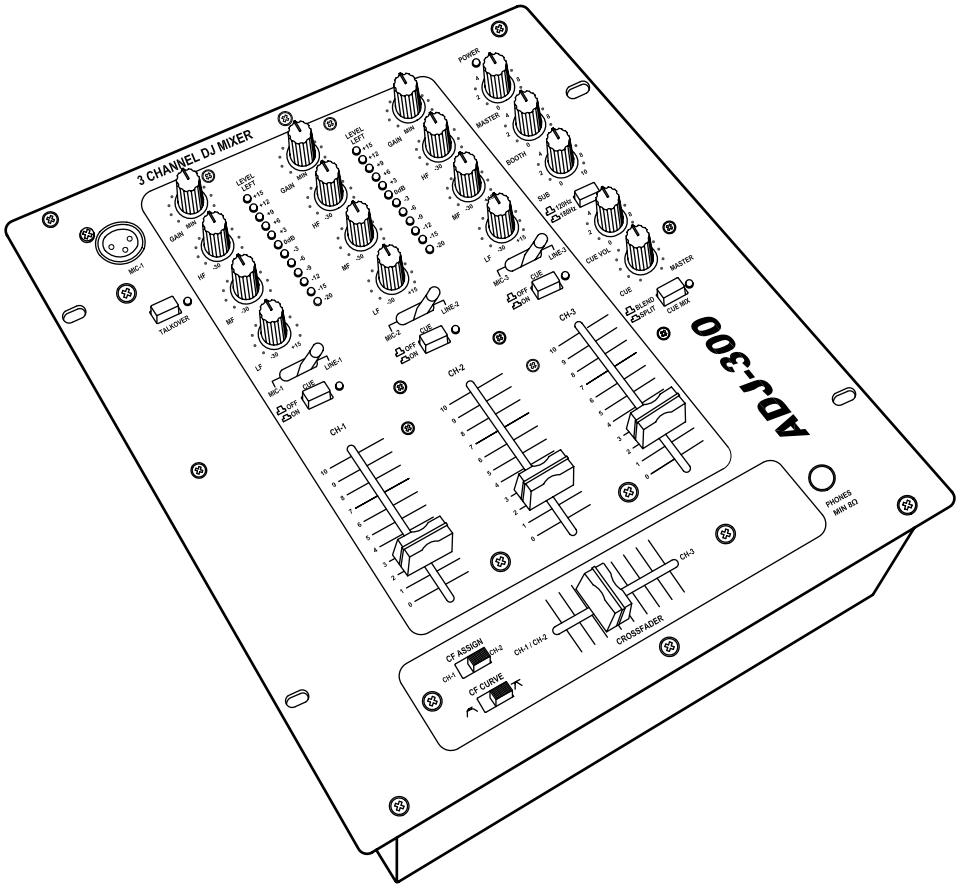
OPERATION MANUAL

DJ MIXER

ADJ-300



- Thank you for purchasing the DJ 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 DJ 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.

• Table of Contents

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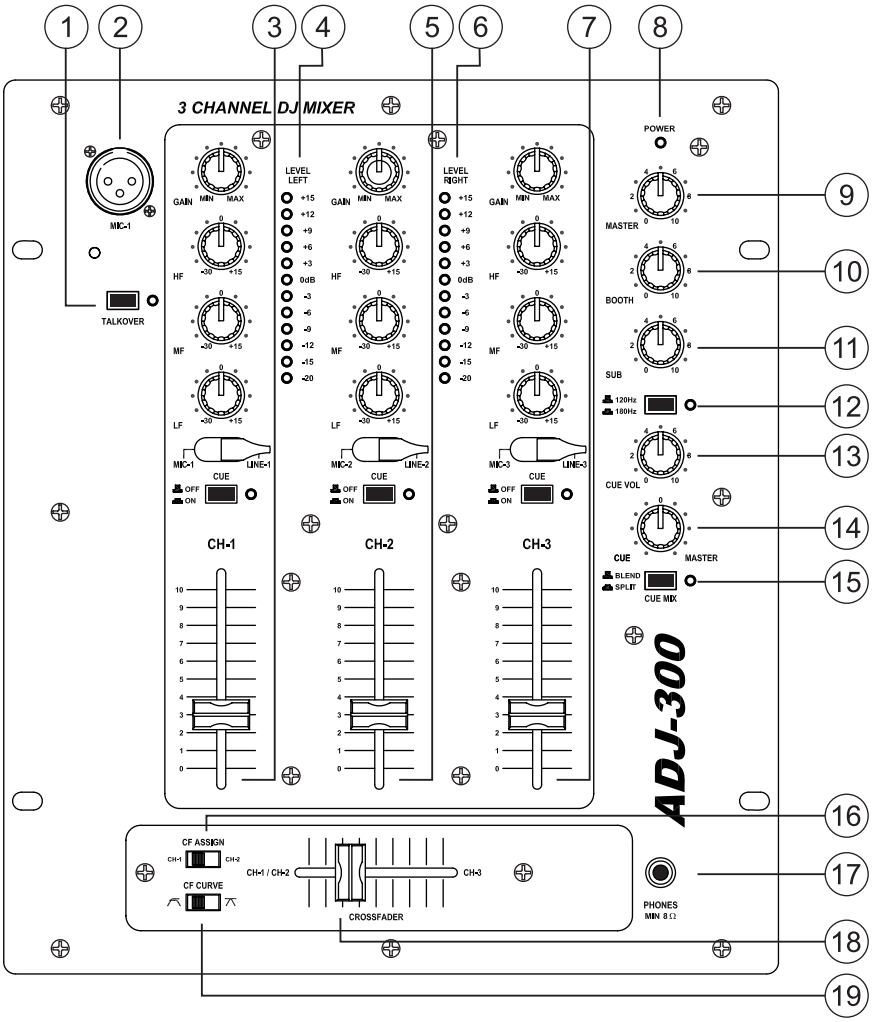
• Features / General Description of Product

- Lightweight & easily portable 3 channel DJ Mixer
- Attractive, robust and reliable; Easy to operate.
- 3 MIC inputs alternate to three stereo LINE/CD inputs.
- MIC-1 is balanced XLR input with TALKOVER priority over other inputs.
- Each channel has a GAIN control, 3 band active EQ, MIC-LINE selector switch, CUE ON/OFF switch and channel fader control.
- Ultra smooth slide control for CROSSFADER function.
- Slide switch for selecting the desired crossfade curve i.e. Flat or Steep.
- Master stereo balanced output is available through independent L & R stereo 6.3mm (1/4”) jack sockets.
- Booth and REC stereo outputs through RCA sockets.
- Balanced Mono Subwoofer output with two frequencies of 120 & 180Hz (selectable).
- Stereo headphone output with CUE volume control.
- CUE MIX switch for selecting between BLEND & SPLIT function.
- Independent volume controls for MASTER, BOOTH, SUB and CUE outputs.
- Individual 12 segment LED array for indicating LEFT & RIGHT output levels.

• Top Panel Controls and Features



1. **TALKOVER Switch and LED:** When TALKOVER switch is pressed, the signal level of channel 2 and channel 3 is attenuated by about 15dB and TALKOVER LED turns red. Press TALKOVER switch again to restore un-attenuated output.

2. **MIC-1 INPUT XLR SOCKET:** For connecting low impedance dynamic microphone through a 3 pin XLR plug **in balanced** mode. For using the mic, ensure that MIC-1/LINE-1 lever switch is in MIC-1 position.

3. **Channel-1 Control Section:** It consists of :
   - i) **Stereo GAIN Control:** For adjusting the input level of either MIC1 or stereo LINE/CD signals of Ch-1.
   - ii) **Stereo HF Control:** For attenuating or boosting the signal level of high frequencies.
   - iii) **Stereo MF Control:** For attenuating or boosting the signal level of mid frequencies.
   - iv) **Stereo LF Control:** For attenuating or boosting the signal level of low frequencies.
   - v) **MIC-1/LINE-1 SELECTOR SWITCH:** For routing either MIC-1 input signal or stereo LINE/CD input signal to channel-1.
   - vi) **CUE ON/OFF SWITCH with LED:** Push the switch 'ON' for cueing the signal of that channel to headphone output for monitoring purposes. Red LED glows to indicate CUE is ON.
   - vii) **Stereo CHANNEL FADER:** This stereo slide volume control adjusts the level of signal prior to crossfading action.

4. **LEFT OUTPUT LEVEL LED ARRAY:** The output level of left channel signal is indicated by 12 segment LED array with a range of -20dB to +15dB.

5. **Channel-2 Control Section:** Input channel 2 consists of :

i) **Stereo GAIN Control:** For adjusting the input level of either MIC2 or stereo LINE/CD signals of Ch-2.

ii) **Stereo HF Control:** For attenuating or boosting the signal level of high frequencies.

iii) **Stereo MF Control:** For attenuating or boosting the signal level of mid frequencies.

iv) **Stereo LF Control:** For attenuating or boosting the signal level of low frequencies.

v) **MIC-2/LINE-2 SELECTOR SWITCH:** For routing either MIC-2 input signal or stereo LINE/CD input signal to channel-2.

vi) **CUE ON/OFF SWITCH with LED:** Push the switch 'ON' for cueing the signal of that channel to headphone output for monitoring purposes. Red LED glows to indicate CUE is ON.

vii) **Stereo CHANNEL FADER:** This stereo slide volume control adjusts the level of signal prior to crossfading action.

6. **RIGHT OUTPUT LEVEL LED ARRAY:** The output level of right channel signal is indicated by 12 segment LED array with a range of -20dB to +15dB.

7. **Channel-3 Control Section:** Input channel 3 consists of :

i) **Stereo GAIN Control:** For adjusting the input level of either MIC3 or stereo LINE/CD signals of Ch-3.

ii) **Stereo HF Control:** For attenuating or boosting the signal level of high frequencies.

iii) **Stereo MF Control:** For attenuating or boosting the signal level of mid frequencies.

iv) **Stereo LF Control:** For attenuating or boosting the signal level of low frequencies.

v) **MIC-3/LINE-3 SELECTOR SWITCH:** For routing either MIC-3 input signal or stereo LINE/CD input signal to channel-3.

vi) **CUE ON/OFF SWITCH with LED:** Push the switch 'ON' for cueing the signal of that channel to headphone output for monitoring purposes. Red LED glows to indicate CUE is ON.

vii) **Stereo CHANNEL FADER:** This stereo slide volume control adjusts the level of signal prior to crossfading action.

8. **POWER LED**: The red LED glows to indicate that the 240V AC mains supply has been switched ON by the mixer's power switch.

9. **Stereo MASTER CONTROL:** For controlling the level of stereo balanced output signal available at MASTER L&R outputs. It also controls the signal level being fed to subwoofer section.

10. **Stereo BOOTH CONTROL:** For controlling the level of stereo unbalanced output signal available at BOOTH L &R outputs.

11. **Stereo SUB CONTROL:** For controlling the level of mono balanced sub-woofer output from DJ mixer.

12. **SUBWOOFER FREQUENCY SWITCH with bicolour LED:** Press the switch for selecting sub-woofer crossover frequency of 180Hz. Release the switch for sub-woofer crossover frequency of 120Hz. The indicator LED is GREEN for 180Hz & RED for 120Hz frequency.

13. **Stereo CUE VOLUME CONTROL:** For controlling the level of cue signal as available from headphone output.

14. **CUE/MASTER VOLUME CONTROL:** For controlling the mix level of CUE and MASTER signal being fed to the headphone output.

15. **CUE MIX SWITCH with bicolor LED:**

BLEND: In this mode, the mix of cue & master signal is available on both speakers of the headphone. LED glows RED in blend mode.

SPLIT: When CUE/MASTER volume control is kept at CUE position, then only cue signal (L+R) is audible on left speaker & when it is kept at MASTER position then only master signal (L+R) is audible on right speaker of the headphone. LED glows GREEN in split mode.

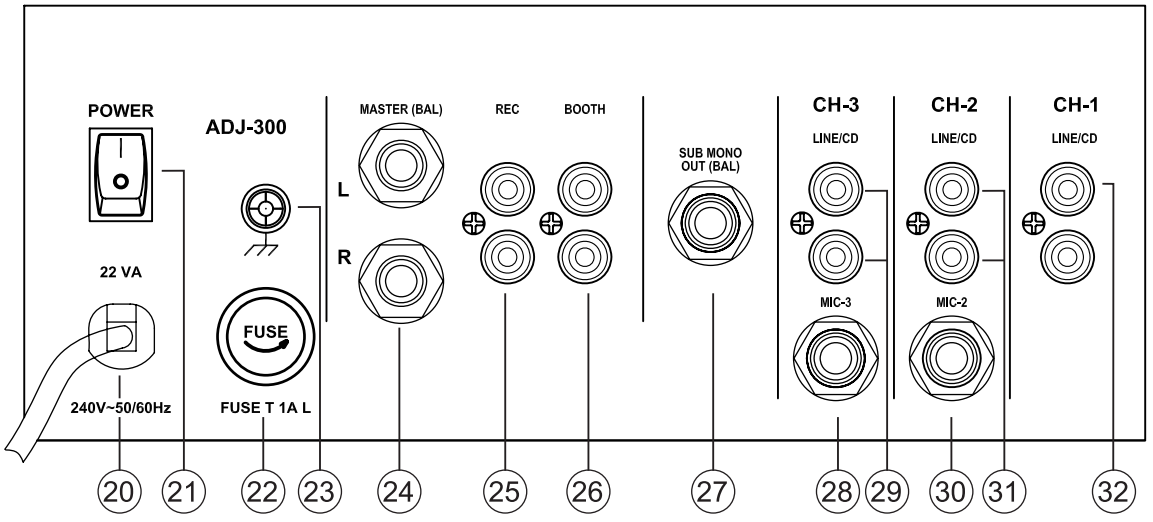
16. **CF ASSIGN SWITCH:** For assigning either channel 1 or channel 2 signal to the crossfader.

17. **Stereo HEADPHONE OUTPUT:** For connecting a stereo headphone (not less than 8-ohms impedance) through a 6.3mm stereo phone plug.

18. **CROSSFADER CONTROL:** At mid position, a mix of Ch-1/Ch-2 and Ch-3 stereo signal is available at the output. When crossfader in on left, only Ch-1/Ch-2 signal is available. When crossfader in on right, only Ch-3 signal is available.

19. **CF CURVE:** The crossfading action will be slow when the CF CURVE switch selects FLAT position and fast when it is in STEEP position.

• Rear Panel Controls and Features



20. **3-Core AC mains cable with plug**.
21. **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.
22. **AC Mains Fuse:** (rating T 1A L Amp. 250V)
23. **Earth Terminal:** For grounding the set.
24. **MASTER (BAL) L&R Output Jack Sockets:** Balanced L&R outputs are available through 6.3mm (1/4”) stereo phone plugs, for connecting to a power amplifier.
25. **REC L&R OUTPUT RCA Sockets:** Unbalanced L&R outputs through RCA sockets, for connecting to an external recording equipment.
26. **BOOTH L&R OUTPUT RCA Sockets:** Unbalanced L&R outputs through RCA sockets, for connecting to a monitor amplispeaker in the DJ booth.
27. **SUB MONO BALANCED OUTPUT JACK SOCKET:** Balanced mono subwoofer output through a 6.3mm (1/4”) stereo phone plug, for connecting to a subwoofer amplifier.
28. **MIC-3 INPUT JACK SOCKET:** For accepting unbalanced signal from a low impedance microphone.
29. **STEREO LINE/CD (CH-3) Input RCA Sockets:** For accepting unbalanced stereo signals from CD players, Mp3 players, DVD players, iPods etc.,
30. **MIC-2 INPUT JACK SOCKET:** For accepting unbalanced signal from a low impedance microphone.
31. **STEREO LINE/CD (CH-2) INPUT RCA SOCKETS**
32. **STEREO LINE/CD (CH-1) INPUT RCA SOCKETS**

Subwoofer Output

Subwoofers may be used in stereo mode (2 nos or 2 stacks: L & R), or in mono mode (single subwoofer or single stack).

(I) For Stereo Mode L&R subwoofers: Use L & R outputs from ADJ-300. Each output should be connected to an active crossover like Ahuja model ACX-202, and the active crossover outputs connected to suitable amplifiers to which both the top speakers and the subwoofers are wired (see active crossover user manual for wiring details).

(II) For mono subwoofer: The mono subwoofer balanced output from ADJ-300 should be connected to a suitable amplifier, and the amplifier connected to the subwoofer. No crossover is required. There are two crossover frequencies of 120Hz & 180 Hz either of which can be selected through a push switch. A separate level control for sub output is also provided. Optimum setting of sub level control should be achieved in conjunction with the setting of master level control. First adjust the Master control to give adequate output for driving the top speakers. Then adjust the sub level control to give adequate output for driving the subwoofer. Later in the programme, if overall level needs to be adjusted, it can be done from the Master control, without effecting the top speaker/subwoofer balance

TALKOVER through Mic.-1

This facility can be used whenever the user desires to make announcements without interrupting or pausing the DJ music. TALKOVER function can be achieved by performing following operations:-

(I) Press TALKOVER switches which results in fall of all the outputs by about 15 db.

(II) To make announcements, put “CF Assign” switch to CH-1, MIC-1/Line-1 Switch to Mic.-1 & CROSSFADER towards Ch-1 / CH-2 position.

Cue Function

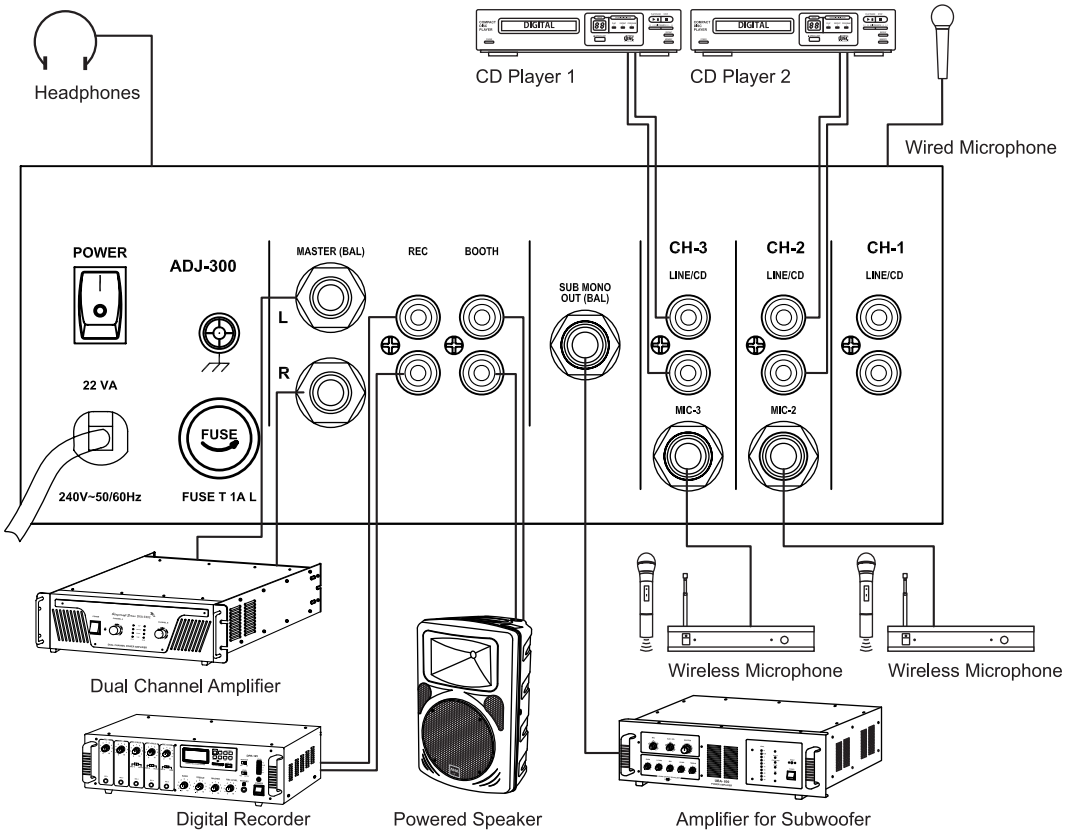
a When BLEND/SPLIT switch is in BLEND position:-

- With CUE / MASTER control fully towards CUE position, a mix of cue & master left channel signal is audible on left speaker of the headphone
- With CUE / MASTER control fully towards MASTER position, a mix of cue & master right channel signal is audible on right speaker of the headphone
- With CUE / MASTER control in middle position, a mix of cue & master left channel signal is audible on left speaker and a mix of cue & master right channel signal is audible on right speaker of the headphone.

b When BLEND/SPLIT switch is in SPLIT position:-

- With CUE / MASTER control fully towards CUE position, a mix of cue left & right channel signal is audible on left speaker of the headphone.
- With CUE / MASTER control fully towards MASTER position, a mix of master left & right channel signal is audible on right speaker of the headphone.
- With CUE / MASTER control in middle position, a mix of cue left & right channel signal is audible on left speaker and master left & right channel signal is audible on right speaker of the headphone.

• Interconnection



• Specifications

MIC INPUTS	:	2mV/4.7kΩ
LINE INPUTS (L & R)	:	100mV/10kΩ
DISTORTION	:	< 0.08%
FREQUENCY RESPONSE	:	20Hz - 22kHz (-3dB)
TONE CONTROLS	:	Bass : -30dB / +15dB at 100Hz; Mid : -30dB / +15dB at 1kHz; Treble : -30dB / +15dB at 10kHz
OUTPUTS (NOMINAL)	:	MASTER: 1V (BAL), BOOTH: 1V (UNBAL), RECORD: 500mV (UNBAL), SUBOUT (Mono): 1V (BAL), Headphones: 200mV@ 8Ω
SUB CROSSOVER FREQUENCIES	:	120Hz and 180Hz (Selectable)
SIGNAL TO NOISE RATIO	:	>80dB
CROSSTALK	:	< 65dB
TALKOVER	:	-15dB attenuation
POWER REQUIREMENTS	:	AC: 220-240V 50/60Hz
DIMENSIONS	:	W260 × H125 × D310 mm
WEIGHT	:	4.5kg approx.