1. INTRODUCTION

The SP-3 speech processor is an advanced electronic record/playback module for short voice messages, up to 20 seconds long. Designed for manual recording and electronically triggered playback, the SP-3 provides 1 Watt of audio output.

The primary application of the SP-3 is an inexpensive, easy-to-install automatic announcer, triggered by motion detectors or any type of momentary switch. The module is suitable for automatic transmission of verbal warnings, announcements, guidance and advertisements in elevators, stairwells, corridors, exhibitions, etc.

A miniature microphone and an easily accessible RECORD pushbutton are included in the module. Loudspeaker output terminals are provided for direct connection to an external loudspeaker. An audio input header permits the installer to choose (by the corresponding jumper, as shown in Figure 1) between recording a message with the internal microphone (INT) and recording a message from an external audio source (EXT).

When triggered by a short pulse, the speech processor plays the recorded message once and then stops. With continuous triggering, the message is repeated over and over again, until the trigger voltage is removed.

The module is suitable for mounting within a host system cabinet or inside the loudspeaker housing. The SP-3 may be supplied mounted in a small plastic cabinet with a built-in 63 mm / 1 W (2-1/2" / 1W) loudspeaker.

Operating power is drawn from the host system or from an external 12 VDC supply.

2. SPECIFICATIONS

<table>
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<tr>
<th>Specification</th>
<th>Details</th>
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<tr>
<td>Maximum Recording Duration</td>
<td>20 seconds</td>
</tr>
<tr>
<td>Memory Type</td>
<td>EEPROM (no need for battery backup)</td>
</tr>
<tr>
<td>Triggering Methods:</td>
<td>Positive voltage applied to the ST+ terminal.</td>
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<tr>
<td></td>
<td>Negative (ground) potential applied to the ST– terminal.</td>
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<td></td>
<td>A short circuit imposed across the ST pins on the PCB.</td>
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<tr>
<td>External Audio Input Level</td>
<td>100 mV p-p maximum.</td>
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<tr>
<td>External Audio Input Impedance</td>
<td>12 kΩ</td>
</tr>
<tr>
<td>Supply Voltage</td>
<td>12 VDC ±15%</td>
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<tr>
<td>Operating Temperatures</td>
<td>0°C to 50°C (32°F to 122°F)</td>
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3. INSTALLATION

Use the 3 mounting holes of the SP-3 (Figure 1). Remember to leave adequate clearance between the bottom of the PCB and any metal surface.

3.1 Triggering with a Motion Detector’s Normally Closed Switch

To operate the speech processor as an automatic announcer triggered with a motion detector’s N.C. terminals or with any momentary N.C. switch, proceed as follows:

A. Connect an 8-ohm / 1 Watt loudspeaker across the SIG and 12V (–) terminals.
B. Connect the motion detector’s N.C. terminals or the momentary N.C. switch between the voice processor’s ST+ and 12V (–) terminals.
C. Use the jumper provided with the unit to short the two ST pins permanently together (these pins are clearly identified in Figure 1).
D. Connect the 12 VDC supply to the 12V (+) and (–) terminals, taking care not to reverse the positive and negative leads.
E. Record a message as explained in Section 4.

3.2 Triggering with a Normally Open Switch

To operate the speech processor as an automatic announcer triggered with any momentary N.O. switch, proceed as follows:

A. Connect an 8Ω / 1W loudspeaker across the SIG and 12V (–) terminals.
B. Connect the momentary N.O. switch between the speech processor ST+ and 12V (+) terminals. A second method is to connect the N.O. switch between the ST– and 12V (–) terminals. A third method is to connect the N.O. switch across the two pins of the ST header on the printed circuit board.
C. Connect the 12 VDC supply to the 12V (+) and (–) terminals, taking care not to reverse the positive and negative leads.
D. Make sure that the jumper is removed from the two ST pins. A good practice is to mount the jumper on a single pin, to prevent it from getting lost.
E. Record a message as explained in Section 4.
Note: Make sure that a jumper is mounted across the two INT pins of the audio input header. If you intend to record from an external audio source, remove the INT jumper and connect the external audio source across the EXT (+) and (–) pins.

A. Complete all connections as explained in Section 3 and power up the system.

B. Push and hold down the REC button, and after approximately one second start to speak, at normal voice level at the distance about 25 cm (10") from the microphone. When through, release the pushbutton. Remember that message duration is limited to 20 seconds.

Note: It is advisable to make the recording in a quiet environment. Turn off nearby radio receivers and noisy machines, and ask people in your immediate vicinity to keep silent while you record. If the background noise is too high, speak closer to the microphone.

WARRANTY

Visonic Limited (the "Manufacturer") warrants this product only (the "Product") to the original purchaser only (the "Purchaser") against defective workmanship and materials under normal use of the Product for a period of twelve (12) months from the date of shipment by the Manufacturer.

This Warranty is absolutely unconditional upon the Product having been properly installed, maintained and operated under conditions of normal use in accordance with the Manufacturer’s recommended installation and operation instructions. Products which have become defective for any other reason, according to the Manufacturer’s discretion, such as improper installation, failure to follow recommended installation and operational instructions, neglect, willful damage, misuse or vandalism, accidental damage, alteration or tampering, or repair by anyone other than the manufacturer, are not covered by this Warranty.

The Manufacturer does not represent that this Product may not be compromised and/or circumvented or that the Product will prevent any death and/or personal injury and/or damage to property from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. The Manufacturer, its directors and/or employees and/or representatives are not liable to anyone for any consequential or incidental damages for the Products. This Warranty is exclusive to the original Purchaser and is not assignable.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products. This warranty is exclusive to the original Purchaser and is not assignable.

This Warranty is in addition to and does not affect your legal rights. Any provision in this warranty which is contrary to the Law in the state or country where the Product is supplied shall not apply.

When accepting the delivery of the Product, the Purchaser agrees to the said conditions of sale and warranty and he recognizes having been informed of.

If you exceed the 20 second limit, the last part of the message will overwrite its first part, making the message incoherent.

To initiate playback (see step D below) to verify that this has not occurred. If the message proves too long, rephrase it to reduce its duration and record again.

D. To initiate playback for testing purposes, momentarily short together the two ST pins on the PCB. The message will be played back once. Repetitive playback will result if the pins are kept shorted together.

E. The speech processor is now ready for regular service, and will play back the last recorded message whenever triggered.

However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty, THE MANUFACTURER’S MAXIMUM LIABILITY (IF ANY) SHALL NOT IN ANY CASE EXCEED THE PURCHASE PRICE OF THE PRODUCT, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.

The Manufacturer shall be under no liability whatsoever arising out of the corruption and/or malfunctioning of any telecommunication or electronic equipment or any programs.

The Manufacturer’s obligations under this Warranty are limited solely to repair and/or replace at the Manufacturer’s discretion any Product or part thereof that may prove defective. Any repair and/or replacement shall not extend the original Warranty period. The Manufacturer shall not be responsible for dismantling and/or reinstallation costs. To exercise this Warranty the Product must be returned to the Manufacturer freight pre-paid and insured. All freight and insurance costs are the responsibility of the Purchaser and are not included in this Warranty.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products. This Warranty is exclusive to the original Purchaser and is not assignable.

For information regarding the recycling of this product you must contact the company from which you originally purchased it. If you are discarding this product and not returning it for repair then you must ensure that it is returned as identified by your supplier. This product is not to be thrown away with everyday waste.