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## Installation & Wiring Instructions SD-401a Recordable Siren Driver

The SD-401a is a siren driver with 2 channels, each with its own 15 second recordable message. Alternatively, a single message of up to 30 seconds may be recorded on channel 1 (see note on BULK ERASE in Figure 1). Burglar and Fire siren tones may be enabled via jumper **JP3** if the SD-401a is to be used as a burg / fire siren. When enabled, the siren tones alternate with the recorded messages. Channel 1 generates a burglar yelp siren; channel 2 generates a temporal-coded fire buzzer. Separate volume controls are provided for **VOICE VOLUME (R11)** and **SIREN VOLUME (R9)**.

### INSTALLATION

Install the board securely in an enclosed area (typically a control panel enclosure) using the included double-sided tape.

### POWER CONNECTIONS (COMMON FOR ALL INSTALLATIONS)

Connect the power terminals (+12V and NEG) to a 12V DC source. Refer to **Figure 1**. Power may be provided by the control panel or power supply, such as the Stealth PS-1224 (be sure to connect a common ground to control panel).

### WIRING CONNECTIONS – SINGLE OUTPUT CONTROL PANEL

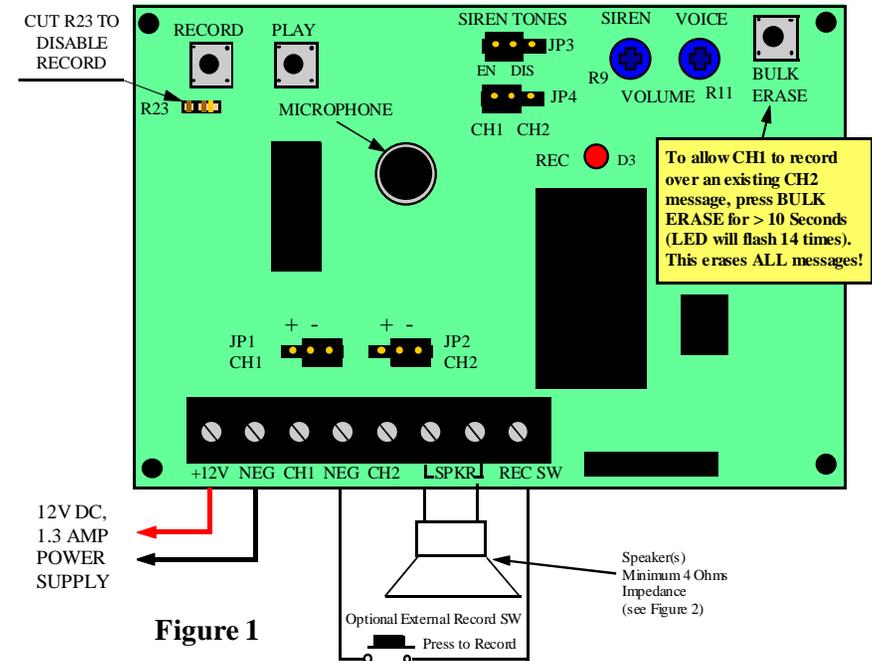
1. If your control panel has only one output (steady = burg, pulsed = fire) connect this output to channel 1 (**CH1**). The SD-401a will differentiate between the signals. Channel 1's message will be played on receipt of a steady signal. Channel 2's message will be played on receipt of a pulsed signal.
2. Set **JP1** to match the control panel's output type: "+" for active-high output, or "-" for active-low output.
3. If jumper **JP3** is set to **ENABLE**, siren tones will sound between each recorded message. **NOTE: if siren tones are not enabled, be sure to set jumper JP4 to CH2 in order to enable steady / pulse input detection.**

### WIRING CONNECTIONS – DUAL OUTPUT CONTROL PANEL

1. If your control panel has two outputs (one for burg and one for fire) connect the burg output to channel 1 (**CH1**). Connect the fire output to channel 2 (**CH2**).
2. Set **JP1 (CH1)** and **JP2 (CH2)** to match the control panel's output type: "+" for active-high output, or "-" for active-low output.
3. If jumper **JP3** is set to **ENABLE**, siren tones will sound between each recorded message. **NOTE: if siren tones are not enabled, be sure to set jumper JP4 to CH1 in order to disable steady / pulse input detection and make CH1 instant.**

### RECORDING MESSAGES

1. **Channel 1:** Make sure **JP4** is set to **CH1**. Press the **RECORD** switch and speak your message. To hear your message, press the **PLAY** switch.
2. **Channel 2:** Make sure **JP4** is set to **CH2**. Press the **RECORD** switch and speak your message. To hear your message, press the **PLAY** switch.



**Figure 1**

### RECORDING HINTS

1. The microphone is very sensitive. Speak from a distance of 18 to 24 inches, making sure there is no background noise.
2. If the **RECORD** switch causes audible pops in the recordings, an external switch (or simply two pieces of wire) may be used between the **REC SW** and **NEG** terminals to activate record mode. See **Figure 1**.

## RECORDING HINTS (continued)

- Each message can be up to 15 seconds long.
- One long message (up to 30 seconds) may be recorded on channel 1. Any messages already recorded on channel 2 must be erased by using the BULK ERASE switch in order for channel 1 to use all memory locations.
- Recording may be permanently disabled by cutting resistor **R23**. This prevents accidental erasure in the field during the installation process. To restore recording capabilities, R23 must be re-soldered or a wire jumper may be soldered in its place.

## SPEAKER CONNECTIONS

Connect a speaker or speaker(s) to the terminals marked SPKR. Minimum impedance is 4 Ohms. Some possible configurations of multiple speakers are shown here.

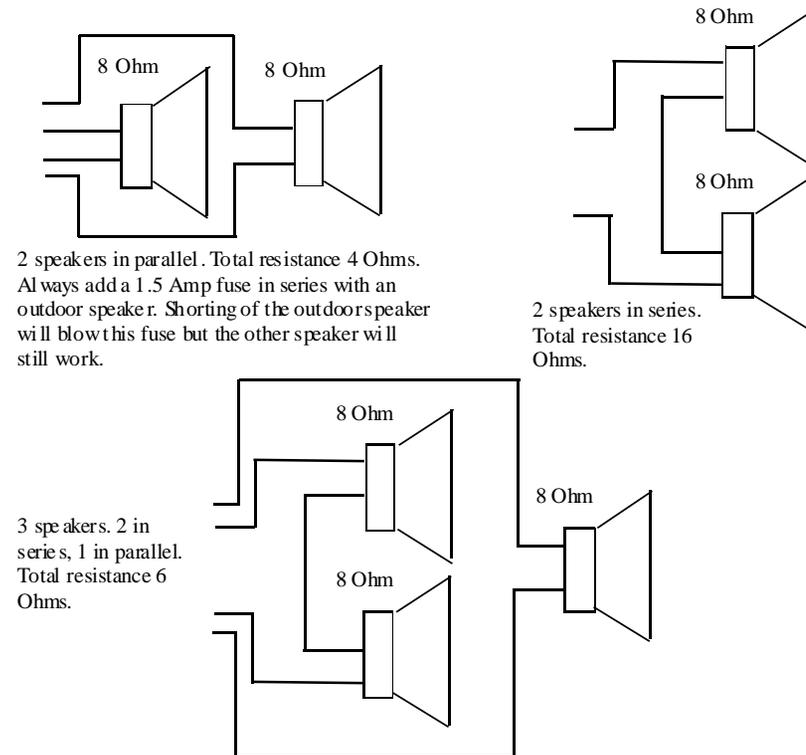
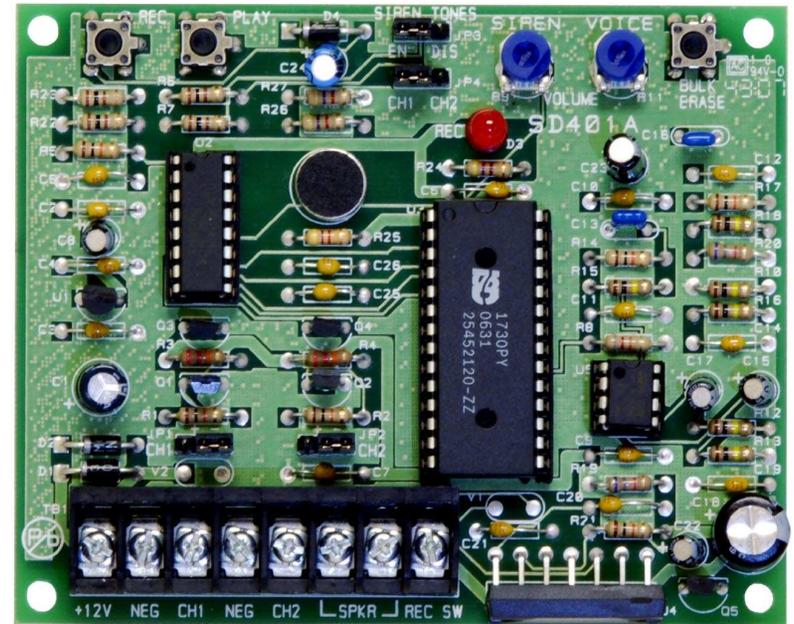


Figure 2

**Note:** The quality of the voice reproduction will be dependent on the quality of the speaker.



## SD-401a Recordable Voice / Siren Module

### SPECIFICATIONS

**Channels:** Two

**Siren Tones:** Optional - burglar yelp (CH1), temporal coded fire buzzer (CH2)

**Pulse / Steady Auto-Detect:** Yes, CH1

**Recording Time:** 15-Seconds max per channel or 30 Seconds max (CH1 only)

**Input Triggers:** Positive (active-high) or Negative (active-low)

**Input power:** 12V DC

**Current Draw:** < 10mA in idle condition, 1.03Amps driving an 8 Ohm speaker

**Output:** 24 Watts, 115dB @ 6 feet

**Impedance:** Use with a 4 Ohm or greater speaker.