■ 9606-01 DATA CONVERSION UTILITY

General specifications

Type	3.5-inch 2HD floppy disk
Operating environment	Windows 95, SCSI interface guaranteed to operate with Windows 95

Functions

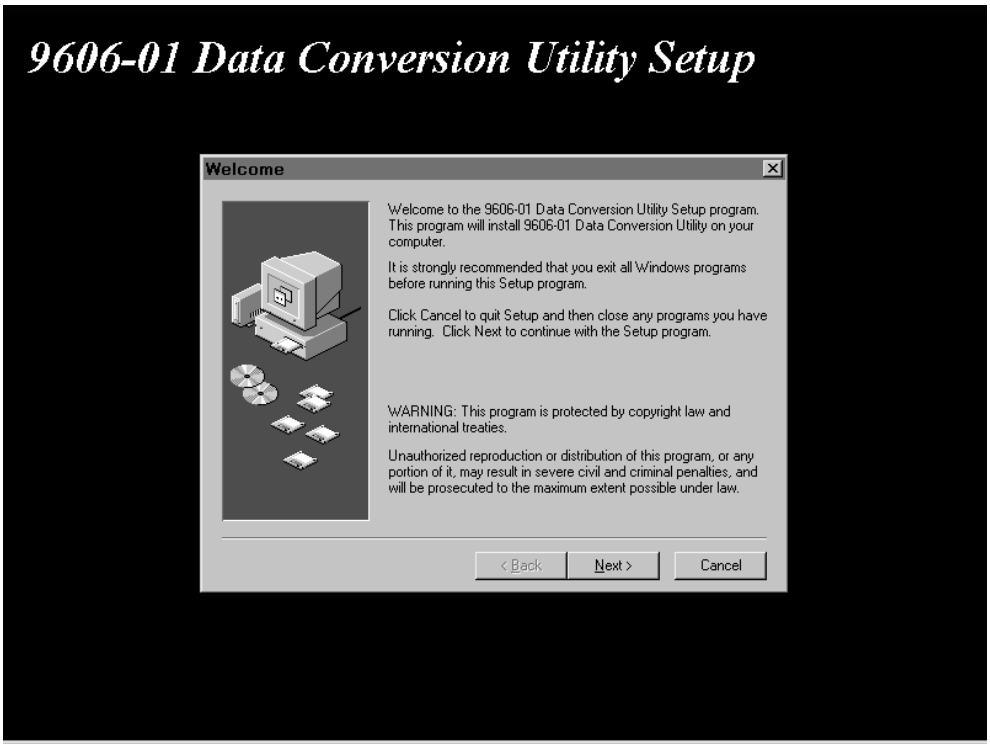
Data conversion	Waveform data from a 8845 DDS file for the 8845 Waveform data from a 8846 MO file for the 8846 can be saved to the personal computer. Can be saved partially Output interval Specifiable from 0 to 10000 data values Save format Binary (8845 only) Text CSV DADiSP
Waveform outline display	Waveform data from a 8845 DDS file can be displayed. Waveform data from a 8846 MO file can be displayed. Channel can be specified. Compression ratio can be specified. Magnification display for each channel, moving position, display color can be specified. The voltage value can be traced. Data can be copied to the clipboard from the waveform display.
File information display	8845 DDS file information can be displayed. 8846 MO file information can be displayed. Display item: file name, function, time axis, recording length, trigger time, number of data, title, channel

6. How to Use the Data Conversion Utility

6.1 Overview

The 9606-01 DATA CONVERSION UTILITY is software for a which allows waveform data recorded using the HIOKI 8845 and 8846 MEMORY HiCORDER to be displayed in outline form or saved to a hard disk in various formats.

6.2 Installation in Windows 95



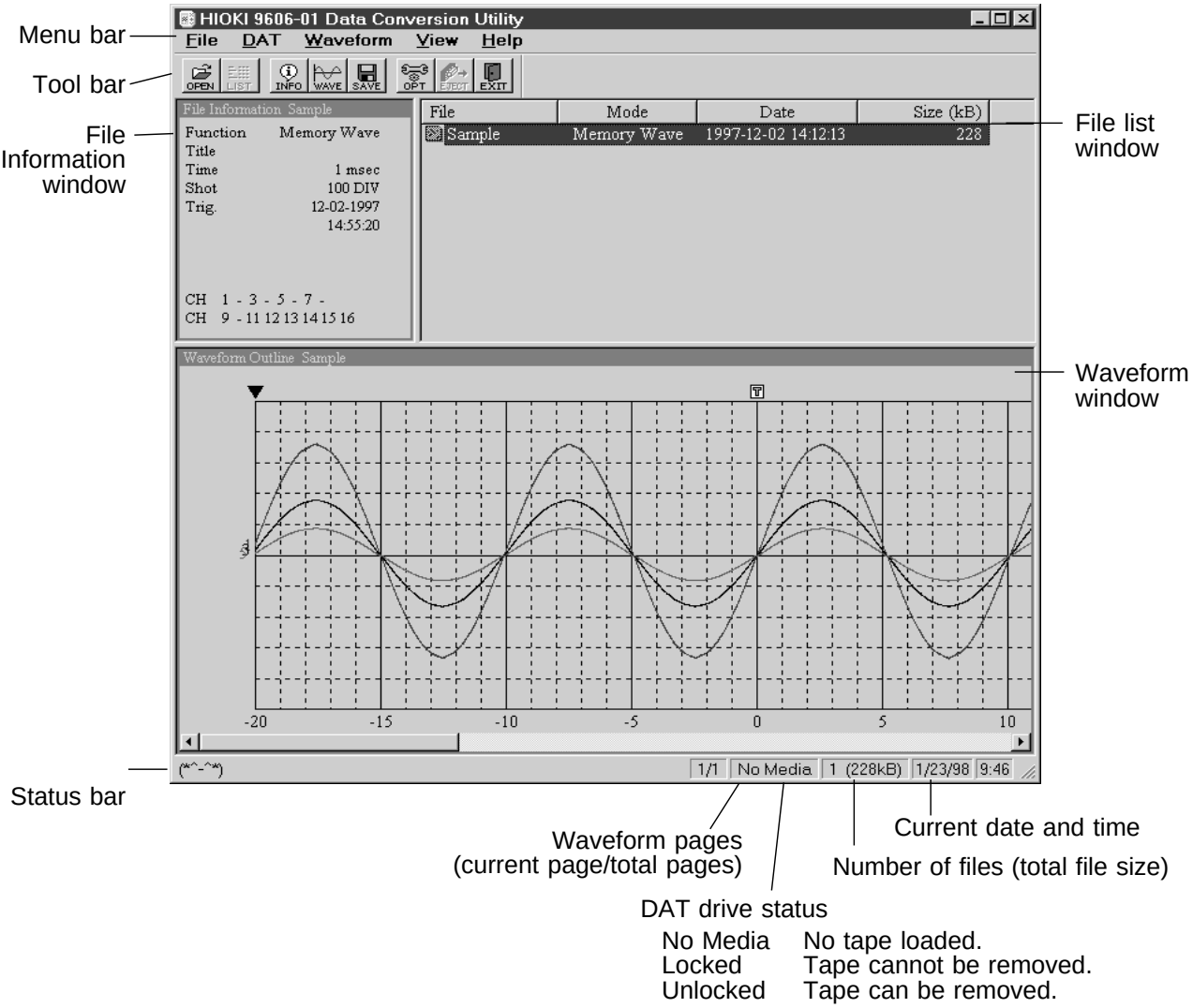
Method

1. Insert the 9606-01 DATA CONVERSION UTILITY disk in an appropriate drive.
2. In Control Panel, launch the **Add/Remove Programs** icon, and in the **Install/Uninstall** tab click **Install**.
3. Follow the screen messages, to display the 9606-01 DATA CONVERSION UTILITY installation. Then follow the installation instructions on the screen.

To launch the 9606-01 DATA UTILITY, follow the sequence: **Start**, **Programs**, and 9606-01 **DATA CONVERSION UTILITY**.

6.3 Basic Operations

(1) Basic screens and names of parts



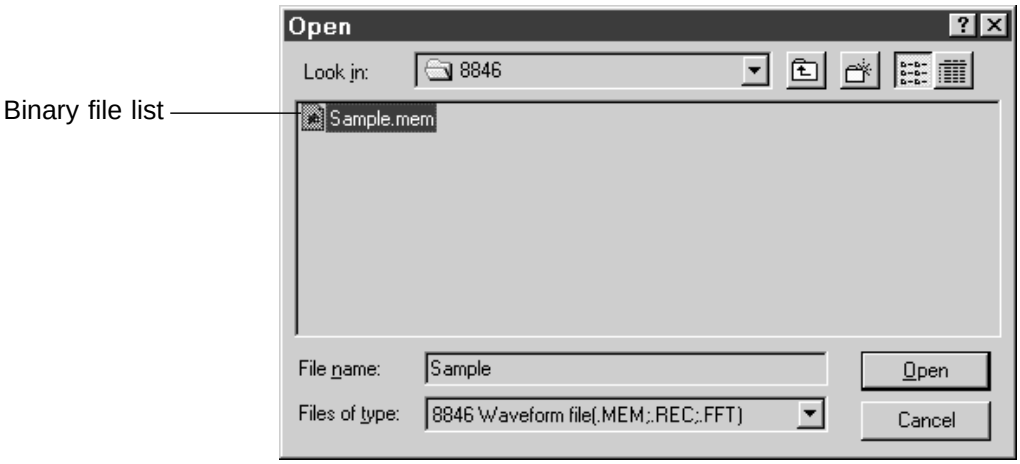
DAT drive status

No Media	No tape loaded.
Locked	Tape cannot be removed.
Unlocked	Tape can be removed.

(2) Operation menu

File ⇒ Open

This program can be used to open files of the 8845 or 8846 waveform data saved on the hard disk in binary format.



FILE ⇒ Information

Display terse information about the currently selected file in the file information window.

FILE ⇒ Save

Save the currently selected files or the file in the waveform display to the hard disk in a selected format.

Format	Meaning
Binary (8845 only)	Save the data in unconverted format. A partial save is not possible. The file can be opened with File/Open.
Text	Save in text format. The file can be viewed with a general-purpose editor.
CSV	Convert to CSV format. This can be read in directly by Excel and other spreadsheet software.
DADiSP	Convert to DADiSP format. This can be read in directly by DADiSP.

File ⇒ Exit

Terminates the 9606-01 DATA CONVERSION UTILITY.

DAT ⇒ List

List the data files on a DDS tape.

Click the headings to sort the files in the corresponding order.

File	Mode	Date	Time	Size (kB)
MEM Sample	Memory Wave	1997-04-23	15:07:43	52
!REC-001	Recorder Wave	1997-04-23	15:14:34	6270
FFT Transfer	FFT Wave	1997-04-23	15:19:03	44

- Double-click a file name with the left mouse button to display the file information.
- Double-click once more to display the waveform outline.

DAT ⇒ Operation ⇒ Eject

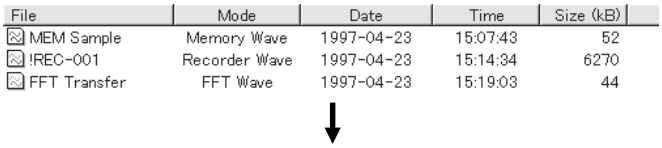
Eject the DDS tape.

DAT ⇒ Tape Operation ⇒ Delete

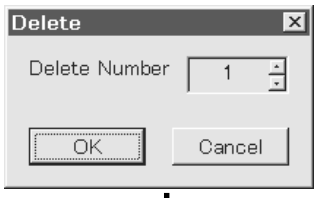
Delete DDS files. (The procedure is shown below.)

NOTE

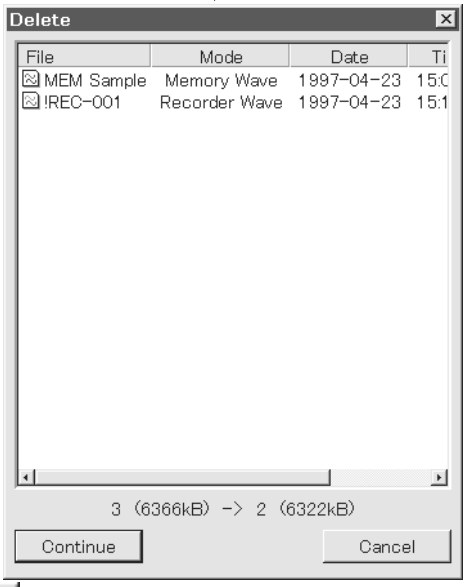
- Because of the basic properties of the DDS format, only the last-written file can be deleted.
- Note that once a file is deleted, it is not possible to restore it



1. List the data files on a DDS tape.



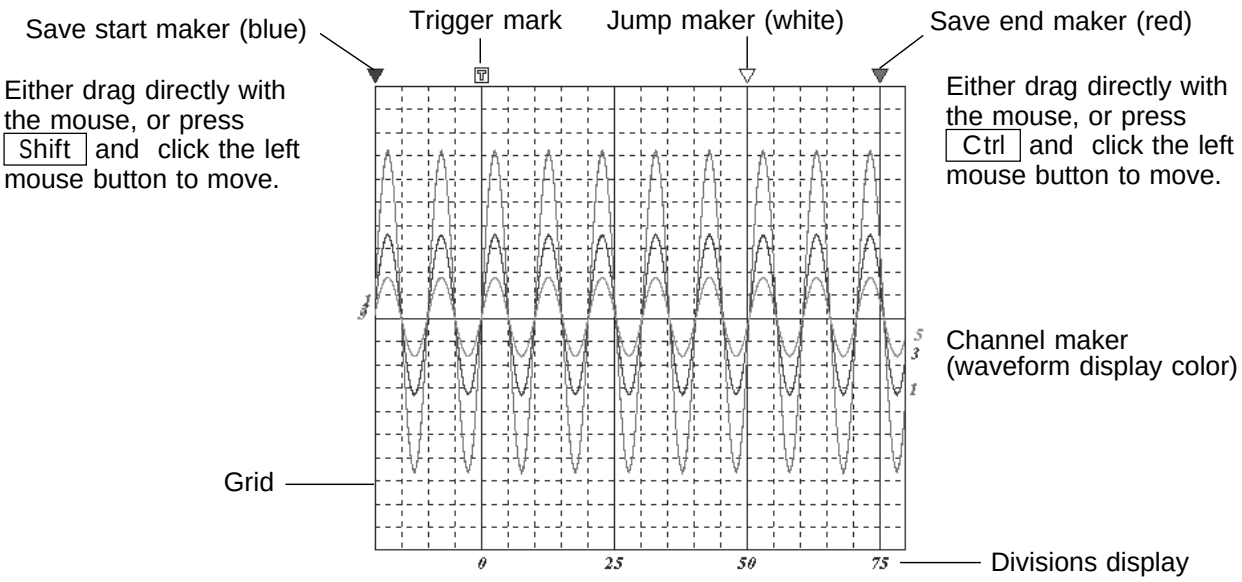
2. Enter the number of files to delete.



3. Check the list of files after deletion, and click **Continue**. This executes out the deletion.

Waveform ⇒ Waveform Outline

Displays the waveform outline of the selected file.



Waveform ⇒ Next Page

Displays the next page of displaying waveform outline.

Waveform ⇒ Previous Page

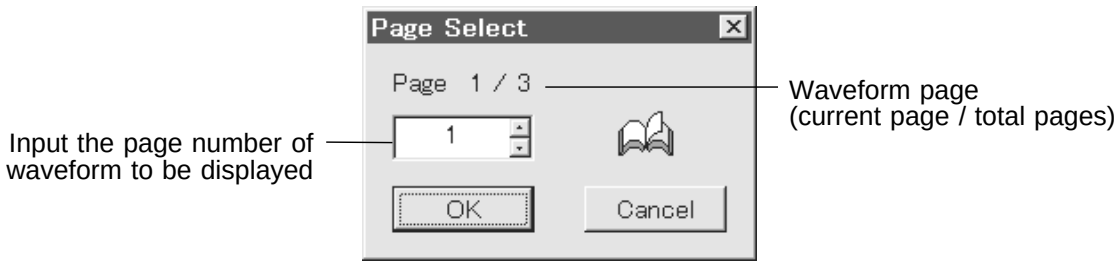
Displays the previous page of displaying waveform outline.

Waveform ⇒ Select Page

Display the specified page as a waveform outline.

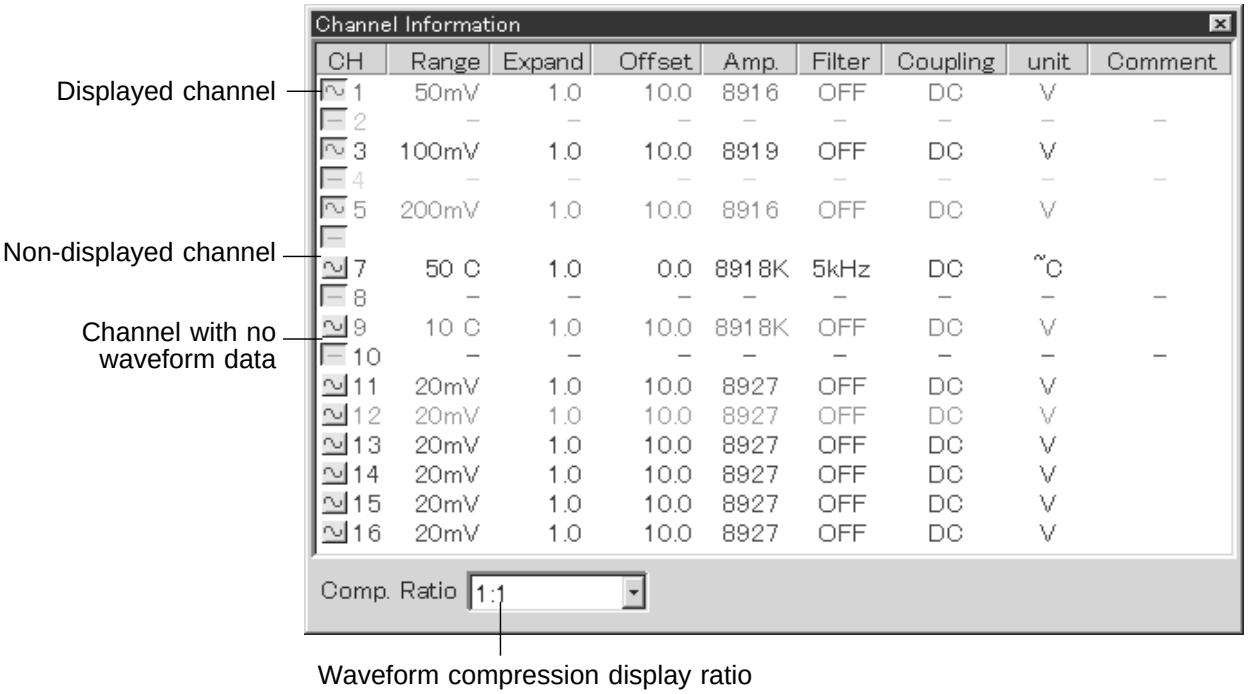
Waveform page:

Since a large waveform file recorded on a media cannot be read in a single operation, it is divided into sections referred to as "pages."



Waveform ⇒ Channel Information

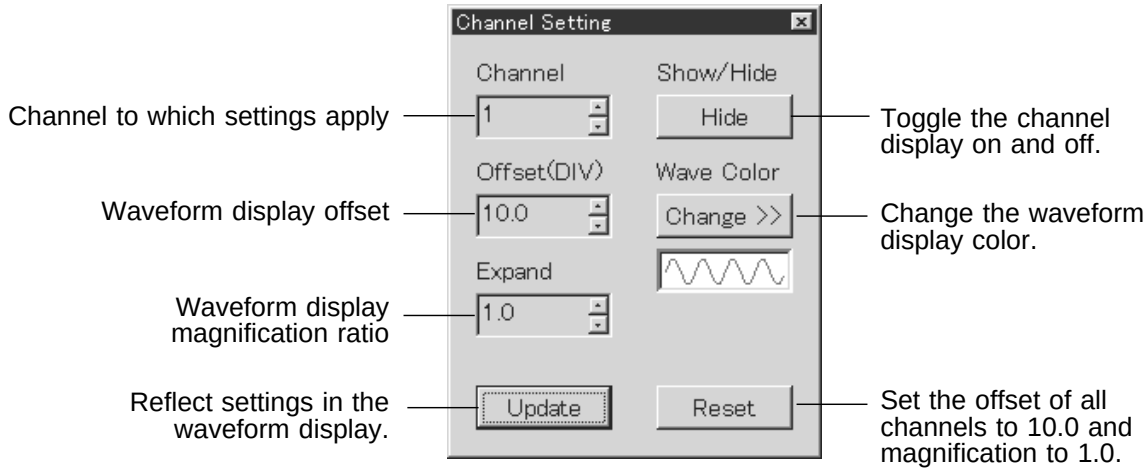
Displays the channel information of the displaying waveform outline.



- Double-click the left mouse button to toggle the waveform display for a channel on and off.
- Click the right mouse button to open the channel settings window for a channel.

Waveform ⇒ Channel Setting

Displays the channel setting of displaying waveform outline.



Waveform ⇒ Jump ⇒ Save Start Position

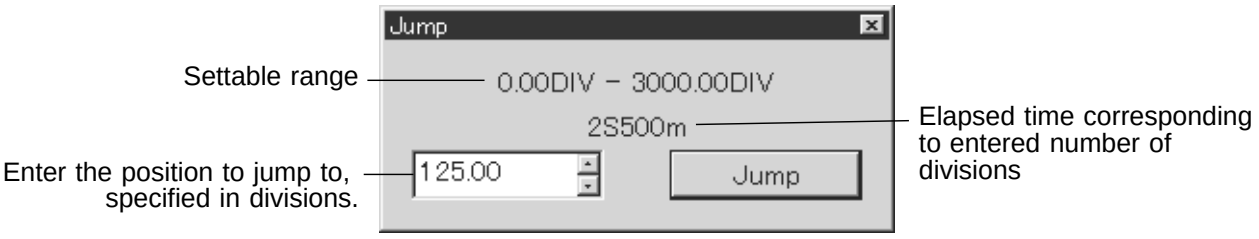
Jump to the waveform save start position.

Waveform ⇒ Jump ⇒ Save End Position

Jump to the waveform save end position.

Waveform ⇒ Jump ⇒ Specify Time

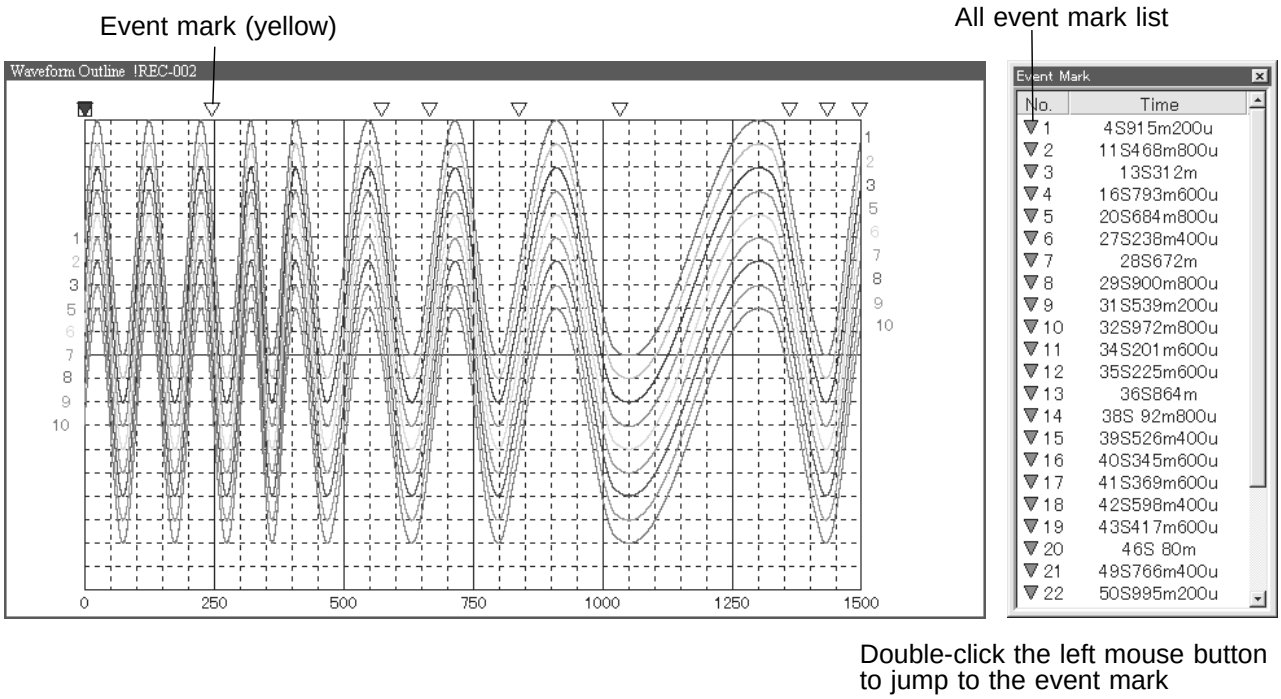
Display the specified time jump window.



Waveform ⇒ Jump ⇒ Event Mark

Display the event mark window.

NOTE This can only be carried out for a waveform with event marks inserted in the recorder function.



Double-click the left mouse button to jump to the event mark

Waveform ⇒ Compression Display

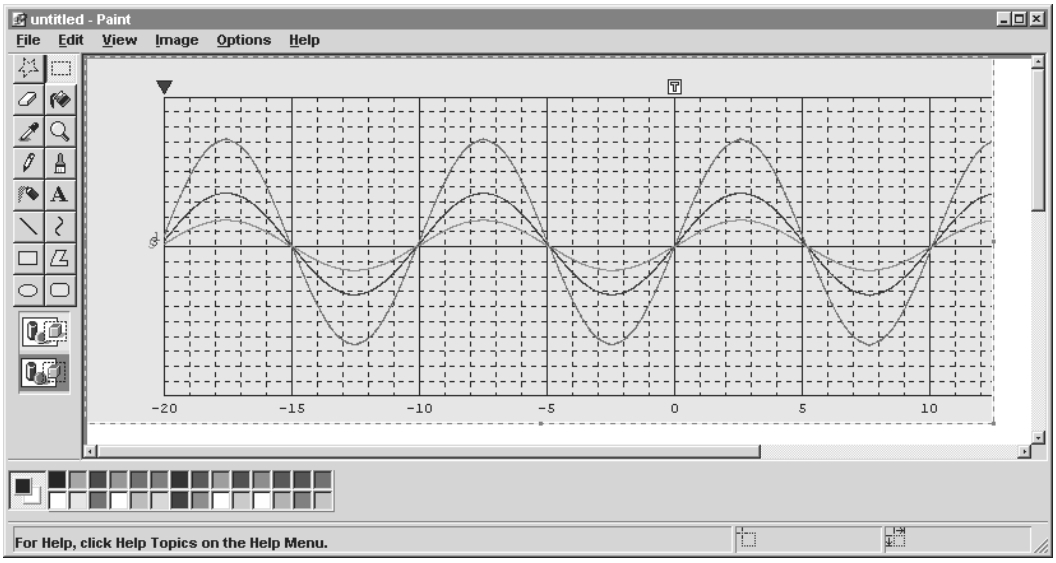
Specifies the compression ratio of the waveform outline display.

Compression ratio to be set; 1:100, 1:50, 1:20, 1:10, 1:5, 1:2, 1:1, 5:1

NOTE For 300 or more divisions of waveform data, the 5:1 setting is not available.

Waveform ⇒ Screen Hard Copy

Copy the waveform window to the clipboard as a bit image. It can then be copied into other applications using the **Edit** menu **Paste** item.



(Example shows bit image pasted into Microsoft Paint.)

View ⇒ Toolbar

Toggle the Toolbar display on and off.

View ⇒ Status Bar

Toggle the Status Bar display on and off.

DAT ⇒ Option

Displays the setting dialog.

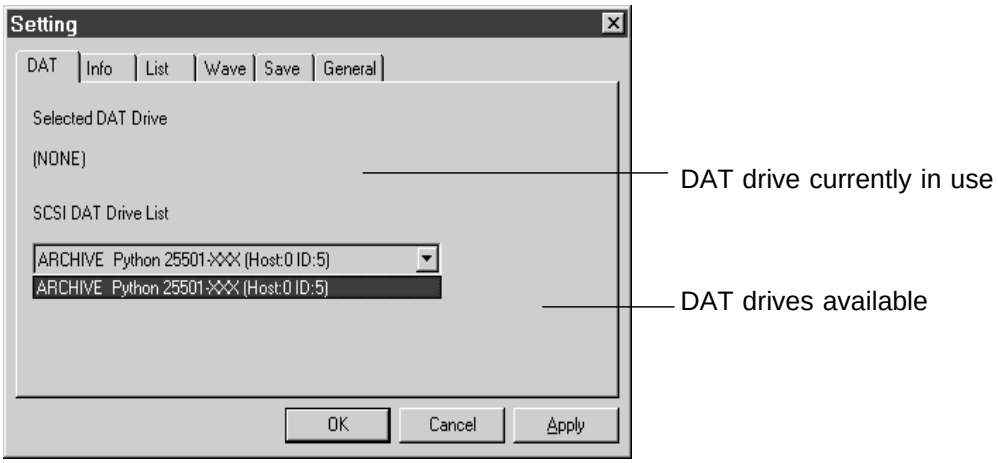
Help ⇒ Version

Display version information of the 9606-01

Example operation 1

This procedure saves a DDS tape memory waveform as a CSV format file.

1. In the Setting dialog box DAT tab, select the DAT drive to be used.
   (Menu **Display** → **Option**)



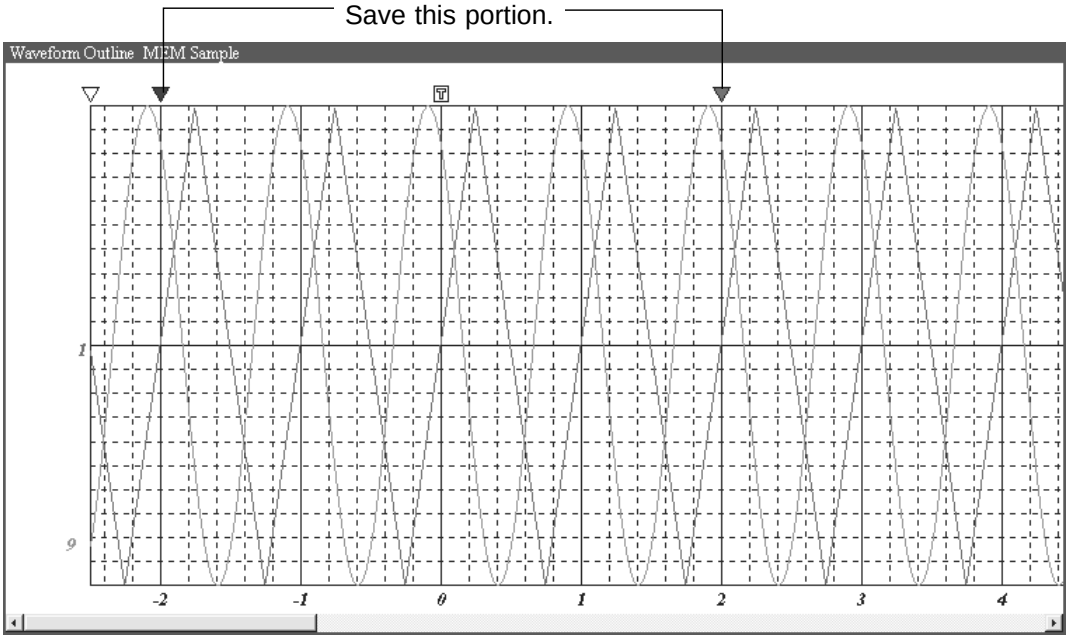
2. Insert the DDS tape into the selected DAT drive.

3. Get a listing of the files. (Menu **DAT** → **List**)

File	Mode	Date	Time	Size (kB)
MEM Sample	Memory Wave	1997-04-23	15:07:43	52
!REC-001	Recorder Wave	1997-04-23	15:14:34	6270
FFT Transfer	FFT Wave	1997-04-23	15:19:03	44

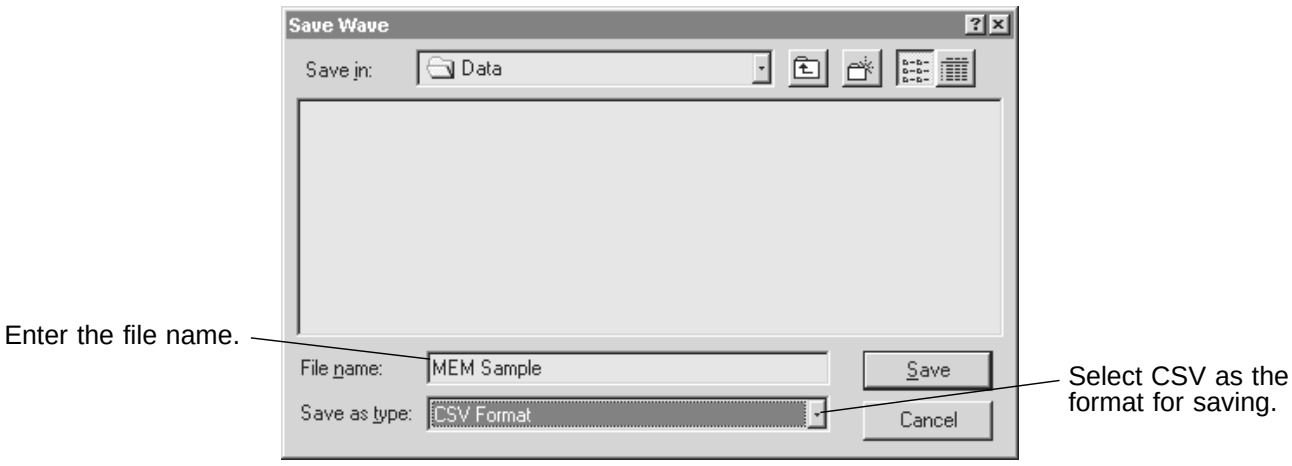
4. Select the file whose waveform is to be displayed, and display the outline.
   (Menu **Waveform** → **Waveform Outline**)
   If necessary, move the start and end positions for the save.

NOTE By default, the whole of the waveform is saved.

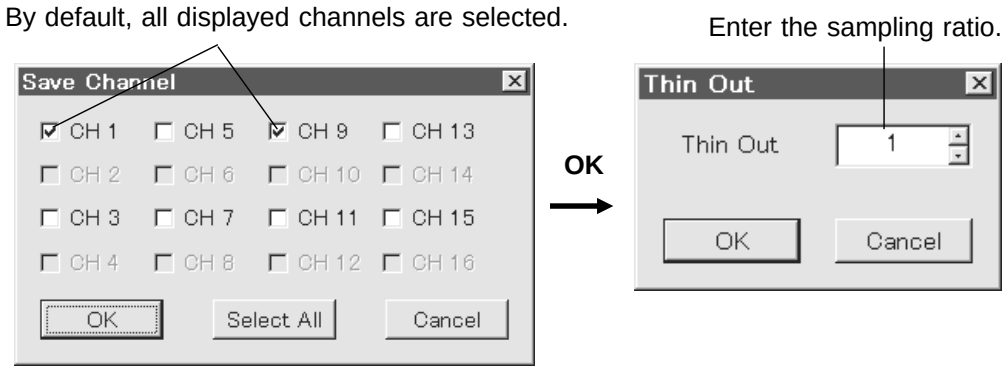


5. Copy the waveform file to the hard disk in CSV format.
(Menu **File** → **Save**)

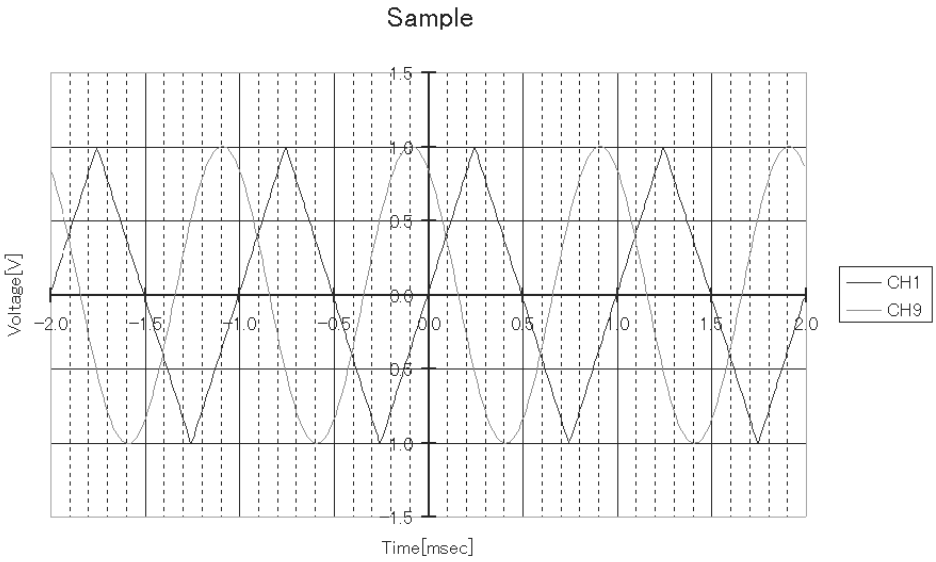
① Enter the file name, and select the format for saving.



② Select **Save**, to display the Channel Selection dialog box.
Select the channels to save, and enter the sampling ratio.



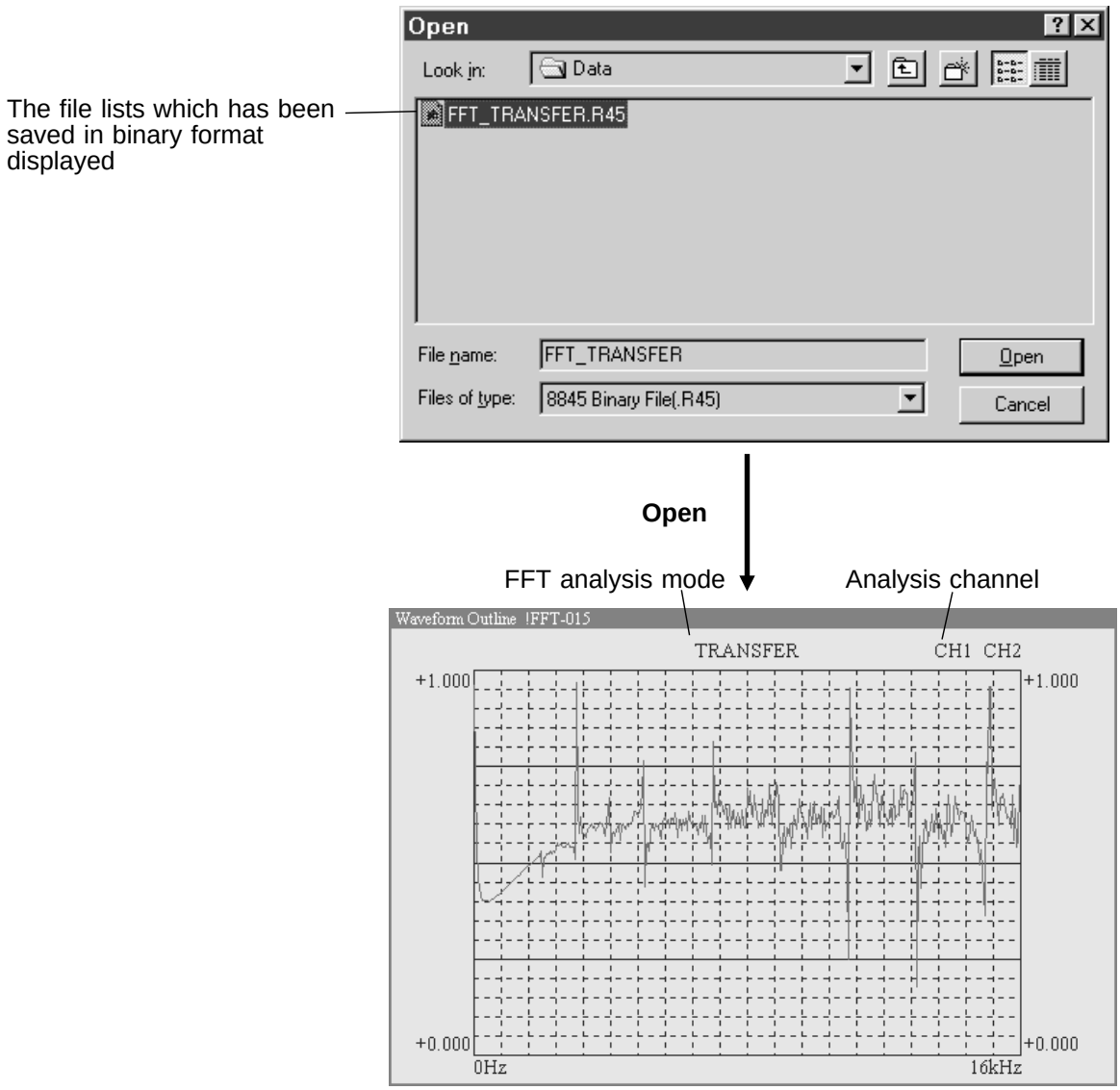
③ Click **OK** to carry out the copy.



(The example shows the file copied to the hard disk when read into MS-Excel and displayed as a graph.)

Example operation 2 This procedure saves a FFT waveform of hard disk as a CSV format file.

1. Open the FFT waveform file which has already been saved in binary format.
   (Menu **File** → **Open**)



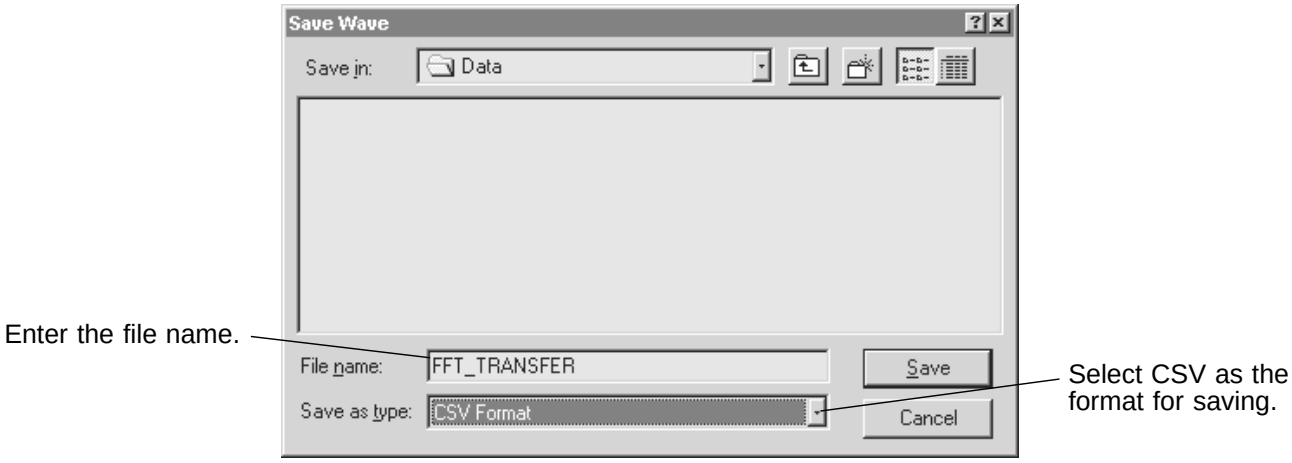
2. Copy the waveform file to the hard disk in CSV format.

(Menu **File** → **Save**)

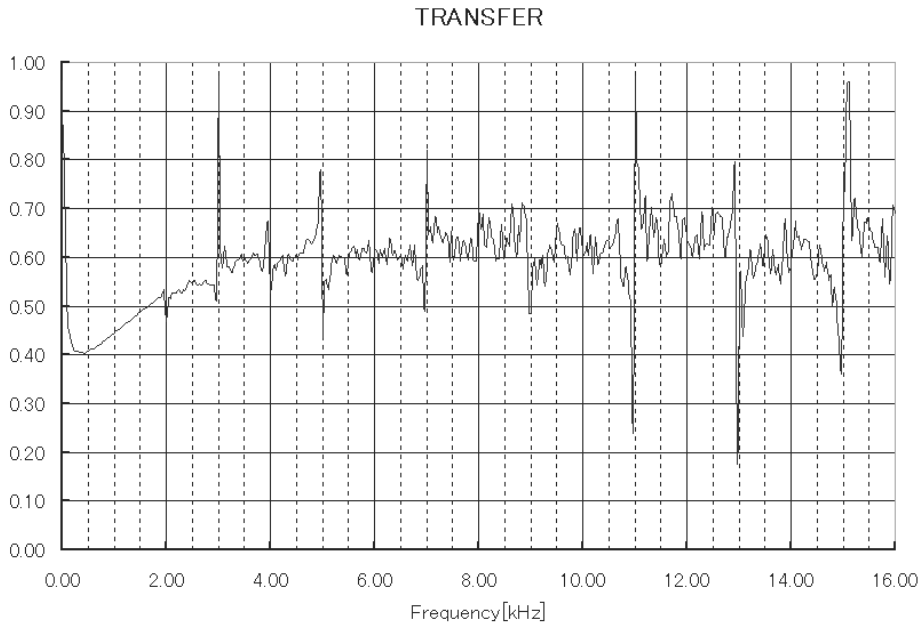
① Enter the file name, and select the format for saving.

NOTE

For the FFT waveform, only waveform which is displayed on the screen is saved.



② Select **Save** to carry out the copy.



(The example shows the file copied to the hard disk when read into MS-Excel and displayed as a graph.)

7. Appendix

Keyboard shortcuts

The following operations can be carried out directly from the keyboard.

Keys	Operations
1 - 9, 0	Toggle the channel display on and off. (CH1 to CH10)
Shift + 1 - 6	Toggle the channel display on and off. (CH11 to CH16)
A	Display the all channel.
B	Move to the previous page.
D	Increment the compression ratio of the waveform display.
E	Eject media
F	Move to the next page.
I	Display the file information.
J	Jump on time axis.
L	Get a listing of the files of DDS tape.
O	Open the Binary data file.
P	Select the waveform page.
Q	Quit the Data conversion utility.
R	Not display all channel
S	Save to the hard disk.
U	Decrement the compression ratio of the waveform display.
W	Display the waveform outline.

Troubleshooting

- Nothing appears in the DAT drive listing in the SCSI settings.

  Check that SCSI Board is correctly installed.
  (When using the SCSI of the PC card type, before inserting the PC card to the personal computer, turn on the power of the 8846.)
  Check that the DAT drive is correctly connected.

- The DDS tape list cannot be obtained, or an error occurs.

  Check that a tape is present in the DAT drive being used.
  Check that the tape is one which was written on the 8846.

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