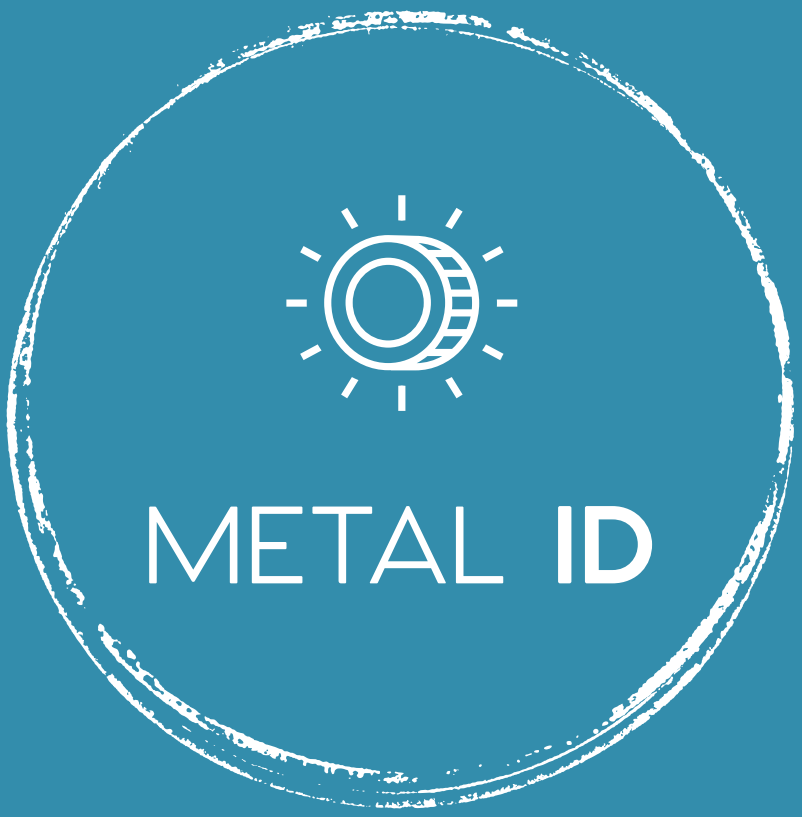

Nicholas Coe

Specifications

Display	16x2 Transflective LCD
Keypad	3x4 slim matrix
Environmental Sealing	Not waterproof – Limited sand/dust protection
Battery	Li-ion 2500mAh (up to 92 hours run time)
File Limit	4
Item Limit	4
ID Limit	99
Compatible Coils	3kHz - 7.5kHz - 18.75kHz

Instructions

Navigation:

- Press **0-9** to enter an ID. Buttons **1-4** are used to select the database and coil.
- Press **#** to enter an ID. Pressing **#** when a **->** is present at the bottom right of the screen will move to the next page.
- Press ***** to clear an ID. Pressing ***** when a **<-** is present at the bottom right of the screen will return to the previous page. This also must be pressed to return after viewing a discovered ID.
- HOLD **#** for 1 second while on the 'waiting' screen to view current battery level.
- HOLD ***** for 1 second while on the 'waiting' screen to toggle on/off LCD backlight. Note: turning off backlight while outdoors will reduce battery consumption by approx. 40%.

Set-Up:

1. Turn on power switch.

1a. If battery is less than 1%, device will lock. Turn off, charge device and turn on when complete.

1b. If no SD card is present, or there is an error, device will continue trying to look for an SD card every 4 seconds.

2. Use **#** and ***** to cycle between first and second pages of databases on SD card. Use corresponding number keys to select desired database.
3. Select the coil that is currently fitted to the metal detector using the same procedure as above.
4. Reminder instructions will appear for 2 seconds and then the device will be waiting for ID input.

NOTE: To change selections from the setup process, the device must be turned off and on again. Settings will not persist through power cycles.

Checking IDs:

1. Obtain a consistent reading from the metal detector.
2. Ensure Metal ID is on the 'waiting' screen.
3. Using the **0**-**9** number keys, enter the reading on the device.

*3a. A **0** in front of single digit numbers returns the same result.*

4. Press **#** key to search for the ID.
5. If no matching item is found in the database, "Unknown item" will be displayed for 2 seconds, otherwise the relevant item/s will be displayed on screen.
6. Cycle between the 2 pages using **#** or ***** when a **->** or **<-** is displayed on screen.
7. If items were found, dismiss the page by pressing ***** to return to the 'waiting' screen.

Database Management

Criteria & Notable Points:

- Files must be of **.CSV** format.
- File names are restricted to 8 characters long (not including the **.CSV** file format at the end of the name).
- Do not have a space in the file name. Use an **_** or **–** if required.
- There is a limit of 4 database files. If there are more **.CSV** files on the SD card, only the first 4 in alphabetical order will be read.
- There is a limit of 4 items per **ID #** due to memory constraints.
- Items must be limited to 16 characters in length.
- If there are 3 or 4 items for an **ID #**, items 2 and 4 are restricted to 14 characters, as characters 15 and 16 on the LCD will be replaced with either **<-** or **->**.
- Edit in Microsoft Excel or similar program to avoid mismatched columns.
- The number in the **ID #** column is the corresponding ID from the metal detector, not the left hand 'Row Numbers' displayed in Excel.
- Do not move/rearrange rows, columns or headings, only the corresponding items.
- Do not store files in folders on the SD card.

Adding a New Database:

1. Copy existing **.CSV** database and rename it to the desired machine name, restricted to 8 characters long.
2. Open the new database in Microsoft Excel or similar editing program.
3. Highlight all **items** and press **DEL** to remove existing entries.
4. Input newly discovered **items** in the relevant coil columns on the correct **ID #** row.
5. Save the file and close.
6. If asked to continue saving as **.CSV** file format due to losing any formatting, accept this and continue.

Editing Existing Database:

1. Open up desired database in Microsoft Excel or similar editing program.
2. Locate and move to the relevant **ID #** row.
3. Locate the first column of the relevant coil type. See **Database Format** below for reference.
   Column 2 = **3kHz**
   Column 6 = **7.5kHz**
   Column 10 = **18.75kHz**
4. Input new item text in correct cell, or edit the existing items. Remember the character length points from **Criteria & Notable Points** section.
5. Save the file and close.
6. If asked to continue saving as **.CSV** file format due to losing any formatting, accept this and continue.

Database Format:

ID #	**3kHz Col.**	**3kHz Col.**	**3kHz Col.**	**3kHz Col.**	**7.5kHz Col.**	**7.5kHz Col.**	**7.5kHz Col.**	**7.5kHz Col.**	**18.75kHz Col.**	**18.75kHz Col.**	**18.75kHz Col.**	**18.75kHz Col.**
0	Item 1	Item 2	Item 3	Item 4	Item 1	Item 2	Item 3	Item 4	Item 1	Item 2	Item 3	Item 4
1	Item 1	Item 2	Item 3	Item 4	Item 1	Item 2	Item 3	Item 4	Item 1	Item 2	Item 3	Item 4