

MD 602

Duplex Amplifier

Instruction Manual

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## **1. General Description**

The intercom is designed for security applications where hands-free communications is required between counter personnel and their customer through security glass. Ideal for use in Banks, Office Receptions, Service Stations or any place where security is important.

## **2. Features**

- Hands-free Duplex Communications.
- Mute Button.
- Simplex mode with press to talk button.
- Compact master station with keypad.

## **3. Installation**

The intercom kit consists of a master station, two loudspeakers, microphone strip and AC adaptor power supply.

The master comes complete with an 8 way telecom plug and socket in which the PSU, Loudspeaker and Microphone cables must be terminated.

The Master station and PSU must be installed on the personnel side and the 2 loudspeakers and microphone strip on the customer side of the glass. The microphone strip is supplied with adhesive tape and must be stuck to the glass at counter level and the screened cable terminated into the telecom socket. The loudspeakers must be mounted 60 to 100 cm apart, head height. The loudspeakers must be wired in SERIES and terminated into the telecom socket. The PSU must be plugged into a mains outlet socket and also terminated into the socket. A foot switch can be connected to the socket if required, it will operate the same as the talk button.

## **4. Telecom Socket wiring**

M5 - Red	+15v dc from PSU
M6 - Black	GROUND from PSU
M8 - Blue	Microphone Live
M7 - Orange	Microphone screen
M2 - Brown	Loudspeaker +
M1 - Slate	Loudspeaker ground
M3 - Yellow	Foot switch
M4 - Green	Foot switch

## **5. Operation**

When the power is switched on the system will be in the mute mode indicated by the red LED being on. Press the mute button once, the red LED will go off and the system will switch to the Duplex mode for hands-free communication.

If the system will not operate properly due to excessive noise on either side the simplex mode can be selected by pressing the simplex button once, the Green LED light indicating simplex. In this mode the personnel can hear the customer but must press the Talk button to talk to the customer. To revert back to the Duplex mode the simplex button must be pressed, the green LED goes off and the master is back in the Duplex mode. At any time the Mute button can be pressed to mute the system, preventing customers from listening in on personal conversations.

## 6. Adjustments

The system is factory setup but small adjustments can be made to the volume in both directions. The master side has background noise sensing therefor after any adjustments are made wait for 30 seconds before testing to allow the system to settle down.

The adjustment is made through the bottom of the master station as per the stickers, with a very small jewels star screw driver. Care must be taken when making adjustments so as not to damage the preset pots inside.

## 7. Technical Specifications

Power Supply	15vdc (ac adaptor).
Current drain	50ma Idle. 110 ma Maximum.
Audio output power	100 mw max at master. 150 mw max at loudspeakers.
Frequency range	500 Hz to 5000 Hz.
Cabling	Single core screened to microphone. Single twin flex to loudspeaker. Single twin flex to PSU.
Cable distance	20 metres maximum.
Dimensions of master	95 mm width. 65 mm height. 205 mm length.
Dimensions of loudspeakers	95 mm width. 110 mm height. 60 mm depth.
Microphone strip	16 x 16 x 1000 mm YT1 EGA trunking.
Loudspeakers impedance	16E minimum (2x8E).

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