

DIGICORD II

DIGITAL AUDIO RECORDER

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DESCRIPTION

DIGICORD is a digital audio recording system for utility "non-critical" applications.. DIGICORD stores audio messages with a bandwidth of either 5 or 8 kHz. Up to 16 messages can be recorded, for random-access playback in any sequence. DigiCord can be programmed to play each message once only or continuously. All functions can be remotely controlled.

CONNECTING TO AC POWER; INSTALLING THE BACKUP BATTERY

Plug DigiCord's AC adaptor into an unswitched AC outlet. DigiCord must be powered at all times. If power is disconnected, all messages stored in DigiCord will be lost unless the backup battery has been installed. To install the battery, remove the main panel from the case by removing the four corner screws. Install a 9-volt alkaline battery in the holder provided. The battery will maintain DigiCord's memory during a power failure for up to 10 hours.

AUDIO INPUTS AND OUTPUTS

Audio connections to DigiCord are made via the 1/4" phone jacks. To record from a microphone, plug the mic into the MIC jack. This input is unbalanced, and will accept any LO-Z mic having an output level of about -50 dBm.

To record from a tape deck or studio, use the LINE input jack. This input is balanced. Use a 'stereo' 1/4" phone plug; the tip and ring are the (+) and (-) inputs. When recording from an unbalanced source, use a 'mono' 1/4" phone plug; this will automatically short the (-) input to ground. DigiCord can accommodate line input levels from -10 dBm to +8 dBm. The LEVEL adjustment is critical! It must be set according to the input audio level. Use the guidelines below for initial setting:

+8 dBm: full CCW +4 dBm: 8 o'clock 0 dBm: 9 o'clock -5 dBm: 12 o'clock -10 dBm: full CW *

*Use the FULL CW setting when dubbing from a 'consumer' tape deck or audio mixer.

The DigiCord audio output is via the balanced OUTPUT jack. Use a 'stereo' 1/4" plug only. The tip and ring are the (+) and (-) outputs. WARNING: Never use a 'mono' plug! If an unbalanced output is required, use a stereo plug, connecting to the tip and sleeve; leave the ring unconnected. The DigiCord's output level can be set using the OUTPUT LEVEL adjustment.

RECORDING MESSAGES

DigiCord can record up to 8 messages, or 16 messages if Remote Message Selection is used. Messages must be recorded in sequence. To begin, reset the unit by moving the MESSAGE SELECT switch to #2, then back to #1. Now set the PLAY/RECORD switch to RECORD. The red LED will light, showing that DigiCord is recording. When the first message has been loaded, set the PLAY/RECORD switch back to PLAY. To check the message, push the PLAY button; the message will play back. (To re-record message #1, repeat above.) To record the next message, change the MESSAGE SELECT switch to #2 and put the unit into RECORD. Repeat this process until all messages have been recorded.

To re-record any message, first 'cue' the unit by playing the message that preceeds the one to be re-recorded. For example, to re-record message #5, first select message #4. Play the message. When it's over, select message #5, and re-record message #5. NOTE: When any message is re-recorded, all messages that follow should also be re-recorded.

PLAYING MESSAGES

To play any message, select the message using the MESSAGE SELECT switch. Push the PLAY button to begin playback. The SINGLE/REPEAT switch selects the playback mode: either once-only or continuous playback may be selected.

REMOTE CONTROL

DigiCord can be remotely controlled via the 25-pin 'D' connector. Refer to the remote control schematic for wiring details. Playback can be started or stopped using a momentary switch closure; the Record mode requires a maintained closure.

REMOTE MESSAGE SELECTION

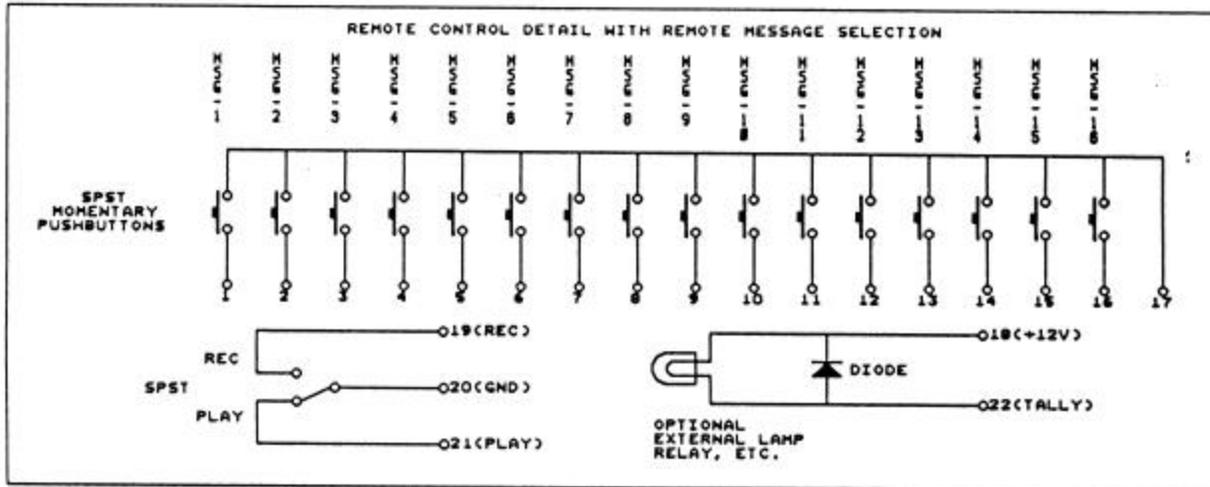
Remote Message Selection is used to access up to 16 messages for recording and playback. To use Remote Message Selection, the MESSAGE 8 ENABLE JUMPER must be removed from the main circuitboard. (See component layout on other side.) After removing this jumper, set the MESSAGE SELECT switch to the position marked "8/REMOTE". By using a momentary pushbutton for each message, messages can be direct-accessed for playback in any order. Note: To record using this feature, the selected message button must be held during recording.

CONTROL OUTPUTS

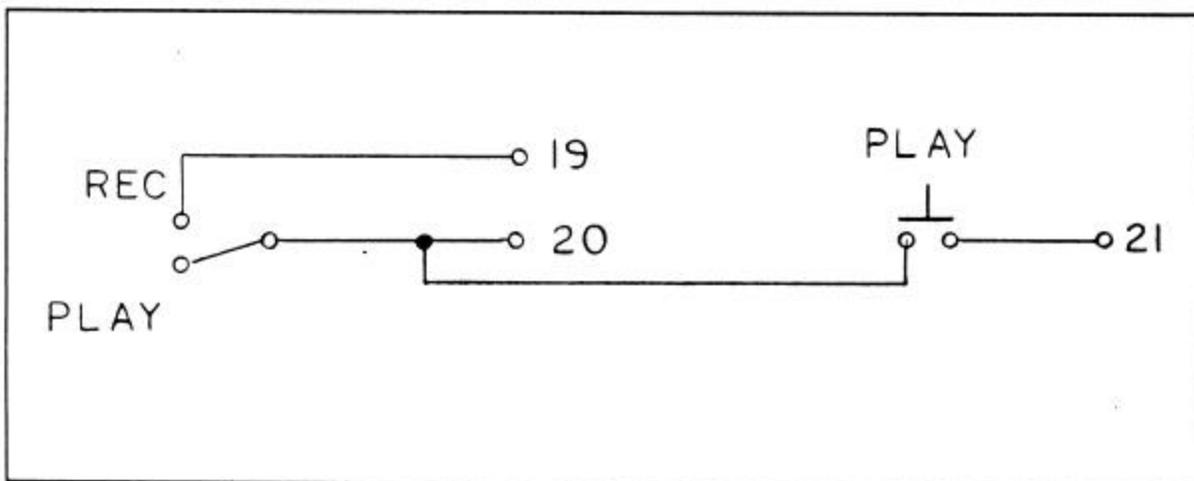
DigiCord provides two control outputs: "TALLY" and "EOM". The TALLY output provides a maintained logic-low when the unit is playing or recording. The TALLY output can be used to operate an external light or relay. The "EOM" output provides a momentary closure (via an opto-isolator) when a message has finished playing. This is suitable for triggering other equipment at the end of message playback. Observe polarity when connecting to the opto-isolator outputs.

DigiCord Remote Control

THE REMOTE CONTROL DETAIL BELOW PERMITS REMOTE RECORD AND PLAYBACK OF ANY MESSAGE. TO USE THIS SYSTEM, THE "MESSAGE 8 ENABLE JUMPER" (J7 ON MAIN CIRCUIT BOARD) MUST BE **REMOVED**, AND THE FRONT PANEL "MESSAGE SELECT" SWITCH MUST BE SET TO "8/REMOTE". TO RECORD, SET THE TOGGLE SWITCH TO "RECORD" AND HOLD SELECTED MESSAGE BUTTON FOR DURATION OF RECORDING. TO PLAY, SWITCH TO "PLAY", AND MOMENTARILY PRESS MESSAGE BUTTON.



FOR SIMPLE REMOTE OPERATION (NOT REQUIRING MESSAGE SELECTION), USE DIAGRAM BELOW. THE J7 JUMPER SHOULD **NOT** BE REMOVED; THE MESSAGE SELECT SWITCH ON FRONT PANEL WILL STILL BE ACTIVE. SELECT THE MESSAGE TO BE RECORDED (OR PLAYED). SWITCH TOGGLE SWITCH TO "RECORD" FOR DURATION OF RECORDING, THEN SWITCH BACK TO "PLAY". MOMENTARILY PRESS "PLAY" BUTTON TO START PLAYBACK.



IMPORTANT: FOR "NEWS DELAY" AND OTHER APPLICATIONS WHERE ONE MESSAGE WILL BE PERIODICALLY RE-RECORDED VIA THE ABOVE REMOTE CONTROL SYSTEM, THE "RESET" JUMPER (JP4) ON THE DIGITAL STORAGE PC BOARD SHOULD BE SET TO "ON". SET THE "MESSAGE SELECT" SWITCH TO "1".