User's Manual

Model 417322900
AE5511 TrafficTesterPro
Remote Command Manual

YOKOGAWA
Yokogawa Electric Corporation

IM 417322900-17E
1st Edition

Thank you for purchasing the AE5511 TrafficTesterPro.
Automated measurements can be carried out on the AE5511 by connecting a PC.
This user's manual describes the procedure to carry out automated measurements using the AE5511 communication function (remote control function) and lists the handling precautions.
To ensure correct use, please read this manual thoroughly before beginning operation.
After reading the manual, keep it in a convenient location for quick reference whenever a question arises during operation.
The following three manuals, including this one, are provided as manuals for the Windows version of the AE5511. Please read all of them.

Manual Title	Manual No.	Description
AE5511 TrafficTesterPro Remote Command Manual	IM417322900-17E	This manual. Explains automated measurement using the communication function (remote control function) of the AE5511 and commands.
AE5511 TrafficTesterPro User's Manual (Windows Version)	IM417322900-01E	Explains all functions and procedures of the AE5511 excluding the communication functions.
AE5511 TrafficTesterPro Startup Manual	IM417322900-02E	Explains the procedures for setting up the AE5511 so that it can be accessed.

Please also read the manuals for the respective units that are to be installed in the AE5511.

- AE5520 10/100BASE-T Unit (Manual No. AS-84713EY)
- AE5521 1000BASE-X Unit (Manual No. AS-84714EY)
- AE5522 10GBASE-X Unit (Manual No. AS-84721EY)
- AE5523 1000BASE-T Unit (Manual No. IM731010-01E)
- AE5524 1000BASE-X Unit (Manual No. IM731011-01E)

If you are controlling the AE5511 from a Web browser, read the Web version of the manual (Manual No. AS-84711-1EY).

Notes

- The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument's performance and functions. The figures given in this manual may differ from those that actually appear on your screen.
- Every effort has been made in the preparation of this manual to ensure the accuracy of its contents. However, should you have any questions or find any errors, please contact your nearest YOKOGAWA dealer.
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Revisions

- 1st Edition: July 2005

1st Edition : July 2005 (YK)

Conventions Used in This Manual

Markings

The following markings are used in this manual.

Note Calls attention to information that is important for proper operation of the instrument.

Subheadings

On pages that describe operating procedures, the following symbols, displayed characters, and terminology are used to distinguish the procedures from their explanations:

Procedure Carry out the procedure according to the step numbers. All procedures are written with inexperienced users in mind; experienced users may not need to carry out all the steps.

Explanation This section describes the setup items and the limitations regarding the procedures. It may not give a detailed explanation of the function. For a detailed explanation of the function, see chapter 1.

Displayed Characters and Terminology Used in the Procedural Explanations

- Software buttons: Bold characters — Example) Click **OK**.
- Parameters: Bold characters — Example) Select **TRAFFIC**.
  [ ] (chapter 3 only) — Example poupdate [*setupfile*] [port]
- Switches: xxx switch — Example) Press the power switch.
- Hard keys: xxx key — Example) Press the cursor key.
- Italic characters: Specified value or string — Example) *filename, project_no, ErrorMessage*

Unit

k: Denotes 1000. Example: 100 kHz and 10 kg
K: Denotes 1024. Example: 100 KB
M: Denotes 1000000 if the unit is bps or Hz. Example: 100 Mbps and 10 MHz
Denotes 1048576 if the unit is bytes. Example: 100 MB
G: Denotes 1000000000 if the unit is bps or Hz. Example: 10 Gbps and 10 GHz

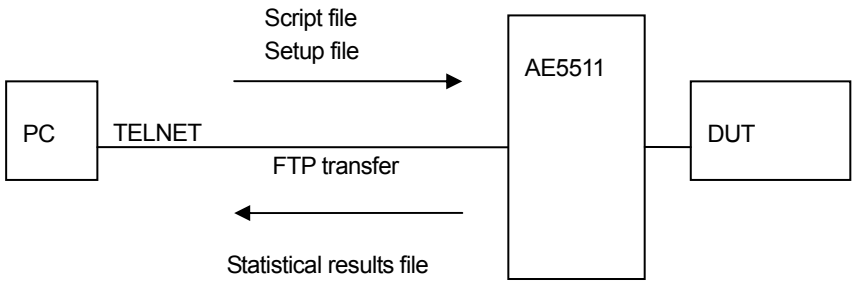
Contents

1.1 Overview

The auto test function tests the statistical items of the AE5511 TrafficTesterPro according to the execution file.

Connection

- Connect the AE5511 and a PC via the Ethernet interface.
- Use a general-purpose terminal software with VT100 terminal emulation such as Hyper Terminal and log into and control the AE5511 using TELNET.
- Transfer the script file and setup file to the AE5511 to build an execution file.
- Execute the execution file to start the auto test.
- When the auto test is complete, the statistical results files are created.
- File transfer is carried out using FTP.

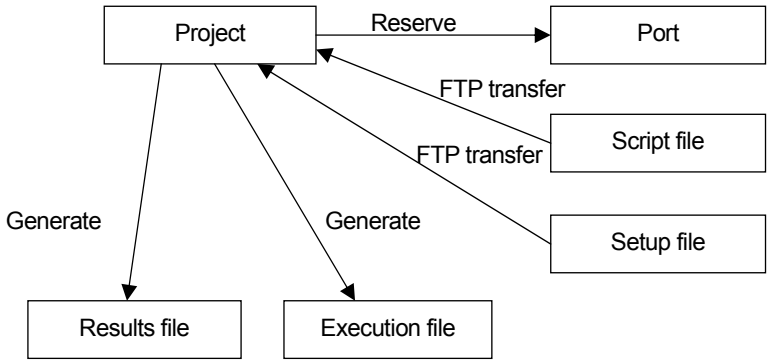


Configuration

The components of the auto test are described below.

- Auto test is managed by projects (the execution environment of the test).

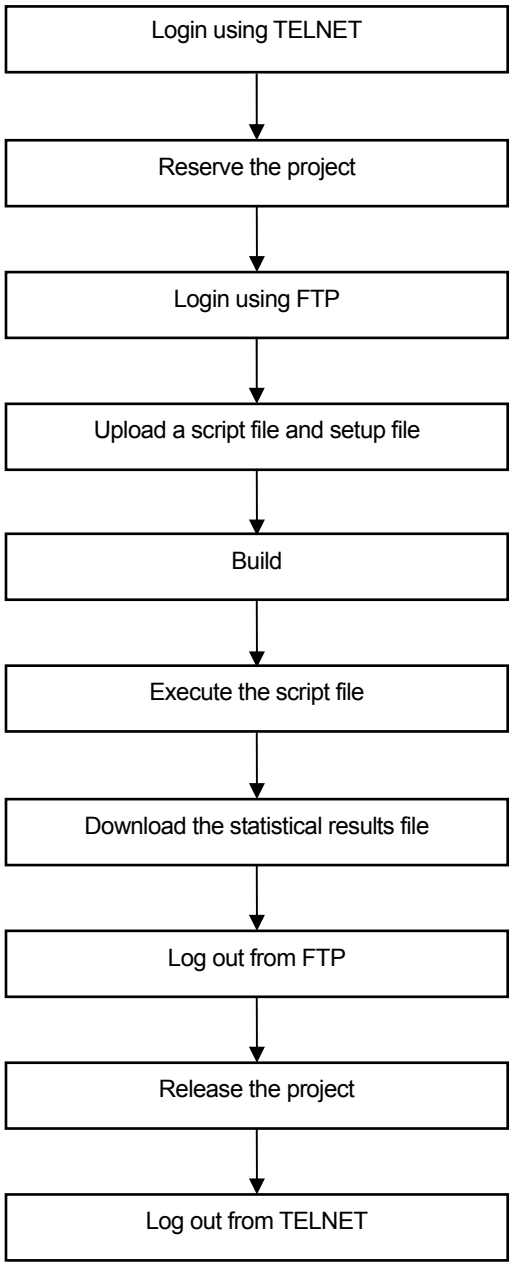
- You provide a script file and setup file that are to be used in the project. These files are used to build an execution file (transferred using FTP).
- When the auto test is executed, results files are generated.



Note

- Project is the unit by which auto tests are managed. The AE5511 has eight projects. Up to eight users can execute auto tests.
- Script file: A file describing the contents of the auto test.
- Setup file: A file describing the configuration of each port.

1.2 Auto Test Flow



The login name is arbitrary.
A name already logged in cannot be used.

Eight projects are available numbered from 1 to 8.

If you reserve the project after logging in using TELNET, you can log in using FTP.
Use the same login name as the TELNET login name.

Upload the files to the auto/setup/ directory. If the files are already uploaded or the execution file exists, there is no need to upload the files.

Run “ATBuild script_file_name.wscp” to generate an execution file. If the execution file already exists, there is no need to generate the file again.

Run the “ATRun” script.

Download the statistical results file from the auto/result/ directory.

Log out from FTP before releasing the project.

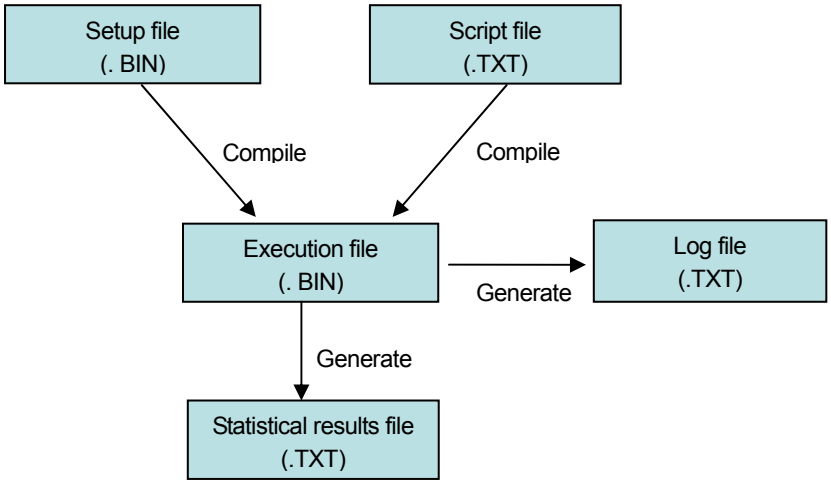
Run “ATProjectRelease” to release the project.

Note

The statistical results files are generated by redirecting POSaveResult or POShowCounter. For a description of redirecting, see section 1.7.

1.3 File Types

This section explains the type of files used by auto test.



- An execution file is built from the setup file and script file when you run the ATBuild command.
- A log file is generated when you execute the execution file with the ATRun command.
- Statistical results files are generated when you run the POSaveResult command.

Note

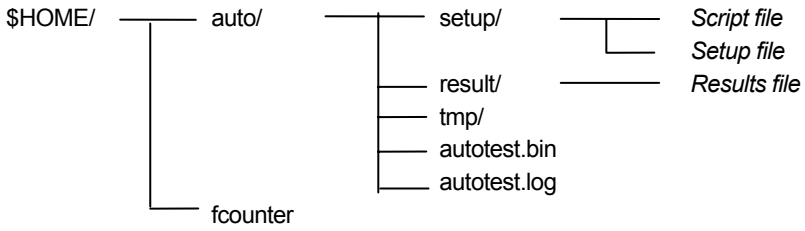
For a description of the commands, see section 1.5, “A List of Commands” or chapter 3, “Description of Commands.”

File Type	File Name	Note
Script file (text)	*user defined* .wscp	A file containing a list of commands for executing the test.
Setup file (binary)	*user defined* .setup	A setup file generated using the data export function of TTProControlWindowE.
Statistical results file (text)	*user defined* .csv	A data file generated when the POSaveResult command is executed, which requests for the statistical results.
Execution file (binary)	autotest.bin	A file generated when you run the ATBuild command. This file is executed using the ATRun command.
Log file (text)	autotest.log	A log file generated when you execute the auto test.

* The words in italics indicate that a specified value or character string is entered there.

1.4 Directory Structure

The directory structure is shown below.



The current directory when you login using FTP is $HOME/.
The auto test uses the directories under $HOME/auto/.

Note

If you move to the $HOME/auto/ directory while logged in via FTP, you cannot move back to the $HOME/ directory.

- **Script File**
  Save the script files in the $HOME/auto/setup/ directory.
  For details, see section 2.1, “Creating Script Files.”

- **Setup File**
  - Save the all the setup files in the $HOME/auto/setup/ directory.
  - When compiling, all the setup files written in the script file must exist in the setup directory.

- **Statistical Results File**
  If the auto test is executed when the POSaveResult command exists in the execution file, the results files are saved to the $HOME/auto/result/ directory.

- **Temporary Folders ($HOME/fcounter, $HOME/auto/tmp/)**
  Folders used to hold temporary files while the auto test is being executed.

1.5 A List of Commands

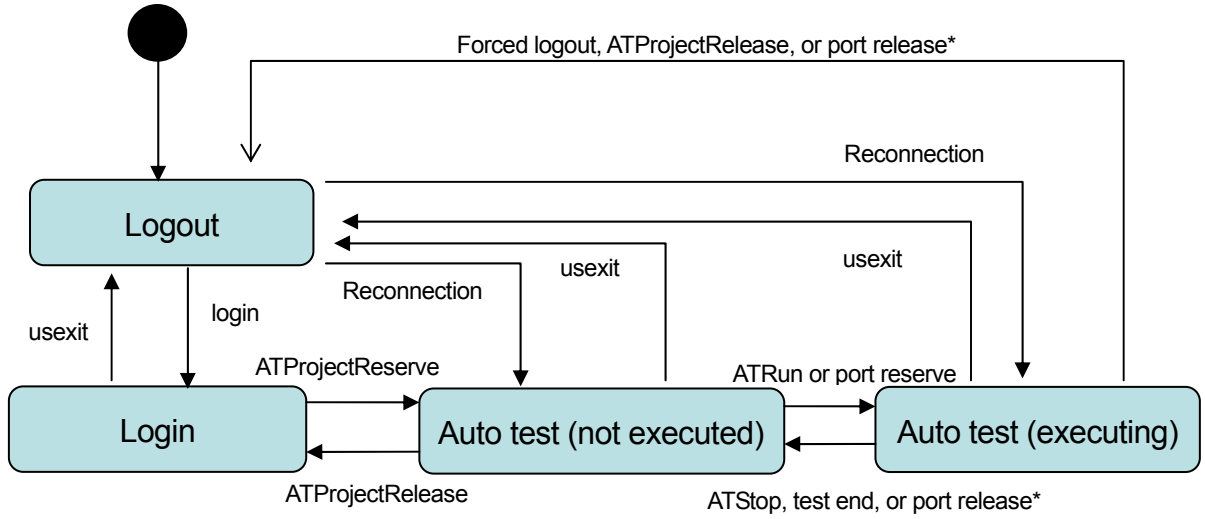
Auto Test Commands

These commands control the auto test. After logging in using TELNET, you type the command directly from the PC keyboard.

Command Name	Description	Logged In	Not Executed	Executing	Note
ATProjectReserve	Reserves a project.	Yes	No	No	
ATProjectRelease	Releases a project.	No	Yes	No	
ATShowProject	Shows a list of projects.	Yes	Yes	No	
ATBuild	Creates an execution file from the setup file and script file.	No	Yes	No	Specify the entire file name including the extension.
ATRun	Executes the auto test from the execution file.	No	Yes	No	
ATStop	Stops the auto test currently in progress.	No	No	Yes	
ATResultList	Shows a list of the generated results files.	No	Yes	No	
ATShowLog	Shows the log file.	No	Yes	No	
ATLogClear	Clears the auto test log file.	No	Yes	No	

Yes: The command is valid.
No: The command is invalid.

State Transition Diagram



* When the port is released, frame transmission, cycle insert frame transmission, and link down control are stopped.

Script Commands

These commands can be written in the script file. You can also log in using TELNET and type these commands directly from the PC.

Function		Command Name	Unit Support			Notes
			AE5520/21	AE5522	AE5523/24	
Port setting	Update the settings (file designation)	POUpdate	Yes	Yes	Yes	
	Check the processing status of the setting update	POUpdateStatus	Yes	Yes	Yes	
Port control	Start/Stop transmission	PORun	Yes	Yes	Yes	
	Clear statistics	POStatistics	Yes	Yes	Yes	
	Insert frames	POInsertFrame	Yes	Yes	Yes	Cycle cannot be specified when the AE5520/AE5521/ AE5522 unit is installed.
	Insert bit errors	POInsertBiterr	Yes	Yes	Yes	
	Insert local fault	POLocalFault	-	Yes	-	
	Insert remote fault	PORemoteFault	-	Yes	-	
	Link down	POLinkdown	Yes	Yes	Yes	
	Wait for link up	POWaitlink	Yes	Yes	Yes	Version R7.1.0.0 or later.
MAC address auto learn	Execute MAC auto learn or clear the result	POAutomac	Yes	Yes	Yes	
	Display the result of the MAC auto learn	POShowAutomac	Yes	Yes	Yes	
	Ipv6 auto configuration	POAutoIp6	-	-	Yes	
	Display the result of the Ipv6 auto configuration	POShowAutoIp6	-	-	Yes	
Status display	Show the unit and port module type	POUnitInfo	Yes	Yes	Yes	
	Show the IF status (link, speed, etc.)	POShowlink	Yes	Yes	Yes	
	Show the transmission and statistical status	POShowStatus	Yes	Yes	Yes	
	Show the statistical counter value	POShowCounter	Yes	Yes	Yes	
	Save statistical information to a CSV file	POSaveResult	Yes	Yes	Yes	
Port initialization	Initialize the port	POInit	Yes	Yes	Yes	
Auxiliary	Wait command	Waittime	Yes	Yes	Yes	
	Show the message	Print	Yes	Yes	Yes	
	Echo command	Echo ON/OFF	Yes	Yes	Yes	
Pre-processor	File start identifier	#!filestart	Yes	Yes	Yes	Write at the start of the file (required)
	File end identifier	#!fileend	Yes	Yes	Yes	Write at the end of the file (required)
	Specify the reserve port	$u1_useport	Yes	Yes	Yes	Reserved port of UNIT1
		$u2_useport	Yes	Yes	Yes	Reserved port of UNIT2
	Specify the test mode	$mode	Yes	Yes	Yes	Test mode designation (required)

Yes: A valid command

-: A command that does not run because the unit does not support it

Other Commands

These commands cannot be written in a script file, but can be typed directly from the PC after logging in using TELNET.

Function		Command Name	Unit Support			Notes
			AE5520/21	AE5522	AE5523/24	
Login Information	Switch the lock mode	USLoginlock	Yes	Yes	Yes	
	Show the login user information	USShowuser	Yes	Yes	Yes	
	Log out	USExit(exit)	Yes	Yes	Yes	
	Log out (forced)	USLogout	Yes	Yes	Yes	
Port reserve	Reserve the port	USReserve	Yes	Yes	Yes	
	Release reserved port	USRelease	Yes	Yes	Yes	
System settings	Set/Show the date	SYDatetime	Yes	Yes	Yes	
	Set/Show the IP address	SYIp	Yes	Yes	Yes	
	Set the password	SYPasswd	Yes	Yes	Yes	
	Set/Show the equipment name	SYEquipmentname	Yes	Yes	Yes	
	Set/Show the timeout value	SYTimeout	Yes	Yes	Yes	
	Set startup operation	SYBootsetup	Yes	Yes	Yes	
	Set the default lock mode	SYDefloginlock	Yes	Yes	Yes	
	Change the Tx clock deviation	SYTxClock	Yes	Yes	Yes	
	Reset factory default	SYSetDefault	Yes	Yes	Yes	
	Show disk check result	SYShowdiskcheck	Yes	Yes	Yes	
	Reboot	SYReboot	Yes	Yes	Yes	
	Shut down	SYShutdown	Yes	Yes	Yes	
	Show version information	SYVersion	Yes	Yes	Yes	
	Request version upgrade	SYVersionup	Yes	Yes	Yes	
	Show system alarms	SYShowalarm	Yes	Yes	Yes	
Self-test	Execute the self-test	POSelftest	Yes	Yes	Yes	
	Check the self-test status	POSelfteststatus	Yes	Yes	Yes	
	Cancel the self-test	POSelftestcancel	Yes	Yes	Yes	
Capture control	Start/Stop capture	POCaptur	-	Yes	Yes	
	Show capture status	POShowcapstatus	-	Yes	Yes	
Other	Control the alarm log	POLog	-	-	Yes	

Yes: A valid command

-: A command that does not run because the unit does not support it

1.6 Tab Input Assistance Function

The tab input assistance function aids the user in typing commands. The function automatically completes a command or shows a list of possible commands.

• Command Auto Completion

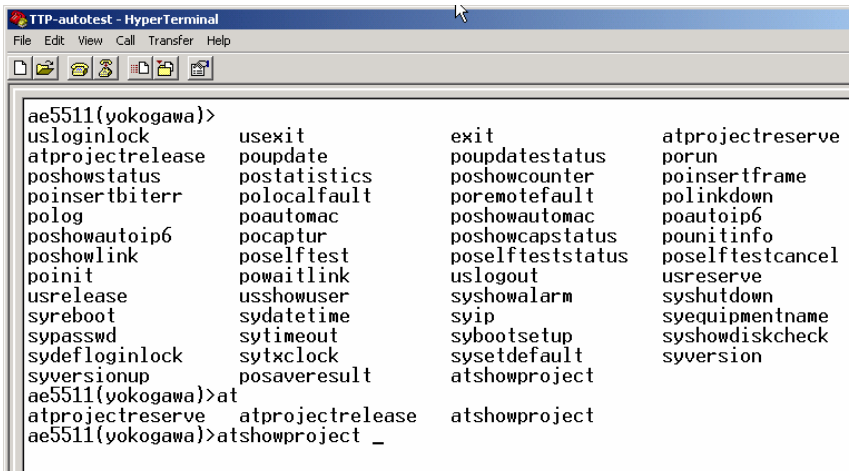
Press the Tab key once after typing a portion of a command to automatically fill the rest of the characters and complete the command.
A command is not automatically completed if there are multiple possibilities.

• List Display of Possible Commands

Press the Tab key twice without typing a command to display all commands.
If a portion of a command is typed but the command cannot be completed with the Tab key because there are multiple possibilities, press the Tab key again to show a list of possible commands.

(Operation Example)

1. Press the Tab key twice at the prompt to show all commands.
2. Type “at” and press the Tab key twice to show a list of commands that start with “at.”
3. Type “s” after “at” and press the Tab key once to complete the command (“atshowproject” is shown).



1.7 Redirect Function

The redirect function saves the command line output to a file.
It can be used on the command line or in the auto test script.

- **Format**

  The redirect format is shown below.
  "command > file name" or "command >> file name"

  • Command

  The redirect function can be used on all commands.

  >: The command output is redirected to a specified file. If the specified file does not exist, a new file is created. If it does, the file is overwritten.

  >>: The command output is redirected to a specified file. If the specified file does not exist, a new file is created. If it does, the output is appended to the end of the file.

  • File name:

  The following characters can be used for the file name: a-z, A-Z, 0-9, hyphen, underscore, and period. A directory cannot be specified.
  Up to 256 characters can be used for a file name.
  A hyphen cannot be used as the first character of a file name.

- **Save Destination Directory**
  - During an auto test: Saved to the $HOME/auto/result/ directory.
  - Normal command line: Saved to the $HOME/result/ directory.

2.1 Creating a Script File

Create a script file describing the auto test contents.
The script file is a text file. Use a general-purpose text editor to create the file.
Save the script file you create in the $HOME/auto/setup/ directory.

Script File Format Example

```
#!filestart

$u1_useport all
$u2_useport 1,2,3,4
$mode traffic

POUpdate XXXXXX unit 1 port 1
PORun unit 1 port 1
POSaveResult XXXXX port# all

POShowCounter RX port# all


#!fileend
```

Script File Syntax

Follow the syntax below when creating a script file.

- The maximum number of lines in a script file is 10000. (This includes blank lines and comment lines.)
- The maximum number of characters in a line of a script file is 512 (including the newline character).
- The following characters can be used for the file name specified in a command.
  a-z, A-Z, 0-9, hyphen, underscore, and period.
  However, a hyphen cannot be used as the first character of a file name.
- A file name written in a script file is “file name” + “.extension.” The path is not included. The extension is not needed for a file specified by POSaveResult or for redirection. (The extension does not need to be specified for an output file.)
- Enter “#” as the first character of a line for a comment (/^#/). A line cannot contain both a comment and a command.
- Command names and parameters are not case-sensitive.
- Be sure to write “#!filestart” in the first line and “#!fileend” in the last line as script file identifiers. The section between these identifiers is recognized as a script.
- “$” is a pre-processor identifier. The pre-process commands for reserving ports “$U1_USEPORT 1,2...” and “$U2_USEPORT 1,2...” are available. This command is valid at any line as long as it is within the script.
- Be sure to enter “#” or “$” as the first character of a line. Otherwise, a syntax error occurs.
- A script command does not have to be at the first character of a line. Spaces and tabs preceding a script command are discarded.
- Set the script file name extension to “.wscp.”

Notes on Command Entry

Valid Keys during Control Command Entry

- Alphanumeric and symbol keys
- BackSpace key

Notes on Command Entry

- The length of one command line is 512 characters (including the newline character).
- Command names and parameters are not case-sensitive.
- The following characters can be used for a file name.
  a-z, A-Z, 0-9, hyphen, underscore, and period.
  However, a hyphen cannot be used as the first character of a file name.

Specifying Ports

The optional port designation is written in the following format.
In direct designation, specify the unit number and port number directly.
In virtual port designation, specify the port number as port1 and port2 in ascending order with respect to the port that is currently reserved by the user.

- **Direct Designation**
  unit (unit number) port (port number)
- **Virtual Port Number Designation**
  Port# (port number)

	Single Designation	Multiple Designation	All Designation
Unit number	Specify unit 1 or 2. Example) unit 1	None	all Selects all units that are reserved. Example) unit all
Port number	Specify the port number. Example) port 4 port# 21	Specify multiple ports by comma-separated format. Example) port 1,2,3,4	all Selects all ports that are reserved. Example) port all

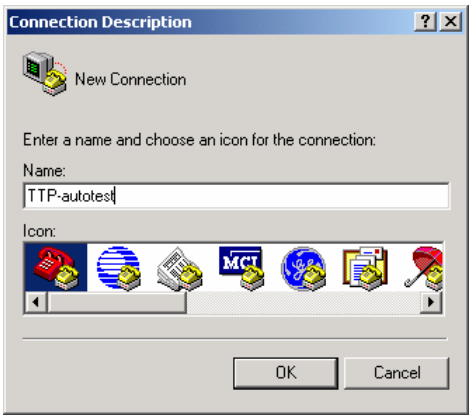
2.2 Logging in Using TELNET

TELNET Connection

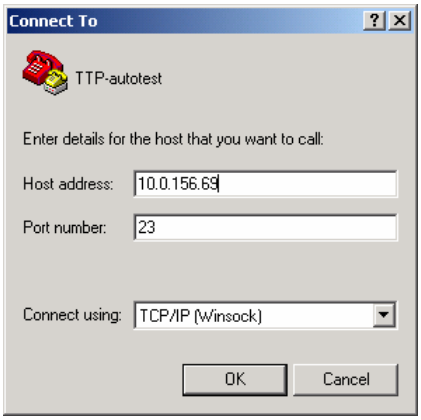
Procedure

1. Connect the AE5511 control port to the LAN port of the controller PC using the CONTROL cable (LAN cable, cross) provided.
2. Start the TELNET connection software application (Hyper Terminal) on the controller PC.
   (On the taskbar, click the Windows **Start** button, point to All **Programs** > **Accessories** > **Communications**, and click **HyperTerminal**.)

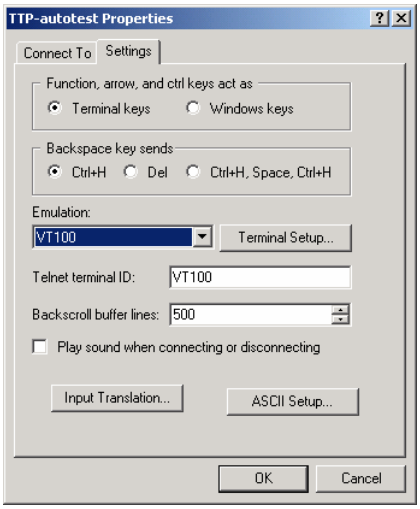
3. Set an arbitrary name for the new connection and click **OK**. (Example: TTP-AUTOTEST)
   (If you start HyperTerminal for the first time, a location information dialog box opens. Enter the prescribed items, and click **OK**.)



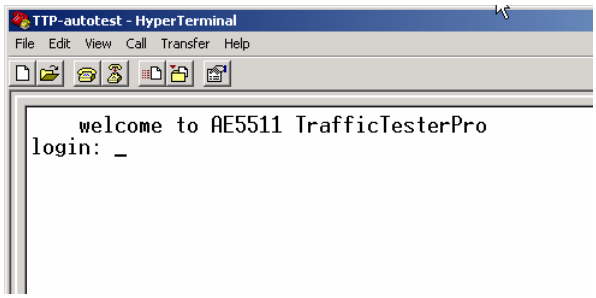
4. Set Host address (arbitrary), Port number (23), and Connect using (TCP/IP), and click **OK**.



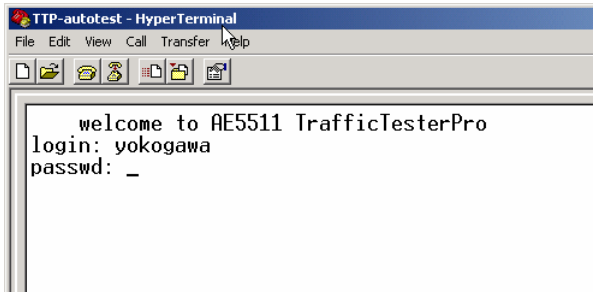
5. Enter the settings as shown below, and click **OK**.



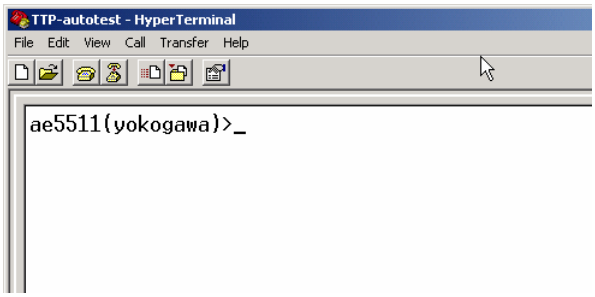
6. The login screen appears. Type the login name, and press the Enter key.



7. Type the password (arbitrary), and press the Enter key.



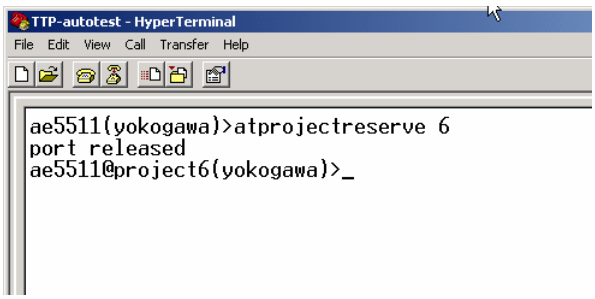
8. The login complete screen appears. (For login name yokogawa)



2.3 Reserving the Project

Procedure

1. Type the reserve command **ATProjectReserve**.
2. Specify a project number between 1 and 8, and press the Enter key.
   When the project reservation is complete, a message “port released” and a prompt containing the specified project number appear.



Explanation

After the project is reserved, the state transits from user login mode to auto test mode.
The following is the auto test mode prompt.

ae5511@project*project_no*(*login_name*)>

Note

All ports reserved before the project is reserved are released.

2.4 Logging in Using FTP

Use a general-purpose FTP client.

Procedure

1. Start the FTP client.
2. Log in using FTP. Use the same login name as TELNET.

Explanation

File Management Interface

Control I/F	Function	Notes
FTP	Transmits setup files and script files to the AE5511 and receives measurement results files and log files via the LAN.	Login ID: Same login name as TELNET Login password: Depends on the AE5511 setting

Note

The FTP login is carried out after logging in using TELNET and reserving a project.

The current directory is $HOME/.
For the directory structure, see section 1.4.

2.5 Uploading Files

Procedure

Uploading Script Files

1. Set the transfer mode of the FTP client to text format.
2. Transfer the script file in the $HOME/auto/setup/ directory.

Uploading Port Setup Files

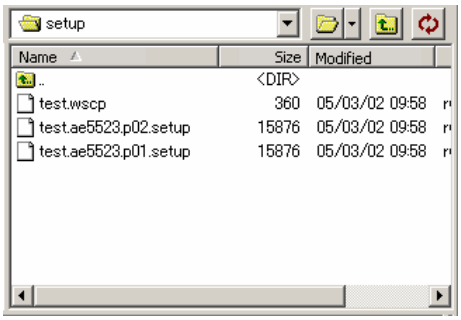
1. Set the transfer mode of the FTP client to binary format.
2. Transfer the port setup file in the $HOME/auto/setup/ directory.

Note

- If the script and port setup files are already uploaded or an execution file exists, there is no need to upload the files again.
- To execute an execution file, all the setup files written in the script file must be uploaded to the setup directory.

Explanation

Upload Screen Example

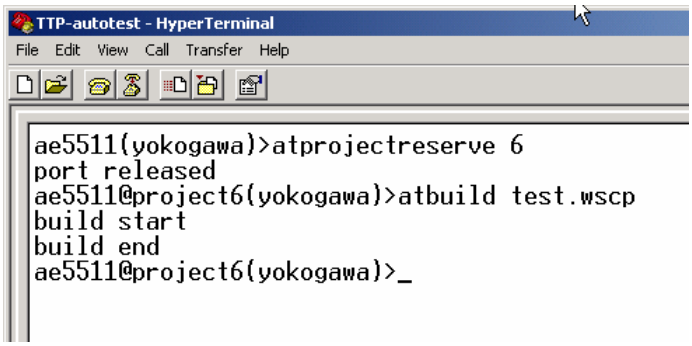


File Type	File Name	Note
Script file (text)	*user defined* .wscp	A file containing a list of commands for executing the test.
Setup file (binary)	*user defined* .setup	A setup file generated using the data export function of TTProControlWindowE.
Execution file (binary)	autotest.bin	A file generated when you run the ATBuild command. This file is executed using the ATRun command.

2.6 Building the Execution File

Procedure

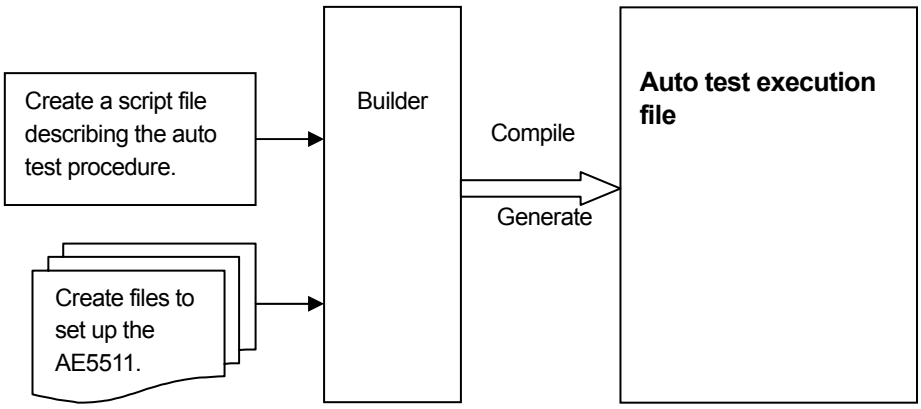
1. On the command line, type “atbuild *script_file_name*.wscp.”
2. Press the Enter key. The build operation starts.
   - If the file is built normally, the words “built start” are shown followed by “build end.” And, the execution file autotest.bin is generated.
   - If an error occurs, an error message appears after the words “build start.” Redo the procedure according to the error message.



Explanation

Description of the Build Operation (Generation of the Auto Test Execution File)

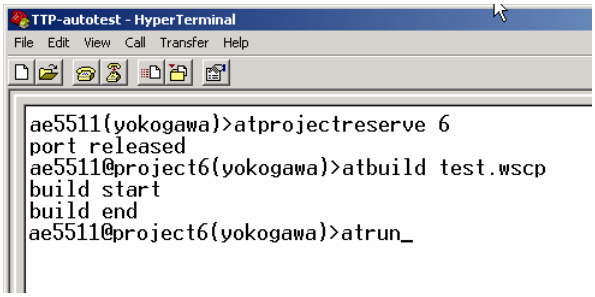
- The auto test requires a script file that describes the execution procedure and setup files to update the settings on the AE5511. These files are compiled using a builder to generate the execution file.
- The following flow diagram shows how the auto test execution file is generated



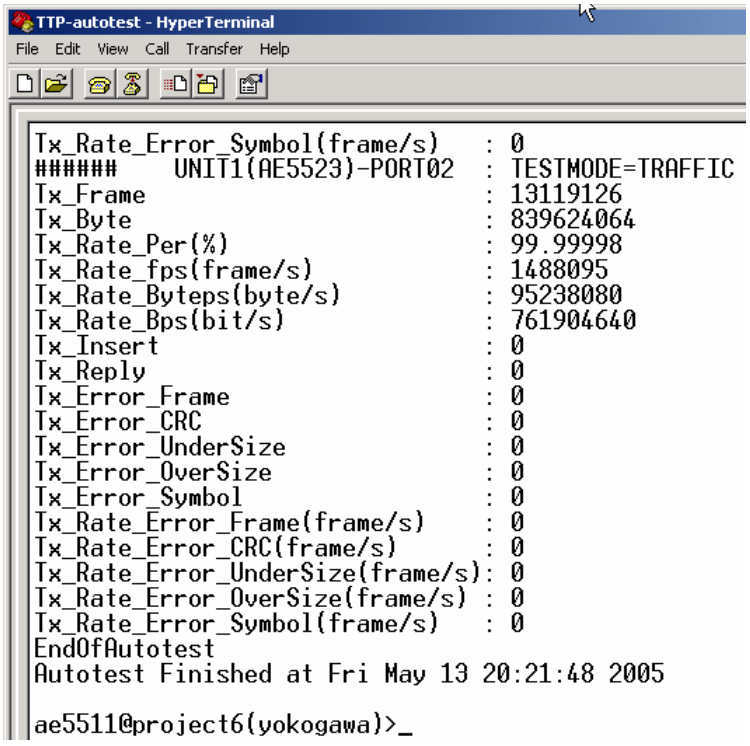
2.7 Test Execution

Procedure

1. On the command line, type atrun.



2. Press the Enter key. The auto test is executed. After the test is executed, the port is automatically released.



Results files are saved to the $HOME/auto/result/ directory.
(Applicable only when the execution file contains the POSaveResult command.)

2.8 Downloading the Statistical Results File

Procedure

Statistical Results File

1. Set the transfer mode of the FTP client to text format.
2. Download the statistical results files from the $HOME/auto/result/ directory.

Log File

1. Set the transfer mode of the FTP client to text format.
2. Download the log file from the $HOME/auto/ directory.

Explanation

Statistical Results File

After the auto test is executed, statistical results files (CSV files) are saved to the %HOME/auto/result/ directory.
(Applicable only when the execution file contains the POSaveResult command.)

Log File

The log file is automatically generated in the following format after the auto test is executed. It is saved to $HOME/auto/autotest.log.

Log File Example

```
Mon Jan 31 20:36:00 2005 poinsertframe start unit 1 port 1
Mon Jan 31 20:48:17 2005 poinsertframe stop unit 1 port 1
Mon Jan 31 20:50:20 2005 porun start unit 1 port 2
                              ...
```

However, the echo, waittime, and print commands in the script are not recorded in the log file.

The events that are recorded to the log file are the commands that start with PO in the “Script Commands” table given in section 1.5, “A List of Commands.”

File Type	File Name	Note
Statistical results file (text)	*user defined* .csv	A data file generated when the POSaveResult command is executed, which requests for the statistical results.
Log file (text)	autotest.log	A log file generated when you execute the auto test.

2.9 Logging Out and Releasing

Procedure

Logging Out from FTP

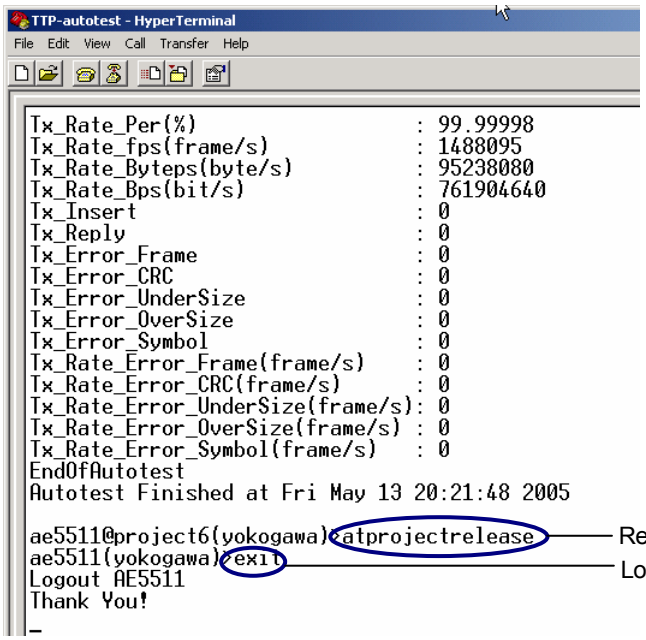
Log out from FTP before releasing the project.
Follow the procedure appropriate for the FTP client that you are using.

Releasing the Project

1. Type the release command **ATProjectRelease**.
2. Press the Enter key. "ae5511 (login name)>" appears. This indicates that the project has been released.

Logging Out from TELNET

1. After the project is released, type **exit**.
2. Press the Enter key. A message "Logout AE5511 Thank You!" appears.



2.10 Stopping the Test

Procedure

Stopping the Test

Stops the auto test currently in progress.

1. Type **ATStop** while the auto test is in progress.
2. Press the Enter key. A message “Autotest Finished” appears.

Logging Out during the Test

Log out from TELNET while the auto test is in progress. The TELNET connection is dropped, but the test is still in progress.

1. Type **exit** keeping the project reserved.
2. Press the Enter key. A message “Logout AE5511” appears.

Explanation

If the test lasts for a long time, drop the TELNET connection once. Because the test continues while you are logged out, you can log in again later to download the results files.

Note

To continue the test, keep the project reserved. If you release the project, the test will stop.

3.1 Auto Test Commands

These commands control the auto test. After logging in using TELNET, you enter the command directly from the PC keyboard.

Note

- The words in italics in the command explanations indicate that a specified value or
- character string is entered there.
  The brackets in the command explanations indicate a parameter.

ATProjectReserve

Description	Specifies the project for the auto test by number and reserves it.	
Syntax	ATProjectReserve [*project_no*]	
Parameters	[*project_no*]: Specify a project number between 1 and 8. This parameter cannot be omitted.	
Comments	• When the project reservation is complete, the following message appears, and the reserved ports are released. port released • After the project is reserved, the state transits from user login mode to auto test mode. The prompt is displayed in the following manner. ae5511@project*project_no*(*login_name*)>	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	12	already been reserved
	16	already been reserved other project

ATProjectRelease

Description	Releases the project for the auto test.	
Syntax	ATProjectRelease [*project_no*]	
Parameters	[*project_no*]: Specify a project number between 1 and 8. This parameter can be omitted conditionally.	
Comments	• A general user (users other than admin) does not have to specify the project number. The project currently reserved is released. • The admin user can forcibly release a project that a general user has reserved. In this case, the project running the auto test is terminated. • If the admin user does not specify the project number, the project reserved by the admin user is released. • After the project is released, the state transits from auto test mode to login mode. The prompt is displayed in the following manner. ae5511(*login_name*)>	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	9	control permission error
	14	reserve a project
	17	project is running

ATShowProject

Description	Shows the status of the auto test project.
Syntax	ATShowProject [*project_no*]
Parameters	[*project_no*]: Specify a project number between 1 and 8. Can be omitted.
Comments	• If a project number is specified, the status of the specified project is shown. If the project number is omitted, the status of all projects 1 to 8 is shown. • The following items are shown as status parameters. ProjectNo.*N* — Project number Reserve *login_name* — The name of the user reserving the project Status STOP — Auto test execution status (STOP: auto test stopped, RUN: auto test running) Script file *aaa.wscp* / NONE — Auto test script file * The corresponding script file name if a built execution file exists * Shows NONE if a built execution file does not exist
ReturnFormat	Success: Project No.1 Reserve yokogawa Status RUN Script file test.wscp Project No.2 : Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	17	project is running

ATBuild

Description	Builds the auto test script so that the auto test can be executed.
Syntax	ATBuild [*filename*]
Parameters	[*filename*]: Specify the name of the script file to be built. This parameter cannot be omitted.
Comments	• The specified script file is built. • The build operation checks the script syntax and parameters. (For details, see section 2.6, “Building the Execution File.”) • After the build operation, a file named $HOME/auto/autotest.bin is generated. • If an error occurs in the script file, the error line number in the script file and the error type are shown. (For details, see “Compile Errors” in appendix 1, “A List of Error Messages.”
ReturnFormat	Success: ae5511@project1(Yokogawa)>atbuild test.wscp build start build end ae5511@project1(Yokogawa)> Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	5	file not found
	17	project is running
	20	build error
	21	command not permitted

ATRun

Description	Runs the auto test.
Syntax	ATRun
Parameters	None
Comments	• To run the auto test, an execution file must have been built in advance. (The file $HOME/auto/autotest.bin must be present.) • When the auto test is executed, a auto test log is generated. If an auto test log already exists, the log is appended to the file. To clear the auto test log, run the ATLogClear command.
ReturnFormat	Success: ae5511@project1(Yokogawa)>atrun starting autotest << Display during the auto test >> ae5511@project1(Yokogawa)>autotest finished at Wed Jun 30 21:49:08 2005 Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	1	reserve a port
	2	command format error
	8	unit kind error
	14	reserve a project
	17	project is running

ATStop

Description	Stops the auto test.
Syntax	ATStop
Parameters	None
Comments	Stops the auto test currently in progress.
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	18	project is not running

ATResultList

Description	Shows a list of generated files in the project in timestamp order.
Syntax	ATResultList
Parameters	None
Comments	• The following files are listed. Results files specified by POSaveResult Files specified by redirection • The display format is as follows: [*week*][*month*][*day*][*hh:mm:ss*][*year*] [*filename*] • If there are no files to be listed, only the title line is shown.
ReturnFormat	Success: Wed Jun 30 21:49:08 1993 result1.csv Wed Jun 30 21:49:50 1993 result2.csv Wed Jun 30 21:50:11 1993 result3.csv Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error

ATShowLog

Description	Shows the execution log of the auto test.
Syntax	ATShowLog
Parameters	None

Comments	• The commands that start with PO in the “Script Commands” table in section 1.5, “A List of Commands” are logged.
	• The display format is as follows:
	`No.  Time  command`
	`----------`
	`[No] [week][month][day][hh:mm:ss][year]  [execute command]`
	`:`

ReturnFormat	Success:
	`No.  Time  command`
	`----------`
	`1  Wed Jun 30 21:49:08 2005  poupdate setup1.setup port# 1`
	`2  Wed Jun 30 21:49:10 2005  polinkdown start port#1`
	`3  Wed Jun 30 21:50:00 2005  porun start port# 1`
	:
	Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error

ATLogClear

Description	Clears the execution log of the auto test.
Syntax	ATLogClear
Parameters	None
Comments	• Clears the log information of the auto test. • Clears the log information in the reserved project.
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	14	reserve a project

3.2 Script Commands

The commands below are those that can be written in a script file. You can also log in using TELNET and type these commands directly from the PC.

Note

- The words in italics in the command explanations indicate that a specified value or
- character string is entered there.
- The brackets in the command explanations indicate a parameter.
  For a description of how to specify [port] in the commands, see "Specifying Ports" in section 2.1.

POUpdate Command

Description	Specifies a setup file and updates the settings of the port.	
Syntax	poupdate [*setupfile*] [port]	
Parameters	*setupfile*: Specify the name of the setup file. port: Specify the port to change the settings.	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	4	specified port error
	5	file not found
	6	file format error
	11	port is busy

POUpdateStatus Command

Description	Shows the processing status of the updating of the settings of the specified port.	
Syntax	poupdatestatus [port]	
Parameters	port: Specify the port to show the status.	
Comments	None	
ReturnFormat	Success: unit no=1 port no=1 upd _state:STOP * RUN: Updating settings, STOP: Updating complete upd_end_state:SUCCESS * SUCCESS/ERROR upd_last_error:6 * SUCCESS or an error number Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	4	specified port error
	5	file not found
	6	file format error

PORun Command

Description	Controls the transmission start and stop of the specified port.	
Syntax	PORun [start/stop] [port]	
Parameters	start/stop: Specify transmission [start] or [stop]. port: Specify the port to be controlled.	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	11	port is busy

POStatistics Command

Description	Clears the statistical value of the specified port.	
Syntax	postatistics [clear] [port]	
Parameters	clear: Clears the statistical value. port: Specify the port to be controlled.	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	4	specified port error * except clear
	11	port is busy

POInsertFrame Command

Description	Inserts an insert frame.	
Syntax	poinsertframe [start/stop] [port]	
Parameters	start/stop: Specify continuous [start] or [stop]. port: Specify the port to be controlled.	
Comments	Valid during Traffic mode.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	11	port is busy

POInsertBiterr Command

Description	Inserts a bit error in the transmission frame in BERT mode.	
Syntax	poinsertbiterr [port]	
Parameters	port: Specify the port to be controlled.	
Comments	Valid during BERT mode.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	11	port is busy

POLocalFault Command

Description	Inserts a local fault.	
Syntax	polocalfault [start/stop] [port]	
Parameters	start/stop: Specify [start] or [stop]. port: Specify the port to be controlled.	
Comments	Valid during AE5522 Traffic mode.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	8	unit kind error
	11	port is busy

PORemoteFault Command

Description	Inserts a remote fault.	
Syntax	poremotefault [start/stop] [port]	
Parameters	start/stop: Specify [start] or [stop]. port: Specify the port to be controlled.	
Comments	Valid during AE5522 Traffic mode.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	8	unit kind error
	11	port is busy

POLinkDown Command

Description	Controls the link status of the port.	
Syntax	polinkdown [start/stop] [port]	
Parameters	start/stop: Specify cycle link down [start] or [stop]. port: Specify the port to be controlled.	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	8	unit kind error
	11	port is busy

POWaitLinkdown Command

Description	Waits for the port to link up.	
Syntax	powaitlink [-t *timeout*] [port]	
Parameters	[-t *timeout*]: Specify the maximum time to wait in seconds. [port]: Specify the port to be controlled.	
Comments	If *timeout* is omitted, the timeout value is set to 10 seconds. This command can be used on TrafficTesterPro Version R7.1.0.0 or later.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	11	port is busy

POAutomac Command

Description	Carries out MAC address auto learn using ARP.	
Syntax	poautomac [start/clear] [port]	
Parameters	start/clear: Specifies whether to [start] the MAC address auto learn or [clear] the address. port: Specify the port to be controlled.	
Comments	Valid during Traffic mode.	
ReturnFormat	Success: unit no=1 port no=1 arp_state: DETECT arp_mac: ********** port no=2 arp_state: TIMEOUT port no=3 arp_state: NONE * arp_state indicates DETECT, TIMEOUT, or NONE. arp_mac is displayed only when arp_state is DETECT. Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	11	port is busy

POShowAutomac Command

Description	Displays the result of the MAC address auto learn.
Syntax	poshowautomac [port]
Parameters	port: Specify the port to be controlled.
Comments	Valid during Traffic mode.
ReturnFormat	Success: unit no=1 port no=1 arp_state: DETECT arp_mac: ********** port no=2 arp_state: TIMEOUT port no=3 arp_state: NONE port no=4 arp_state: BUSY * arp_state indicates DETECT, TIMEOUT, NONE, or BUSY. arp_mac is displayed only when arp_state is DETECT. Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	3	port not found
	7	test mode error

POAutoIp6 Command

Description	Auto-learns IP address autoconfiguration information and router's MAC address using IPv6 router solicitation or router advertisement.
Syntax	poautoip6 [start/clear] [port]
Parameters	start/clear: Specifies whether to [start] the auto learn or [clear] the information. port: Specify the port to be controlled.
Comments	Valid during Traffic mode.
ReturnFormat (C mode)	Success: unit no=1 port no=1 ip6_state: DETECT ip6_mac: ********** ipv6_sa: 0102030405060708090a0b0c0d0e0f port no=2 ip6_state: TIMEOUT port no=3 ip6_state: NONE * ip6_state indicates DETECT, TIMEOUT, or NONE. ip6_mac and ipv6_sa are displayed only when ip6_state is DETECT. Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	8	unit kind error
	11	port is busy

POShowAutoIp6 Command

Description	Shows the result of the auto learn of the IP address autoconfiguration information and router's MAC address using IPv6 router solicitation or router advertisement.
Syntax	poshowautoIp6 [port]
Parameters	port: Specify the port to be controlled.
Comments	Valid during Traffic mode.
ReturnFormat (C mode)	Success: unit no=1 port no=1 ip6_state: DETECT ip6_mac: ********** ipv6_sa: 0102030405060708090a0b0c0d0e0f port no=2 ip6_state: TIMEOUT port no=3 ip6_state: NONE port no=4 ip6_state: BUSY * ip6_state indicates DETECT, TIMEOUT, NONE, or BUSY. ip6_mac and ipv6_sa are displayed only when ip6_state is DETECT. Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	3	port not found
	7	test mode error
	8	unit kind error

POUnitInfo Command

Description	Shows UNIT and PORT information.
Syntax	pounitinfo [-r] [port]
Parameters	-r: Reload the interface information. port: Specify the port to be displayed.
Comments	None
ReturnFormat	Success: unit no=1 id=ae5522 ver=01.00 port no=1 gmac: 00-01-e2-00-00-01 * Global MAC module_type: xenpak_lr * gbic_[t | sx | lx] / xenpak_[ew | lw | lx4 | er | lr | sr | cx4]/ sfp_[sx | lx | zx | t]/ unknown/ unmount/ dontcare ("dontcare" for units that do not need modules) Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	3	port not found
	11	port is busy

POShowLink Command

Description	Shows the link status of the physical interface.
Syntax	poshowlink [port]
Parameters	port: Specify the port to be displayed.
Comments	Shows link up/down, speed, duplex, MDI, and performance of the remote PoE device.
ReturnFormat	Success: unit no=1 port no=1 autonego=ON link: UP * UP/DOWN speed: 100M * 10M/100M/1G/10G duplex: FULL * FULL/HALF mdi: CROSS * STRAIGHT/CROSS/UNFIXED poe_state: ON * ON/OFF Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	3	port not found
	11	port is busy

POShowStatus Command

Description	Shows the frame transmission status of the specified port.
Syntax	poshowstatus [port]
Parameters	port: Specify the port to be displayed.
Comments	None
ReturnFormat (C mode)	Success: unit no=1 port no=1 tra_state:RUN * RUN (transmitting) or STOP (transmission stopped) ins_state:RUN * RUN (inserting) or STOP (stopped) lcnt_state:STOP * RUN (controlling link down) or STOP (stopped) lfault_state:STOP * RUN (inserting LocalFault) or STOP (stopped) rfault_state:STOP * RUN (inserting RemoteFault) or STOP (stopped) Fail: [Error*N*] *ErrorMessage*

Error	Error No	Message
	2	command format error
	3	port not found
	11	port is busy

POShowCounter Command

Command Specifications

Description	Shows the specified statistical item of the specified port.	
Syntax	poshowcounter [*param*] [port]	
Parameters	param: See “Parameter Types.” Specify multiple items by separating each item with a comma. Specify [ALL] to specify all items. The parameter is not case-sensitive. port: Specify the port to be displayed.	
Comments	Parameters can be specified directly by its name or by groups. If a group is specified, multiple parameters belonging to the group can be shown. The maximum number of displayed items is 512.	
ReturnFormat	Success: ### UNIT1(AE5521)-PORT01 : TESTMODE=TRAFFIC : I/F-GBIC-SX ### ← title line cmn_gettime : Wed Jun 30 21:49:08 2005 cmn_measuretime : 10000sec link_state : Linkdown : Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	4	specified port error
	11	port is busy

Parameter Types

Group	Group Param. (Param.No.)	No	Item	Parameter	Notes
Common	cmn 0-1	0	[Common] Get Time	cmn_gettime	Time when statistics were retrieved Example) Wed Jun 30 21:49:08 2005
		1	[Common] Measured Time (s)	cmn_measuretime	Unit of seconds
Link	link 2-9	2	[Link] Link Status	link_state	Linkdown-unfixed Linkdown-Straight Linkdown-Cross 10M-FULL-Straight 10M-FULL-Cross 10M-HALF-Straight 10M-HALF-Cross 100M-FULL-Straight 100M-FULL-Cross 100M-HALF-Straight 100M-HALF-Cross 1000M-FULL 1000M-FULL-Straight 1000M-FULL-Cross 10G-FULL
		3	[Link] Link Down	link_downcnt	
		4	[Link] Tx Frequency Deviation (ppm)	link_sendfreq	
		5	[Link] Rx Frequency Deviation (ppm)	link_recfreq	
		6	[Link] 1000BASE-T Clock Mode	link_1000tclk	MASTER, SLAVE
		7	[Link] PoE Line Power Detect	link_poestate	OFF, ON
		8	[Link] LF Detect	link_lfcnt	
		9	[Link] RF Detect	link_rfcnt	
Tx	tx 10-27 tx_rate 12-15,23-27 tx_error 18-27 tx_rate_error 23-27	10	[Tx] Normal Frame	tx_frame	
		11	[Tx] Byte	tx_byte	
		12	[Tx] Rate (%)	tx_rate_per	Displays 5 digits to the right of the decimal
		13	[Tx] Rate (frame/s)	tx_rate_fps	
		14	[Tx] Rate (byte/s)	tx_rate_byteps	
		15	[[Tx] Rate (bps)	tx_rate_bps	
		16	[Tx] Insert Frame	tx_insert	
		17	[Tx] Reply Frame	tx_reply	
		18	[Tx] Error Frame	tx_error_frame	
		19	[Tx] CRC Error	tx_error_crc	
		20	[Tx] Under Size Error	tx_error_under	
		21	[Tx] Over Size Error	tx_error_over	
		22	[Tx] Symbol Error	tx_error_symbol	
		23	[Tx] Error Frame (frame/s)	tx_rate_error_frame	
		24	[Tx] CRC Error (frame/s)	tx_rate_error_crc	
		25	[Tx] Under Size Error (frame/s)	tx_rate_error_under	
		26	[Tx] Over Size Error (frame/s)	tx_rate_error_over	
		27	[Tx] Symbol Error (frame/s)	tx_rate_error_symbol	

Group	Group Param. (Param.No.)	No	Item	Parameter	Notes
Rx	rx 28-54 rx_rate 30-33,43-48 rx_error 37-48 rx_rate_error 43-48	28	[Rx] Normal Frame	rx_frame	
		29	[Rx] Byte	rx_byte	
		30	[Rx] Rate (%)	rx_rate_per	Displays 5 digits to the right of the decimal
		31	[Rx] Rate (frame/s)	rx_rate_fps	
		32	[Rx] Rate (byte/s)	rx_rate_byteps	
		33	[Rx] Rate (bps)	rx_rate_bps	
		34	[Rx] Pause Frame	rx_pause	
		35	[Rx] Collision Detect	rx_collision	
		36	[Rx] Late Collision Detect	rx_latecollision	
		37	[Rx] Error Frame	rx_error_frame	
		38	[Rx] CRC Error	rx_error_crc	
		39	[Rx] Under Size Error	rx_error_under	
		40	[Rx] Over Size Error	rx_error_over	
		41	[Rx] Alignment Error	rx_error_align	
		42	[Rx] Symbol Error	rx_error_symbol	
		43	[Rx] Error Frame (frame/s)	rx_rate_error_frame	
		44	[Rx] CRC Error (frame/s)	rx_rate_error_crc	
		45	[Rx] Under Size Error (frame/s)	rx_rate_error_under	
		46	[Rx] Over Size Error (frame/s)	rx_rate_error_over	
		47	[Rx] Alignment Error (frame/s)	rx_rate_error_align	
		48	[Rx] Symbol Error (frame/s)	rx_rate_error_symbol	
Latency	rx_ifg 49-51 rx_latency 52-54	49	[Latency] Max IFG (us)	rx_ifg_max	Displays 1 digit to the right of the decimal
		50	[Latency] Min IFG (us)	rx_ifg_min	Displays 1 digit to the right of the decimal
		51	[Latency] Avg IFG (us)	rx_ifg_avg	Displays 1 digit to the right of the decimal
		52	[Latency] Max Packet Latency (us)	rx_latency_max	Displays 1 digit to the right of the decimal
		53	[Latency] Min Packet Latency (us)	rx_latency_min	Displays 1 digit to the right of the decimal
		54	[Latency] Avg Packet Latency (us)	rx_latency_avg	Displays 1 digit to the right of the decimal
Sequence Check	seq 55-58	55	[Seq] Loss Packet	seq_packetloss	
		56	[Seq] Reorder Packet	seq_swap	
		57	[Seq] Duplicate Packet	seq_repetition	
		58	[Seq] Max Burst Packet Loss	seq_burstloss	

Group	Group Param. (Param.No.)	No	Item	Parameter	Notes
QoS Traffic	qos 59-98 qos_ch1 59-63,99-101 : qos_ch8 94-98,120-122 qos_ch1_traffic 59-60 : qos_ch8_traffic 94-95 qos_ch1_rate 61-63 : qos_ch8_rate 96-98	59	[CH1] Frame	qos_ch1_frame	
		60	[CH1] Byte	qos_ch1_byte	
		61	[CH1] Rate (%)	qos_ch1_rate_per	Displays 5 digits to the right of the decimal
		62	[CH1] Rate (frame/s)	qos_ch1_rate_fps	
		63	[CH1] Rate (bps)	qos_ch1_rate_bps	
		64	[CH2] Frame	qos_ch2_frame	
		65	[CH2] Byte	qos_ch2_byte	
		66	[CH2] Rate (%)	qos_ch2_rate_per	Displays 5 digits to the right of the decimal
		67	[CH2] Rate (frame/s)	qos_ch2_rate_fps	
		68	[CH2] Rate (bps)	qos_ch2_rate_bps	
		69	[CH3] Frame	qos_ch3_frame	
		70	[CH3] Byte	qos_ch3_byte	
		71	[CH3] Rate (%)	qos_ch3_rate_per	Displays 5 digits to the right of the decimal
		72	[CH3] Rate (frame/s)	qos_ch3_rate_fps	
		73	[CH3] Rate (bps)	qos_ch3_rate_bps	
		74	[CH4] Frame	qos_ch4_frame	
		75	[CH4] Byte	qos_ch4_byte	
		76	[CH4] Rate (%)	qos_ch4_rate_per	Displays 5 digits to the right of the decimal
		77	[CH4] Rate (frame/s)	qos_ch4_rate_fps	
		78	[CH5] Rate (bps)	qos_ch4_rate_bps	
		79	[CH5] Frame	qos_ch5_frame	
		80	[CH5] Byte	qos_ch5_byte	
		81	[CH5] Rate (%)	qos_ch5_rate_per	Displays 5 digits to the right of the decimal
		82	[CH5] Rate (frame/s)	qos_ch5_rate_fps	
		83	[CH5] Rate (bps)	qos_ch5_rate_bps	
		84	[CH6] Frame	qos_ch6_frame	
		85	[CH6] Byte	qos_ch6_byte	
		86	[CH6] Rate (%)	qos_ch6_rate_per	Displays 5 digits to the right of the decimal
		87	[CH6] Rate (frame/s)	qos_ch6_rate_fps	
		88	[CH6] Rate (bps)	qos_ch6_rate_bps	
		89	[CH7] Frame	qos_ch7_frame	
		90	[CH7] Byte	qos_ch7_byte	
		91	[CH7] Rate (%)	qos_ch7_rate_per	Displays 5 digits to the right of the decimal
		92	[CH7] Rate (frame/s)	qos_ch7_rate_fps	
		93	[CH7] Rate (bps)	qos_ch7_rate_bps	
		94	[CH8] Frame	qos_ch8_frame	
		95	[CH8] Byte	qos_ch8_byte	
		96	[CH8] Rate (%)	qos_ch8_rate_per	Displays 5 digits to the right of the decimal
		97	[CH8] Rate (frame/s)	qos_ch8_rate_fps	
		98	[CH8] Rate (bps)	qos_ch8_rate_bps	

Group	Group Param. (Param.No.)	No	Item	Parameter	Notes
QoS Latency	qos_ch1_latency 99-101 : qos_ch8_latency 120-122	99	[CH1] Max Packet Latency (us)	qos_ch1_latency_max	Displays 1 digit to the right of the decimal
		100	[CH1] Min Packet Latency (us)	qos_ch1_latency_min	Displays 1 digit to the right of the decimal
		101	[CH1] Avg Packet Latency (us)	qos_ch1_latency_avg	Displays 1 digit to the right of the decimal
		102	[CH2] Max Packet Latency (us)	qos_ch2_latency_max	Displays 1 digit to the right of the decimal
		103	[CH2] Min Packet Latency (us)	qos_ch2_latency_min	Displays 1 digit to the right of the decimal
		104	[CH2] Avg Packet Latency (us)	qos_ch2_latency_avg	Displays 1 digit to the right of the decimal
		105	[CH3] Max Packet Latency (us)	qos_ch3_latency_max	Displays 1 digit to the right of the decimal
		106	[CH3] Min Packet Latency (us)	qos_ch3_latency_min	Displays 1 digit to the right of the decimal
		107	[CH3] Avg Packet Latency (us)	qos_ch3_latency_avg	Displays 1 digit to the right of the decimal
		108	[CH4] Max Packet Latency (us)	qos_ch4_latency_max	Displays 1 digit to the right of the decimal
		109	[CH4] Min Packet Latency (us)	qos_ch4latency_min	Displays 1 digit to the right of the decimal
		110	[CH4] Avg Packet Latency (us)	qos_ch4_latency_avg	Displays 1 digit to the right of the decimal
		111	[CH5] Max Packet Latency (us)	qos_ch5_latency_max	Displays 1 digit to the right of the decimal
		112	[CH5] Min Packet Latency (us)	qos_ch5_latency_min	Displays 1 digit to the right of the decimal
		113	[CH5] Avg Packet Latency (us)	qos_ch5_latency_avg	Displays 1 digit to the right of the decimal
		114	[CH6] Max Packet Latency (us)	qos_ch6_latency_max	Displays 1 digit to the right of the decimal
		115	[CH6] Min Packet Latency (us)	qos_ch6_latency_min	Displays 1 digit to the right of the decimal
		116	[CH6] Avg Packet Latency (us)	qos_ch6_latency_avg	Displays 1 digit to the right of the decimal
		117	[CH7] Max Packet Latency (us)	qos_ch7_latency_max	Displays 1 digit to the right of the decimal
		118	[CH7] Min Packet Latency (us)	qos_ch7_latency_min	Displays 1 digit to the right of the decimal
		119	[CH7] Avg Packet Latency (us)	qos_ch7_latency_avg	Displays 1 digit to the right of the decimal
		120	[CH8] Max Packet Latency (us)	qos_ch8_latency_max	Displays 1 digit to the right of the decimal
		121	[CH8] Min Packet Latency (us)	qos_ch8_latency_min	Displays 1 digit to the right of the decimal
		122	[CH8] Avg Packet Latency (us)	qos_ch8_latency_avg	Displays 1 digit to the right of the decimal

Group	Group Param. (Param.No.)	No	Item	Parameter	Notes
BERT	bert 123-133 bert_rx 123-131 bert_tx 132-133	123	[BERT] Bit Error Rate (E-12)	bert_rx_rate_biterror	Displays 5 digits to the right of the decimal
		124	[BERT] Bit Error Count	bert_rx_biterror_bit	
		125	[BERT] Bit Error Frame	bert_rx_biterror_frame	
		126	[BERT] Sync Loss	bert_rx_nosync	
		127	[BERT] BERT Checked Byte	bert_rx_sync_byte	
		128	[BERT] Bit Error (bps)	bert_rx_rate_biterror_bit	
		129	[BERT] Bit Error Frame (frame/s)	bert_rx_rate_biterror_frame	
		130	[BERT] Sync Loss /sec	bert_rx_rate_nosync	
		131	[BERT] BERT Checked Byte/s	bert_rx_rate_sync_byte	
		132	[BERT] Bit Error Insert	bert_tx_biterror_bit	
		133	[BERT] Bit Error Insert Frame	bert_tx_biterror_frame	
All Items	all 0-133			all	Displays all items

Screen Display Format

```
>POShowCounter
### UNIT1(AE5521)-PORT01 : TESTMODE=TRAFFIC : I/F-GBIC-SX ###
cmn_gettime           : Wed Jun 30 21:49:08 2005
cmn_measuretime(sec)  : 10000sec
link_state            : Linkdown
   :
rx_rate_per(%)        : 100.00000%
rx_latecollisition    : 0
   :
bert_rx_rate_biterror_frame : -----
### UNIT2(AE5523)-PORT02 : TESTMODE=TRAFFIC : I/F-T-UNMOUNT ###
```

* UNIT number, PORT number, test mode, and interface are displayed at the title of each port.
  ### UNIT2(AE5523)-PORT02 : TESTMODE=TRAFFIC : I/F-T-UNMOUNT ###
* Displays the information repeatedly for the specified number of ports.

POSaveResult Command

Command Specifications

Description	Saves the statistical items of the specified port to a file in CSV format.	
Syntax	posaveresult [*filename*] [port]	
Parameters	[*filename*]: Specify the output file name. An error occurs if the path name is included. If the extension is not present, [.csv] is automatically added. The characters that can be used for a file name are alphanumeric characters, hyphen, underscore, and period. However, a hyphen cannot be used as the first character of a file name. [port]: Specify the port to be displayed.	
Comments	All statistical items are saved.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	4	specified port error
	11	port is busy

CSV Output Items

Group Name	No	Item Name	Parameter Name	Notes
Common	0	[Common] Get Time	cmn_gettime	Time when statistics were retrieved Example) Wed Jun 30 21:49:08 2005
	1	[Common] Measured Time (s)	cmn_measuretime	Unit of seconds
Link	2	[Link] Link Status	link_state	Linkdown-unfixed Linkdown-Straight Linkdown-Cross 10M-FULL-Straight 10M-FULL-Cross 10M-HALF-Straight 10M-HALF-Cross 100M-FULL-Straight 100M-FULL-Cross 100M-HALF-Straight 100M-HALF-Cross 1000M-FULL 1000M-FULL-Straight 1000M-FULL-Cross 10G-FULL
	3	[Link] Link Down	link_downcnt	
	4	[Link] Tx Frequency Deviation (ppm)	link_sendfreq	
	5	[Link] Rx Frequency Deviation (ppm)	link_recfreq	
	6	[Link] 1000BASE-T Clock Mode	link_1000tclk	MASTER, SLAVE
	7	[Link] PoE Line Power Detect	link_poestate	OFF, ON
	8	[Link] LF Detect	link_lfcnt	
	9	[Link] RF Detect	link_rfcnt	

Group Name	No	Item Name	Parameter Name	Notes
Tx	10	[Tx] Normal Frame	tx_frame	
	11	[Tx] Byte	tx_byte	
	12	[Tx] Rate (%)	tx_rate_per	Displays 5 digits to the right of the decimal
	13	[Tx] Rate (frame/s)	tx_rate_fps	
	14	[Tx] Rate (byte/s)	tx_rate_byteps	
	15	[Tx] Rate (bps)	tx_rate_bps	
	16	[Tx] Insert Frame	tx_insert	
	17	[Tx] Reply Frame	tx_reply	
	18	[Tx] Error Frame	tx_error_frame	
	19	[Tx] CRC Error	tx_error_crc	
	20	[Tx] Under Size Error	tx_error_under	
	21	[Tx] Over Size Error	tx_error_over	
	22	[Tx] Symbol Error	tx_error_symbol	
	23	[Tx] Error Frame (frame/s)	tx_rate_error_frame	
	24	[Tx] CRC Error (frame/s)	tx_rate_error_crc	
	25	[Tx] Under Size Error (frame/s)	tx_rate_error_under	
	26	[Tx] Over Size Error (frame/s)	tx_rate_error_over	
	27	[Tx] Symbol Error (frame/s)	tx_rate_error_symbol	
Rx	28	[Rx] Normal Frame	rx_frame	
	29	[Rx] Byte	rx_byte	
	30	[Rx] Rate (%)	rx_rate_per	Displays 5 digits to the right of the decimal
	31	[Rx] Rate (frame/s)	rx_rate_fps	
	32	[Rx] Rate (byte/s)	rx_rate_byteps	
	33	[Rx] Rate (bps)	rx_rate_bps	
	34	[Rx] Pause Frame	rx_pause	
	35	[Rx] Collision Detect	rx_collision	
	36	[Rx] Late Collision Detect	rx_latecollision	
	37	[Rx] Error Frame	rx_error_frame	
	38	[Rx] CRC Error	rx_error_crc	
	39	[Rx] Under Size Error	rx_error_under	
	40	[Rx] Over Size Error	rx_error_over	
	41	[Rx] Alignment Error	rx_error_align	
	42	[Rx] Symbol Error	rx_error_symbol	
	43	[Rx] Error Frame (frame/s)	rx_rate_error_frame	
	44	[Rx] CRC Error (frame/s)	rx_rate_error_crc	
	45	[Rx] Under Size Error (frame/s)	rx_rate_error_under	
	46	[Rx] Over Size Error (frame/s)	rx_rate_error_over	
	47	[Rx] Alignment Error (frame/s)	rx_rate_error_align	
	48	[Rx] Symbol Error (frame/s)	rx_rate_error_symbol	

Group Name	No	Item Name	Parameter Name	Notes
Latency	49	[Latency] Max IFG (us)	rx_ifg_max	Displays 1 digit to the right of the decimal
	50	[Latency] Min IFG (us)	rx_ifg_min	Displays 1 digit to the right of the decimal
	51	[Latency] Avg IFG (us)	rx_ifg_avg	Displays 1 digit to the right of the decimal
	52	[Latency] Max Packet Latency (us)	rx_latency_max	Displays 1 digit to the right of the decimal
	53	[Latency] Min Packet Latency (us)	rx_latency_min	Displays 1 digit to the right of the decimal
	54	[Latency] Avg Packet Latency (us)	rx_latency_avg	Displays 1 digit to the right of the decimal
Sequence Check	55	[Seq] Loss Packet	seq_packetloss	
	56	[Seq] Reorder Packet	seq_swap	
	57	[Seq] Duplicate Packet	seq_repetition	
	58	[Seq] Max Burst Packet Loss	seq_burstloss	
QoS Traffic	59	[CH1] Frame	qos_ch1_frame	
	60	[CH1] Byte	qos_ch1_byte	
	61	[CH1] Rate (%)	qos_ch1_rate_per	Displays 5 digits to the right of the decimal
	62	[CH1] Rate (frame/s)	qos_ch1_rate_fps	
	63	[CH1] Rate (bps)	qos_ch1_rate_bps	
	64	[CH2] Frame	qos_ch2_frame	
	65	[CH2] Byte	qos_ch2_byte	
	66	[CH2] Rate (%)	qos_ch2_rate_per	Displays 5 digits to the right of the decimal
	67	[CH2] Rate (frame/s)	qos_ch2_rate_fps	
	68	[CH2] Rate (bps)	qos_ch2_rate_bps	
	69	[CH3] Frame	qos_ch3_frame	
	70	[CH3] Byte	qos_ch3_byte	
	71	[CH3] Rate (%)	qos_ch3_rate_per	Displays 5 digits to the right of the decimal
	72	[CH3] Rate (frame/s)	qos_ch3_rate_fps	
	73	[CH3] Rate (bps)	qos_ch3_rate_bps	
	74	[CH4] Frame	qos_ch4_frame	
	75	[CH4] Byte	qos_ch4_byte	
	76	[CH4] Rate (%)	qos_ch4_rate_per	Displays 5 digits to the right of the decimal
	77	[CH4] Rate (frame/s)	qos_ch4_rate_fps	
	78	[CH4] Rate (bps)	qos_ch4_rate_bps	
	79	[CH5] Frame	qos_ch5_frame	
	80	[CH5] Byte	qos_ch5_byte	
	81	[CH5] Rate (%)	qos_ch5_rate_per	Displays 5 digits to the right of the decimal
	82	[CH5] Rate (frame/s)	qos_ch5_rate_fps	
	83	[CH5] Rate (bps)	qos_ch5_rate_bps	
	84	[CH6] Frame	qos_ch6_frame	
	85	[CH6] Byte	qos_ch6_byte	
	86	[CH6] Rate (%)	qos_ch6_rate_per	Displays 5 digits to the right of the decimal

Group Name	No	Item Name	Parameter Name	Notes
QoS Traffic	87	[CH6] Rate (frame/s)	qos_ch6_rate_fps	
	88	[CH6] Rate (bps)	qos_ch6_rate_bps	
	89	[CH7] Frame	qos_ch7_frame	
	90	[CH7] Byte	qos_ch7_byte	
	91	[CH7] Rate (%)	qos_ch7_rate_per	Displays 5 digits to the right of the decimal
	92	[CH7] Rate (frame/s)	qos_ch7_rate_fps	
	93	[CH7] Rate (bps)	qos_ch7_rate_bps	
	94	[CH8] Frame	qos_ch8_frame	
	95	[CH8] Byte	qos_ch8_byte	
	96	[CH8] Rate (%)	qos_ch8_rate_per	Displays 5 digits to the right of the decimal
	97	[CH8] Rate (frame/s)	qos_ch8_rate_fps	
	98	[CH8] Rate (bps)	qos_ch8_rate_bps	
QoS Latency	99	[CH1] Max Packet Latency (us)	qos_ch1_latency_max	Displays 1 digit to the right of the decimal
	100	[CH1] Min Packet Latency (us)	qos_ch1_latency_min	Displays 1 digit to the right of the decimal
	101	[CH1] Avg Packet Latency (us)	qos_ch1_latency_avg	Displays 1 digit to the right of the decimal
	102	[CH2] Max Packet Latency (us)	qos_ch2_latency_max	Displays 1 digit to the right of the decimal
	103	[CH2] Min Packet Latency (us)	qos_ch2_latency_min	Displays 1 digit to the right of the decimal
	104	[CH2] Avg Packet Latency (us)	qos_ch2_latency_avg	Displays 1 digit to the right of the decimal
	105	[CH3] Max Packet Latency (us)	qos_ch3_latency_max	Displays 1 digit to the right of the decimal
	106	[CH3] Min Packet Latency (us)	qos_ch3_latency_min	Displays 1 digit to the right of the decimal
	107	[CH3] Avg Packet Latency (us)	qos_ch3_latency_avg	Displays 1 digit to the right of the decimal
	108	[CH4] Max Packet Latency (us)	qos_ch4_latency_max	Displays 1 digit to the right of the decimal
	109	[CH4] Min Packet Latency (us)	qos_ch4latency_min	Displays 1 digit to the right of the decimal
	110	[CH4] Avg Packet Latency (us)	qos_ch4_latency_avg	Displays 1 digit to the right of the decimal
	111	[CH5] Max Packet Latency (us)	qos_ch5_latency_max	Displays 1 digit to the right of the decimal
	112	[CH5] Min Packet Latency (us)	qos_ch5_latency_min	Displays 1 digit to the right of the decimal
	113	[CH5] Avg Packet Latency (us)	qos_ch5_latency_avg	Displays 1 digit to the right of the decimal
	114	[CH6] Max Packet Latency (us)	qos_ch6_latency_max	Displays 1 digit to the right of the decimal
	115	[CH6] Min Packet Latency (us)	qos_ch6_latency_min	Displays 1 digit to the right of the decimal
	116	[CH6] Avg Packet Latency (us)	qos_ch6_latency_avg	Displays 1 digit to the right of the decimal
	117	[CH7] Max Packet Latency (us)	qos_ch7_latency_max	Displays 1 digit to the right of the decimal

Group Name	No	Item Name	Parameter Name	Notes
QoS Latency	118	[CH7] Min Packet Latency (us)	qos_ch7_latency_min	Displays 1 digit to the right of the decimal
	119	[CH7] Avg Packet Latency (us)	qos_ch7_latency_avg	Displays 1 digit to the right of the decimal
	120	[CH8] Max Packet Latency (us)	qos_ch8_latency_max	Displays 1 digit to the right of the decimal
	121	[CH8] Min Packet Latency (us)	qos_ch8_latency_min	Displays 1 digit to the right of the decimal
	122	[CH8] Avg Packet Latency (us)	qos_ch8_latency_avg	Displays 1 digit to the right of the decimal
BERT	123	[BERT] Bit Error Rate (E-12)	bert_rx_rate_biterror	Displays 5 digits to the right of the decimal
	124	[BERT] Bit Error Count	bert_rx_biterror_bit	
	125	[BERT] Bit Error Frame	bert_rx_biterror_frame	
	126	[BERT] Sync Loss	bert_rx_nosync	
	127	[BERT] BERT Checked Byte	bert_rx_sync_byte	
	128	[BERT] Bit Error (bps)	bert_rx_rate_biterror_bit	
	129	[BERT] Bit Error Frame (frame/s)	bert_rx_rate_biterror_frame	
	130	[BERT] Sync Loss /sec	bert_rx_rate_nosync	
	131	[BERT] BERT Checked Byte/s	bert_rx_rate_sync_byte	
	132	[BERT] Bit Error Insert	bert_tx_biterror_bit	
	133	[BERT] Bit Error Insert Frame	bert_tx_biterror_frame	

CSV Display Format

UnitNo-PortNo	Unit1-Port1	Unit1-Port2	Header	Unit number, port number
Unit	AE5523	AE5523		Unit type
Interface	T-UNMOUNT	T-UNMOUNT		Interface
Mode	Traffic	Traffic		Test mode
cmn_gettime	Wed Jun 30 21:49:08 2005	Wed Jun 30 21:49:08 2005	Statistical items	
cmn_measuretime	123	123		
:	:	:		
:	:	:		
:	:	:		
:	:	:		

POInit Command

Description	Initializes the specified port settings.	
Syntax	poinit [port]	
Parameters	port: Specify the port to be initialized.	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	4	specified port error
	11	port is busy

Waittime Command

Description	Stops the execution of the script for a specified time.	
Syntax	waittime [*time*]	
Parameters	[*time*]: The time value. The unit is seconds. The selectable range is 1 to 86400.	
Comments	This command is not recorded in the log file.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error

Print Command

Description	Shows the specified character string.	
Syntax	print [*String*]	
Parameters	[*String*]: The string to be displayed. Enclose the string in single quotation marks.	
Comments	This command is not recorded in the log file. • If a tab character exists, it is converted to a space and displayed. • If an odd number of single quotation marks is present, a compile error occurs.	
ReturnFormat	Success: [Specified string] Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error

Echo Command

Description	Shows/Hides the executed commands during the test.	
Syntax	Echo [on/off]	
Parameters	on: Shows the executed commands after the line in which this command is written. off: Does not show the executed commands after the line in which this command is written.	
Comments	This command is not recorded in the log file.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error

#!filestart

Description	An identifier indicating the start of the script file. (A dedicated command used in a script)
Syntax	#!filestart
Parameters	None
Comments	Write this identifier in the first line of a script file. Write the '#' character as the first character in the line.
ReturnFormat	None (only used within the script)
Error	None

#!fileend

Description	An identifier indicating the end of the script file. (A dedicated command used in a script)
Syntax	#!fileend
Parameters	None
Comments	Write this identifier at the end of a script file. Write the '#' character as the first character in the line.
ReturnFormat	None (only used within the script)
Error	None

$u1_useport, $u2_useport

Description	Specifies the port to be reserved. (A dedicated command used in the script)
Syntax	$u1_useport [port] $u2_useport [port]
Parameters	[port]: Specify the port. The possible values are 1 to 16 or all. Multiple ports can be specified by separating each value with a comma (ie. 1,2,...)
Comments	Write the '$' character as the first character in the line. $u1 and $u2 denote unit 1 and 2, respectively. Specifying all reserves all ports. When specifying multiple ports, do not insert spaces around the comma. You cannot mix "all" and individual ports. "all" can be used only to reserve the ports of units that are actually inserted. * For AE5520/21/22, only "all" is accepted for the port designation.
ReturnFormat	None (only used within the script)
Error	None

$mode

Description	Specifies the measurement mode in the auto test. (A dedicated command used in a script)
Syntax	$mode [traffic/bert]
Parameters	None
Comments	Write the '$' character as the first character in the line. A compile error occurs, if this command does not exist in a script file.
ReturnFormat	None (only used within the script)
Error	None

3.3 Other Commands

These commands cannot be written in a script file, but can be entered directly from the PC after logging in using TELNET.

Note

- The words in italics in the command explanations indicate that a specified value or
- character string is entered there.
- The brackets in the command explanations indicate a parameter.
  For a description of how to specify [port] in the commands, see “Specifying Ports” in section 2.1.

USLoginLock

Description	Switches the login lock mode.	
Syntax	usloginlock on/off	
Parameters	on/off: on (enable login lock), off (disable login lock)	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error

USShowUser

Description	Shows the information of the logged in user.	
Syntax	usshowuser	
Parameters	None	
Comments	None	
ReturnFormat	Success: user_number number=1 user no=1 user_name: ae5511 login_state: LOGIN login_lock: UNLOCK reserve_port: 1-1,1-2 login_time: 2004/10/23 11:57:28 Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error

USExit(exit)

Description	Carries out a logout procedure.	
Syntax	usexit (or exit)	
Parameters	None	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error

USLogout

Description	Releases the port lock of the specified user and logs the user out.	
Syntax	uslogout [username]	
Parameters	[username]: Specify the name of the user to be logged out.	
Comments	Only the admin user can execute this command.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	9	command not permitted

USReserve

Description	Reserves the specified port.	
Syntax	usreserve [port]	
Parameters	[port]: Specify the port to be controlled.	
Comments	The following operations are carried out when this command is executed. • Clears the statistics • Clears the log	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	3	port not found
	4	specified port error
	10	already been reserved
	11	port is busy

USRelease

Description	Releases the specified port.	
Syntax	usrelease [port]	
Parameters	[port]: Specify the port to be controlled.	
Comments	The following operations are carried out when this command is executed. • Stops the frame transmission • Stops the insert frame transmission • Stops cycle link down • Stop capturing	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	4	specified port error
	11	port is busy

SYDatetime

Description	Sets or shows the system date/time.	
Syntax	sydatetime [-d *date*] [-t *time*]	
Parameters	[-d *date*]: Date. Specify the data in the following format: YY/MM/DD. [-t *time*]: Time. Specify the time in the following format: HH:MM:SS.	
Comments	None	
ReturnFormat	When setting the date/time Success: No display Fail: [Error*N*] *ErrorMessage* When showing the date/time *date*: 2005/10/23 *time*: 13:24:16	
Error	Error No	Message
	2	command format error
	9	control permission error

SYIp

Description	Changes or shows the IP address, netmask, and default gateway settings assigned to the system.	
Syntax	syip [-d on/off] [-a *IPAddress*] [-m *netmask*] [-g *gateway*]	
Parameters	[-d on/off]: Turn on/off DHCP. [-a *IPAddress*]: IP address [-m *netmask*]: Netmask [-g *gateway*]: Default gateway	
Comments	Changes in the settings take effect the next time the system is started.	
ReturnFormat	When setting the parameters Success: No display Fail: [Error*N*] *ErrorMessage* When showing the parameters current dhcp: ON ipaddress: 192.168.0.1 netmask: 255.255.255.0 gateway: 192.168.0.254 set dhcp: ON ipaddress: 192.168.0.1 netmask: 255.255.255.0 gateway: 192.168.0.254	
Error	Error No	Message
	2	command format error
	9	control permission error

SYPasswd

Description	Changes or shows the password assigned to the system.	
Syntax	sypasswd [-s ON/OFF] [-n *passwd*]	
Parameters	[-s ON/OFF]: Specify whether to use the password. [-n *passwd*]: Set a new password.	
Comments	None	
ReturnFormat	When setting the password Success: No display Fail: [Error*N*] *ErrorMessage* When showing the password passwd: OFF	
Error	Error No	Message
	2	command format error
	9	control permission error

SYEquipmentname

Description	Changes or shows the equipment name assigned to the system.	
Syntax	syequipmentname [*name*]	
Parameters	[*name*]: Specify the equipment name.	
Comments	None	
ReturnFormat	When setting the equipment name Success: No display Fail: [Error*N*] *ErrorMessage* When showing the equipment name equipmentname: ae5511	
Error	Error No	Message
	2	command format error
	9	control permission error

SYTimeout

Description	Changes or shows the login timeout value assigned to the system.	
Syntax	sytimeout [*timeout*]	
Parameters	[*timeout*]: Timeout value (in minutes)	
Comments	None	
ReturnFormat	When setting the timeout Success: No display Fail: [Error*N*] *ErrorMessage* When showing the timeout logintimeout: 10	
Error	Error No	Message
	2	command format error
	9	control permission error

SYBootSetup

Description	Sets the system boot operation.	
Syntax	sybootsetup [-s on/off] [-f on/detail/off]	
Parameters	[-s on/off]: Specify whether to use the unit settings the next time the system is booted. [-f on/detail/off]: Specify whether to check the disk (on), check the disk in detail (detail), or not check the disk (off) the next time the system boots.	
Comments	None	
ReturnFormat	When setting the operation Success: No display Fail: [Error*N*] *ErrorMessage* When showing the operation remenber_setup: ON fail_check: OFF	
Error	Error No	Message
	2	command format error
	9	control permission error

SYTxClock

Description	Sets the transmission clock deviation.	
Syntax	sytxclock [-c1 *ppm*] [-c2 *ppm*]	
Parameters	[-c1 *ppm*]: Specify the transmission clock deviation of unit 1 in ppm. [-c2 *ppm*]: Specify the transmission clock deviation of unit 2 in ppm.	
Comments	None	
ReturnFormat	When setting the deviation Success: No display Fail: [Error*N*] *ErrorMessage* When showing the deviation unit no=1 clock_adjust: 0 unit no=2 clock_adjust: 0	
Error	Error No	Message
	2	command format error
	9	control permission error

SYSetDefault

Description	Resets all settings to factory default.	
Syntax	sysetdefault	
Parameters	None	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	9	control permission error

SYShowDiskCheck

Description	Shows the result of the last disk check that was executed.	
Syntax	syshowdiskcheck	
Parameters	None	
Comments	None	
ReturnFormat	<result> <check_trigger>ABNORMAL_END</check_trigger> <check_date>2004/10/23</check_date> <check_detail>OFF</check_detail> <check_result>SUCCESS</check_result> </result>	
Error	Error No	Message
	2	command format error

SYReboot

Description	Reboots the system.	
Syntax	syreboot	
Parameters	None	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	9	control permission error

SYShutdown

Description	Shuts down the system.	
Syntax	syshutdown	
Parameters	None	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	9	control permission error

SYVersion

Description	Shows the system version information.	
Syntax	syversion	
Parameters	None	
Comments	None	
ReturnFormat	system_version: 6.1.0.0	
Error	Error No	Message
	2	command format error

SYVersionup

Description	Executes version upgrade.	
Syntax	syversionup [*versionup_file*]	
Parameters	[*versionup_file*]: Specify the name of the version upgrade file.	
Comments	The version upgrade file must be transferred to the AE5511 using FTP in advance.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	2	command format error
	5	file not found
	6	file format error
	9	control permission error

SYShowAlarm

Description	Shows the system alarm status.	
Syntax	syshowalarm	
Parameters	None	
Comments	None	
ReturnFormat	fan_alarm state=OFF fatal_err state=OFF err_no=0 xenpak_err state=OFF err_port=	
Error	Error No	Message
	2	command format error
	9	control permission error

POSelftest

Description	Executes the self-test.	
Syntax	poselftest [-p]	
Parameters	[-p]: Child process mode. If this mode is specified, the command finishes without showing the result. The self-test is executed in the background.	
Comments	None	
ReturnFormat	<result> <unit_confirum> <status>SUCCESS</status> </unit_confirm> <tranmit_mem> <status1>SUCCESS</status1> <status2>SUCCESS</status2> </transmit_mem> <stat_mem> <status1>NONE</status1> <status2>NONE</status2> </stat_mem> <capture_mem> <status1>NONE</status1> <status2>NONE</status2> </capture_mem> <loopback_test> <status1>SUCCESS</status1> <status2>SUCCESS</status2> </loopback_test> </result>	
Error	Error No	Message
	1	reserve a port
	2	command format error
	9	control permission error
	11	port is busy

POSelftestStatus

Description	Shows the execution status of the self-test.	
Syntax	poselftestcancel	
Parameters	None	
Comments	None	
ReturnFormat	<result> <current_test>LOOPBACK_TEST</current_test> <unit_confirum> <status>SUCCESS</status> </unit_confirm> <tranmit_mem> <status1>SUCCESS</status1> <status2>SUCCESS</status2> </transmit_mem> <stat_mem> <status1>NONE</status1> <status2>NONE</status2> </stat_mem> <capture_mem> <status1>NONE</status1> <status2>NONE</status2> </capture_mem> <loopback_test> <status1>SUCCESS</status1> <status2>SUCCESS</status2> </loopback_test> </result>	
Error	Error No	Message
	2	command format error

POSelftestCancel

Description	Cancels the execution of the self-test.	
Syntax	poselftestcancel	
Parameters	None	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	9	control permission error
	11	port is busy

POCaptur

Description	Starts/Stops the capture operation.	
Syntax	pocaptur [start/stop] [port]	
Parameters	[start/stop]: Specify capture [start] or [stop]. [port]: Specify the port to be controlled.	
Comments	None	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	8	unit kind error
	11	port is busy

POShowCapStatus

Description	Shows the capture status.	
Syntax	poshowcapstatus [port]	
Parameters	[port]: Specify the port to be displayed.	
Comments	None	
ReturnFormat	unit no=1 port no=1 cap_link: up trigger: NONE cap_state: STOP capturing_number: 0 max_buffer_number: 512	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	7	test mode error
	8	unit kind error
	11	port is busy

POLog

Description	Controls the port alarm log.	
Syntax	polog clear [port]	
Parameters	[port]: Specify the port to be controlled.	
Comments	Clears the alarm log.	
ReturnFormat	Success: No display Fail: [Error*N*] *ErrorMessage*	
Error	Error No	Message
	1	reserve a port
	2	command format error
	3	port not found
	8	unit kind error
	11	port is busy

Appendix 1 A List of Error Messages

Command Error Messages

The following are error messages that may occur during command execution.

Error No	Message	Description
1	reserve a port	You do not have privileges to control the specified port.
2	command format error	The command parameter (format) is incorrect.
3	port not found	The specified port does not exist.
4	specified port error	You cannot specify individual ports because the unit* is of an old type.
5	file not found	The specified file does not exist.
6	file format error	The specified file format is incorrect.
7	test mode error	The test mode is incorrect.
8	unit kind error	The unit type is incorrect.
9	control permission error	You do not have privileges to control the system.
10	already been reserved	The port is already reserved.
11	port is busy	The port is executing the previous command.
12	already been reserved	The project is already reserved.
13	project not found	The specified project does not exist.
14	reserve a project	A project has not been reserved.
15	auto test file not found	The execution file of the test does not exist.
16	already been reserved other project	Another project has already been reserved.
17	project is running	The test is currently in progress.
18	project is not running	The test is currently stopped.
19	file name error (***.wscp)	The file name designation is incorrect. (***.wscp)
20	build error	Build error
21	command not permitted	Command execution prohibited
255	fatal error	Fatal error

*: AE5520, AE5521, AE5522

Compile Errors

If an error occurs during the compile operation, a compile error occurs.

<script file name> : <line in the script> : <error type>

The following are errors that the compiler may output.

Error	Description
test mode not defined ($mode...)	A test mode is not specified.
test mode differ error	The test mode is different from the setup file.
too many characters	Exceeded the maximum number of allowed characters in one line.
too many lines	Exceeded the maximum number of allowed lines.
too many setfiles	The setup files referred using the POUpdate command exceed 1000.

Appendix 2 Sample Script

```
#!filestart

$mode traffic
$u1_useport all

print 'StartingAutotest'
waittime 2
echo on
# port configuration
poupdate test.ae5523.p01.setup unit 1 port 1,3,5,7,9,11
poupdate test.ae5523.p01.setup unit 1 port 2,4,6,8,10,12
# start transmit
porun start unit 1 port all

waittime 10

poshowcounter tx unit 1 port 1,2

waittime 5

print 'EndOfAutotest'

#!fileend
```