

# iPhone/iPad Connection Manual

By connecting your iPhone, iPad or iPod touch to a compatible Yamaha digital instrument and using the various applications we've created, you can manage your music files more easily and take advantage various functions — expanding the potential of the instrument and make it an even more integral part of your total music life.

**NOTE** In this manual, iPhone and iPod touch are hereafter collectively called iPhone.

## Yamaha Applications for Piano & Keyboard Instruments

---

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

<http://www.yamaha.com/kbdapps/>

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

Certain applications 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 applications

You can download the applications from the App Store, accessible by clicking or tapping the App Store icon in each application's page of the website above.

# Contents

---

<b>Yamaha Applications for Piano &amp; Keyboard Instruments .....</b>	<b>1</b>
<b>NOTICE .....</b>	<b>3</b>
<b>Information .....</b>	<b>3</b>
<b>Determining the Connection Type .....</b>	<b>4</b>
<b>Connection .....</b>	<b>8</b>
<b>Troubleshooting Problems with Wireless LAN Connections .....</b>	<b>14</b>
<b>Glossary of Terms .....</b>	<b>15</b>
<b>About Using BSD-Licensed Software .....</b>	<b>16</b>

# 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.

# Information

---

- The contents of this manual are exclusive copyrights of Yamaha Corporation.
- Copying of the reproduction of this manual in whole or in part by any means is expressly forbidden without the written consent of the manufacturer.
- Yamaha makes no representations or warranties with regard to the use of the documentation and cannot be held responsible for the results of the use of this manual.
- The screen displays as illustrated (are based on the CVP-609) in this manual are for instructional purposes, and may appear somewhat different from the screens which appear on your instrument or device.
- Copying of the commercially available musical data including but not limited to MIDI data and/or audio data is strictly prohibited except for your personal use.
- iPhone, iPad, iPod touch and Lightning are trademarks of Apple Inc., registered in the U.S. and other countries.
- IOS is a trademark or registered trademark of Cisco in the U.S. and other countries and is used under license.
- The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Yamaha Corporation is under license.
- The company names and product names in this manual are the trademarks or registered trademarks of their respective companies.





# Determining the Connection Type

You can connect your iPhone/iPad to instruments equipped with MIDI terminals or a [USB TO HOST] terminal, or to instruments compatible with a USB Wireless LAN Adaptor or those equipped with a wireless LAN function. Since the connection procedures differ depending on the terminal of the instrument, the particular iPhone/iPad connector and the iOS version, confirm which connection type applies to your situation, using the following chart.

**NOTE** Audio signals cannot be transferred between the digital instrument and the iPhone/iPad. This means that audio signals created via your keyboard performance cannot be recorded to the connected iPad/iPhone.

## iPhone/iPad Connection Matrix Chart

### Cable connection

		iPhone/iPod touch				iPad	
		Lightning connector 		30-pin connector 		Lightning connector 	30-pin connector 
		iOS 7.0 or later	iOS 4.3 – 6.1.5	iOS 7.0 or later	iOS 4.3 – 6.1.5	iOS 4.3 or later	
Yamaha Instrument	USB TO HOST	A or C	C	B or D	D	A or C	B or D
	MIDI	E		F		E	F

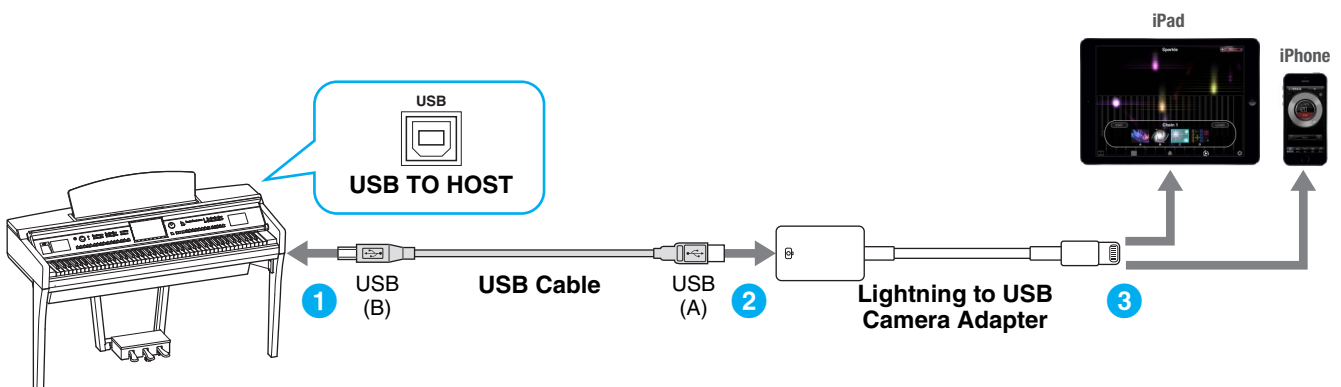
### Wireless connection

Yamaha Instrument		iPhone/iPad/iPod touch	
		Bluetooth 4.0	iOS 4.3 or later
		iOS 8.0 or later	
Yamaha Instrument	USB Wireless LAN Adaptor	G or H	
	Wireless LAN function included		
	USB TO HOST	I	-
	MIDI	J	

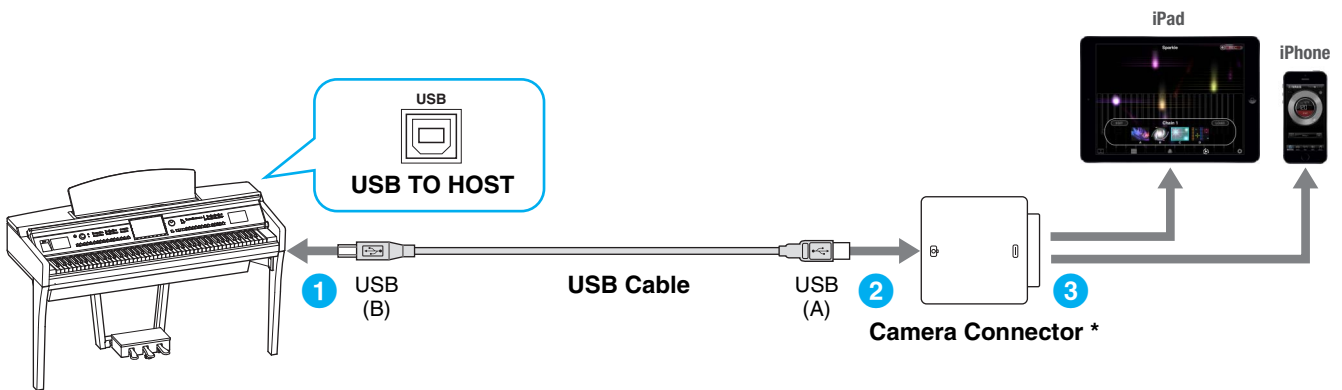
**NOTE** Some of the cables and adaptors used in connections A-J may not be available depending on your area.

**NOTE** Please confirm the version of Bluetooth in the product specification chart of iPhone/iPad/iPod touch.

**Connection A** For connection instructions, see [page 8](#).



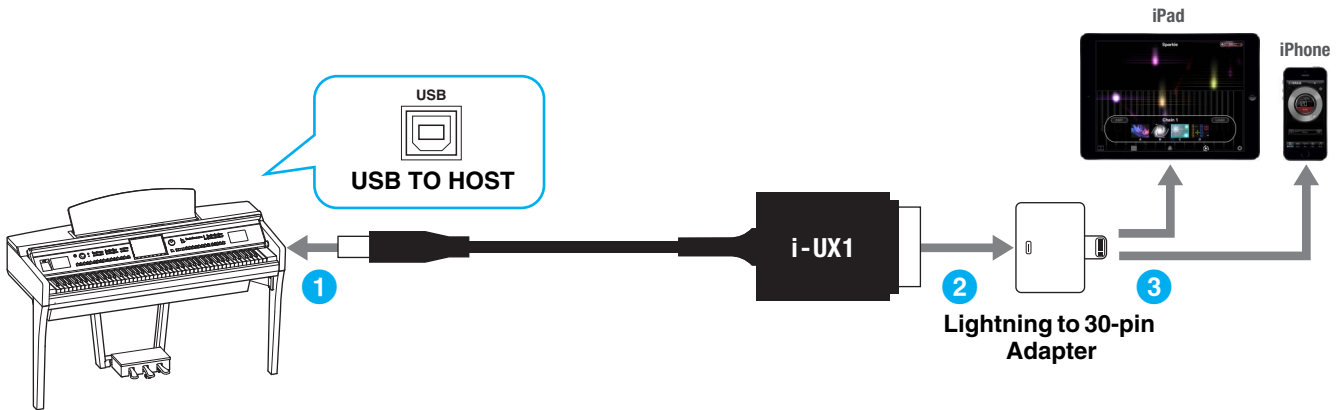
**Connection B** For connection instructions, see [page 8](#).



\* The Camera Connector is included in the Apple iPad Camera Connection Kit.

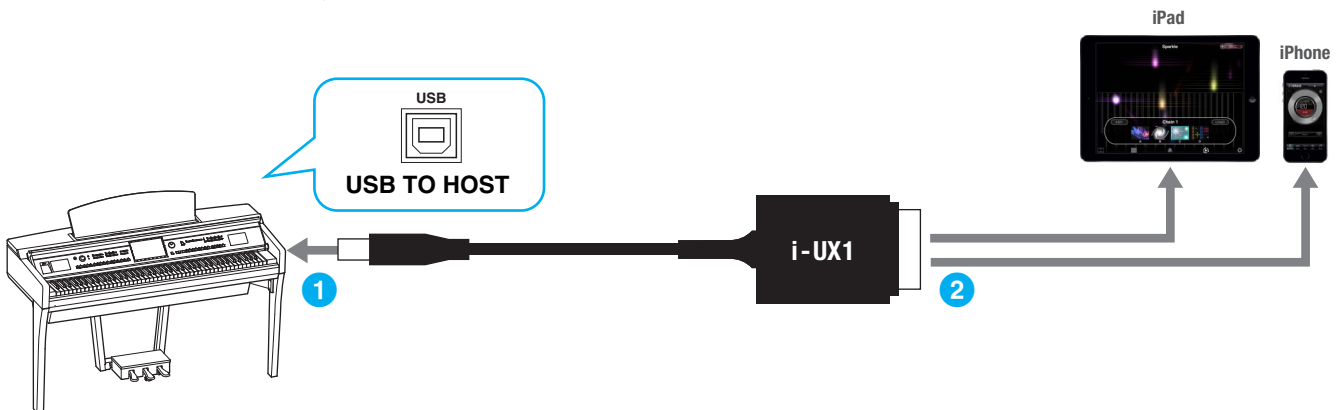
**Connection C** For connection instructions, see [page 8](#).

**NOTE** MIDI data only; audio signal not supported.



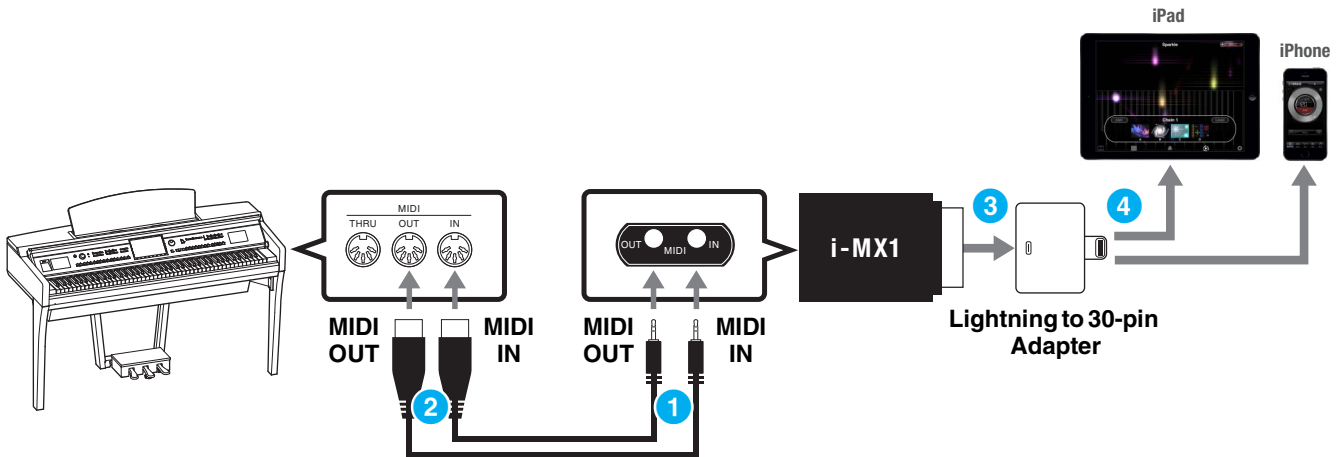
**Connection D** For connection instructions, see [page 8](#).

**NOTE** MIDI data only; audio signal not supported.



**Connection E** For connection instructions, see [page 8](#).

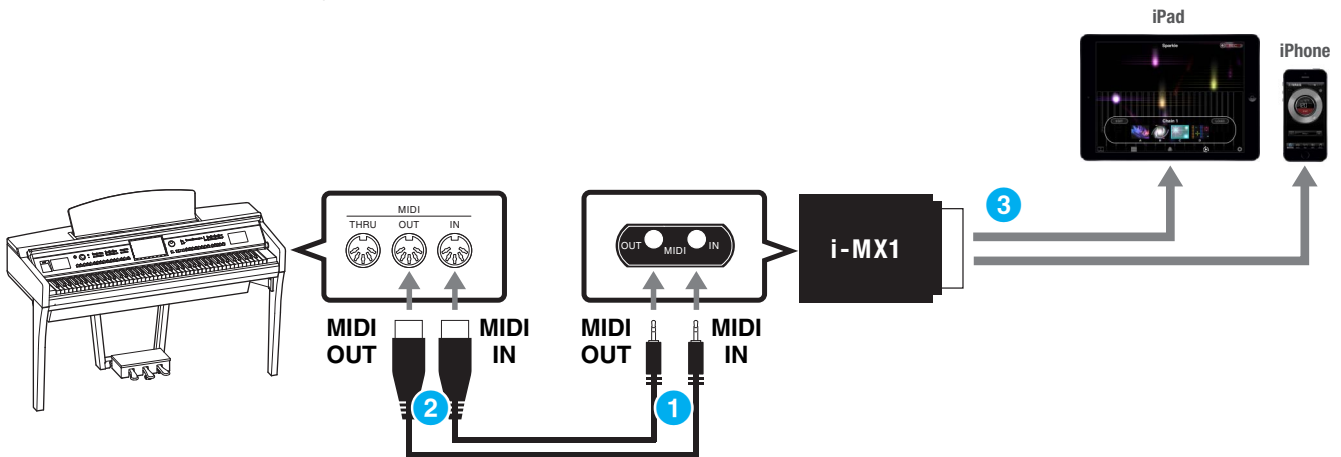
**NOTE** MIDI data only; audio signal not supported.



Please make sure that i-MX1 MIDI OUT terminal is connected to the MIDI IN terminal of the instrument, and the i-MX1 MIDI IN terminal to the MIDI OUT terminal of the instrument.

**Connection F** For connection instructions, see [page 8](#).

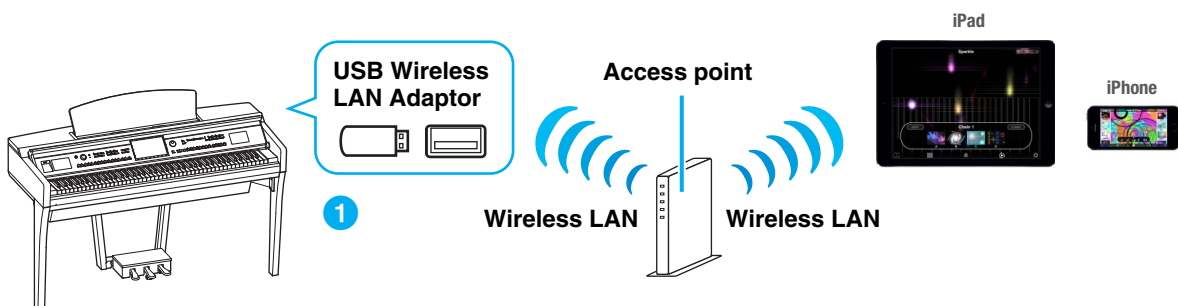
**NOTE** MIDI data only; audio signal not supported.



Please make sure that i-MX1 MIDI OUT terminal is connected to the MIDI IN terminal of the instrument, and the i-MX1 MIDI IN terminal to the MIDI OUT terminal of the instrument.

**Connection G** For connection instructions, see [page 8](#).

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



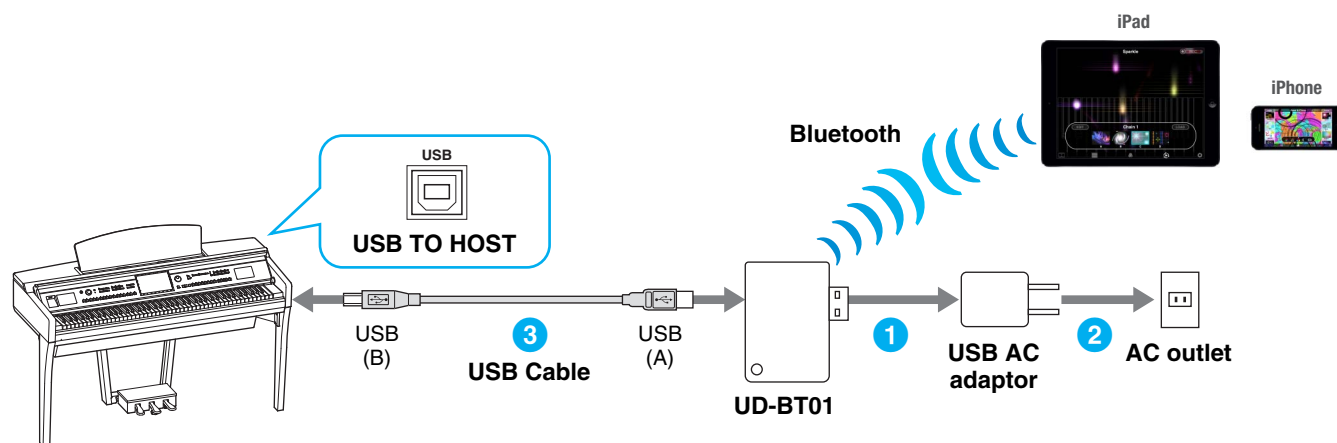
**Connection H** For connection instructions, see [page 12](#).

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



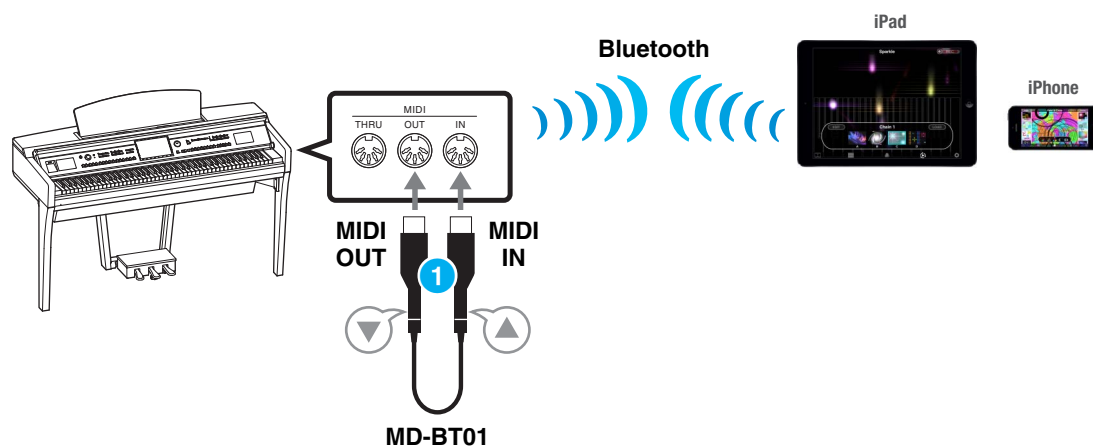
**Connection I** For connection instructions, see [page 13](#).

**NOTE** MIDI data only; audio signal not supported.



**Connection J** For connection instructions, see [page 13](#).

**NOTE** MIDI data only; audio signal not supported.



# Connection

## ■ Connecting with MIDI terminals or a [USB TO HOST] terminal

- 1 Turn off the power of the instrument.**  
Quit any open application software 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.
- 3 Turn on the instrument.**
- 4 The connection procedures are completed at step 3. Use the application on your iPhone/iPad to communicate with your instrument.**

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

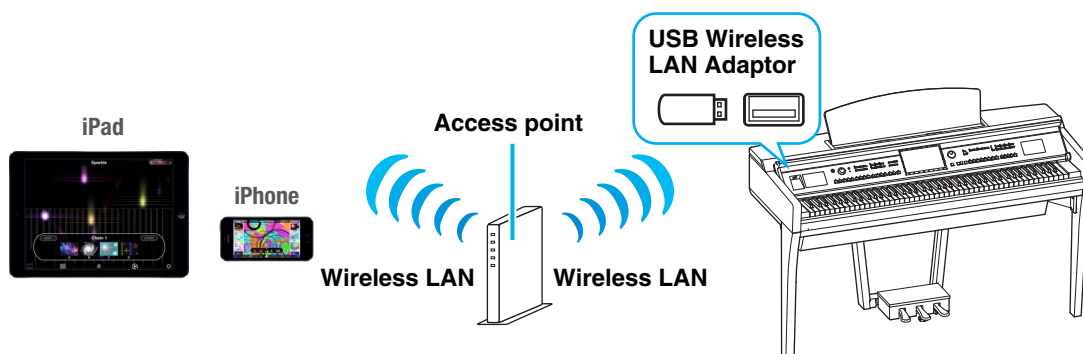
### Operation with iOS 6 or later

Note that iPhone and iPad devices running iOS 6 or later may, on rare occasions, fail to recognize the i-MX1. If this should occur, update the firmware of the i-MX1 to a new version according to the instructions in the attached PDF in the Yamaha website i-MX1 product page.

## ■ 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.

- 1 Turn off the power to the instrument.**  
Quit any open application software 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 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.



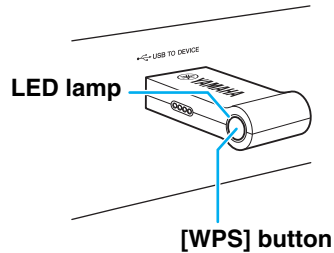
## Automatic Setup by WPS

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.



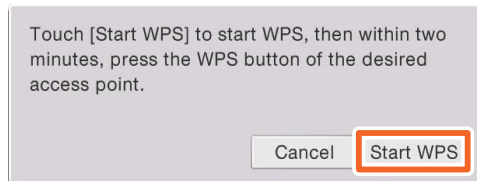
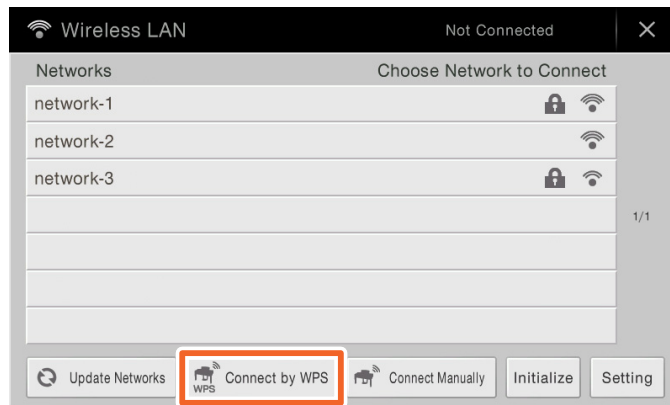
The LED lamp of the adaptor flashes.

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

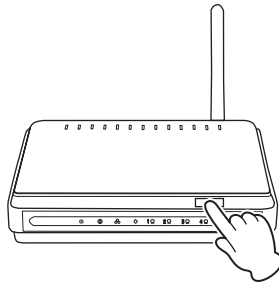
- 1 As illustrated, press the [Start WPS] button via the display of the instrument.

**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.

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



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



Press the WPS button on your access point.

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.

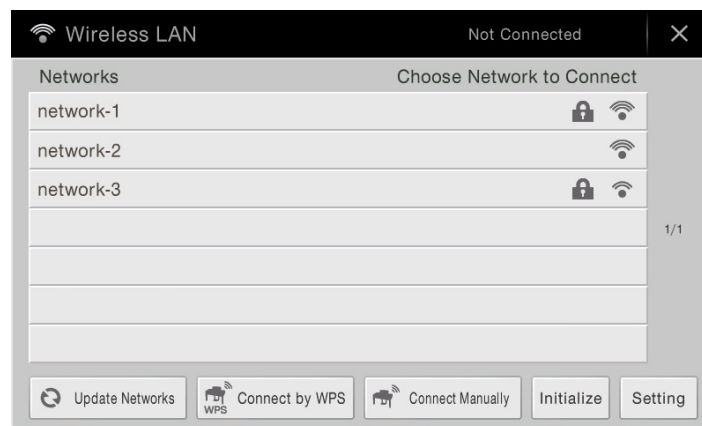
The necessary information is automatically set, and the connection between access point and the instrument has been completed. Proceed to step 6 on [page 12](#) to connect the access point and iPhone/iPad. If you cannot set by WPS, follow the instructions in "Displaying the Networks in the Wireless LAN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

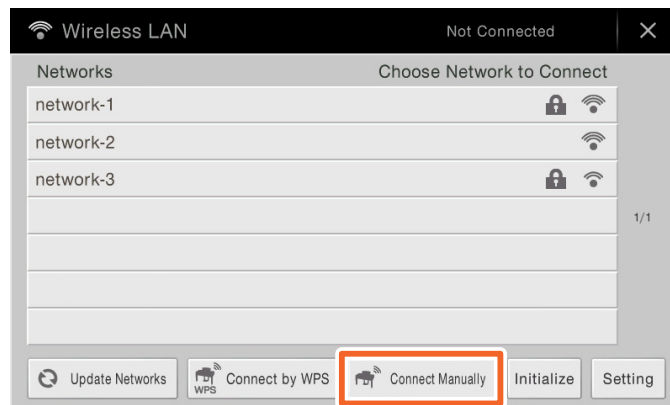
If you cannot find the desired network on the display, it may be a network with closed or non-disclosure. In this case, you will need to manually input SSID, security and key settings for connection.

**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.

For example: CVP-609/CVP-605



Please set these to the same as the settings on the access point.

2

### 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](#)).

## 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 application on your iPhone/iPad to communicate with your instrument.

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

## ■ Connect 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.

### 1 Turn off the power to the instrument.

Quit any open application software 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.

### 6 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.

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

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

## ■ Connect Directly via the Wireless MIDI Adaptor

- 1 Make sure that the power to the connected musical instrument is turned off.**  
Quit any open application software on your iPhone/iPad.
- 2 Connect the Wireless MIDI Adaptor to the instrument.**  
For the proper order, carefully follow the indicated instruction steps for each connection type.
- 3 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.
- 6 The connection procedures are completed at step 5. Use the application on your iPhone/iPad to communicate with your instrument.**

**NOTE** Some applications need appropriate settings to communicate with the instrument. For details, refer to the relevant application 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 G)	Connection not via an access point (Connection H)	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.	✓	–	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 H (connection not via an access point).	✓	–	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.	✓	✓	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.	✓	–	When the network signal strength shown by the instrument's Wi-Fi settings page or iOS is low.
Move the instrument slightly away from the access point.	✓	–	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 iOS.	✓	✓	Bluetooth can generate electromagnetic interference even when not being used to connect to other devices.
Update iOS to the latest version.	✓	✓	In certain cases, communication performance may be improved by updating iOS.
Restart the iOS device.	✓	✓	In certain cases, devices may connect after being reset.
Restart the access point.	✓	–	In certain cases, devices may connect to an access point when it is restarted.
Update the access point's firmware to the newest version.	✓	–	In certain cases, updating the firmware may improve communication performance.
Replace the access point.	✓	–	When using an access point employing old specifications such as IEEE802.11b.

## Glossary of Terms

<b>Access point</b>	A device which acts as a base station when transmitting data by wireless LAN. Some access points are combined with modem functions.
<b>Broadband</b>	An Internet connection technology/service (such as ADSL and optical fiber) that allows for high-speed, high-volume data communication.
<b>Internet</b>	A huge network made up of networks, the Internet allows high-speed data transfer among computers, mobile phones and other devices.
<b>LAN</b>	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.
<b>Link</b>	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.
<b>Modem</b>	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.
<b>Provider</b>	A communications business that offers Internet connection services. In order to connect to the Internet, it is necessary to contract to a provider.
<b>Router</b>	A device that allows multiple devices (e.g., computers, your Yamaha instrument) to share the same Internet connection.
<b>Security setting of access point</b>	Protects data passed from various access points from being intercepted from an unauthorized person/device.
<b>Server</b>	A hardware system or computer used as a central point for a network, providing access to files and services.
<b>Site</b>	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="http://www.yamaha.com/">http://www.yamaha.com/</a> " is referred to as the Yamaha site.
<b>SSID</b>	A name used to identify a particular access point, or the wireless networks set as the access point.
<b>USB Wireless LAN Adaptor</b>	A device which allows wireless LAN connection.
<b>WEP</b>	A standard of security format of wireless LAN.
<b>Wireless LAN</b>	A LAN connection that allows data transfer through a wireless, cable-free connection.
<b>Wireless network</b>	Wireless network where signal is sent and received by using electric waves.
<b>WPA/WPA2</b>	A standard of security format of wireless LAN. It is more secure than the WEP format adopted in the past.
<b>WPS</b>	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.

## (CVP-709/CVP-705/CVP-609/CVP-605 only)

# About Using BSD-Licensed Software

The software used by this product includes components that comply with the BSD license.

The restrictions placed on users of software released under a typical BSD license are that if they redistribute such software in any form, with or without modification, they must include in the redistribution (1) a disclaimer of liability, (2) the original copyright notice and (3) a list of licensing provisions.

The following contents are displayed based on the licensing conditions described above, and do not govern your use of the product.

### WPA Supplicant

Copyright © 2003-2009, Jouni Malinen <j@w1.fi> and contributors  
All Rights Reserved.

This program is dual-licensed under both the GPL version 2 and BSD license. Either license may be used at your option.

### License

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name(s) of the above-listed copyright holder(s) nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

### XySSL

Copyright © 2006-2008, Christophe Devine.  
All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

- \* Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
- \* Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
- \* Neither the name of XySSL nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.