NAKAYO

NYC-16VDSL-B
INSTRUCTION & INSTALLATION MANUAL

Demonstration Use Only

Thank you so much for your purchasing our equipment.
Prior to using it, read and understand the "Instruction and Installation Manual" thoroughly.
After reading it, always keep it at hand for your reference.

F-5243-1

BE SURE TO READ Checking Installation Work and System Operation

The following describes a procedure for checking installation work and system operation. In addition to the following reference pages, the Equipment has the setting functions. Set it as required.

Installing the NYC-16VDSL-B

- Determine how to install the Equipment.→See 5. INSTALLATION(Pages 12 and 13).
- The installation environment is 0 to 40 ℃.
- If there is an ADSL circuit or amateur radio set installed nearby, there may be an interference between the Equipment and ADSL circuit or a cross talk from the Equipment to the amateur radio set.

↓

Wiring Work

- Prior to work, check the VDSL circuit cables used. The transmission speed of the VDSL circuit may slow down because of the bridge type(branch wiring), IDF/cable wire diameter/type or cross talk between the cables.
- For wiring between the systems, see SYSTEM CONFIGURATION(Page 14).

↓

Connecting the VDSL Circuit

- Check connector pin layout.→ See VDSL CIRCUIT CONNECTION(Page 16).
- Abide by a setting example as for a connection between the Equipment and NYC-VDSL-T16(single unit apparatus). →See 9. SETTING EXAMPLES - VDSL PORT CONNECTION(Page 64).

↓

Connecting the Telephone Circuit

- Check connector pin layout.→ See POTS/ISDN CIRCUIT CONNECTION(Page 17).

↓

Connecting the 10/100BASE Circuit

- A 10/100BASE port corresponds to the 10BASE-T/100BASE-TX. Flow control may be also accommodated. → See 10/100BASE CONNECTION(Page 15).

↓

Installing the NYC-VDSL-T16

- Connect the Equipment and NYC-VDSL-T16(single unit apparatus), and in-line filter.→ See SYSTEM CONFIGURATION(Page 14).

↓

System Setting(Serial and TELNET/Web)

Set various functions. Be sure to set the following items:

- User name/password setting→See Pages 45 to 48.
- IP address/subnet mask.etc.setting→See Pages 27/39 to 44.
- Setting the Time→See Page 49.
- VDSL SETTING: Initial setting is "Valid." Set "Invalid" for only the ports not used.→See Page 61.
- 10/100BASE SETTING.→See Page 59.
- E-mail setting→See Pages 98 to 101.
- Saving the Data→Be sure to save when the settings have been changed.→See Page 29/55.
- Reboot→See Page 30/57.

↓

Operation Test

- After completing connection and setting, check the circuit condition of the VDSL and 10/100BASE ports.→ See LINE INFORMATION(Page 96).
- If the VDSL circuit has lower transmission speed, adjust the following settings:
  →S/N ratio margin(see Page 66)
  →Power back-off
  →VDSL output level
- Conduct an operation test of this system.
  →Confirming Terminal Conection(see Page 87)
  →Sending Test Mail(see Page 90)
  →Ping test(see Page 93)

↓

Completion of Work

- After starting to run the Equipment, replace the fan every 20 months or so.→See REPLACEMENT OF FANS(Page 102).

INTRODUCTION

The "Instruction and Installation Manual" describes not only the operating methods, but other important matters you should observe in order to prevent personal injuries and damage on your properties and run the Equipment safely.
Prior to using it, read and understand the Manual thoroughly.
If you lose or deface the Manual, obtain a new copy from our dealer.

- Handle the Equipment properly according to the Manual.
- We will take no responsibility for any purely financial loss such as damage caused by losing opportunities of communication, etc. due to external factors such as the Equipment's trouble, malfunctioning, fault or power failure.
- Boundary points with external devices to be connected to the Equipment include a housed circuit interface connection and a power terminal. External devices are not included in the scope of our responsibility.
- The Equipment is not provided with any protective means such as a battery for a power failure, instantaneous power shutoff. When necessary to stably run the system, it is recommended to use an uninterruptive power source.
- It is prohibited to re-engineer the Equipment and reproduce or duplicate part or all of the Manual without permission.
- The Manual has been prepared with utmost care. If you have any question as to the Manual, however, inquire our dealer.
- The information in the Manual is subject to change without prior notice.
- Windows® is the registered trademark of U.S. Microsoft Corporation in the U.S.A. and other countries.
- Netscape Navigator® is the registered trademark of Netscape Communication Corporation in the U.S.A. and other countries.
- Other company names and product names are the trademarks or registered trademarks of such corporations.

BE SURE TO OBSERVE FOR YOUR SAFETY

⚠ WARNING

- If you notice any abnormality such as smoke, foul odor during use, disconnect the power plug immediately from the plug socket, confirm that the smoke has stopped, and contact our dealer. Neglect of this may result in a fire, electric shock or trouble.
- If by any chance you drop the Equipment or break or wet the cabinet, disconnect the power plug immediately from the plug socket and contact our dealer. Neglect of this may result in a fire, electric shock or trouble.
- Do not insert any metal or combustible substance into the Equipment.
  If any foreign substance enters inside, disconnect the power plug immediately from the plug socket and contact our dealer. Neglect of this may result in a fire, electric shock or trouble.
- Do not disassemble or remodel the Equipment. Neglect of this may result in a fire, electric shock or trouble.
- If you notice any abnormal sound or abnormal heat generation in the Equipment, disconnect the power plug immediately from the plug socket and contact our dealer. Neglect of this may result in a fire, electric shock or trouble.
- Use the Equipment only on the 230 V AC(50/60 Hz) power. Neglect of this may result in a fire, electric shock or trouble.
- The power cable should not be damaged, broken, reworked, bent/pulled/twisted by force or bundled. It may be broken by placing a heavy object on or heating it, resulting in a fire or electric shock. If it is damaged, disconnect the power plug from the plug socket and contact our dealer.
- Do not touch the power plug with a wet hand. Neglect of this may result in an electric shock.
- Connect the power plug into the plug socket(230 V AC) securely.
  Contacting the power plug with a metal may result in a fire or electric shock.
- When pulling the power plug out of the plug socket, be sure to hold the plug of the power cable. Pulling the cord may damage itself, resulting in a fire or electric shock.
- Prior to connecting the power plug, confirm that the plug socket is free from adherence of dust. Check and clean the plug socket semiannually or annually. Dust may cause a fire or electric shock.
- Do not put many loads on a single electric outlet, using a table tap, branch plug socket or current tap socket. Neglect of this may result in a fire or electric shock.
- Do not block a ventilating hole in the Equipment. Blocking it may cause the internal temperature to increase, resulting in a fire or trouble.
- When connecting your own device to the Equipment for use, check with our dealer in advance whether it is acceptable. Otherwise, never use it. Neglect of this may result in a fire or electric shock.

⚠ WARNING

- When relocating the Equipment, confirm that the power plug has been disconnected from the plug socket and the external connection cables such as the power cable, telephone circuit cable have been disconnected. Neglect of this may damage the cables, resulting in a fire or electric shock.
- When connecting the power plug of another electric appliance to a wall outlet having two or more plug sockets, ensure that the total current value does not exceed the maximum value of the wall outlet. Neglect of this may result in a fire or electric shock.
- Prior to starting work, confirm that the power plug has been disconnected from the plug socket. Neglect of this may result in an electric shock or trouble.
- Do not use the Equipment with its cover removed. There are high-voltage parts inside, which may induce an electric shock. When replacing the fan, particularly, be sure to disconnect the power plug from the plug socket prior to starting work.
- Prior to checking wiring, confirm that the power plug has been disconnected from the plug socket.
- Utmost care should be taken, following the warnings and cautions indicated inside the Equipment.

⚠ CAUTION

- Do not install the Equipment in the following places. Neglect of this may not only deteriorate its intended performance or stop its functions, but cause personal injuries or damage on properties or impede other devices.
  ①Ill-ventilated place.
  ②Place exposed to direct sunshine or high-temperature place close to a heater.
  ③Humid or dusty place.
  ④Place exposed to oil or chemical products, or where toxic gas is produced.
  ⑤Place exposed to oil fume or steam.
  ⑥Unstable place such as a rickety stand or tilted surface.
  ⑦Place exposed to vibrations or shocks.
- Note that you may be injured by carelessly touching projecting portions such as the body case(frame or cover) and connectors.
- Be sure to connect an earthing conductor to the Equipment. Neglect of this may cause it to become out of order.
- When it begins to thunder, do not touch the power cable or connect a peripheral device. Lightning may cause an electric shock.
- When the Equipment is not used for a long time, disconnect the power plug from the power socket for your safety.
- Do not climb on or put any object on the Equipment. It may go out of order, resulting in a personal injury.
- Do not place a water contained vessel or a small metallic object near the Equipment. Water may be spilt or the metallic object may happen to enter inside the Equipment, causing a trouble.
- Do not put the power cord close to any heating apparatus. Its covering may melt, resulting in a fire or electric shock.
- Do not put your hand into the ventilating hole. You may be electrically shocked or injured.
- Pay heed to projecting portions the cases(upper and lower) of the Equipment or the connectors. Careless contact with them may injure you.
- Insert the connectors properly.
- Be sure to check the connections. Improper connection may cause a trouble to the connected device or the Equipment.
- After completing entire installation work, conduct a connection and operation test for final checking.
- When replacing the fan, care should be taken not to catch the cables at the time of putting back the cover.
- When replacing the fan, do not touch the parts or pattern on the PCB, because they may be broken by static electricity, etc.
- Ask our dealer to clean inside the Equipment semiannually or annually. If accumulated dust is left uncleaned for a long period of time, it may result in a fire or trouble.
- At the time of maintenance, disconnect the power plug from the power socket for your safety.

BE SURE TO OBSERVE THE FOLLOWING TO AVOID TROUBLES

ATTENTION

- Do not install the Equipment in the following places:
  ①Place where the temperature drops drastically, such as an ice plant.
  ②Place close to a high frequency producing facility such as a high-frequency welder, electric welder.
  ③Magnetized place such as a TV, radio, fluorescent lamp, microwave oven, office automation device, or electromagnetic wave producing place. If the Equipment is used in a place where hydrogen sulfide is generated (hot spa), its life may be shortened.
- Do not use benzine, thinner or alcohol for cleaning. They may discolor or deform the Equipment. If badly contaminated, dip cloth into thin neutral detergent, wring it tightly to wipe off contamination, and then wipe with soft dry cloth.
- Do not touch the connector pins of the Equipment. They may be corroded and have a contact failure, inducing functional deterioration.
- Do not install the Equipment in a place subject to illegal radio communication, near a broadcasting station, or a place exposed to strong radio waves of amateur radio or CB radio.
- Replace the fan every 20 months.
- It is recommended to use the UTP cables. Depending on the working environment, it may be necessary to change cables.
- Consult our dealer when the Equipment is interfered by CB radio or when it has been installed close to a broadcasting station and is interfered by a broadcasting wave or noise.

TABLE OF CONTENTS

INTRODUCTION 1

1. OVERVIEW 6

2. APPLICATION EXAMPLES 7

3. EQUIPMENT CHECK 8

4. CONSTRUCTION 9
- COMPONENT PARTS 9

5. INSTALLATON 12
- HORIZONTAL INSTALLATION 12
  - Horizontal Instllation 12
- 19-INCH RACK INSTALLATION 13
  - 19-inch Rack Instllation 13

6. CONNECTION 14
- SYSYTEM CONFIGURATION 14
- 10/100BASE CONNECTION 15
- VDSL CIRCUIT CONNECTION 16
- POTS/ISDN CIRCUIT CONNECTION 17
- POWER SOURCE CONNECTION 18

7. SERIAL AND TELNET SETTING 19
- LIST OF SERIAL AND TELNET SETTING ITEMS 19
- CONNECTION TO PC 24
  - Serial Connection 24
  - TELNET Connection 25
- LOG-IN 26
  - User Command Menu 26
- SYSTEM ADMINISTRATION 27
  - Setting the IP Address 27
- OVERALL SETTING 29
  - Saving the Date 29
  - Reboot 30
- LOG-OUT 31
  - Log-out 31

8. Web SETTING 32
- LIST OF WEB SETTING ITEMS 32
- CONNECTION TO PC 36
  - Connection through Web 36
- LOG-IN 38
- SYSTEM ADMINISTRATION 39
  - Setting the IP Address 39
  - Setting the Default Gateway 41
  - Setting the DNS Server 43

TABLE OF CONTENTS

Setting the User Name 45
Setting the Password 47
OVERALL SETTING 49
Setting the Time 49
Setting the Time Server 51
Setting upon Shipment from Factory 53
Saving the Date 55
Reboot 57
10/100BASE SETTING 59
10/100BASE Setting 59
VDSL SETTING (SETTING BY PORTS) 61
Selecting the VDSL port 61

9. SETTING EXAMPLES 63
LIST OF SETTING EXAMPLES 63
VDSL PORT CONNECTION 64
S/N RATIO MARGIN SETTING 65
Setting the S/N Ratio Margin 66
VLAN CONFIGURATION (INITAL SETTING) 68
VLAN CONFIGURATION 70
Setting the VLAN ID 71
Setting PVID 75
SETTING TAG OUTPUT 77
Setting Tag Output 77
TRUNKING SETTING 83
Setting Trunking 84

10. MAINTENANCE FUNCTIONS 86
LIST OF MAINTENANCE FUNCTIONS (WEB SETTING) 86
TEST (WEB SETTING) 87
Confirming Terminal Conection 87
Sending Test Mail 90
Ping Test 93
LINE INFORMATION (WEB SETTING) 96
Displaying the VDSL Circuit Status and Setings 96
LINE INFORMATION (WEB SETTING) 97
Histry Information 97
NOTIFICATION FUNCTION (WEB SETTING) 98
User Common E-mail Setting 98
E-mail Setting for Each User 100
REPLACEMENT OF FANS 102

11. FOR YOUR REFERENCE 103
OPTIONS 103
RS-232C PORT INTERFACE 104
TROUBLESHOOTING 105
Fault Identification 105
SPECIFICATION 110
APPENDIXES 111
About Private MIB 111

1. OVERVIEW

By utilizing the VDSL (Very high bit rate Digital Subscriber Line) technology, the Equipment uses a UTP (Unshielded Twisted Pair) cable to realize high-speed data communication with maximum fall of 50 Mbps. It consists of NYC-16VDSL-B (concentrated apparatus) and NYC-VDSL-T16 (single unit apparatus).

The NYC-16VDSL-B can accommodate up to 16 VDSL ports and uses a commercially available 36-pin anphenol connector for connection. It has four 10/100BASE ports and uses a RJ-45 connector for connection.

With a POTS/ISDN splitter incorporated, the Equipment does not require you to purchase a new splitter, allowing you to use a telephone circuit and an ISDN circuit(2W).

The following lists its features:

- Maximum transmission speed fall of 50 Mbps and rise of 29 Mbps (Note)
- Compliant with the ITU-T G.993.1 (G.vdsl.f) Annex A frequency plan. (See the figure below)
- Built-in POTS/ISDN splitter required for using existing wiring.
- Capable of mounting various types of horizontal racks.
- Capable of setting a flexible VLAN group.
- Capable of remotely setting for each port and checking the operating condition through the Web screen from a distant place.
- Capable of communicating the fault information to the administrator by e-mail.
- Capable of backing up/restoring the setting data.

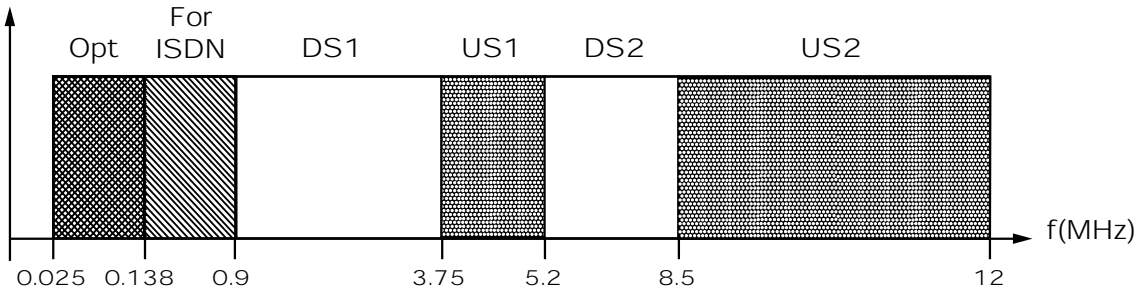


Fig. Frequency Plan A (G.993.1 Annex A)

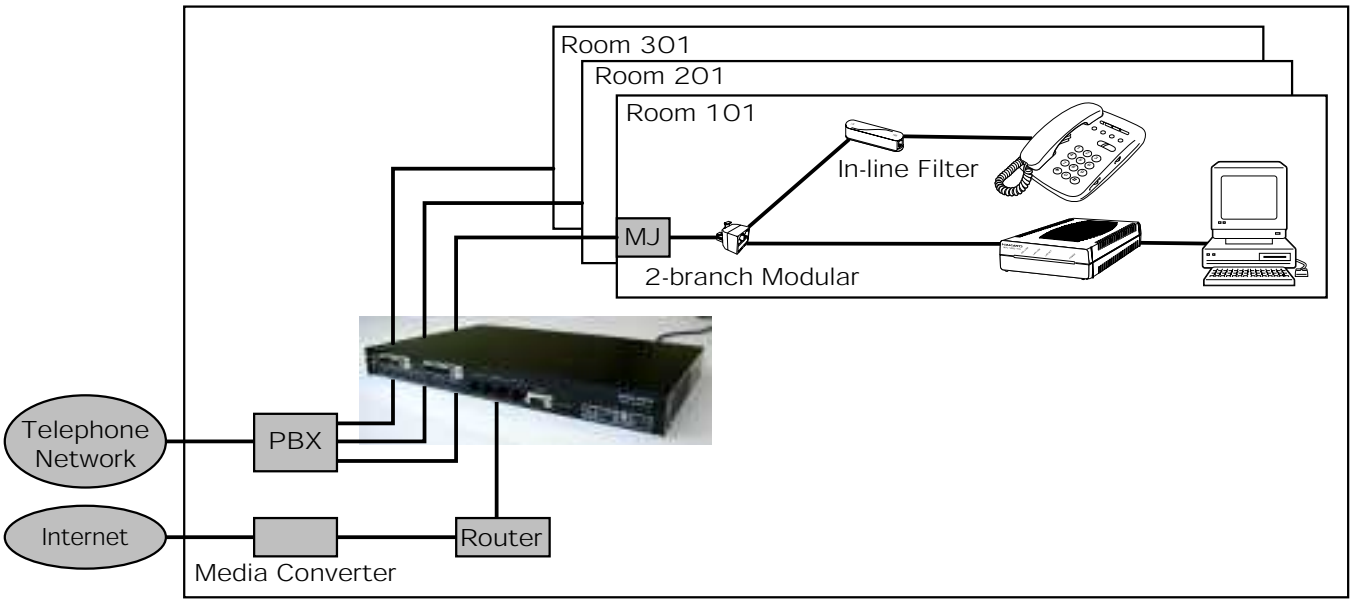
Note: The transmission speed indicates the performance in a single circuit in an ideal environment without noise. The actual transmission speed differs depending on the your installation environment (noise from other system, etc., bridge type (cable branch point), existence of IDF, cable wire diameter/type, inter-system cross talk which takes place between the cables).

2. APPLICATION EXAMPLES

High-speed Internet connection is enabled by linking the NYC-16VDSL-B (concentrated apparatus) and NYC-VDSL-T16 (single unit apparatus).
The following applications are available.

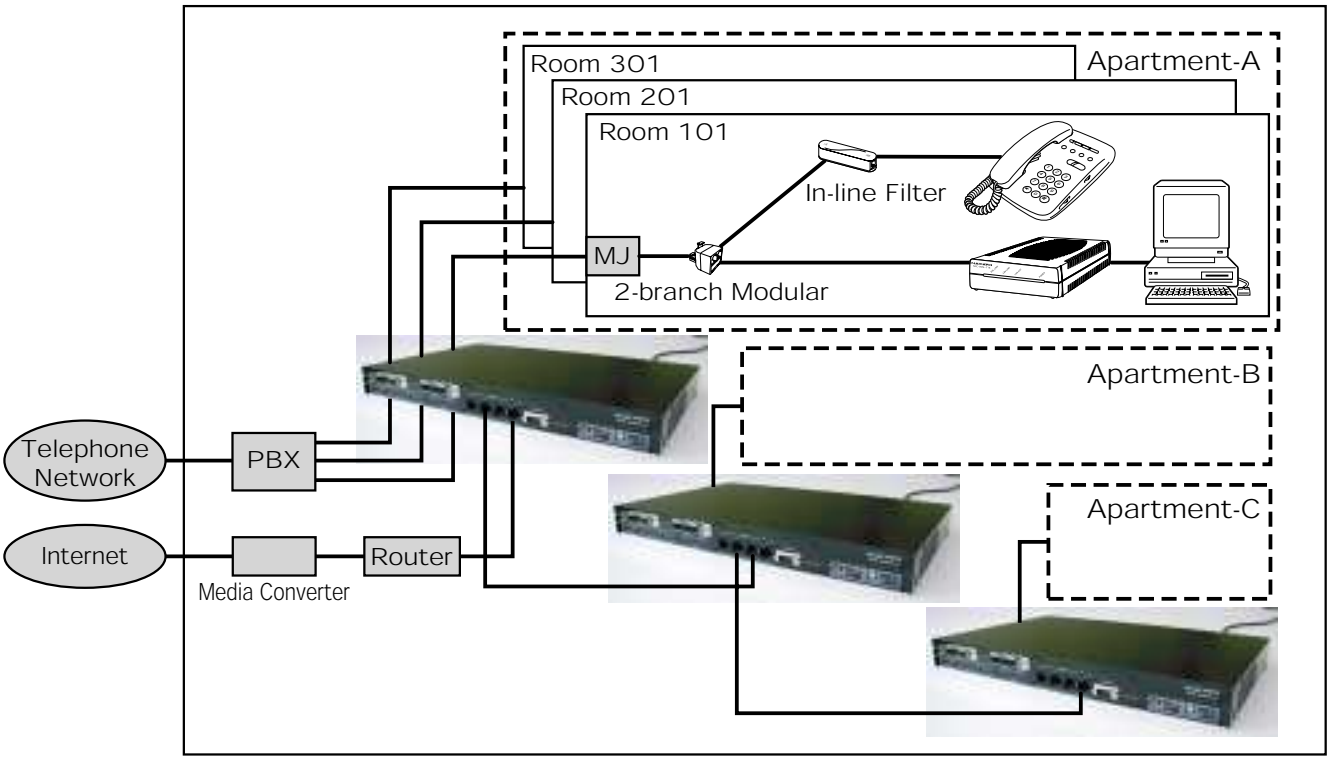
■Installation in Condominium/Hotel

・Configuration



■Cascade Connection

・Configuration

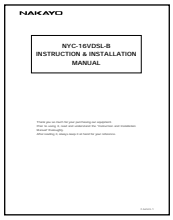


3. EQUIPMENT CHECK

Check the equipment.

■Main Body

■Accessories

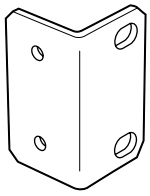


Instruction and Installation Manual (1 Copy)

Rubber Legs (4 Pcs.)

M3 Setscrews (4 Pcs.)

M5 Setscrews (4 Pcs.)

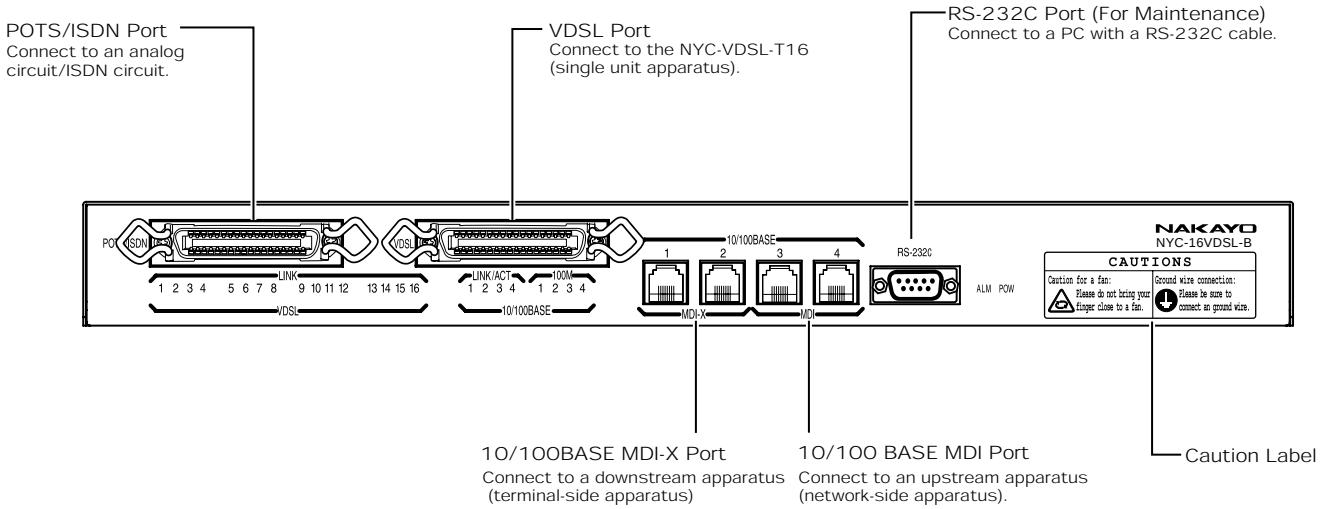


19-inch Rack Fittings (2 Pcs.)

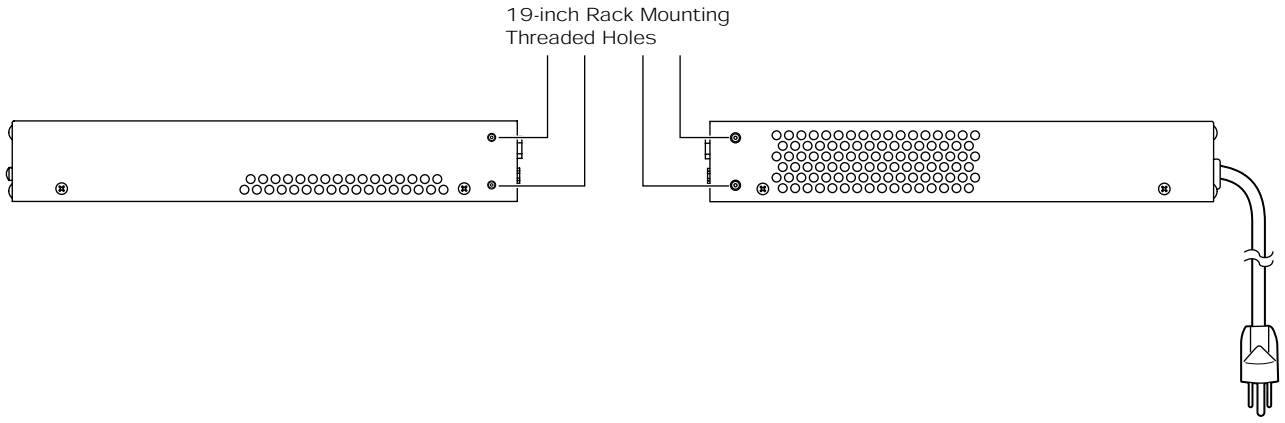
●The shape of each component is only an example.

COMPONENT PARTS

【Front View】

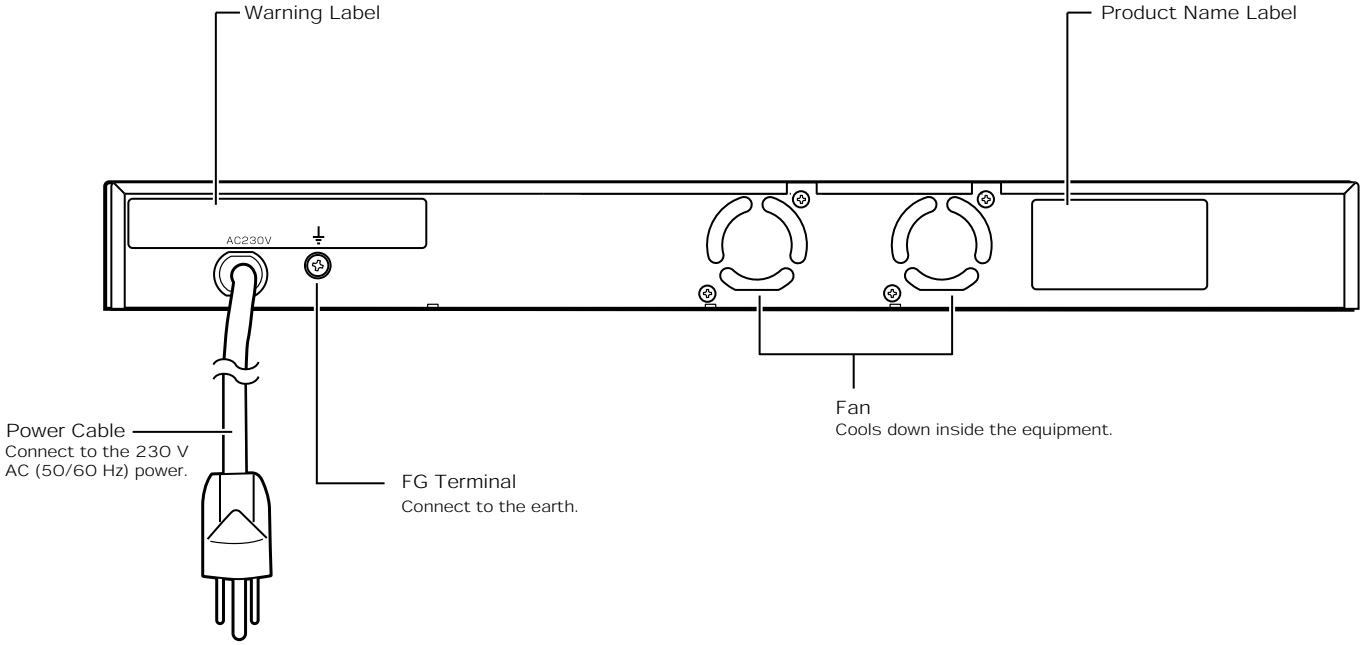


【Side View】

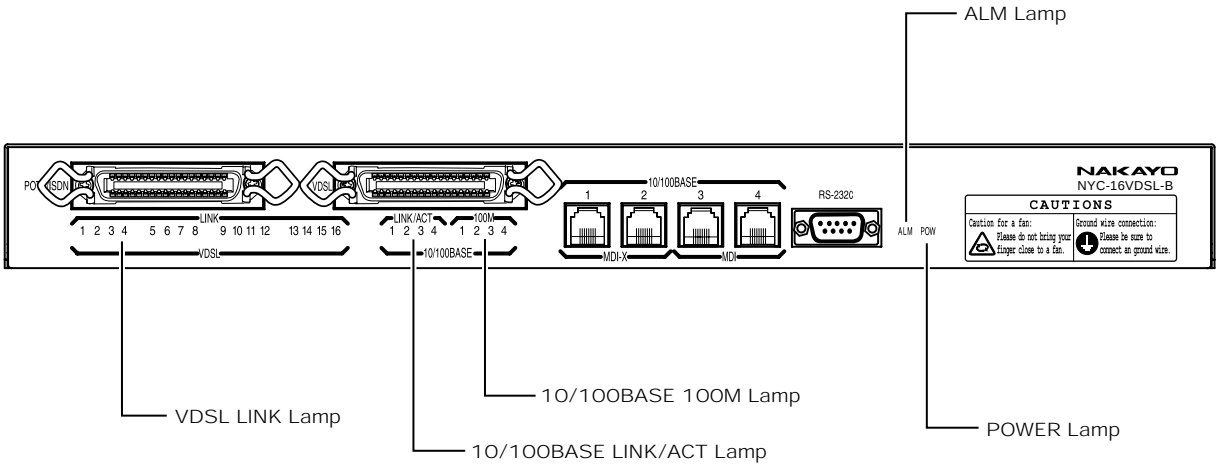


COMPONENT PARTS

【Rear View】



COMPONENT PARTS



Lamp	Lamp State	Description
POWER	ON (Green)	Power turned on.
	OFF	Power turned off.
ALM	ON (Red)	The Equipment has an alarm(＊1).
	Blinking (Red)	The Equipment is being upgraded.
	OFF	Normal
VDSL LINK	ON (Green)	A link with the NYC-VDSL-T16 is being established (other than 1.2 M/1.3 Mbps).
	Fast blinking (Green)	Link training is under way between the Equipment and the NYC-VDSL-T16.(＊2)
	Slow blinking (Green)	A link with the NYC-VDSL-T16 is being established at 1.2 M/1.3 Mbps.
	OFF	A link with the NYC-VDSL-T16 is not established.
10/100BASE LINK/ACT	ON (Green)	A link with the NYC-VDSL-T16 is being established.
	Blinking (Green)	The data is being transmitted/received.
	OFF	A link with the NYC-VDSL-T16 is not established.
10/100BASE 100M	ON (Green)	The Equipment is operating in the 100 Mbps mode.
	OFF (Green)	The Equipment is operating in the 10 Mbps mode.

＊1 : • When the equipment has high internal temperature.
• When the NYC-VDSL-T16 (single unit apparatus) has an error.
＊2 : Link training means to adjust the speed of the VDSL circuit. It is not allowed to connect to the Internet during link training.
Link training may take about 5 minutes depending on the line condition, and so on.

Supplemental Explanation

- With the ALM lamp turned on, an attempt to display the history information (☛Page 97) turns off the lamp.
- If the 10/100BASE LINK/ACT lamp or 10/100BASE 100M lamp does not function properly, disconnect and reconnect a LAN cable.
- With 10/100BASE set to 100 M Fixed (full/half duplex), the 10/100M BASE 100M lamp remains turned on if the LAN cable is disconnected.

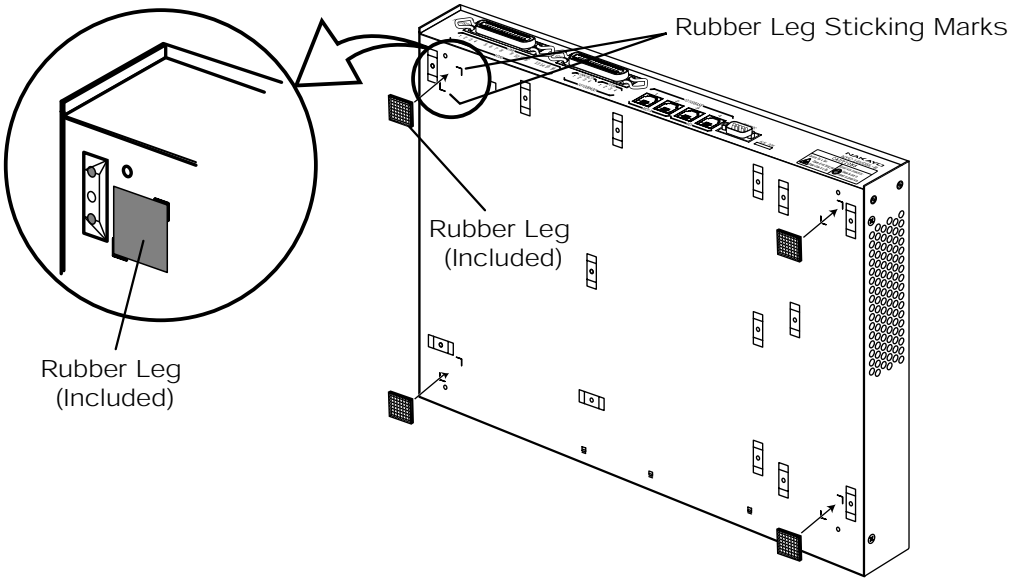
Notes

- When a link is established between the Equipment and NYC-VDSL-T16 (single unit apparatus), the time required for the VDSL LINK to switch from blinking to being illuminated may differ by several seconds.

HORIZONTAL INSTALLATION

Horizontal Installation

1 Stick the included rubber legs to the bottom of the Equipment.



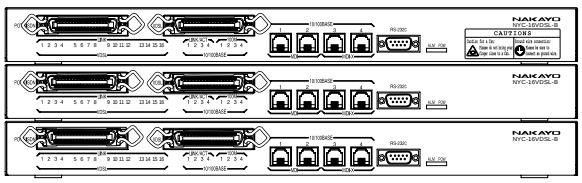
ATTENTION

●When installing the Equipment, observe the following:

①Do not stack 3 units or more of the Equipment on top of each other.

②When stacking the Equipment, use a band, etc. to secure them.

a. Band



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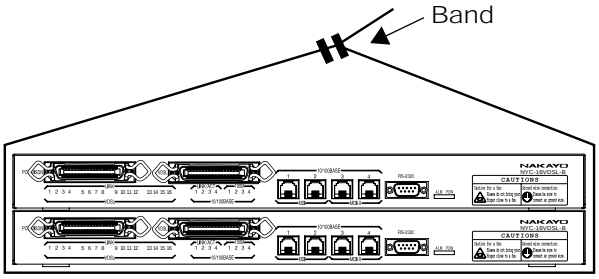
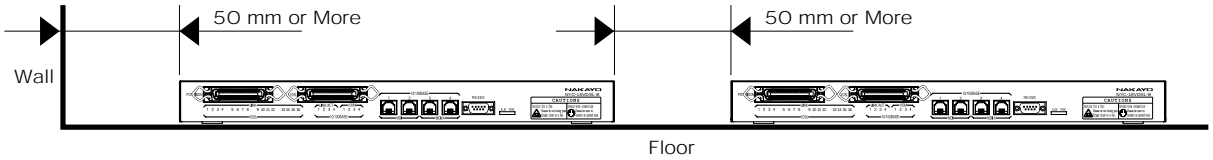
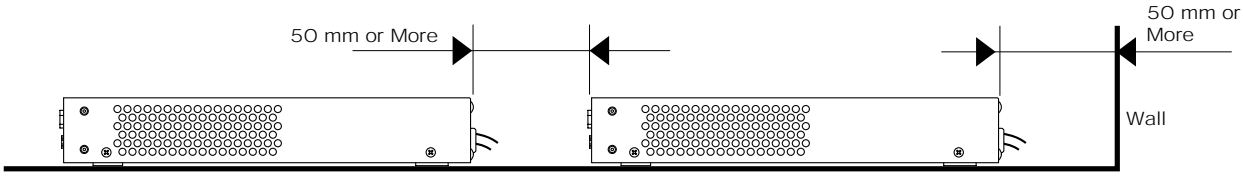


○

③When installing multiple units of the Equipment sideways or lengthways, or when installing them close to the wall, secure space of 50 mm or more from the wall and between them.





19-INCH RACK INSTALLATION

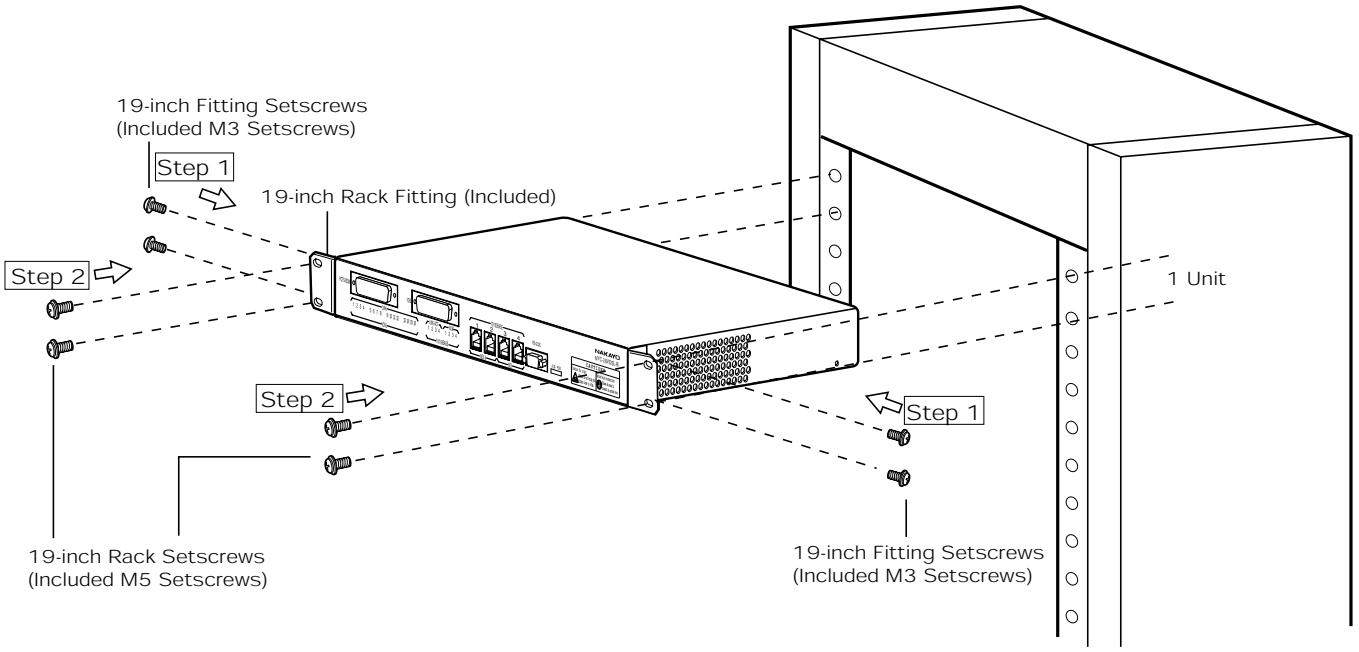
19-inch Rack Installation

1 **Attach the included 19-inch rack fittings to the right and left sides of the Equipment with included M3 setscrews.**

2 **Secure the Equipment onto the 19-inch rack with included M5 setscrews.**

- When attaching the Equipment to the 19-inch rack, secure one-unit-wide space in the 19-inch rack.

■**Installation Drawing**

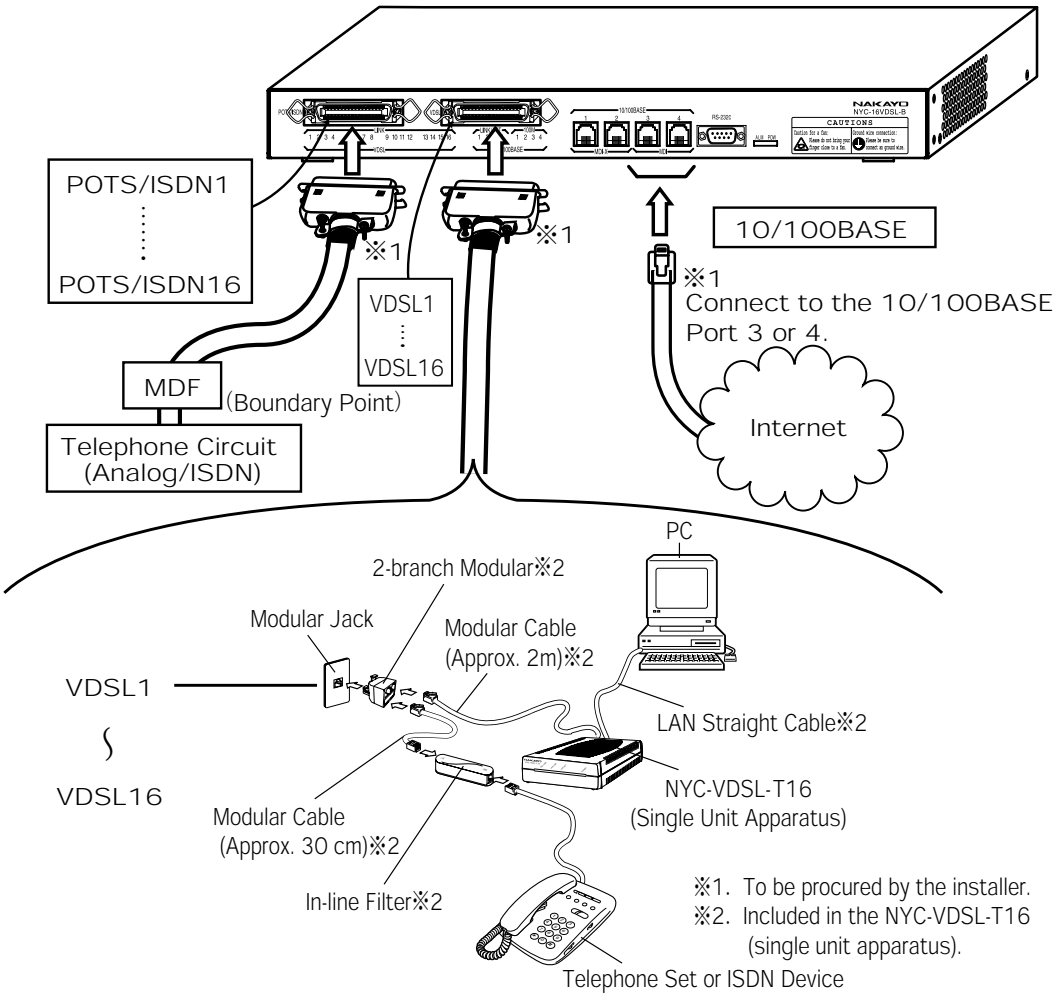


⚠ CAUTION

- ●When installing the Equipment into the 19-inch rack, use special purpose fittings (included). Use of unspecified ones may cause the Equipment to fall off the rack.
- ●The rack fittings are only available for the 19-inch rack compliant with the EIA Standards. If used for the 19-inch rack not compliant with the EIA Standards, the Equipment may fall off.
- ●When securing the 19-inch rack fittings to the Equipment, use 4 included M3 setscrews.
- ●Secure the Equipment firmly to the 19-inch rack so that it will not fall off.
- ●When installing the Equipment in the 19-inch rack with a door, the door may not be closed because of the protruding connector or cable of the VDSL circuit and POTS/ISDN circuit. Check it beforehand or use the 19-inch rack with no doors.

SYSTEM CONFIGURATION

The following figure shows a configuration with the Equipment and NYC-VDSL-T16 (single unit apparatus).

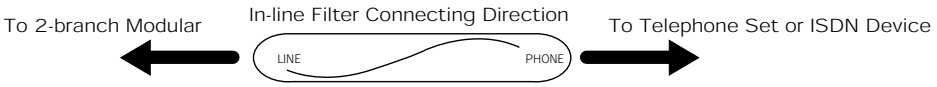


Supplemental Explanation

- Either analog or IDSN telephone circuit is available.
- Use of the ISDN circuit requires a terminal adaptor, and so on.
- The VDSL Port 1 is superposed on the telephone circuit connected to the POTS/ISDN Port 1, and the Ports 2 to 16 similarly superposed.
- The actual connection method may differ from this figure because it is necessary to meet the working conditions such as the devices used and installation place.

Notes

- Connect the NYC-VDSL-T16 (single unit apparatus) to the Equipment. Do not connect the respective apparatuses to other products.
- Make sure that each wiring is not snapped.
- Install the Equipment in such a manner that no unnecessary force will be applied to each connector.
- Each cable should be properly routed and bundled by the installer.
- If a protector including a hybrid circuit is used for the MDF section and UTP private cable, communication over the VDSL circuit may be interrupted. Utmost care should be taken in selecting the protector.
- The Equipment is not provided with any protective means such as a battery for a power failure and instantaneous power shutoff. When necessary to stably run the system, it is recommended to use an uninterruptive power source.
- The in-line filter has its specified connecting direction. Connecting it in a wrong direction disables communication or considerably slows down the transmission speed of the VDSL circuit.



10/100BASE CONNECTION

1 **Insert the LAN cable's modular plug into the "10/100BASE" port of the data circuit interface section of the Equipment until it "clicks."**

- For the LAN cable's modular plug, use an RJ-45 plug compliant with the ISO Standards, IS8877. The following shows the pin layout of the modular jack.

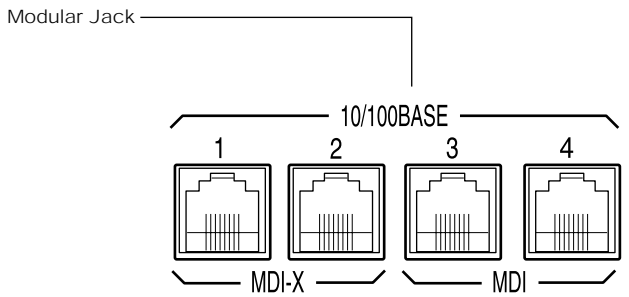
MDI-X (Terminal-side Apparatus and Connection)

Pin No.	Signal Name	Signal Direction
1	TX+	Equipment←Terminal-side apparatus
2	TX−	Equipment←Terminal-side apparatus
3	RX+	Equipment←Terminal-side apparatus
4	−	−
5	−	−
6	RX−	Equipment←Terminal-side apparatus
7	−	−
8	−	−

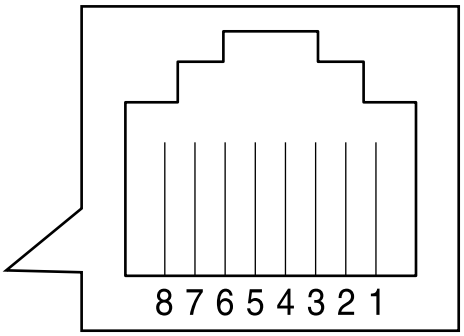
MDI (Network-side Apparatus and Connection)

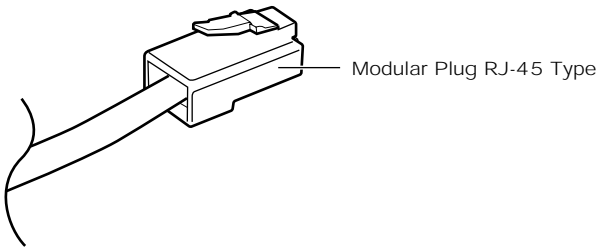
Pin No.	Signal Name	Signal Direction
1	RX+	Equipment → Network apparatus
2	RX−	Equipment → Network apparatus
3	TX+	Equipment → Network apparatus
4	−	−
5	−	−
6	TX−	Equipment → Network apparatus
7	−	−
8	−	−

10/100BASE Interface Section



Pin Layout Viewed from Front of Equipment





ATTENTION

- Do not connect any unused cable to the 10/100BASE port. Neglect of this produces noise, resulting in malfunctioning.
- Remove dust from the pins of the modular jack, if any.
- Use the UTP cable (Category 5 or above) to connect with a correct pin layout.

Notes

- The 10/100BASE ports of the Equipment correspond to the 10BASE-T and 100BASE-TX. Initial setting is auto negotiation. The communication speed of the Equipment should be equal to that of the PC connected to it or the network apparatuses(router, hub, etc.). If not, the Equipment may not be able to properly communicate with the PC or network apparatuses(router, hub, etc.)
- When connecting a notebook PC, connect its power adapter to the plug socket, and then, connect it with the LAN cable.

VDSL CIRCUIT CONNECTION

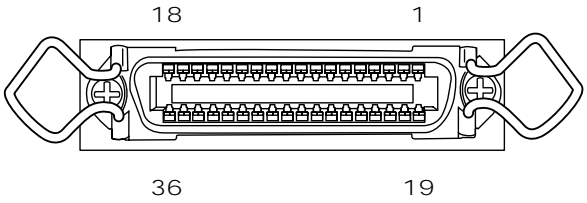
1 Connect an installation work cable's lead wire to a commercially available 36-pin anphenol connector (to be procured by the installer).

- The following lists the recommended 36-pin anphenol connectors.

Manufacturer	Part No.	Remark
DDK Ltd. (www.ddknet.co.jp)	57-30360	Soldering type
DDK Ltd. (www.ddknet.co.jp)	57FE-30360-20N (D28)	pressure type

- The following lists the recommended pressure tools for the 36-pin anphenol connectors (pressure type).

Manufacturer	Part No.	Remark
DDK Ltd. (www.ddknet.co.jp)	357J-4256	Cable cutting tools
DDK Ltd.(www.ddknet.co.jp)	357J-4674D	Press body
DDK Ltd. (www.ddknet.co.jp)	357J-4668	Attachment



VDSL Port Connector
(Viewed from Front of Equipment)

VDSL Port Pin Assignment

Pin No.	Circuit Name
1,19	—
2,20	—
3,21	VDSL16
4,22	VDSL15
5,23	VDSL14
6,24	VDSL13
7,25	VDSL12
8,26	VDSL11
9,27	VDSL10
10,28	VDSL9
11,29	VDSL8
12,30	VDSL7
13,31	VDSL6
14,32	VDSL5
15,33	VDSL4
16,34	VDSL3
17,35	VDSL2
18,36	VDSL1

2 Insert the connector-attached cable prepared in Step 1 into the "VDSL" port of the VDSL circuit interface section of the Equipment.

- After inserting the connector, lock the lock springs at its both ends.
- The VDSL circuit connected to the VDSL Port 1 is superposed on the POTS/ISDN Port 1, and the Ports 2 to 16 similarly superposed.

Notes

- Install the Equipment in such a manner that no unnecessary force is applied to the connector.
- The cables should be properly routed and bundled by the installer.

⚠ CAUTION

- When installing the Equipment in the 19-inch rack, with a door, the door may not be closed because of a protruding connector or cable. Check it beforehand or use the 19-inch rack with no doors.

ATTENTION

- When connecting the telephone circuit and VDSL circuit, care should be taken not to connect to a wrong connector. Neglect of this causes the Equipment to have a trouble or malfunction.
- L1/L2 of the cable to be connected to the VDSL Port 1 should be connected in pairs with those to be connected to the POTS/ISDN Port 1; connect to the Ports 2 to 16 similarly. Erroneous connection of either L1 or L2 to an adjacent port causes the Equipment to malfunction.
- The cable not connected to the VDSL circuit should not be connected to the VDSL circuit interface section, because the Equipment malfunctions due to noise.
- When disconnecting/reconnecting the VDSL circuit, wait for 10 seconds or more after disconnecting it, and then, reconnect it.

POTS/ISDN CIRCUIT CONNECTION

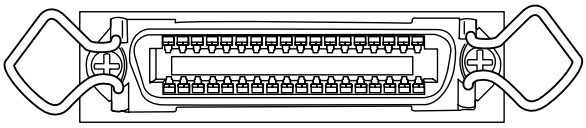
1 Connect an installation work cable's lead wire to a commercially available 36-pin anphenol connector (to be procured by the installer).

- The following lists the recommended 36-pin anphenol connectors.

Manufacturer	Part No.	Remark
DDK Ltd. (www.ddknet.co.jp)	57-30360	Soldering type
DDK Ltd. (www.ddknet.co.jp)	57FE-30360-20N (D28)	pressure type

- The following lists the recommended pressure tools for the 36-pin anphenol connectors (pressure type).

Manufacturer	Part No.	Remark
DDK Ltd. (www.ddknet.co.jp)	357J-4256	Cable cutting tools
DDK Ltd.(www.ddknet.co.jp)	357J-4674D	Press body
DDK Ltd. (www.ddknet.co.jp)	357J-4668	Attachment



POTS/ISDN Port Connector
(Viewed from Front of Equipment)

POTS/ISDN Port Pin Assignment

Pin No. (L2,L1)	Circuit Name
1,19	—
2,20	—
3,21	POTS16/ISDN16
4,22	POTS15/ISDN15
5,23	POTS14/ISDN14
6,24	POTS13/ISDN13
7,25	POTS12/ISDN12
8,26	POTS11/ISDN11
9,27	POTS10/ISDN10
10,28	POTS9/ISDN9
11,29	POTS8/ISDN8
12,30	POTS7/ISDN7
13,31	POTS6/ISDN6
14,32	POTS5/ISDN5
15,33	POTS4/ISDN4
16,34	POTS3/ISDN3
17,35	POTS2/ISDN2
18,36	POTS1/ISDN1

2 Insert the connector-attached cable prepared in Step 1 into the "POTS/ISDN" port of the VDSL circuit interface section of the Equipment.

- After inserting the connector, lock the lock springs at its both ends.
- The VDSL Port 1 is superposed on the telephone circuit connected to the POST/ISDN Port 1, and the Ports 2 to 16 similarly superposed.

Notes

- Install the Equipment in such a manner that no unnecessary force is applied to the connector.
- The cables should be properly routed and bundled by the installer.

⚠ CAUTION

- When installing the Equipment in the 19-inch rack, with a door, the door may not be closed because of a protruding connector or cable. Check it beforehand or use the 19-inch rack with no doors.

ATTENTION

- When connecting the telephone circuit and VDSL circuit, care should be taken not to connect to a wrong connector. Neglect of this causes the Equipment to have a trouble or malfunction.
- L1/L2 of the cable to be connected to the POTS/ISDN Port 1 should be connected in pairs with those to be connected to the VDSL Port 1; connect to the Ports 2 to 16 similarly. Erroneous connection of either L1 or L2 to an adjacent port causes the Equipment to malfunction.
- The cable not connected to the telephone circuit should not be connected to the telephone circuit interface section, because the Equipment malfunctions due to noise.
- When disconnecting/reconnecting the VDSL circuit, disconnect it, wait for 10 seconds or more, and then, reconnect it.

POWER SOURCE CONNECTION

1 Screw an earthing conductor to the FG terminal on the back of the Equipment.

- The following lists the recommended earthing conductor and its crimped terminal.

Part Name	Specification	Applicable Thread Diameter
Crimped terminal	R2-4 or its equivalent. Solid wire : 1.14～1.84mm Twisted pair wire : 1.04～2.63mm²	M4

Part Name	Specification
Earthing conductor	600V-IV wire or its equivalent. Solid wire: Conductor diameter 1.6 mm. Twisted pair wire: Sectional area 2mm²

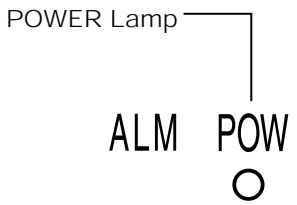
2 Connect the power cable to the 230 V AC (50/60 Hz) power source.

- Use a 3-pole insertion power plug.
- If the plug socket is of 3 poles (earthed), connection of the earthing conductor in Step 1 is not required.

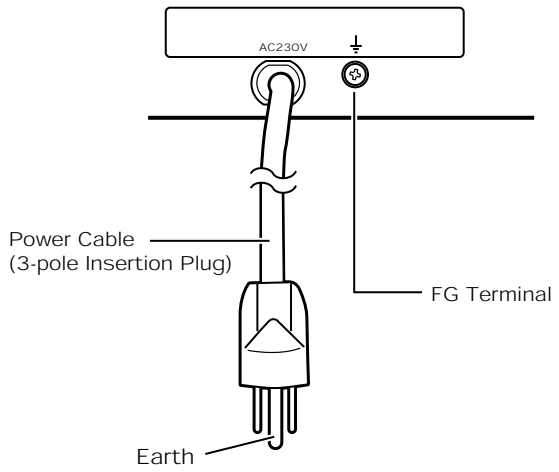
3 Confirm that the POWER lamp (green) has been turned on.

- If turned off, contact our dealer.

Front of NYC-16VDSL-B



Back of NYC-16VDSL-B



⚠ WARNING

- Never use the power source of other than 230 V AC (50/60 Hz). Neglect of this may result in a fire, electric shock or trouble.
- It is prohibited to connect the earthing conductor to a gas pipe. Neglect of this leads to an explosion.

⚠ CAUTION

- Separate the power cable from the wiring of the noise emitting apparatuses (motored devices, arc discharge devices, devices using a coil). Neglect of this may cause the Equipment to have a trouble or malfunction.
- Be sure to connect an earthing conductor to the Equipment. Neglect of this may cause it to go out of order.

Notes

- When turning on the power again, disconnect the power plug from the plug socket, wait for 10 seconds or more, and then, reconnect it to the plug socket.

LIST OF SERIAL AND TELNET SETTING ITEMS

Setting Item		Description	Page
Connection to PC			23
	Serial Connection	A method to connect the Equipment and PC with a RS-232C cable to log in.	23
	TELNET Connection	A method to log in to the Equipment through the PC connected to the network.	24
Log-in			26
	User Command Menu	A method to log in to the Equipment in order to make various settings.	26
System Administration			–
	System Administration Menu		–
	User Name Setting	Sets/changes the user name accessing the Equipment. An initial value is「vdsl」(lower case).	–
	Password Setting	Sets/changes the user password accessing the Equipment. An initial value is「vdsl」(lower case).	–
	IP Address Setting	Sets the IP address/subnet mask of the Equipment. An initial value is 「192.168.1.1」.	27
	Default Gateway Setting	Sets the IP address of the user's default gateway used by the Equipment. An initial value is 「0.0.0.0.」	–
	Delete Default Gateway	Deletes the IP address of the default gateway used by the Equipment.	–
	DNS Server Setting	Sets the IP address of the user's DNS server used by the Equipment. An initial value is 「0.0.0.0.」	–
	Restriction of Access Address	Sets an access enabled IP address in order to limit access from the TELNET/Web browser to the Equipment. Up to 10 access addresses may be registered. No initial setting has been made.	–
	Delete Restriction of Access Address	Deletes an access enabled IP address in order to limit access to the Equipment from the TELNET/Web browser.	–
	Change of Web Port Number	Required to be set when restricting access from the Web browser for security. A port number for the HTTP may be changed. An initial value is 「80」	–
System Setting			–
	System Setting Menu		–
	Time Setting	Used for displaying the alarm occurrence time or mail sending time. An initial value is Jan. 1, 2003, 00:00. Re-set at installation. (Web setting allows you to set it to the PC setting time.)	–
	Time Server Setting	An accurate standard time may be acquired from the time server set on the network. If the time server is used, set to the time of the time server at power-on and 23:59. An initial value is 「Unused.」	–
	Check Timer Server Setting	Allows you to check the time server setting.	–
	Initialize Data	Initializes all the setting data of the Equipment.	–
	Save Data	Saves the set data. If the setting is changed, be sure to save the data. Otherwise, the pre-change setting is restored by reboot or power failure.	29
	Reboot	Reboots the Equipment. Reboot does not initialize the set data.	30

LIST OF SERIAL AND TELNET SETTING ITEMS

Setting Item	Description	Page
10/100BASE Setting		–
10/100BASE Setting	Allows you to set the communication mode of the 10/100BASE port and check the setting. Set the communication speed and flow control. If they are set, disconnect and reconnect a 10/100BASE cable. ●Communication speed Initially set to Auto (auto negotiation). Make the communication speed setting consistent with the network apparatus to be connected. If inconsistent, the Equipment may not work properly. ●Flow control This function is to prevent a packet loss when the received data processing speed exceeds the transmitted data speed or due to buffer overflow resulting from concentration of received packets. An initial value is no flow control.	–
Check 10/100BASE Setting	Allows you to check the 10/100BASE setting.	–
VDSL Setting		–
VDSL Setting Menu		–
VDSL Setting (Port Common Setting)		–
VDSL Low Speed Re-setting	Re-sets the VDSL circuit transmission speed at set time for all the ports of the VDSL circuit. Use this when the transmission speed slows down due to the installation environment (when fixed at the minimum speed of 1.2/1.3 Mbps).	–
VDSL Setting (Setting by Ports)		–
Selection of VDSL Port	Set Valid/Invalid for all the ports of the VDSL circuit. An initial value is「Valid」for all the VDSL ports. Set「Invalid」for those not used. Otherwise, the transmission speed of the VDSL circuit may slow down due to a cross talk between the cables.	–
VDSL Speed Setting	Sets the transmission speed of the VDSL circuit. Automatic control is provided so that the optimum transmission speed will be obtained between the set transmission speed and the minimum speed in the installation environment. The transmission speed may differ depending on the installation environment. The following lists the reference values when all the VDSL circuit ports are wired to the identical UTP cable (setting upon shipment from the factory). Transmission Distance (m) / Transmission Speed (Down/Up)(Mbps) ～100 / 45.1/27.0 ～300 / 45.1/24.6 ～500 / 42.6/18.8 ～700 / 30.1/5.7 ～900 / 20.2/4.8 ※When using the ADSL circuit in combination with the Equipment, set to 「43/25 Mbps (ADSL Friendly).」 An interference of the VDSL and ADSL signals may be reduced.	–
S/N Ratio Margin Setting	Used when communication over the VDSL circuit is unstable. If communication over the VDSL circuit is unstable, increase a S/N ratio margin. The transmission speed slows down, but communication may be stabilized.	–

LIST OF SERIAL AND TELNET SETTING ITEMS

<table>
<tr><th colspan="2">Setting Item</th><th>Description</th><th>Page</th></tr>
<tr><td></td><td>Notch Filter Setting</td><td>●If the Equipment is installed near an amateur radio apparatus, radiation noise from the VDSL circuit cable may affect amateur radio communication. Setting Notch Filter = Valid allows you to leave a part of the working frequency band of the VDSL circuit unused.
This may reduce an effect on amateur radio communication.
●Notch Filter can be set, dividing the VDSL working frequency into 4 bands. For Notch Filter, set an effective frequency band, depending on the working environment.
●Setting Notch Filter = Valid may slows down or shortens the transmission speed or transmission distance, because the working frequency band of the VDSL circuit is partly left unused. The following lists the transmission speed and transmission distance when Notch Filter is Valid.
The transmission speed differs depending on the installation environment. The following lists the reference values when all the VDSL circuit ports are wired to the identical UTP cable.
<table>
<tr><th rowspan="2">Transmission Distance (m)</th><th colspan="2">Transmission Speed (Mbps)</th></tr>
<tr><th>NotchFilter : Invalid</th><th>NotchFilter : Valid</th></tr>
<tr><td>100</td><td>45.1/27.0</td><td>39.0/18.8</td></tr>
<tr><td>300</td><td>45.1/24.6</td><td>34.0/18.8</td></tr>
<tr><td>500</td><td>42.6/18.8</td><td>28.9/14.4</td></tr>
<tr><td>700</td><td>30.1/5.7</td><td>18.8/5.0</td></tr>
<tr><td>900</td><td>20.2/4.8</td><td>16.4/3.6</td></tr>
</table>
Notch Filter setting is the case where all the frequency bands have been set to Invalid/Valid. Other VDSL settings are all initial values.</td><td>–</td></tr>
<tr><td></td><td>Power Back-off Setting</td><td>●Power back-off is a function to control the VDSL send-out level in order to reduce a cross talk between the cables of the VDSL circuit. The VDSL send-out level and S/N ratio are calculated as parameters to automatically set the send-out level according to its transmission speed and transmission distance.
●If power back-off is Valid, the transmission speed may slow down in order to control the VDSL send-out level. It has been initially set to「Valid (UP)」(UP: In the direction from single unit type to concentrated type).</td><td>–</td></tr>
<tr><td></td><td>VDSL Send-out Level Control Setting</td><td>●If the S/N ratio of the VDSL port is unstable, an inter-cable cross talk between the VDSL ports is possibly affecting it. The send-out level may be attenuated to 0 to 20 dB.
●Set an attenuation value to an optimum one depending on the installation environment.
●Note that attenuating the VDSL send-out level may slow down the transmission speed.
●When controlling the VDSL send-out level, set Power Back-off Setting = 「Invalid.」 VDSL Send-out Level Control Setting is not reflected if you set Power Back-off Setting = 「Valid.」</td><td>–</td></tr>
<tr><td></td><td>Check VDSL Setting</td><td>Allows you to check the VDSL setting data.</td><td>–</td></tr>
<tr><td></td><td>Port Reset</td><td>Allows you to reset the specified VDSL circuit port if a VDSL port link is unstable.</td><td>–</td></tr>
</table>

LIST OF SERIAL AND TELNET SETTING ITEMS

Setting Item		Description	Page
Switching Setting			–
	Switching Setting Menu		–
	VLAN Setting	Newly sets the VLAN. ●The Equipment has a Layer-2 switch function and each of the ports (VDSL ports and 10/100BASE ports) may be independently used. (Switching HUB function) ●VLAN is capable of virtually grouping each port to handle each independent port as an identical group. Communication is allowed between identical groups, but not between different ones. ●VLAN is capable of creating up to 255 groups. ●VLAN ID is an identification number to identify the VLAN group you want to set. It is used when multiple apparatuses are to be linked to constitute the VLAN group among multiple apparatuses. VLAN ID may be set even if the multiple apparatuses are not linked. ●VLAN ID may be registered from 2 to 4094.	–
	Delete VLAN Setting	Deletes the VLAN setting data.	–
	PVID Setting	Sets the port base VLAN ID. Allocates the set VLAN groups to respective ports. Sets VLAN ID used for (belonging to) each port.	–
	Trunking Setting	●Trunking is a function to improve the transmission speed by using multiple 10/100BASE ports. ●Trunking may be set for up to 2 groups. ●When trunking is to be set, check the following: ①In the VLAN configuration, all the ports of the identical trunking group should have the same VLAN setting. ②In tag setting, all the ports of the identical trunking groups should have the same tag setting. ●When 3- or 4-circuit trucking is to be set, delete all the VLANs other than the VLAN you want to set and VLAN ID1.	–
	MAC Address Learning Setting: Learning Aging Time	MAC Address Learning Setting includes two types of settings; Learning Aging Time and MAC Address Filtering. The Equipment registers the MAC address of the received unicast packet with the MAC table and determines a transfer destination port based on that information. When moving the PC, etc. connected to the NYC-VDSL-T16 (single unit apparatus), communication may not be allowed because the MAC table has been registered. The information of the port having no packet transmission within the set time is automatically deleted by setting the aging time. An initial learning aging time value is 5 minutes.	–
	MAC Address Learning Setting: Filtering	The Equipment sets the number of learnable MAC addresses to each VDSL port. Communication is not allowed for the terminal where the set number of MAC addresses is exceeded.	–
	MAC Table Display	Capable of displaying the MAC address being learned by the equipment. The MAC address is not displayed, which has passed the aging time. The port, where MAC address filtering has been limitlessly set, is capable of displaying up to 20 MAC addresses.	–
	Port Priority Setting	Prioritizes the VDSL port used. Setting Priority = 「High」 allows preferred communication to other ports.	–

LIST OF SERIAL AND TELNET SETTING ITEMS

Setting Item		Description	Page
	Tag Output Setting	Sets addition of a VLAN identification tag to the data output from each port, in VLAN group setting. If tag output is set, the tagged packet compliant with the IEEE 802.1Q may become the frame data bigger than the 1,518 bytes/frame prescribed by the IEEE 802.3/Ethernet. Therefore, it may result in a packet error or communication failure.	–
	Check Switching Setting	Allows you to check the switch setting data.	–
SNMP Setting			–
	SNMP Setting Menu	SNMP is a network administration protocol for exchanging the administration information on the network running on the UDP. If there is an administration information request from SNMP Manager on the administration station, the Equipment notifies the administration information accumulated in MIB-II to SNMP Manager.	–
	sysContact Setting	Sets the information such as the administrator name of the Equipment.	–
	sysName Setting	Sets the system name of the Equipment.	–
	sysLocation Setting	Sets the information such as the installation site of the Equipment.	–
	SNMP Host Setting	Sets the IP address of SNMP Manager which transfers the administration information of the Equipment.	–
	Check SNMP Setting	Allows you to check the SNMP setting data.	–
Log out		Terminates setting of various data and maintenance for the Equipment.When closing the setting screen, be sure to log out. If it is closed without logging out or if the 10/100BASE cable is disconnected while logging in with TELNET, you may not be able to log in next time.	–
Registration Error Screen		If this screen appears, it indicates that there is an erroneous setting. Re-set the relevant item correctly.	–

Notes

- When setting the data, save the set value with Save Data under System Setting. If it is not saved, the pre-change condition will be restored at reboot or power failure.
- Reboot initializes the time setting.

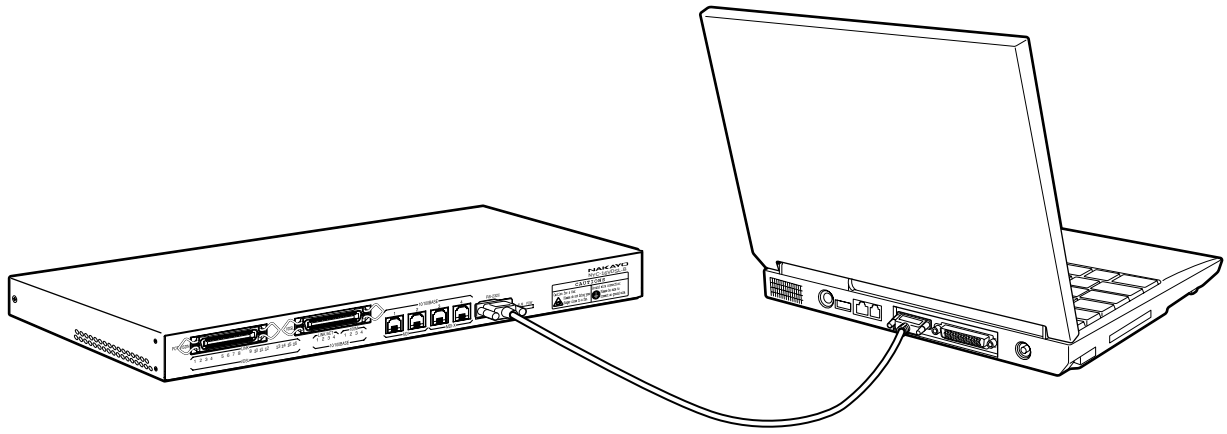
CONNECTION TO PC

This section describes how to connect a PC to the Equipment for serial or TELNET setting.

Serial Connection

1 Connect the PC to the Equipment with a RS-232C straight cable.

- The RS-232C straight cable (female 9-pin connector to female 9-pin connector) is to be procured by the installer.



RS-232C Straight Cable

2 Start communication software.

- <Communication Setting Items>

Connection	: COMn direct
Speed	: 115,200 bps
Data bits	: 8 bits
Parity	: None
Stop bits	: 1 bit
Flow control	: Hardware

3 Press the Enter key with communication software.

- The following log-in menu appears.

```
 VDSL System
 NAKAYO  NYC-16VDSL-B  Ver:*.**

USER NAME:
```

Notes

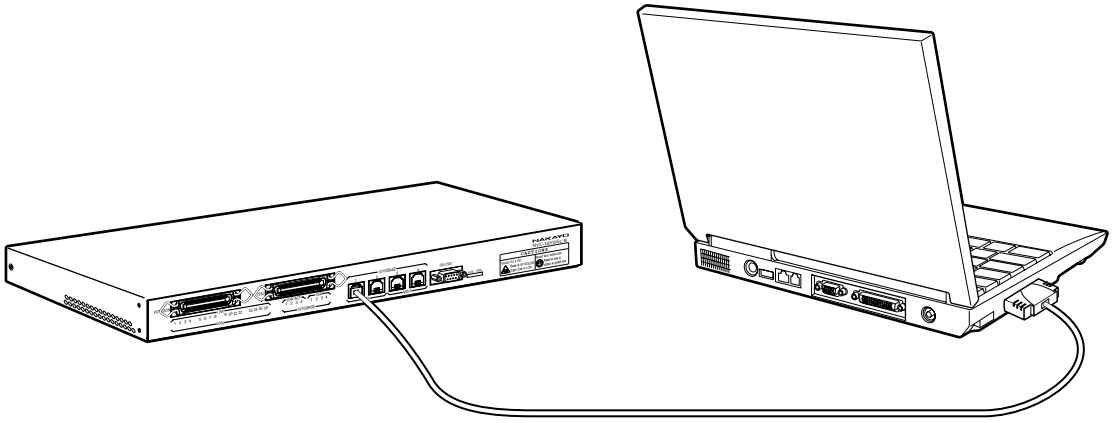
- ●Connect the cable correctly according to the Instruction Manual for the PC.
- ●Connect the RS-232C cable, paying heed to the connector's direction, and turn the screws at both ends to secure it.
- ●While the log-in menu is being displayed with TELNET connection or while logging in with TELNET connection, it is not allowed to log in with serial connection.
- ●If the screen is not properly displayed;
  - Check whether or not the RS-232C cable has been properly connected.
  - Check whether or not communication setting items have been correctly set.
- ●You are automatically logged out if there is no key entry for 10 minutes.
- ●Note that if setting is interrupted, the setting data may not be registered.
- ●When closing the setting screen, be sure to log out.

CONNECTION TO PC

TELNET Connection

1 **Connect the 10/100BASE port of the PC to the Equipment (MDI-X) with a 10/100BASE straight cable.**

- The 10/100BASE straight cable is to be procured by the installer.



10/100BASE10/100BASE Straight Cable

2 **Set the IP address of the PC to 「192.168.1.＊＊＊」 and delete the default gateway and DNS setting in TCP/IP setting.**

3 **Click on 「Start」 - 「Program」 - 「MS-DOS Prompt」 of Windows®**

4 **Enter「telnet 192.168.1.1」and press the Enter key.**

- 「192.168.1.1」is an initial value of the IP address to access the Equipment.

```
C:¥>telnet 192.168.1.1
```

5 **The following log-in menu appears.**

- If not, press the Enter key.

```
 VDSL System
 NAKAYO  NYC-16VDSL-B  Ver:*.**

USER NAME:
```

Notes

- If you cannot log in with TELNET, check the IP address/subnet mask of the PC or try serial connection (☛Page 23) and make the IP address of the Equipment match that of the PC.
- Ensure that the IP address of the PC does not overlap with that of the Equipment; The IP address (initial value) of the Equipment is 「192.168.1.1.」
- While the log-in menu is being displayed with serial connection or while logging in with serial connection, it is not allowed to log in with TELNET connection.
- You are automatically logged out if there is no key entry for 10 minutes.
- Note that if setting is interrupted, the setting data may not be registered.

LOG-IN

User Command Menu

1 Enter a user name and press the Enter key.

- An initial value is "vdsl" (lowercase).

```
 VDSL System
 NAKAYO  NYC-16VDSL-B  Ver:*.**

USER NAME: vdsl
```

2 Enter a password and press the Enter key.

- An initial value is 「vdsl」 (lowercase).

```
 VDSL System
 NAKAYO  NYC-16VDSL-B  Ver:*.**

USER NAME: vdsl
PASSWORD: ****
```

3 Call the following User Command Menu.

```
******************** <USER COMMAND MENU> ********************
 1.SYSTEM ADMINISTRATION
 2.SYSTEM SETTING
 3.10/100BASE SETTING
 4.VDSL SETTING
 5.SWITCHING SETTING
 6.SNMP SETTING
 7.E-MAIL ADDRESS SETTING
 8.TEST
 9.LINE INFORMATION
10.LOG OUT
*SAVE DATA AFTER THE COMMAND SETTING.
*****************************************************************
SELECT A NUMBER FROM THE MENU, AND INPUT IT AND THEN PRESS "ENTER".
>
```

Notes

●If the user name and password are changed, enter new ones and press the Enter key.
Page-27

SYSTEM ADMINISTRATION

Setting the IP Address

The following describes how to set the IP address of the Equipment. Setting from the TELNET and Web browser is allowed through the set IP address.
An initial value is 「192.168.1.1.」

1 Select 1 (1. SYSTEM ADMINISTRATION) in the User Command Menu and press the Enter key.

```
******************** <USER COMMAND MENU> ********************
 1.SYSTEM ADMINISTRATION
 2.SYSTEM SETTING
 3.10/100BASE SETTING
 4.VDSL SETTING
 5.SWITCHING SETTING
 6.SNMP SETTING
 7.E-MAIL ADDRESS SETTING
 8.TEST
 9.LINE INFORMATION
10.LOG OUT
*SAVE DATA AFTER THE COMMAND SETTING.
*****************************************************************
SELECT A NUMBER FROM THE MENU, AND INPUT IT AND THEN PRESS "ENTER".
> 1
```

2 Enter 3 ([3] : IP ADDRESS SETTING) and press the Enter key.

```
SELECT AND INPUT A COMMAND NUMBER TO PROGRAM AND PRESS "ENTER".
  [1]:USER NAME SETTING
  [2]:PASSWORD SETTING
  [3]:IP ADDRESS SETTING
     [ACTUAL SETTING IP ADDRESS:192.168.1.1/255.255.255.0]
  [4]:DEFAULT GATEWAY SETTING
     [ACTUAL SETTING GATEWAY ADDRESS:0.0.0.0]
  [5]:DNS SERVER SETTING
     [ACTUAL SETTING DNS SERVER:0.0.0.0]
  [6]:RESTRICTION OF ACCESS ADDRESS
  [7]:CHANGE OF Web PORT NUMBER
     [ACTUAL SETTING Web PORT NUMBER:80]
  [8]:INFORMATION OF SYSTEM VERSION
> 3
```

3 Enter the IP address and subnet mask and press the Enter key.

```
INPUT IP ADDRESS AND SUBNET MASK TO REGISTER AND PRESS "ENTER".
  EXAMPLE: xxx.xxx.xxx.xxx(/yyy.yyy.yyy.yyy) *xxx IS DECIMAL NUMBER(0-255)
           IP ADDRESS      (SUBNET MASK)     *()SUBNET MASK CAN BE BLANK
192.168.1.123/255.255.255.0
```

4 The IP address and subnet mask are set and you are taken back to the User Command Menu.

```
IP ADDRESS/SUBNET MASK WAS REGISTERED.
*IP ADDRESS SETTING WILL BE VALID AFTER SAVING DATA AND REBOOT THE UNIT.
```

5 **Save the data according to the data save procedure (☞Page 29).**

- If it is not saved, the set value will be replaced by the previous one.

6 **Reboot the Equipment according to the reboot procedure (☞Page 30).**

- The set IP address is validated after rebooting the Equipment.

Notes

- Enter the IP address and subnet mask with half-em characters.
- When the setting is changed, save the set value with Save Data under System Setting. If it is not saved, the pre-change condition will be restored at reboot or power failure.
- After setting the IP address, save the data, and then, reboot the Equipment. The changed IP address is validated after rebooting.
- If an entry of the subnet mask is omitted, it will be automatically set by IP address classes. If the subnet mask is unknown, inquire our dealer or network administrator.
- Some IP addresses are not registrable.

OVERALL SETTING

Saving the Data

The following describes how to save various setting data in the Equipment. When the setting is changed, be sure to operate the procedure below to save the new data.
Otherwise, the pre-change condition is restored at reboot or power failure.

1 Select 2 (2. SYSTEM SETTING) in the User Command Menu and press the Enter key.

```
******************** <USER COMMAND MENU> ********************
 1.SYSTEM ADMINISTRATION
 2.SYSTEM SETTING
 3.10/100BASE SETTING
 4.VDSL SETTING
 5.SWITCHING SETTING
 6.SNMP SETTING
 7.E-MAIL ADDRESS SETTING
 8.TEST
 9.LINE INFORMATION
10.LOG OUT
*SAVE DATA AFTER THE COMMAND SETTING.
*****************************************************************
SELECT A NUMBER FROM THE MENU, AND INPUT IT AND THEN PRESS "ENTER".
> 2
```

2 Enter 4 ([4] : SAVE DATA) and press the Enter key.

```
SELECT AND INPUT A COMMAND NUMBER TO PROGRAM AND PRESS "ENTER".
  [1]:TIME SETTING
  [2]:TIME SERVER SETTING
  [3]:INITIALIZE DATA
  [4]:SAVE DATA
  [5]:REBOOT
4
```

3 The data is saved and you are taken back to the User Command Menu.

```
SAVED THE DATA.
```

Notes

- When the setting is changed, save the data. If not saved, the pre-change condition will be restored at reboot or power failure.

OVERALL SETTING

Reboot

The following describes how to reboot (reset) the Equipment. If the data has not been saved, the pre-change condition will be restored.

1 **Select 2 (2. SYSTEM SETTING) in the User Command Menu and press the Enter key.**

```
******************** <USER COMMAND MENU> ********************
 1.SYSTEM ADMINISTRATION
 2.SYSTEM SETTING
 3.10/100BASE SETTING
 4.VDSL SETTING
 5.SWITCHING SETTING
 6.SNMP SETTING
 7.E-MAIL ADDRESS SETTING
 8.TEST
 9.LINE INFORMATION
10.LOG OUT
*SAVE DATA AFTER THE COMMAND SETTING.
*****************************************************************
SELECT A NUMBER FROM THE MENU, AND INPUT IT AND THEN PRESS "ENTER".
> 2
```

2 **Enter 5 ([5] : REBOOT) and press the Enter key.**

```
SELECT AND INPUT A COMMAND NUMBER TO PROGRAM AND PRESS "ENTER".
  [1]:TIME SETTING
  [2]:TIME SERVER SETTING
  [3]:INITIALIZE DATA
  [4]:SAVE DATA
  [5]:REBOOT
5
```

3 **The Equipment is automatically rebooted. Press the Enter key again in about 30 seconds.**

- The log-in screen appears.

```
 VDSL System
 NAKAYO  NYC-16VDSL-B  Ver:*.**

USER NAME:
```

Notes

- When rebooting the Equipment, save the set values with Save Data under System Setting. If not saved, the pre-change condition will be restored.
- Rebooting the Equipment initializes the time setting. Re-set it.
- If the Equipment has been connected with TELNET, communication will be disrupted. Connect with TELNET again.

LOG-OUT

Log-out

The following describes how to log out.

1 **Select 1 0 (10. LOG OUT) in the User Command Menu and press the Enter key.**

```
******************** <USER COMMAND MENU> ********************
 1.SYSTEM ADMINISTRATION
 2.SYSTEM SETTING
 3.10/100BASE SETTING
 4.VDSL SETTING
 5.SWITCHING SETTING
 6.SNMP SETTING
 7.E-MAIL ADDRESS SETTING
 8.TEST
 9.LINE INFORMATION
10.LOG OUT
*SAVE DATA AFTER THE COMMAND SETTING.
*************************************************************
SELECT A NUMBER FROM THE MENU, AND INPUT IT AND THEN PRESS "ENTER".
>10
```

2 **Execute log-out.**

```
LOG OUT:OK
```

Notes

- After logging out, you will not be returned to the User Command Menu.
- When closing the setting screen, be sure to log out. If it is closed without logging out, you may not be able to log in next time.
- If there is no key entry for about 10 minutes, you are automatically logged out.

LIST OF WEB SETTING ITEMS

Setting Item	Description	Page
Connection to PC		36
Web Connection	A method to log in to the Equipment through the PC connected to the network.	36
Log-in	A method to log in to the Equipment in order to make various settings.	38
System Administration		38
IP Address Setting	Sets the IP address/subnet mask of the user who accesses the Equipment. An initial value is 「192.168.1.1.」	39
Default Gateway Setting	Sets/deletes the IP address of the user's default gateway used by the Equipment. No initial setting has been made.	41
DNS Server Setting	Sets the IP address of the user's DNS server used by the Equipment. No initial setting has been made.	43
User Name Setting	Sets/changes the user name accessing the Equipment. An initial value is 「vdsl」 (lower case).	45
Password Setting	Sets/changes the user password accessing the Equipment. An initial value is 「vdsl」 (lower case).	47
System Setting		49
Time Setting	Used for displaying the alarm occurrence time or mail sending time.An initial value is Jan.1.2003.00:00. Re-set it at installation. (Web setting allows you to set it to the PC setting time.)	49
Time Server Setting	An accurate standard time may be acquired from the time server set on the network. If the time server is used, set to the time of the time server at power-on and 23:59. An initial value is 「Unused.」	51
Initialize Data	Initializes all the setting data of the Equipment.	53
Save Data	Saves the set data. If the setting is changed, be sure to save the data. Otherwise, the pre-change setting is restored by reboot or power failure.	55
Reboot	Reboots the Equipment. Reboot does not initialize the set data.	57
10/100BASE Setting	Allows you to set the communication mode of the 10/100BASE port. Set the communication speed and flow control. If they are set, disconnect and reconnect a 10/100BASE cable.	59
10/100BASE Setting	●Communication speed Initially set to Auto (auto negotiation). Make the communication speed setting consistent with the network apparatus to be connected. If inconsistent, the Equipment may not work properly. ●Flow control This function is to prevent a packet loss when the received data processing speed exceeds the transmitted data speed or due to buffer overflow resulting from concentration of received packets. An initial value is no flow control.	59
VDSL Setting (Port Common Setting)		–
VDSL Low Speed Re-setting	Re-sets the VDSL circuit transmission speed at set time for all the ports of the VDSL circuit. Use this when the transmission speed slows down due to the installation environment (when fixed at the minimum speed of 1.2/1.3 Mbps).	–
VDSL Setting (Setting by Ports)		61
Selection of VDSL Port	Set Valid/Invalid for all the ports of the VDSL circuit. An initial value is「Valid」for all the VDSL ports. Set「Invalid」for those not used. Otherwise, the transmission speed of the VDSL circuit may slow down due to a cross talk between the cables.	61

LIST OF WEB SETTING ITEMS

<table>
<tr><th colspan="2">Setting Item</th><th>Description</th><th>Page</th></tr>
<tr><td></td><td>VDSL Speed Setting</td><td>Sets the transmission speed of the VDSL circuit. Automatic control is provided so that the optimum transmission speed will be obtained between the set transmission speed and the minimum speed in the installation environment.
The transmission speed may differ depending on the installation environment. The following lists the reference values when all the VDSL circuit ports are wired to the identical UTP cable (setting upon shipment from the factory).
<table>
<tr><th>Transmission Distance (m)</th><th>Transmission Speed (Mbps)(Down/Up)</th></tr>
<tr><td>～100</td><td>45.1/27.0</td></tr>
<tr><td>～300</td><td>45.1/24.6</td></tr>
<tr><td>～500</td><td>42.6/18.8</td></tr>
<tr><td>～700</td><td>30.1/5.7</td></tr>
<tr><td>～900</td><td>20.2/4.8</td></tr>
</table>
※When using the ADSL circuit in combination with the Equipment, set to 「43/25 Mbps (ADSL Friendly).」
An interference of the VDSL and ADSL signals may be reduced.</td><td>–</td></tr>
<tr><td></td><td>VDSL Send-out Level Control Setting</td><td>●If the S/N ratio of the VDSL port is unstable, an inter-cable cross talk between the VDSL ports is possibly affecting it. The send-out level may be attenuated to 0 to 20 dB.
●Set an attenuation value to an optimum one depending on the installation environment.
●Note that attenuating the VDSL send-out level may slow down the transmission speed.
●When controlling the VDSL send-out level, set Power Back-off Setting = 「Invalid.」 VDSL Send-out Level Control Setting is not reflected if you set Power Back-off Setting = 「Valid.」</td><td>–</td></tr>
<tr><td></td><td>S/N Ratio Margin Setting</td><td>Used when communication over the VDSL circuit is unstable. If communication over the VDSL circuit is unstable, increase a S/N ratio margin. The transmission speed slows down, but communication may be stabilized.</td><td>–</td></tr>
<tr><td></td><td>Power Back-off Setting</td><td>●Power back-off is a function to control the VDSL send-out level in order to reduce a cross talk between the cables of the VDSL circuit. The VDSL send-out level and S/N ratio are calculated as parameters to automatically set the send-out level according to its transmission speed and transmission distance.
●If power back-off is Valid, the transmission speed may slow down in order to control the VDSL send-out level. It has been initially set to 「Valid (UP)」 (UP: In the direction from single unit type to concentrated type).</td><td>–</td></tr>
<tr><td></td><td>Notch Filter Setting</td><td>●If the Equipment is installed near an amateur radio apparatus, radiation noise from the VDSL circuit cable may affect amateur radio communication. Setting Notch Filter = Valid allows you to leave a part of the working frequency band of the VDSL circuit unused.This may reduce an effect on amateur radio communication.
●Notch Filter can be set, dividing the VDSL working frequency into 4 bands. For Notch Filter, set an effective frequency band, depending on the working environment.
●Setting Notch Filter = Valid may slows down the transmission speed or shortens the transmission distance, because the working frequency band of the VDSL circuit is partly left unused. The following lists the transmission speed and transmission distance when Notch Filter is Valid.
The transmission speed differs depending on the installation environment. The following lists the reference values when all the VDSL circuit ports are wired to the identical UTP cable.
<table>
<tr><th rowspan="2">Transmission Distance (m)</th><th colspan="2">Transmission Speed (Mbps)</th></tr>
<tr><th>Notch Filter : Invalid</th><th>Notch Filter : Valid</th></tr>
<tr><td>～100</td><td>45.1/27.0</td><td>39.0/18.8</td></tr>
<tr><td>～300</td><td>45.1/24.6</td><td>34.0/18.8</td></tr>
<tr><td>～500</td><td>42.6/18.8</td><td>28.9/14.4</td></tr>
<tr><td>～700</td><td>30.1/5.7</td><td>18.8/5.0</td></tr>
<tr><td>～900</td><td>20.2/4.8</td><td>16.4/3.6</td></tr>
</table>
Notch Filter setting is the case where all the frequency bands have been set to Invalid/Valid. Other VDSL settings are all initial values.</td><td>–</td></tr>
<tr><td></td><td>Port Reset</td><td>Allows you to reset the specified VDSL circuit port if a VDSL port link is unstable.</td><td>–</td></tr>
</table>

LIST OF WEB SETTING ITEMS

Setting Item		Description	Page
Switching Setting			–
	VLAN Setting	Newly sets/changes/deletes the VLAN. ●The Equipment has a Layer-2 switch function and each of the ports (VDSL ports and 10/100BASE ports) may be independently used. (Switching HUB function) ●VLAN is capable of virtually grouping each port to handle each independent port as an identical group. Communication is allowed between identical groups, but not between different ones. ●VLAN is capable of creating up to 255 groups. ●VLAN ID is an identification number to identify the VLAN group you want to set. It is used when multiple apparatuses are to be linked to constitute the VLAN group among multiple apparatuses. VLAN ID may be set even if the multiple apparatuses are not linked. ●VLAN ID may be registered from 2 to 4094.	–
	PVID Setting	Sets the port VLAN ID. Allocates the set VLAN groups to respective ports. Sets VLAN ID used for (belonging to) each port.	–
	Tag Output Setting	Sets addition of a VLAN identification tag to the data output from each port, in VLAN group setting. If tag output is set, the tagged packet compliant with the IEEE 802.1Q may become the frame data bigger than the 1,518 bytes/frame prescribed by the IEEE 802.3/Ethernet. Therefore, it may result in a packet error or communication failure.	–
	Trunking Setting	●Trunking is a function to improve the transmission speed by using multiple 10/100BASE ports. ●Trunking may be set for up to 2 groups. ●When trunking is to be set, check the following: ① In the VLAN configuration, all the ports of the identical trunking group should have the same VLAN setting. ②In tag setting, all the ports of the identical trunking groups should have the same tag setting. ●When 3- or 4-circuit trucking is to be set, delete all the VLANs other than the VLAN you want to set and VLAN ID1.	–
	MAC Address Learning Setting	●MAC Address Learning Aging Time The Equipment registers the MAC address of the received unicast packet with the MAC table and determines a transfer destination port based on that information. When moving the PC, etc. connected to the NYC-VDSL-T16 (single unit apparatus), communication may not be allowed because the MAC table has been registered. The information of the port having no packet transmission within the set time is automatically deleted by setting the aging time. An initial aging time value is 5 minutes. ●MAC Address Filtering The Equipment sets the number of learnable MAC addresses to each VDSL port. Communication is not allowed for the terminal where the set number of MAC addresses is exceeded.	–
	MAC Table	Capable of displaying the MAC address being learned by the equipment. The MAC address is not displayed, which has passed the aging time. The port, where MAC address filtering has been limitlessly set, is capable of displaying up to 20 MAC addresses.	–
	Port Priority Setting	Prioritizes the VDSL port used. Setting Priority = 「High」 allows preferred communication to other ports.	–

LIST OF WEB SETTING ITEMS

Setting Item		Description	Page
SNMP Setting		SNMP is a network administration protocol for exchanging the administration information on the network running on the UDP. If there is an administration information request from SNMP Manager on the administration station, the Equipment notifies the administration information accumulated in MIB-II to SNMP Manager.	–
	Common to Users	●sysContact Setting Sets the information such as the administrator name of the Equipment. ●sysName Setting Sets the system name of the Equipment. ●sysLocation Setting Sets the information such as the installation site of the Equipment.	–
	User's SNMP Host Setting	Sets the IP address of SNMP Manager which transfers the administration information of the Equipment.	–
Registration Error Screen		If this screen appears, it indicates that there is an erroneous setting. Re-set the relevant item correctly.	–

Notes

- ●When setting the data, save the set value with Save Data under System Setting. If it is not saved, the pre-change condition will be restored at reboot or power failure.
- ●Reboot initializes the time setting.

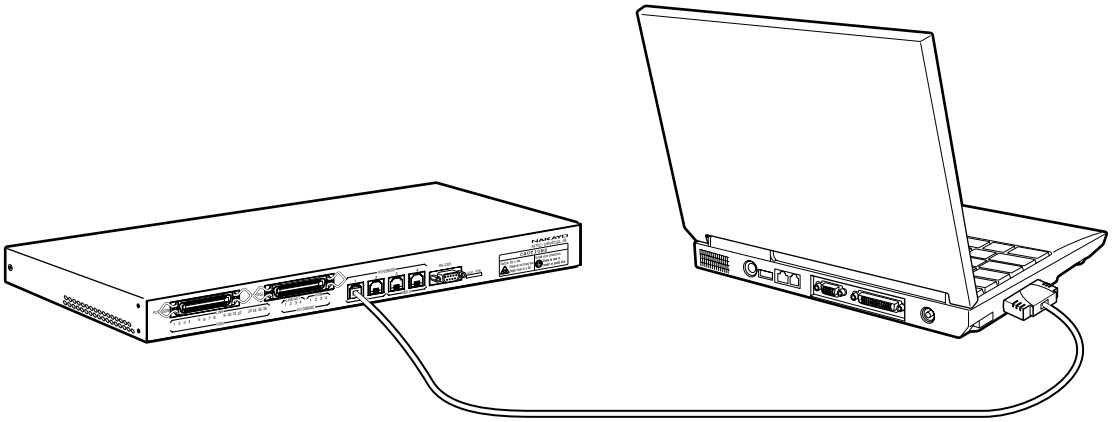
CONNECTION TO PC

The following describes how to connect a PC to the Equipment through the Web.

Connection through Web

1 **Connect the 10/100BASE port of the PC to the Equipment (MDI-X) with a 10/100BASE straight cable.**

- The 10/100BASE straight cable is to be procured by the installer.



10/100BASE10/100BASE Straight Cable

2 **Set the IP address of the PC to「192.168.1.＊＊＊」and delete the settings of the default gateway and DNS server in TCP/IP setting.**

3 **Start the browser through the PC, enter 「http：//192.168.1.1/」in the URL field and press the Ether key.**

- 「192.168.1.1」is the initial value of the IP address for accessing the Equipment.
- If the IP address is changed, enter the new IP address.

4 **The user name and password entry screen appears.**

CONNECTION TO PC

Supplemental Explanation

●For setting of the Internet temporary file for the browser used, select 「Check at Every Page Display.」

Setting Example for Internet Explorer

① Click on Internet Option in the 「Tool」 menu.

②Click on Set of 「Internet Temporary File」 in the 「Internet Option」 - 「Overall」 screen.

③At 「New Version Check of Saved Page」 in the 「Setting」 screen, select 「Check at Every Page Display」 and click on OK.

④Click on OK in the 「Internet Option」 screen.

●The browser used should be Internet Explorer 5.0 or above or Netscape Navigator® 6.00 or above.

●The browser's screen size should be 1,024 x 768 pixels.

Notes

●In the browser setting screen, clicking on Register may display the pre-registration screen. If this is the case, bring the cursor to the center of the setting screen, right-click the mouse and click on 「Update Information,」 etc. in the displayed short-cut menu.

●If the browser setting screen does not appear, check the following settings:

①The IP address of the PC should be 「192.168.1.＊＊＊」

Ensure that the IP address of the PC does not overlap with that of the Equipment. The IP address (initial value) of the Equipment is 「192.168.1.1.」

②Delete the settings of the default gateway and DNS server in TCP/IP setting.

③Select 「No Use」 for the proxy server in browser setting.

●When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.

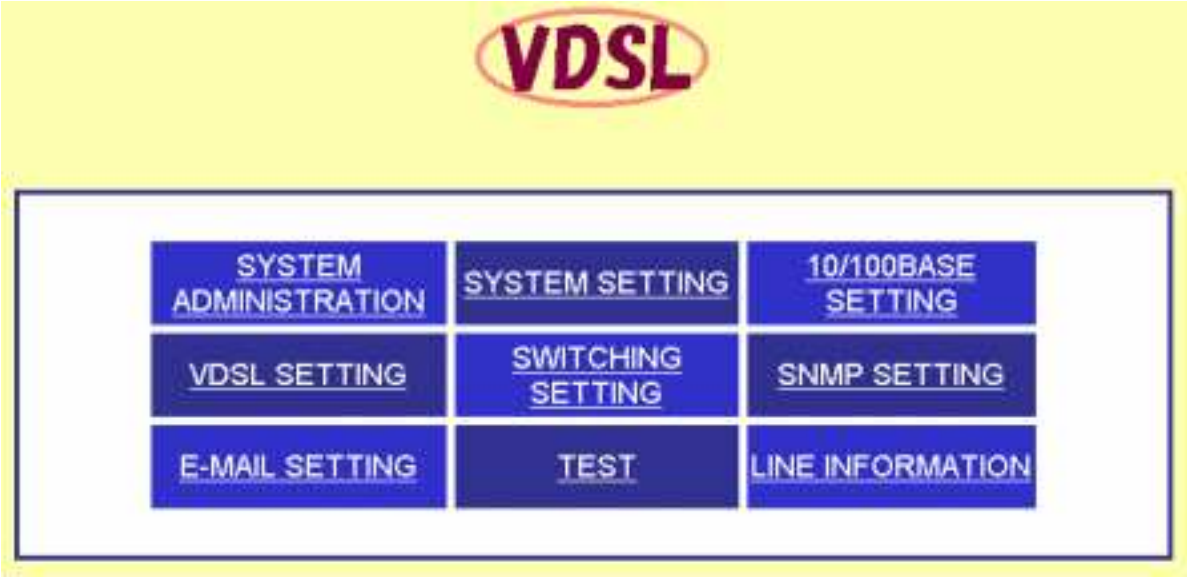
●The screen display may partly differ depending on the PC or browse used.

LOG-IN

1 **Enter the user name and password and click on OK.**

- Both initial values are 「vdsl」 (lowercase).
- When changing the user name and password, enter the new ones and click on OK.

2 **Entering the user name and password displays the TOP screen for Web setting.**



Notes

- Depending on the PC used, the "Network Password Entry" screen may appear when displaying each setting screen. If this is the case, enter the user name and password again and click on OK.

SYSTEM ADMINISTRATION

Setting the IP Address

The following describes how to set the IP address of the Equipment. The set IP address allows you to set from the TELNET and Web browser.
An initial value is 「192.168.1.1.」

1 Click on SYSTEM ADMINISTRATION in the TOP screen for Web setting.

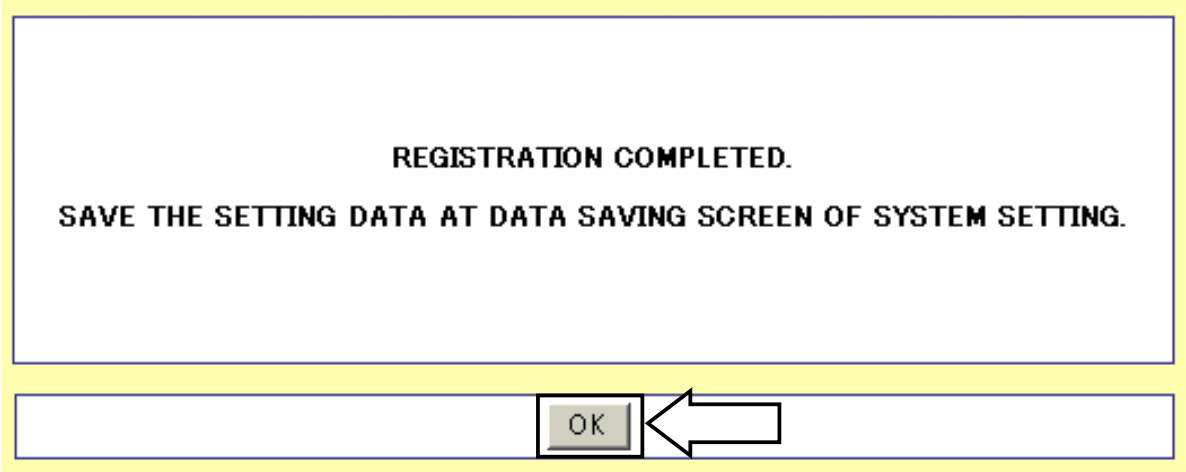
2 Click on IP ADDRESS SETTING.

- The IP Address Setting screen appears.

3 Enter the IP address and subnet mask.

4 Click on REGISTRATION

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the IP Address Setting, Default Gateway Setting and DNS Server Setting screen.

Notes

- Enter the IP address/subnet mask in half-em numerals.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.
- After setting the IP address, save the data, and then, reboot the Equipment. Rebooting makes the changed IP address valid.
- If an entry of the subnet mask is omitted, it will be automatically set by IP address classes. If the subnet mask is unknown, inquire our dealer or network administrator.
- Some IP addresses are not registrable.

SYSTEM ADMINISTRATION

Setting the Default Gateway

The following describes how to set the IP address of the default gateway used by the Equipment.
No initial value has been set.

1 Click on SYSTEM ADMINISTRATION in the TOP screen for Web setting.

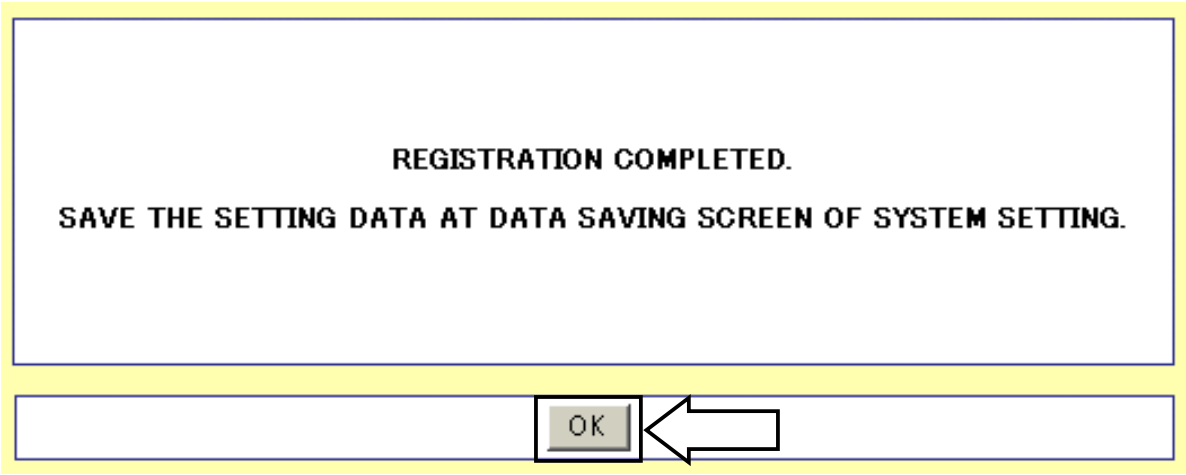
2 Click on IP ADDRESS SETTING.

- The Default Gateway Setting screen appears.

3 Enter the IP address of the default gateway.

4 Click on REGISTRATION

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the IP Address Setting, Default Gateway Setting and DNS Server Setting screen.

Notes

- Enter the default gateway in half-em numerals.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.
- If the default gateway is unknown, inquire our dealer or network administrator.

Setting the DNS Server

The following describes how to set the DNS server used by the Equipment.
No initial value has been set.

1 Click on SYSTEM ADMINISTRATION in the TOP screen for Web setting.

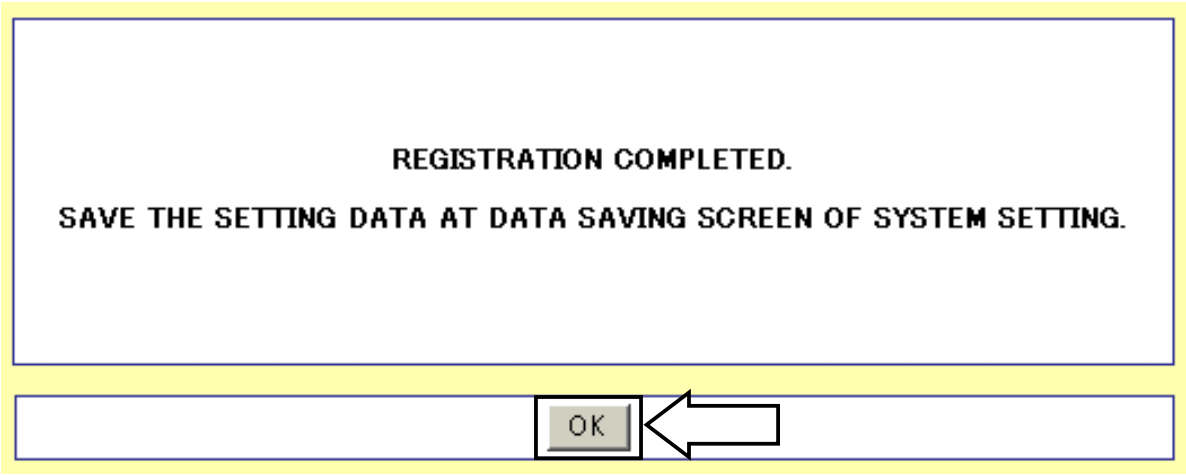
2 Click on IP ADDRESS SETTING.

- The DNS Server Setting screen appears.

3 Enter the IP address of the DNS server.

4 Click on REGISTRATION.

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the IP Address Setting, Default Gateway Setting and DNS Server Setting screen.

Notes

- Enter the DNS server in half-em numerals.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.
- If the DNS server is unknown, inquire our dealer or network administrator.

Setting the User Name

The following describes how to set the user name for accessing the Equipment.
An initial value is 「vdsl」 (lowercase).

1 Click on SYSTEM ADMINISTRATION.in the TOP screen for Web setting.

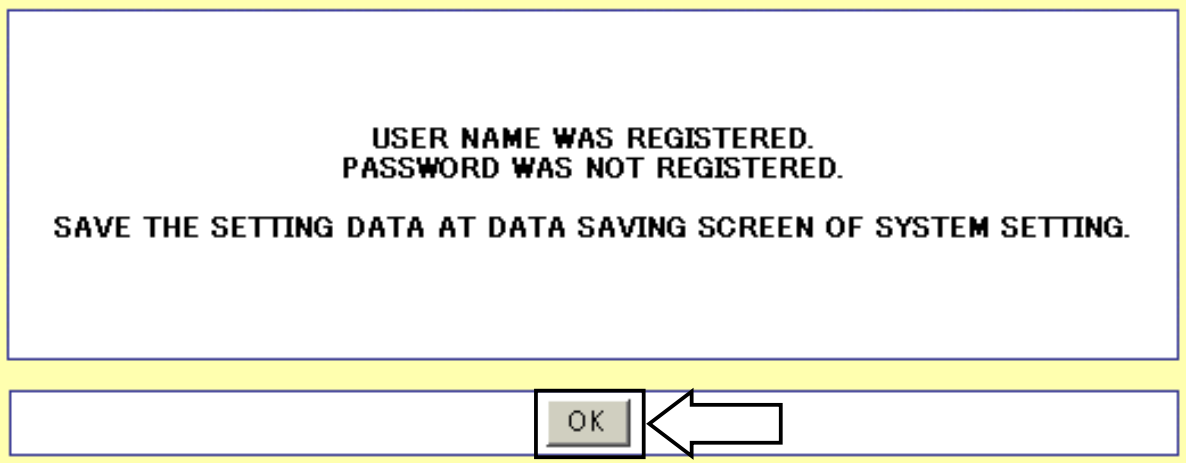
2 Click on PASSWORD SETTING.

- The User Name Setting screen appears.

3 Enter the new user name.

4 Click on REGISTRATION.

5 「USER NAME WAS REGISTERED.」 appears. Click on OK.



- You are taken back to the User Name Change and Log-in Password Change screen.

Notes

- Enter the user name by up to 8 characters in half-em alphanumerals (upper case and lower case).
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.
- The new user name is made valid by saving the set value with Save Data under System Setting and rebooting the Equipment.
- When logging in next time, use the new user name.

SYSTEM ADMINISTRATION

Setting the Password

The following describes how to set the password for accessing the Equipment.
An initial value is 「vdsl」 (lower case).

1 Click on SYSTEM ADMINISTRATION in the TOP screen for Web setting.

2 Click on PASSWORD SETTING.

- The Log-in Password Change screen appears.

3 Enter the old and new passwords, followed by the new one again for confirmation.

- When changing from an initial value, enter the old password as 「vdsl」 (lower case).

4 Click on REGISTRATION.

5 「PASSWORD WAS REGISTERED.」 appears. Click on OK.

- You are taken back to the User Name and Log-in Password Change screen.

Notes

- The setting can be changed only after entering the log-in password into all the passwords (OLD PASSWORD/NEW PASSWORD/INPUT NEWPASSWORD AGAIN).
- When changing from the initial value, enter「vdsl」in the Old Password field.
- Enter the password by up to 8 characters in half-em alphanumerals (upper case and lower case).
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.
- The new password is made valid by saving the set value with Save Data under System Setting and rebooting the Equipment.
- When logging in next time, use the new password.

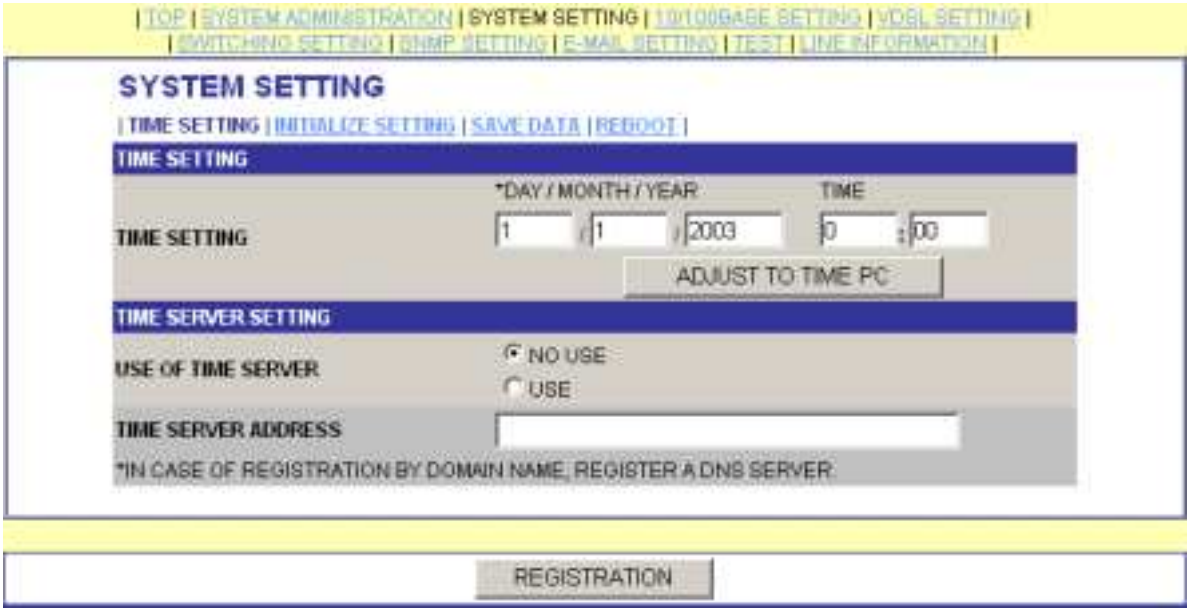
OVERALL SETTING

Setting the Time

The following describes how to set the time.

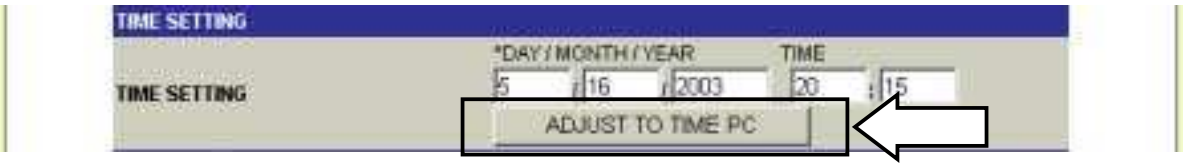
1 Click on SYSTEM SETTING in the TOP screen for Web setting.

2 The Time Setting screen appears.



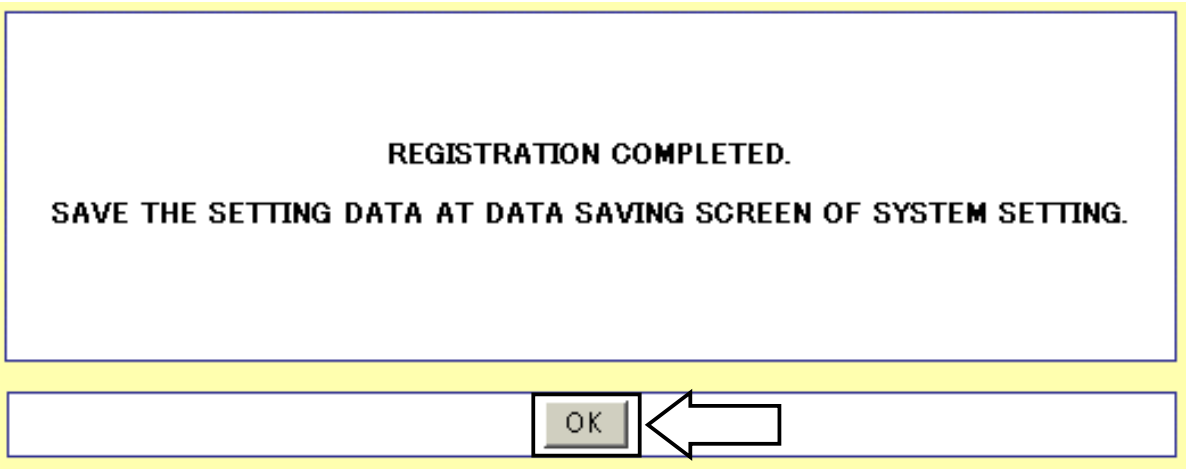
3 Click on ADJUST TO TIME PC.

- You can adjust to the PC setting time.



4 Click on REGISTRATION.

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the Time Setting screen.

Notes

- Use the time of the Equipment as a guideline.
- The initial value is Jan. 1, 2003, 00:00.
- The time setting range is Jan. 1, 2000, 00:00 to Dec. 31, 2035, 23:59.
- The time of the Equipment is initialized when the Equipment is rebooted or the power fails. Set the time again after rebooting or power failure.
- The time can be also directly entered. Bring the cursor to the Time Setting field and enter numerical values directly.

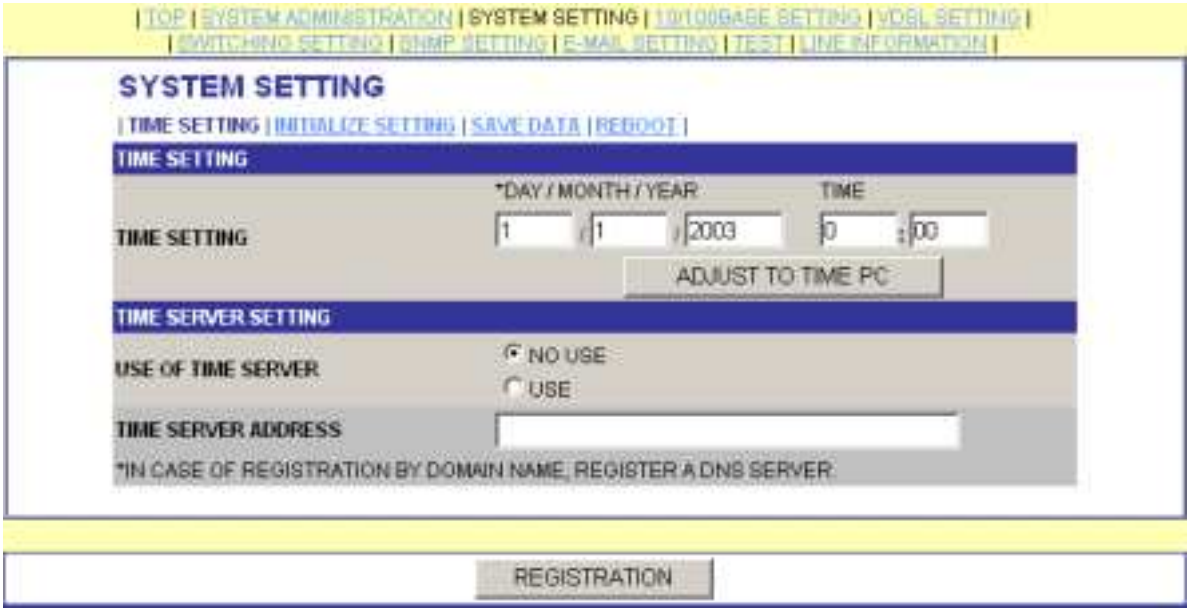
OVERALL SETTING

Setting the Time Server

The following describes how to set the time server.

1 Click on SYSTEM SETTING in the TOP screen for Web setting.

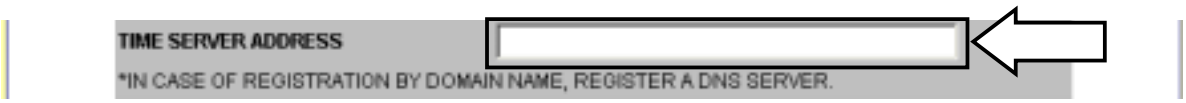
2 The Time Setting screen appears.



3 Select［NO USE］ or ［USE］ at USE OF TIME SERVER.

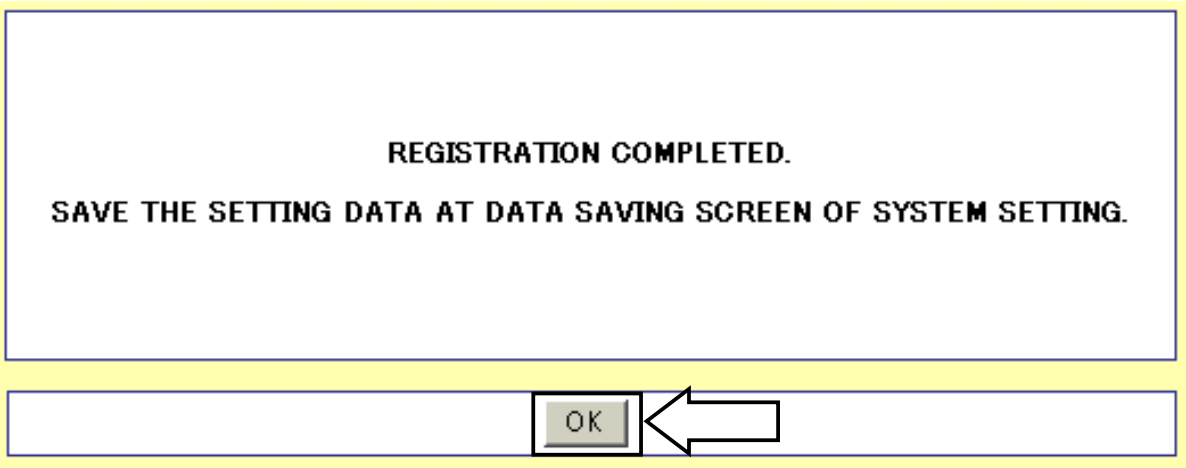
4 Enter the IP address or domain name of the timer server in the TIME SERVER ADDRESS field.

- The timer server address can be entered by up to 32 characters in half-em alphanumerals.



5 Click on REGISTRATION.

6 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the Time Setting and Timer Server Setting screen.

Supplemental Explanation

- Time server setting is to acquire an accurate standard time from the time server set in the network.
- If USE is selected, the accurate standard time is acquired from the server at power-on and 23:59 and reflected on the time setting. If time acquirement fails, it is retried up to twice. If the time still cannot be acquired by retry, the history information 「Time Setting Failed」 is recorded.
- The Equipment corresponds to the SNTP (Simple Network Time Protocol).

Notes

- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.
- If the network device connected to the network is running, the time may not be acquired from the time server.

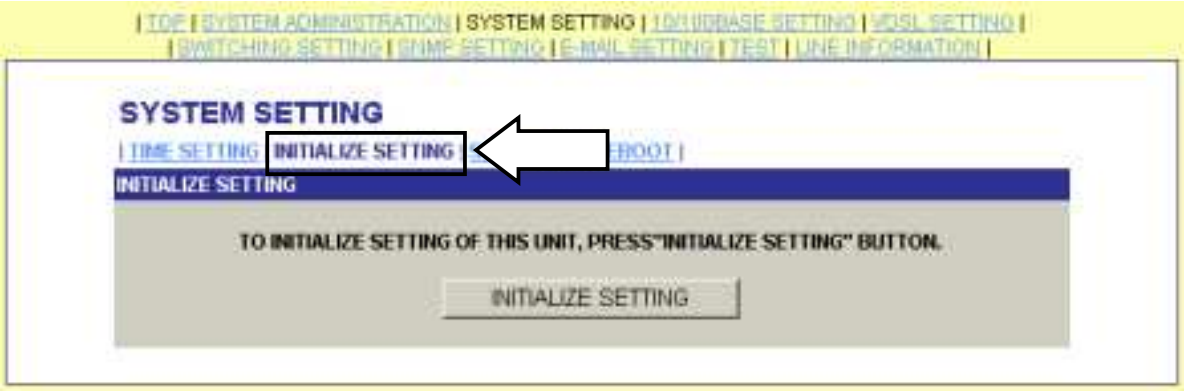
OVERALL SETTING

Setting upon Shipment from Factory

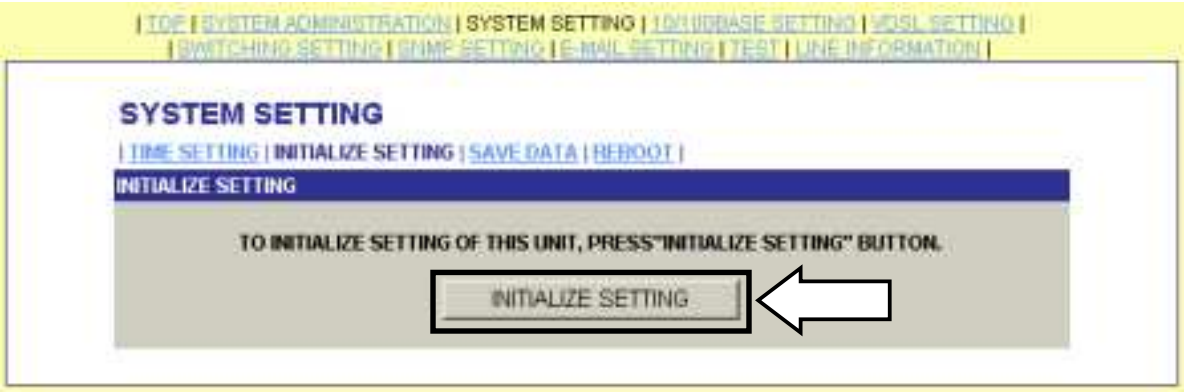
The following describes how to initialize all the settings (back to the initial values). The history information is also cleared.

1 Click SYSTEM SETTING in the TOP screen for Web setting.

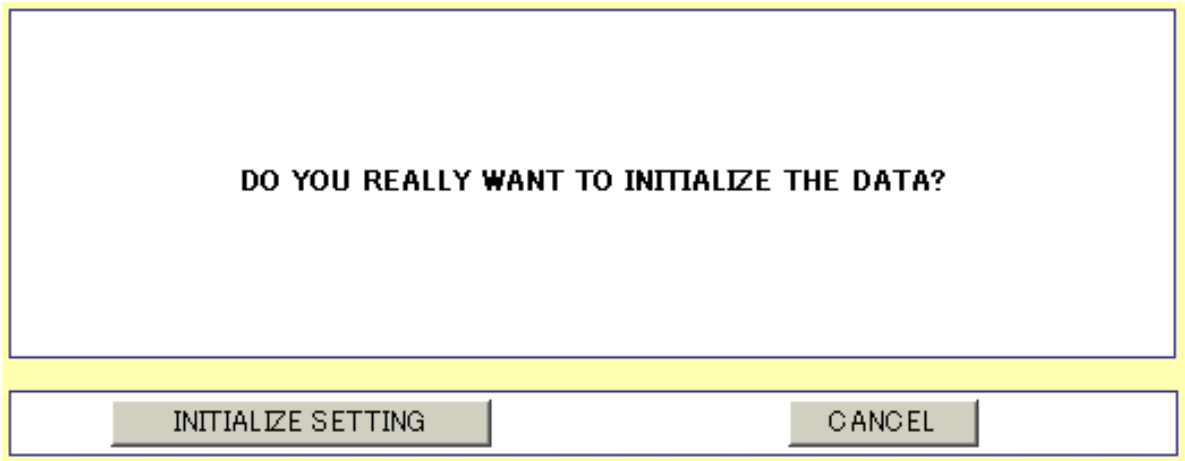
2 Click on INITIALIZE SETTING.



3 Click on INITIALIZE SETTING.

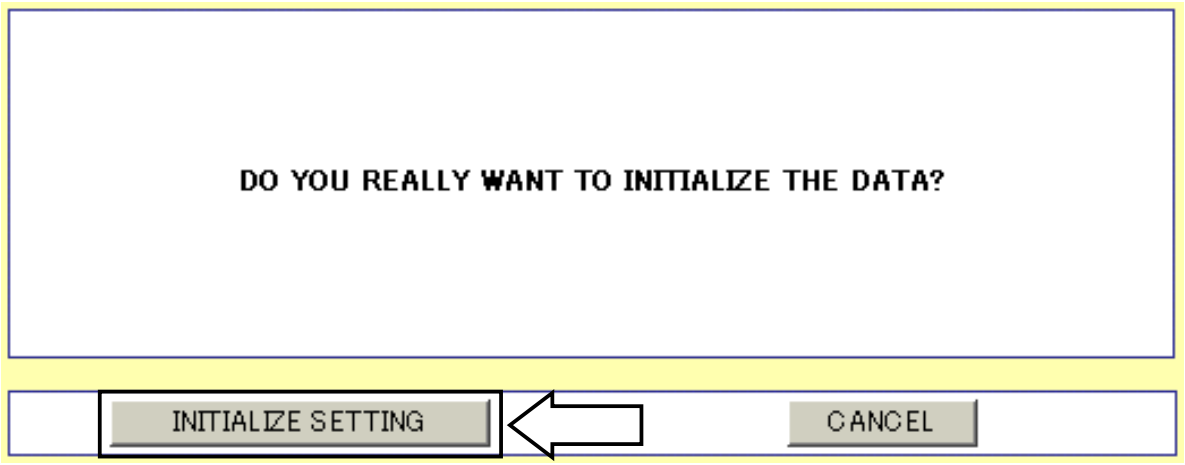


4 The confirmation screen appears, asking you whether you want to initialize the data.



5 **Click on INITIALIZE SETTING.**

- Clicking on CANCEL takes you back to the Initialize Setting screen.



6 **「DATA WAS INITIALIZED AND WAS REBOOTED AUTOMATICALLY.」 appears. Wait for about 30 seconds, enter 「http : //192.168.1.1」 in the URL field for the browser and press the Enter key.**

- The TOP screen for Web setting appears.
- The IP address of the Equipment is initialized. If it has been changed, set that of the PC to the initial value of the Equipment.

Notes

- If you initialize the data, the IP address of the Equipment is also initialized. If it has been changed, communication is disrupted, disabling data setting. Care should be taken when remotely setting the data.

OVERALL SETTING

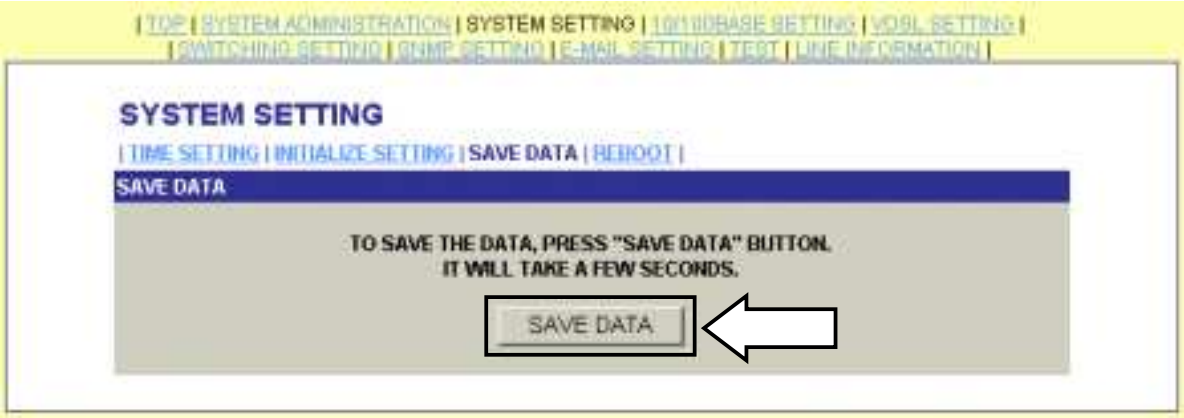
Saving the Data

The following describes how to save the various setting data into the Equipment. If the setting has been changed, be sure to go through the following procedure. Otherwise, the pre-change condition is restored at reboot or power failure.

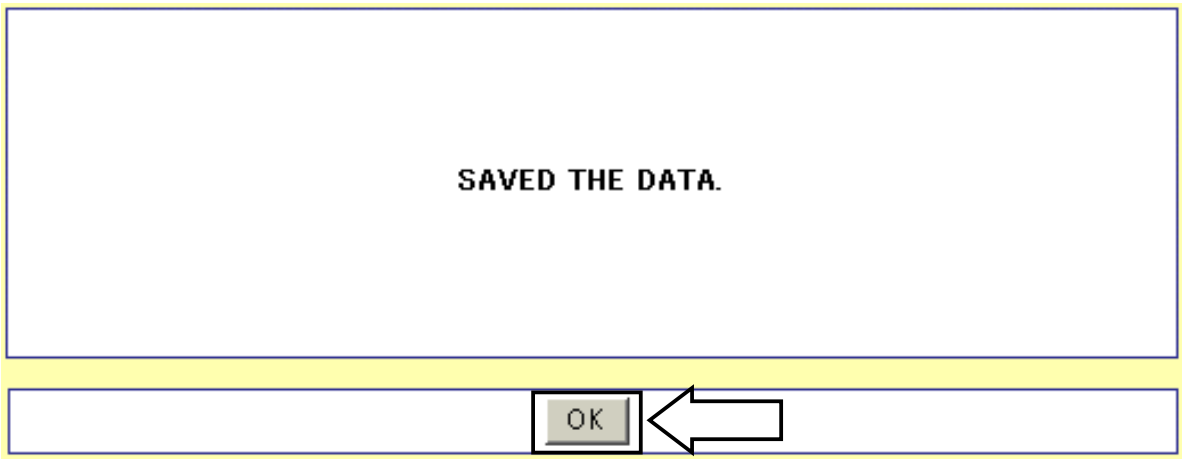
1 Click on SYSTEM SETTING in the TOP screen for Web setting.

2 Click on SAVE DATA.

3 Click on SAVE DATA.



4 「SAVED THE DATA.」 appears. Click on OK.



- You are taken back to the Save Data screen.

Notes

- When the setting is changed, be sure to save the data. If not saved, the pre-change condition will be restored at reboot or power failure.

OVERALL SETTING

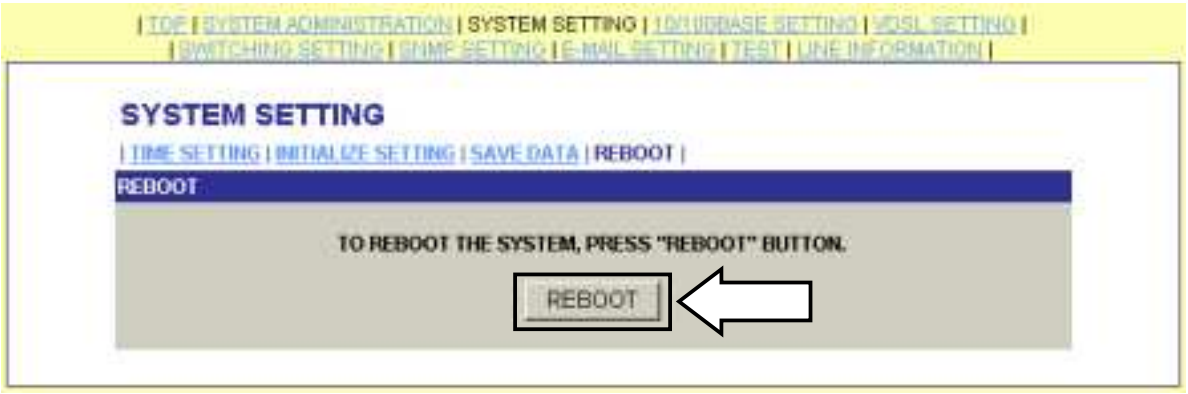
Reboot

The following describes how to reboot (reset) the Equipment. If the data is not saved, the pre-change condition is restored.

1 Click on SYSTEM SETTING in the TOP screen for Web setting.

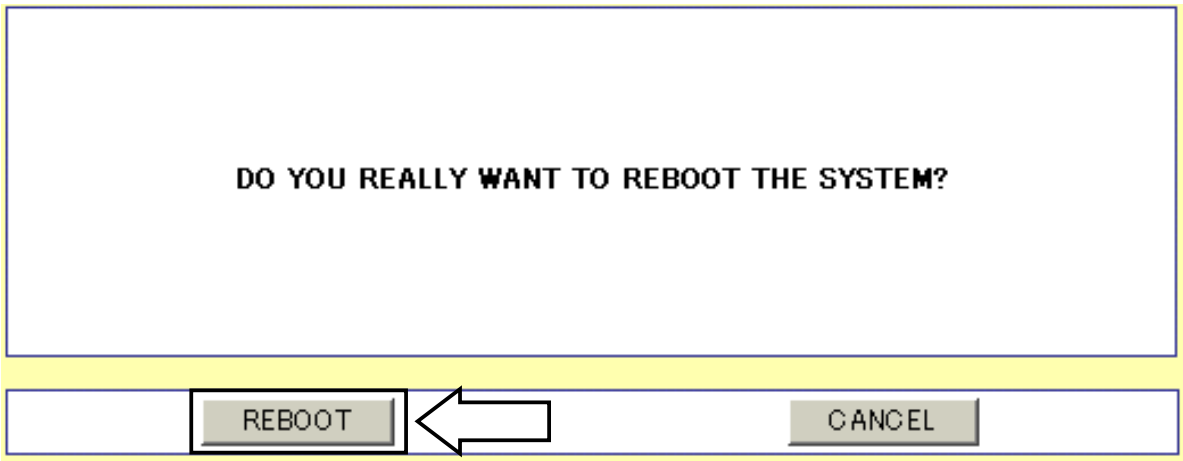
2 Click on REBOOT.

3 Click on REBOOT.



4 **Click on REBOOT.**

- Clicking on CANCEL takes you back to the Reboot screen.



5 **「REBOOT COMPLETED.」 appears. Wait for about 30 seconds, enter 「http : //192.168.1.1」 in the URL field for the browser and press the Enter key.**

- IIf the IP address has been changed (☛Page 39), enter the changed IP address.
- The TOP screen for Web setting appears.

Notes

- ●When rebooting, save the set value with Save Data under System Setting. If not saved, the pre-change condition is restored.
- ●Rebooting initializes the time setting. Re-set it.
- ●Rebooting disrupts communication. If you want to continue setting the data, connect through the Web again.

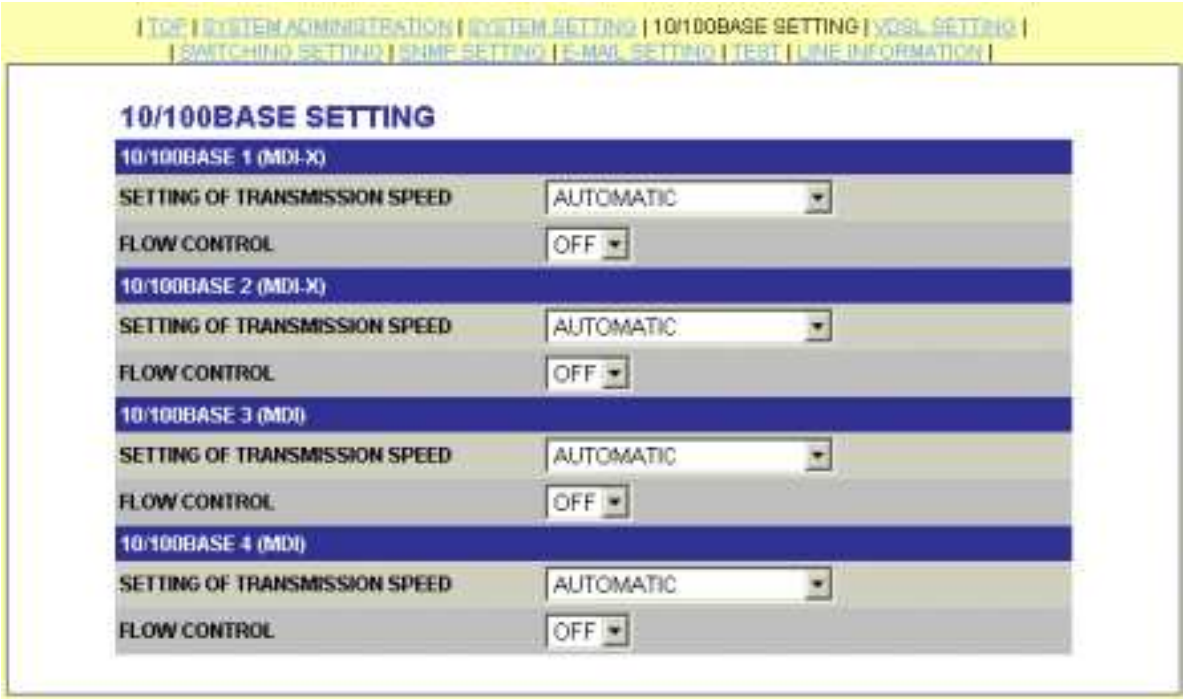
10/100BASE SETTING

10/100BASE Setting

The following describes how to set various data for the 10/100BASE ports.

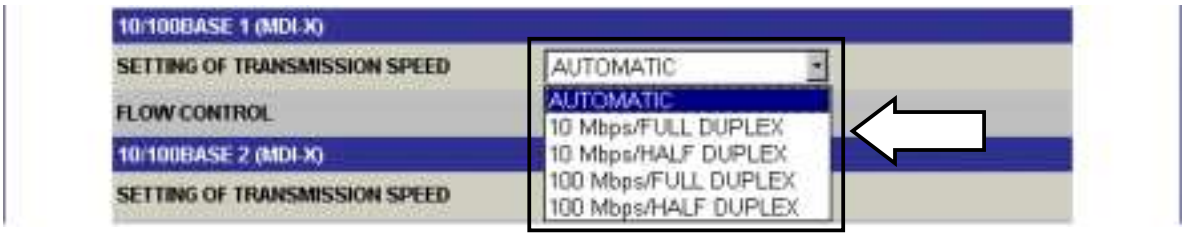
1 Click on 10/100BASE SETTING in the TOP screen for Web setting.

2 The 10/100BASE Setting screen appears.



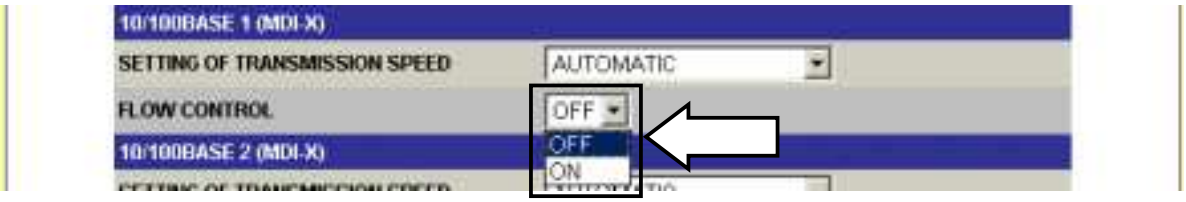
3 Select the communication speed in a pull-down menu.

- An initial value is AUTOMATIC.



4 Select flow control in a pull-down menu.

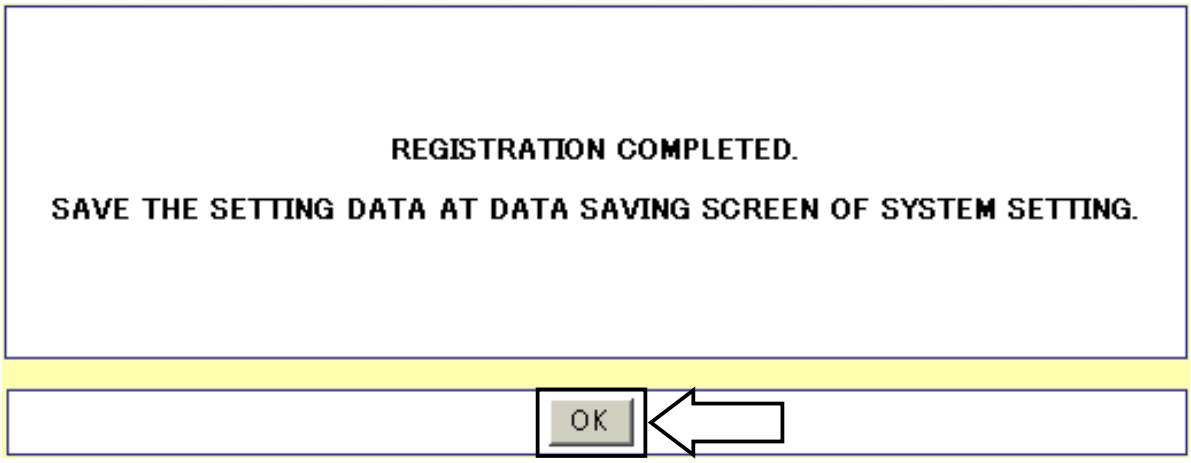
- An initial value is 「OFF」.



10/100BASE SETTING

5 Click on REGISTRATION

6 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the 10/100BASE Setting screen.

Supplemental Explanation

- When running in the 10 Mbps mode, the 10/100BASE 100M lamp is turned off.
- When running in the 100 Mbps mode, the 10/100BASE 100M lamp is turned on.

Notes

- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.
- The communication speed of the Equipment should match that of the PC connected to it or the network apparatus (router, HUB, etc.). If not, the Equipment may not be able to properly communicate with the PC or network apparatus.
- If the 10/100BASE port has been set, disconnect and reconnect a LAN cable. This makes the setting valid.

VDSL SETTING (SETTING BY PORTS)

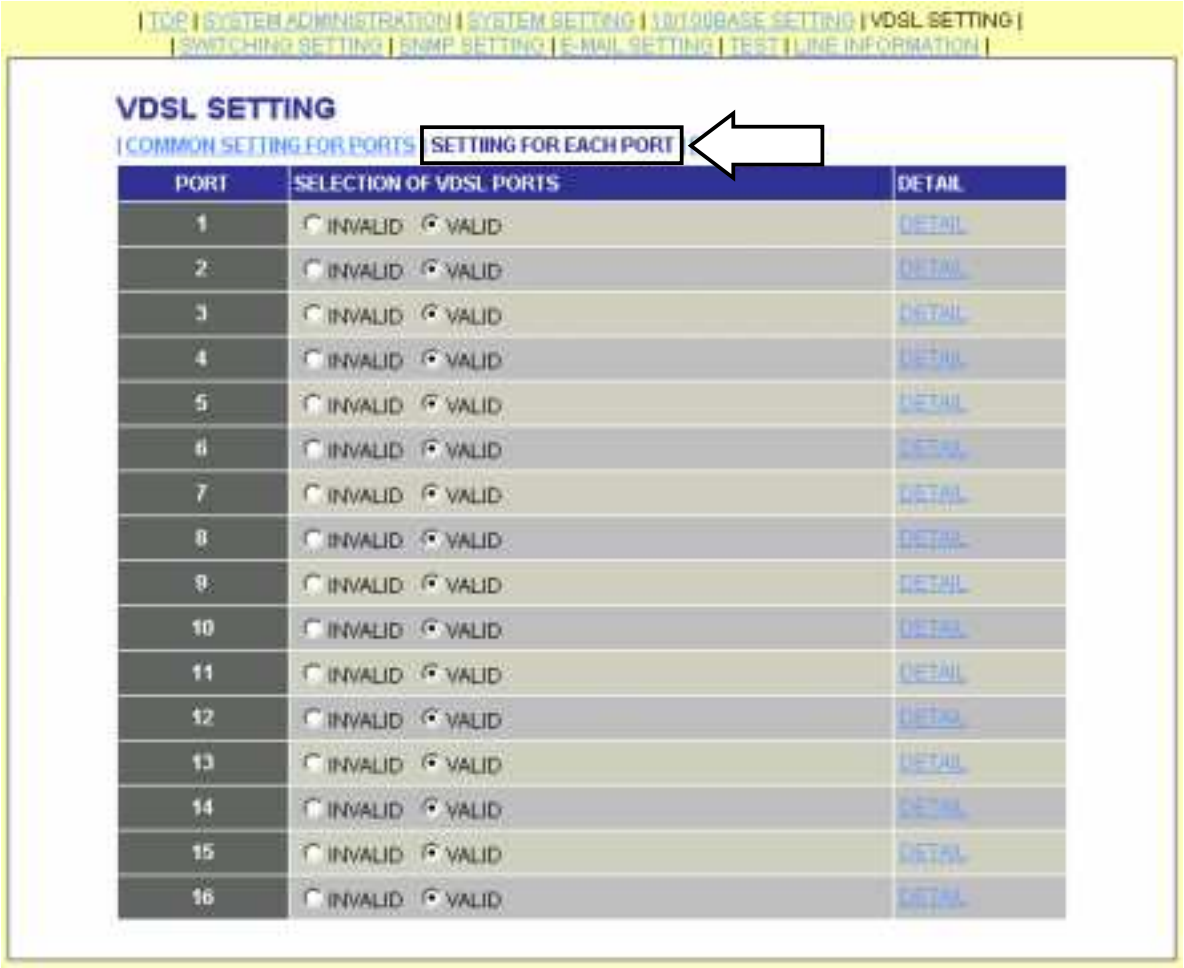
Selecting the VDSL Port

The following describes how to select Valid/Invalid for the VDSL ports used.
「Valid」 has been initially selected for all the VDSL ports. Select 「Invalid」 for the unused ports.

1 Click on VDSL SETTING in the TOP screen for Web setting.

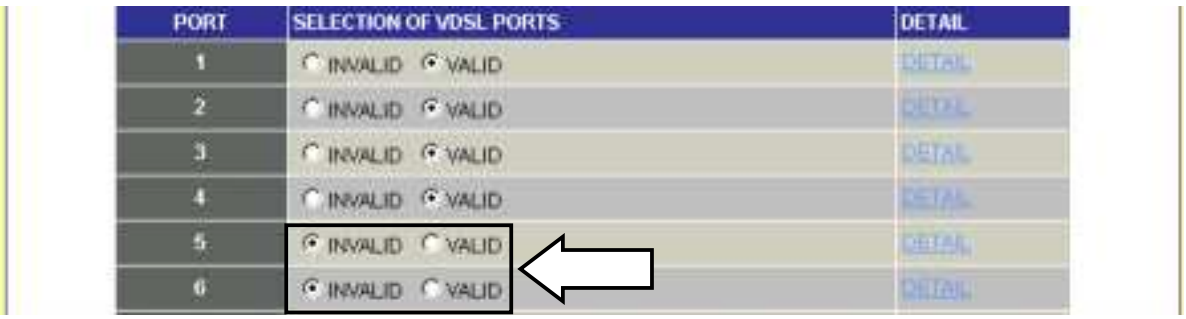
2 Click on SETTING FOR EACH PORT.

- The Setting for Each Port screen appears.



3 In selection of the VDSL ports, select ［INVALID］ or ［VALID］ for the VDSL ports used.

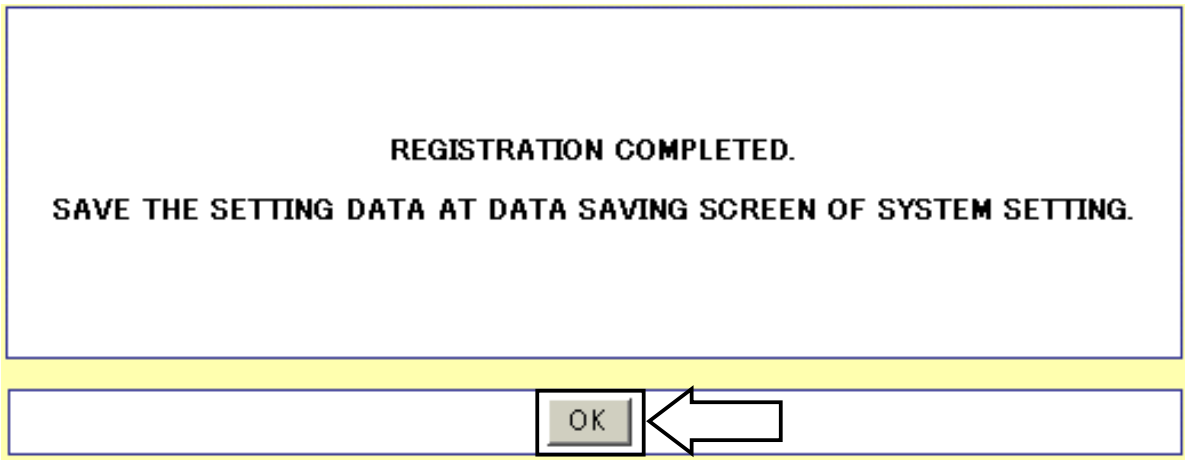
- An initial value is 「VALID」.
- Select 「INVALID」 for the unused ports.



VDSL SETTING (SETTING BY PORTS)

4 Click on REGISTRATION.

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the Setting for Each Port screen.

Supplemental Explanation

●In selection of the VDSL ports, data communication is allowed when 「VALID」 is enabled. The 「INVALID」 ports are disabled.

Notes

●An initial value is「VALID」for all the VDSL ports. Select 「INVALID」 for the unused ports. If "INVALID" is not selected for those ports, the transmission speed of the VDSL circuit used may slow down due to a cross talk between the cables or the VDSL LINK lamp for the unused VDSL port (where the NYC-VDSL-T16 (single unit apparatus) has not been connected) may blink.

●When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.

LIST OF SETTING EXAMPLES

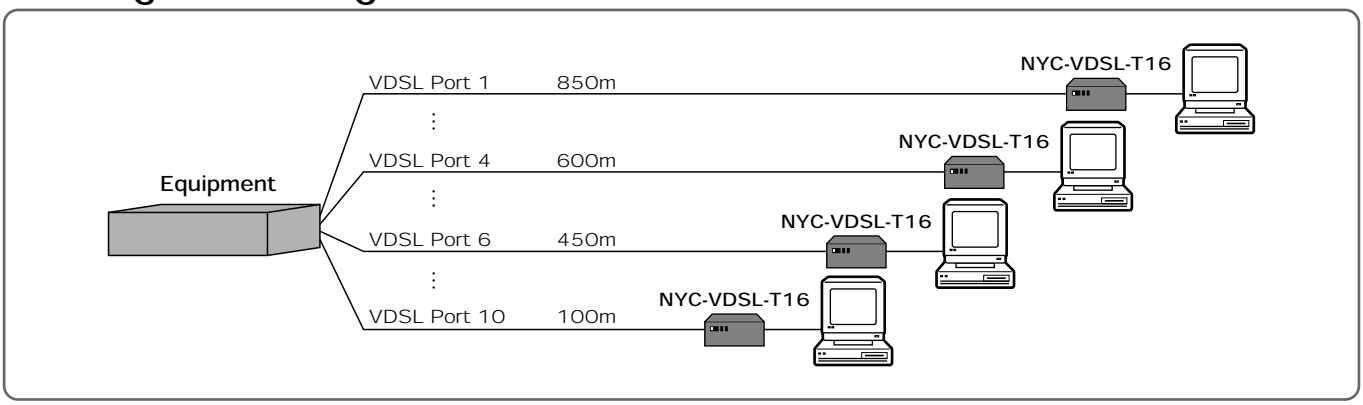
Setting	Description	Page
VDSL Port Connection	Shows the notes for connecting the VDSL ports.	64
S/N Ratio Margin Setting	Shows a S/N ratio margin setting example.	65
VLAN Configuration (Initial Setting)	Shows an initially set VLAN configuration.	68
VLAN Configuration		70
Configuration Diagram	Shows a VLAN configuration example.	70
VLAN ID Setting	Sets the ID of the configured VLAN.	71
VLAN Name Setting	Sets the name of the configured VLAN.	
Port Selection	Sets the VLAN ports you want to configure.	
PVID Setting	Sets the VLAN ID per port.	75
Tag Output Setting		77
To Send Tagged Frame	Describes how to send out a tagged frame.	77
Configuration Example	Shows an example of sending out a tagged frame.	78
Trunking Setting		83
Configuration Diagram	Shows an example of cascading the Equipment.	83
Trunking Setting	Sets a connection between 2 apparatuses with multiple cables.	84

VDSL PORT CONNECTION

■VDSL Port Connection

The following is recommended in order to fully exhibit the performance of the Equipment.
At the VDSL ports of the Equipment, connect between the adjacent ports at the minimum line length difference.

■Configuration Diagram



(Example) When there are the following 10 VDSL circuits;

Circuit Name	Line Length
Circuit A	850m
CircuitB	300m
CircuitC	450m
CircuitD	700m
CircuitE	200m
CircuitF	500m
CircuitG	100m
CircuitH	100m
CircuitI	600m
CircuitJ	650m

The following is recommended to connect to the VDSL ports.

VDSL Port	Circuit Name	Line Length
VDSL1	Circuit A	850m
VDSL2	CircuitD	700m
VDSL3	CircuitJ	650m
VDSL4	CircuitI	600m
VDSL5	CircuitF	500m
VDSL6	CircuitC	450m
VDSL7	CircuitB	300m
VDSL8	CircuitE	200m
VDSL9	CircuitG	100m
VDSL10	CircuitH	100m

Connect between the adjacent VDSL ports at the minimum line length difference.

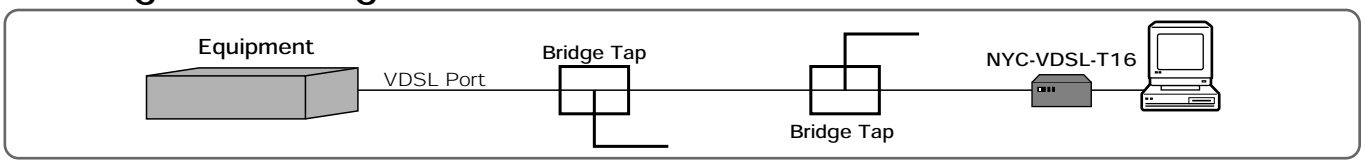
Notes

- For the unused (unconnected) VDSL ports of the Equipment, select 「INVALID」 at Selection of VDSL Ports.
- If the line length of the VDSL port is changed due to use of the patch panel (wiring switch) or when Use/No Use is changed over for the NYC-VDSL-T16 (SINGLE UNIT APPARATUS), transmission may be affected at other VDSL ports. If this is the case, the effect may be reduced by adjusting 「S/N Ratio Margin Setting」 for each VDSL port from 1 dB to 9 dB or selecting 「Valid」 for 「Power Back-off Setting.」 (The transmission speed may slow down.)

S/N RATIO MARGIN SETTING

The following provides an example of S/N ratio margin setting.

■Configuration Diagram



■Description of Configuration Example

As shown in the configuration diagram above, if the VDSL circuit is branched by a bridge tap, etc., there may be an unstable VDSL port circuit condition (link training repeated), slow transmission speed or low S/N ratio. When this is the case, adjust the S/N ratio margin setting. This may stabilize the VDSL circuit condition.

■What Is the S/N Ratio Margin Setting ?

It is used when the communication speed of the VDSL circuit is unstable. Change the S/N ratio margin setting from 1 dB to 9 dB. The transmission speed slows down, but the communication speed may be stabilized.

■Transmission Speed When Setting the S/N Ratio Margin

・When emphasizing the circuit more than the speed: Change the S/N ratio margin setting from 1 dB to 9 dB.
・When emphasizing the speed more than the circuit: Change the S/N ratio margin setting from 9 dB to 1 dB.

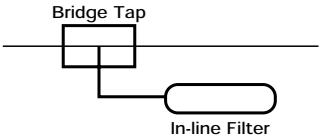
The following lists the circuit conditions and transmission speeds when setting the S/N ratio margin. The transmission speed may differ depending on the installation environment. The following table lists the reference values when the 16 VDSL circuit ports are wired to the identical UTP cables and measured. Adjust the S/N ratio margin setting based on the reference values.
Note that depending on the circuit condition or transmission distance, the VDSL circuit may not be linked if the set value is overadjusted from 1 dB to 9 dB.
If the VDSL circuit condition is not stabilized by adjusting the set value, adjust power back-off setting and VDSL send-out level control setting.

Transmission Distance(m)	S/N Ratio Margin Setting (dB)	S/N Ratio of VDSL	Transmission Speed (Mbps)	
			Down	Up
100	1	LOW	45.1	27.0
	3	MID	45.1	24.6
	6	MID	40.0	21.2
	9	HIGH	35.1	18.8
300	1	LOW	45.1	24.6
	3	MID	37.5	22.2
	6	MID	35.1	18.8
	9	HIGH	30.1	15.4
500	1	LOW	42.6	18.8
	3	MID	35.1	16.4
	6	MID	30.1	13.0
	9	HIGH	27.6	9.6
700	1	LOW	30.1	5.7
	3	MID	30.1	4.8
	6	MID	27.6	3.8
	9	HIGH	22.6	2.8
900	1	LOW	20.2	4.8
	3	LOW	17.7	3.8
	6	MID	15.2	2.8
	9	HIGH	12.6	1.9

Setting Conditions: The values other than the S/N ratio margin setting are initial ones.
- ●VDSL Speed Setting (Down/Up): 50/29 Mbps
- ●VDSL Send-out Level Control Setting: 0 dB
- ●Power Back-off Setting: VALID (UP)
- ●Notch Filter Setting : 1.81MHz−2MHz : INVALID
  3.5MHz−4MHz : INVALID
  7MHz−7.3MHz : INVALID
  10.1MHz−10.15MHz : INVALID

Notes

●Do not branch the wiring of the VDSL circuit which uses a bridge tap, etc. The circuit condition may be deteriorated, decreasing the transmission speed. If the wiring is inevitably branched, terminate a branched wiring cable with an in-line filter, etc.



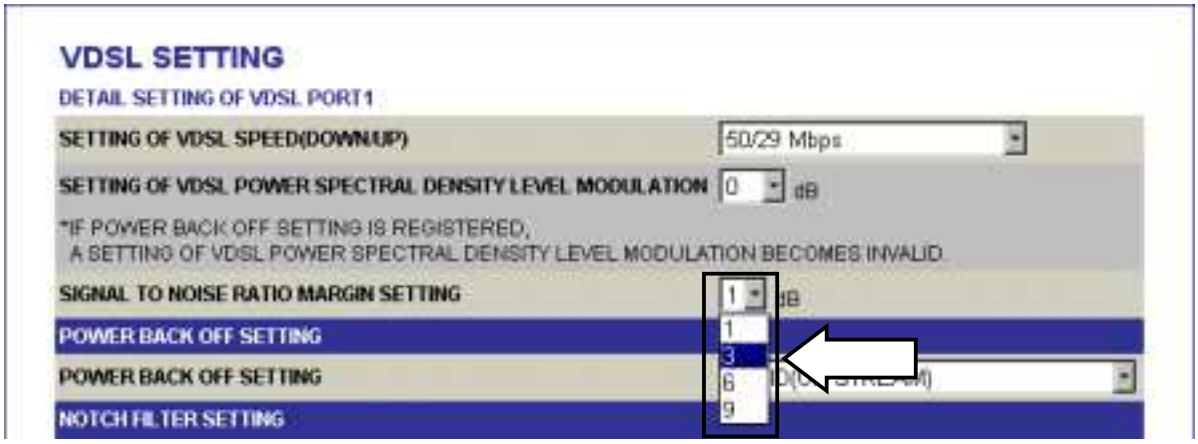
S/N RATIO MARGIN SETTING

Setting the S/N Ratio Margin

1 Click on VDSL SETTING in the TOP screen for Web setting, followed by SETTING FOR EACH PORT.

2 Click on DETAIL

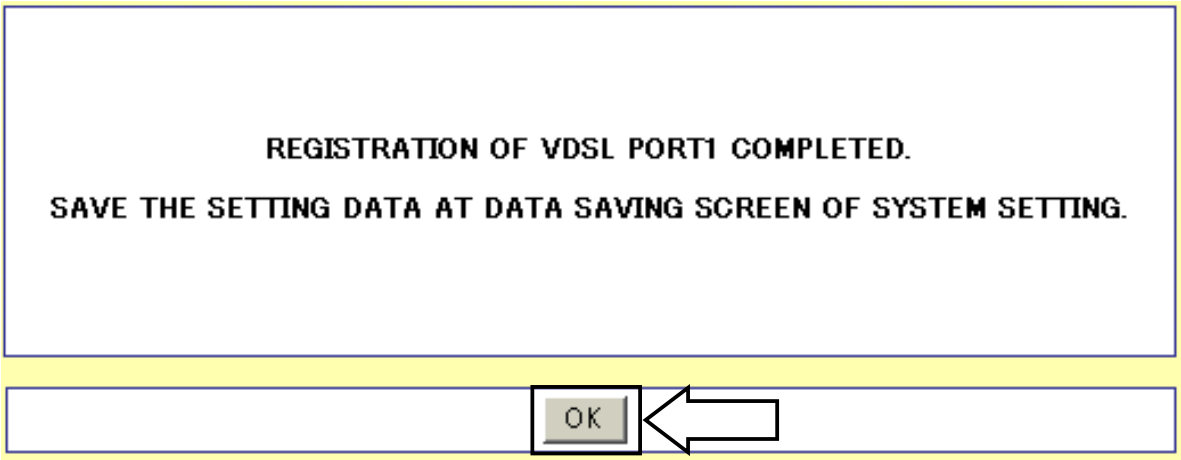
3 Change the S/N ratio margin setting.



4 Click on REGISTRATION

S/N RATIO MARGIN SETTING

5 「REGISTRATION OF VDSL PORT1 COMPLETED.」 appears. Click on OK.



- You are taken back to the Detail Setting screen.

Notes

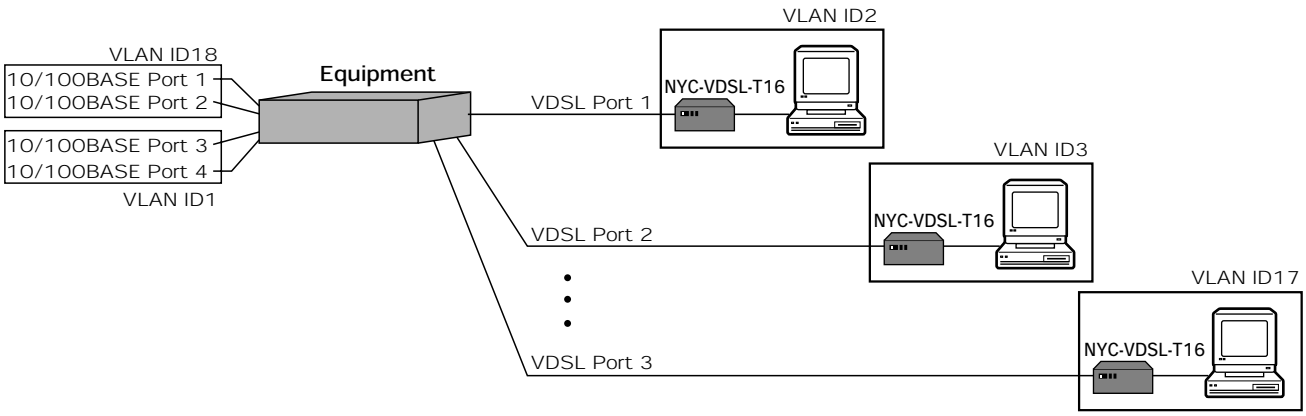
- Set the S/N ratio margin with the NYC-VDSL-T16 (single unit apparatus) connected. If not connected, clicking on the OK button results in an error, disabling data setting.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.

VLAN CONFIGURATION (INITIAL SETTING)

The following shows an initial VLAN configuration.

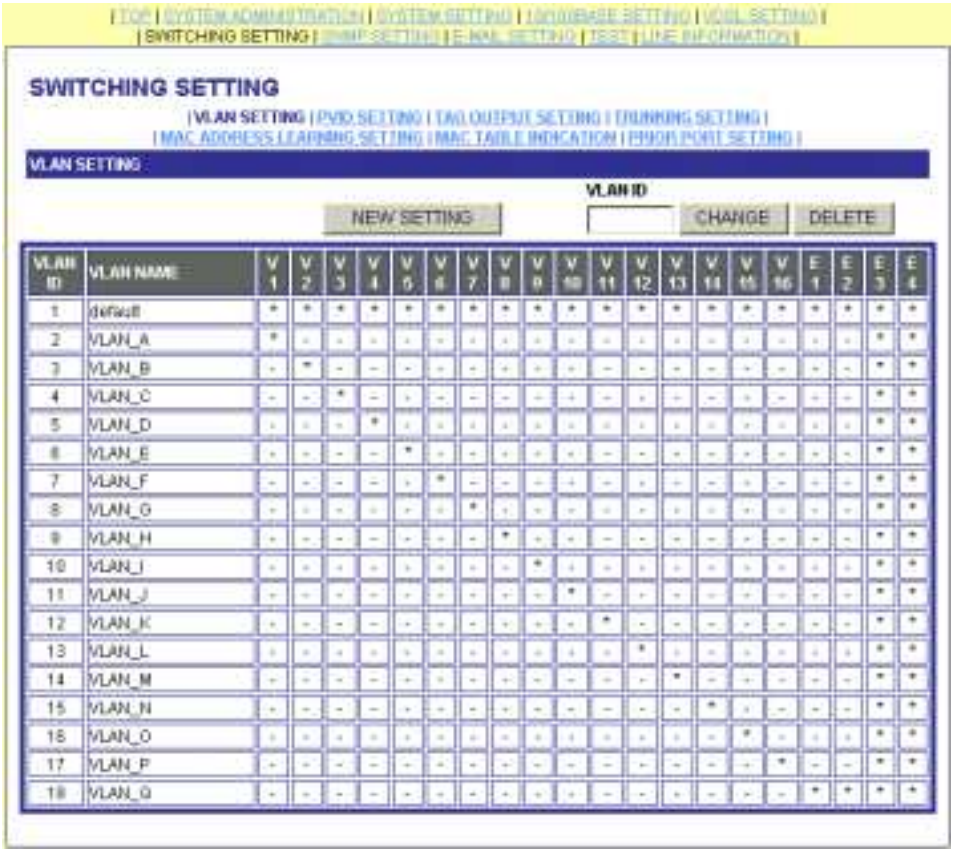
■Configuration Diagram

Configuring the VLAN



■Configuration Example

＊：Port belonging to VLAN ID.
「T」 appears for tag output setting.



①For a default VLAN group, all the VDSL ports and all the 10/100BASE ports are of the same group. Selecting this group allows the data to flow among all the ports.

②For the VLAN group of VLAN__A to VLAN__P, each VDSL port and 10/100BASE Ports 3 and 4 are of the same group. Selecting this group allows the data to flow only from each VDSL port to the 10/100BASE Ports 3 and 4.

③For the VLAN group of VLAN__Q, only the 10/100BASE ports are of the same group. Selecting this group allows the data to flow only among the 10/100BASE ports.

VLAN CONFIGURATION (INITIAL SETTING)

■Description of VLAN (Virtual LAN)

(1) VLAN configuration (Group)

Equipped with the Layer-2 switch function, the Equipment allows each port (VDSL and 10/100BASE ports) to be independently used. (Switching HUB function)

Virtually grouping each port, the VLAN is capable of handling each independent port as identical groups.

Communication is allowed between the identical groups, but not between the different ones.

As the initial VLAN (base VLAN), for example, each port belongs to the same group as the upstream side (network side: 10/100BASE Port 3 and 10/100BASE Port 4) as an independent group. In this case, data communication is allowed from each VDSL port to the 10/100BASE Ports 3 and 4, but not allowed between each VDSL port. Placing them in the same group requires you to pay heed to privacy security, because the communication data in the group is made visible.

(2) VLAN ID

A number to identify the set VLAN group. It is used for connecting multiple equipments to configure a VLAN group among them. It is necessary to set the VLAN ID, even if multiple equipments are not used.

(3) PVID

ID of the port VLAN. It allocates the set VLAN groups to respective ports. Select the VLAN ID used (belonging) per port.

(4) Cascade connection

Multiple units of this equipment may be connected. When cascading to another equipment, use the 10/100BASE Ports 1 and 2, because they are MDI-X.

As the initial VLAN, the 10/100BASE Ports 1 and 2 assume only the 10/100BASE Ports 3 and 4 as an identical group. In this case, the data from the 10/100BASE Ports 3 (another one of connected multiple equipments) flows only to the 10/100BASE Ports 3 and 4. The data does not flow to each VDSL port. In case of the initial VLAN, therefore, the 10/100BASE Ports 1 and 2 are valid only when connecting multiple equipments.

(5) Tag output setting

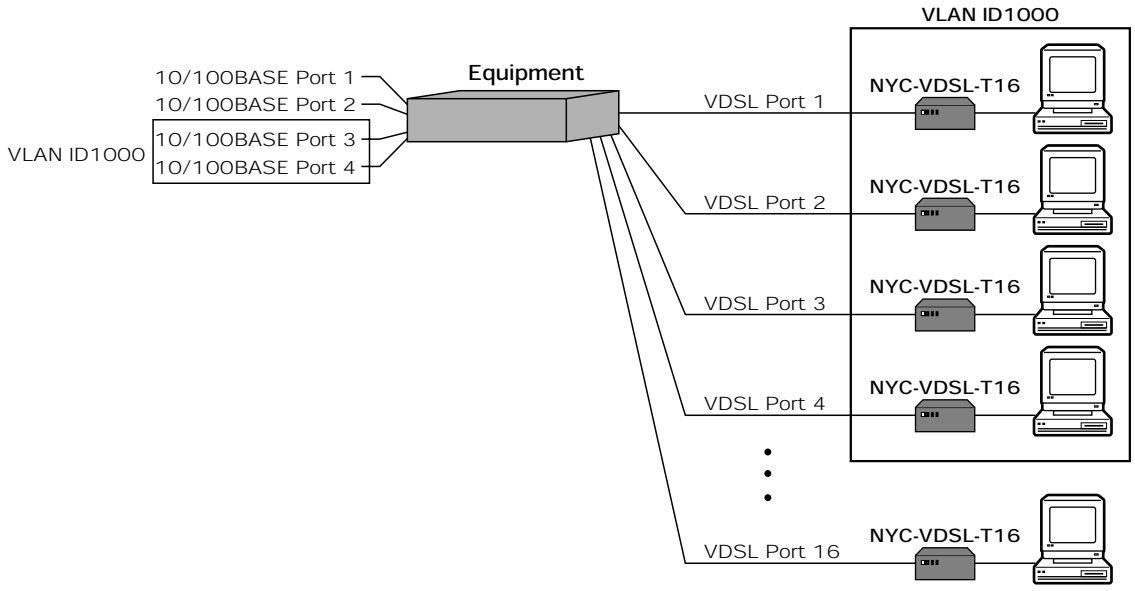
In VLAN group setting, this is to add a VLAN identification tag (information) to the data output from each port. Generally, select Untag (does not add the tag); select this when configuring the VLAN at each port among multiple equipments by cascade connection, etc.

VLAN CONFIGURATION

The following shows a setting example of VLAN configuration. This configuration example sets the VDSL Ports 1 to 4 and 10/100BASE Ports 3 and 4 as VLAN ID 1000.

■Configuration Diagram

Configuraing the VLAN



The following pages describes a setting example based on this configuration.

VLAN CONFIGURATION

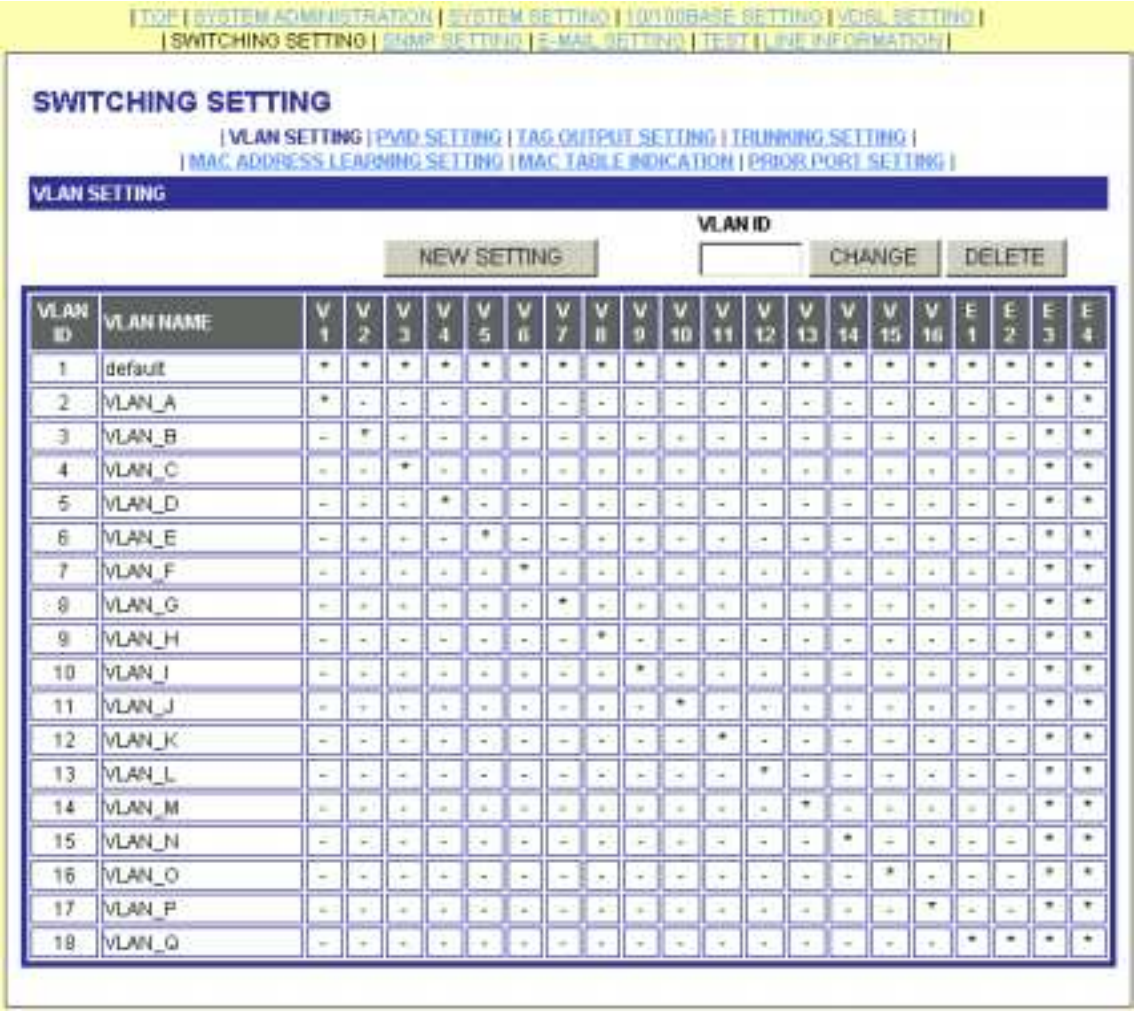
Setting the VLAN ID

The following describes how to set the VLAN ID.

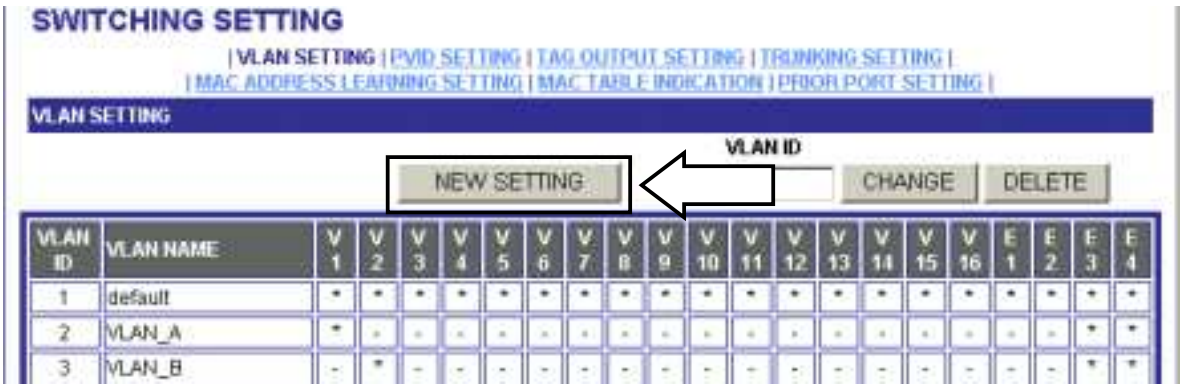
1 Click on SWITCHING SETTING in the TOP screen for Web setting.

2 The VLAN Setting screen appears.

- 「＊」appears if no tag has been set, and 「T」 if it has been set, respectively.
- Up to 255 VLANs may be registered (18 of them have been already registered as an initial value).



3 Click on NEW SETTING

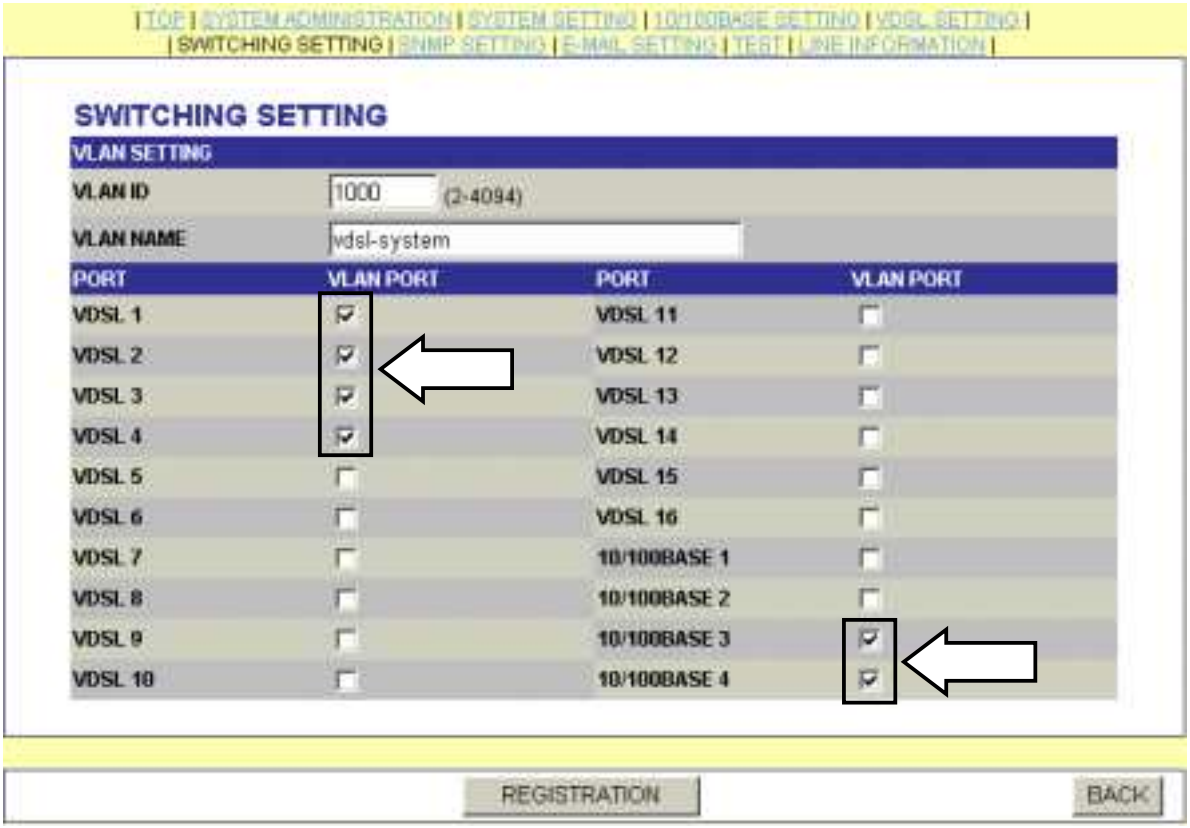


VLAN CONFIGURATION

4 Enter the data newly in the ［VLAN ID］ and ［VLAN Name］ fields in the VLAN Setting screen you want to newly register.

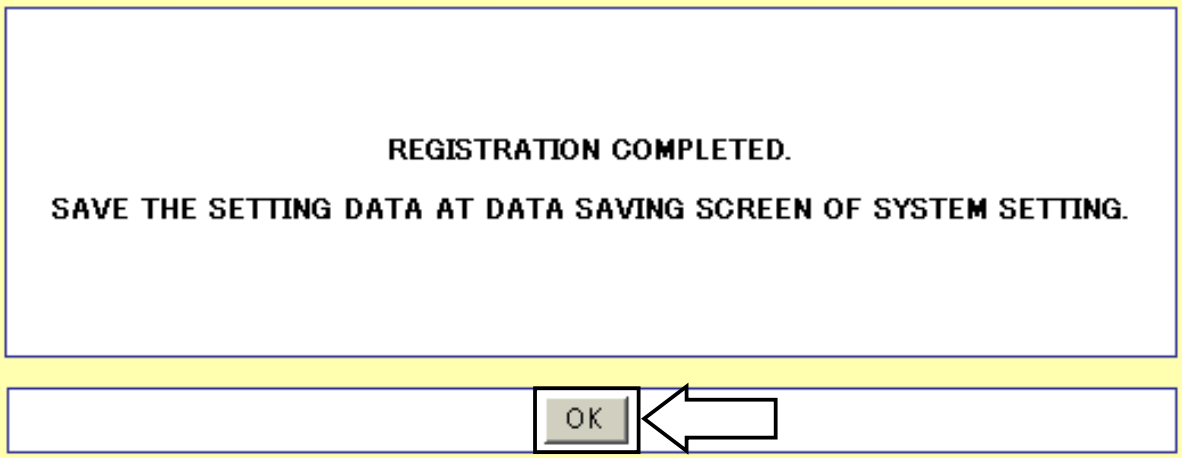
5 Click in the check box for the VLAN port you want to newly set.

- The following shows an example.



6 Click on REGISTRATION.

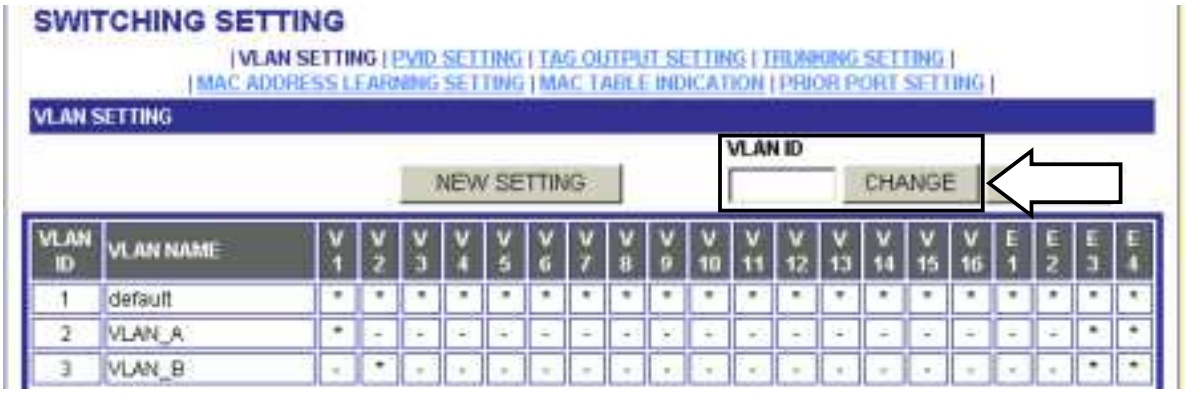
7 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the VLAN Setting screen.

Supplemental Explanation

●To change the VLAN setting, enter [VLAN ID] you want to change in the VLAN Setting screen in Step 2, and click on CHANGE.The specified VLAN Setting screen appears. Change the setting to register.



●To delete the VLAN setting, enter [VLAN ID] you want to delete in the VLAN Setting screen in Step 2, and click on DELETE.The specified VLAN setting may be deleted.

●In Step 5, clicking on BACK takes you back to the VLAN Setting screen. The setting data is not registered.

VLAN CONFIGURATION

Notes

- The setting examples of VLAN IDs [1-18] have been registered with the Equipment.
- The setting data of VLAN ID [1] may not be changed or deleted.
- When deleting VLAN ID, firstly change the setting of PVID used.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.

VLAN CONFIGURATION

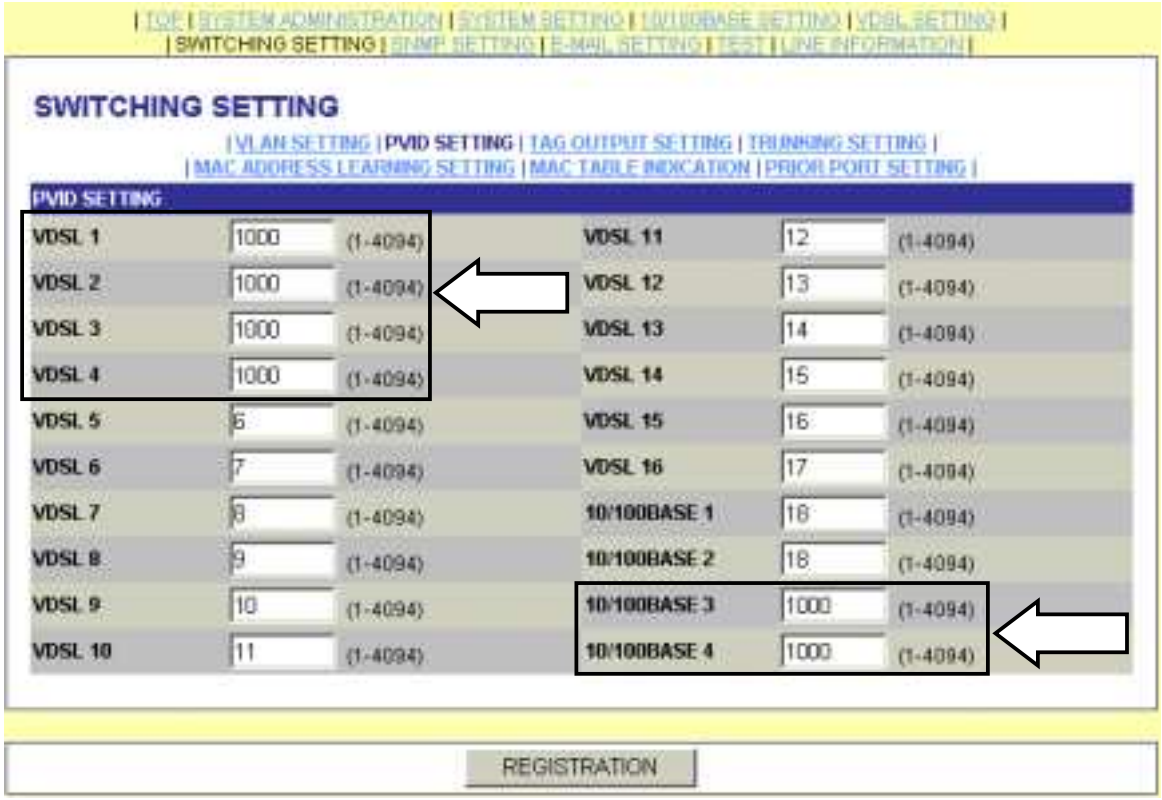
Setting PVID

The following describes how to set PVID (port base VLAN).
Apply the set VLAN ID to the VDSL1to VDSL4 ports.

1 Click on SWITCHING SETTING in the TOP screen for Web setting.

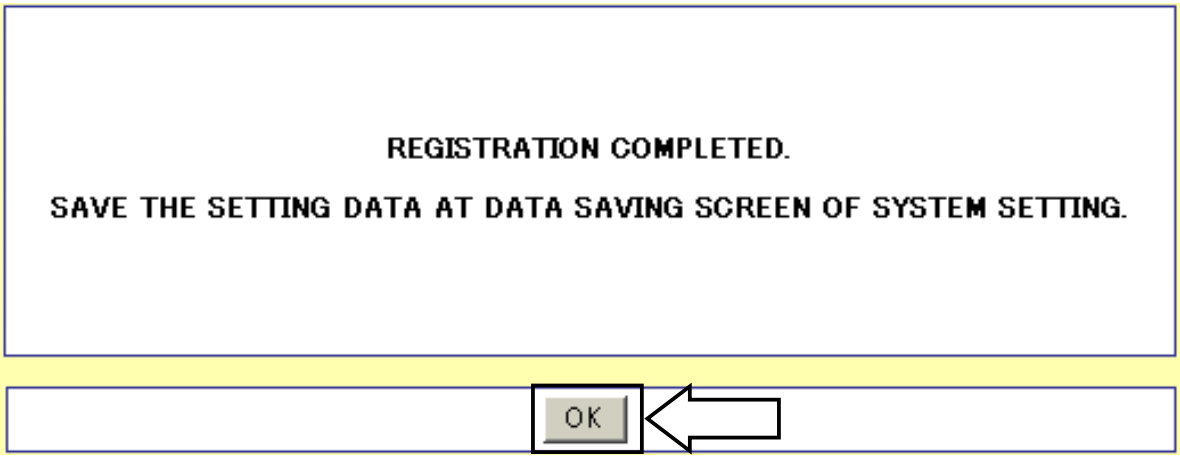
2 Click on PVID SETTING.

3 Set PVID (VLAN ID) for each of the VDSL and 10/100BASE ports.



4 Click on REGISTRATION.

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the PVID Setting screen.

Notes

- When deleting the VLAN ID used, firstly change the setting of PVID used.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.

SETTING TAG OUTPUT

Setting Tag Output

■Sending out the Tagged Frame

The following two figures show the case when the 10/100BASE Port 1 has been set for tag output and the data flows from the VDSL Port 1 to the 10/100BASE Port 1.
There is a condition to PVID setting to send out the tagged frame. The tagged frame is not sent out between the ports where the same PVID has been set as shown in Fig. 1; it is sent out between the ports where different PVIDs have been set as shown in Fig. 2. In Fig. 2, the frame tagged with VLAN ID1 is sent out of the 10/100BASE Port 1.

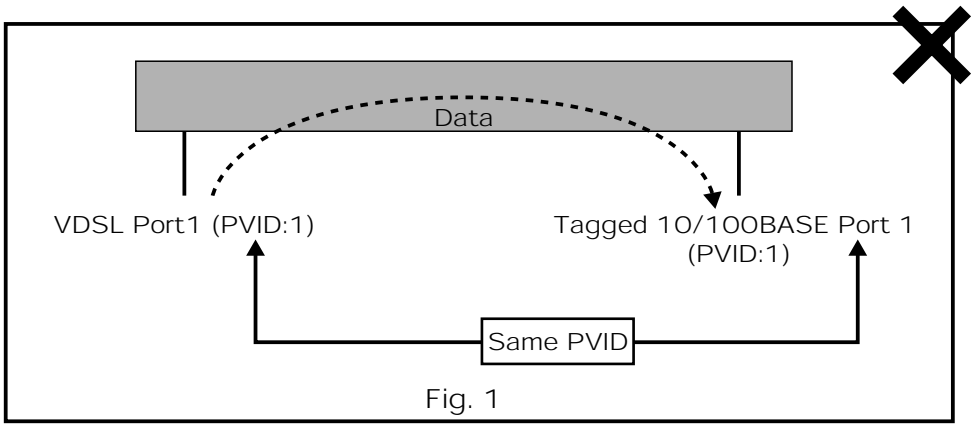


Fig. 1

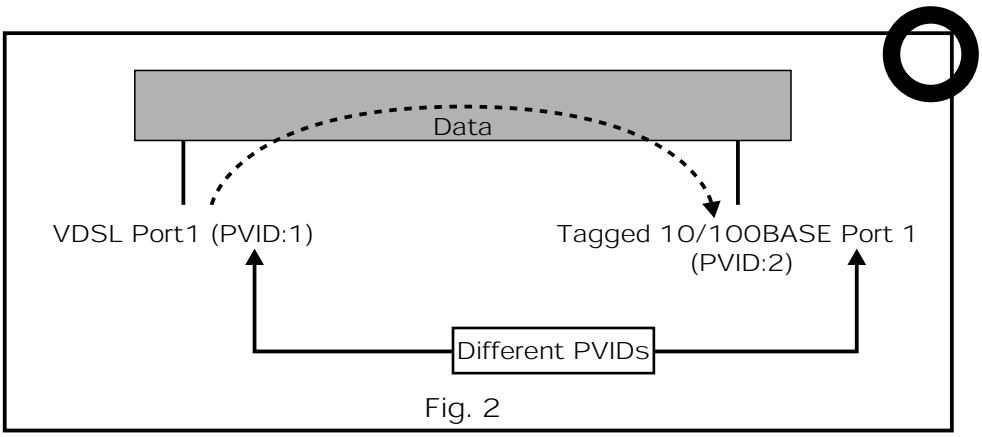


Fig. 2

The following pages describe how to set a configuration example which sends out the tagged frame.

SETTING TAG OUTPUT

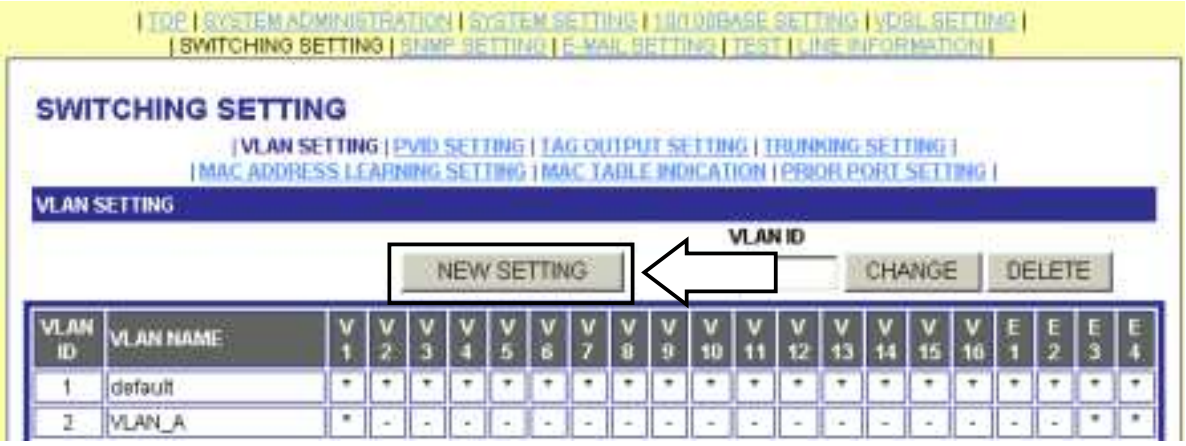
■Configuration Example

①Communication is allowed between the VDSL ports.
②Communication is allowed from all the VDSL ports to the 10/100BASE Port 1.
③Communication is allowed from the 10/100 BASE Port 1 to all the VDSL ports.
④Add the VLAN ID1 tag to the frame sent out from the 10/100BASE Port 1.

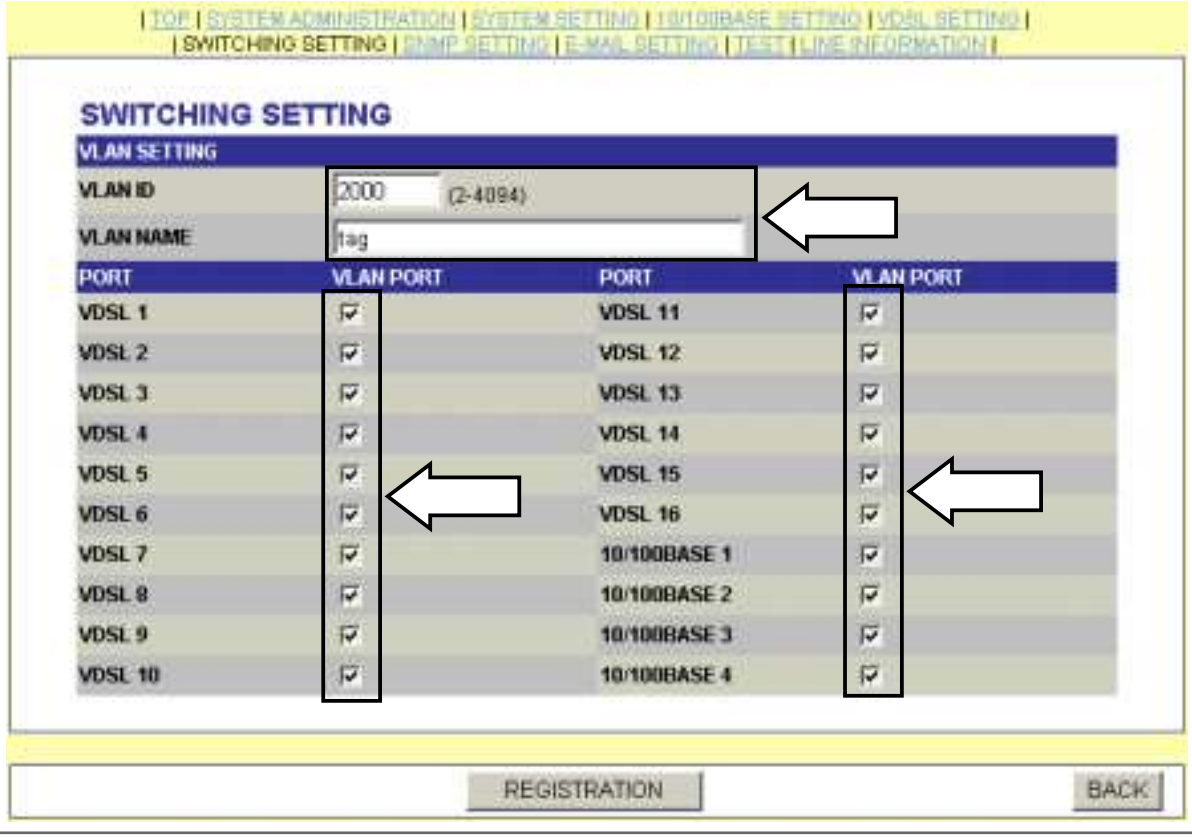
PVID to be set for the 10/100BASE Port 1 needs to be set to other than 1.
The following shows a setting example.

1 Click on SWITCHING SETTING in the TOP screen for Web setting.

2 The VLAN Setting screen appears. Click on NEW SETTING.



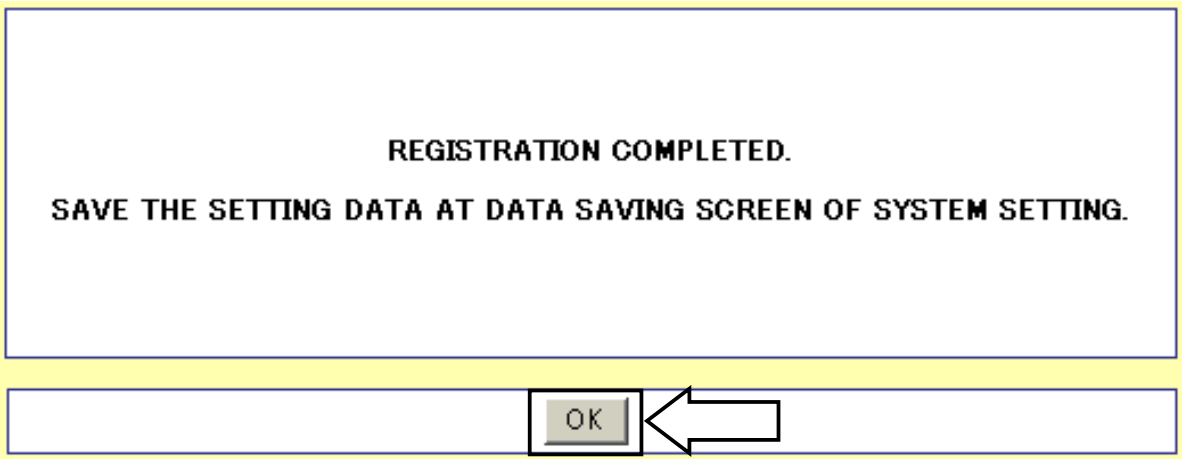
3 Set the VLAN ID, VLAN Name and ports as follows.



SETTING TAG OUTPUT

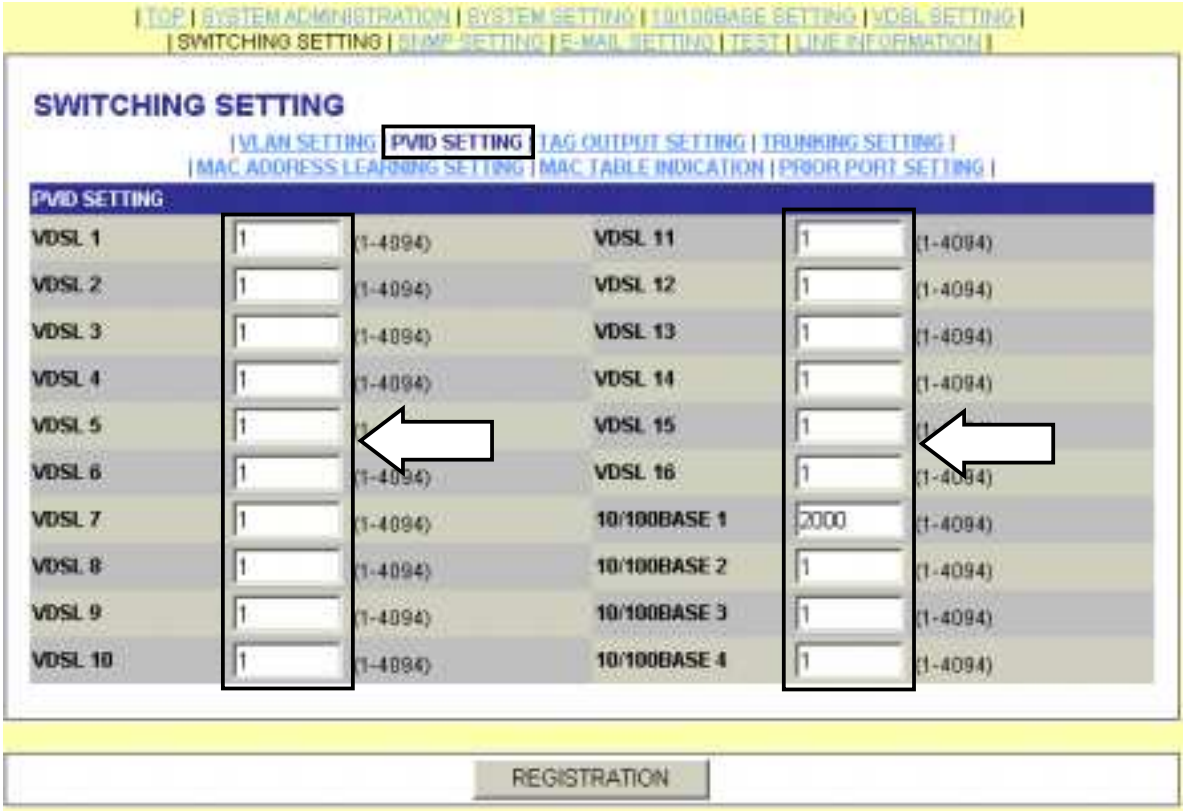
4 Click on REGISTRATION.

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the VLAN Setting screen.

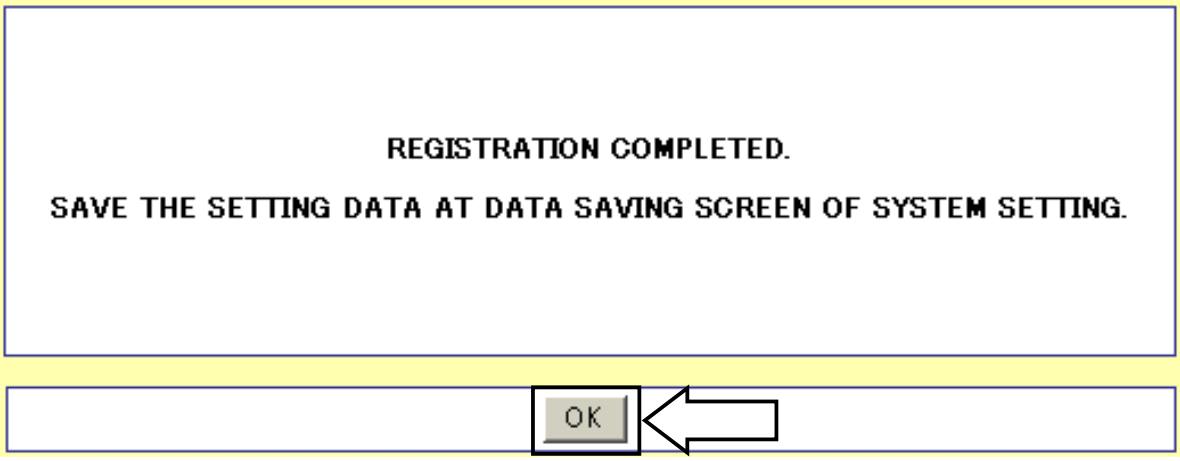
6 Click on PVID SETTING and set as follows for each of the VDSL and 10/100BASE ports.



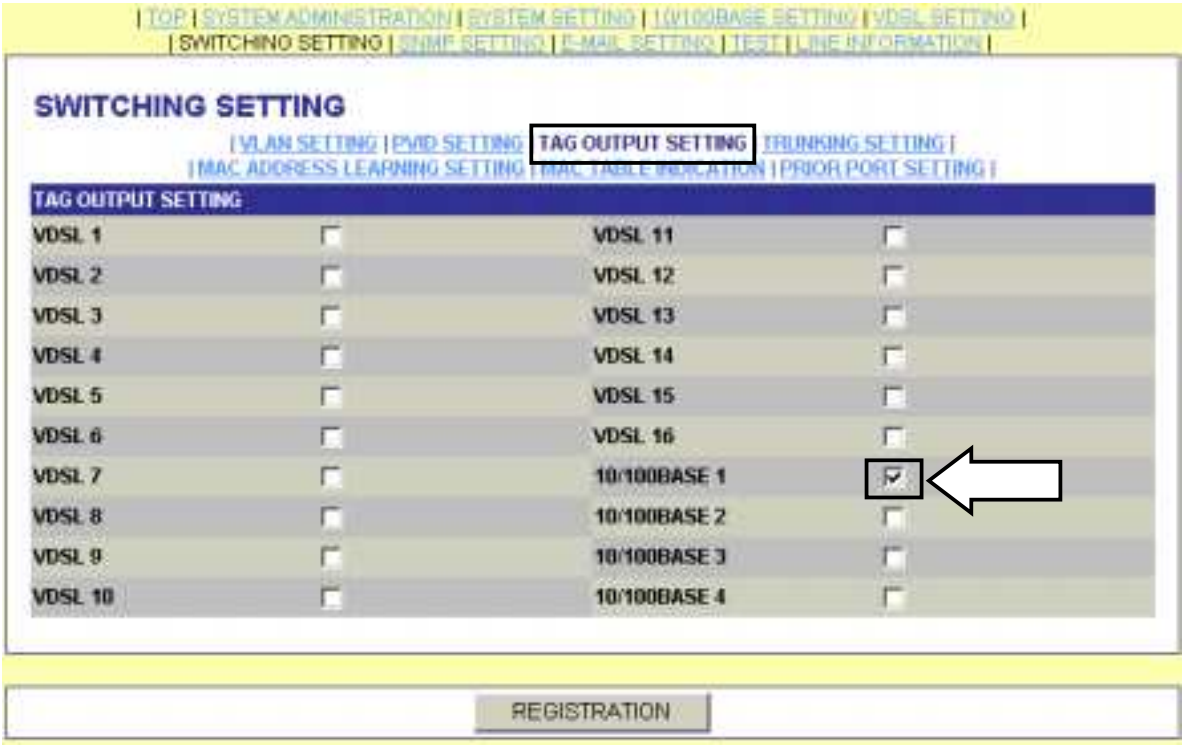
SETTING TAG OUTPUT

7 Click on REGISTRATION.

8 「REGISTRATION COMPLETED.」 appears. Click on OK.



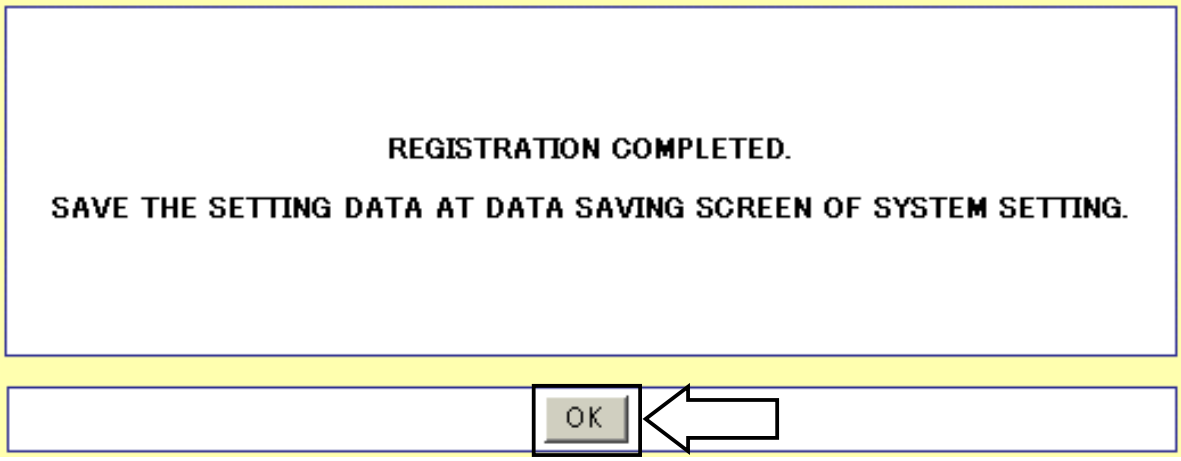
9 Click on TAG OUTPUT SETTING and set as follows.



SETTING TAG OUTPUT

10 Click on REGISTRATION.

11 「REGISTRATION COMPLETED.」 appears. Click on OK.

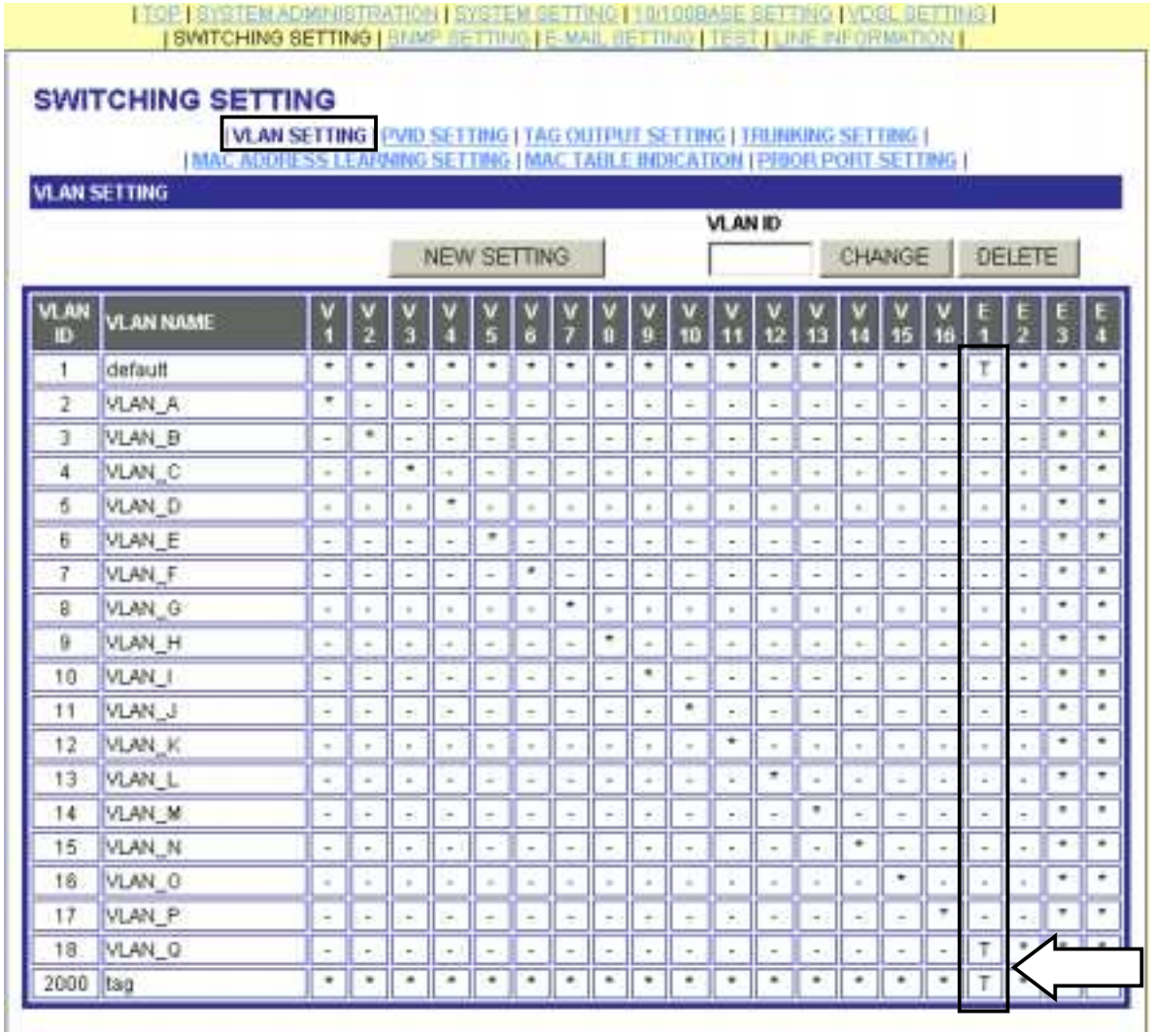


- You are taken back to the Tag Output Setting screen.

SETTING TAG OUTPUT

12 **Click on VLAN SETTING and confirm that 「T」 is being displayed for the 10/100BASE Port 1 where tag output has been set.**

- The frame flowing from each VDSL port to the 10/100BASE Port 1 is tagged ID1.



VLAN ID	VLAN NAME	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15	V16	E1	E2	E3	E4
1	default	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	T	*	*	*
2	VLAN_A	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
3	VLAN_B	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
4	VLAN_C	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
5	VLAN_D	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
6	VLAN_E	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	*	*
7	VLAN_F	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	*	*
8	VLAN_G	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	*	*
9	VLAN_H	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	*	*
10	VLAN_I	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	*	*
11	VLAN_J	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	*	*
12	VLAN_K	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	*	*
13	VLAN_L	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	*	*
14	VLAN_M	-	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	-	*	*
15	VLAN_N	-	-	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	-	*	*
16	VLAN_O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	-	-	-	*	*
17	VLAN_P	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	*	-	-	*	*
18	VLAN_Q	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T	*	*	*
2000	tag	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	T	*	*	*

Supplemental Explanation

- In VLAN group setting, a VLAN identification tag (information) is added to the data output from each port. A special field is provided within the frame, for representing a VLAN attribute, to send out a packet. Which VLAN a frame belongs to may be identified by handing over the tagged frame.
- This is used for configuring the VLAN at each port between multiple equipments by cascade connection, etc.
- When tag output is set, 「*」 in the VLAN Setting screen is replaced by 「T」.

Notes

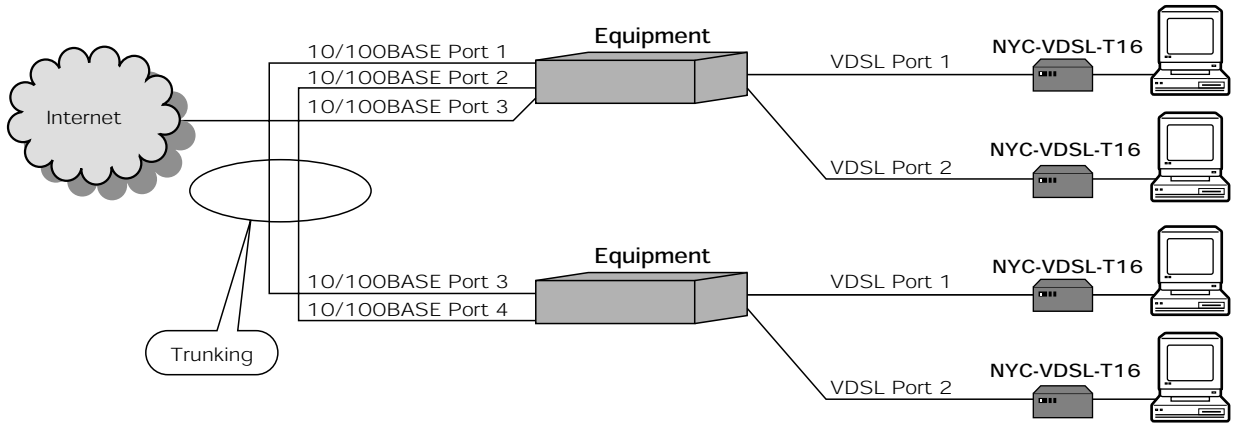
- Setting tag output may result in a packet error or communication failure at another device connected to the port where tag output has been set.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition will be restored at reboot or power failure.

TRUNKING SETTING

The following describes a setting example for using (trunking) multiple 10/100BASE circuits to improve the speed, when conneting (cascading) to other apparatuses (the Equipment also connectable) having the VLAN functions.
When trunking is used, the opponent apparatus should be another unit of this equipment or have a trunking function.

■Configuration Diagram

Cascading Multiple Units of This Equipment to Configure the LAN



Supplemental Explanation

●Trunking uses multiple 10/100BASE circuits to improve the speed.
If there is only one 10/100BASE circuit with the equipment connected on the downstream side in providing multiple equipments (up to 3 units) to add to the ports, for example, the maximum speed will be 100 Mbps. Connection to the Internet is made via the upstream-side equipment, making it disadvantageous in terms of speed. At this time, use of 2 to 4 circuits in trunking setting allows 200 to 400 Mbps. However, some connection circuits may not be used depending on the circuit working condition or configuration.

Notes

●Be sure to adjust the speed as to setting of the 10/100BASE ports of the apparatus where trunking is to be performed.

TRUNKING SETTING

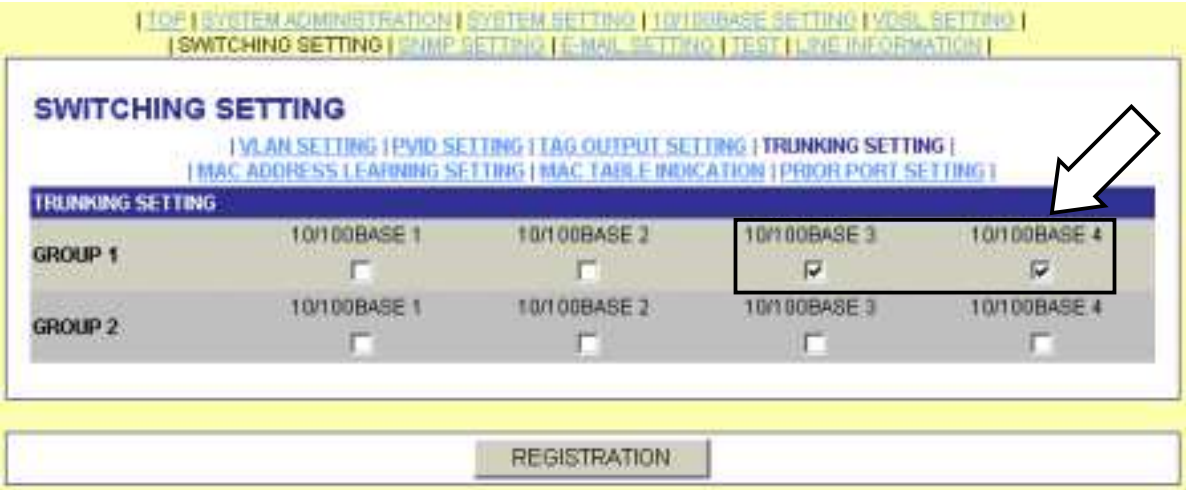
Setting Trunking

The following describes the setting method for using 2 10/100BASE circuits.

1 Click on SWITCHING SETTING in the TOP screen for Web setting.

2 Click on TRUNKING SETTING.

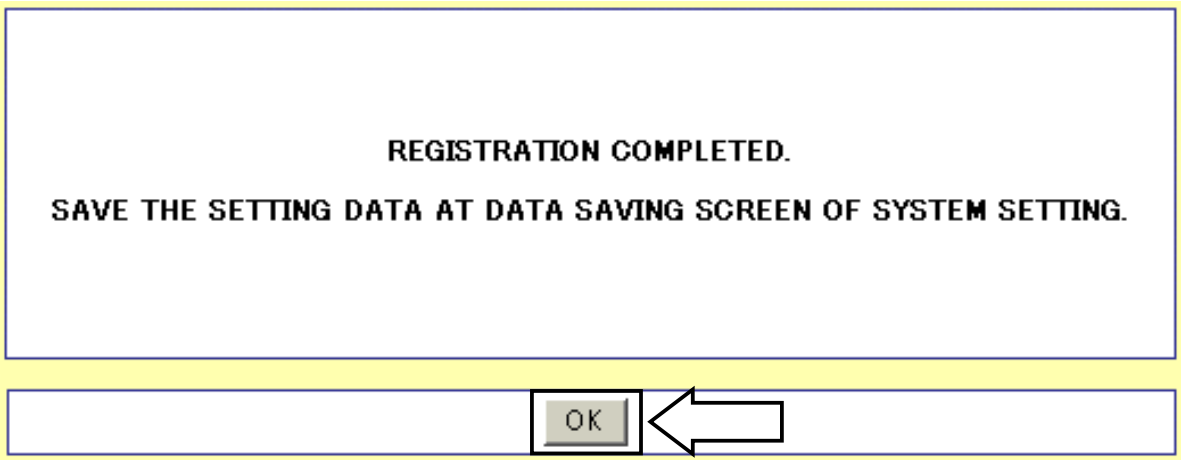
3 Select the 10/100BASE ports where you want to set trunking.



4 Click on REGISTRATION.

TRUNKING SETTING

5 「REGISTRATION COMPLETED.」 appears. Click on OK.



- You are taken back to the Trunking Setting screen.

Supplemental Explanation

- Trunking is a function to multiplex the 10/100BASE circuit into 2/3/4 ports in order to improve the transmission speed to/from the downstream-side unit, when the Equipment is cascaded (multiple units connected).
- Trunking may be set for up to 2 groups.

Notes

- When setting trunking, check the following settings.
  ①In the VLAN configuration, all the ports in the identical trunking groups should be of the same VLAN setting.
  ②In tag setting, all the ports in the identical trunking groups should be of the same tag setting.
- When setting 3- or 4-circuit trunking, delete all the VLANs other than those you want to set.
- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition is restored at reboot or power failure.
- When trunking (multiplexing) 3 or 4 ports, the VLAN setting for all the 10/100BASE ports to be trunked should be the same.
- When trunking (multiplexing) 3 or 4 ports, delete the VLAN IDs (initially registered VLAN IDs and all the user-registered VLAN IDs) other than the VLAN ID you want to set.

LIST OF MAINTENANCE FUNCTIONS (WEB SETTING)

Setting Item		Description	Page
Test (Web Setting)			87
	Confirmation of Terminal Connection	Conducts a connection test between the VDSL circuits of the Equipment and NYC-VDSL-T16 (single unit apparatus)	87
	SENDING A TEST MAIL	Capable of using a mail sending function to check whether mail can be sent to the set address.	90
	Ping Test	Capable of checking a connection to the network device connected to the Equipment by Ping.	93
Line Information (Web Setting)			96
	VDSL Circuit Status and Setting	Allows you to confirm the circuit status and setting information of each VDSL port.	96
	VDSL circuit Packets	●No. of Packets: Displays the unicast frames and multi-cast frames received by the Equipment. ●Packet Counter Clear: Clears the count of received frames.	–
	10/100BASE Circuit Status and No. of Packets	●Circuit Status: Allows you to check the circuit status of each 10/100BASE port. ●No. of Packets: Displays the unicast frames and multi-cast frames received by the Equipment. ●Packet Counter Clear: Clears the count of unicast frames and multi-cast frames received by the Equipment.	–
Information Display (Web Setting)			97
	System Information	Allows you to check the product version, MAC address and VDSL chip firmware version of the Equipment.	–
	History Information	Displays the history information of the Equipment. Capable of displaying up to 1,000 history information. The oldest information will be overwritten if the number of information exceeds 1,000.	97
	History Information Clear	Clears the history information of the Equipment.	–
Notification Functions (Web Setting)			98
	User Trap Notification Setting	Notifies the fault information on the network. Set whether or not trap notification is required, and the IP address of SNMP Manager to inform to.	–
	User Common E-mail Setting	Monitors the following conditions periodically and notifies them as a SNMP trap notification to the set mail address when they change. Mail setting is allowed for up to 4 users. Notification Items (1) Temperature increase/recovery notification (2) VDSL apparatus power-on (3) Single unit type access disabled/recovered (4) Time setting failure from the time server ・Capable of setting the sender mail address and mail server.	98
	E-mail Setting for Each User	Allows you to set the send address for each user.	100

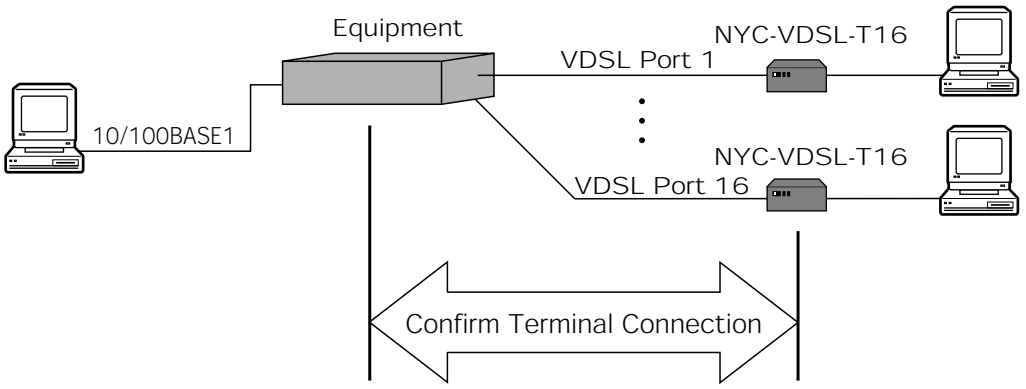
TEST (WEB SETTING)

Confirming Terminal Connection

Confirmation of terminal connection allows you to confirm a connection from the Equipment to the NYC-VDSL-T16 (single unit apparatus).

■Test Confirmation Range

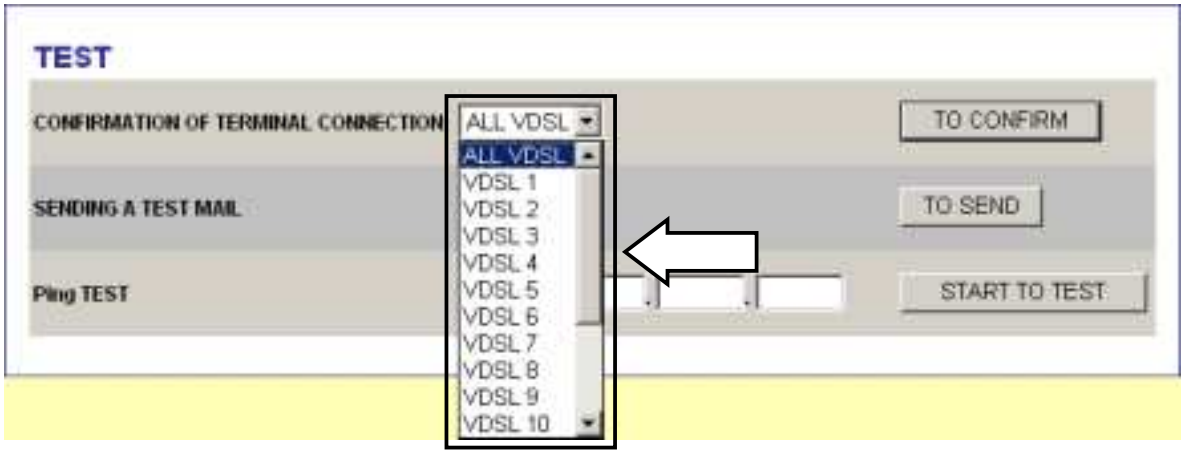
Test Confirmation Range



1 **Click on TEST in the TOP screen for Web setting.**

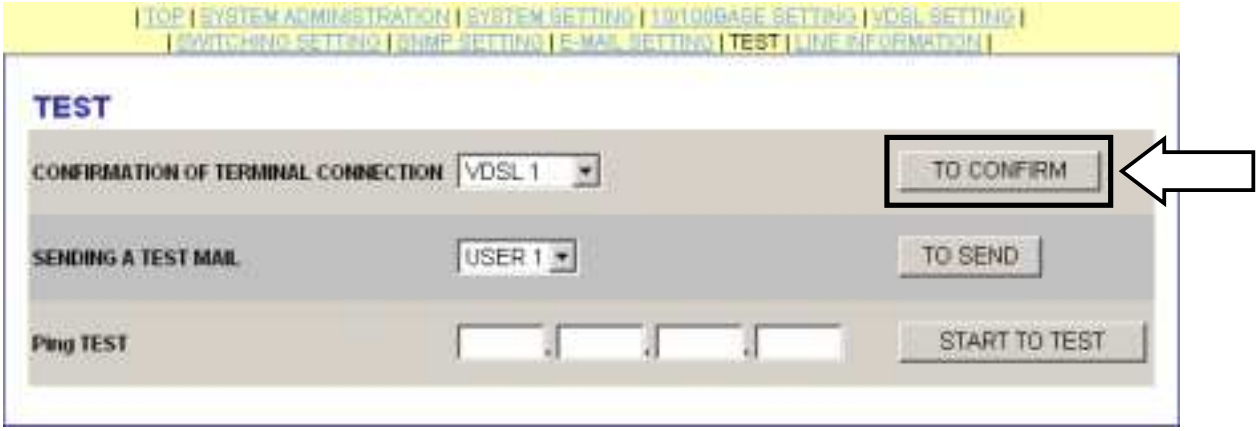
2 **At Confirmation of Terminal Connection, select in a pull-down menu the［VDSL port］you want to confirm its connection.**

- An initial value is 「ALL VDSL」



TEST (WEB SETTING)

3 At Confirmation of Terminal Connection, click on TO CONFIRM.



- Test a connection to the NC-VDSL-T16 (single unit apparatus) connected to the selected VDSL port and present the test result.

4 Execution Result

- When successful

- When unsuccessful

TEST (WEB SETTING)

5 **Click on BACK.**

- You are taken back to the Test screen.

Supplemental Explanation

●Confirmation of Terminal Connection allows you to confirm the link condition between the Equipment and NYC-VDSL-T16 (single unit apparatus).

Notes

●Confirm terminal connection with the NYC-VDSL-T16 (single unit apparatus) connected.

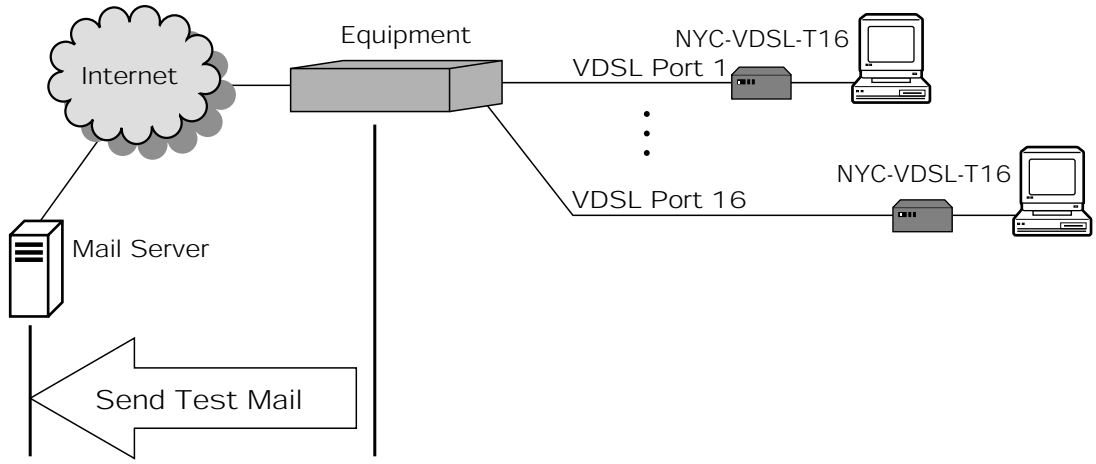
TEST (WEB SETTING)

Sending Test Mail

Sending Test Mail allows you to check whether mail setting (☞Pages 98 and 100) is valid. This test sends a fixed message to the set mail address.

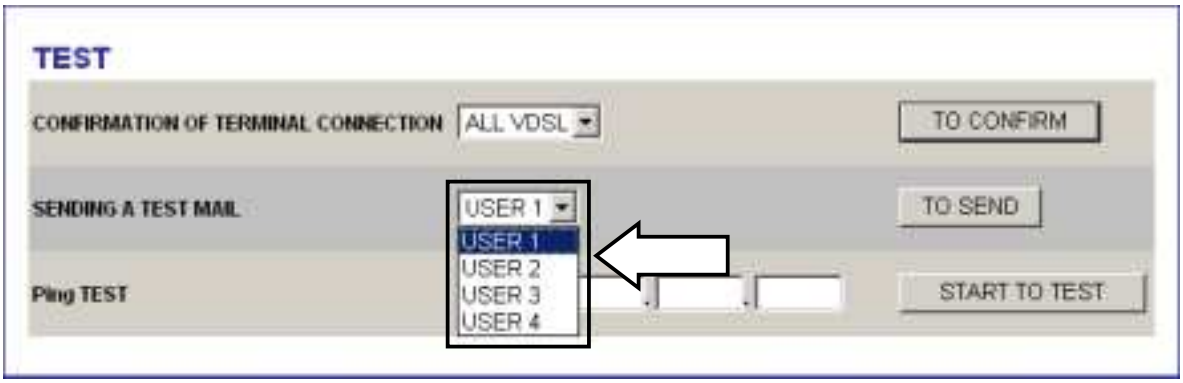
■Test Confirmation Range

Test Confirmation Range



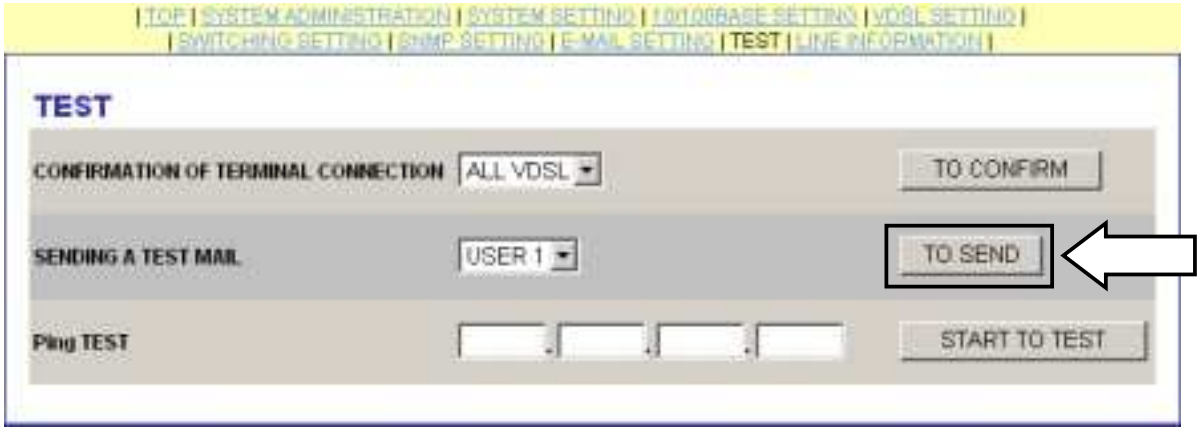
1 Click on TEST in the TOP screen for Web setting.

2 At Sending Test Mail, select in a pull-down menu the [USER] you want to send test mail to.



TEST (WEB SETTING)

3 At Sending Test Mail, click on TO SEND.



4 Execution Result

- When successful

- When unsuccessful

TEST (WEB SETTING)

5 **Click on BACK.**

- You are taken back to the Test screen.

Supplemental Explanation

●Test mail title:VDSL TEST E-MAIL
●Test mail text:IT SUCCEEDED IN TRANSMISSION OF VDSL TEST E-MAIL

Notes

●Set mail for each user. (☛Page 100)
●Test mail does not function properly, unless mail has been registered for each user.
●To limit the access address, it is necessary to set the mail server address.

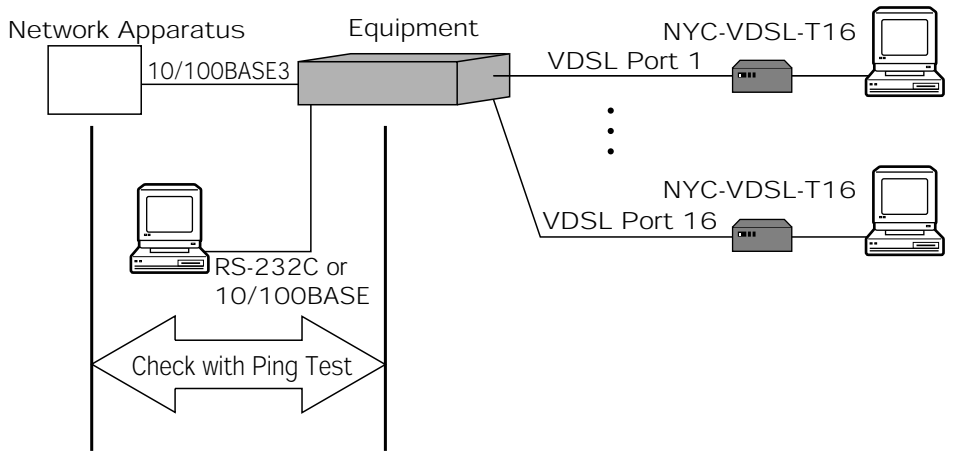
TEST (WEB SETTING)

Ping Test

A Ping test is to test a connection to the network apparatus (router, HUB, etc.) linked with the 10/100BASE port of the Equipment. From the Equipment, you cannot conduct the test on the PC connected to the NYC-VDSL-T16 (single unit apparatus).

■試験確認範囲

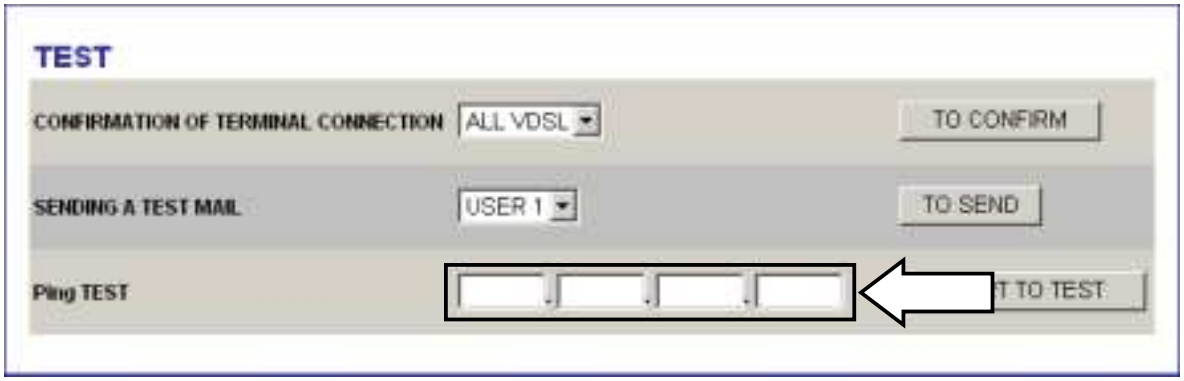
試験確認範囲



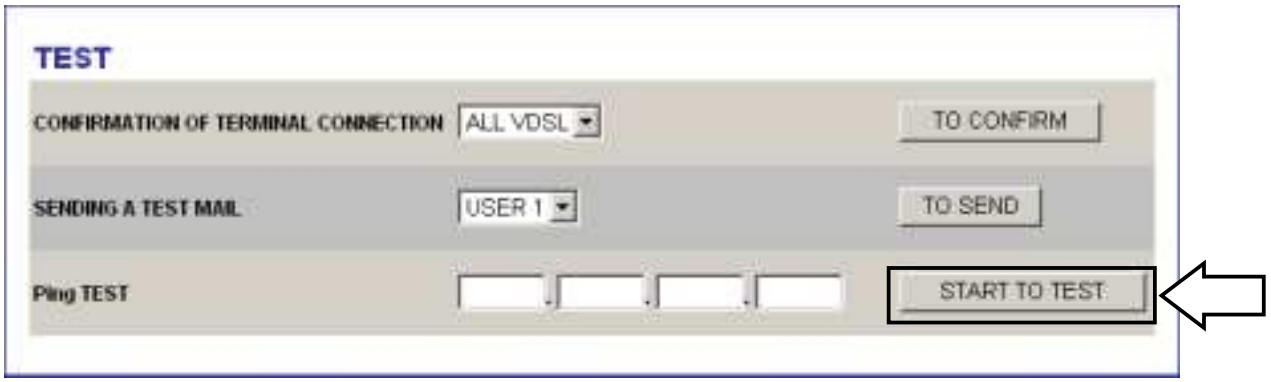
1 **Click on TEST in the TOP screen for Web setting.**

2 **Enter the IP address of the computer used for the Ping test.**

- Enter the IP address of the network apparatus (router, HUB, etc.) connected to the 10/100BASE port of the Equipment.
- The initial IP address of the Equipment is 「192.168.1.1」Prior to conducting the Ping test, check the address.



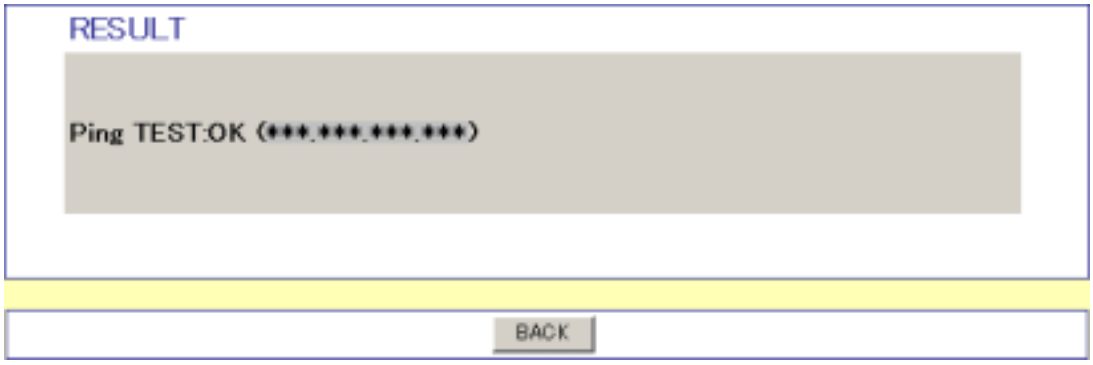
3 **Click START TO TEST at Ping Test.**



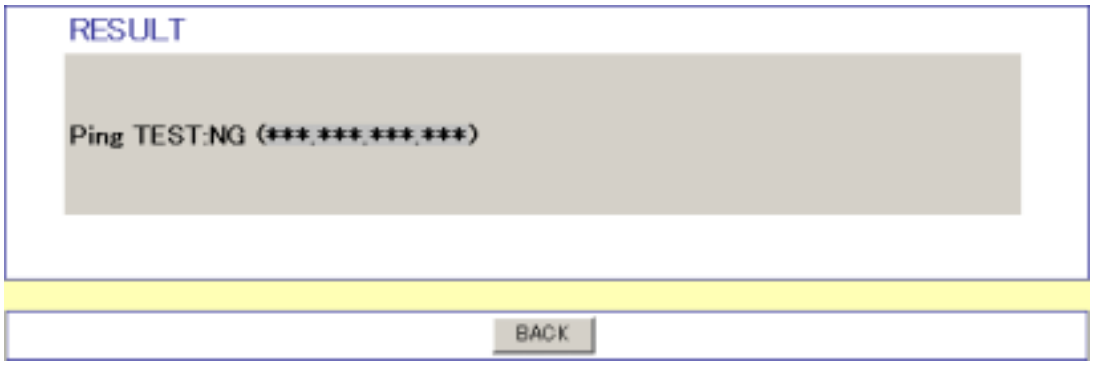
TEST (WEB SETTING)

4 Execution Result

- When the Ping test is successful



- When the Ping test is unsuccessful



5 Click on BACK.

- You are taken back to the Test screen.

TEST (WEB SETTING)

Supplemental Explanation

●The Ping test is to test a connection to the network apparatus (router, HUB, etc.) linked with the 10/100BASE port of the Equipment. >From the Equipment, you cannot conduct the test on the PC connected to the NYC-VDSL-T16 (single unit apparatus).

●To conduct the Ping test on the PC connected to the NYC-VDSL-T16 (single unit apparatus), operate as follows at the PC connected to the 10/100BASE port of the Equipment.

①Click on 「Start」 - 「Program」 - 「MS-DOS Prompt」 of Windows.

②Enter 「Ping ＊＊＊.＊＊＊.＊＊＊.＊＊＊(IP address of the PC connected to the NYC-VDSL-T16 (single unit apparatus))」 and press the Enter key.

Notes

●The IP address and subnet mask registered with the Equipment should be identical with those of the network apparatus (router, HUB, etc.) connected to the 10/100BASE port of the Equipment. Otherwise, the Ping test does not work properly.

例) When the initial IP address of the Equipment is 「192.168.1.1,」 the IP address of the network apparatus to be Ping-tested should be「192.168.1.＊＊＊」and the subnet mask is 「255.255.255.0」

●If the PC connected to the NYC-VDSL-T16 (single unit apparatus) is connected with another unit of the NYC-VDSL-T16, the Ping test may not be conducted during the aging time of the MAC address learning function.

LINE INFORMATION (WEB SETTING)

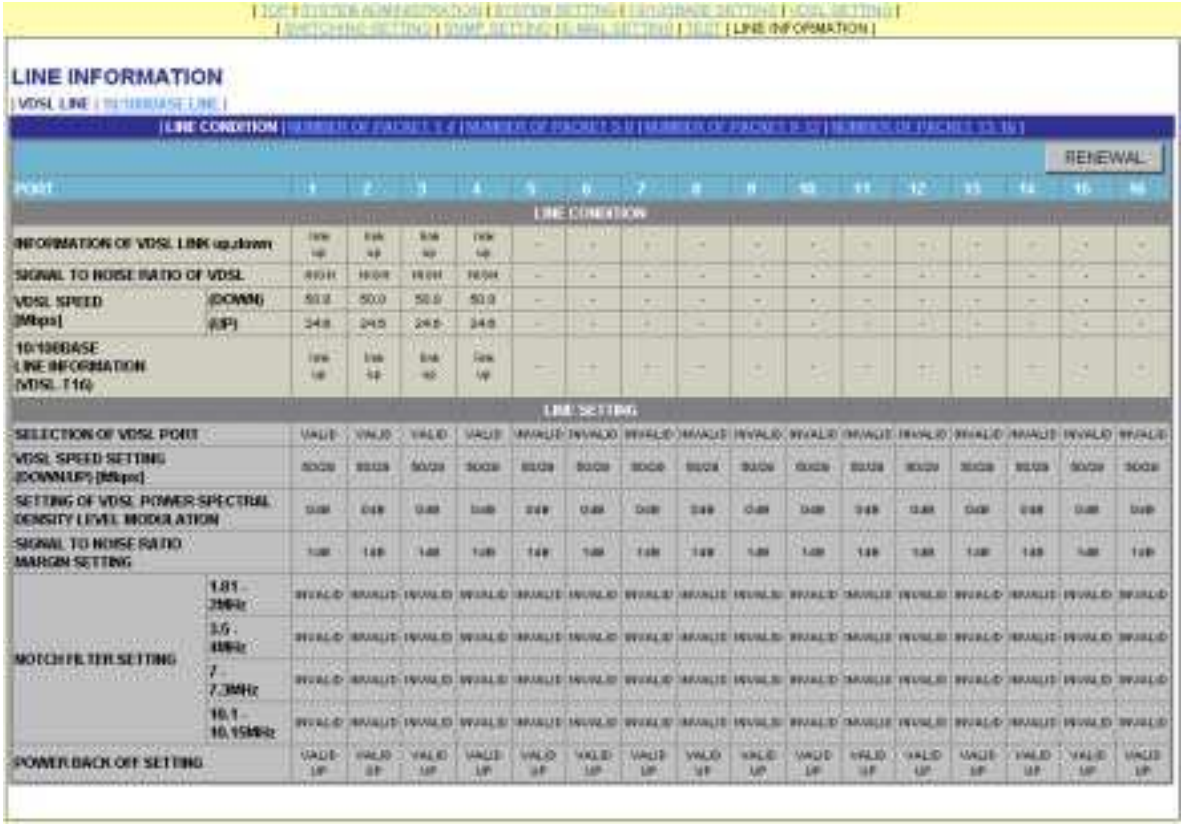
Displaying the VDSL Circuit Status and Settings

Displaying the VDSL Circuit Status and Settings

1 **Click on LINE INFORMATION in the TOP screen for Web setting.**

2 **The Circuit Status and Circuit Settings screen appears.**

- Clicking on RENEWAL displays the latest line information.
- The latest line information appears for about every 30 seconds.



Notes

- Even if you click on the RENEWAL button, no latest information appears for the ports where 「INVALID」 has been selected at Selection of VDSL Port.

LINE INFORMATION (WEB SETTING)

History Information

1 Click on SYSTEM ADMINISTRATION in the TOP screen for Web setting.

2 The History Information screen appears.

Notes

- The history information appears, starting from the latest.
- Up to 1,000 history information is saved; the rest of it is overwritten, starting from the oldest.
- If the history information appears while the ALM lamp is ON, the lamp will be turned off.

NOTIFICATION FUNCTION (WEB SETTING)

If an alarm takes place, the Equipment notifies an alarm message by mail. The following describes how to set the various data for mail.

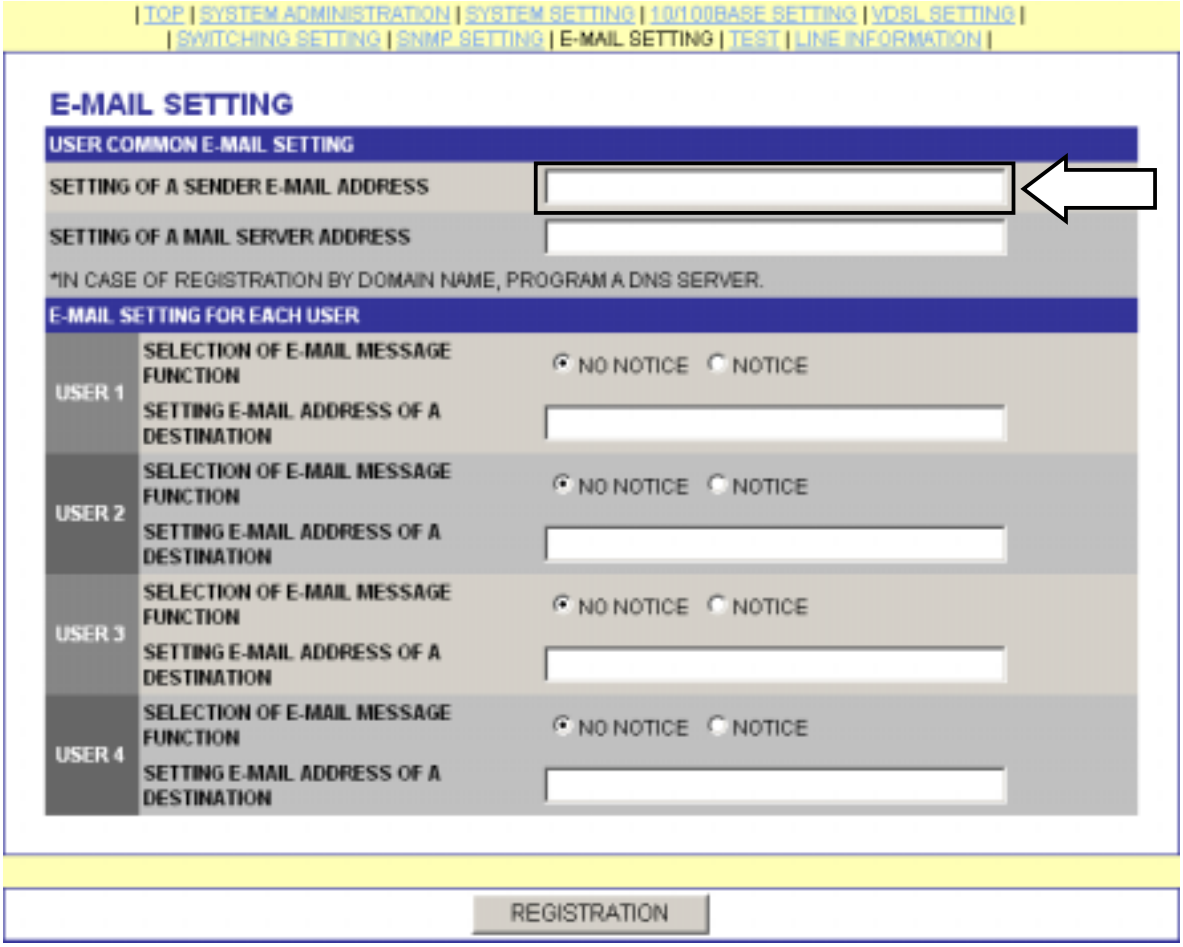
User Common E-mail Setting

User Common E-mail Setting

1 Click on E-MAIL SETTING in the TOP screen for Web setting.

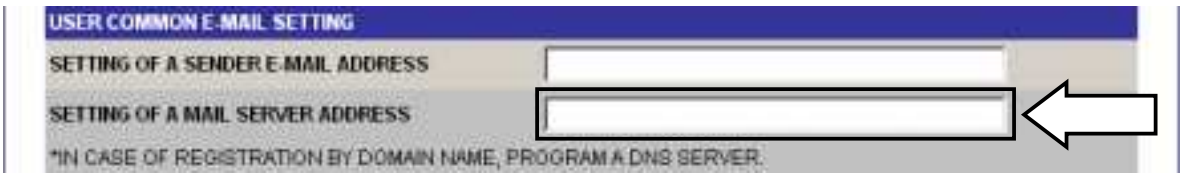
2 Enter the sender e-mail address in the [SETTING OF A SENDER E-MAIL ADDRESS] field.

- The sender e-mail address may be entered up to 64 characters in half-em alphanumerals.



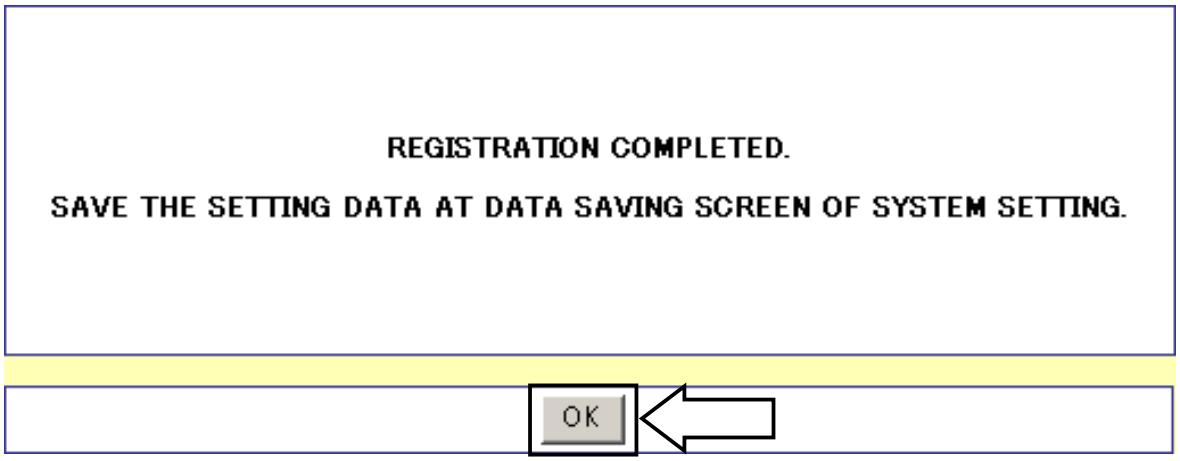
3 Enter the IP address or domain name of the mail server in the [SETTING OF A MAIL SERVER ADDRESS] field.

- The mail server address may be entered by up to 32 characters in half-em alphanumerals.



4 Click on REGISTRATION.

5 「REGISTRATION COMPLETED.」 appears and click on OK.



- You are taken back to the E-mail Setting screen.

Supplemental Explanation

- E-mail title : THE NOTICE OF VDSL ALARM
- E-mail text examples :
  - THE POWER SUPPLY OF VDSL DEVICE CHANGED INTO ON STATE.
  - THE TEMPERATURE OF VDSL DEVICE IS UNUSUAL.
  - THE TEMPERATURE OF VDSL DEVICE RETURNED TO NORMAL.
  - THE VDSL PORTx IS UNUSUAL.
  - THE VDSL PORTx RETURNED TO NORMAL.
  - A SETUP OF TIME WENT WRONG.

Notes

- When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition is restored at reboot or power failure.
- At power-on, e-mail is notified in about 5 minutes.
- If the network device connected to the upstream side is running, e-mail may not be notified.
- The date and time of sent-out e-mail are those set in the mail server.
  Note that they may differ from the actual alarm occurrence date and time.

E-mail Setting for Each User

The following describes mail setting for each user.

1 Click on E-MAIL SETTING in the TOP screen for Web setting.

2 Select［NO NOTICE］or［NOTICE］at［SELECTION OF E-MAIL MESSAGE FUNCTION］.

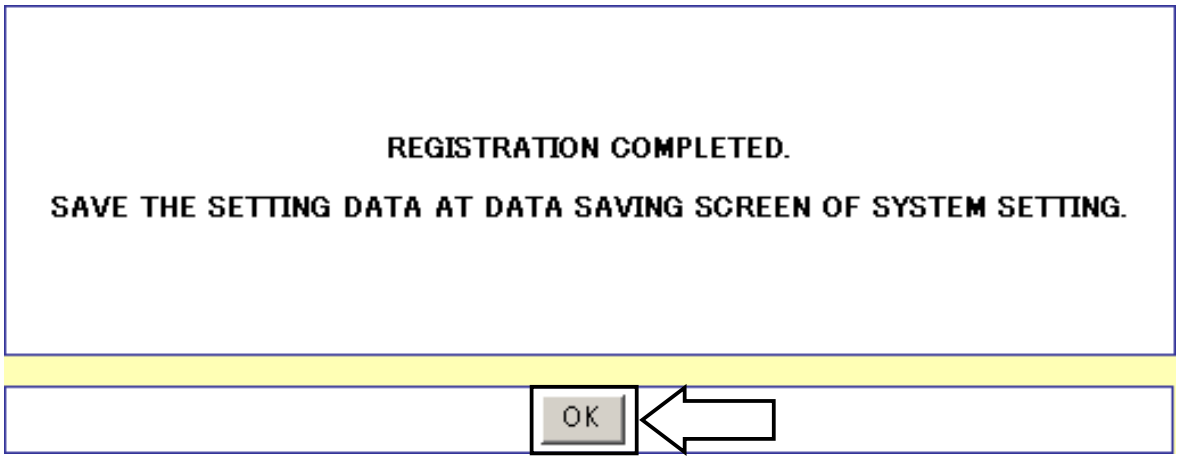
- An initial value is「NO NOTICE」.
- E-mail setting for each user may be registered for up to 4 users.

3 Enter the sender e-mail address in the［SETTING E-MAIL ADDRESS OF A DESTINATION］field.

- The destination e-mail address may be entered by up to 64 characters in half-em alphanumerals.

4 Click on REGISTRATION

5「REGISTRATION COMPLETED.」appears. Click on OK.



- You are taken back to the Mail Setting screen.

NOTIFICATION FUNCTION (WEB SETTING)

Supplemental Explanation

●E-mail title : THE NOTICE OF VDSL ALARM
●E-mail text examples :
- THE POWER SUPPLY OF VDSL DEVICE CHANGED INTO ON STATE.
- THE TEMPERATURE OF VDSL DEVICE IS UNUSUAL.
- THE TEMPERATURE OF VDSL DEVICE RETURNED TO NORMAL.
- THE VDSL PORTx IS UNUSUAL.
- THE VDSL PORTx RETURNED TO NORMAL.
- A SETUP OF TIME WENT WRONG.

Notes

●When the setting is changed, save the set value with Save Data under System Setting. If not saved, the pre-change condition is restored at reboot or power failure.
●At power-on, e-mail is notified in about 5 minutes.
●If the network device connected to the upstream side is running, e-mail may not be notified.
●The date and time of sent-out e-mail are those set in the mail server.
Note that they may differ from the actual alarm occurrence date and time.

REPLACEMENT OF FANS

The fans of the Equipment are expendable parts and need to be periodically replaced.
Replace two of them simultaneously about every 15,000 hours (about 20 months).
Also, replace them in the following cases:

- **When the fans halt or when they slow down, while the Equipment is running.**
- **When e-mail「THE TEMPERATURE OF VDSL DEVICE IS UNUSUAL」 is sent from the Equipment (e-mail setting of the Equipment is required) and the fans halt or when they slow down.**

To purchase the fans, inquire our dealer. The following shows the product name of the fans.

Product Name	Quantity
SD4010B5H	2 pcs.

⚠ WARNING

- Do not use the Equipment with its cover removed. There are high-voltage parts inside, which may induce an electric shock. When replacing the fans, particularly, be sure to disconnect the power plug from the plug socket prior to starting work.
- Utmost care should be taken, following the warnings and cautions indicated inside the Equipment.

⚠ CAUTION

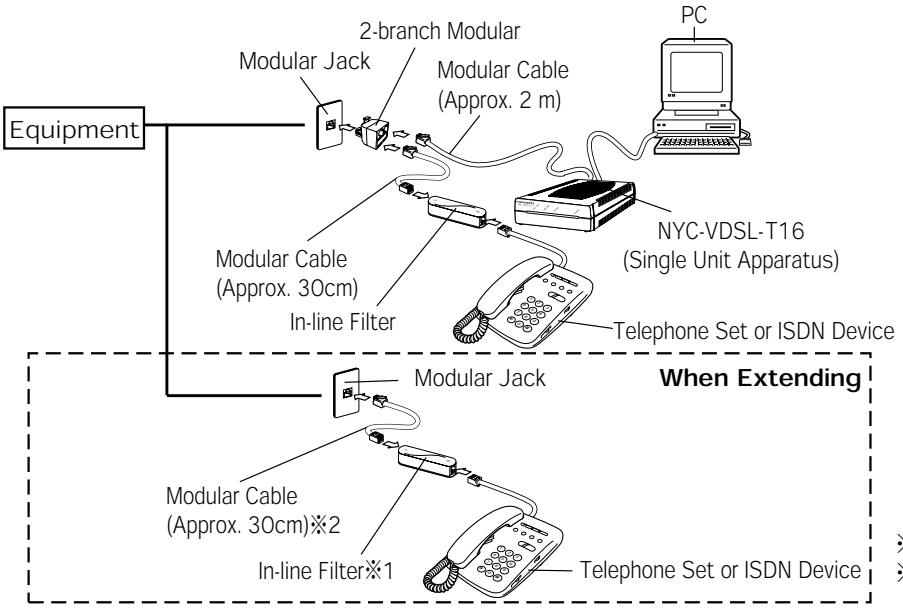
- Note that you may be injured by carelessly touching the Equipment cases (upper and lower cases) or the connector's projection.
- When replacing the fans, care should be taken not to catch the cables at the time of putting back the cover.
- When replacing the fans, do not touch the parts or pattern on the PCB, because they may be broken by static electricity, etc.
- Attach the fans properly. Neglect of this may increase vibrations or noise and reduce an internal radiation effect, causing a trouble to the Equipment.
- Do not touch any rotating part of the fan.
- Do not pull the fan's cord by force or plug in its connector by force.
- The fans are fragile mechanical parts and should be carefully handled. Do not use them when they are likely to have been given external shocks by dropping or striking.
- Prior to replacing the fans, eliminate static electricity beforehand.
- Do not touch the internal units of the concentrated apparatus.

ATTENTION

- Replace the two fans simultaneously about every 15,000 hours (about 20 months).
- After replacing the fans, turn on the Equipment and confirm that they are properly running.

OPTIONS

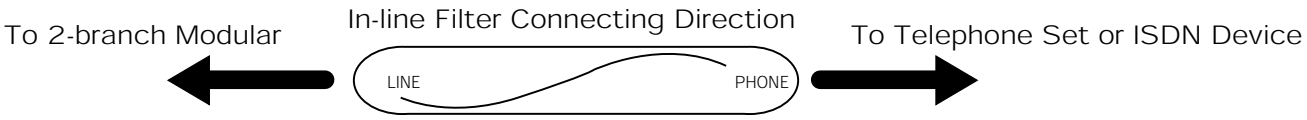
Equipment	Q'ty	Remarks
NYC-VDSL-FILTER (In-line filter)	1	Used for connecting a telephone set or ISDN device to the VDSL circuit. It is included in the NYC-VDSL-T16 (single unit apparatus) as a standard part. Purchase it separately when extending the telephone set or ISDN device or when the in-line filter is out of order.



※1. Purchase as an option.
※2. Accessory of an option.

Notes

- The in-line filter has its directionality for connection. Wrong connection may disable communication or considerably slow down the transmission speed of the VDSL circuit.



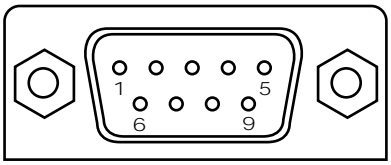
RS-232C PORT INTERFACE

When connecting the PC to the RS-232C port of the Equipment, use a RS-232C straight cable. The following describes the RS-232C port interface.

■Appearance of Connector

9-pin Connector (Male Type)

RS-232C



■Signal Lines of RS-232C Port Interface.

Pin No.	JIS	Signal Direction P C Equipment	Name	Function
Shell	(FG)		Frame Ground	Frame ground for the Equipment
1	CD		Unused	Unused
2	RD	←	Receive Data	Data sent from the Equipment to the PC
3	SD	→	Send Data	Data sent from the PC to the Equipment
4	ER	→	Data Terminal Ready	Indicates whether the PC is ready for operation. ON : Indicates that it is ready to send/receive the data. OFF : Indicates that it is not ready to send/receive the data.
5	SG		Signal Group	Gives the reference potential to the mutual connection circuit.
6	DR	←	Data Set Ready	Indicates whether the Equipment is ready for operation. ON : Indicates that it is ready to send/receive the data to/from the PC. OFF : Indicates that it is not ready to send/receive the data.
7	RS	→	Request to Send	Requests for a permission to send the data. ON : Requests for a permission to send the data. OFF : Does not request for a permission to send the data.
8	CS	←	Clear to Send	Indicates whether it is possible to send the data. ON : Capable of sending the data. OFF : Not capable of sending the data.
9	CI		Unused	Unused

■Communication Specifications

Synchronizing system	Asynchronous
Data length	8bit
Parity bits	None
Stop bits	1bit
Communication speed	115.2 kbits/sec.
Flow control	Hard flow

TROUBLESHOOTING

Fault Identification

When a fault occurs, identify a faulty section according to the procedure in Fig. 11-1. If the Equipment is determined out of order, contact our dealer.

■System Fault

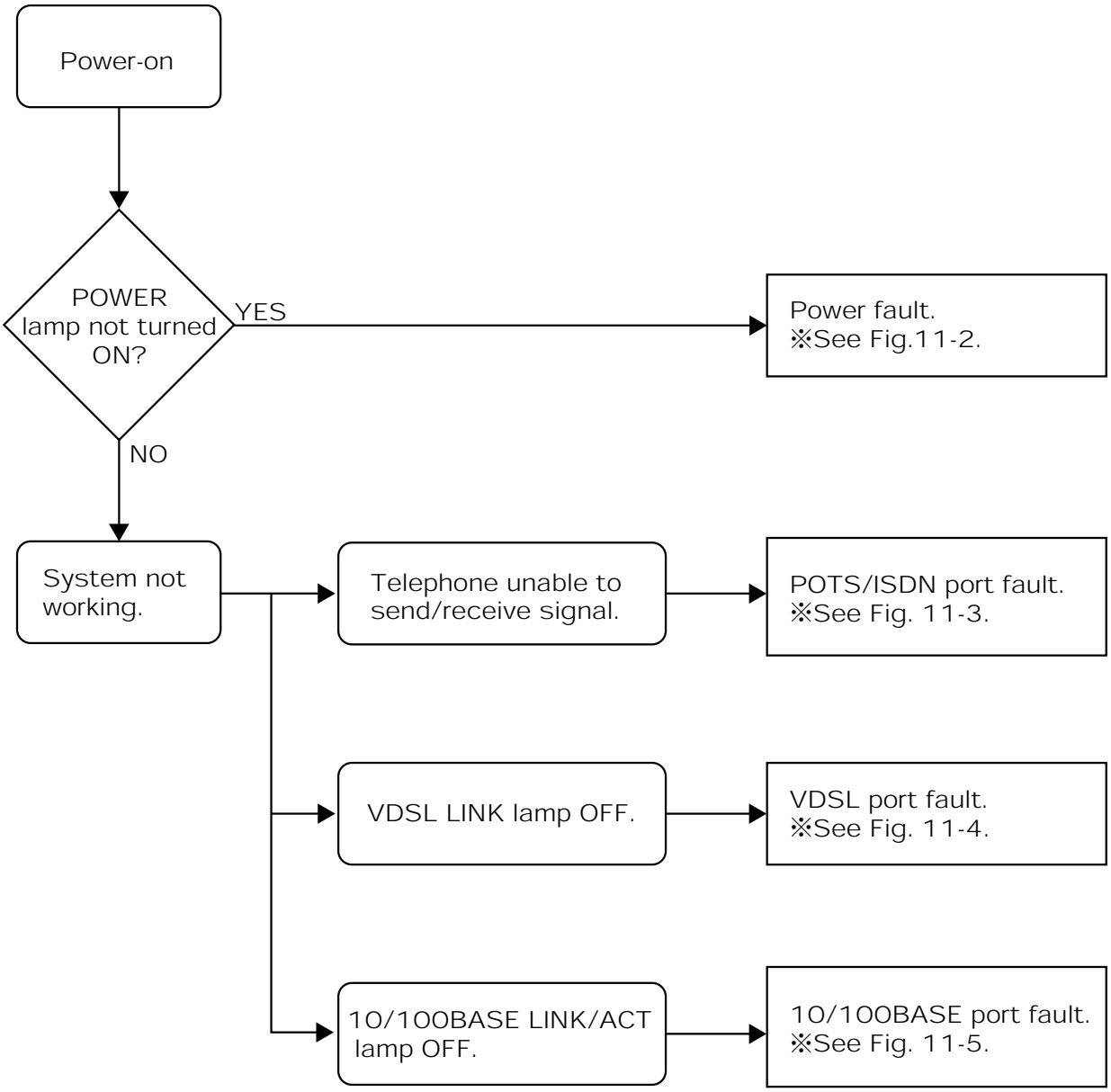


Fig. 11-1 Fault Identification Procedure

■Power Fault

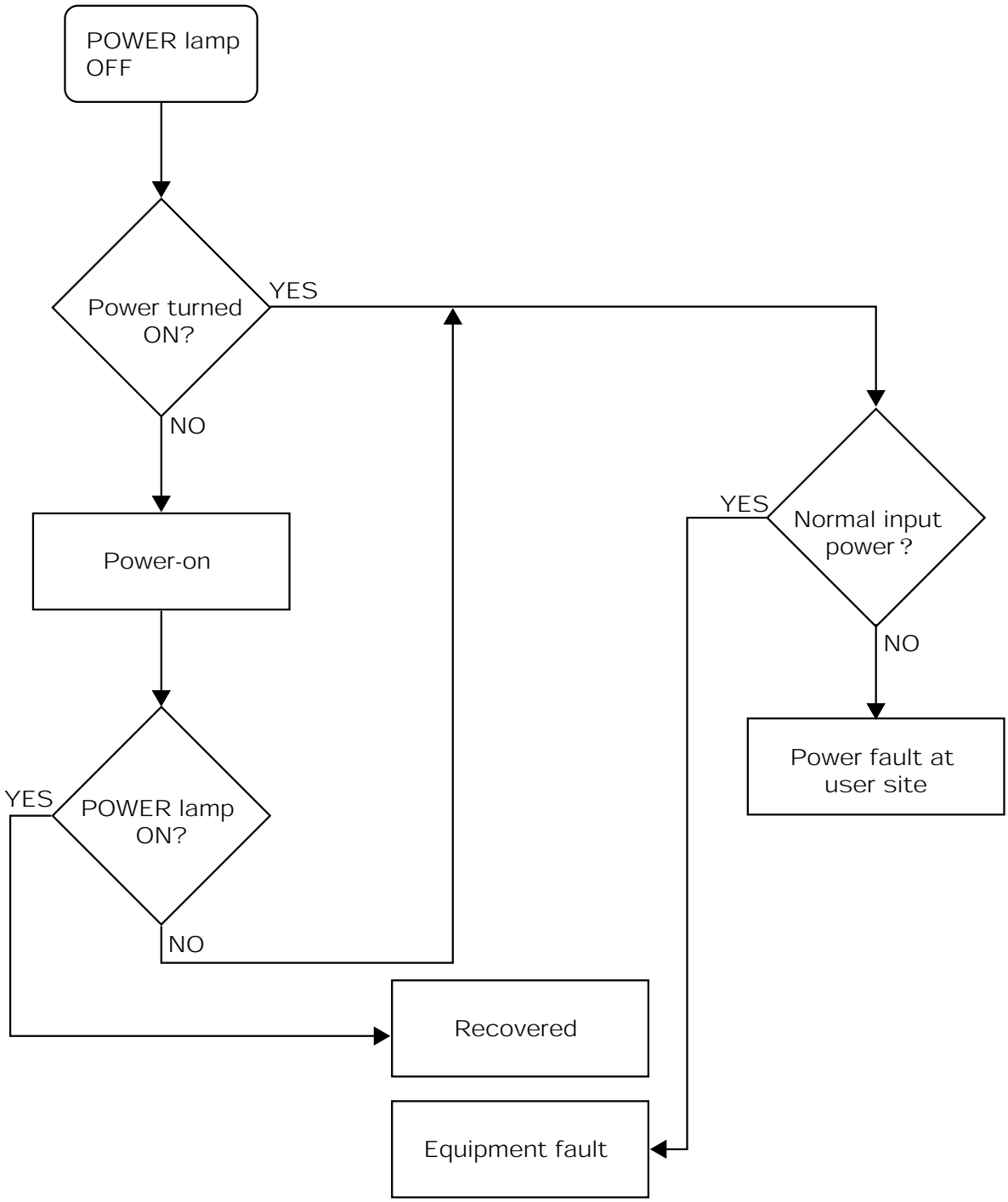


Fig. 11-2 Fault Identification Procedure

TROUBLESHOOTING

■POTS/ISDN Port Fault

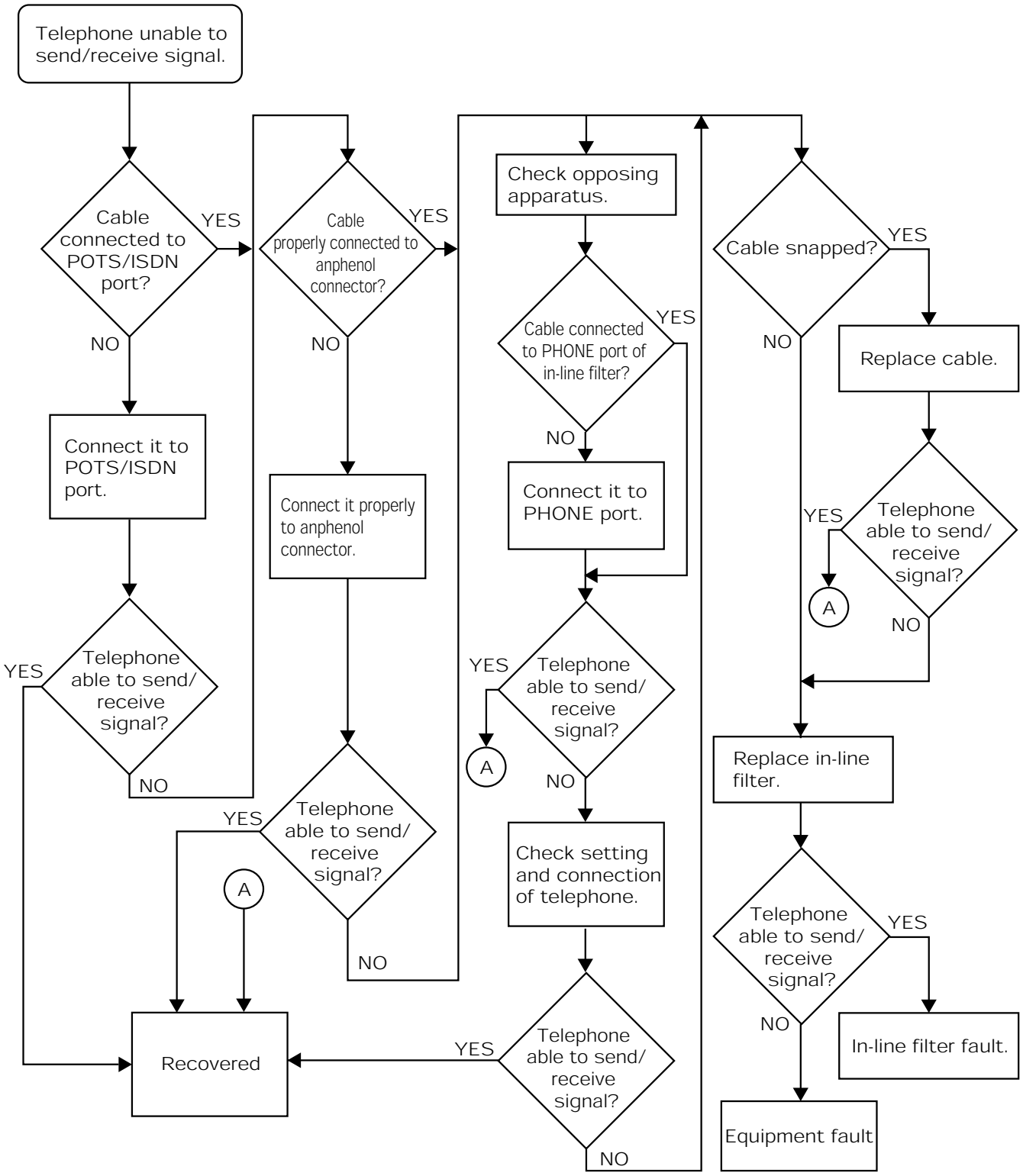


Fig. 11-3 Fault Identification Procedure

■VDSL Circuit Port Fault

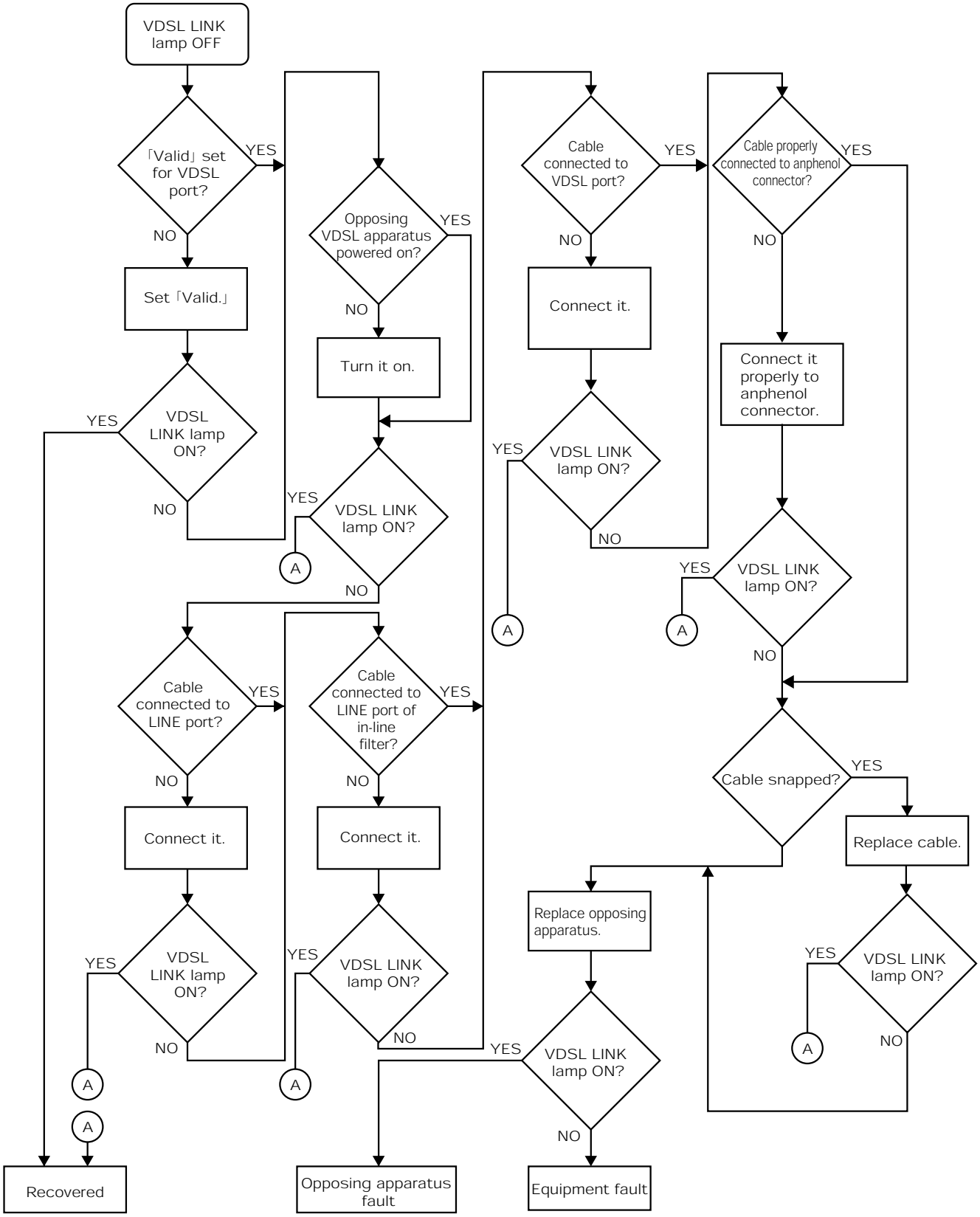


Fig. 11-4 Fault Identification Procedure

■10/100BASE Port Fault

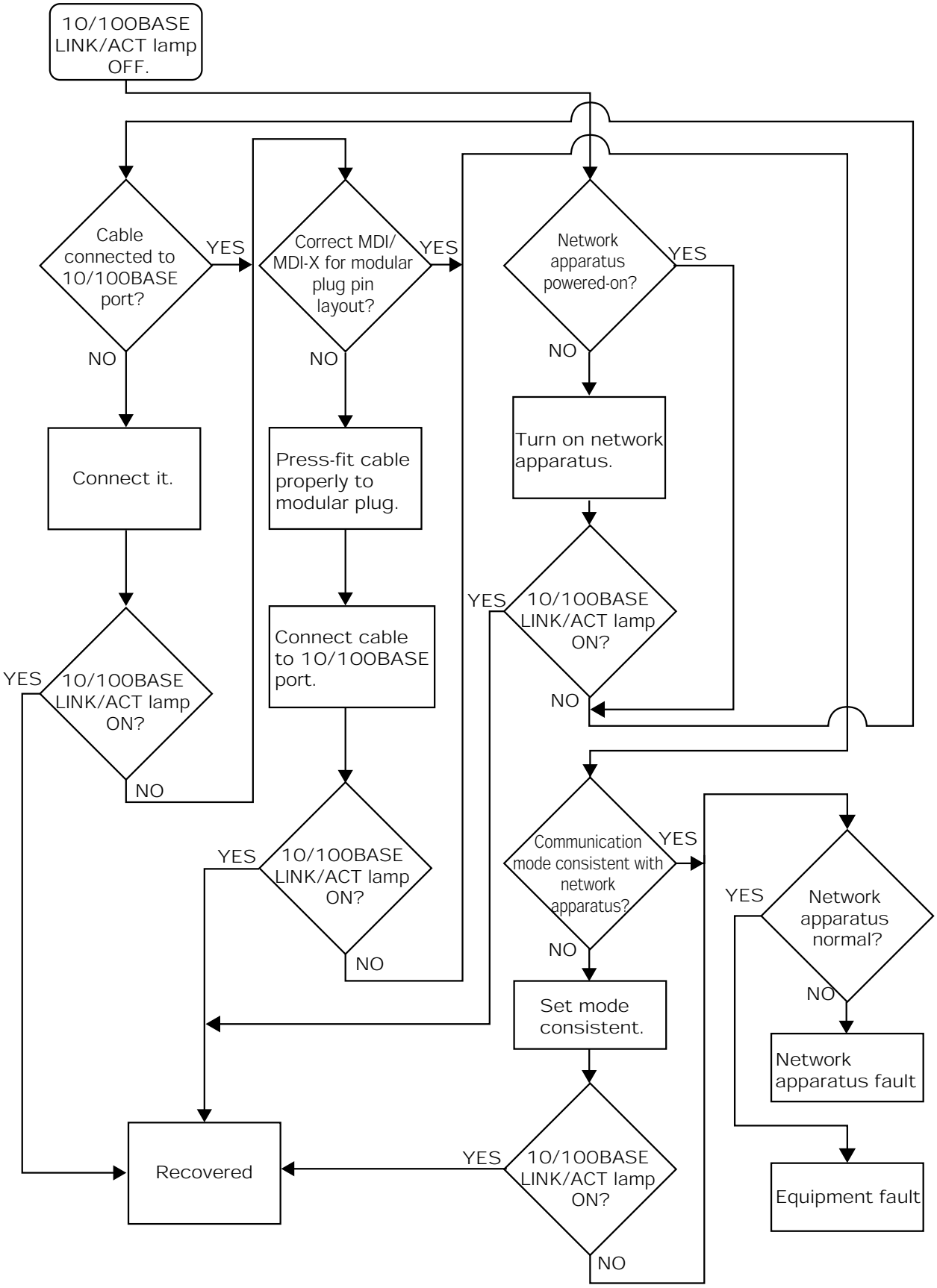


Fig. 11-5 Fault Identification Procedure

SPECIFICATION

The following lists the major specification of the Equipment.

	Item	Specification	
VDSL interface	No. of ports	16	
	Transmission speed（＊1）	50 Mbps downstream and 29 Mbps upstream at maximum	
	Transmission distance（＊2）（φ0.4mm）	Approx. 300 m ・At 50 Mbps downstream and 29 Mbps upstream ・When using a metallic balanced pair cable (Category 5) Approx. 900 m ・At 1.2 Mbps downstream and 1.3 Mbps upstream ・When using a metallic balanced pair cable (Category 5)	
	Transmission medium	Metallic balanced pair cable	
	Transmission system	QAM	
	Connector type	36-pole anphenol connector	
POTS/ISDN interface	No. of ports	16	
	Applicable ties	Analog telephone circuit Overall digital communication network basic interface L1 point	
	Transmission medium	Metallic balanced pair cable	
	Connector type	36-pole anphenol connector	
10/100BASE interface	No. of ports	4（MDI-X：2/MDI：2）	
	Applicable circuit standards	IEEE802.3（10BASE-T/100BASE-TX）	
	Transmission speed（＊1）	10Mbps	100Mbps
	Access control system	CSMA/CD	CSMA/CD
	Transmission medium	UTP Category 3 or above	UTP Category 5
	Connector type	RJ-45 (Compliant with the ISO IS8877)	
	Connector pin layout	MDI-X MDI	
Others	Power	230 V AC (50/60 Hz)	
	Power consumption	Approx. 00 W	
	Outer dimensions	Approx. 430×280×45 (mm)(Projections, etc. excluded)	
	Weight	Approx. 4.5 kg (19-inch rack fittings included)	
	Environmental conditions	Operating temperature：0～40℃ Operating humidity：30～85%RH	

＊1：The transmission speed is the theoretical speed of the circuit and differs from actual throughput.

＊2：The transmission distance may fluctuate depending on the working environment and does not assure the actual distance.

The specification is subject to change without prior notice.

About Private MIB

■Configuration of Private MIB private(4).enterprises(1).nyc(4509).vdsl16Products(2)

Status Related

- nycStatus(1) ◄---【Status Related】
  - nycStTemp(1) ◄---【Temperature Rise】
  - nycStVdslChipVer(2) ◄---【VDSL Chip Version】
  - nycStVdslTable(3) ◄---【VDSL】
    - nycStVdslEntry(1)
      - nycStVdslPort(1)
      - nycStVdslLink(2)
      - nycStVdslSpeed(3)
      - nycStVdslSNR(4)
      - nycStVdslRemoteEtherLink(5)
  - nycStEtherTable(4) ◄---【10/100BASE】
    - nycStEtherEntry(1)
      - nycStEtherPort(1)
      - nycStEtherLink(2)
      - nycStEtherSpeed(3)
  - nycStMacAddrTable(5) ◄---【Learning MAC Address】
    - nycStMacAddrEntry(1)
      - nycStMacAddrInfo(1)
      - nycStMacAddrPort(2)
      - nycStMacAddrStringInfo(3)

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- nycStSwCountTable(6) ◄---【L2 Switch Counter】
  - nycStSwCountEntry(1)
    - nycStSwCntPort(1)
    - nycStSwCntByteSdLow(2)
    - nycStSwCntByteSdHi(3)
    - nycStSwCntUncastFrmSdLow(4)
    - nycStSwCntUncastFrmSdHi(5)
    - nycStSwCntNUncastFrmSdLow(6)
    - nycStSwCntNUncastFrmSdHi(7)
    - nycStSwCntTotalByteRcvLow(8)
    - nycStSwCntTotalByteRcvHi(9)
    - nycStSwCntTotalFrmRcvLow(10)
    - nycStSwCntTotalFrmRcvHi(11)
    - nycStSwCntMcastFrmRcvLow(12)
    - nycStSwCntMcastFrmRcvHi(13)
    - nycStSwCntBcastFrmRcvLow(14)
    - nycStSwCntBcastFrmRcvHi(15)

Setting Related

- nycEstablishment(2) ←【Setting Related】
  - nycEstDsSet(1) ←【Data Setting 】
    - nycEstDsSetControl(1)
      - nycEstDsSetCtlSave(1)
      - nycEstDsSetCtlInit(2)
      - nycEstDsSetCtlReset(3)
    - nycEstDsSetTimeServer(2)
      - nycEstDsSetTimeSvPermit(1)
      - nycEstDsSetTimeSvAddr(2)
    - nycEstDsSetLogin(3)
      - nycEstDsSetLgUserAccount(1)
      - nycEstDsSetLgUserPasswd(2)
    - nycEstDsSetAccessTable(4)
      - nycEstDsSetAccessEntry(1)
        - nycEstDsSetAccessIndex(1)
        - nycEstDsSetAccessAddr(2)
        - nycEstDsSetAccessNetMask(3)
    - nycEstDsSetWebPortNumber(5)

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- nycEstVdsl(2) ←【VDSL】
  - nycEstVdslTable(1)
    - nycEstVdslEntry(1)
      - nycEstVdslPort(1)
      - nycEstVdslPortPermit(2)
      - nycEstVdslSpeed(3)
      - nycEstVdslSendLevel(4)
      - nycEstVdslSNRMargin(5)
      - nycEstVdslNotchFilter(6)
      - nycEstVdslPBOPermit(7)
      - nycEstVdslMacAddrFilter(8)
      - nycEstVdslPriority(9)
      - nycEstVdslReset(10)
  - nycEstVdslSpeedSetTime1(2)
  - nycEstVdslSpeedSetTime2(3)
- nycEstEthernet(3) ←【10/100BASE】
  - nycEstEtherIPAddr(1)
  - nycEstEtherNetMask(2)
  - nycEstEtherGateway(3)
  - nycEstEtherDNS(4)
  - nycEstEtherTable(5)
    - nycEstEtherEntry(1)
      - nycEstEtherPort(1)
      - nycEstEtherMode(2)
      - nycEstEtherFlowControl(3)

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- nycEstSnmp(4) ◄---【Snmp】
  - nycEstSnmpCommTable(1)
    - nycEstSnmpCommEntry(1)
      - nycEstSnmpCommUser(1)
      - nycEstSnmpCommPermit(2)
      - nycEstSnmpCommHost(3)
      - nycEstSnmpCommName(4)
      - nycEstSnmpCommAccess(5)
  - nycEstSnmpTrapTable(2)
    - nycEstSnmpTrapEntry(1)
      - nycEstSnmpTrapUser(1)
      - nycEstSnmpTrapPermit(2)
      - nycEstSnmpTrapHost(3)
      - nycEstSnmpTrapName(4)
- nycEstSwitch(5) ◄---【Switch】
  - nycEstSwVLANTable(1) ◄---【VLAN】
    - nycEstSwVLANEntry(1)
      - nycEstSwVLANID(1)
      - nycEstSwVLANName(2)
      - nycEstSwVLANPortPermit(3)
  - nycEstSwPVIDTable(2) ◄---【PVID】
    - nycEstSwPVIDEntry(1)
      - nycEstSwPVIDPort(1)
      - nycEstSwPVIDNumber(2)
  - nycEstSwTrunkingTable(3) ◄---【Trunking】
    - nycEstSwTrunkingEntry(1)
      - nycEstSwTrunkingGroup(1)
      - nycEstSwTrunkingPermit(2)

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- nycEstMail(6) ◄---【Mail】
  - nycEstMailSendOrgAddress(1)
  - nycEstMailServer(2)
  - nycEstMailTable(3)
    - nycEstMailEntry(1)
      - nycEstMailUser(1)
      - nycEstMailSendPermit(2)
      - nycEstMailSendForAddress(3)

Test Related

- nycTest(3) ◄---【Test Related 】
  - nycTestMail(1)
  - nycTestPing(2)
  - nycTestVdslLink(3)

■Details of Private MIB private(4).enterprises(1).nyc(4509)

ID	Object Name	syntax	access	status	Description
2	nyc16VdslProducts	Obj-Iden	NA	Manda-tory	Reference to the MIB definition on the product
2.1	nycStatus				Reference to the MIB definition on the status
2.1.1	nycStTemp	Integer	Read only		Equipment temperature status (Abnormal/Normal)
2.1.2	nycStVdslChipVer	DisStr			VDSL chip FW version
2.1.3	nycStVdslTable	Sequence	NA		VDSL port status entry list
2.1.3.1	nycStVdslEntry				VDSL port status entry
2.1.3.1.1	nycStVdslPort	Integer	Read only		Index to identify the interface (Port)
2.1.3.1.2	nycStVdslLink				VDSL circuit link status (Link Down/Link Up)
2.1.3.1.3	nycStVdslSpeed	DisStr			VDSL circuit speed
2.1.3.1.4	nycStVdslSNR	Integer			VDSL circuit S/N ratio
2.1.3.1.5	nycStVdslRemoteEtherLink				Single-unit 10/100BASE link status (Link Down/Link Up)
2.1.4	nycStEtherTable	Sequence	NA		Concentrated 10/100BASE port status entry list
2.1.4.1	nycStEtherEntry				Concentrated 10/100BASE port status entry
2.1.4.1.1	nycStEtherPort	Integer	Read only		Index to identify the interface (Port)
2.1.4.1.2	nycStEtherLink				Concentrated 10/100BASE link status (Link Down/Link Up)
2.1.4.1.3	nycStEtherSpeed				Concentrated 10/100BASE speed
2.1.5	nycStMacAddrTable	Sequence	NA		Learning MAC address information entry list
2.1.5.1	nycStMacAddrEntry				Learning MAC address information entry
2.1.5.1.1	nycStMacAddrInfo	PhyAddr	Read only		Learning MAC address information (6 bytes)
2.1.5.1.2	nycStMacAddrPort	Integer			Learning MAC address port number
2.1.5.1.3	nycStMacAddrStringInfo	DisStr			Learning MAC address information (Expression in characters)
2.1.6	nycStSwCountTable	Sequence	NA		Data transmit/receive counter entry list for each port
2.1.6.1	nycStSwCountEntry				Data transmit/receive counter entry for each port
2.1.6.1.1	nycStSwCntPort	Integer	Read only		Index to identify the interface (Port)
2.1.6.1.2	nycStSwCntByteSdLow	counter			Number of sent bytes (Low counter)
2.1.6.1.3	nycStSwCntByteSdHi				Number of sent bytes (Hi counter)
2.1.6.1.4	nycStSwCntUncastFrmSdLow				Number of sent unicast frames (Low counter)
2.1.6.1.5	nycStSwCntUncastFrmSdHi				Number of sent unicast frames (Hi counter)
2.1.6.1.6	nycStSwCntNUncastFrmSdLow				Number of sent non-unicast frames (Low counter)
2.1.6.1.7	nycStSwCntNUncastFrmSdHi				Number of sent non-unicast frames (Hi counter)
2.1.6.1.8	nycStSwCntTotalByteRcvLow				Number of received total bytes (Low counter)
2.1.6.1.9	nycStSwCntTotalByteRcvHi				Number of received total bytes (Hi counter)
2.1.6.1.10	nycStSwCntTotalFrmRcvLow				Number of received total frames (Low counter)
2.1.6.1.11	nycStSwCntTotalFrmRcvHi				Number of received total frames (Hi counter)
2.1.6.1.12	nycStSwCntMcastFrmRcvLow				Number of received multicast frames (Low counter)
2.1.6.1.13	nycStSwCntMcastFrmRcvHi				Number of received multicast frames (Hi counter)
2.1.6.1.14	nycStSwCntBcastFrmRcvLow				Number of received broadcast frames (Low counter)
2.1.6.1.15	nycStSwCntBcastFrmRcvHi				Number of received broadcast frames (Hi counter)

[Obj-Iden]→Object-Identifier,[DisStr]→DisplayString,[NA]→Not-Accessible

APPENDIXES

ID	Object	syntax	access	status	description
2.2	nycEstablishment	Obj-Iden	NA	Manda-tory	Reference to the MIB definition on setting
2.2.1	nycEstDsSet				Reference to the MIB definition on data setting
2.2.1.1	nycEstDsSetControl				Reference to the MIB definition on control
2.2.1.1.1	nycEstDsSetCtlSav e	Integer	Read write		Saves the data by setting "1".
2.2.1.1.2	nycEstDsSetCtlInit				Initializes the data by setting "1".
2.2.1.1.3	nycEstDsSetCtlReset				Reboots by setting "1".
2.2.1.2	nycEstDsSetTimeServer	Obj-Iden	NA		Reference to the MIB definition on the time server.
2.2.1.2.1	nycEstDsSetTimeSvPermit	Integer	Read only		Time server selection (Enable/Disable)
2.2.1.2.2	nycEstDsSetTimeSvAddr	DisStr			Time server address
2.2.1.3	nycEstDsSetLogin	Obj-Iden	NA		Reference to the MIB definition on log-in
2.2.1.3.1	nycEstDsSetLgUserAccount	DisStr	Read only		General users' account
2.2.1.3.2	nycEstDsSetLgUserPasswd				General users' password
2.2.1.4	nycEstDsSetAccsessTable	Sequence	NA		Access address control entry list
2.2.1.4.1	nycEstDsSetAccsessEntry				Access address control entry
2.2.1.4.1.1	nycEstDsSetAccsessIndex	Integer	Read only		Index to identify the interface
2.2.1.4.1.2	nycEstDsSetAccsessAddr	IpAddr			Access enabling address
2.2.1.4.1.3	nycEstDsSetAccsessNetMask				Subnet mask for the address
2.2.1.5	nycEstDsSetWebPortNumber	Integer			Web port number
2.2.2	nycEstVdsl	Obj-Iden	NA		Reference to the MIB definition on VDSL setting
2.2.2.1	nycEstVdslTable	Sequence			VDSL port setting related entry list
2.2.2.1.1	nycEstVdslEntry				VDSL port setting related entry
2.2.2.1.1.1	nycEstVdslPort	Integer	Read only		Index to identify the interface (Port)
2.2.2.1.1.2	nycEstVdslPortPermit		Read write		Port selection (Enable/Disable)
2.2.2.1.1.3	nycEstVdslSpeed		Read only		Speed setting
2.2.2.1.1.4	nycEstVdslSendLevel				Sending level setting
2.2.2.1.1.5	nycEstVdslSNRMargin				S/N ratio margin setting
2.2.2.1.1.6	nycEstVdslNotchFilter	DisStr			Notch filter setting
2.2.2.1.1.7	nycEstVdslPBOPermit	Integer			Power back-off setting (Enable/Disable)
2.2.2.1.1.8	nycEstVdslMacAddrFilter				Number of learnable MAC addresses
2.2.2.1.1.9	nycEstVdslPriority				Priority control
2.2.2.1.1.10	nycEstVdslReset		Read write		Resets the VDSL chip by setting "1".
2.2.2.2	nycEstVdslSpeedSetTime1	DisStr	Read only		Time-1 to re-set the speed at low-rate speed
2.2.2.3	nycEstVdslSpeedSetTime2				Time-2 to re-set the speed at low-rate speed
2.2.3	nycEstEthernet	Obj-Iden	NA		Reference to the MIB definition on concentrated 10/100BASE setting
2.2.3.1	nycEstEtherIPAddr	IpAddr	Read only		IP address
2.2.3.2	nycEstEtherNetMask				Subnet mask
2.2.3.3	nycEstEtherGateway				Default gateway
2.2.3.4	nycEstEtherDNS				DNS server
2.2.3.5	nycEstEtherTable	Sequence	NA		Concentrated 10/100BASE setting related entry list
2.2.3.5.1	nycEstEtherEntry				Concentrated 10/100BASE setting related entry
2.2.3.5.1.1	nycEstEtherPort	Integer	Read only		Index to identify the interface (Port)
2.2.3.5.1.2	nycEstEtherMode				Communication mode (Automatic/Manual (Full/Half duplex 10/100BASE))
2.2.3.5.1.3	nycEstEtherFlowControl				Flow control selection (Enable/Disable)

ID	Object	syntax	access	status	description
2.2.4	nycEstSnmp	Obj-Iden	NA	Manda-tory	Reference to the MIB definition on SNMP setting
2.2.4.1	nycEstSnmpCommTable	Sequence			SNMP client setting related entry list
2.2.4.1.1	nycEstSnmpCommEntry				SNMP client setting related entry
2.2.4.1.1.1	nycEstSnmpCommUser	Integer	Read only		Index to identify the interface (User)
2.2.4.1.1.2	nycEstSnmpCommPermit				SNMP client enable/disable selection (Enable/Disable)
2.2.4.1.1.3	nycEstSnmpCommHost	IpAddr			SNMP client host address
2.2.4.1.1.4	nycEstSnmpCommName	DisStr			SNMP client community name
2.2.4.1.1.5	nycEstSnmpCommAccess	Integer			SNMP client access to the MIB (Read only/Read-write)
2.2.4.2	nycEstSnmpTrapTable	Sequence	NA		SNMP trap notification setting related entry list
2.2.4.2.1	nycEstSnmpTrapEntry				SNMP trap notification setting related entry
2.2.4.2.1.1	nycEstSnmpTrapUser	Integer	Read only		Index to identify the interface (User)
2.2.4.2.1.2	nycEstSnmpTrapPermit				Trap notification enable/disable selection (Enable/Disable)
2.2.4.2.1.3	nycEstSnmpTrapHost	IpAddr			Trap notification destination
2.2.4.2.1.4	nycEstSnmpTrapName	DisStr			Community name for trap notification
2.2.5	nycEstSwitch	Obj-Iden	NA		Reference to the MIB definition on switch setting
2.2.5.1	nycEstSwVLANTable	Sequence			VLAN setting related entry list
2.2.5.1.1	nycEstSwVLANEntry				VLAN setting related entry
2.2.5.1.1.1	nycEstSwVLANID	Integer	Read only		Index to identify the interface (VLAN ID)
2.2.5.1.1.2	nycEstSwVLANName	DisStr			VLAN NAME
2.2.5.1.1.3	nycEstSwVLANPortPermit				Tag port setting
2.2.5.2	nycEstSwPVIDTable	Sequence	NA		PVID setting related entry list
2.2.5.2.1	nycEstSwPVIDEntry				PVID setting related entry
2.2.5.2.1.1	nycEstSwPVIDPort	Integer	Read only		Index to identify the interface (Port)
2.2.5.2.1.2	nycEstSwPVIDNumber				PVID number
2.2.5.3	nycEstSwTrunkingTable	Sequence	NA		Trunking setting related entry list
2.2.5.3.1	nycEstSwTrunkingEntry				Trunking setting related entry
2.2.5.3.1.1	nycEstSwTrunkingGroup	Integer	Read only		Index to identify the interface (Group)
2.2.5.3.1.2	nycEstSwTrunkingPermit	DisStr			Trunking setting data
2.2.6	nycEstMail	Obj-Iden	NA		Reference to the MIB definition on mail setting
2.2.6.1	nycEstMailSendOrgAddress	DisStr	Read only		Sender mail address
2.2.6.2	nycEstMailServer				Mail server
2.2.6.3	nycEstMailTable	Sequence	NA		Mail setting related entry list
2.2.6.3.1	nycEstMailEntry				Mail setting related entry
2.2.6.3.1.1	nycEstMailUser	Integer	Read only		Index to identify the interface (User)
2.2.6.3.1.2	nycEstMailSendPermit				Mail sending selection (Enable/Disable)
2.2.6.3.1.3	nycEstMailSendForAddress	DisStr			Sender mail address

[Obj-Iden]→Object-Identifier,[DisStr]→DisplayString,[NA]→Not-Accessible

ID	Object	syntax	access	status	description
2.3	nycTest	Obj-Iden	NA	Manda-tory	Reference to the MIB definition on the test
2.3.1	nycTestMail	Integer	Read write		Conducts a mail sending test by setting "1" to "4".
2.3.2	nycTestPing	DisStr			Conducts a Pin test by setting the IP address.
2.3.3	nycTestVdslLink	Integer			Checks a terminal connection by setting "1" to "17" (17 for all ports).

[Obj-Iden]→Object-Identifier,[DisStr]→DisplayString,[NA]→Not-Accessible

Where to Contact for Service and Maintenance

●About Maintenance Service

See the following for where to contact for service and maintenance.

Dealer Name