

WELU Assistive Listening System

Equipment setup procedures

Equipment setup and preliminary checks/adjustments are included.

The additional equipment for the Assistive Listening System comprises a special headphone amplifier, one or more transmitters and their associated power supplies/connectors and audio connections to the existing mixer console as outlined here.

- Connect the headphone amplifier input to the ♦Control Room out" jacks (15) on the rear panel of the mixer console.
- Connect the power cord and switch on the headphone amplifier.
- Connect the appropriate power supply to the transmitter.
- Connect the transmitter audio inputs to one of the 1/4" OUTput jacks on the headphone amplifier using an adaptor if necessary. (Note that the adjacent AUX IN jack is not used.)

It is critical that an adequate signal level is available for the headphones. Therefore, it is important to follow the settings outlined below to ensure the system operates correctly.

Therefore, the following adjustments should be checked/made to the controls of the main amplifier, the mixer, headphone amplifier, and transmitter.

The numbers in brackets () below refer to the various controls on the associated diagrams.

MAIN AMPLIFIER

- The main amplifier input gain is reduced by 20dB (set to _____)

MIXER (Figures 1 & 2)

- The CONTROL ROOM SOURCE (33) is selected to MAIN MIX other buttons should be deselected.
- The CR/SUBMIX (34) is set to Maximum: +10dB
- The MAIN MIX (32) control is set to U or higher so that the level peaks at 0dBu or slightly more (+4dBu)

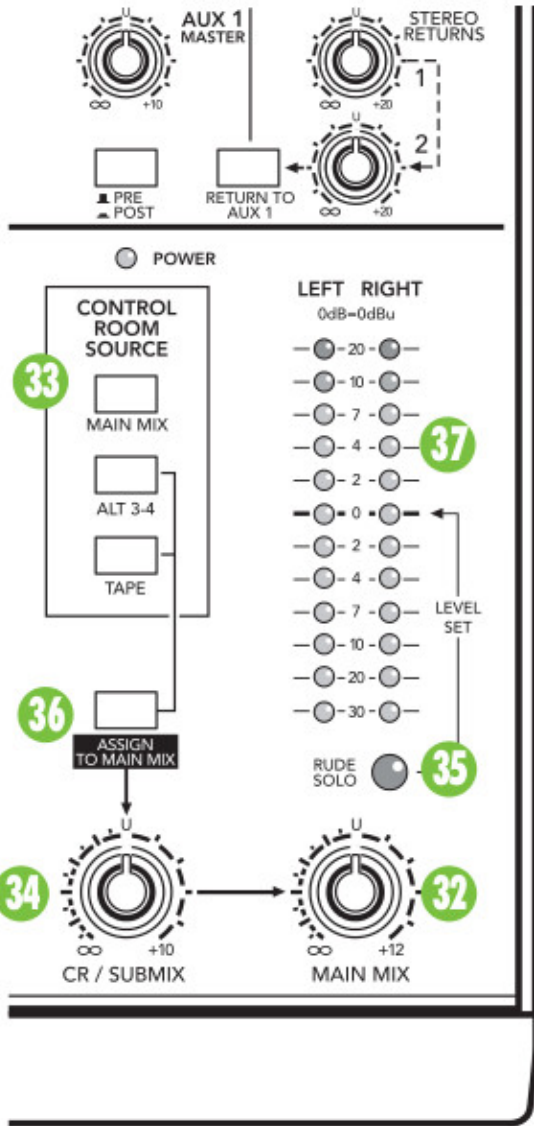


Figure 1 Control Room source

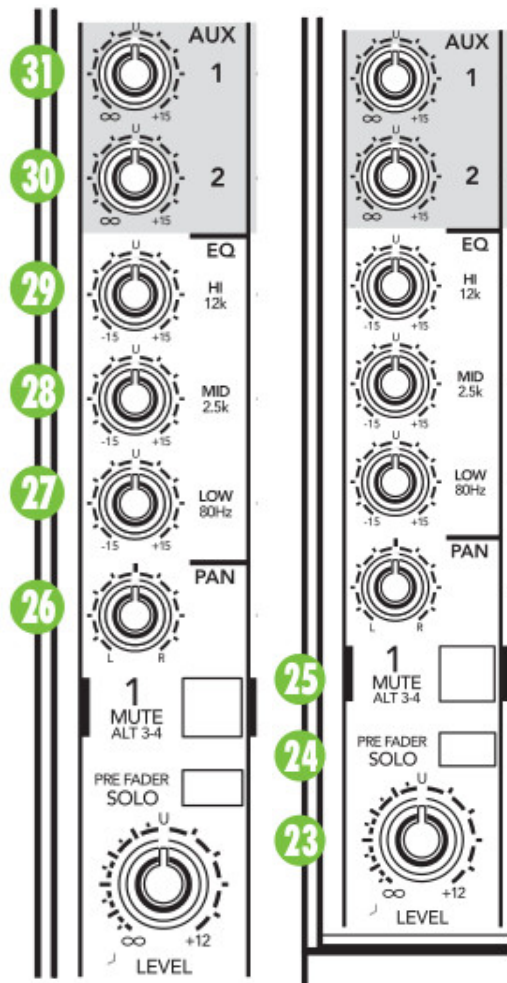


Figure 2 Individual Channel controls

For each channel in use:

- Equalisation may be varied slightly. Some emphasis of High frequency (29) (+3dB to +9dB) is often useful. De-emphasis of LOW frequencies (27) might be desirable with some speakers (LOW set to -3dB to -6dB). Most voices will be in the MID control (28) range which may be set between +1dB or +3dB.
- The LOW CUT (3) selectors should be set to **ON**.
- All PAN (26) controls should be set to **0**.

- The Microphone GAIN and LEVEL (23) controls are increased as needed to compensate for the lower level at the input of the main amplifier (both +6-10dB).

The objective is to achieve a peak output LEVEL of 0dB (37) with little or no clipping. This can usually be achieved with the above settings, but speaker's voices and other factors will require the settings to be adjusted. If the output LEVEL is correct and the loudspeaker volume is not correct, then the MAIN AMPLIFIER input should be suitably adjusted.

HEADPHONE AMPLIFIER

- The headphone amplifier MASTER VOLUME should be set close to maximum (without clipping ♦ indicated by the red light flashing on loud peaks) See Figure 3.

For each CHANNEL in use:

- The LEVEL control should also be set close to maximum (without clipping).
- The BALANCE control should be set to "0".
- The MUTE L/R buttons must both be set to off (no light showing) to ensure both Left and Right channels are operational.
- The MONO button setting should be off but is not critical.

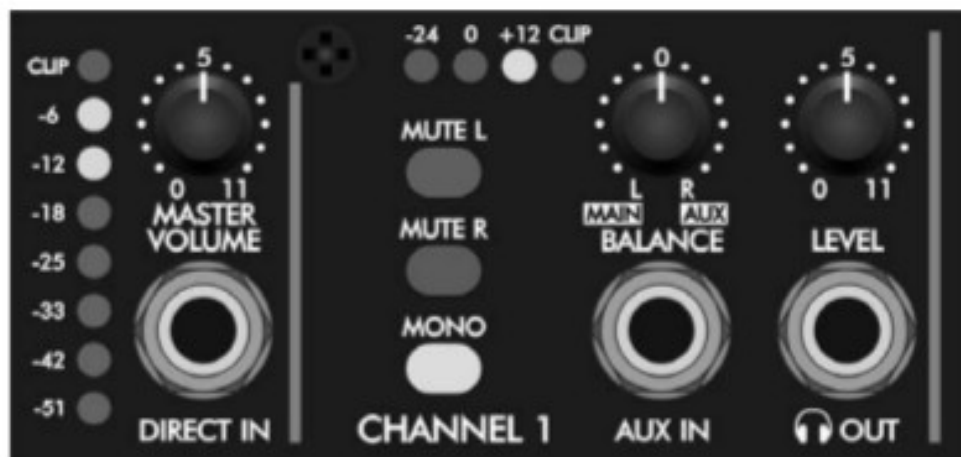


Figure 3 Headphone Amplifier

TRANSMITTER

- Check that the channel selector on the transmitter is set to **1** (the upper position).
- It is important that there are no headphones on the transmitter charging position (top), otherwise the transmitter is disabled!

The recommended headphones have an on/off switch, and an independent volume control. Ensure the **auto-tune** button on the headphones is pressed once after the system is switched on.

If users have older model headphones requiring the channel to be manually selected, it should be set to Channel 1 to match the transmitter.