

PROGRAMMING GENERAL INFO

The audio files are initially created on a computer. The files are copied to an SD card which is inserted in the hand-held programmer.

The programmer is then connected to the U-Turn Round and the file transfer process is started. The files are copied to the audio board and stored on the internal on board memory. After completing the transfer, the programmer is removed from the U-Turn and it is ready for use.

The audio file format for the system is Windows PCM file format (i.e. .wav files). The audio must be mono, 16 bit samples at 22.05 KHz sampling (16KHz or 11KHz sampling rates are also allowed). The audio should be normalized to 100% amplitude to ensure best quality when played back on the system.

The SD card **MUST** be formatted as FAT with a blank volume name before copying the 'wav' files. This is done by right clicking the SD drive icon from 'My Computer' and selecting **FORMAT**.

The audio files on the PC hard disc **MUST** be named '01.wav', '02.wav' etc. up to the last file to be copied. There should be no break in the file name sequence i.e. the name of the last file should be equivalent to the total tracks to be on the card. There can be a maximum of 8 audio files on the SD card.

You then copy each file in turn from the PC hard disc to the SD card root directory. Do not put any other files on the SD card.

Note that copying files to the SD card can take longer than the computer indicates i.e. the computer will show that copying is finished but there is still data to be transferred to the card. Please ensure all files have been copied to the SD card before it is removed. The best way to confirm this is to 'click' the 'Unplug or Eject Hardware' button in the 'System Tray' icons (bottom right of screen), and then select 'STOP xxxxxxxx' where xxxxxxxx represents the SD card drive. If all the data has been transferred then a message will indicate that you can remove the card, if not then wait a while and try stopping the device again. Remember that you should not have 'My Computer' or 'Windows Explorer' accessing the SD card at this time otherwise the computer will assume the card is in use and will not allow it to be removed.

The programmed card should then be inserted to the programmer with the label side up.

PROGRAMMING PROCEDURE

The procedure for copying the files into the U-Turn internal system is as follows:-

WARNING – Please make sure that the U-Turn has been powerless for 30 mins.

1. Ensure the SD card is inserted in the programmer and the programmer is switched OFF before beginning the programming process.
2. Look carefully at the speaker holes; you should notice 4 holes which are clear from the protective mesh. They are located in the outer ring, top right of the speaker hole array. (See diagram) Align the programmer head pins to the 4 outer holes of the speaker grill. Do not force the pins in to the holes.
3. Switch the programmer ON – the RED LED lights, wait until the RED LED flashes.
4. Turn the U-Turn handle until the AMBER LED lights and remains lit until the memory is fully erased (approx 90 seconds).
5. If the AMBER LED does not light after about 5 seconds winding, remove the programmer, switch the programmer OFF and wait about 1 minute. Then repeat from step 2.
6. The GREEN LED will then flash as the message data is transferred. This could take several minutes (20 seconds per MByte of data).
7. When all messages are programmed, all 3 LEDs go off, and the U-Turn will beep. – Switch OFF the programmer and unplug the head of the programmer.
8. Wait until the U-Turn stops beeping and then play all messages to check that they have been successfully loaded.

