

# DIGISTOR

*Digital Message Storage System*

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## DESCRIPTION

DIGISTOR is a digital audio message storage device. When connected to a telephone line, DigiStor will automatically answer the line and play the message to the caller. DigiStor can also be used for "message-on-hold". It can record and play audio for any utility application, with all functions remotely controllable via external contact closures. An internal 9-volt battery may be installed to prevent memory loss in the event of an AC power failure.

## CONNECTING TO AC POWER; INSTALLING THE BACKUP BATTERY

Plug DigiStor into an unswitched AC outlet. DigiStor should be plugged into to AC power at all times. If the AC power is disconnected, the audio stored in DigiStor's memory will be lost unless the 9-volt backup-battery has been installed. To install the battery, remove the main panel from the case by unscrewing the four corner screws. Install a 9-volt alkaline battery in the holder provided. The battery will "hold" the memory for about 24 hours after AC power has been disconnected. **IMPORTANT:** In high RF or static areas, connect a ground wire to DigiStor's GND terminal.

## RECORDING A MESSAGE

DigiStor can record from a LO-Z microphone or from a tape deck, studio, or other "line level" audio source. To record from a mic, set the LEVEL trimmer fully CW. For best results, use a 'voice grade' or communications mic, such as a Shure 575-SB. Plug the microphone into the MIC input jack on the DigiStor. (The MIC input is unbalanced.) To record from a cassette deck or other "line level" source, plug the source into the LINE input jack. This input is also unbalanced, and will accept any input level from +8 to -10 dBm. The LEVEL trimmer (above the LINE jack) must be set according to the line audio input level. Use these guidelines to determine in initial setting for the LEVEL adjustment:

+8 dBm: full CCW      +4 dBm: 8 o'clock      0 dBm: 9 o'clock      -5 dBm: 12 o'clock      -10 dBm: 2 o'clock  
Note: "Consumer" tape decks have an output level of -10 dbm, and will require a setting of 2 o'clock or fully CW.

To record a message, set the PLAY/RECORD switch to RECORD and begin speaking into the mic. The PLAY LED will light, showing that the unit is recording. At the end of the message, switch back to the PLAY mode. The message is now in DigiStor's memory. To check the message, plug a pair of headphones or a speaker into the MONITOR jack. Press the PLAY TEST button; the unit will play the message once. Note: When using headphones or a high quality speaker, it is normal to hear some background noise in the audio. This noise will not be nearly as noticeable when the message is heard via phone lines.

**RECORDING LEVEL IS IMPORTANT!** It is important to record your message at an optimum level. Too high a level will produce distortion; too low will result in excessive noise. Experiment until the message is clear and easily understood.

## USING DIGISTOR FOR AUTO-ANSWER/MESSAGE PLAYBACK

In this mode, DigiStor will automatically answer a phone line and play the message to the caller. Use the modular cord supplied to connect to the phone line; connect the RED and GREEN wires to the DigiStor's LINE terminals. Polarity is unimportant. The yellow and black wires should be cut off. Set the SINGLE/CONT. switch according to the desired mode of operation: in the SINGLE mode, DigiStor will play the message once, then hang up. In the CONTinuous mode, the message will be repeated continuously until the caller hangs up. This mode can be used only on phone systems that have "CPC" (calling party control).

## USING DIGISTOR FOR "MESSAGE ON HOLD"

In this mode, DigiStor plays the message continuously, feeding the "Music-On-Hold" input of a telephone system. To use in this mode, the REMOTE ENABLE JUMPER (J4) in the corner of the main circuit board must be installed. Please see the REMOTE CONTROL section below. After installing the jumper, connect DigiStor's LINE terminals to the Music-On-Hold audio input of the phone system. Do not connect directly to phone line. Set the SINGLE/CONT switch to CONT. Momentarily jump the DigiStor START terminal to GND. DigiStor will begin continuous message playback. To stop playback, momentarily jump the STOP terminal to GND.

## **REMOTE CONTROL**

All DigiStor functions can be remotely controlled. To use the remote control terminals, install the REMOTE ENABLE JUMPER (J4) on the DigiStor main circuit board. (See parts layout.) A momentary closure between either the START or STOP and the GND terminals will activate these functions. A maintained closure of at least 1 second between the RECORD and GND terminals will put DigiStor in the Record mode. The remote ON terminal supplies a ground closure (open collector) when the unit is operating; this can be used to operate a remote LED, relay, or digital counter (100 ma max).

## **SAMPLE RATE VS RECORDING TIME**

DigiStor's maximum recording time is indicated on the front panel of the unit. On "Standard" and "XM" versions, the recording time can be doubled, at the expense of somewhat reduced sound quality. To increase recording time, open the unit and locate the "DIGITAL AUDIO STORAGE" circuit board. Move the the "BIT/R" jumper (JP-3) to the "16K" position. See over for details.

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