

RTX810 Manual

Before You Begin

Thank you for purchasing this product.

This product is a Gigabit access VPN router designed for small to medium-sized enterprise networks.

Package Contents

- LAN cable (1)
- *Before You Begin*
- CD-ROM (1)
- Warranty card (see page 21 of *Before You Begin*)

Conventions Used in This Manual

Abbreviations

In this manual, company names and product names are abbreviated as follows:

- Yamaha RTX810: this product
- Microsoft® Windows®: Windows
- Microsoft® Windows® 7: Windows 7
- Microsoft® Windows Vista®: Windows Vista
- Microsoft® Windows® XP: Windows XP
- 10BASE-T/100BASE-TX/1000BASE-T cables: LAN cables
- Nippon Telegraph and Telephone East Corporation: NTT East
- Nippon Telegraph and Telephone West Corporation: NTT West

About Configuration Examples

The IP addresses, domain names, URLs, and other configuration examples shown in this manual are provided for illustrative purposes only.

When performing actual configuration, be sure to use the values specified by your Internet service provider.

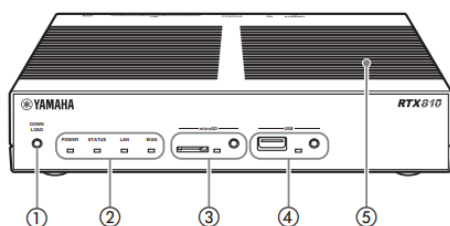
About Detailed Technical Information

To make full use of this product, detailed knowledge of the Internet and networking may be required.

The manuals included with this product do not explain these topics in detail. For more information, please refer to commercially available reference books or other technical resources.

Names and Functions of Each Part

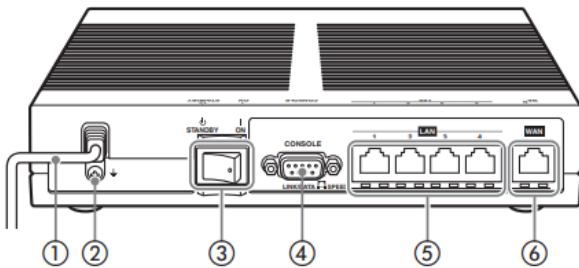
前面／上面



1. **DOWNLOAD Button** : If the product is configured to allow revision updates using the DOWNLOAD button, press and hold this button for three seconds to start the firmware revision update.
2. **Indicators (LEDs)** : These indicators show the operating status of this product. For details on the relationship between the indicator status and product operation, refer to “Front Panel Indicator Status” (next page).
 - **POWER**: Indicates the power status of this product.
 - **STATUS**: Indicates whether communication with connected devices is unavailable.
 - **LAN**: Indicates the usage status of the LAN ports.
 - **WAN**: Indicates the usage status of the WAN ports.
3. **microSD Button and Slot** : By using a commercially available microSD card, you can copy configuration files (pages 131 and 142), save logs (page 141), and perform firmware revision updates (page 138). When removing a microSD card, press and hold the microSD button for two seconds to disconnect it, and then remove the microSD card. When reinserting a microSD card, first remove the card completely, and then insert it again.
4. **USB Button and Port** : By connecting a commercially available USB flash drive, you can copy configuration files (pages 131 and 142), save logs (page 141), and perform firmware revision updates (page 138). You can also connect a USB data communication device to use a 3G mobile network connection (page 52). When removing a USB device, press and hold the USB button for two seconds to disconnect it, and then remove the USB device.

Part Names and Functions (Continued)

背面



1. Power Cord : Connects the product to an AC power source.
2. Ground Terminal : Connect a ground wire to this terminal.
3. POWER Switch : Switches the power of this product between ON and STANDBY.
4. CONSOLE Port : Used to configure the product from a console. Connect this port to the RS-232C (serial) port of a computer. For details, refer to “Configuring via the CONSOLE Port” (page 129).
5. LAN Ports : Connect these ports to a computer’s LAN port or a hub using LAN cables.
Each LAN port has a LINK indicator (left) and a SPEED indicator (right) located below it.
 - LINK indicator:
Off (link down), On (link established), or Blinking (data transfer in progress), depending on the link status.
 - SPEED indicator:
Off (100BASE-TX / 10BASE-T) or On (1000BASE-T), depending on the connection speed.
6. WAN Port : Connect this port to a cable modem, ADSL modem, or ONU using a LAN cable.

Preparation Workflow

1. Connect your computer and network lines to this product, and turn on the power.
2. Open the 「かんたん設定ページ」.
3. Set a password for this product.
4. Set the date and time of this product.
5. Configure the LAN-side IP address of this product.
6. Change the IP address of computers on the LAN.

7: Configure Network Connections

The required configuration procedures vary depending on the connection method.

For details, refer to “Choosing How to Connect to the Internet.”

Before You Begin, Prepare the Following Items

LAN Cables

Prepare LAN cables according to the number of computers and the required distance.

Hub

You can connect up to four computers directly to the LAN ports of this product.

If you need to connect five or more computers, prepare a hub (or switching hub) that supports 10BASE-T, 100BASE-TX, or 1000BASE-T.

Network Information for Installing This Product

Decide in advance the IP address to be assigned to the LAN side of this product.

Note

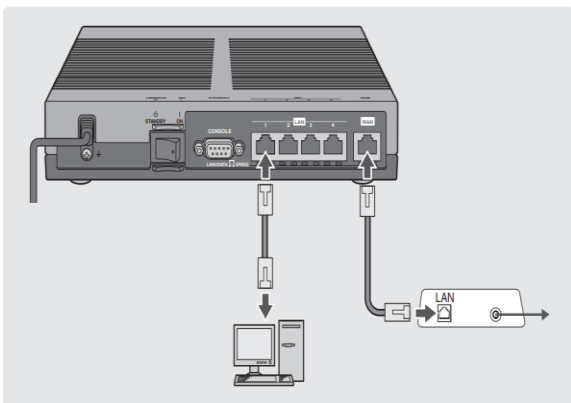
If you connect this product to a network that uses a DHCP server, you must disable the DHCP server function of this product. For details, consult your network administrator.

Installation Precautions

When installing this product in a 19-inch rack, use the optional YMORACK1U Rack Mount Kit.

When mounting this product on a wall, use the optional YWK-1200B Wall Mount Kit.

Connecting the Devices



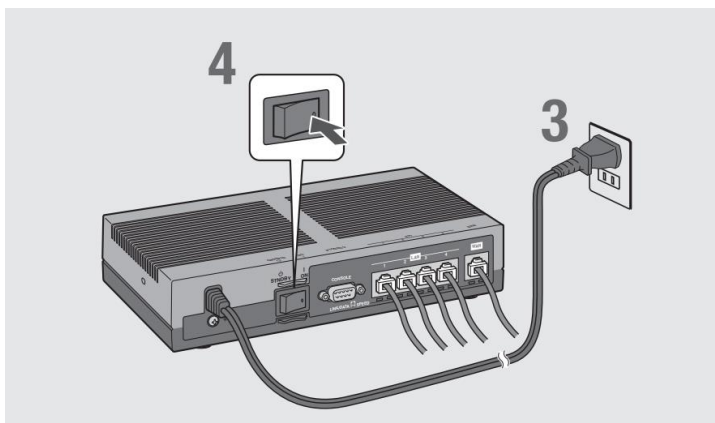
1. Connect the LAN port of your computer to a LAN port of this product using a LAN cable.
2. Connect the LAN port of a cable modem, ADSL modem, or ONU to the WAN port of this product using a LAN cable. Also refer to the documentation provided by your Internet service provider and the manuals for the ADSL modem or ONU.

Note

If you switch from an environment where a cable modem, ADSL modem, or ONU is directly connected to a computer, or if you replace an existing router with this product, the connection may not function correctly due to issues such as failure to obtain an IP address.

In some cases, after changing the network environment, additional configuration or a reset operation may be required, or you may need to wait for a specified period of time (for example, 20 minutes or longer).

For details, follow the instructions provided in the relevant device manuals.



3. Connect the power cord of this product to an AC outlet.
4. Set the POWER switch of this product to ON to turn on the power. After blinking several times, the POWER indicator will light steadily.
5. Turn on the power of the computer(s) and hub(s). If the LAN and WAN indicators light or blink, the connection is operating normally.

If the LAN indicator does not light or blink:

- Check that the LAN cable is properly connected and that the power of the computer(s) and hub(s) is turned on.
- If all computers and hubs connected to this product are powered off, the LAN indicator will not light or blink.

If the WAN indicator does not light or blink:

- Check that this product is properly connected to the ADSL modem (or cable modem or ONU) and that the power of the ADSL modem (or cable modem or ONU) is turned on.

That's it for connecting this product!

Let's move on to the next setup steps. Next Page.

Open the 「かんたん設定ページ」

To change the settings of this product, open the 「かんたん設定ページ」 from a web browser on a computer connected to the product.

To open the 「かんたん設定ページ」, follow the steps below.

Note

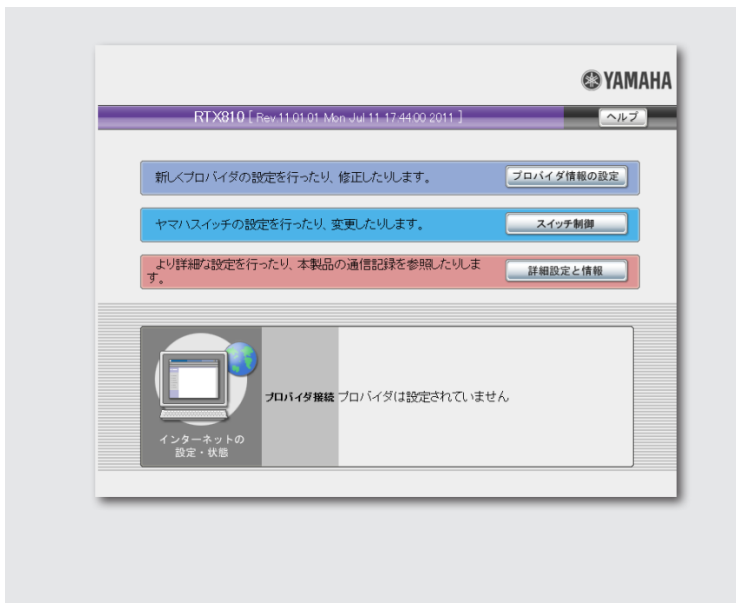
- To use the 「かんたん設定ページ」, a Windows version of Internet Explorer 8 or later is required.
- In this manual, screenshots and explanations are based on Windows 7 and Internet Explorer 9.
Screens may look slightly different in other environments, but the 操作方法 is the same.

Hint

You can also perform more advanced configuration by entering commands from the console using TELNET software (console commands).

For information on how to connect to this product using TELNET software, see page 126.

For a list of available commands, refer to the Command Reference (included on the supplied CD-ROM).



1. Make sure that this product is powered on.
2. Start a web browser on your computer.
3. Enter <http://192.168.100.1/> in the address bar using half-width alphanumeric characters, and then press Enter.
The Windows Security screen will appear.
4. Leave the User name and Password fields blank, and click OK.
The top page of the 「かんたん設定ページ」 will be displayed.

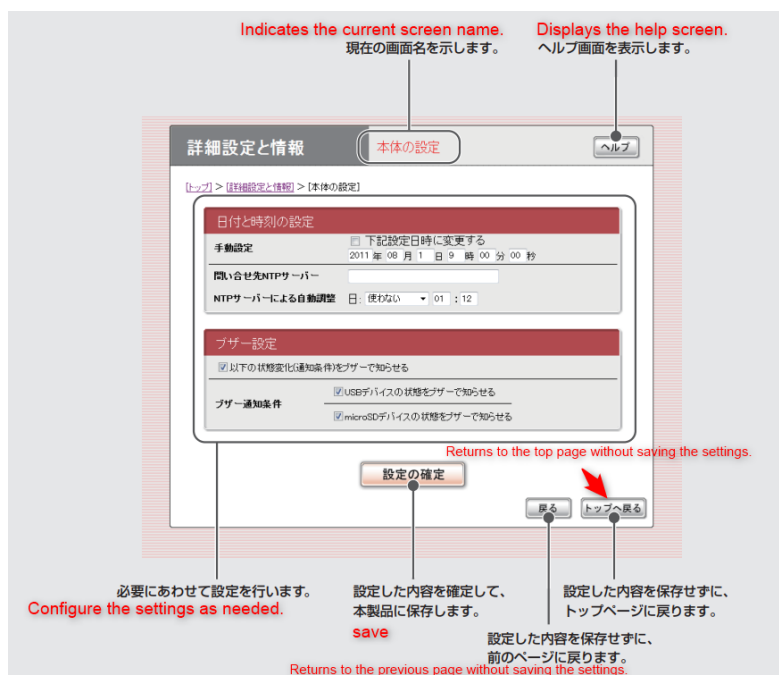
Note

If a user name or password has been set, enter the configured user name and password.

If the top page of the 「かんたん設定ページ」 does not appear:

Refer to "Unable to Configure Using the 「かんたん設定ページ」" (page 150).

How to Use the 「かんたん設定ページ」



Set a Password

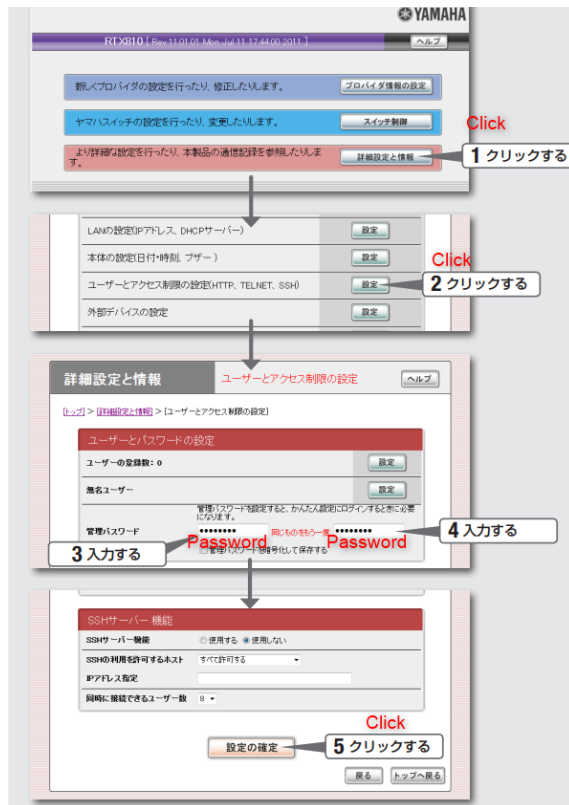
By default, no password is set on this product.

For better security, we recommend setting a password.

Once a password is set, you will be required to enter it when accessing this product, making it much harder for unauthorized users to change the settings.

This product uses two types of passwords: an Administrator Password and a Login Password.

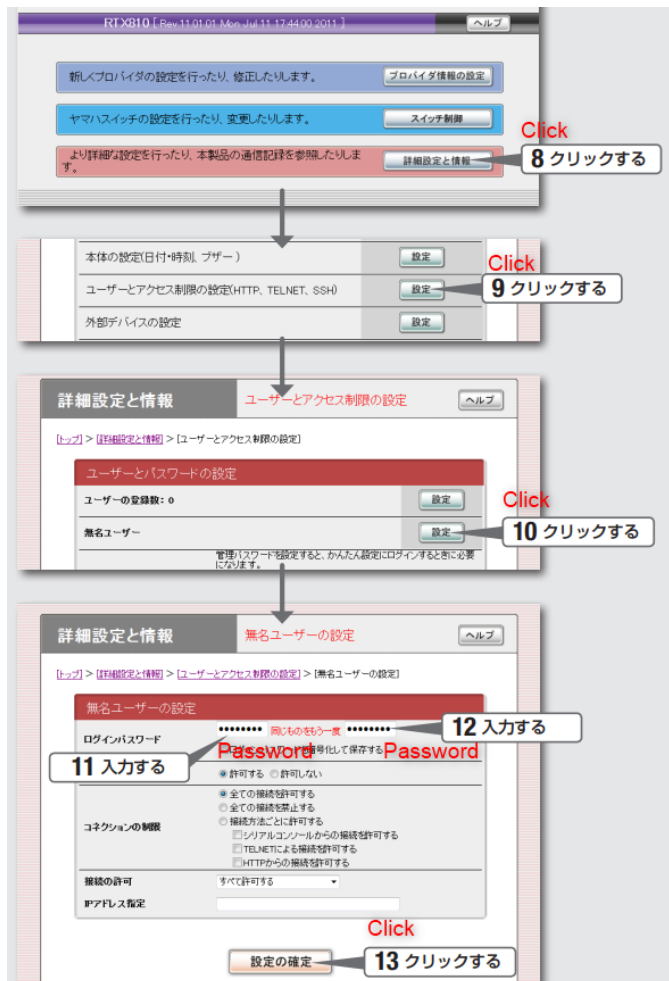
First, set the Administrator Password, and then set the Login Password.



1. On the top page of the 「かんたん設定ページ」, click 「詳細設定と情報」.
The 「詳細設定と情報」 screen appears.
2. Under 「ユーザーとアクセス制限の設定 (HTTP、TELNET、SSH)」, click 「設定」.
The 「ユーザーとアクセス制限の設定」 screen appears.
3. In the 「管理パスワード」 field, enter a password for this device.
The characters you enter will be shown as ●.
4. Re-enter the same password to confirm it.
5. Click 「設定の確定」.
The password is applied, and a confirmation screen appears.
6. Click 「トップへ戻る」.
The Windows Security screen appears.
7. Enter the device password (the one you set in step 3) in the 「パスワード」 field, then click 「OK」.
You will return to the top page of the 「かんたん設定ページ」.

Next, set the ログインパスワード for this device.

There is no need to enter anything in the 「ユーザー名」 field.



8. On the top page of the 「かんたん設定ページ」, click 「詳細設定と情報」.
The 「詳細設定と情報」 screen appears.
9. Under 「ユーザーとアクセス制限の設定 (HTTP、TELNET、SSH)」, click 「設定」.
The 「ユーザーとアクセス制限の設定」 screen appears.
10. In the 「無名ユーザー」 section, click 「設定」.
The 「無名ユーザーの設定」 screen appears.
11. In the 「ログインパスワード」 field, enter the password for login.
The characters you enter will be shown as ●.
12. Re-enter the same login password to confirm it.
13. Click 「設定の確認」.
The password is applied, and a confirmation screen appears.
14. Click 「トップへ戻る」.
You will return to the top page of the 「かんたん設定ページ」.

Setting the Date and Time

1. On the top page of the 「かんたん設定ページ」, click 「詳細設定と情報」.
The 「詳細設定と情報」 screen will be displayed.
2. Under 「本体の設定 (日付・時刻、ブザー)」, click 「設定」.
The 「本体の設定」 screen will be displayed.

3. In the 「日付と時刻の設定」 section, check 「下記設定日時に変更する」.

4. Enter the date and time.

Tip: For more accurate time adjustment, enter a time slightly ahead and click 「設定の確定」 at the exact time signal.

5. Click 「設定の確定」.

A confirmation screen will be displayed.

6. Click 「トップへ戻る」.

You will return to the top page of the 「かんたん設定ページ」.

Automatically Adjusting the Time

You can automatically synchronize the device time using an Internet NTP server (time distribution server).

- Depending on the security settings of this device, it may not be possible to synchronize time using an NTP server from either this device or computers on the LAN.

When using an external NTP server, change the filter settings (see page 103).

- If the firewall security level is set to レベル 4 または 5 (静的セキュリティフィルタ), response packets from the NTP server will be discarded and time synchronization will not be possible.

In this case, set the firewall security level to レベル 6 または 7 (動的セキュリティフィルタ) (see page 103).

Configuring the LAN-side IP Address

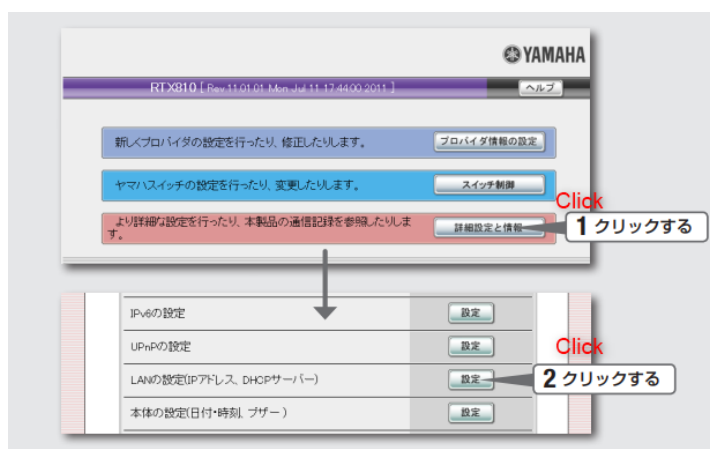
When connecting LANs at different locations via a broadband connection, make sure that the network addresses of each LAN do not overlap.

Decide new network addresses for each LAN, and configure the IP address and netmask on this device and on the computers according to the new network addresses.

Note:

If different network addresses have already been configured, set the IP address and netmask on this device according to those network addresses.

Be sure to assign this device an IP address that does not conflict with the IP addresses of other devices already installed on the LAN.

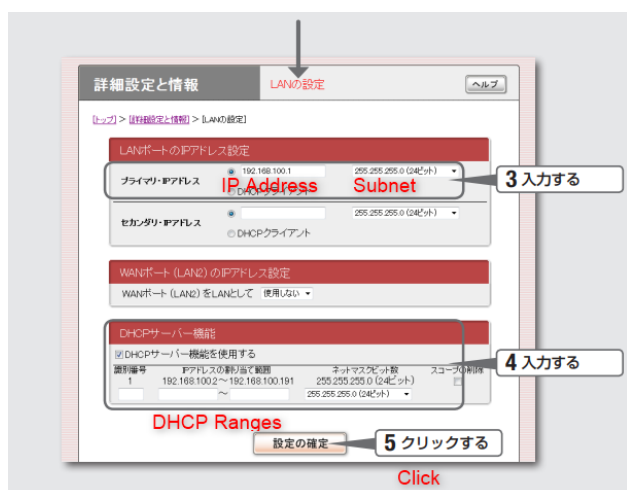


1. On the top page of the 「かんたん設定ページ」, click 「詳細設定と情報」.

The 「詳細設定と情報」 screen will be displayed.

2. Click 「LAN の設定 (IP アドレス、DHCP サーバー)」.

The 「LAN の設定」 screen will be displayed.



3. In the 「LAN ポートの IP アドレス設定」 section, enter the LAN-side IP address of this device.

プライマリ・IP アドレス

Enter an IP address corresponding to the newly defined network address, and select the netmask.

4. In the 「DHCP サーバー機能」 section, enter the IP addresses to be assigned to computers on the LAN.

IP アドレスの割り当て範囲

If you enter 「1」 in the 識別番号, the settings will be overwritten.

Specify an IP address range that does not conflict with the IP address of this device.

For the ネットマスクビット数, select the same value as the netmask of this device.

5. Click 「設定の確定」.

A confirmation screen will be displayed.

6. Click 「実行」, then change the IP address of the computer.

For instructions on changing the computer's IP address, see the explanation on the following pages.

Changing the IP Address of Computers on the LAN

If you change the network address of the LAN, you must also change the IP address and netmask of the computers on the LAN in addition to this device.

If devices other than computers are installed on the LAN, you must also change the IP address and netmask of those devices.

For information on how to configure those devices, refer to the instruction manuals for each device.

Note:

If you have not changed the network address of the LAN where this device is installed, there is no need to change the IP address of computers on the LAN.

The method for changing a computer's IP address varies depending on the OS version.

Connecting to the Internet via a Broadband Connection (PPPoE / CATV)

Configure the connection destination on the device's 「かんたん設定ページ」 to connect to the Internet.

If you use a network-type PPPoE connection or an unnumbered connection, refer to

「ネットワーク型接続サービスで常時接続する (ネットワーク型 ADSL・フレッツ VPN ワイド接続)」 (page 46).

Before Configuration

Note:

- If you cancel or change your ISP contract, be sure to delete or reconfigure the connection settings on this device.
If you continue using the device without deleting the settings, you may be charged unexpected fees by the line provider or ISP.
- When using an always-on Internet connection, the risk of unauthorized access or attacks from the Internet increases.
Use this device with sufficient security precautions. For details, see 「セキュリティを強化する」 (page 99).
- This manual explains the procedures using screens from Windows 7 and Internet Explorer 9 as examples.
Screen displays may differ slightly in other environments, but the operation procedures are the same.

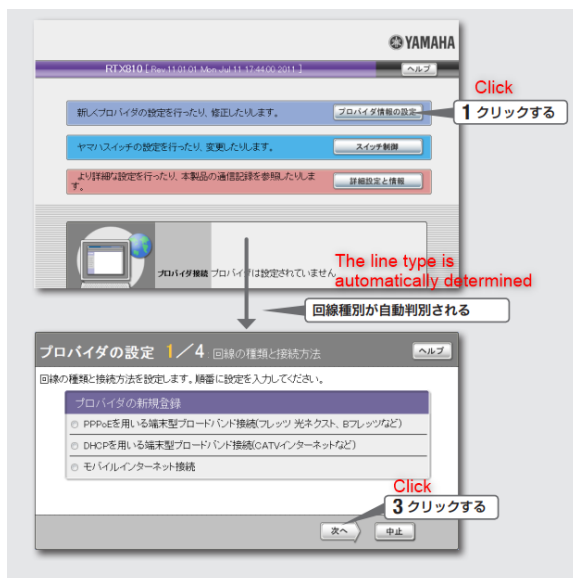
Prepare Your ISP Configuration Information

To configure the connection destination and connect to the Internet, you will need the following information provided by your ISP

(some items may not be required depending on the connection method):

- User ID (Authentication ID, Account Name)
- Password (Authentication Password, Initial Password)
- IP Address
- Netmask
- Name Server Address
(DNS Server Address, Name Server IP Address, DNS Server IP Address)
- Default Gateway Address

1. Checking the Connection Method



1. On the top page of the 「かんたん設定ページ」, click 「プロバイダ情報の設定」.

The device's broadband line auto-detection function will run, and a screen showing the connection method appropriate for the connected line will be displayed.

Note:

Once the broadband line auto-detection function is executed, it will not perform auto-detection again the next time.

Before running it, make sure that a broadband line is connected to the WAN port of this device.

2. Check the automatically detected connection method and click 「次へ」.

If 「PPPoE を用いる端末型ブロードバンド接続（フレッツ光ネクスト、B フレッツなど）」 is selected:

Typical connection services for which this option is selected include the following:

- フレッツ 光ネクスト
- B フレッツ
- フレッツ・ADSL
- イー・アクセス（ADSL モデムがブリッジモードの場合）

If 「DHCP を用いる端末型ブロードバンド接続（CATV インターネットなど）」 is selected:

Typical connection services for which this option is selected include the following:

- Yahoo! BB
- イー・アクセス（ADSL モデムがルーターモードの場合）
- プロバイダ独自の ADSL 接続サービス
- 各種 CATV インターネット接続サービス

3. Click 「次へ」.

A configuration screen corresponding to the connected line will be displayed.

The following settings vary depending on the connection line, so refer to the description for the selected connection type.

If No Connection Method Is Selected

The broadband line auto-detection has failed.

Select either 「PPPoE を用いる端末型ブロードバンド接続（フレッツ光ネクスト、B フレッツなど）」 or

「DHCP を用いる端末型ブロードバンド接続（CATV インターネットなど）」 according to your connection line, then click 「次へ」.

If you are unsure which option to choose, check your contract documents or contact your ISP.

2. Specifying the ISP Information

プロバイダの設定 2/4 契約先プロバイダの情報入力

プロバイダからの契約書をお手元にご用意して正確に入力してください。
(※は必ず入力してください)

設定名	Settings name	PPPoE	1 入力する
ユーザーID	user name	* username@provider.ne.jp	2 入力する
接続パスワード	Password	*	3 入力する

戻る 次へ 4 クリックする

1. Enter a setting name.

Enter a name that makes it easy to identify the connection destination.

You may choose any name you like, but using a descriptive name will be helpful if you need to modify the settings later.

2. Enter the ユーザー ID.

Enter the connection user ID specified by your ISP.

Be sure to check the provided documents and enter the information correctly.

Note:

When connecting via フレッツ・ADSL or B フレッツ, you must enter the provider name after the user ID.

For details, refer to the materials sent by NTT when you signed up for フレッツ・ADSL or B フレッツ, or the documents provided by your ISP.

Example when the user ID is “username”:

- username@provider.ne.jp
- username@aaa.provider.ne.jp (when a subdomain is added)

3. Enter the 接続パスワード.

Enter the password specified by your ISP (or a password you have changed yourself).

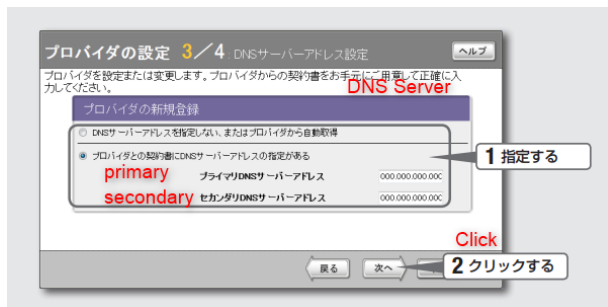
Use alphanumeric characters, and make sure to enter uppercase and lowercase letters correctly.

The entered password characters will be displayed as ●.

4. Click 「次へ」.

The 「プロバイダの設定 3/4」 screen will be displayed.

3. Specifying the DNS Server Address



1. Specify the DNS server address.

If no DNS server address is specified by your ISP:

Select 「DNS サーバーアドレスを指定しない、またはプロバイダから自動取得」.

If DNS server addresses are specified by your ISP:

Select 「プロバイダとの契約書に DNS サーバーアドレスの指定がある」, then configure the following settings:

- プライマリ DNS サーバーアドレス:
Enter the DNS server address specified by your ISP using half-width numbers.
- セカンダリ DNS サーバーアドレス:
Enter this only if your ISP has provided two DNS server addresses.
(If only one address is specified, leave this field blank.)

2. Click 「次へ」.

The 「プロバイダの設定 4/4」 screen will be displayed.

4. Confirming the Settings

1. Verify that the displayed settings match the configuration information provided by your ISP.

If any settings are incorrect, click 「戻る」 to return to the appropriate settings screen and reconfigure them correctly.

2. Click 「設定の確定」.

The 「プロバイダの登録」 screen will be displayed.

5. Connecting to the Internet

1. Click 「接続」.

The device connects to the Internet, and the 「プロバイダへの接続/切断」 screen will be displayed.

Clicking 「トップへ戻る」 will return you to the top page of the 「かんたん設定ページ」.

2. Confirm that the device is connected to the Internet.

Check the status displayed at the bottom of the screen to verify that this device is connected to the Internet.

Complete!!