



## AUDIO TELEX COMMUNICATIONS PTY. LTD.

Incorporated in N.S.W. A.C.N. 001345482

# OPERATING INSTRUCTIONS TX7000 SPEAKER DELEGATION SWITCHER

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**TX7000 ,SERIES SPEAKER DELEGATION SWITCHER**

The TX7000 series delegation switcher is a matrix device , which is designed primarily for switching the 100 or 70 volt output of up to three audio amplifiers to a maximum of one hundred and twenty eight speakers or zones. The TX7000 can also be used for any other switching function , which suits this configuration .

Switching selection is by means of a key pad and colour coded amplifier selection switches located on the master panel.

Each speaker position has an associated tri-coloured light emitting diode indicating the speaker connection to the selected amplifier.

RED is amplifier one

GREEN is amplifier two

AMBER is amplifier three.

Switching contacts are rated at 0.6 amperes at 120 volts , providing a maximum of 60 watts per speaker or zone switching .

**1..SELECTING INDIVIDUAL SPEAKERS**

Press desired speaker then press amplifier output.

Example [ 1 ] [ 0 ] [ AMP B ]

A green l.e.d at position ten will glow , indicating that speaker ten is now connected to the output of amplifier B.

**2..CANCELLING INDIVIDUAL SPEAKERS**

Example ( 1 ) ( 0 ) [ CLEAR ]

The output connection from amplifier B to speaker ten, is now disconnected.

**3..SELECTING GROUPS OF SPEAKERS**

Press desired speakers and outputs (eg) connect speakers ten and eleven to the output of amplifier A.

Example [ 1 ] [ 0 ] [ AMP A ] ( then ) [ 1 ] [ 1 ] [ AMP A ]

Red l.e.d.'s at speakers ten and eleven will glow , indicating the output of amplifier A is now connected to speakers ten and eleven.

**4..SELECTING LARGER GROUPS OF SPEAKERS**

Press desired speakers by utilising the [ TO ( ALL ) ] button. (eg) connect speakers two , three , four and five to amplifier B .

Example [ 2 ] [ TO ( ALL ) ] [ 5 ] [ AMP B ]

Green l.e.d.'s at speakers two, three, four and five , will glow indicating the output of amplifier B is connected to those speakers.

Note; There is no limit to the number of speakers which can be selected in one group , providing they are consecutive numbers.

### 5..CANCELLING SELECTED GROUPS OF SPEAKERS

From the example above, where speakers two three four and five are connected to amplifier B, this setting can be cancelled by means of the foll;

Example ( 2 ) TO (ALL) ( 5 ) ( CLEAR

Speakers two three four and five are now disconnected from amplifier B .

### 6..CANCELLING ALL SPEAKERS CONNECTED TO ONE GROUP

Set up conditions as per item four , for speaker groups. (Then)

Example ( CLEAR ) ( AMP B

All speakers connected to the output of amplifier B will be disconnected.

### 7..ALL CALL

To connect all speakers to the output of amplifier A (The designated all call paging amplifier); press ( ALL CALL

All speakers will now be connected to the output of amplifier A, regardless of whether they were previously connected to another amplifier or turned off . A red l.e.d. will glow at all speaker positions.

Release ( ALL CALL

All speakers will be released to their previously selected positions.

### 8..SELECTED ( ALL CALL

To connect speakers currently selected to any of the three amplifier outputs , to "all call" on amplifier A .

Example ( 1 ) TO (ALL) ( 6 ) AMP B ( Then ) ( 7 ) ( TO (ALL) ) ( 1 ) ( 0 ) ( AMP C ) ( Then ) ( 1 ) ( 2 ) ( AMP A

This setting will connect speakers one through to six to amplifier B , seven through to ten to amplifier C and speaker twelve to amplifier A .

Now press ( SELECTED ALL CALL

Speakers one to six , seven to ten and twelve will all be connected to amplifier A.

This function is useful for all paging to those speakers in use, unlike "all call" previously described , it will not allow paging to speakers, which are turned off.

Release ( SELECTED ALL CALL

All speaker connections will be reinstated to their previously selected positions.

## 9..PAGING USING THE "MIC SELECTION" BUTTONS.

To utilise these functions it is necessary to connect a balanced paging microphone to the socket provided at the rear of the switcher and marked " MIC IN " and the outputs marked "OUT 1", "OUT 2" and "OUT3" to the appropriate microphone inputs of the amplifiers.(See connection details further on in these instructions).

Example Press **PAGE B**

A red l.e.d. associated with page B , will glow , and the output of the local microphone will be connected to the input of amplifier B.

Press **PAGE B** again and the connection is broken.

## 10..REMOTE CONNECTIONS

A five pin " push in " terminal connection designated X7 is located at the extreme right rear adjacent to the power cord and fuse.

Connections are as follows ; (Right to Left

1.Selected all call 2.All Call 3.Common 4.-24volts dc 5.+24volts dc

The low voltage 24 volts dc is for emergency supply in case of mains failure.This supply is essential to retain settings if there is a mains failure.

2 and 3 connections when closed , will switch all speakers to the "all call" mode, placing all speakers on to the output of amplifier A and causing all red l.e.d.'s to glow. Opening this connection will cause the switcher to return all speakers to their previous connections .

3 and 1 connections when closed , will switch all those speakers which are in use , to the output of amplifier A. Opening this connection will cause the switcher to return all speakers to their previously selected position.

## SPEAKER CONNECTIONS

Both poles of each speaker line are switched to avoid earth loops etcConnections are "push in " type quick connect terminals located at the rear of the panel and designated one through to thirty two.

## OUTPUT CONNECTIONS

Microphone outputs designated " OUT 1" " OUT 2" " OUT 3" are three pin XLR male connectors, with foll pin connections;

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

## INTERNAL MATRIX CONNECTIONS

Internal matrix connections between master and slave matrix printed circuit boards, are factory fitted, for detailed wiring information contact your dealer or Audio Telex.

## INSTALLATION INFORMATION

Power Rating; Each matrix has a total load capacity of 500 watts of speaker power over sixteen speaker positions ,and should not be exceeded.

To increase maximum total power it is possible to use seperate amplifiers for each matrix pcb and simply parallel the inputs to each amplifier.