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DL-4

4 Line Telephone Digital Announcement System

11/12/08

Introduction

Thank you for purchasing the Skutch DL-4 four line Announcement System. This unit was designed for heavy duty applications, such as movie theaters, that requires a pre-recorded announcement to be played to a high volume of incoming callers. Each caller always hears the announcement from the beginning, no matter how many lines are currently in use.



The DL-4 is a totally digital system. This means that there are no moving parts during the play back process which makes this unit much more reliable than tape based systems. Best of all the audio quality will not degrade with usage or time. The DL-4 stores the audio data on a user replaceable manufacture specific SD memory card. Each SD card can only hold one pre-recorded announcement. This card can easily be replaced or swapped with another by the end user. This gives the end user the ability to have many different pre-recorded announcements available to switch out at any time. This is an awesome feature. The DL-4 can use SD cards from 128MB to 2GB in size. Not all SD Cards are compatible with the DL-4. You should only use one of the recommended brands as stated in the SD Card section of this manual.

A 2GB SD card, the maximum size that can be used, will record announcements up to 17 Hours, 28.5 minutes in length.

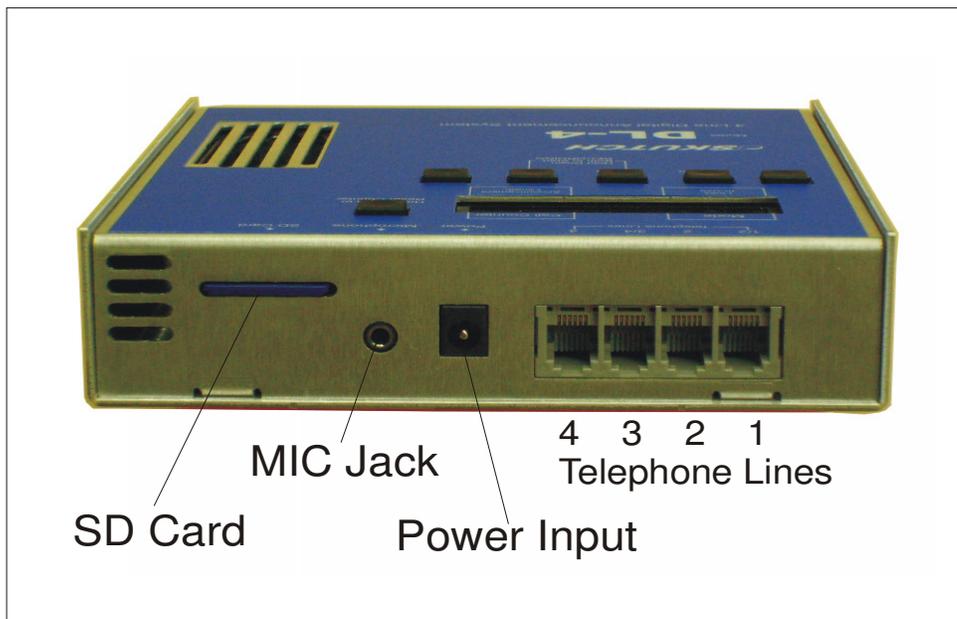
The DL-4 uses a standard WAV file format that is compatible with Windows based computers. This makes it possible for the end user to produce and/or store audio files directly on their computer. The DL-4 uses a sampling rate of 16K per second, at 16 bits, uncompressed, Mono. This provides an audio quality twice as good as most telecommunication devices which only use a sampling rate of 8K per second.

The DL-4 is easy to use and is the perfect choice for high volume, announcement only applications.



Installation

- 1- The DL-4 supports both single line per modular cord (RJ-11), or two lines per modular cord (RJ-14) telephone jacks. There are 4 modular jacks on the rear of the DL-4. Connect the modular cords from the wall jack to the proper jack rear of the DL-4
- 2- Connect the Power Adapter to the DL-4, then to a 115vac Power Outlet.
- 3- Connect the Microphone to the microphone jack on the back of the DL-4. The microphone can be left connected to the DL-4 if desired.



IDLE MODE

When the DL-4 is first powered up, it will come up in the IDLE MODE. This mode is basically the OFF state for the unit. While in the IDLE mode, the DL-4 will not answer any incoming calls. You **MUST** be in the IDLE state to initiate an announcement record or test sequence. You must also be in the IDLE mode to **RESET** the six digit call counter.

Version Number

The number directly to the right of the word "IDLE" represents the version of the firmware in the DL-4.

Resetting the Call Counter

This function can **ONLY** be done while in the IDLE mode. Press down the "Hold Down to Reset Counter" button until the display reads **CALL COUNTER RESET**.

Announcement Record

Once the Announcement Record mode is entered, the current announcement is erased. In order to get the best sounding audio quality from the DL-4 we decided **NOT** to put an automatic volume control on the microphone circuit of the DL-4. Simply put, automatic volume control circuits reduce the overall quality of audio recordings. This means that it is up to the end user to control their volume while recording. If you talk too loud, and/or too close to the microphone, you will get distortion. If you talk too low, and/or too far away from the microphone, the audio could sound too low. Consistency while recording is very important. I suggest that you practice recording a few times to find the best distance and speech volume while recording. For best results, try to speak into the microphone at a consistent volume and distance.

1. Make sure that you are in the IDLE MODE.
2. Connect the microphone to the jack on the rear o panel of the DL-4.
3. Make sure that the MIC SWITCH is ON, and the LOCK switch on the SD Card is in the UNLOCK position.
4. Press both the PAUSE and END buttons down, at the same time, until you hear the BEEP. When the BEEP stops, immediately start dictating your new announcement.
5. When you have finished your announcement, immediately press the END button. The unit will take a moment to store the newly recorded announcement then will automatically play it back over the internal speaker, then will return to the IDLE MODE.

Pausing during Record

If you need to **PAUSE** during a recording, simply press the PAUSE button. The display will show the word PAUSE as confirmation. To start recording again, where you left off, simply press the PAUSE button again and the unit will BEEP. As soon as the BEEP ends, immediately start dictating.

Testing the Pre-recorded Announcement

From the IDLE MODE simply press the TEST button and the current announcement will play back through the internal speaker. If you wish to abort the TEST simply HOLD down the IDLE button until the unit stops playing.

ANSWER MODE

After you have recorded your announcement you are now ready to start answering calls. To place the DL-4 in the answer mode, simply press the ANSWER button until the unit BEEPS.

Answer Mode Display Information

Upper Left hand corner = MODE

Upper Right Hand Corner = Six Digit Call Counter (Must be in IDLE MODE to RESET)

Lower Left hand Corner = Shows the lines that are currently active

Lower Right Hand Corner = Shows the length of the pre-recorded announcement

Exiting ANSWER MODE

Simply press the IDLE button for 2 seconds.

Answering the Call

The DL-4 answers all line after the first ring. This can not be adjusted.

Disconnect Methods

The DL-4 has two disconnect methods.

CPC Disconnect

If the DL-4 detect a CPC or Battery Reversal during an inbound call, it will automatically disconnect

Play Loop Disconnect

The DL-4 will automatically hang up after the announcement has played a preset number of times. The default value is 3. The number of LOOPS can be adjusted from 1 to 6.

To adjust the number of loops do the following:

1- From IDLE MODE press and HOLD DOWN the COUNTER RESET Button until the unit BEEPS (approximately 18 seconds). The display will read: Play Loops. Press the

PAUSE button to decrease setting, and TEST button to increase the setting. Press IDLE button to exit.

The SD Card

The SD card should ONLY be installed or removed from the DL-4 while it is in the IDLE MODE or when the unit is removed from power. The DL-4 is not compatible with all SD cards. It will ONLY work with one of the following SD Cards. Due to the inconsistencies in the specifications of SD Cards from one manufacture to the next, the DL-4 is not compatible with all SD Cards. The following is a list of approved SD Cards. Only one of these types of cards should be used.

Compatible SD Cards

- 1- **Toshiba "High Performance" SD Memory Card** (Not Over 2G in size)
- 2- **SanDisk SD Card** (Not over 2G in size)
- 3- **SanDisk Ultra II SD Card** (Not over 2G in size)



Using the SD Card in your Computer

The SD Card can be inserted into a Windows based computer and the audio wav file can be copied or replaced by the computer. There is ONLY one file that should be stored on the DL-4 SD card. It is named "DL4.WAV" (all capitals). If you wish to store a WAV file from your computer to the SD card, you MUST change the name of the file first. The name of the new file MUST be "DL4.WAV" before you copy it to the SD Card. If any other file is stored on the SD Card, the DL4.WAV file might not play back properly, and the other file could be corrupted. If you wish to replace the DL4.WAV file, simply write the file to the SD Card. The old file will automatically be deleted. If you have problems, try re-formatting the SD Card before you copy the file.

Size of Card

The DL-4 uses approximately 1.92MB of memory for each minute of recorded audio. Even though a card states a specific size, you don't have access to all of the memory in the card. A certain amount of memory is lost to overhead for the card. The following shows the maximum message length for each size of size of SD memory card:

(Can not use SD cards under 64MB)
128MB = 1 Hour, 2.5 Minutes

256MB = 2 Hours, 5.5 Minutes
512MB = 4 Hours, 12 Minutes
1GB = 8 Hours, 42 Minutes
2GB = 17 Hours, 28.5 Minutes
(Can Not Use SD cards over 2GB)

SD Card Lock

The LOCK switch on the SD card can be used to protect an announcement from accidental erasure. When the LOCK switch is in the ON position, the DL4 will not allow the user to record a new announcement. The unit will play back normally with the LOCK switch ON.

Life of SD Card

All SD memory cards have a maximum number of times that you can write to them. In general most cards have approximately a 100,000 write cycle life. There is no limit on the number of times that you read the data. The DL-4 will display a message indicating that the card is bad when it is worn out.

Audio WAV File

The DL-4 uses a specific WAV file format that is compatible with Windows based computers. This makes it possible for the end user to produce and/or store audio files directly on their computer. The specifications for the WAV file format is as follows:

File Name = **DL4.WAV** (All Capitals) Must be stored on SD card with this name.

File Type= **WAV**

Sampling Rate = **16,000 per second** (16K)

Sample Size = **16 bits**

Compression = **No Compression**

Channels = **MONO**

DO NOT store any other files on the DL4 SD Card. The only file that should be on the SD Card is "DL4.WAV".

Tech Support - 916-786-6186

If you have any problems getting the unit to work properly feel free to give us a call. Technical Support is available between the hours of 7:30 AM and 4:30 PM Pacific Time, Monday through Friday.

• **ONE YEAR LIMITED WARRANTY**

This SKUTCH PRODUCT is warranted against defects for a period of one (1) year from the date of the original invoice. Within this period, we will repair it without charge for parts and labor. To obtain warranty service the product must be returned, at the customer's expense, to SKUTCH Electronics along with a copy of the original invoice. After the unit has been repaired, SKUTCH will ship the PRODUCT back via UPS GROUND service at our expense. If any other form of return shipment is requested, the customer will pay for 100% of the shipping cost.

This Warranty does not apply if in the sole opinion of SKUTCH Electronics, the PRODUCT has been damaged by lightning or any other Acts of God, or by accident, misuse, neglect, or improper packing, shipping, modification or servicing by other than an authorized SKUTCH Service Center.

EXCEPT AS SPECIFICALLY PROVIDED IN THIS AGREEMENT, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND IN NO EVENT SHALL SKUTCH ELECTRONICS BE LIABLE FOR LOSS OF PROFITS OR BENEFITS, INDIRECT, SPECIAL, CONSEQUENTIAL OR OTHER SIMILAR DAMAGES ARISING OUT OF ANY BREACH OF THIS WARRANTY OR OTHERWISE.