

**Homework 13: User Manual*****Due: Friday, April 24, at NOON*****Team Code Name: FLACtrac****Group No. 9**

NOTE: This is one of the last sections needed to finish the Final Report. This homework will count toward each team member's grade, and therefore all team members should participate equally in completing it. The User Manual should be about 5 pages in length (one page per bullet).

**User Manual Outline:**

- **Brief (marketing-style) product description**
- **Product illustration annotated with callouts for each control/display**
- **Product setup instructions**
- **Product use instructions**
- **Product troubleshooting instructions**

**Evaluation:**

SCORE	DESCRIPTION
10	<b><i>Excellent</i></b> – among the best papers submitted for this assignment. Very few corrections needed for version submitted in Final Report.
9	<b><i>Very good</i></b> – all requirements aptly met. Minor additions/corrections needed for version submitted in Final Report.
8	<b><i>Good</i></b> – all requirements considered and addressed. Several noteworthy additions/corrections needed for version submitted in Final Report.
7	<b><i>Average</i></b> – all requirements basically met, but some revisions in content should be made for the version submitted in the Final Report.
6	<b><i>Marginal</i></b> – all requirements met at a nominal level. Significant revisions in content should be made for the version submitted in the Final Report.
*	<b><i>Below the passing threshold</i></b> – major revisions required to meet report requirements at a nominal level. <b><i>Revise and resubmit.</i></b>

\* Resubmissions are due within **one week** of the date of return, and will be awarded a score of "6" provided all report requirements have been met at a nominal level.

*Include this sheet as a cover page for your report*

## Introduction

Thanks!

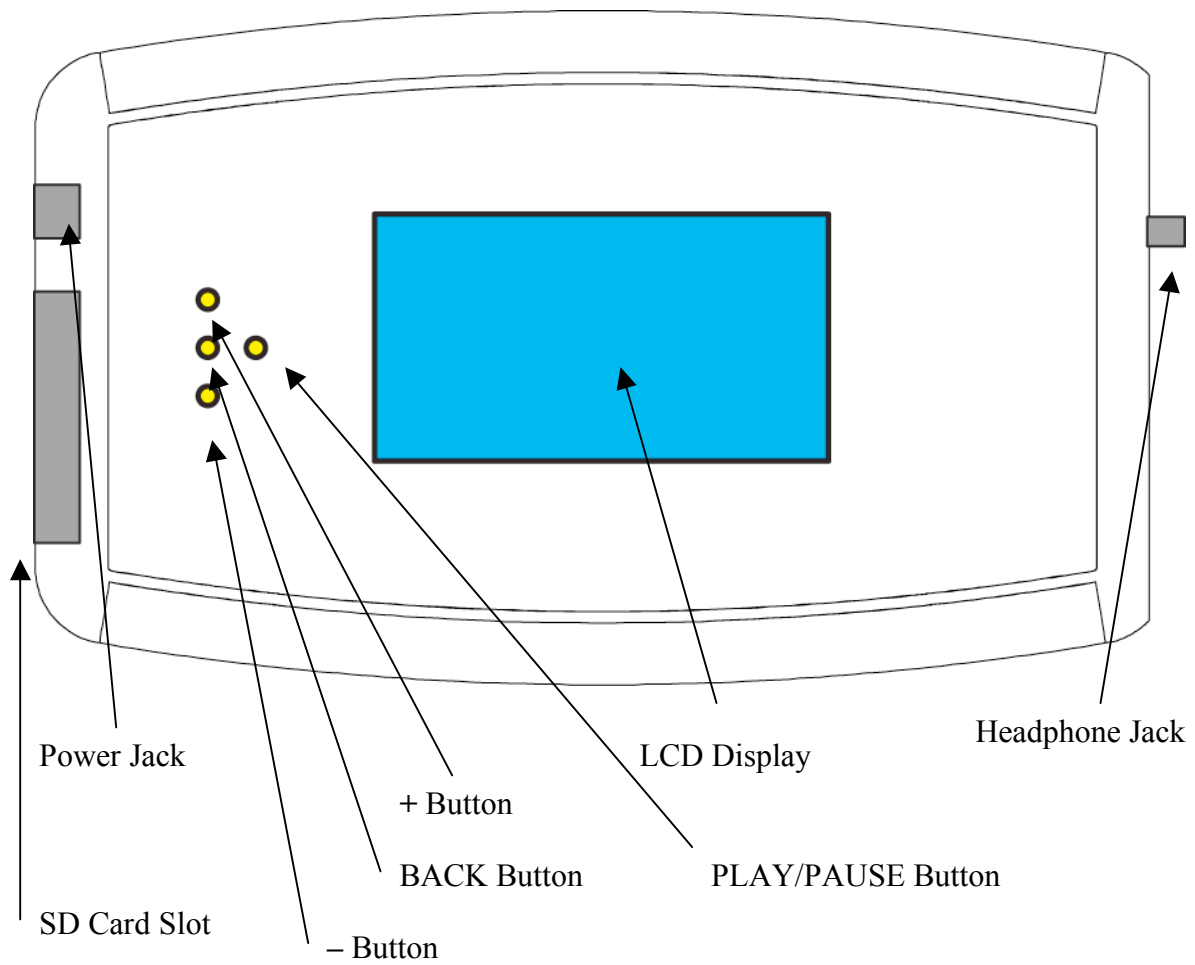
Thank you for purchasing the FLACtrac digital audio player! The FLACtrac allows you to take your favorite music with you without the loss of quality found in typical MP3 players. Some key features of the FLACtrac include:

- FLAC file storage allows for smaller audio files than uncompressed WAV, with no loss in quality
- Removable SD memory cards allow unlimited audio storage
- Amazing three hour battery life
- Bright LCD display backlight allows easy reading in the dark
- Simple and intuitive controls
- Visualization
- Progress bar shows how far through the song you are!
- Open-format FLAC codec ensures future compatibility

## Precautions

For your safety, please follow the following precautions while using the FLACtrac:

- Do not immerse the FLACtrac in water. It is not waterproof in any way.
- If the LCD breaks, avoid contact. Be careful to not get the liquid crystal fluid in your mouth or eyes.
- Do not expose the FLACtrac to strong mechanical shock, impact, torque or tension.
- Do not open the FLACtrac under any circumstances. There are no user serviceable parts inside.
- Be careful to not use the FLACtrac at high volumes. Hearing damage may occur.
- In some jurisdictions, driving while using the FLACtrac with earphones in your ears is forbidden by law. For car use, please purchase the FLACtrac Car Adapter.

**Product Illustration**

## Using the FLACtrac

### Getting Started

After unboxing your FLACtrac, be sure you have the following items:

- FLACtrac Digital Audio Player
- Earphones (with 3.5mm plug)
- AC Adapter (5 V)
- SD Card (2 GB)

Plug the AC Adapter in to a wall power socket (110/120 V only). Then plug the FLACtrac in. You should allow the FLACtrac to charge for a few hours before portable use, but music can be played while the FLACtrac is charging. The internal lithium ion battery is not removable by the user. The battery is expected to provide over 500 cycles of operation. At the end of its lifecycle the battery can be replaced by an authorized FLACtrac service center.

To load music onto the SD card, use the FLACtrac USB Memory Card Widget (sold separately) to copy FLAC files onto your SD card. The SD card must be formatted with the FAT32 filesystem, and cannot be larger than 2 GB. MicroSD card adapters (sold separately) may be used.

### Playing Music

- Insert an SD card with FLAC files loaded on it into the slot at the bottom of the device.
- Using the on-screen file browser, select the file you want and press **PLAY/PAUSE**.
- Adjust volume to a comfortable level by pressing the + and – keys.
- The LCD displays a visualization of the song being played, as well as other “metadata” encoded in the file, such as song title, artist, album, etc.
- A progress bar shows the current progress through the song.
- To stop playing the song, press **BACK**. This returns you to the file browser.

## Troubleshooting

If the FLACtrac seems to be not performing as expected, check the following table:

Symptom	Solution
FLACtrac does not respond.	Check to make sure the battery is charged. Plug the FLACtrac into the wall charger. If this does not work, try pressing the reset button with an SD card removed.
FLACtrac is running, but does not produce any audio.	Check to make sure earphones are actually connected. Try another set of headphones to see if the headphones are bad.
FLACtrac cannot find files on SD card.	Make sure the SD card is fully inserted into the slot. Also, make sure the SD card is FAT32 formatted and also is smaller than 2 GB. The FLACtrac does not support cards bigger than 2 GB.
FLACtrac becomes abnormally warm during operation.	Unplug the FLACtrac and discontinue use.

If the FLACtrac still does not function as expected, call 1-800-FLACTRAC for assistance.