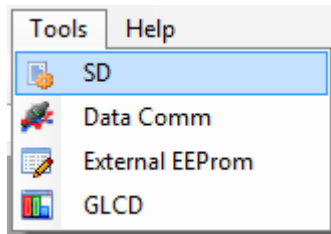


The FIDE SD Tool is the User Interface for transferring .wav (sound) and .fii (image) files to the FICE SD card. In the process of loading up the sound and image files in batches, information regarding individual files that are to be used while programming later on is displayed.

To launch the SD Tool from the FIDE window:
FIDE > Tools > SD



FICE SD: The FICE SD card consists of 53 clusters of 16MB each, with a FAT header area of 8192bytes in each cluster. Data storage starts after the 16-sector FAT header. Each cluster consists of 32768 sectors of 512bytes. FI OS takes clusters 0-3 and these clusters are read-only. Users will not be able to write into it. Images are stored in the range of clusters 4 to 7, while audio is stored in the range of clusters 8 to 55.

Writing to external memory (FICE SD card)

External Memory Drive must be set before commencing write operation. This can be done in **FIDE > Project > External Memory Setting**.

Example,
(When the FICE SD is inserted into the PC, it will show up as a removable drive which can be seen from “My Computer”.)



In this case, the drive would be ‘H’.

Formatting the FICE SD

The FICE SD is shipped ‘ready-to-use’ with preloaded soundtracks, numbers, alphabets and the first 100 commonly used English words in 16Khz 16 bit Mono wave file formats.¹ However, should a need arise to reformat the FICE SD card, please take note and follow the instructions below carefully.

You will need to do the actual formatting yourself.

Here’s how:

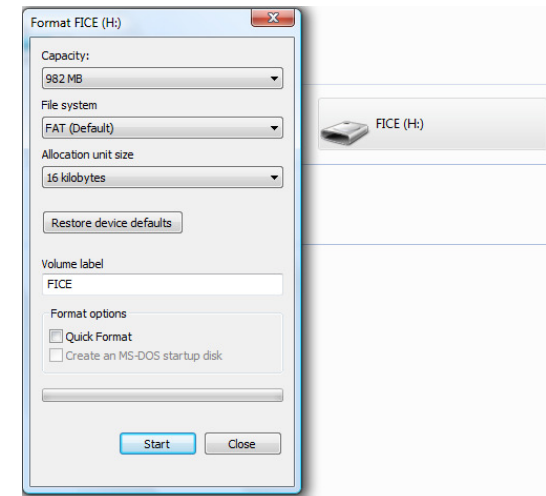
Windows Explorer > My Computer > Right Click (in this case) FICE (H:) > Format...

You should see something like the figure below:


File System: FAT

Allocation Unit Size: 16kb.

Volume Label: FICE



Once you’re ready, click ‘Start’.

Upon successful formatting of the drive, open the SD tool from FIDE, click on the “SD image transfer”  icon and you’re done.

OVERVIEW

The screenshot shows the SD Tool interface with several callout boxes highlighting key features and data:

- Cluster Information for Sound and Image:** Points to the top tabs of the main window: "Sound - Cluster:08" and "Image - Cluster:04".
- SD Image Transfer:** Points to the "SD Image Transfer" button in the toolbar.
- Save To Cluster...:** Points to the "Save To Cluster..." button in the toolbar.
- Copy to Clipboard:** Points to the "Copy to Clipboard" button in the toolbar.
- Add Items:** Points to the "Add Items" button in the toolbar.
- Delete Selected Items:** Points to the "Delete Selected Items" button in the toolbar.
- Write to External Memory:** Points to the "Write to External Memory" button in the toolbar.
- File List Table:** A table showing file details for "Sound - Cluster:08":

File/s	BlockStart	BlockEnd	Block Length	Last Pos...
W0000.wav	16	34	19	0
W0001.wav	35	63	29	0
W0002.wav	64	84	21	0
W0003.wav	85	104	20	0
W0004.wav	105	130	26	0
W0005.wav	131	151	21	0
W0006.wav	152	182	31	0
W0007.wav	183	216	34	0
W0008.wav	217	240	24	0
W0009.wav	241	257	17	0
W0010.wav	258	280	23	0
W0011.wav	281	303	23	0
W0012.wav	304	328	25	0
W0013.wav	329	350	22	0
W0014.wav	351	377	27	0
- Take note of the Block Information as stated when the files are loaded:** Points to the "BlockStart", "BlockEnd", "Block Length", and "Last Pos..." columns in the table above.
- File List Table:** A smaller table showing details for "Image - Cluster:04":

File/s	BlockStart	BlockEnd	Block Length	Last Pos. in Block
test.fil	16	16	1	228
- Status Bar:** Shows "Sound: 362/32752 Image: 1/32752 SndFiles: 15/1024 ImgFiles: 1/1024".
- Max number of files: 1024**
Max Data Bytes in each cluster: 32752

Saving to different clusters

Users can specify the clusters that they wish to store their data files should one run out of space or any other reason.

Clicking the “Save To Cluster...” icon will prompt a dialog box where the user can specify the current cluster for loading files.

Cluster Range:

Image: 4 to 7

Sound: 8 to 55

Copying Data to clipboard

This feature is especially useful since there is a need to refer to the list of block data information generated by the SD tool.

Clicking on the icon copies the entire list of data of the currently active tab to the clipboard, allowing the user to have the choice of editor to paste the info into. This works especially well with Excel, where it nicely displays and organises the items in their individual columns and rows.

Using the Data Block Info with the FIDE

Users can programmatically access the data they have stored into the FICE SD card using the SD tool.

OS.SD.Read

Read data from specified cluster and section in the FICE SD, into the OS buffer.

Buffer size = 512 bytes.

```
OS.SD.Read(Cluster, Sector)
```

Note: Data from the SD will overwrite any previous data that is in the buffer.

OS.SD.Write

Write data into specified cluster and sector of the FICE SD card.

```
OS.SD.Write(Cluster, Sector)
```

More Information regarding coding instructions can be found under “FIDE System Library” and “FIDE Language Reference”. These are typically installed under:

My Documents > AIS Cube > Documentation