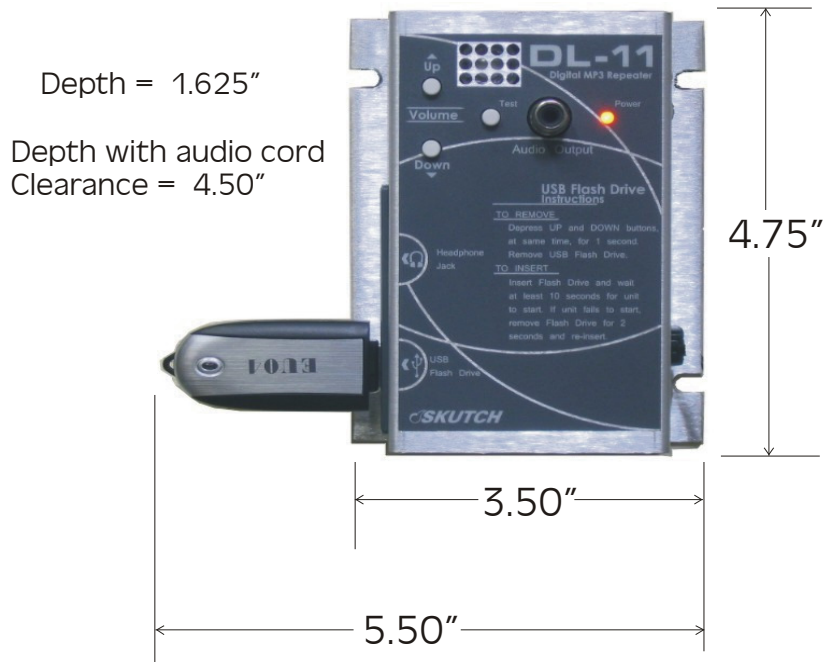




"TELECOMMUNICATION PRODUCTS TO SOLVE TELECOMMUNICATION PROBLEMS"

8/6/07

## DL-11 Technical Information



Size: See above

Length of Power cord (Power Cube) = 5 Ft.

Weight in box = 1.10 lbs

### Accessories that come with unit:

One RCA Male to RCA Male, 6 ft cable

One RCA Male to 1/8" Phone Male, 6ft cable

One 64MByte USB Flash Drive

One DL-11 Operation Manual

### Power Requirements:

Input Voltage = 120VAC 60Hz

AC Input Current = 27mA

Input Power = 3.10 Watts

### Audio Specifications

Audio Outputs = (Main and Headphone) All specifications are referenced to the MAIN (RCA) Output.

Audio Output Power = Approximately 200mW

Output Impedence = 8 ohm (Will work with 600 ohm also)

Volume Steps = 64 (1 step per depression of switch)

## Frequency Response:

At 600 ohm load: 10Hz to 20,000 Hz

At 10 ohm load: 130Hz to 20,000 Hz

(( Test audio was generated at a -6DB level. Test audio was recorded using a 44,100 Hertz sample rate, 16 bit, to a WAV file. Then it was converted to an MP3 at 44,100 Hertz sample rate, 128KBPS, format and placed into the DL-11 for testing. The output load on the DL-11 was a 100% resistive load.))

## MP3 Compatible Formats

The following is a list of MP3 formats that we have tested the DL-11 to be compatible with. All other formats should not be used:

MPEG Layer-3 ACM, 48,000 Hz, 224 kbps, stereo  
MPEG Layer-3 ACM, 48,000 Hz, 192 kbps, stereo  
MPEG Layer-3 ACM, 48,000 Hz, 160 kbps, stereo  
MPEG Layer-3 ACM, 48,000 Hz, 128 kbps, joint stereo  
MPEG Layer-3 ACM, 48,000 Hz, 128 kbps, mono  
MPEG Layer-3 ACM, 48,000 Hz, 112 kbps, joint stereo  
MPEG Layer-3 ACM, 48,000 Hz, 112 kbps, mono  
MPEG Layer-3 ACM, 48,000 Hz, 96 kbps, joint stereo  
MPEG Layer-3 ACM, 48,000 Hz, 96 kbps, mono  
MPEG Layer-3 ACM, 48,000 Hz, 80 kbps, mono  
MPEG Layer-3 ACM, 48,000 Hz, 64 kbps, mono  
MPEG Layer-3 ACM, 48,000 Hz, 48 kbps, mono

MPEG Layer-3 ACM, 44,100 Hz, 256 kbps, stereo  
MPEG Layer-3 ACM, 44,100 Hz, 224 kbps, stereo  
MPEG Layer-3 ACM, 44,100 Hz, 192 kbps, stereo  
MPEG Layer-3 ACM, 44,100 Hz, 160 kbps, stereo  
MPEG Layer-3 ACM, 44,100 Hz, 128 kbps, joint stereo  
MPEG Layer-3 ACM, 44,100 Hz, 128 kbps, mono \*\*\*\*\*Recommended \*\*\*\*\*  
MPEG Layer-3 ACM, 44,100 Hz, 112 kbps, joint stereo  
MPEG Layer-3 ACM, 44,100 Hz, 112 kbps, mono  
MPEG Layer-3 ACM, 44,100 Hz, 96 kbps, joint stereo  
MPEG Layer-3 ACM, 44,100 Hz, 96 kbps, mono  
MPEG Layer-3 ACM, 44,100 Hz, 80 kbps, mono  
MPEG Layer-3 ACM, 44,100 Hz, 64 kbps, mono  
MPEG Layer-3 ACM, 44,100 Hz, 56 kbps, mono  
MPEG Layer-3 ACM, 44,100 Hz, 48 kbps, mono

MPEG Layer-3 ACM, 32,000 Hz, 224 kbps, stereo  
MPEG Layer-3 ACM, 32,000 Hz, 192 kbps, stereo

MPEG Layer-3 ACM, 32,000 Hz, 160 kbps, stereo  
MPEG Layer-3 ACM, 32,000 Hz, 128 kbps, joint stereo  
MPEG Layer-3 ACM, 32,000 Hz, 128 kbps, mono  
MPEG Layer-3 ACM, 32,000 Hz, 112 kbps, joint stereo  
MPEG Layer-3 ACM, 32,000 Hz, 112 kbps, mono  
MPEG Layer-3 ACM, 32,000 Hz, 96 kbps, joint stereo  
MPEG Layer-3 ACM, 32,000 Hz, 96 kbps, mono  
MPEG Layer-3 ACM, 32,000 Hz, 80 kbps, mono  
MPEG Layer-3 ACM, 32,000 Hz, 64 kbps, mono  
MPEG Layer-3 ACM, 32,000 Hz, 56 kbps, mono  
MPEG Layer-3 ACM, 32,000 Hz, 48 kbps, mono

MPEG Layer-3 ACM, 24,000 Hz, 80 kbps, joint stereo  
MPEG Layer-3 ACM, 24,000 Hz, 64 kbps, joint stereo  
MPEG Layer-3 ACM, 24,000 Hz, 56 kbps, joint stereo  
MPEG Layer-3 ACM, 24,000 Hz, 48 kbps, joint stereo  
MPEG Layer-3 ACM, 24,000 Hz, 48 kbps, mono  
MPEG Layer-3 ACM, 24,000 Hz, 40 kbps, joint stereo  
MPEG Layer-3 ACM, 24,000 Hz, 40 kbps, mono  
MPEG Layer-3 ACM, 24,000 Hz, 32 kbps, joint stereo  
MPEG Layer-3 ACM, 24,000 Hz, 32 kbps, mono  
MPEG Layer-3 ACM, 24,000 Hz, 24 kbps, mono

MPEG Layer-3 ACM, 22,050 Hz, 80 kbps, joint stereo  
MPEG Layer-3 ACM, 22,050 Hz, 64 kbps, joint stereo  
MPEG Layer-3 ACM, 22,050 Hz, 56 kbps, joint stereo  
MPEG Layer-3 ACM, 22,050 Hz, 48 kbps, joint stereo  
MPEG Layer-3 ACM, 22,050 Hz, 48 kbps, mono  
MPEG Layer-3 ACM, 22,050 Hz, 32 kbps, joint stereo  
MPEG Layer-3 ACM, 22,050 Hz, 32 kbps, mono  
MPEG Layer-3 ACM, 22,050 Hz, 24 kbps, mono

MPEG Layer-3 ACM, 16,000 Hz, 80 kbps, joint stereo  
MPEG Layer-3 ACM, 16,000 Hz, 64 kbps, joint stereo  
MPEG Layer-3 ACM, 16,000 Hz, 56 kbps, joint stereo  
MPEG Layer-3 ACM, 16,000 Hz, 48 kbps, joint stereo  
MPEG Layer-3 ACM, 16,000 Hz, 48 kbps, mono  
MPEG Layer-3 ACM, 16,000 Hz, 40 kbps, joint stereo  
MPEG Layer-3 ACM, 16,000 Hz, 40 kbps, mono  
MPEG Layer-3 ACM, 16,000 Hz, 32 kbps, joint stereo  
MPEG Layer-3 ACM, 16,000 Hz, 32 kbps, mono  
MPEG Layer-3 ACM, 16,000 Hz, 24 kbps, mono  
MPEG Layer-3 ACM, 16,000 Hz, 20 kbps, mono  
MPEG Layer-3 ACM, 16,000 Hz, 18 kbps, mono  
MPEG Layer-3 ACM, 16,000 Hz, 16 kbps, mono

MPEG Layer-3 ACM, 12,000 Hz, 32 kbps, joint stereo  
MPEG Layer-3 ACM, 12,000 Hz, 24 kbps, joint stereo  
MPEG Layer-3 ACM, 12,000 Hz, 20 kbps, joint stereo  
MPEG Layer-3 ACM, 12,000 Hz, 20 kbps, mono  
MPEG Layer-3 ACM, 12,000 Hz, 18 kbps, joint stereo  
MPEG Layer-3 ACM, 12,000 Hz, 18 kbps, mono  
MPEG Layer-3 ACM, 12,000 Hz, 16 kbps, mono

## Multiple MP3 Files

Normally you would store only one MP3 audio file on the DL-11 USB Flash drive. In this case the DL-11 will repeatedly play this single MP3 file over and over again. If you place multiple MP3 files on the USB Flash drive, the DL-11 will play the first file that was copied to the USB Flash drive, followed by the second, and so forth, until all files have been played. Once the DL-11 has played the last file, it will repeat the sequence over and over again. If you wish to control the order in which the files play, simply perform a high level format on the USB Flash drive, and save the audio files to the USB Drive in the order that you wish them to be played. They will not play in alpha-numeric order.

## Recommended Recording Procedures:

- 1- Record final mix of production audio into a WAV file at 44,100 Hertz sample rate, 16 bit.
- 2- Store in WAV format for future editing purposes.
- 3- Convert WAV file to MP3 format at 44,100 Hertz sampling at 128KBPS. Then put on USB Flash Drive. Make sure you delete the old MP3 audio file.

## USB Flash Drive Specifications

Type: USB1.1 or USB2.0

<u>Drive Size</u>	<u>Approx Play Time</u>
32MB	30 Minutes
64MB	1 Hour (Supplied with DL-11)
128MB	2.13 Hours
256MB	4.26 Hours
512MB	8.52 Hours
1 GB	17 Hours

Based on an MP3 file generated at 44,100 Hertz sample rate and 128KBPS.

## **Registering the USB Flash Drive**

If you are using our POHU software, it requires that all USB Flash Drives are REGISTERED with Skutch Electronics before they can be used with the POHU software. The USB Flash Drive that comes with the DL-11 has been pre-registered. To register a new USB Flash Drive, write down the Serial Number from your DL-11 and call Skutch at: (916) 786-6186. If you are not using the POHU software, registration is not required.

## **Warranty:**

Limited One Year Parts and Labor. See operation manual for specifics.