



ELK Magic Voice Series

ELK-MV120
32 Channel Recordable Voice Annunciator
Installation Instructions



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L384 rev 1.4

ELK Magic Voice Series

32 Channel Recordable Voice Annunciator

Features

- Controlled from the ELK Magic Module (ELK-MM443) or compatible controllers.
- 32 individually addressable message addresses.
- 120 seconds maximum record time on the ELK-MV120
- Any message can be any length up to the maximum record time.
- 31 Voice units may be networked on the Magic Module RS-485 Data Bus
- Built-in microphone or download a computer wave file using the ELK-129 computer interface.
- Record and playback controlled from a PC computer.
- Adjustable volume control.
- Output for direct connection to audio amplifiers.
- 24-Watt built-in audio amplifier.
- Two speaker connections

Specifications

- Operating Voltage: 10.25 to 15 Volts DC, well regulated. Note: Low cost plug in DC power supplies may not work due to AC hum present on the power supply. Recommended: Elk-624 Power Supply with ELK-1240 standby battery or ELK-P1216 regulated wall plug-in power supply.
- Temperature: 20 degrees F. to 122 degrees F, non-condensing. Contact the factory if to be used in extended temperature environments.
- Maximum current draw at full volume: 1.25 amps. Adjust volume for desired maximum current draw.
- Maximum output speaker load: 4 ohms.
- Data Bus: RS-485, max bus length: 4000 feet w/22 AWG wire, Two data: A&B, Two power: +12VDC & NEG.
- Type 4 Magic Module, Addressed from 1 to 31. Address 0 = global non-responding address.

Hookup

Power Supply

The Magic Voice may be powered from any one of three different locations on the printed circuit board.

1. **J3 Power Connector** – Plug in a well-regulated +12VDC power supply into the connector. The center conductor is Positive. 2.1mm ID X 5.5mm OD Female plug on the power supply.
2. **Terminals 1 & 4** – Terminal 1 is +12VDC and terminal 4 is Negative.
3. **Connector J2** – Pin 4 is +12VDC and pin 1 is Negative.

Data Bus Connection

The RS-485 Data Bus may be connected in two locations:

1. **Terminals 2 & 3** – Terminal 2 is “A” side of the data bus. Terminal 3 is “B” side of the data bus.
2. **Connector J2** – Pin 3 is “A” side of the data bus. Pin 2 is “B” side of the data bus.

Note: Data Bus “A” must connect to Data Bus “A” on other modules and Data Bus “B” must connect to Data Bus “B” on other modules for proper operation of the Data Bus.

Speaker Connection – Two 8 ohm speaker connections are available at terminals W1 & W2 SPKR1 and W1 & W2 SPKR2. When an 8-ohm speaker is connected to both terminals, an effective 4-ohm speaker load is placed on the amplifier. The speakers may also be wired in series to add more speakers to the system. To connect the Magic Voice to a low level line input going into another audio amplifier, turn the volume all the way down, then turn it up until the audio level into the other amplifier is satisfactory.

Note: Maximum speaker load on the audio amplifier is 4 ohms.

Jumper Selection – There are two sets of jumpers that should be configured before use of the Magic Voice.

1. **MIC, JP1 – Microphone enable** – If the on board microphone is to be used to record messages; the jumper at JP1 (labeled "MIC") must be set to the "IN" position (IN Circuit). If the ELK-129 Computer Interface is to be used to record messages, the jumper at JP1 should be in the "OUT" position (OUT of Circuit).
2. **Data Bus Address Jumpers** – Each voice module must be set to its own individual data bus address. The address is set with 5 jumpers. There are two settings, 0 or 1, for each jumper. When the jumper is in the 0 position, its value is equal to 0. When it is set to the 1 position, its value is shown above the jumper: 1, 2, 4, 8, 16. Add up the jumpers in the 1 position to see the data bus address setting. Example: jumper 1 is set to the 1 position; jumper 4 is set to the 1 position. Add the values: 1 + 4 = 5, The data bus address = 5. If a jumper is missing, its value will be 1.

-Play Active Solder Pad – The solder connection is pulled to ground by a transistor when the Magic Voice is playing a message. It may be connected to an ELK-924 Relay to trigger other equipment. The maximum current draw at the solder pad is 50 milliamps.

Audio Tap Solder Pad – A low level audio signal may be taken to another audio amplifier from this solder pad.

RECORD Button – When the Magic Voice has been given a record command from the computer; the record button should be pressed and held during the recording session. (If the record button is not pressed within 45 seconds, the Magic Voice will return to normal operating mode and cancel the record request). Speak clearly into the on board microphone. When the button is released, the message just recorded will be played. Pressing the RECORD Button without a record command issued from the computer will play the last message recorded or the first message if no recording has taken place.

Status LED - **blinking** – The status LED blinks when the Magic Voice is in normal operation.
On continuous – The status LED will be ON continuous when a record command is received from the PC computer. The status LED will return to blinking within 45 seconds if the record button is not pressed on the Magic Voice.

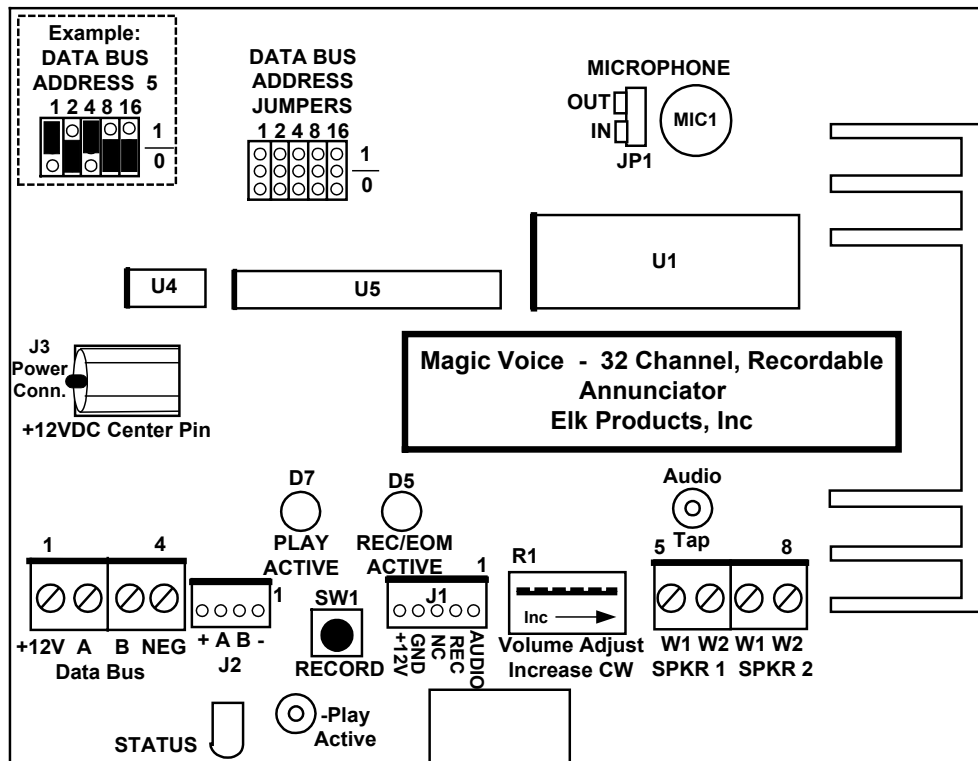


Figure 1. Magic Voice Annunciator Diagram.

The ELK Magic Voice is recorded at the factory with the following list of phrases. Your ELK Magic Module (ELK-MM443) program can combine these phrases to form desired sentences. For an example, “back door not secure”.

In most cases you will record a custom message or messages. You do this by using the Magic Module Voice program. From the Voice Play/Record screen, select the message start and stop value, and click the yellow record box. Then press and hold the record button on the Magic Voice and speak into the onboard microphone. Release the record button when you finish your message. More messages can be recorded by repeating the above procedure.

A message of 3.75 seconds or less will occupy one location. Message locations (except for location 32) can overrun and use the following location(s). This allows messages of greater lengths, but it will also decrease the number of available messages. Playback of a message ends when it reaches the point that the record button was released.

Factory Recorded	User Recorded
1. Alarm	_____
2. Activated	_____
3. System is Armed	_____
4. Not Secure	_____
5. Exit Expires in 10 Seconds	_____
6. Please Enter Your Code to Disarm	_____
7. Then Call the Monitoring Station	_____
8. Exit Immediately	_____
9. AC Power Loss	_____
10. Energy Saving Features	_____
11. Main Entry	_____
12. Hallway	_____
13. Living Room	_____
14. Family Room	_____
15. Dining Room	_____
16. Kitchen	_____
17. Master Bedroom	_____
18. Bedroom 2	_____
19. Bedroom 3	_____
20. Bedroom 4	_____
21. Upstairs	_____
22. Downstairs	_____
23. Basement	_____
24. Garage	_____
25. Door	_____
26. Window	_____
27. Front	_____
28. Back	_____
29. Side	_____
30. Sliding	_____
31. Motion Detector	_____
32. Glass Break Detector	_____

The file ELK-MV120.VOC lists the names and location of each message. In order to view this file:

1. Start the MagicModule.exe program.
2. Click the Voice button to access the Voice Play/Record window.
3. Click File, Open, Look in Magic Module, File Name: ELK-MV120.VOC.
4. Click Open.

ELK-129 Hookup

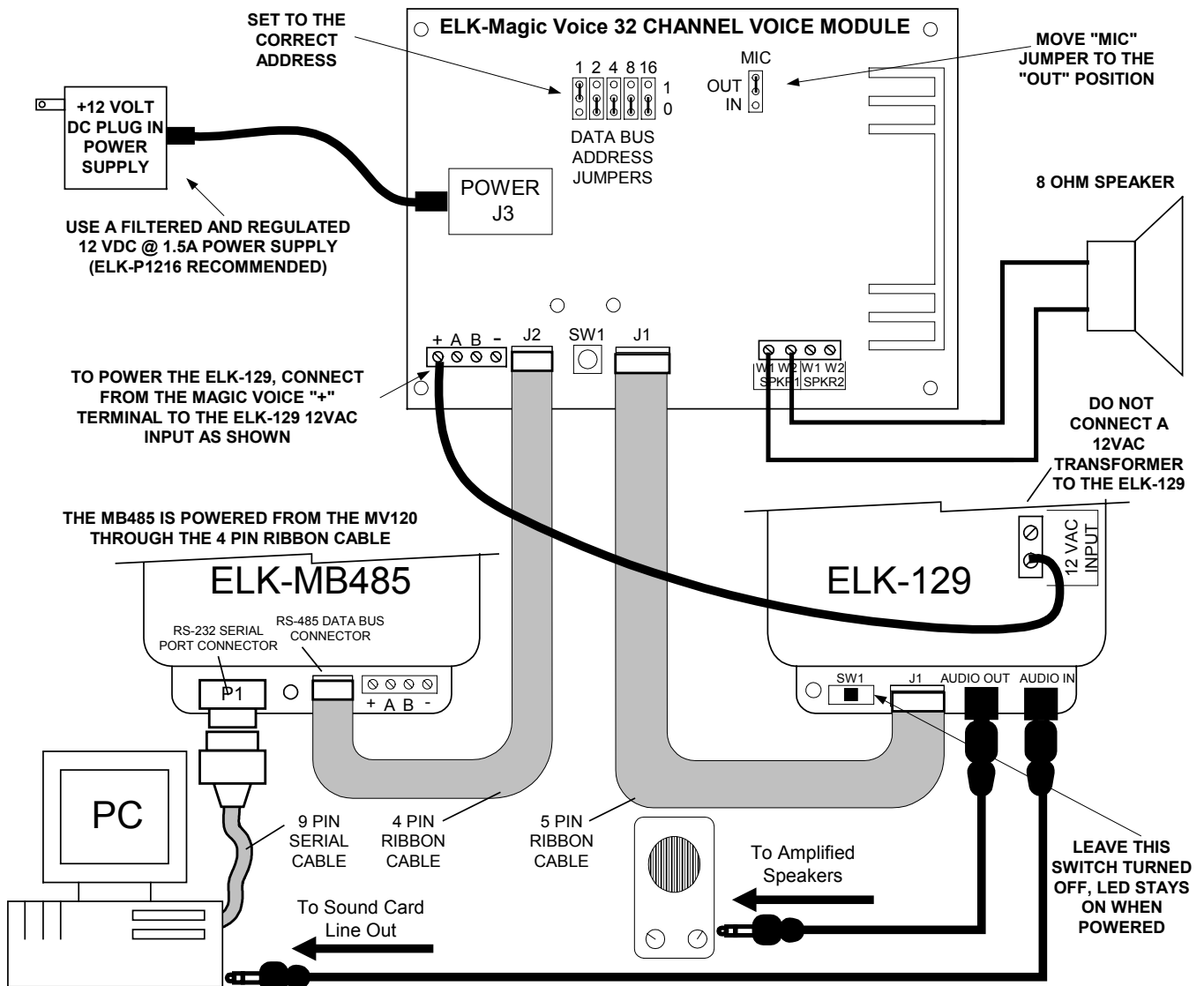
The ELK-129 Computer Interface enables the connection of the Magic Voice Recordable Annunciator to a PC sound card for downloading WAV or other audio files to the Magic Voice. Reference the ELK-129 for further information on the level settings of the PC sound card.

Cool Edit audio editing software is included on the ELK-MK400S Development CD. This software configures the audio files for downloading into the Magic Voice.

The ELK-129 may also be plugged into tape recorders or stereo systems, but the record button will have to be pressed on the Magic Voice and the record command issued from the computer to start recording.

Note: Connect one of the AC Transformer inputs on the ELK-129 to terminal 1 on the Magic Voice to provide +12VDC to the internal circuitry on the ELK-129.

Figure 2. Recording Hookup for Magic Voice to ELK-129



Cool Edit is a Trade Mark of Syntrellium Software Corporation

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Elk Products, Inc. ("Manufacturer") warrants to the original purchaser (the "Customer") that the products it manufactures ("Product") shall be free from defects in material and workmanship at time of shipment. Manufacturer's obligations under this Limited Warranty shall be limited to repairing or replacing, at its option, free of charge, any product returned to Manufacturer freight prepaid. Manufacturer shall have no obligation under this Limited Warranty or otherwise if (1) the Product has been damaged by negligence, accident, mishandling, lightning or flood, or other Acts of God, (2) the Product has not been operated in accordance with its operating instructions, (3) the Product has been altered or repaired by anyone outside Manufacturer's authorized facilities (4) adaptations or accessories have been made or attached to the Product which, in Manufacturer's sole determination, have adversely affected its performance, safety or reliability. Products such as batteries and fused transformers have their own warranties, and are not included in this Limited Warranty.

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This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1) Reorient or relocate the receiving antenna. 2) Increase the separation between the equipment and receiver. 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. 4) Consult the dealer or an experienced radio/TV technician for help.

For more information contact your local Distributor or:

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