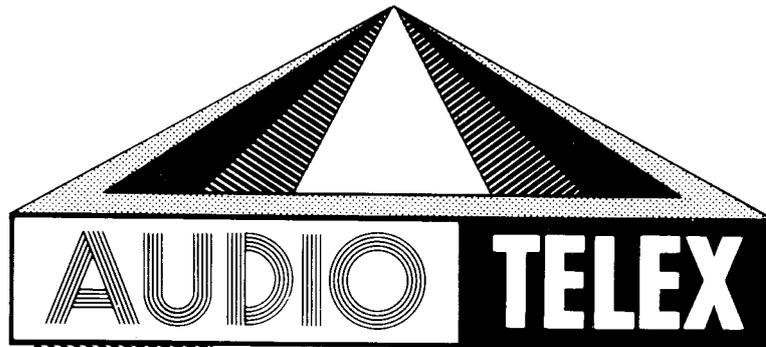


OLDER VERSION



**OPERATING INSTRUCTIONS
AND
CONNECTIONS**

SA SERIES MIXER AMPLIFIERS

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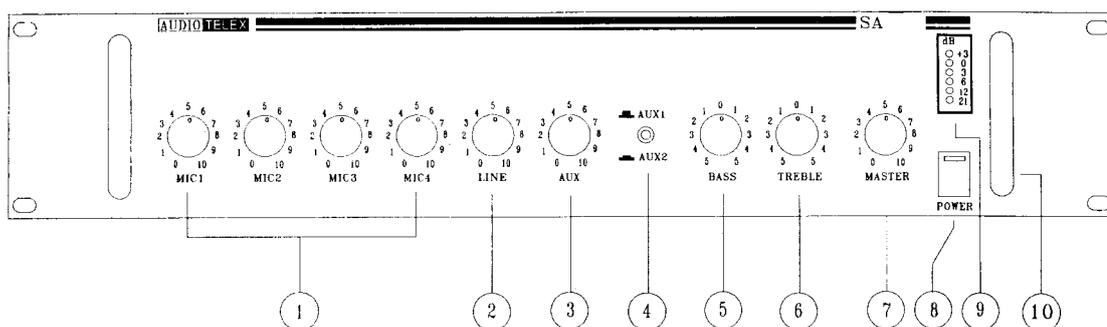
SA SERIES MIXER AMPLIFIERS

Congratulations on your purchase of our SA series mixer amplifier. As you are no doubt aware, mains power must be disconnected before removing the lid or making any internal adjustments or connections to the amplifier. The SA Series Mixer Amplifiers are two rack height units suitable for direct rack mounting in a standard 482mm rack format, or desk/ table mount by means of the rubber feet provided. They are equipped with four balanced microphone inputs, one line input and two auxiliary inputs (switched). The following information will provide setting up and connection information for use in a conventional sound reinforcement system. More detailed information and performance data is available from your dealer or any Audio Telex Communication's office.

SETTING UP

For normal operation the master gain control should be set at mid position and the various microphone, line or auxiliary controls adjusted to their desired level. See details under "controls" below.

PANEL CONTROLS (fig 1)



7...." MASTER " This control adjusts the overall volume from the output of the mixer section of the amplifier. Normal position for this control is 5, which will enable the overall volume level from the amplifier to be adjusted up or down as required.

1...." MIC " Marked one to four, these controls will respond to microphone inputs connected at the rear of the amplifier. The setting will depend upon the sensitivity of the microphone, which is connected. Generally a setting of six to seven is ideal for most dynamic microphones with an impedance of 200 ohms, however the purpose of multiple microphone inputs is to enable microphones of varying levels to be mixed to produce the desired performance level.

2...." LINE " The line input will respond to inputs connected to the appropriate connections at the rear of the amplifier. Generally, program sources such as a tape deck, cd disc player, telephone line or wireless microphone can be connected to this input.

3...." AUX " The auxiliary control is used in conjunction with the switch marked " AUX1 - AUX2 " (4). Auxiliary inputs such as tape decks, background music players, radio tuners or wireless microphones are some of the sources normally connected to these inputs. The switch " AUX1- AUX2 " should be pressed " in " to connect auxiliary input one and " out " to connect auxiliary input two. Note that it is not possible to amplify both auxiliary inputs simultaneously, although they can be permanently connected, (see connection details).

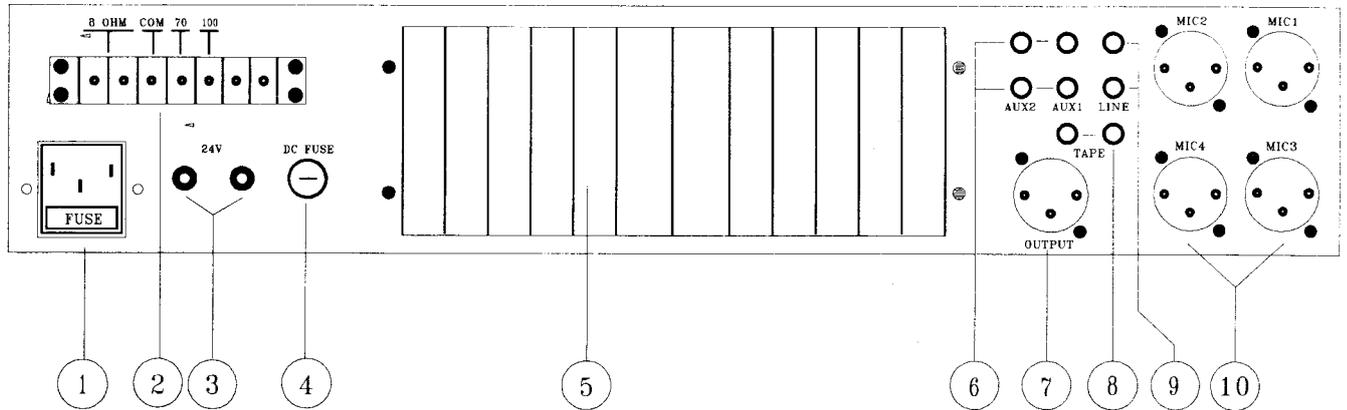
5...." BASS " The bass control will normally be operated in the zero position to obtain a flat overall response for the amplifier. To boost the bass response of the amplifier turn the control clockwise towards five. To cut bass response turn the control counter clockwise towards five.

6...." TREBLE " The treble control will normally be operated in the zero position, which sets the treble response of the amplifier for a flat performance. To boost the high frequency performance of the amplifier, adjust the control clockwise towards five. To cut the high frequency response, turn the control counter clockwise towards five.

9...." VU METER " Marked in decibel graduation from +3 to 21, the light emitting diodes will indicate the volume level at the output of the amplifier. For normal operation the l.e.d.s glow green as they modulate with the output level of the amplifier. If the lights consistently indicate red, the amplifier is being over-driven, resulting in distortion in the quality of the output signal.

8...." POWER " This switch turns on or off the mains power to the amplifier. An l.e.d. glows red to indicate the amplifier is turned on.

CONNECTIONS (fig2)



1.... Three pin IEC mains power inlet 240/120 vac with built in fuse drawer and spare fuse. Ensure the mains cord is disconnected before replacing the fuse.(Fuse sizes are indicated further on in these instructions.)

2.... Terminal strip for speaker connections are from left to right as follows;

term 1..... 8 ohms)

term 2..... 8 ohms)

term 3..... Common return for 70 and 100volt line.

term 4..... 70 volt output.

term 5..... 100 volt output.

term 6..... Spare(Ideal for connection of tone generator)

term 7..... Spare(remote start or any ancillary control)

3.... 24 volts dc power source input, two post type terminals RED + BLACK - .

4.... DC low voltage fuse . Remove with a screwdriver after disconnecting mains power.

5.... External aluminium heat sink. As this unit generates heat during continuous operation , care should be taken to avoid skin contact with it.

6.... Auxiliary inputs, connections are twin RCA type phone connectors , allowing up to two auxiliary sources to be connected.

7.... Balanced transformer output, male XLR socket. Pin connections ... 1.. earth 2... active 3... active.

8.... Tape recorder output , twin RCA phone connectors to enable left and right stereo connection for monaural output.

9... Line input, twin RCA phone type connectors.

10... Four XLR female microphone inputs, accept 200 ohms balanced microphones. Connections

Pin 1... earth Pin 2...active Pin 3...active .

SPECIAL ACCESSORIES

TONE GENERATORS ; Four types of tone generators are available as options . They are easily fitted by first removing the mains cord and then , by means of screws on either side, remove the lid. Attach the module to the metal base of the amplifier, using the adhesive tape provided. Plug the seven pin plug into the socket as shown on the diagram supplied with the tone module. Replace the lid and reconnect the mains cord. Note the module can be switched on off from a remote connection by utilising the spare terminals described in "CONNECTIONS" item 2 . Operation of the tone generator will automatically mute the line and auxiliary inputs, however the microphone inputs remain active to ensure paging is possible during an emergency.

Tone Generators available ;

ATC5227 Continuous bell

ATC5228 Pre announce chime

ATC5229 Evacuation tone

ATC5230 Alert tone

MICROPHONE LINE TRANSFORMER SA4012 ; When long microphone lines are utilised , there is always a risk of inducing hum or noise , particularly when there is electrical interference in the vicinity of the cables. The SA4012 is a " plug in " balanced 200 ohm mic line transformer with a nu-metal shield,which will reduce the possibility of induced hum and noise. .It is fitted into the sockets provided for each micro phone input , inside the amplifier.

To fit the SA4012 , disconnect the mains power and remove the lid , by means of the screws at either side,remove the existing jumper plug for the required input . Plug the SA4012 into the appropriate input socket, located on the circuit board .(see diagram with SA4012)

VOICE OPERATED MUTING MODULE TX3010; Automatic muting of all microphone , line and auxiliary inputs is possible from microphone input one , which is a designated priority input.Voice operation of a microphone in this input will cause the module to switch off all other inputs. This function is ideal for muting background music or other sources during paging.

To fit the TX3010 module, disconnect the mains power and remove the lid of the amplifier by means of the screws on either side . Remove the jumper plug from the socket adjacent microphone input one (see

MIC/LINE INPUT CONVERSION MODULE ; Any microphone input on the SA60 and SA120 can be converted to an extra line input by means of the TX3011. The function is useful for accepting high level paging inputs such as a telephone or telecom line.

To fit the TX3011 disconnect the mains and remove the lid. Remove the existing jumper plug from the required mic input socket located on the circuit board. Plug the TX3011 into the socket and replace the lid.

FUSE SIZES SA AMPLIFIERS

MAINS FUSE RATINGS

SA30.....1AMP SB

SA60.....2AMP SB

SA120 ..4AMPS SB

DC FUSE RATINGS

3AMPS SB

5AMPS SB

10 AMPS SB