

APPLICATION BRIEF 11 — SIMPLE, MULTIPLE MESSAGE ISD1400 APPLICATION WITH EOM DELETE AND ADDRESS RESET

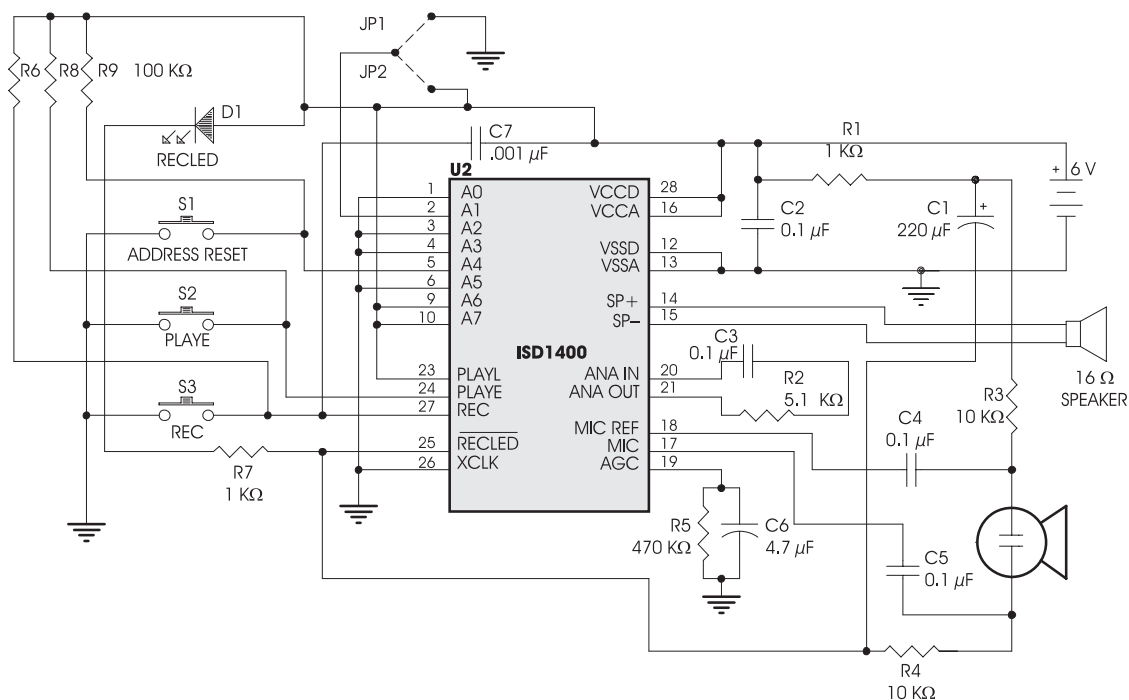
The ISD1100, the ISD1200, and the ISD1400 series include the A1 EOM Delete and A4 Consecutive Addressing Operational Modes found in the original ISD1000A device series. These modes allow the designer to produce a low cost product that can store multiple random length messages and play them back individually or all at once. When the Delete EOM Operational Mode is activated, Playback starts at the beginning of memory and continues through all the messages just recorded without stopping. When Delete EOM is not activated, the messages are played back individually. The circuit diagram in Figure 13 and circuit explanation demonstrate these two applications.

CIRCUIT OPERATION – DELETE EOM ACTIVATED

The circuit is constructed as shown with JP2 installed. This straps A1 to a HIGH. Additionally, A6 and A7 are held HIGH to put the ISD1400 in Operational Mode. Also, R9 holds A4 HIGH unless the S1 push-button switch (Address Reset) is pressed.

Messages are recorded into the ISD1400 individually by pressing and holding the REC push-button for the length of the recording. The REC LED will illuminate during the recording. Additional messages may be recorded until the REC LED turns off. This indicates the device memory is full. The PLAYE push-button should not be pressed during this sequence. When the recording sequence is complete, a single momentary press of the PLAYE push-button will playback all the messages stored during the preceding Record sequence. A record sequence is ended by a Playback operation, even if the memory is not full.

Figure 13: Multiple Message, EOM Delete, and Address Reset Application



NOTE: Install JP2 for Delete EOM, install JP1 for normal operation.

To start this playback sequence over, momentarily press the ADDRESS RESET push-button while the device is not playing back. This resets the internal address counter. The next press of PLAYE will start playback from the beginning of memory.

CIRCUIT OPERATION - DELETE EOM NOT ACTIVATED

The circuit is built exactly as the same with JP1 in and JP2 removed. The Delete EOM Operational Mode is now disabled.

The recording sequence is performed as before. When the record sequence is complete, a single momentary press of the PLAYE push button will play the first message stored. A second press of the PLAYE push-button will play the second message stored. Messages will continue to playback in sequence, one message for each press of the PLAYE push-button.

As before, a momentary press of the ADDRESS RESET push-button will reset the ISD1400's internal address counter to enable the playback of the first message in the sequence.