



A 2651



Operating Manual

A 2651 6 Channel Mixer With USB Playback

Redback®

IMPORTANT NOTE:

Please read these instructions carefully from front to back prior to installation. They include important setup instructions. Failure to follow these instructions may prevent the system from working as designed.

Congratulations on your purchase of this excellent mixer. This modern 6 channel (4 MIC/ LINE + STEREO inputs) analogue console with USB/SD Card stereo playback is packed with features to make it easy to provide sound control for small studio or PA environments. It is made from quality components in state-of-the-art manufacturing facilities. It is ideally suited for small bands, home studios, recording booths, low-power radio stations, schools and churches.

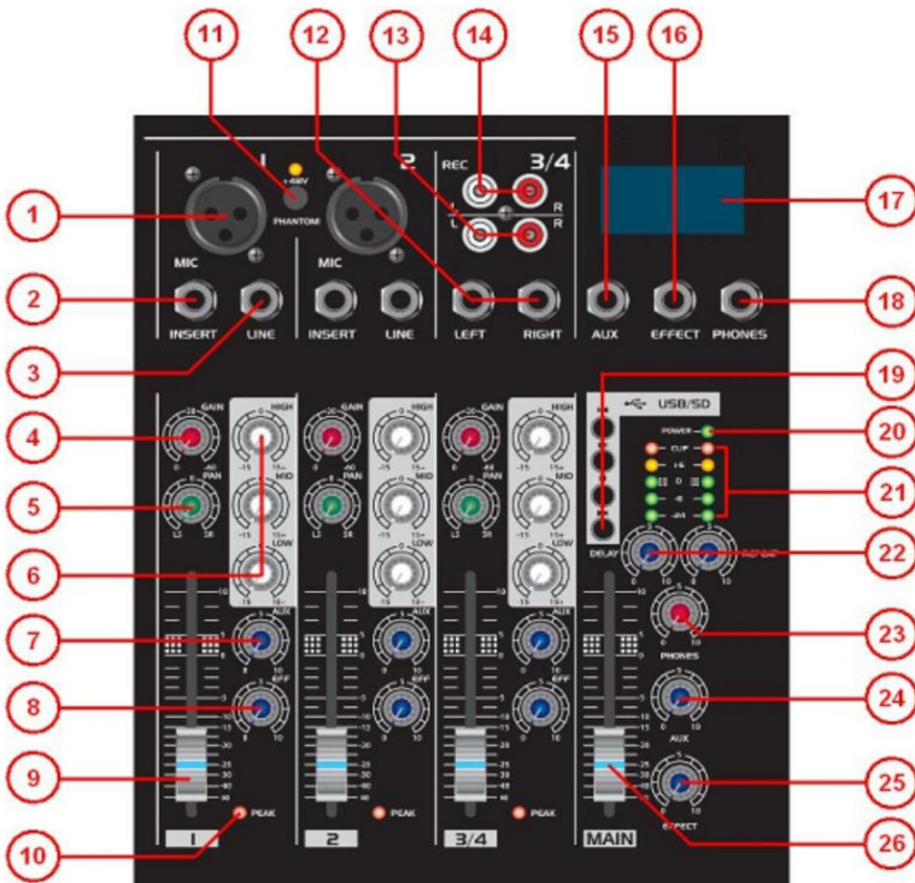
FEATURES:

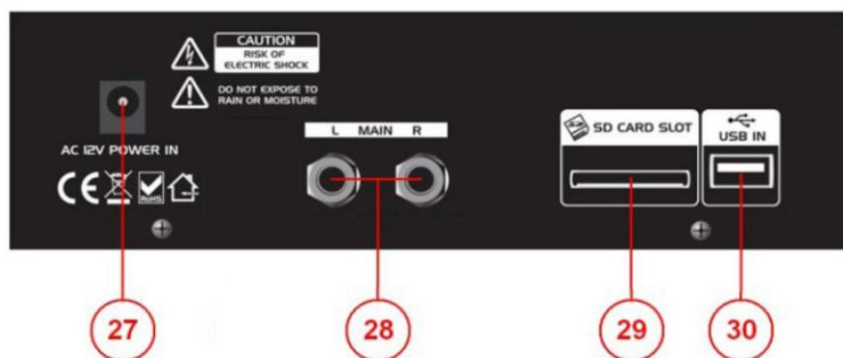
- USB/SD player shared on stereo input channel, along with 6.3mm line jacks or RCA plugs
- Digital media LCD status screen and transport controls embedded on mixer console
- Delay and Repeat (echo) audio signal effects processing feeding into main mix
- EFFECTS feed from each channel (Post Fader)
- AUX feed from each channel (Pre Fader)
- 3-band Equaliser per channel (High/Mid/Low EQ)
- Channel INSERT (send and return) on mono inputs for external signal processing
- +48V phantom power on some inputs

In the box:

- MIXER
- AC POWER ADAPTER
- INSTRUCTION MANUAL

MIXER CONSOLE: (The illustration below shows the controls that are common to this series of mixer)



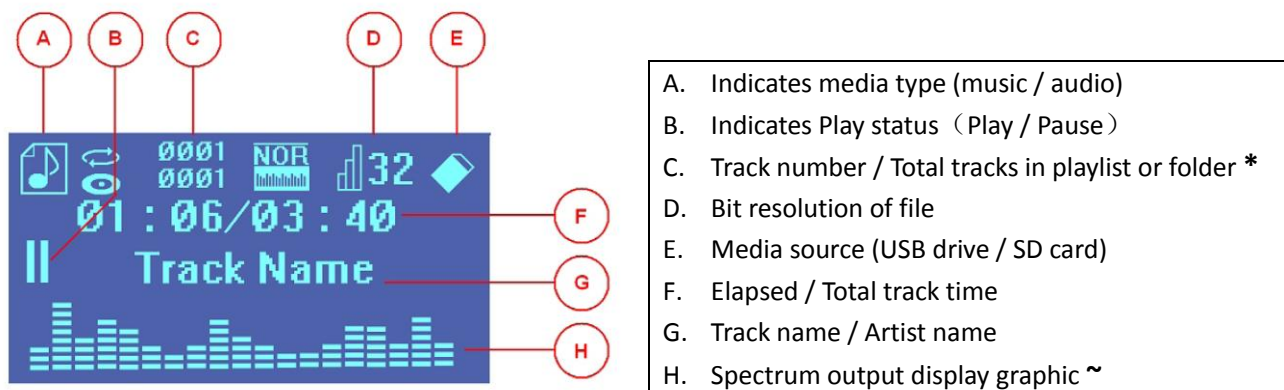


CONSOLE INPUT / OUTPUT CONTROLS:

1. MIC – XLR input (mono)
2. INSERT: TRS 6.3mm jack - Send and return connection for external signal processing devices such as compressors.
3. LINE: 6.3mm jack input (mono).
4. GAIN: rotary input level control knob.
5. PAN: L-R balance rotary control knob.
6. HIGH/MID/LOW: 3-band EQ control knobs.
7. AUX: Auxiliary level control knob for input signal (Pre-fader) to be sent direct to the AUX output (24).
8. EFF: EFFECT level control knob for input signal (Post-fader) to be sent direct to the EFFECT output (25).
9. FADER: Channel volume slide control - The channel fader must be up for the input audio to reach the MAIN fader (26) and the EFFECT output (25).
10. PEAK: LED indicator to show when pre-fader input audio level is clipping.
11. +48V: Phantom power switch for electret microphones connected to certain XLR inputs.
12. LEFT~RIGHT: Stereo channel line input - 2x 6.3mm jack.
13. L~R: Stereo channel line input – 2x RCA.
14. REC: Record output on 2x RCA, to send to PC or Tape Recorder.
15. AUX: 6.3mm jack output, to connect to secondary amplifier.
16. EFFECT: 6.3mm jack output - When a phono plug is inserted, it overrides and deactivates Delay / Repeat effect controls and sends a mono signal (sum L+R) from a channel or channels direct to an external processor or amp.
17. USB/SD player LCD: shows status of source media input and track playback (see below).
18. PHONES: Stereo 6.3mm jack output.
19. USB drive/SD card player transport controls (see below for operation details).
20. POWER LED.
21. CLIP: LEDs showing L+R master output levels – CLIP shows when output signal is distorting.
22. DELAY and REPEAT rotary controls.
23. PHONES output level control knob – stereo signal.
24. AUX master output level control knob – The AUX knob on the input(s)) must be up for a signal to reach AUX master.
25. EFFECT master output level (TRS 6.3mm jack) control knob – Both the EFF and Fader of the input channel(s) must be turned up for the unprocessed audio signal to reach the EFFECT bus.
26. MAIN: Master output volume slide control fader (Stereo).
27. 12V a.c. power input (Adapter supplied).
28. MAIN: L+R - 6.3mm jacks stereo master output.
29. SD card slot
30. USB Type-A input socket

USB FEATURES:

The USB and SD card connections are for the internal media player, which can offer playback of compressed digital audio files (MP3/WMA) through the stereo channel. When a USB pen drive or SD card (recommended maximum capacity 16GB) containing such files is connected via the rear panel, the player recognizes this and automatically begins playback through the stereo channel. The player status is indicated by a small backlit LCD screen, as shown below:



* The USB Drive /SD Card player can find all playable MP3 and WMA audio files that are located in multiple folders, either placed in the root directory or nested in sub-directories. It will play folders and tracks sequentially in alpha-numerical order. The player will tell how many playable tracks it has found on the media (see C above). There are no transport controls provided to navigate between folders, only buttons to skip to the NEXT or PREVIOUS tracks (see above) in a playlist that the player compiles from available tracks. **There is no shuffle / random or repeat mode for playback.**

~ The Spectrum Output Display (H) is just a graphical indicator to show when the audio track playback is underway. The graphic moves in a pattern when a track is playing and stops moving when the track playback is paused or stopped. The graphic does not represent audio signal volume levels, which are clearly shown on the LED VU meters, and is not linked to any audio frequencies.

The USB drive / SD Card player is smart and remembers where playback is interrupted if a media device is removed. When that media is reinserted, playback will recommence from exactly where it was interrupted. Furthermore, if during playback from the USB media the player detects that the SD Card is inserted into the slot, then the player will stop the track on the USB stick and start playing the SD Card. The same applies in reverse i.e. if the SD Card is playing and the USB stick is inserted, then the USB will take playback priority, which goes to the most recently inserted media device. Also, if both the USB stick and SD Card input sockets have media inserted, and the USB is given playback priority because it was inserted last, then if the USB is removed, the player will automatically revert to the remaining SD Card media and commence playback from the same track and time location as it was so doing before the USB stick was first inserted.

Similarly, if the SD Card is in playback mode and is removed, the player will revert to the USB media and start playing automatically from where it left off. And finally, if the SD Card has playback priority, and the USB stick is removed during playback and then reinserted some time later, then the USB will take priority, the SD Card playback will stop and the player will start playing the USB stick from where it left off, provided the mixer is not turned off in the meantime. If the mixer is turned off, the player will not retain any memory of what was playing on either media. When the mixer is switched back on again and media inserted, it will commence playback automatically from track 1 of the playlist that it finds on that media, which is comprised of all playable tracks found in the directories contained on that media.

Note: It is advised that all USB drives and SD Cards be removed from their slots when the mixer is switched off. Only insert media after the mixer has been turned on at the mains and the LCD says 'No Device Please Insert...'. The player will normally start playback automatically as soon as a media is inserted.

Transport controls for the USB stick /SD Card playback are located on the mixer just above the MAIN fader (26). These allow navigation through and between tracks on the memory device as described below.

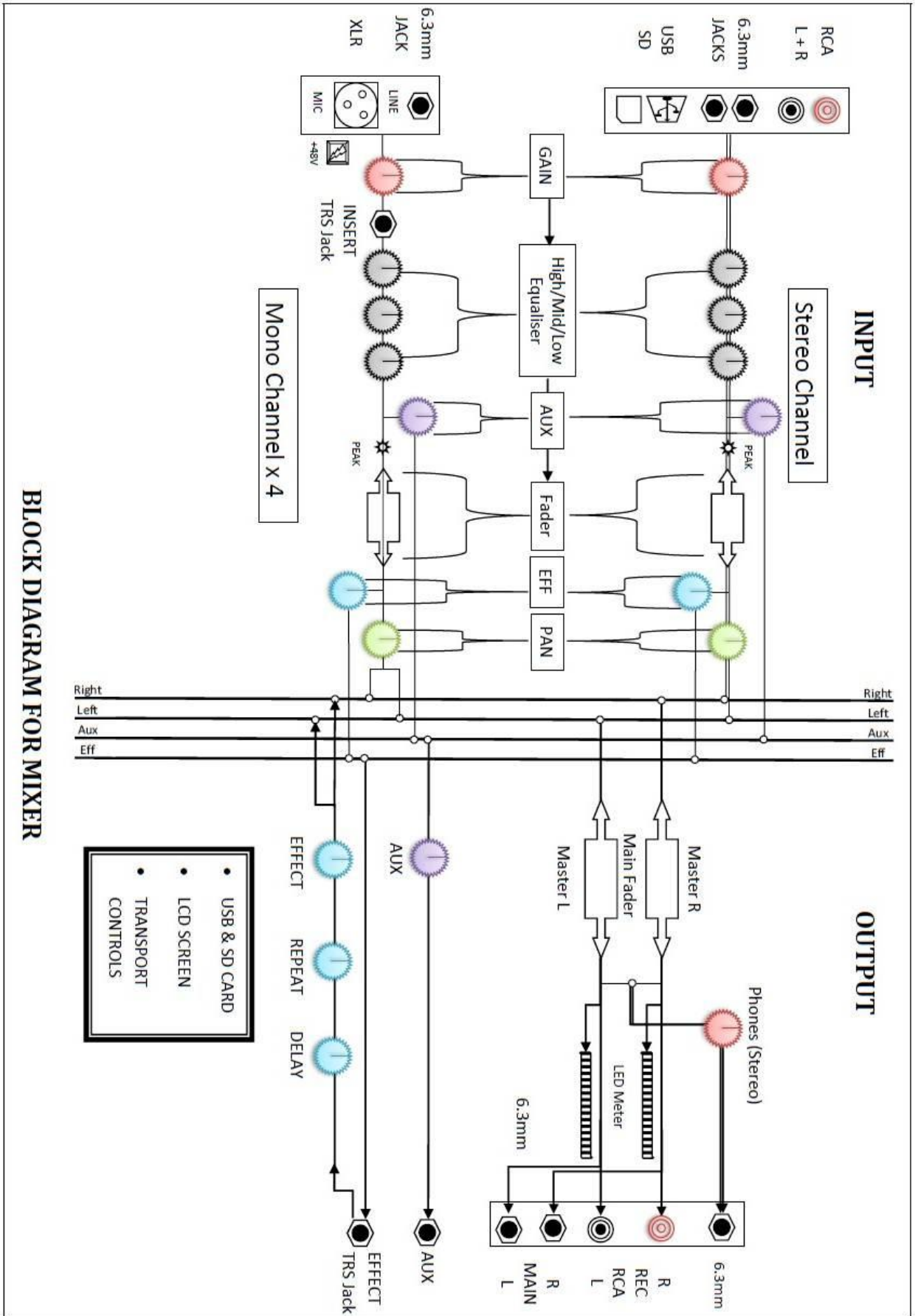


- Press to skip back to the start of a current or a previous track. Play will commence automatically on the track chosen. Press and hold to rewind through the current track audio.
- Press once to start playback. Press to pause. Press again to restart playback from the paused location in the track.
- Press the Stop playback. Press PLAY to start playback from the beginning of the track that was stopped.
- Press to skip forward to the start of the next track. Play will commence automatically on the track chosen. Press and hold to fast-forward through the current track audio.

MIXER AUDIO CONTROL FUNCTIONS:

On the next page is a block diagram showing the audio signal paths – mono and stereo channels – from input to output. Below is a descriptive summary of the key elements of the mixer's functions, which are represented graphically in the diagram.

- **AUX** on each channel is located PRE Fader, which means the channel fader does not need to be up for the signal to reach the AUX volume knob. AUX signal travels via a bus that is independent of the faders, including MAIN fader, direct to AUX output. The AUX is a mono (sum of L+R) only channel and output.
- **PEAK** is also located on each channel PRE fader to alert the user to an overloaded input signal. Adjust the GAIN to prevent clipping. A **CLIP** LED is located as part of the MAIN fader output volume VU meter, and indicates when the post-fader signal going out is distorting / clipping.
- **EFF** on each channel is located POST Fader, which means the channel fader must be up for the EFF knob to work. The EFF is a mono (sum of L+R) only channel and output. The EFF signal goes to the EFFECT output jack, unprocessed. If there is nothing in the jack, then the signal returns back into the effects processor (Delay and Repeat), and then 'dual mono' to the L and R MAIN bus, where it is fed into the MAIN stereo output. The EFFECT knob beside the MAIN fader controls the volume for the processed signal. If the EFFECT socket has a jack in it, then the signal goes out to an external device, thereby rendering the Delay and Repeat effect control inoperative. The signal going out cannot return through the same socket.
- **DELAY** and **REPEAT** rotary controls - These require the following conditions to impact the main stereo output signal: Input channel fader(s) up, EFF up, MAIN fader up, EFFECT knob up, and EFFECT socket open.
- **PHONES** knob controls the volume of the stereo signal sent to the PHONES socket. The PHONES will only receive a signal if the input fader(s) and MAIN faders are up.
- **MAIN** fader controls the output volume level of the mixed master signal sent to the **REC** and **MAIN** outputs.



SPECIFICATIONS:**MONO INPUT CHANNELS X4:**

MIC - XLR input electronically balanced, discrete input configuration	
Frequency response	20Hz to 20kHz
Gain range	+14dB to +60dB
SNR	12dB E.I.N

LINE input - electronically balanced (6.35mm PHONO JACK):

Frequency response	20Hz to 20kHz
Gain range	-6dB to +38dB
SNR	95dB E.I.N
PAN	Shift the mono signal between Left and Right aspects

STEREO CHANNEL (ONE CHANNEL CONTROLS THREE INPUTS – USB-SD/6.35MM JACK/ 2-TRK RCA):

Frequency response	20Hz to 20kHz
Gain range line	-8dB to +15dB/ Mic: +13dB to + 60dB
SNR line	95dB / Mic: 104dB E.I.N
Digital audio formats	MP3 AND WMA files only
USB drive / SD Card capacity limit	16GB recommended, FAT 32 standard formatting
PAN	Adjust balance of stereo image between Left and Right

EQUALIZATION (ALL CHANNELS):

LOW	50Hz, +/- 15dB
MID	700Hz, +/- 15dB
HIGH	10kHz, +/- 15dB

MAIN MIX OUTPUTS:

MAIN volume (L+R)	+28dBu balanced / +22dBu unbalanced
AUX send	+22dBu unbalanced
EFF Send	+22dBu unbalanced (TRS Jack)
REC	+22dBu unbalanced
PHONES (Stereo)	+15dBu 150Ω

WARRANTY:

Redback Distributors warrants this product for one year from date of purchase from Redback or its resellers to the consumer. If this item is part of an installation or another product, please contact the installer or supplier for your warranty.

During the warranty period, we undertake to repair or replace your product at no charge if found to be defective due to a manufacturing fault. The warranty excludes damage by misuse or incorrect installation (i.e. failure to install and operate device according to specifications in the supplied instruction manual), neglect, shipping accident, or no fault found, nor by use in a way or manner not intended by the supplier.

For speakers, misuse includes burnt out voice coils.

For repair or service please contact your **PLACE OF PURCHASE**.

It is at Redback discretion as to whether the goods will be repaired or replaced (while under warranty); and as to whether identical goods will be used to replace the item due to changes of models / products.

Note: Under no circumstances should you attempt to repair the device yourself or via a non-authorized Redback service centre, as this will invalidate the warranty!

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

NOT FIELD SERVICEABLE.