Internet Connection Guide

Enjoy your instrument with Internet Direct Connection

This instrument can be directly connected to the Internet, conveniently letting you display and access the special website from the instrument's display and enjoy the various contents. This guide provides detailed instructions on connecting. You can also refer to the Internet-related terms at the end of this guide. For the latest services of the Internet Direct Connection function, refer to the Yamaha website: http://services.music.yamaha.com/

NOTE
- *Only the special website can be opened when the instrument is directly connected to the Internet.*

* The illustrations and screens as shown in this guide are for instructional purposes only, and may appear somewhat different from those on your instrument.
* Clicking on the Internet-related terms (blue characters) in this guide jumps to the "Glossary of Terms" at the end.
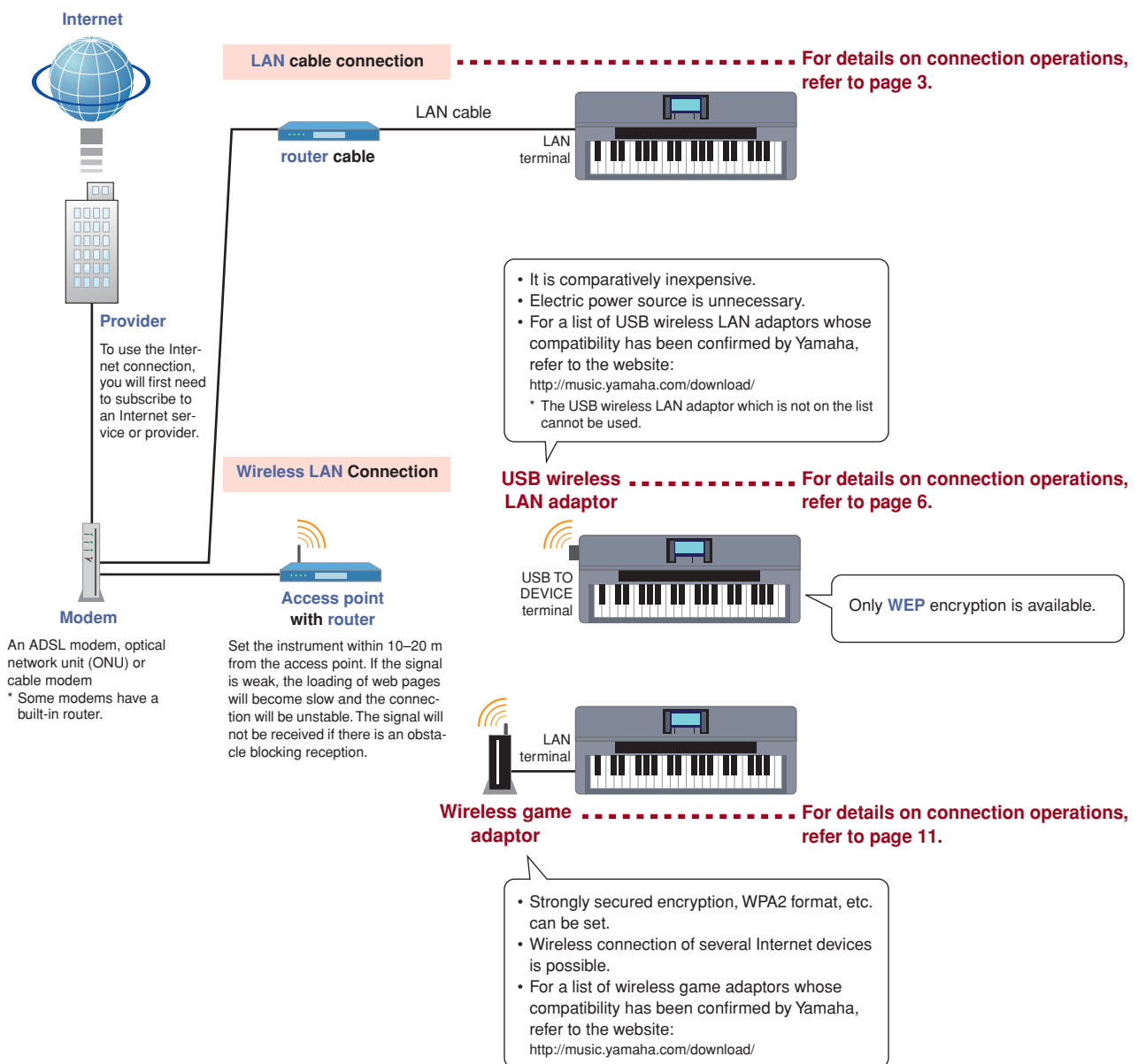
Contents

Selection of the Connection Environment

To connect the instrument to the Internet, a full-time online connection (ADSL, optical fiber, cable Internet, etc.) using a broadband router or a modem equipped with a router is necessary.

> **NOTE**
> * Since no broadband router or modem settings can be made by the instrument itself, use a computer to make the settings before connecting to the instrument.
> * Since this instrument does not support PPPoE communication, it is not possible to directly connect to the modem without a router.
> * Dial-up and ISDN connections cannot be used.

Depending on the Internet connection, the number of connectable devices may be limited. This may mean that your instrument cannot be connected to the Internet. If in doubt, check your contract or contact your provider.

Select the connection environment of your home from the following.

Internet

LAN cable connection · **For details on connection operations, refer to page 3.**

LAN cable

router cable

LAN terminal

Provider

To use the Internet connection, you will first need to subscribe to an Internet service or provider.

* It is comparatively inexpensive.
* Electric power source is unnecessary.
* For a list of USB wireless LAN adaptors whose compatibility has been confirmed by Yamaha, refer to the website:
  http://music.yamaha.com/download/
  * The USB wireless LAN adaptor which is not on the list cannot be used.

Wireless LAN Connection

USB wireless LAN adaptor · · · · · · · · · · · **For details on connection operations, refer to page 6.**

USB TO DEVICE terminal

Only **WEP** encryption is available.

Access point with router

Set the instrument within 10–20 m from the access point. If the signal is weak, the loading of web pages will become slow and the connection will be unstable. The signal will not be received if there is an obstacle blocking reception.

Modem

An ADSL modem, optical network unit (ONU) or cable modem
* Some modems have a built-in router.

LAN terminal

Wireless game adaptor · · · · · · · · · · · · · · **For details on connection operations, refer to page 11.**

* Strongly secured encryption, WPA2 format, etc. can be set.
* Wireless connection of several Internet devices is possible.
* For a list of wireless game adaptors whose compatibility has been confirmed by Yamaha, refer to the website:
  http://music.yamaha.com/download/

For details on operations for connections using static IP address or proxy server, refer to page 14.
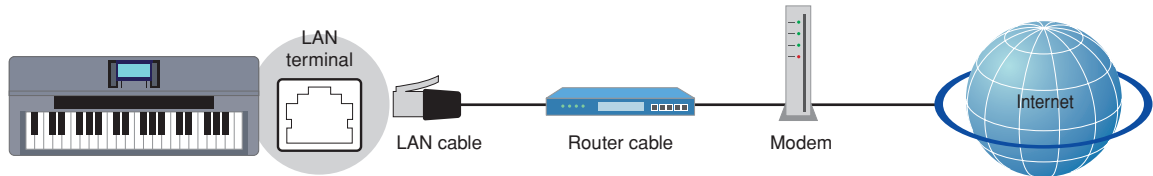
Connection

LAN Cable Connection

1 Connect the devices according to the example.

First turn the power of the instrument off, then connect the devices as shown in the illustration below, and finally turn the power on again.

> **NOTE**
> • For an illustration of the location of the LAN terminal, refer to the Owner's Manual (Chapter 10).

LAN terminal — LAN cable — Router cable — Modem — Internet

Required Devices

- LAN cable
- Router cable (This is unnecessary if your modem has router capability.)
- Modem (ADSL modem, optical network unit or cable modem)

> **NOTE**
> • Before installing a new router, check that the router performs normally by connecting via a computer.

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2 Press the [INTERNET] button.

When the special website appears

Since the instrument is connected to the special website, you do not need to make Internet settings. About the operations in the special website, refer to the Owner's Manual (Chapter 9).
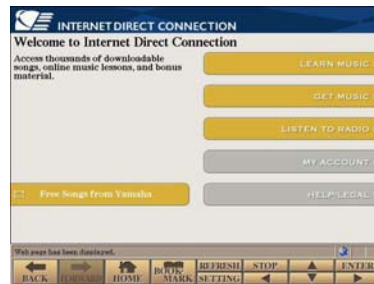
> **NOTE**
> • The contents of the service as appearing here are current as of May, 2009. The available contents of the service are subject to change.

When the special website does not appear

Proceed to step 3.

3 **Use the [DATA ENTRY] dial to select "Set the Internet connection," then press the [ENTER] button to execute.**
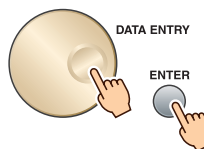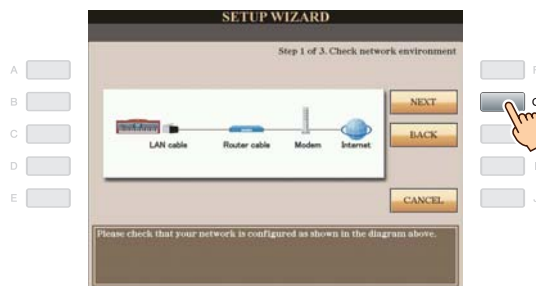

*4* **Use the [A]/[B] buttons to select "SETUP WIZARD."**
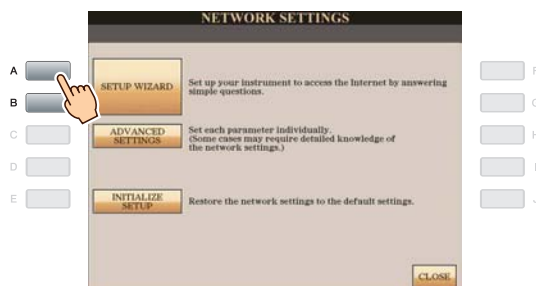
5 **Press the [B] button to select "LAN cable," then press the [G] button to proceed to "NEXT."**

6 **Make sure that the devices are connected as shown in the illustration of the display, then press the [G] button to proceed to "NEXT."**

7 **Press the [G](CONNECTION) button to check the connection to the special website.**

The settings are saved by checking the connection.
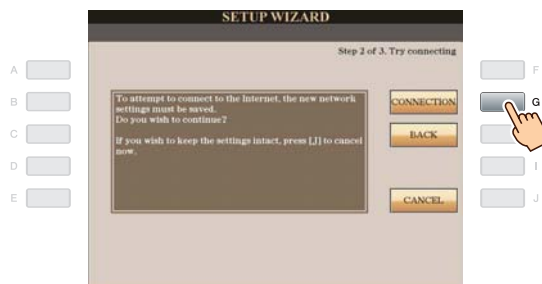
NOTE

• *Because the settings are lost when you turn off the power of the instrument, be sure to save the settings and changes you made.*

8 **Press the [G](DONE) button to connect to the special website.**

When the special website appears, the network settings to the Internet are complete.

When the special website does not appear, refer to "Connection Help" on page 18.

For more details on the operations in the special website, refer to the Owner's Manual (Chapter 9).

Wireless LAN Connection Using USB LAN Adaptor

1 **Connect the devices according to the example.**

First turn the power of the instrument off, then connect the devices as shown in the illustration below, and finally turn the power on again.

NOTE

• *For an illustration of the location of the USB TO DEVICE terminal, refer to the Owner's Manual (Chapter 10).*
• *Only WEP encryption is available.*

Set the instrument within 10–20 m from the access point. The signal will not be received if there is an obstacle blocking reception.
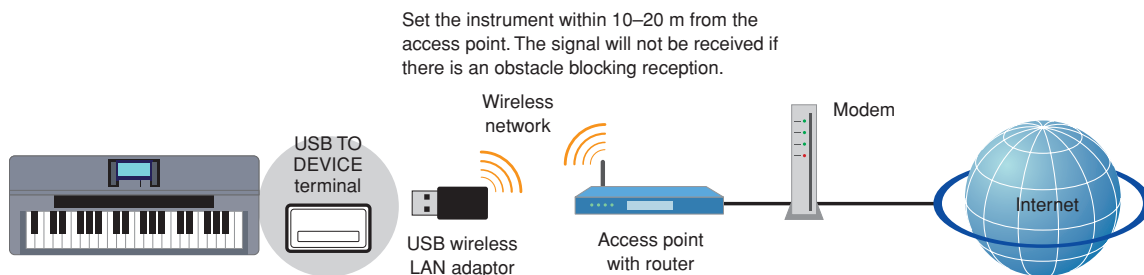
Required Devices

• USB wireless LAN adaptor

   For a list of USB wireless LAN adaptors whose compatibility has been confirmed by Yamaha, refer to the website:

      http://music.yamaha.com/download/

   * The USB wireless LAN adaptor which is not on the list cannot be used.

• Access point with router (The router capability here is unnecessary if your modem has router capability.)
• Modem (ADSL modem, optical network unit or cable modem)

NOTE

• *About the confirmation and changes in the setting of the access point with router side, read the owner's manual for the product you are using.*
• *Before installing a new router, check that the router performs normally by connecting via a computer.*
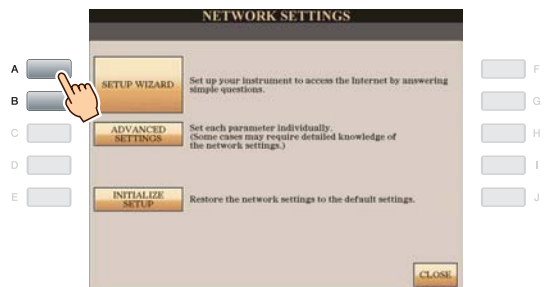
2 **Press the [INTERNET] button.**

3 **Use the [DATA ENTRY] dial to select "Set the Internet connection," then press the [ENTER] button to execute.**
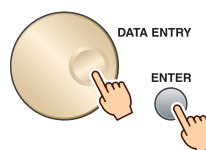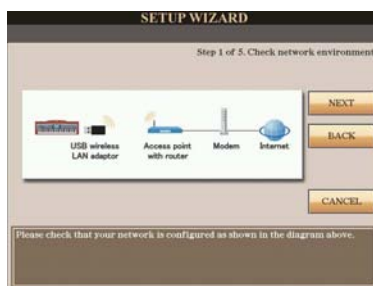
4 Use the [A]/[B] buttons to select "SETUP WIZARD."
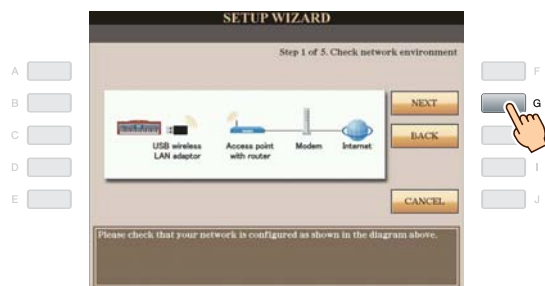

5 Press the [D] button to select the "Wireless LAN using USB LAN adaptor," then press the [G] button to proceed to "NEXT."

6 Make sure that the devices are connected as shown in the illustration of the display.

7 Press the [G](NEXT) button to search for wireless network near the instrument.
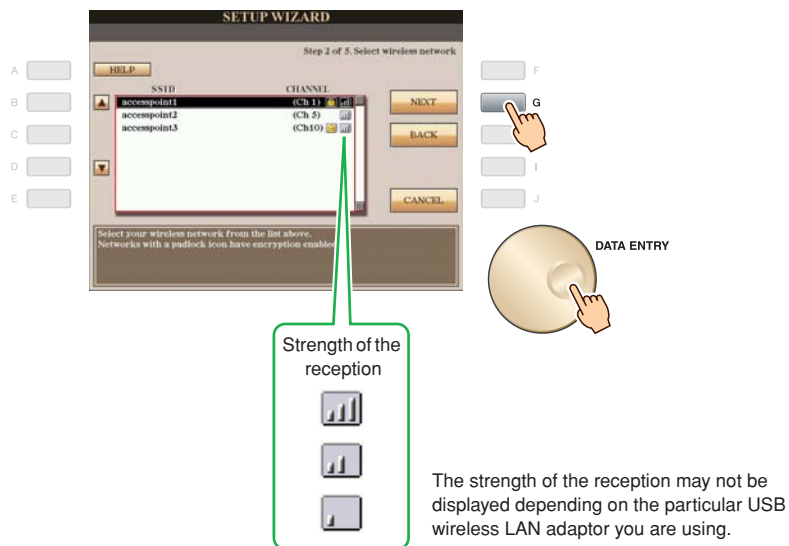
8 **Use the [DATA ENTRY] dial to select the desired wireless network, then press the [G] button to proceed to "NEXT."**

The SSID and channel of the selected wireless network are automatically set. Since the encrypted wireless network is displayed with padlock icon " ," input the WEP key. Make sure that the settings are the same as those for the access point on the router side.

NOTE

• For details on confirmation and changes in the setting of the access point on the router side, refer to the owner's manual for the product you are using.

Strength of the reception

The strength of the reception may not be displayed depending on the particular USB wireless LAN adaptor you are using.

With padlock icon " " (encryption)

Since your access point with router is an encrypted setting, proceed to step 9 to input the WEP key.

No padlock icon (No encryption)

Because your access point with router is not an encrypted setting, you don't need to make a setting for the WEP key. Proceed to step 12 on page 9. If you want to encrypt the access point, change this in the settings of your access point with router.

9 **Press the [C](WEP KEY) button to call up the character-entry display to input the WEP key.**
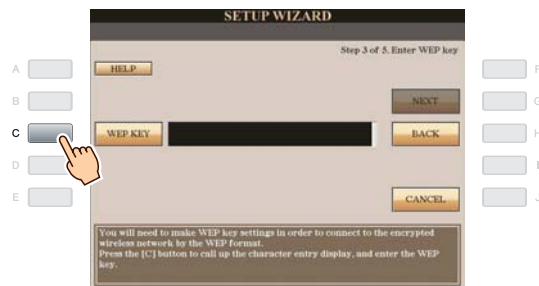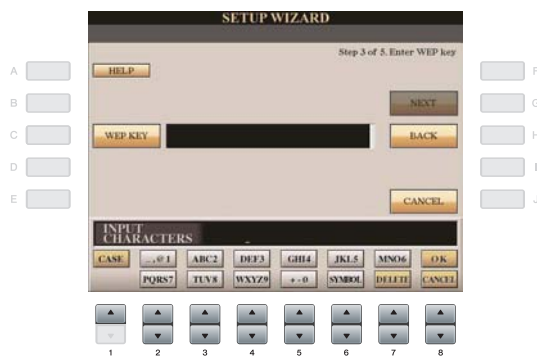

Only WEP encryption is available.

NEXT PAGE

10 Input the WEP key.

Refer to the Owner's Manual (Starting Up) for character-entry details.

To cancel the WEP key input, press the [8▼](CANCEL) button.

11 Press the [G](NEXT) button to set the WEP key input.

When you set the WEP key input, the characters are hidden and displayed as "******."

12 Press the [G](CONNECTION) button to check the connection to the special website.

The settings are saved by checking the connection.

NOTE

• Because the settings are lost when you turn off the power of the instrument, be sure to save the settings and changes you made.

13 **Press the [G](DONE) button to connect to the special website.**

When the special website appears, the network settings to the Internet are complete.

When the special website does not appear, refer to "Connection Help" on .

For details on operations in the special website, refer to the Owner's Manual (Chapter 9).

Make a written note of the settings, in case you have to enter them again.

Access point	SSID		
	Channel		
Encryption		YES	NO
WEP key			—

Wireless LAN Connection Using Wireless Game Adaptor

1 Connect the devices according to the example.

First turn the power of the instrument off, then connect the devices as shown in the illustration below, and finally turn the power on again.

> **NOTE**
>
> • For an illustration of the location of the LAN terminal, refer to the Owner's Manual (Chapter 10).

Set the instrument within 10–20 m from the access point. The signal will not be received if there is an obstacle blocking reception.

LAN terminal

LAN cable

Wireless game adaptor

Access point with router

Modem

Internet
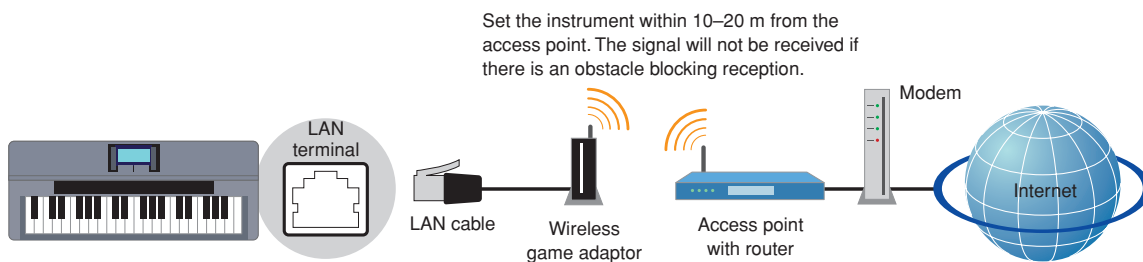
Required Devices

• LAN cable

• Wireless game adaptor

For a list of wireless game adaptors whose compatibility has been confirmed by Yamaha, refer to the website:

http://music.yamaha.com/download/

• Access point with router (The router capability here is unnecessary if your modem has router capability.)

• Modem (ADSL modem, optical network unit or cable modem)

> **NOTE**
>
> • The wireless game adaptor requires connection to the AC outlet. For details on changes in the settings of the wireless game adaptor, read the owner's manual for the product you are using.
> • About confirmation and changes in the setting of the access point on the router side, read the owner's manual for the product you are using.
> • Before installing a new router, check that the router performs normally by connecting via a computer.

2 Press the [INTERNET] button.

When the special website appears

Since the instrument is connected to the special website, you do not need to make Internet settings. For details on operations in the special website, refer to the Owner's Manual (Chapter 9).
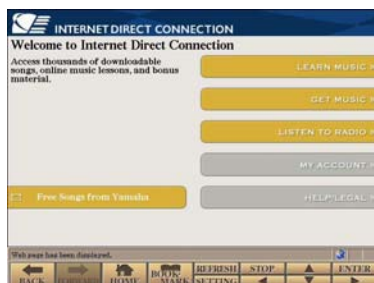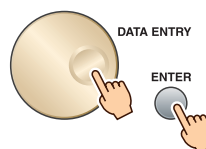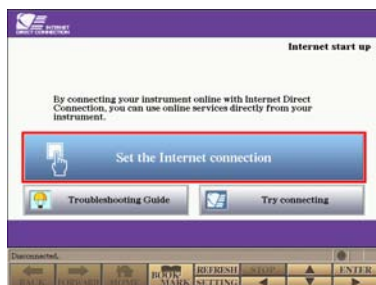

NOTE

• The contents of the service as appearing here are current as of May, 2009. The available contents of the service are subject to change.
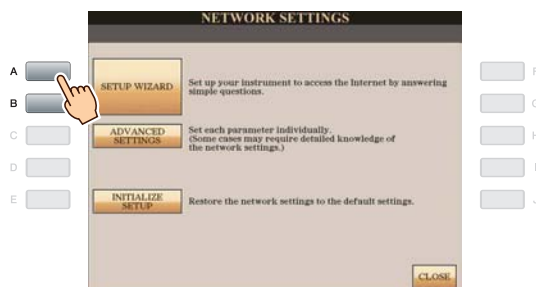
When the special website does not appear

Proceed to step 3.

3 Use the [DATA ENTRY] dial to select "Set the Internet connection," then press the [ENTER] button to execute.

4 Use the [A]/[B] buttons to select "SETUP WIZARD."

NEXT PAGE

5 **Press the [C] button to select "Wireless LAN using Wireless Game Adaptor," then press the [G] button to proceed to "NEXT."**

6 **Make sure that the devices are connected as shown in the illustration of the display, then press the [G] button to proceed to "NEXT."**

7 **Press the [G](CONNECTION) button to check the connection to the special website.**

The settings are saved by checking the connection.

NOTE

• *Because the settings are lost when you turn off the power of the instrument, be sure to save the settings and changes you made.*

8 **Press the [G](DONE) button to connect to the special website.**

When the special website appears, the network settings to the Internet are complete.

When the special website does not appear, refer to "Connection Help" on .

For details on operations in the special website, refer to the Owner's Manual (Chapter 9).
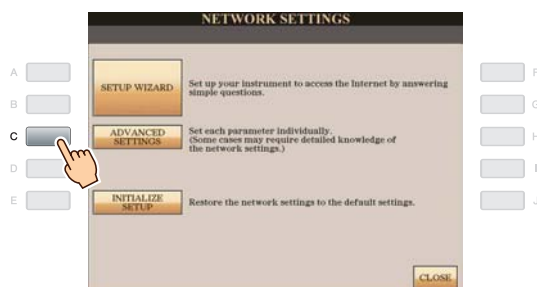
Using Static IP Address or Proxy Server

Some cases may require detailed knowledge of the network settings.

1 **Turn the power of the instrument on, then press the [INTERNET] button.**

2 **Use the [DATA ENTRY] dial to select "Set the Internet connection," then press the [ENTER] button to execute.**
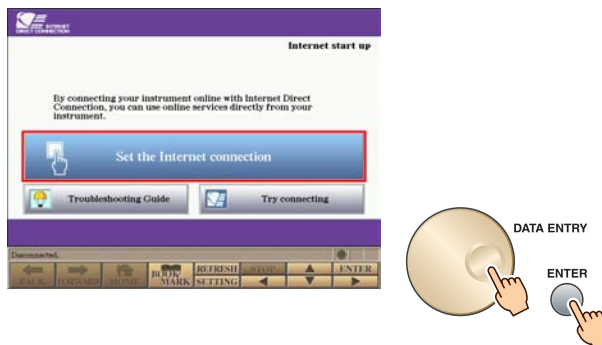
3 **Press the [C] button to select "ADVANCED SETTINGS."**

4 **Use the TAB [◀][▶] buttons to call up the desired page.**

5 Use the [A]–[J] buttons to select the desired parameter.
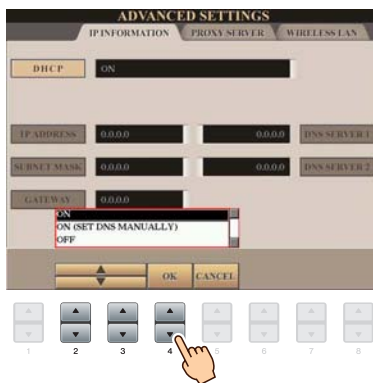
For details on each parameter, refer to .

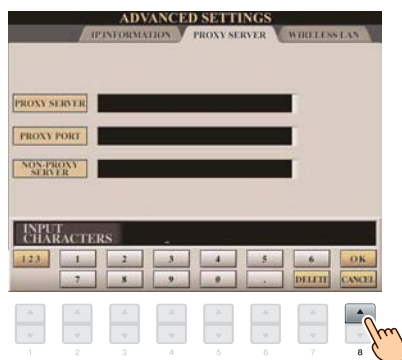## 6 Select the setting or change the value.

Selecting the setting

Use the [2 ▲▼]/[3 ▲▼] buttons to select the setting, then use the [4 ▲▼](OK) buttons to execute.
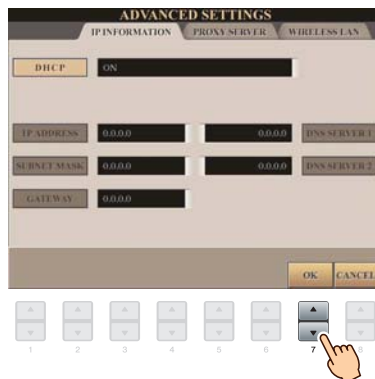

Changing the value

Enter the value, then press the [8 ▲](OK) button to execute.
Refer to the Owner's Manual (Starting Up) for character-entry details.

7 **Use the [7 ▲▼] buttons to select "OK."**

8 **Press the [G](YES) button to save the settings.**

NOTE

• Because the settings are lost when you turn off the power of the instrument, be sure to save the settings and changes you made.

9 **Connect the devices.**

First turn the power of the instrument off, then connect the devices, and finally turn the power on again.

10 **Press the [INTERNET] button to connect to the special website.**

When the special website appears, the network settings to the Internet are complete.
When the special website does not appear, refer to "Connection Help" on .

For details on operations in the special website, refer to the Owner's Manual (Chapter 9).

Parameters

IP INFORMATION

DHCP	Determines the DHCP ON/ON (SET DNS MANUALLY)/OFF settings.
IP ADDRESS/SUBNET MASK/ GATEWAY	Determines the IP ADDRESS/SUBNET MASK/GATEWAY settings. These settings must be made when DHCP above is set to "OFF."
DNS SERVER 1/2	These settings must be made when DHCP above is set to "ON (SET DNS MANUALLY)" or "OFF."

PROXY SERVER

PROXY SERVER/PROXY PORT/ NON-PROXY SERVER	Determines the proxy server name, port number and the host name for the non-proxy server.

WIRELESS LAN

| SSID	Determines the SSID setting.
CHANNEL	Determines the channel.
ENCRYPTION	Determines the ENCRYPTION ON/OFF settings.
WEP KEY	Input the WEP key when ENCRYPTION above is set to "ON."

Connection Help

If the instrument is not connected to the Internet, sometimes the [HELP] button appears on the display. You can view the solutions by selecting "HELP."
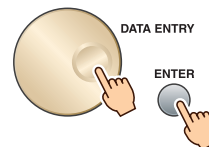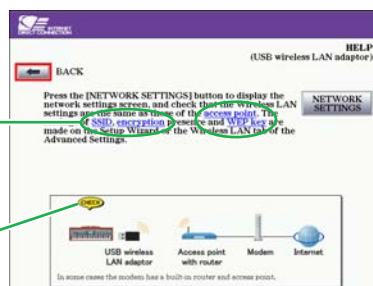
1 Press the [G] button to select "HELP."

2 Use the [DATA ENTRY] dial to select a solution (Details), then press the [ENTER] button to view the details.
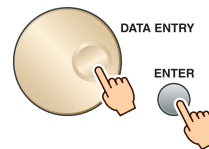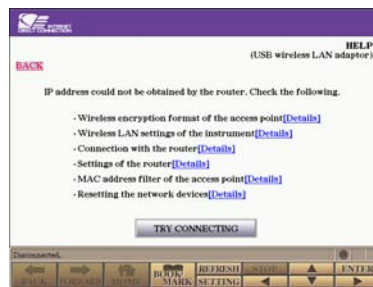
3 Solve the problem with the displayed solutions.

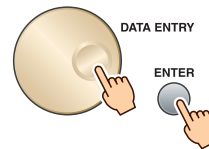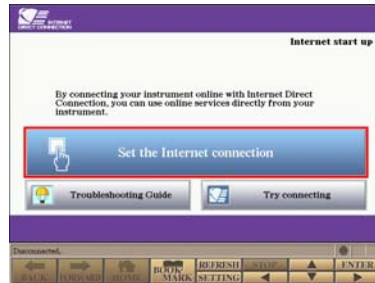Use the [DATA ENTRY] dial to select the link, then press the [ENTER] button to see the comments.

Check the part where the Check mark is displayed.
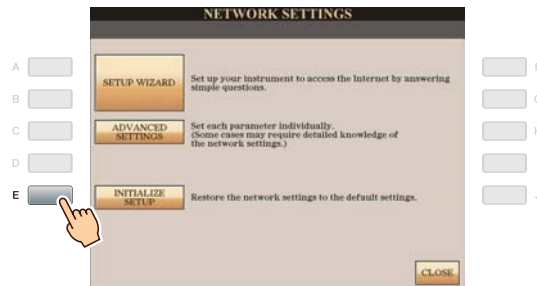
Initialization of the Setup
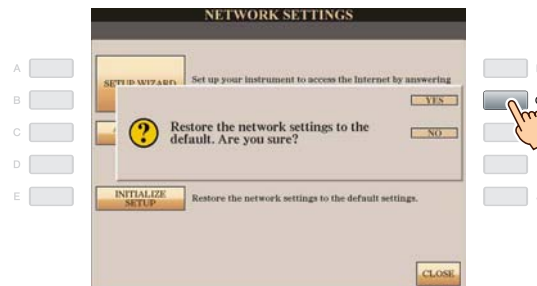
1 Press the [INTERNET] button.

2 Use the [DATA ENTRY] dial to select "Set the Internet connection," then press the [ENTER] button to execute.

3 Press the [E] button to select "INITIALIZE SETUP."

4 Press the [G](YES) button to initialize the settings.

⚠ **CAUTION**

• This restores the network settings to the default settings.

Glossary of Terms

Access point	A device that allows devices like your Yamaha instrument to connect to the Internet using a wireless network. Some access points are combined with the modem.
broadband	An Internet connection technology/service (such as ADSL and optical fiber) that allows for highspeed, high-volume data communication.
DHCP	A standard or protocol by which IP addresses and other low-level network configuration information can be dynamically and automatically assigned each time the computer and the instrument connect to the Internet.
DNS SERVER	A server that maps names to actual IP addresses of devices connected to a network.
Encryption	Protects data passed from various access points from being intercepted from an unauthorized person/device.
GATEWAY	A Gateway is a link between two computer programs or systems.
Internet	A huge network made up of networks, the Internet allows high-speed data transfer among computers, mobile phones and other devices.
IP ADDRESS	A string of numbers assigned to each computer connected to a network that indicate the device's location on the network.
LAN	Short for Local Area Network, this is a data-transfer network that connects a group of computers at a single location (such as an office or home) by means of a special cable.
link	Location information in other sentences and images, etc. that are under buttons and character strings on a web page. When the place with the link is clicked, the page selection jumps to the relevant link.
MAC address	An identifying number used to distinguish network devices.
MAC address filter	The mechanism for restricting network devices that can connect to an access point. Unless the device has registered the MAC address with the access point, it cannot connect to the access point.
Modem	A device which connects and allows data transfer between a conventional telephone line and a computer. It converts the digital signals from the computer to analog audio for sending over the phone line, and vice versa.
Provider	A communications business that offers Internet connection services. In order to connect to the Internet, it is necessary to contract to a provider.
PROXY PORT	This number determines where on the server to connect to.
PROXY SERVER	A computer that relays Internet communications for security and efficiency.
router	A device that allows multiple devices (e.g., computers, your Yamaha instrument) to share the same Internet connection.
Server	A hardware system or computer used as a central point for a network, providing access to files and services.
Site	Short for "website," this refers to the group of web pages that are opened together. For example, the collection of web pages whose addresses begin with "http://www.yamaha.com/" is referred to as the Yamaha site.
SSID	A name used to identify a particular access point.
SUBNET MASK	The structure for dividing a large-scale network.
WEP	An encryption format used by wireless networks.
WEP KEY	An encryption key used by WEP encryption format.
Wireless game adaptor	A device that allows easy wireless connection with digital consumer electronic devices, printers, and game machines, etc. equipped with [LAN] ports.
Wireless LAN	A LAN connection that allows data transfer through a wireless, cable-free connection.
wireless network	Wireless network where signal is sent and received by using electric waves.