier, booster amplifier etc.
- 3. **LEVEL LEFT LED ARRAY:** The output level of left channel is indicated by an array of three green & two red LEDs. Rated output level of 775mV is indicated by the glow of red LED marked `0dB'.
- **4. LEVEL RIGHT LED ARRAY:** The output level of right channel is indicated by an array of three green & two red LEDs. Rated output level of 775mV is indicated by the glow of red LED marked `0dB'.
- 5. **EFFECT ON/OFF SWITCH:** For switching the effect function ON or OFF during setting up and while in live program. Keep the switch in OFF position if digital effects are not to be used.
- 6. **DELAY SELECTOR SWITCH:** The built-in digital effect unit provides total delay range of 60-650ms which is divided in three groups i.e., 60-300ms, 300-500ms and 500-650ms. The desired delay setting is selectable through a delay selector slide switch.
- 7. MONO / STEREO SWITCH: For Stereo mode, keep the push switch knob in raised up (♣) condition. In stereo mode, the ratio of signal in left and right channels is controlled by the setting of Pan control in that channel.
- 8. **DELAY CONTROL:** For setting the delay time within the selected range of delay setting. For Mono mode, keep the push switch knob in depressed (—) condition. In mono mode, the respective Master volume controls adjust the level of left and right line outputs. However, the Pan control is not effective in mono mode.
- **9. HEADPHONE CONTROL:** It is used for controlling the level of stereo signal which is available as headphone output.
- **10. REPEAT CONTROL:** For setting the number of repetitions within the selected delay time.
- 11. **HEADPHONE OUTPUT**: For connecting a stereo headphone (not less than  $8\Omega$  impedance) through a 6.3mm stereo phone jack. The headphone output is used for personal monitoring & its level is not effected by the setting of master control.
- 12. EFFECT LEVEL CONTROL: For setting the level of delay signal in the overall output signal.
- **13. MASTER 'RIGHT' VOLUME CONTROL:** For adjusting the level of output signal as available through RIGHT output jack.
- **14. MASTER 'LEFT' VOLUME CONTROL:** For adjusting the level of output signal as available through LEFT output jack.



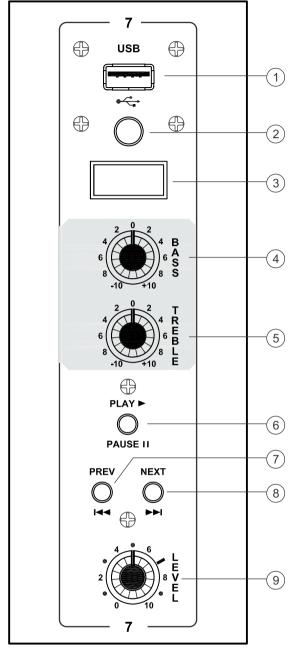
# MP3 Playback Facility

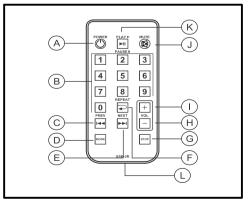
- 1. USB Connector: Insert the USB drive here. Insert the USB drive in correct direction so as to avoid any damage to it due to forceful insertion in wrong direction.
- 2. IR Sensor: Picks up signal from the Remote control. Point the Remote control toward this sensor for best results.
- 3. Display: Displays the track played.
- **4. BASS CONTROL:** For attenuating or boosting the signal level of low frequencies.
- **5. TREBLE CONTROL:** For attenuating or boosting the signal level of high frequencies.
- **6.** ►II PLAY/PAUSE: Press PLAY/PAUSE once to Pause if music is already playing. Press PLAY/PAUSE again to resume playing.
- 8. Next: Press NEXT to select next forward music track. Pressing NEXT repeatedly will move the system to successively next forward tracks. Then press PLAY/PAUSE for playing the track so selected.
- **9. LEVEL CONTROL:** For adjusting the signal level of USB channel in the overall mix of all the channels.

#### **Remote Control**

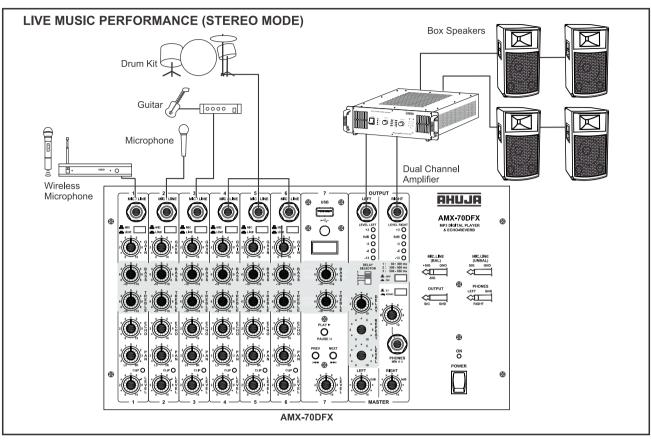
- **A.** Power: Press once to switch off MP3 digital player, press again to switch ON.
- **B.** Number keys 0 to 9. To select the track number to be played.
- **C.** ► To select the previous track.
- D. MODE: not in use.
- **E.** ▶► Press to select the next track.
- **F.** Press once to repeat the song being played. Press again to repeat all the songs.
- **G. STOP:** Press to stop the track being played.
- H. Vol-: Press to decrease the volume of Digital Player.
- I. Vol+: Press to increase the volume of Digital Player.
- J. Mute: Press once to mute the sound, press again to resume the sound.
- K. ►II PLAY/PAUSE: Press Play/Pause once to Pause when music is already playing. Press Play/Pause again to resume playing.
- L. Battery Replacement: Pull out the battery tray and replace the battery with positive electrode facing upwards as shown in fig. below. Push the battery compartment back to the close position. Use CR2025 or equivalent lithium coin cell.

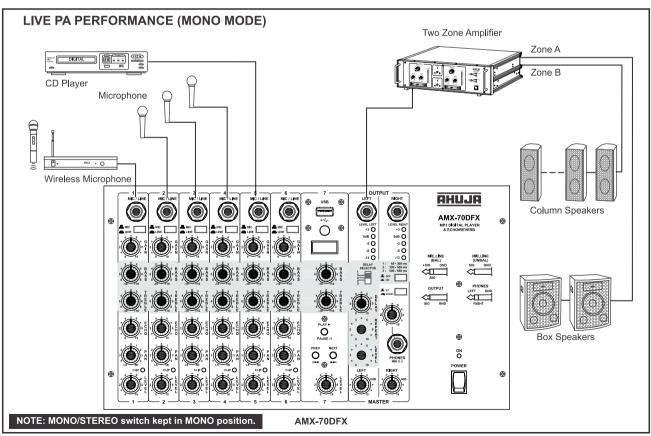






# **Typical Applications** •





# Plug Wiring

# MIC, LINE (Balanced)



# MIC, LINE, OUTPUT (Unbalanced)



#### **HEADPHONE**



Stereo Phone Plug

# Specifications

**MIC INPUT** 

(Impedance/Gain) :  $2k\Omega$  Balanced/62dB

1kΩ Unbalanced/62dB

LINE INPUT

(Impedance/Gain) :  $20k\Omega$  Balanced/42dB

 $10k\Omega$  Unbalanced/42dB

**THD** : < 0.1 %

FREQUENCY RESPONSE: 20Hz-18 kHz (-1dB)

**EQUALISATION** 

Bass/Treble : ±12dB at 100 Hz /

±12dB at 10kHz

MP3 PLAYBACK : MP3 (FAT 32 Format)

Port: USB-A (Full speed)

**HEADPHONE OUTPUT** : 200mV at  $8\Omega$ , THD <1%

**DELAY RANGE SETTINGS**: 1: 60-300ms,

2: 300-500ms, 3: 500-650ms

LINE OUTPUT L/R

Nominal : 0dBm (775mv) Maximum : +18dBm (6.5V)

**OUTPUT IMPEDANCE** :  $600\Omega$  **S/N RATIO** : > 68dB

CLIP LED INDICATION : 4dB prior to true clip
POWER SUPPLY : 220-240V AC 50Hz
PROTECTION : AC: Fuse 1Amp.

250V (T 1A L)

**DIMENSIONS**: W345 X H75 X D205mm

**WEIGHT** : 3.1kg approx.

Design and Specifications are subject to change without notice owing to continuous product up-gradation. Technical specifications are subject to production tolerances.

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