

IEEE1394 Test Tool

Operation Manual

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Preface

This manual explains how to operate the tool for testing the IEEE1394 Device Driver (hereinafter, this tool).

This tool requires a Windows2000 personal computer where the IEEE1394 Device Driver is preinstalled and a printer is connected.

1 Installation

Execute Setup.exe from the install disk.

According to the displayed instructions, specify a setup folder and install this tool.

Once the installation has been completed, IEEE1394 Test Tool is added to Programs on the Start menu.

2 Startup

2.1 Select IEEE 1394 Test Tool from Programs on the Start menu.

2.2 This tool starts up and the window shown in Figure 1 opens.

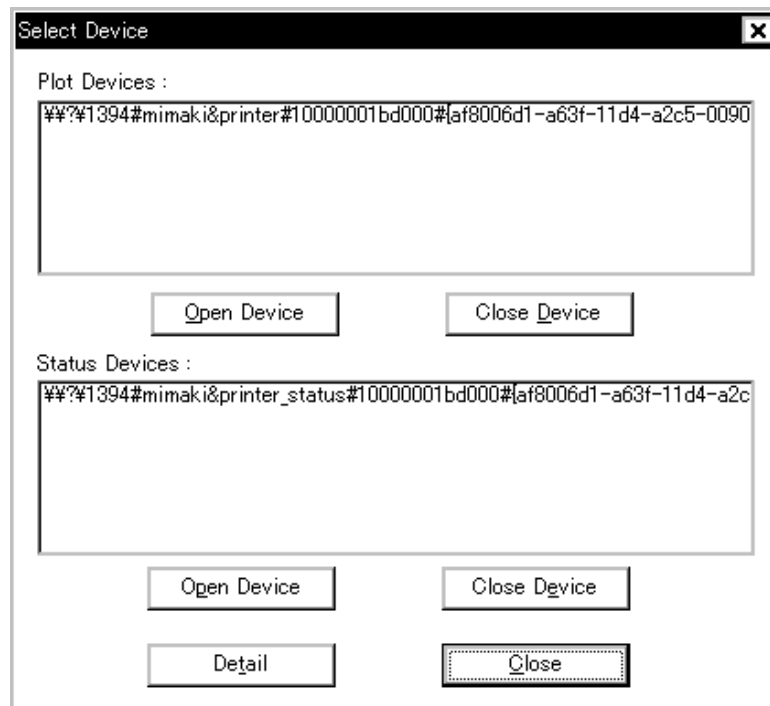


Figure 1 Select Device window
To select the default device, click Close.

2.3 The main window shown in Figure 2 and the status window shown in Figure 3 open.

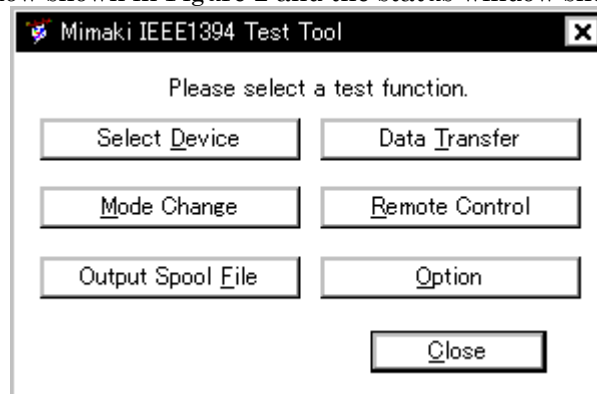


Figure 2 Main window

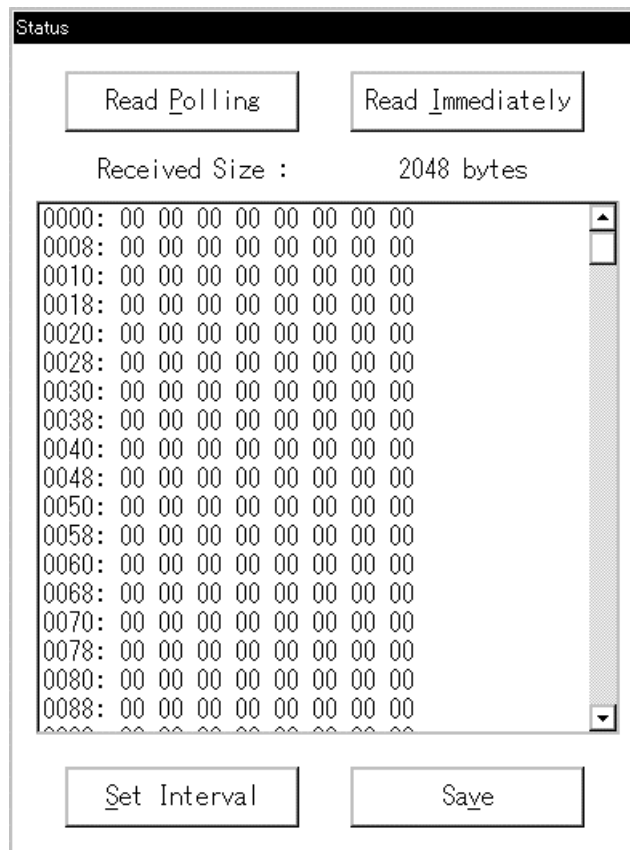


Figure 3 Status window

These two windows remain open until this tool is terminated.

3 Status Read

For the Status window shown in Figure 3, a driver-pollled status block is read at every interval set at Option (8). The polled status is also read if the Read Polling button is clicked.

Clicking the Read Immediately button reads and displays not a driver-pollled status block but a status block directly from the printer.

Read-in status block data is displayed in a hexadecimal dump format.

Clicking the Save button saves the read-in status block data in a file.

To change the polling interval of the driver, click the Set Interval button. The window shown in Figure 4 opens.

Specify the status data polling interval in units of 100 ms.

Any change made here becomes effective when Windows is rebooted or the printer power is turned off and on again.

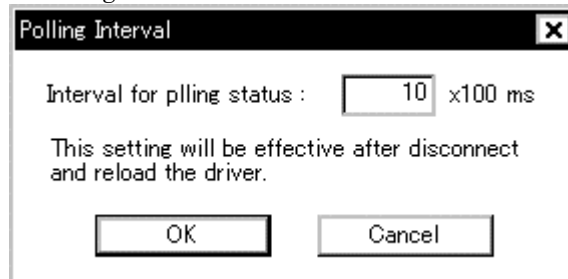


Figure 4 Polling Interval window

4 Mode Change Test

For the Data Transfer and Remote Control mode ON/OFF tests, click the Mode Change button. The window shown in Figure 5 opens.

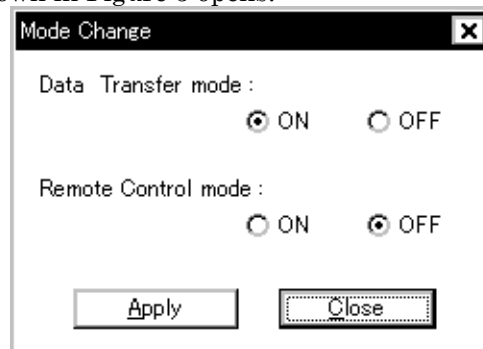


Figure 5 Mode Change window

Set each mode to ON or OFF and click the Apply button for command transmission. If both modes are set to ON, "Error: Data Transfer mode is ON. (e0070003)."

5 Data Transfer

For the data transfer test, click Data Transfer. The window shown in Figure 6 opens.

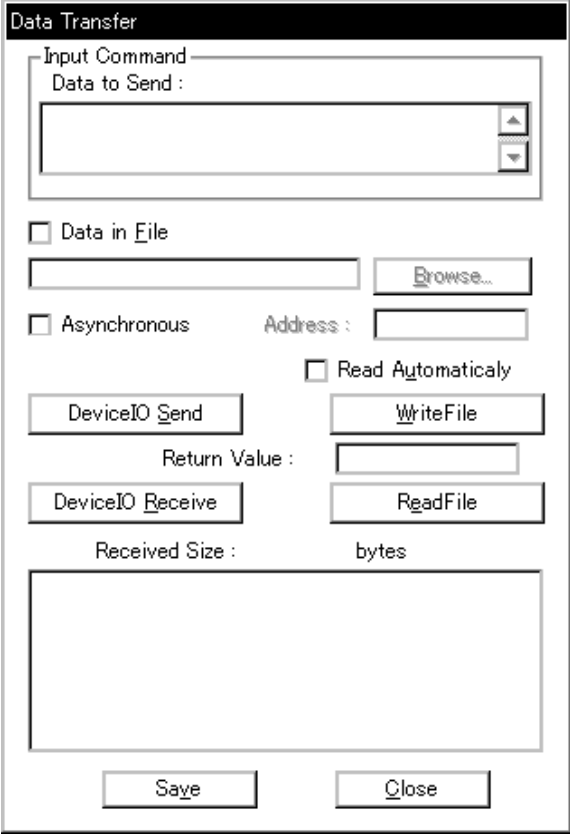
The figure shows a 'Data Transfer' window with a black title bar. Inside, there's an 'Input Command' section with a 'Data to Send' text box. Below this are checkboxes for 'Data in File', 'Asynchronous', and 'Read Automatically'. The 'Data in File' checkbox is accompanied by a text box and a 'Browse...' button. The 'Asynchronous' checkbox is accompanied by an 'Address' text box. There are four main action buttons: 'DeviceIO Send', 'WriteFile', 'DeviceIO Receive', and 'ReadFile'. Below these is a 'Return Value' text box. At the bottom, there's a 'Received Size' label followed by a large empty text box for the result, and a 'bytes' label. At the very bottom are 'Save' and 'Close' buttons.

Figure 6 Data Transfer window

5.1 Data Send

For the manual input of send data, enter the data into the Data to Send box. Any character string enclosed in double quotation marks (") is regarded as a hexadecimal value and converted into binary data.

Ex: When the input character string is IN"1b2e41"0, the actual send data is INesc.A0.

5.2 File Send

For file send, check Data in File and select a file with the Browse button.

In both 5.1 and 5.2, if Device IO Send or Write File is clicked, the data is sent and the number of sent bytes and the send time in milliseconds are displayed.

5.3 Data Receive

If Device IO Receive or Read File is clicked, data is read from the printer and displayed in a hexadecimal dump format.

If Read Automatically is checked, new data is read automatically after data send in 5.1 or 5.2.

5.4 Asynchronous Read/Write

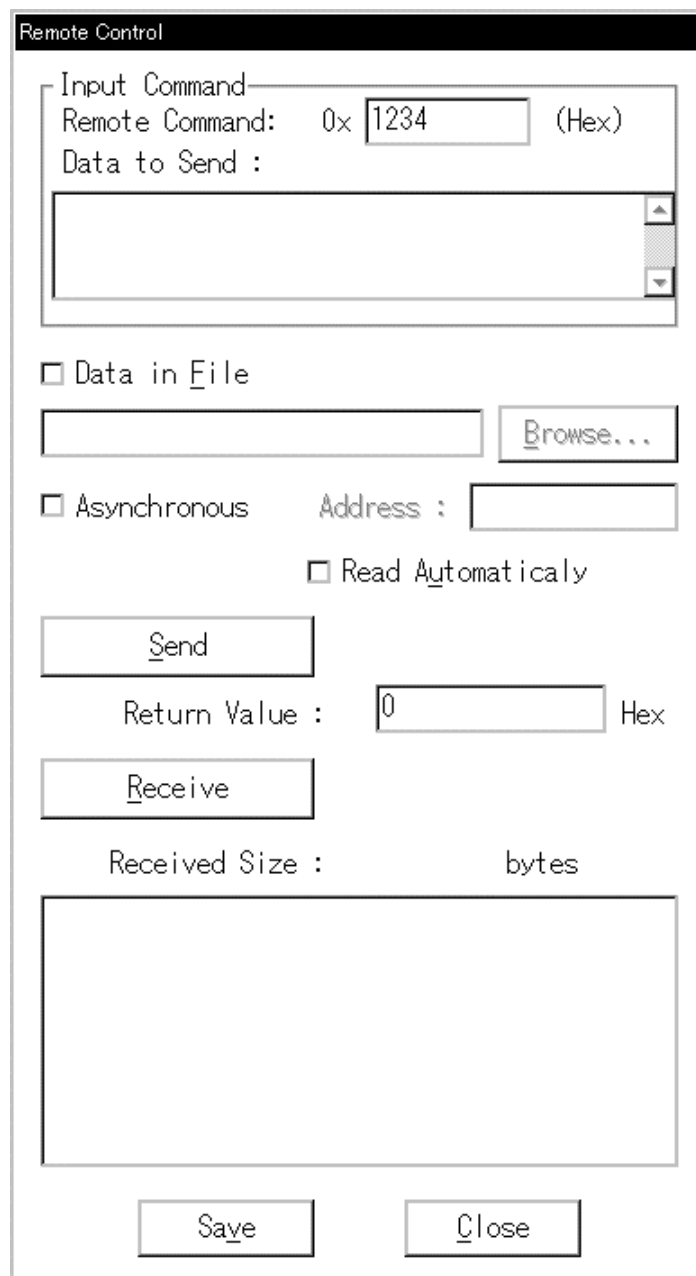
When Asynchronous is checked, data is read or written asynchronously using the address entered into the Address box.

5.5 Data Save

Clicking the Save button saves read data into a file.

6 Remote Control Test

For the remote control test, click Remote Control. The window shown in Figure 7 opens.



The 'Remote Control' window contains the following elements:

- Input Command:** A label above a text box containing '1234' and the label '(Hex)'.
- Remote Command:** A label next to the '0x' prefix of the text box.
- Data to Send:** A label above a large empty text area.
- Data in File:** A checkbox, a text box, and a 'Browse...' button.
- Asynchronous:** A checkbox.
- Address:** A label next to an empty text box.
- Read Automatically:** A checkbox.
- Buttons:** 'Send' and 'Receive' buttons.
- Return Value:** A label next to a text box containing '0' and the label 'Hex'.
- Received Size:** A label next to an empty text box and the label 'bytes'.
- Bottom Buttons:** 'Save' and 'Close' buttons.

Figure 7 Remote Control window

6.1 Send Command Input

Enter a remote control command into the Remote Command box in a hexadecimal format for send.

6.2 Parameter Input

Enter a parameter into the Data to Send box to accompany the remote control command entered in 6.1. Any character string enclosed in double quotation marks (") is regarded as a hexadecimal value and converted into binary data.

Ex: When the input character string is 00"4142"1, the actual send parameter is 00AB1.

6.3 File Send

For file send, check Data in File and select a file with the Browse button.

In both 6.1 and 6.2, if Device IO Send or Write File is clicked, the data and parameter are sent and the number of sent bytes and the send time in milliseconds are displayed.

6.4 Data Receive

If Receive is clicked, data is read from the printer and displayed in a hexadecimal dump format.

If Read Automatically is checked, new data is read automatically after data send in 6.1 or 6.2.

6.5 Asynchronous Read/Write

When Asynchronous is checked, data is read or written asynchronously using the address entered into the Address box.

6.6 Data Save

Clicking the Save button saves read data into a file.

7 Spool File Output

When sending a pre-created spool file, click the Output Spool File button. The window shown in Figure 8 opens.

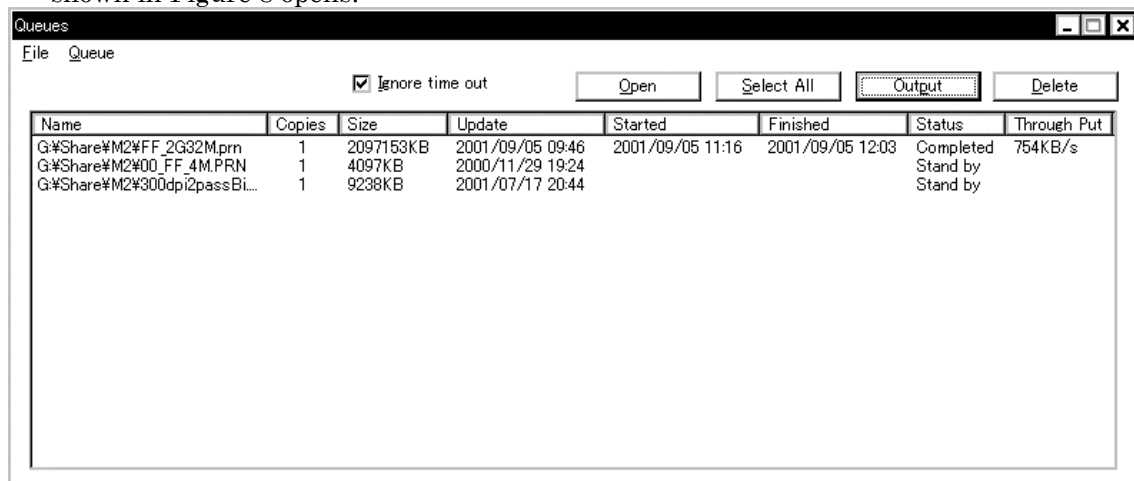


Figure 8 Queues window

7.1 File Selection

Click Open on the File menu and select an output file. The selected file is added to the end of the list and its size and update date and time are displayed.

7.2 Deletion from List

To delete files from the list, select Delete from the Queue menu or the popup menu that is displayed when files are selected and the mouse right button is clicked. This deletes the selected files from the list.

7.3 Number of Copies Input

Double-click a file on the list for numeric input to "Copies." The number of copies can be specified in the range from 1 to 1,000,000.

7.4 Output Execution

To execute file output, select Output from the Queue menu or the popup menu that is displayed when files are selected and the mouse right button is clicked. The window shown in Figure 9 opens and the output starts. All files selected on the list are output.

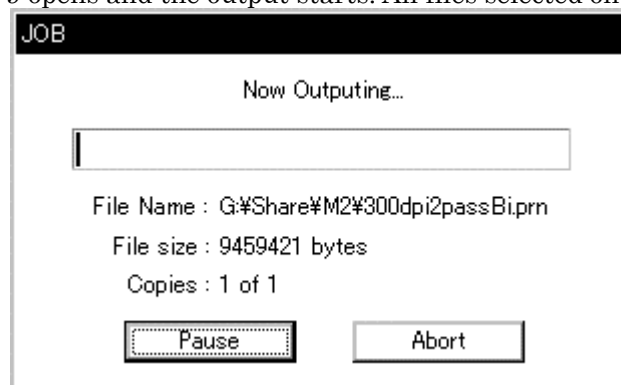


Figure 9 Output window

Output can be paused by the Pause button or aborted by the Abort button.

At the end of output, the screen returns to the window shown in Figure 8 and displays the output start/end date and time and throughput.

7.5 All Selection

Clicking the Select All button selects all files on the list for output or deletion.

8 Options

To make necessary settings for this tool, click the Option button. The window shown in Figure 10 opens.

8.1 Polling and read status

When this switch is turned ON, the window shown in Figure 3 opens and the status is polled. This also makes the tool ready to reset a bus or to receive an error notice.

When this switch is OFF, none of the processing is executed.

8.2 Interval for reading status

This option is effective only when the switch of 8.1 is ON. At Status read (3), specify the read interval for driver-pollled status block in units of 100 ms.

The image shows a Windows-style dialog box titled "Option". It contains several configuration settings:

- ☒ Polling and read status
- Interval for reading status : x100 ms
- Data size for one time of transfer : Bytes
- Time out (x 100ms)
 - Device Open :
 - Device Close :
 - Data Transfer Write
 - Interface :
 - Driver :
 - Data Transfer Read :
 - Remote Control Write :
 - Remote Control Read :
 - Get Status :
- Write Length : MB
- Select API used for sending spool files:
 - (dropdown menu)
- Notes : Time out and Write length settings will be effective after disconnect and reload the driver.
- Buttons: OK, Cancel

Figure 10 Option window

8.3 Data size for one time of transfer

Specify the size of single data transfer by spool file output (7) in bytes.

8.4 Time out

Specify each time-out value to the driver in units of 100 ms. (*)

8.5 Write Length

Specify the memory size of the data transfer area to be reserved by the driver. (*)

8.6 Select API used for sending spool files

As the API for data send by spool file output (7), select either Write File or Device Io Control.

About 1/8 of the PC-mounted physical memory capacity is recommended.

*Any change made here becomes effective when Windows is rebooted or the printer power is turned off and on again.

