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SS-22

User Manual

Revision History

Revision 01   Original document   04 May 2006
Revision 02   Cosmetic changes   23 January 2008
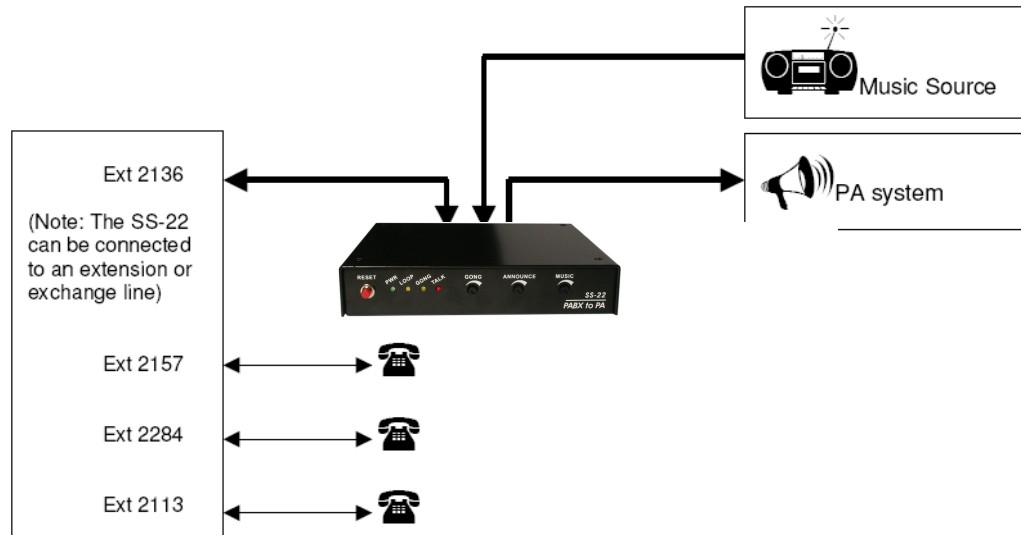
CONTENTS

1.   INTRODUCTION

The SS-22 allows public address announcements to be made from any telephone within a company. This negates the need for a P.A. microphone to make an announcement, and allows users the opportunity to make announcements from any part of the building that has a phone.

2.   FEATURES

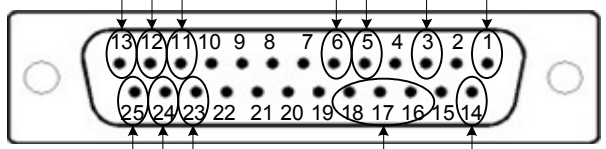-   Connection to either an exchange line or an extension port.
-        2 relay contacts for use as required
-        Background music mute
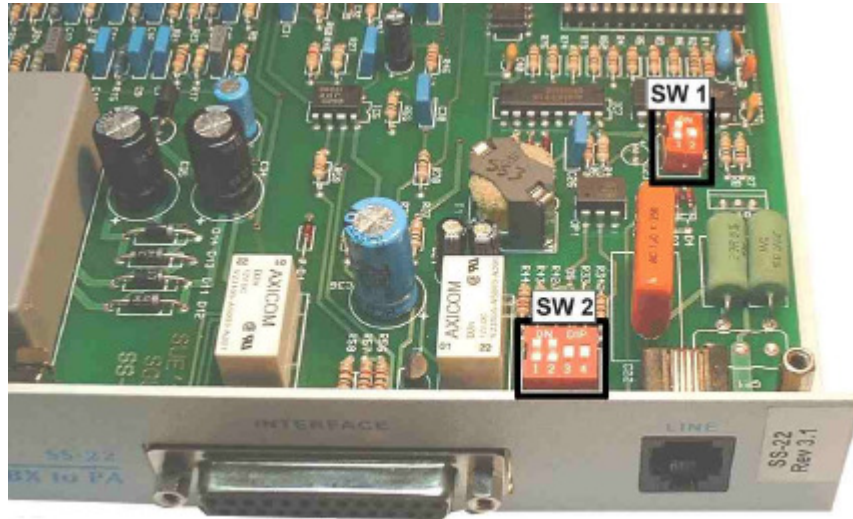-   Settable Vox timeout

3.   DESCRIPTION

The SS-22 is housed in a durable and neutral black aluminium box.
The front of the unit is equipped with three knurled spindles for adjusting the volume of the background music, the gong and the announcement.
The LED's on the front indicate Power on, Loop detect, Gong operative and Talk in progress. The rear of the unit is equipped with a 220V mains cable, DB25 connector and a RJ-11 connector.

4.   CONNECTIONS

SS-22 PABX TO PA INTERFACE CONNECTIONS

Dry Contact Output 1
Normally Closed Output ── -20db OUTPUT to AMPLIFIER
Common Relay Pin ── 0db OUTPUT to AMPLIFIER
Normally Open Output ── MUSIC SIGNAL INPUT
EXTENSION / LINE - A

13 12 11 10 9 8 7 6 5 4 3 2 1
25 24 23 22 21 20 19 18 17 16 15 14

Dry Contact Output 2
Normally Open Output ── EXTENSION / LINE - B
Common Relay Pin
Normally Closed Output ── GND PINS FOR MUSIC & PA OUTPUTS

Extension/Line 'A'	DB 25 pin 1 **Or** RJ 11 pin 2
Extension/Line 'B'	DB 25 pin 14 **Or** RJ 11 pin 3
Music Input Signal	DB 25 pin 3
0dB Output to Amplifier	DB 25 pin 5
-20dB Output to Amplifier	DB 25 pin 6
Ground for Music and PA Outputs	DB 25 pins 16, 17 & 18
Relay 1 Normally Open	DB 25 pins 25 & 24
Relay 1 Normally Closed	DB 25 pins 23 & 24
Relay 2 Normally Open	DB 25 pins 13 & 12
Relay 2 Normally Closed	DB 25 pins 11 & 12
Note:	As an alternative to Pins 1 & 14 on the DB25 connector the RJ-11 connector pins 2 & 3 can be used for connecting the Extension / Lines wires

5.   SWITCH SETTINGS

Gong, Tone, Voice Prompt & Vox Selection Options *(Note Vox options only applicable in extension mode operation)*				SW1 Setting	
GONG	**TONE**	**VOICE PROMPT**	**VOX TIMEOUT**	**1**	**2**
Short	Short	No	7 sec	OFF	OFF
Normal	Normal	Normal	7 sec	ON	OFF
No	No	No	7 sec	OFF	ON
No	No	No	30 sec	ON	ON

Exchange Line / Extension Port Operation	SW2 Setting			
	1	**2**	**3**	**4**
Connecting to PABX extension port	ON	ON	OFF	OFF
Connecting to exchange line port	OFF	OFF	ON	ON

6.   **FUNCTION**

Pick up telephone handset and dial the exchange line or extension to which the SS-22 is connected. The user will then be prompted to make an announcement while a gong is simultaneously played over the relevant speakers and the background music is muted.
The user's announcement will play over the P.A. speakers.
The unit will disconnect after the Vox timeout or when the phone is put down.
The background music will be reinstated**.**

7.   **FREQUENTLY ASKED QUESTIONS**

7.1   ***What is -20dB output for?***

To input to MIC on amplifier or if amp requires low level input.

7.2   ***Where to connect output to?***

Input on amplifier

7.3   ***What are relay contacts for?***

1. For operating additional items such as a flashing light to indicate an announcement.
2. To take the place of the button on MIC to enable announcements to P.A.

7.4   ***How to test the exchange line mode.***

1. Connect a telephone to the RJ11 connector or to pins 1 & 14 on the DB-25. Set the switches for exchange line mode.
2. Pick up the phone and make the announcement.

7.5   ***What Loop resistance can be handled by the SS-22?***

1. Extension mode: The internal resistance of the SS-22 in exchange line mode is about 440 ohms. Add this to the loop resistance and check with the maximum rated resistance of the PABX to see if it will work.
2. Exchange line mode: It is recommended that the SS-22 only be used with low loop resistances in this mode.

7.6   *When I connect the SS-22 to the amplifier I get a loud hum.*
          What is causing it?

1. It could be a simple matter of a ground loop if the input to the amplifier is un-balanced.

   a) Always try to keep the cable between the SS-22 as short as possible.
   b) Make sure the SS-22 is plugged into the same power source as the PA system.
   c) Try to use a 'LINE' or 'AUX' input if possible
   d) If you need to use a balanced 'MIC' input, then place a 20dB attenuator in the 'MIC' jack. This can be made up of a series 10k resistors in the two 'live' conductors and a 1k resistor between it on the PA System side.

2. The Input cable to the PA system may be picking up feedback from the speaker output and causing an ultra-sonic whistle. This can appear as a hum from the speakers and can even damage the speakers or the amplifier. The solutions are as above.

3. The above two problems can occur even when using a balanced input amplifier. The solutions are the same as above, except that the resistors in d) above need to be duplicated for both audio legs of the input.

8.   CONTACT DETAILS

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