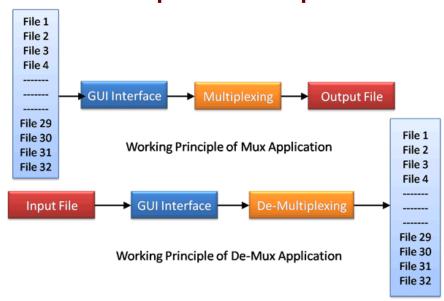
Multiplex-Demultiplex



Overview

The Mux-Demux software provides the capability to multiplex individual files on different timeslots into one aggregate output file and the reverse process of demultiplex one aggregate file into individual timeslot files. The program is applicable to T1 E1 multiplex systems and is companion software for the files transmit and the files receive programs available with the T1 E1 cards.

In Multiplexing process a frame is created with one byte from each input file. Finally the frame is copied to the output file. This process is repeated until all bytes from input files are exhausted. For smaller files once the end of file is reached, bytes are read from the beginning of the file or filler bytes are used for padding. The Demultiplexing process is the reverse process of multiplexing. In case of Demultiplexing bytes from an input file is copied into the output files successively starting from the 1st file to last file. Each time a single byte is copied into a single file.

This software is accompanying software for the File-transmit & File-receive programs, which accompany the T1 E1 cards. Using the multiplexing feature, files from different time slots can be multiplexed together & sent in the T1 or E1 line. Now the same file can be transmitted back by loop back technique. This is De-multiplexed and resultant files can be compared with the original files to find out any fault in the line and the fault free working of the Multiplexing/De-multiplexing algorithms used.

Now, included with the <u>T1 E1 Record/Playback application (XX020)</u> which allows execution of features/functions of Mux-Demux application.

For more information, refer to Multiplex Demultiplex T1 E1 Lines webpage.

Main Features

- Multiplex and De-Multiplex of files (voice data streams) of different sizes
- The output file can be any number of channels from 2 to 24 for T1 or 2 to 32 for E1
- User–selectable timeslots, file names
- Wrap file feature enables retransmission of smaller file from beginning till the completion of copying of all the files into the output file
- Incase the wrap feature is not checked; the filler bytes (Specified by user/Default Value '00') will be used to fill the gap



818 West Diamond Avenue - Third Floor, Gaithersburg, MD 20878, U.S.A (Web) www.gl.com - (V) +1-301-670-4784 (F) +1-301-670-9187 - (E-Mail) info@gl.com

Multiplex Section

Multiplex-Demultiplex application user interface has two main sections: the Multiplex section and the DeMultiplex section at the bottom. The Multiplexing user interface consists of 32 edit controls for Input File Selection which can be used for selecting different data streams / Files, and one control that can be used to select the output file, also called as Multiplexed file. In addition, it provides additional Setting controls such as Wrap, Save, Load, Clear, Progress bar, Multiplex, and Exit. These are useful to store the current setting or to load an already stored setting from a file or to erase the displayed settings. Wrap when checked, will enable retransmission of smaller file from beginning till the completion of copying of all the files into the output file.

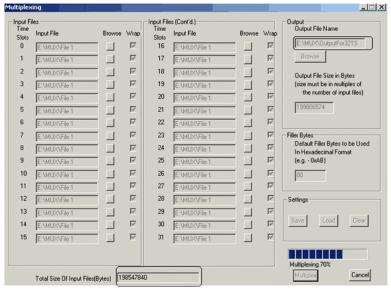


Figure: Multiplexing

Demultiplex Section

The Demultiplexing user interface provides the user an option to choose the Input file (which is a Multiplexed file) and in addition, provides 32 controls that enable to user to choose the File names/Channels to which user intends to Demultiplex the multiplexed data. In addition, it provides additional Setting controls such as Save, Load, Clear, Progress bar, Demultiplex, and Exit. These are useful to store the current setting or to load an already stored setting from a file or to erase the displayed settings.

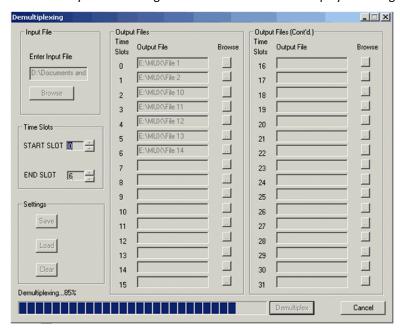


Figure: De-Multiplexing

Buyer's Guide

Item No	Product Description
<u>STE040</u>	Mux-Demux Software

Item No	Related Software
<u>XX020</u>	Record/Playback File Software
<u>XX019</u>	Transmit/Receive File Utility Software
<u>XX030</u>	Call Capture and Analysis Software
<u>XX610</u>	w/ Transmit and Receive File Capability

Item No	Related Hardware *Specifications and features subject to change without notice.
XTE001	Dual Express (PCIe) T1 E1 Boards
PTE001	tProbe™ Dual T1 E1 Laptop Analyzer
FTE001, ETE001	Quad and Octal T1 E1 Analyzer Boards
TTE001	tScan16™ T1 E1 Boards

For more information, refer to <u>Multiplex Demultiplex T1 E1 Lines</u> webpage.