

OPERATION

There are two ways to initiate a listen-in session.

A. The first is an alarm from a zone which has the "two way listen-in" option enabled. After the zone alarm is transmitted, the dialer will hold the line for up to 60 seconds, allowing the CS Operator to press the tone command *55* to initiate listen-in. If this tone command is not received, the dialer will hang-up and release the phone line.

B. The second way is through the telephone remote control feature, if enabled. First, call the control, wait for it to answer, and enter a valid passcode. Select option 7 "Audio Monitor" from the telephone remote menu and follow the Tone Commands below. Telephone remote control is enabled from Installer Programming, Menu 07 - Global System Definitions, Option G01.

NOTE: An active two way session will terminate automatically after 3 minutes, unless manually extended using command 7. Tone Commands are summarized below:

Tone Commands:

55 BEGIN LISTEN-IN - This command is used by the Central Station to initiate listen-in.

NOTE: All 3 microphone zones are initially active when listen-in begins. Use tone command 4 options to select mic zones.

- 1 TALK - Toggles (turns on) Output 1 speakers allowing you to talk to the premises.
- 2 LISTEN - Toggles (turns off) Output 1 speakers allowing you to listen.
- 3 MAX. SENSITIVITY - Raises the microphone gain to maximum sensitivity.
- 4 MICROPHONE SELECT -
 - 40 Selects ALL microphones
 - 41 Selects Microphone Zn 1
 - 42 Selects Microphone Zn 2
 - 43 Selects Microphone Zn 3
- 5 - [future use]
- 6 LOW SENSITIVITY - Lowers the microphone gain to minimum sensitivity.
- 7 EXTEND TIME - Restarts 3 minute listen-in.
- 8 TERMINATE FOR NOW - Ends the listen-in session but allows callback restart within 1 to 60 seconds (programmable). Control will answer on first ring during this time.
- 9 9 TERMINATE SESSION - Ends the listen-in session without any callback allowed.
- 0 - [future use]
- * CANCEL last key-press (undo)
- # - [future use]

Operation of the two way listen-in feature is affected by the following installer programming options:

- Menu 05-Zone Definitions, Option 06 "Enable Listen-in" must be enabled "Yes" for any triggering zone(s).
- Menu 07-Global System Definitions:
 - Option G31 "2 Way Listen-in" must be enabled "Yes".
 - Option G32 "2 Way Callback Time" is a timer value which may be set to allow time for the CS to callback and initiate a listen-in session after dialer hangup.
 - Option G01 "TelRmtCtl" must be enabled "Yes" if you wish to initiate listen-in by Telephone Remote Control.

05/05

Two Way Listen-in Interface M1TWI

APPLICATION:

The M1TWI Interface allows microphones to be connected to the M1 for two way voice verification and listen-in. It features 3 separate microphone zones with up to 4 microphones per zone. Programming options and operation procedures are already built into the M1 control.



Two Way Listen-in Interface M1TWI

101-216

FEATURES:

- Interfaces Listen-in Microphones to the M1
- Powers Microphones and Performs Switching
- Provides 3 Separate Microphone Zones
- Each Zone Can Have Up to 4 Microphones
- All Programming and Operation Is Performed from the M1 Control

SPECIFICATIONS:

- Requires ELK-M1TWM or M1TWS Microphones
- Operating Voltage: 12 Volts D.C.
- M1TWI Board Current Draw: 10mA
- Microphone Current Draw. 5mA each
- Housing Dimensions: 111 x 76 x 28.5mm
- Circuit Board Dimensions: 89 x 70mm



Security Products

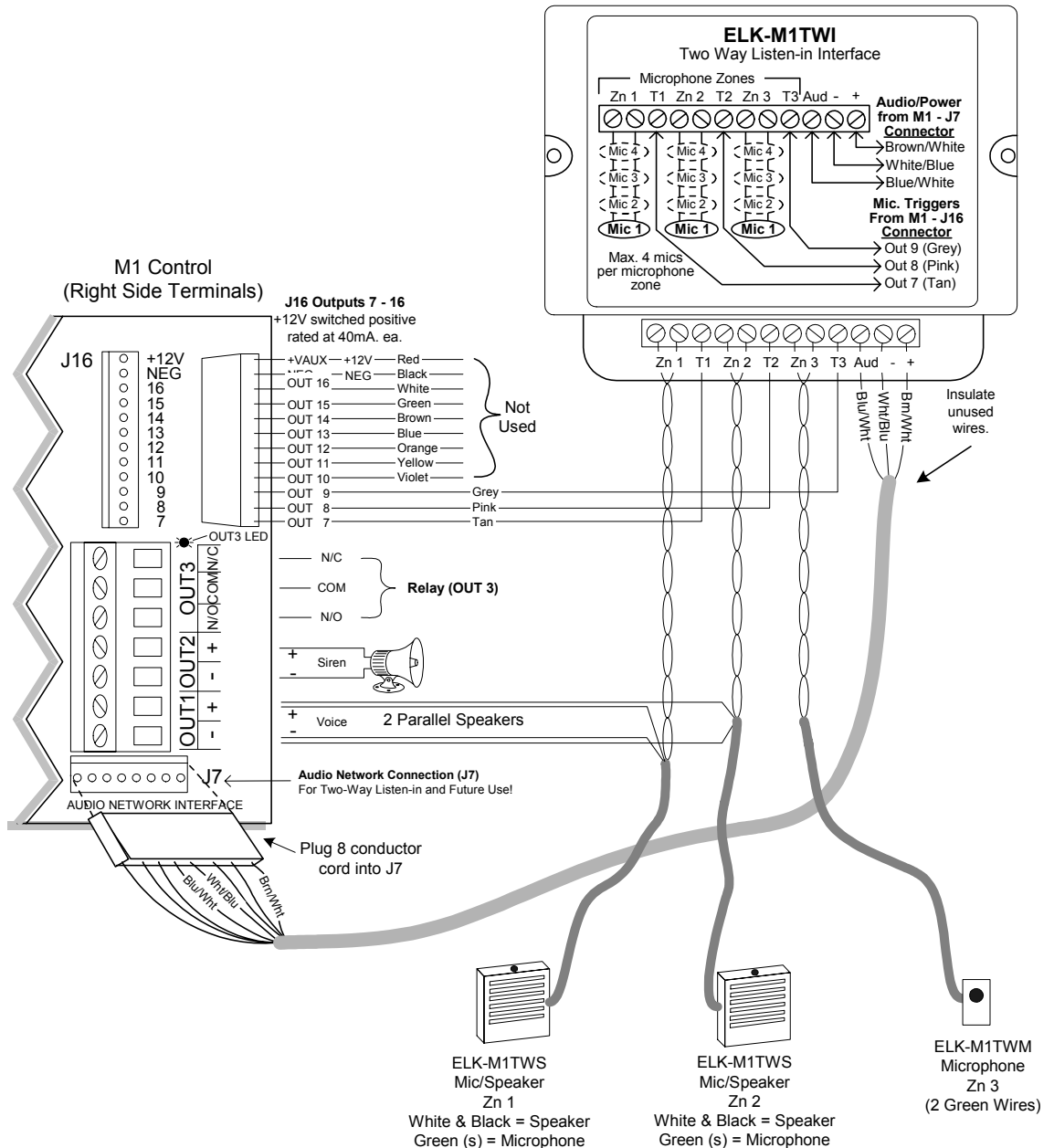
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Instructions Printed On Inside

INSTALLATION

The following equipment is required: ELK-M1TWI Interface, 8 Conductor J7 Cable (packed with M1TWI), 12 Conductor J16 Cable (packed with M1), and at least 1 M1TWS Speaker/Microphone or M1TWM Microphone.

1. Mount the M1TWI in the M1 enclosure near the right side of the main board. The 12" audio/power cable must reach connector J7, located about 1/3 up from the lower right side of the M1 board. The M1TWI can be mounted using double sided tape or screws. An alternate method is to remove the board from the black case and mount it on a set of ELK-SWG Glides (not included) which holds the board vertically and conserves space.
2. Install at least one Microphone/Speaker (M1TWS) near the center of the building. Recommended wire is 22 to 24 gauge UTP (unshielded twisted pair) for the microphone, and 18 to 20 gauge for the speaker.
3. Connect the first microphone to the two terminals marked Zn 1. The M1TWI has 3 microphone zones (inputs) and 3 triggers. During a listen-in session the operator can choose to listen to ALL zones or select a specific zone. See operation instructions. Each zone is capable of handling up to 4 microphones.
4. Connect the microphone Zn 1 trigger terminal T1 to Output 7 (Tan wire) on the M1 J16 connector. Plug the J16 cable into the M1. **NOTE: Outputs 7, 8, and 9 automatically become assigned as the triggers for Microphone zones 1, 2, and 3 whenever the "Two Way Listen-in" option is enabled in the M1 Installer Programming. See Menu 07-Global System Definitions, option 31.**
5. Connect speaker wires directly to Output 1 on the M1. **NOTE: The maximum number of speakers is based on the total load (resistance/impedence). Output 1 should never be loaded below 2 Ohms total load. Typically that allows up to four 8 Ohm speakers to be paralleled.**
6. Connect the Aud, +, and - terminals to the Brown/White, White/Blue, and Blue/White wires of the 8 conductor J7 Cable. Plug the J7 cable into the M1 connector marked J7 "Audio Network Interface". The M1TWI is now powered up and ready to test.



Hookup Diagram for ELK-TWI Listen-in with 2 Mic/Speaker Zones and 1 Microphone only Zone