

# Smart Device Connection Manual for iPhone/iPad

(iPhone/iPad Connection Manual)

By connecting your iPhone or iPad to a compatible Yamaha digital instrument and using special apps, you can take advantage of various functions such as controlling the instrument from the smart device, or displaying the score on your iPhone or iPad — expanding the potential of the instrument and making it an even more integral part of your total music life. This manual explains how to connect an iPhone or iPad to a compatible Yamaha digital instrument.

#### NOTE

- This manual supplements the instructions of the Owner's Manual provided with the digital instrument. Please read the Owner's Manual of your particular instrument first before reading this manual.
- In this manual, iPhone and iPod touch are collectively called iPhone.
- If you are using an Android OS device, refer to the separate manual "Smart Device Connection Manual for Android™."

# Yamaha Apps for Piano & Keyboard Instruments

Refer to the following web page for information on Yamaha apps for pianos and keyboard instruments.

https://www.yamaha.com/2/apps/

iPhone/iPad compatibility and other related system requirements vary from app to app. Be sure, therefore, to refer to the compatibility-related information provided on the above web page.

Certain apps do not need to be connected to an instrument. In such a case, there is no need to follow the instructions provided in this manual.

# Download the apps

You can download apps from the App Store by searching for the desired app's name found from the website above.

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# **NOTICE**

To prevent the iPhone/iPad from falling, note the following points:

- Before moving the instrument, make sure to remove the iPhone/iPad from the music rest.
- Never put anything else on the music rest together with the iPhone/iPad, such as a song booklet or another iPhone/iPad.
   Doing so may make the music rest unstable.
- Never place the instrument with the iPhone/iPad in an unstable position.
- Never slide the iPhone/iPad along the music rest or submit it to strong shock, such as pushing or hitting it when on the music rest.
- After use, or when you separate from a instrument, make sure to remove the iPhone/iPad from the music rest.

# To avoid noise caused by communication, note the following points:

When using your instrument together with an App on your iPhone/iPad, we recommend that you turn on Airplane Mode on your device. If you need to connect to a Wi-Fi network at this time, we recommend that after turning on Airplane Mode, you also turn on Wi-Fi.

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# **Determining the Connection Type**

You can connect your iPhone/iPad to instruments equipped with a USB TO HOST terminal or MIDI terminals, or to instruments compatible with a USB Wireless LAN Adaptor, or those equipped with a wireless LAN function or Bluetooth function. Determine the connection type which applies to your iPhone/iPad and instrument, using the following chart.

#### NOTE

- Connection types may be limited depending on the app being used. Please check the description of each app on the website (<a href="https://www.yamaha.com/2/apps/">https://www.yamaha.com/2/apps/</a>) in advance.

### ■ iPhone/iPad Connection Matrix Chart

# Connection by using a USB cable

Connecting an iPhone/iPad to the instrument by a USB cable. Conversion adaptors may be required.

		iPhone/iPad	
		Lightning connector	USB Type-C connector
Yamaha Instrument	Instruments equipped with USB TO HOST (Type B) terminal	Connection A (page 5)	Connection B (page 5)
	Instruments equipped with USB TO HOST (Type C) terminal	Connection C (page 5)	Connection D (page 6)

#### Wireless connection

	Instruments compatible with USB wireless LAN adaptor	Connection E (page 6) or
	Instruments equipped with a wireless LAN function	Connection F (page 6)
	Instrument equipped with USB TO HOST (Type B) terminal	
		Connection G (page 7)
Yamaha Instrument	Using the wireless MIDI adaptor UD-BT01	
instrument	Instrument equipped with MIDI terminals	
	OUT IN	Connection H (page 7)
	Using the wireless MIDI adaptor MD-BT01	
	Instruments equipped with Bluetooth function	Refer to the Owner's Manual of the instrument for details on how to connect, etc.

#### NOTE

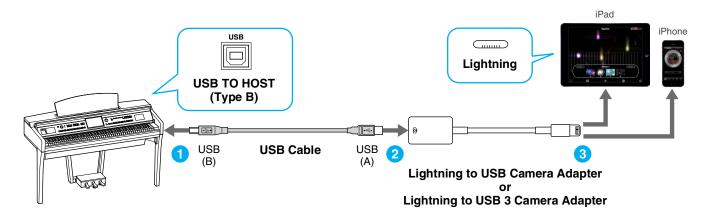
- Some of the cables and adaptors used in connections A-H may not be available depending on your area.
- Depending on the version of the OS or Bluetooth of the iPhone/iPad, you may not be able to connect the iPhone/iPad to the instrument by wireless LAN or by using wireless MIDI adaptor UD-BT01/MD-BT01. For details, refer to the owner's manuals for each adaptor or instrument. Confirm the version of Bluetooth in the product specifications chart of the particular iPhone/iPad.
- Audio signals cannot be communicated by using the wireless MIDI adaptor UD-BT01/MD-BT01.
- The orientation and arrangement of the terminals may differ depending on the instrument.
- When connecting an iPhone/iPad by using the instrument's Bluetooth function, refer to the owner's manual of the instrument for details about the types of data that can be communicated.

**Connection A** 

For connection instructions, see page 8.

### **NOTICE**

Use a USB cable of less than 3 meters. USB 3.0 cables cannot be used.

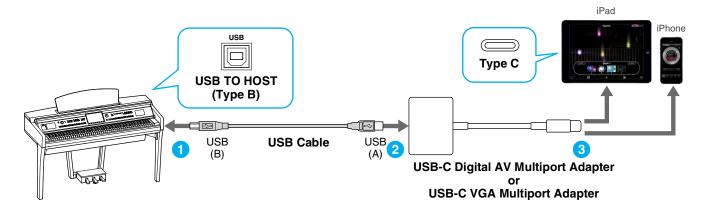


**Connection B** 

For connection instructions, see page 8.

#### **NOTICE**

Use a USB cable of less than 3 meters. USB 3.0 cables cannot be used.

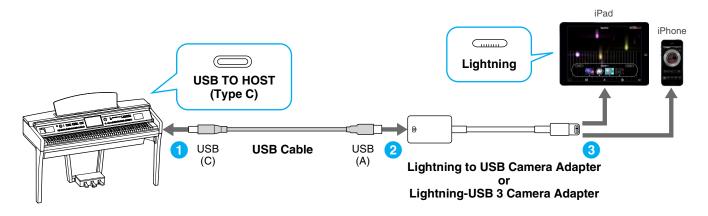


**Connection C** 

For connection instructions, see page 8.

#### **NOTICE**

Use a USB cable of less than 3 meters. The cable must be a communication cable compliant with USB standards, and not a charging-only cable.

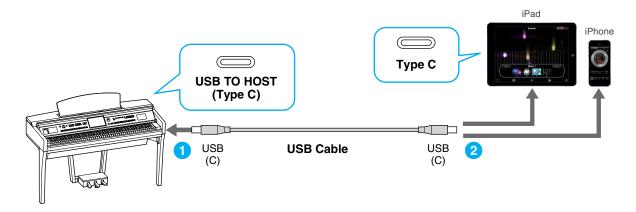


**Connection D** 

For connection instructions, see page 8.

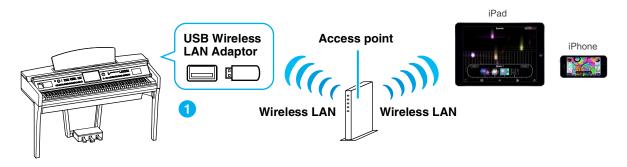
#### **NOTICE**

Use a USB cable of less than 3 meters. The cable must be a communication cable compliant with USB standards, and not a charging-only cable.



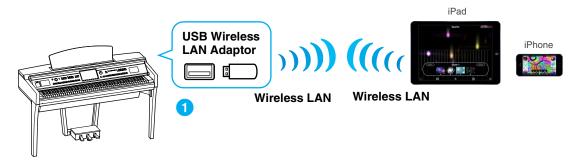
**Connection E** For connection instructions, see page 8.

If the wireless LAN function is included on the instrument, the USB Wireless LAN Adaptor is not required.



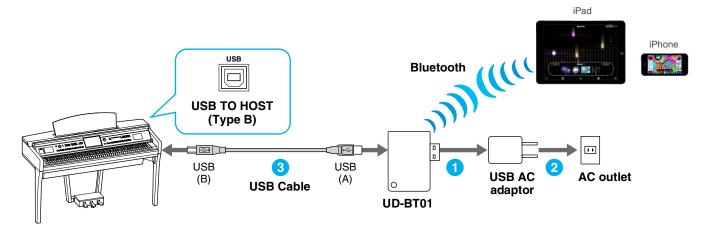
**Connection F** For connection instructions, see page 12.

If the wireless LAN function is included on the instrument, the USB Wireless LAN Adaptor is not required.



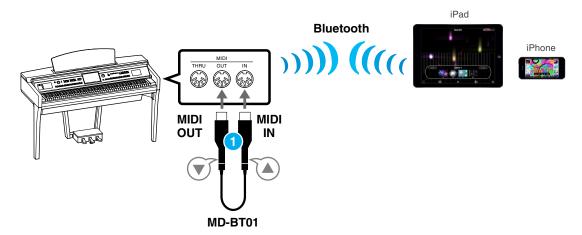
Connection G For connection instructions, see page 13.

NOTE MIDI data only; audio signal not supported.



Connection H For connection instructions, see page 13.

NOTE MIDI data only; audio signal not supported.



# Connection

# ■ Connection A–D: Connecting by using a USB cable

# Required devices

- USB Cable and conversion adaptor (if necessary) as shown in each connection type on page 5 or page 6.
- Turn off the power of the instrument.

Quit any open app on your iPhone/iPad.

2 Connect your iPhone/iPad to the instrument.

For the proper order, carefully follow the indicated instruction steps for each connection type on page 5 or page 6.

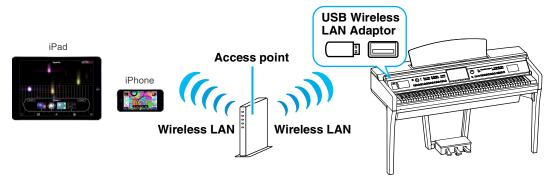
- 3 Turn on the instrument.
- 4 The connection procedures are completed at step 3. Use the app on your iPhone/iPad to communicate with your instrument.

**NOTE** Some apps need the appropriate setting to communicate with the instrument. For details, refer to the relevant app manuals.

# ■ Connection E: Connecting with Wireless LAN via an Access Point

### **Required devices**

- USB Wireless LAN Adaptor specified for your instrument (This is unnecessary if the wireless LAN function is included on the instrument.)
- Access point with router (This is unnecessary if your modem has router capability.)



If the wireless LAN function is included on the instrument, skip steps 1 and 2 below.

- Turn off the power to the instrument.

  Quit any open app on your iPhone/iPad.
- Connect the USB Wireless LAN Adaptor to the [USB TO DEVICE] terminal of the instrument.
- 3 Turn on the power to the instrument.
- 4 If your instrument has a wireless LAN mode setting, set it to Infrastructure Mode.

For instructions on setting your instrument's wireless LAN mode, refer to the Owner's Manual or the Reference Manual of your instrument.

5 Connect the instrument to the network.

There are three methods of connection:

- Automatic Setup by WPS (page 9)
- Displaying the Networks in the Wireless LAN and Connecting to the Network (page 10)
- Manual Setup (page 11)

Select the appropriate setup method from the above depending on your network environment.

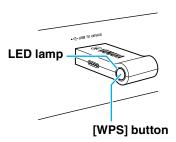
# **Automatic Setup by WPS**

If your access point supports WPS, you can easily connect the instrument to access point by WPS, without making settings, such as key input, etc.

**NOTE** Check whether your access point supports WPS by referring to the owner's manual for the access point you are using.

## When using the UD-WL01 USB Wireless LAN Adaptor:

1 As illustrated, press and hold the [WPS] button for longer than three seconds.



The LED lamp of the adaptor flashes.

**NOTE** May not be able to start WPS by above instruction depending on the instrument. For details, refer to the "When not using the UD-WL01 USB Wireless LAN Adaptor."

## When not using the UD-WL01 USB Wireless LAN Adaptor:

1 As illustrated, press the [Start WPS] button via the display of the instrument.

**NOTE** The button name and displayed name differ depending on the instrument. For details, refer to the Owner's Manual or the Reference Manual of your instrument.

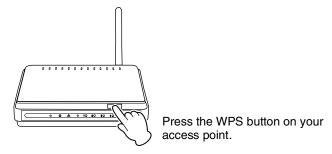
# Wireless LAN Networks Choose Network to Connect A network-1 network-2 network-3 A ? 1/1 Update Networks Connect by WPS Connect Manually Initialize Touch [Start WPS] to start WPS, then within two minutes, press the WPS button of the desired access point.

Start WPS

Cancel

For example, on the CVP-609/CVP-605

# 2 Press the WPS button on your access point within two minutes after step 1 above.



When the connection to the wireless network is completed, the LED lamp of the adaptor lights, and then flashes during communication over the network.

**NOTE** For details about the operations in the setting of the access point, read the owner's manual for the product you are using.

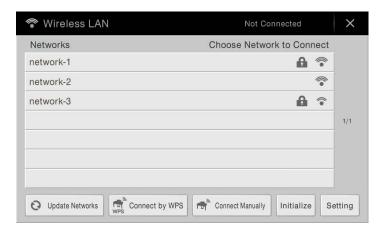
The necessary information is automatically set, and the connection between access point and the instrument has been completed. Proceed to step 6 on page 12 to connect the access point and iPhone/iPad. If you cannot set by WPS, follow the instructions in "Displaying the Networks in the Wireless LAN and Connecting to the Network."

# Displaying the Networks in the Wireless LAN and Connecting to the Network

You can connect the instrument to the Network by selecting it in the wireless LAN display on the instrument. For more information on displaying networks in the wireless LAN display of the instrument, refer to the Owner's Manual or the Reference Manual of your instrument.

# 1 Display the Networks in the wireless LAN display of the instrument.

For example, on the CVP-609/CVP-605: Menu → [Wireless LAN]



**NOTE** If no signal from the access point is received, the access point cannot be listed. Also, closed access points cannot be listed.

## 2 Connect the instrument to the access point.

From the Networks listed on the display, select the desired one. For a network with a lock icon (1), you need to enter the password, and for the network without the lock icon, you can connect the network only by selecting it.

When connection is done successfully, "Connected" is shown at the top of the display, and the icon shown below appears according to the signal strength.



The connection between the instrument and the access point is complete. Proceed to step 6 on page 12 to connect the access point and iPhone/iPad. If you cannot find the desired network on the display or you want to set by a method other than described above, follow the instructions in "Manual Setup" (below).

NOTE The name of the function described above may differ or the function may not be supported depending on the instrument

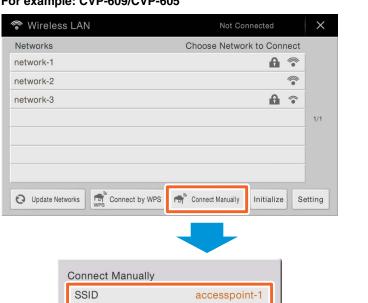
### **Manual Setup**

If you cannot find the desired network on the display, it may be a network with closed or non-disclosure. In this case, you will need to manually input SSID, security and key settings for connection.

NOTE About the confirmation and changes in the access point settings, refer to the manual of the access point.

**NOTE** For more information on successively inputting the SSID, Security and Password on the display of the instrument, refer to the Owner's Manual or the Reference Manual of your instrument.

1 As illustrated, input in succession the SSID, Security and Password on the display of the instrument.



Security WPA-PSK(AES)

Password

For example: CVP-609/CVP-605

# 2 Press the [Connect] button as illustrated.

The necessary information is automatically set, and the connection between access point and the instrument has been completed. Proceed to step 6 on page 12 to connect the access point and iPhone/iPad. If you cannot find the desired network on the display or you want to set by a method other than described above, follow the instructions in "Connect Directly via the USB Wireless LAN Adaptor" (page 12).

Cancel Connect

Please set these to the same as the

settings on the access point.

2

# 6 Connect the iPhone/iPad to the access point.

- 6-1 Call up the Wi-Fi display on your iPhone/iPad by tapping Settings → Wi-Fi.
- 6-2 Turn ON the Wi-Fi.
- 6-3 From the network list shown on the display, tap on the network to which you connected your instrument in step 5. If the key is required, input the key, then connect.

# 7 The connection procedures are completed at step 6. Use the app on your iPhone/iPad to communicate with your instrument.

**NOTE** Some apps need the appropriate setting to communicate with the instrument. For details, refer to the relevant app manuals.

# ■ Connection F: Connecting Directly via Wireless LAN

## **Required devices**

• USB Wireless LAN Adaptor specified for your instrument (This is unnecessary if the wireless LAN function is included on the instrument.)

NOTE This connection is only for instruments which have the Access Point mode function or Ad Hoc mode function.

**NOTE** Please note that when your instrument is set to Access Point mode or Ad Hoc mode, no Internet access is available on your iPhone/iPad, limiting part of their functions, such as mailing and searching.



If the wireless LAN function is included to the instrument, skip the steps 1 and 2 below.

# Turn off the power to the instrument. Quit any open app on your iPhone/iPad.

- 2 Connect the USB Wireless LAN Adaptor to the [USB TO DEVICE] terminal of the instrument.
- **3** Turn on the power to the instrument.
- 4 Switch the instrument to the Access Point mode or Ad Hoc mode.

  Select the appropriate mode in the Wireless LAN mode setting. For details, refer to the Owner's Manual or the Reference Manual of your instrument.
- 5 As necessary, set the SSID and so on.

You can make various settings (such as SSID, security, password, channel, key), although the specific settings differ depending on the mode used by the instrument.

If you have two or more instruments to connect, set the SSID and channel to different values on each instrument.

### Save the settings.

The settings for the instrument are complete.

#### 7 Connect the iPhone/iPad to the instrument.

- 7-1 Call up the Wi-Fi display on your iPhone/iPad by tapping Settings → Wi-Fi.
- **7-2** Turn ON the Wi-Fi.
- 7-3 From the network list shown on the display, tap the instrument that you set to Access Point mode or Ad Hoc mode. If the key is required, input the key, then connect.

# The connection procedures are completed at step 7. Use the app on your iPhone/iPad to communicate with your instrument.

**NOTE** Some apps need appropriate settings to communicate with the instrument. For details, refer to the relevant app manuals.

# ■ Connection G–H: Connecting Directly via the Wireless MIDI Adaptor UD-BT01 or MD-BT01

#### Required devices

- When connecting via MD-BT01 Wireless MIDI adaptor MD-BT01
- When connecting via UD-BT01
   Wireless MIDI adaptor UD-BT01
   USB cable (Type A plug Type B plug)
   USB AC adaptor
- Make sure that the power to the connected musical instrument is turned off.

  Quit any open app on your iPhone/iPad.
- Connect the Wireless MIDI Adaptor to USB TO HOST (Type B) or MIDI terminal of the instrument.

For the proper order, carefully follow the indicated instruction steps for each connection type on page 7.

- Turn on the instrument.
  The lamp of the Wireless MIDI Adaptor flashes.
- 4 Turn on "Bluetooth" of your iPhone/iPad by tapping Setting → Bluetooth.
- 5 Start the Bluetooth compatible app, and then make the appropriate wireless connection settings.

If the wireless connection is successful, the lamp on the Wireless MIDI Adaptor lights continuously.

The connection procedures are completed at step 5. Use the app on your iPhone/iPad to communicate with your instrument.

**NOTE** Some apps need appropriate settings to communicate with the instrument. For details, refer to the relevant app manuals.

# **Troubleshooting Problems with Wireless LAN Connections**

Factors such as electromagnetic interference can result in disconnection, recording or playback stopping, and other similar problems. In such a case, please try to resolve the problem using the following countermeasures.

**NOTE** The term "access point" below refers to any device that can function as a router.

Countermeasure	Connection via an access point (Connection E)	Connection not via an access point (Connection F)	Applicable situations
Change the Wi-Fi channel being used.	(Refer to the manual that came with your access point for details regarding Wi-Fi channels.)	(Refer to the Owner's Manual or Reference Manual that came with your instrument for details regarding Wi-Fi channels.)	When, in addition to the access point to which the instrument and the iPhone/iPad are connected, other access points are available (multiple networks are displayed on the iPhone/iPad Wi-Fi settings screen).
Stop using Wi-Fi on other devices connected to the same access point.	<b>√</b>	-	When watching video or downloading data on other devices connected to the same network overloads the access point and causes the wireless speed to drop.
Change to Connection F (connection not via an access point).	<b>√</b>	-	When multiple devices are connected to the same network. The access point is overloaded and the wireless speed has dropped.
Turn off any electrical products generating electromagnetic interference.	<b>√</b>	<b>√</b>	When electromagnetic waves used by wireless devices such as portable telephones, microwave ovens, and Bluetooth devices are causing interference.
Move closer to the access point.	<b>√</b>	_	When the network signal strength shown by the instrument's Wi-Fi settings page or the iPhone/iPad is low.
Move the instrument slightly away from the access point.	<b>√</b>	-	When the instrument is right beside the access point, and the strength of the electromagnetic waves is actually making it difficult to receive data.
Turn off Bluetooth on the iPhone/iPad.	<b>√</b>	<b>√</b>	Bluetooth can generate electromagnetic interference even when not being used to connect to other devices.
Update the OS of iPhone/iPad to the latest version.	<b>√</b>	<b>√</b>	In certain cases, communication performance may be improved by updating the OS of iPhone/iPad.
Restart the iPhone/iPad.	<b>√</b>	✓	In certain cases, devices may connect after being reset.
Restart the access point.	<b>√</b>	_	In certain cases, devices may connect to an access point when it is restarted.
Update the access point's firmware to the newest version.	<b>√</b>	-	In certain cases, updating the firmware may improve communication performance.
Replace the access point.	<b>√</b>	_	When using an access point employing old specifications such as IEEE802.11b.

# **Glossary of Terms**

Access point	A device which acts as a base station when transmitting data by wireless LAN.  Some access points are combined with modem functions.	
Broadband	An Internet connection technology/service (such as ADSL and optical fiber) that allows for high-speed, high-volume data communication.	
Internet	A huge network made up of networks, the Internet allows high-speed data transfer among computers, mobile phones and other devices.	
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.	
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.	
Router	A device that allows multiple devices (e.g., computers, your Yamaha instrument) to share the same Internet connection.	
Security setting of access point	Protects data passed from various access points from being intercepted from an unauthorized person/device.	
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 " <a href="https://www.yamaha.com/">https://www.yamaha.com/</a> " is referred to as the Yamaha site.	
SSID	A name used to identify a particular access point, or the wireless networks set as the access point.	
USB Wireless LAN Adaptor	A device which allows wireless LAN connection.	
WEP	A standard of security format of wireless LAN.	
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.	
WPA/WPA2	A standard of security format of wireless LAN. It is more secure than the WEP format adopted in the past.	
WPS	A structure to easily make a setting of wireless LAN by pushing only the WPS buttons of an access point and the wireless LAN device.	

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