

For Electone Users

iPhone/iPad Connection Manual

By connecting your iPhone, iPad or iPod touch to a compatible Electone and using the various dedicated applications, you can expand the potential of the Electone 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.

Supported Models

- ELC-02/ELCU-M02
- ELS-02/ELS-02C (including Vitalize unit)
- ELB-02
- ELS-01/ELS-01C/ELS-01X (including Type U)
- ELB-01
- DDK-7

Use the above-mentioned models with the latest version.

When an upgrade is required, refer to the following web page for information.

<http://download.yamaha.com/>

Supported iOS Devices and iOS

Supported iOS devices	iPhone	iPhone 4S or later
	iPod touch	iPod touch fifth-generation or later
	iPad	All iPads, except first-generation
Supported iOS	iOS 9.0 or later	

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 Electone. 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.

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NOTICE

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

- Before moving the Electone, 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 Electone 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 the Electone, make sure to remove the iPhone/iPad from the music rest.

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

When using your Electone 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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- 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 company names and product names in this manual are the trademarks or registered trademarks of their respective companies.

Determining the Connection Type

Check the connection method of the Electone you are using with an iPhone/iPad by referring to the below matrix chart.

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

■ iPhone/iPad Connection Matrix Chart

When using wireless communications:

			iPhone/iPad/iPod touch
Electone	USB TO DEVICE	USB wireless LAN adaptor	A or B



NOTE The ELB-01 does not support wireless communication.

About USB wireless LAN adaptor

The USB wireless LAN adaptor lets you connect the Electone to an iPhone/iPad. For details, contact your nearest Yamaha representative or the distributor listed at the end (or beginning) of your Owner's Manual. Or you can access the following website and contact Yamaha support at your location.

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

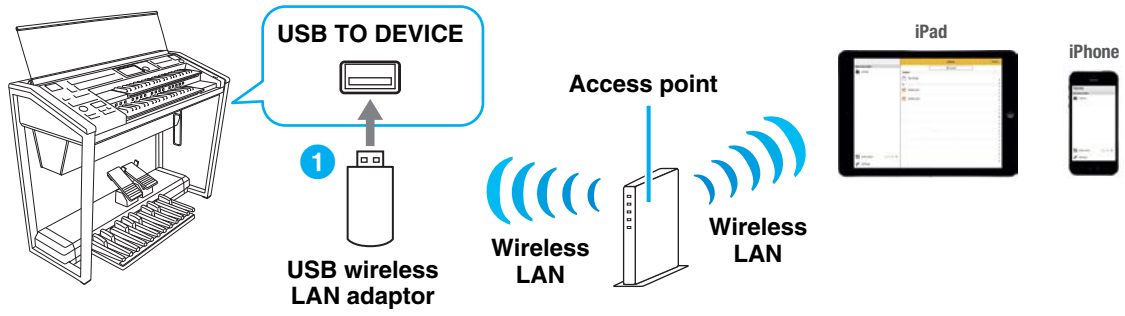
When using a cable for communications:

		iPhone/iPad/iPod touch	
		Lightning connector 	30-pin connector 
Electone	USB TO HOST	C or E	D or F
	MIDI	G	H

NOTE Lightning to USB Camera Adapter, Apple iPad Camera Connection Kit (Camera Connector) and Lightning to 30-pin Adapter are the only Apple products supported. When products of manufacturers other than Apple are used, the instrument may not operate properly.

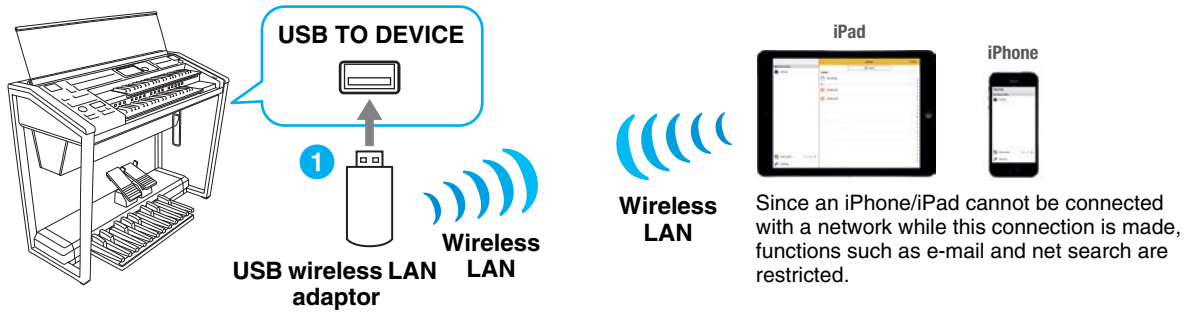
Connection A

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



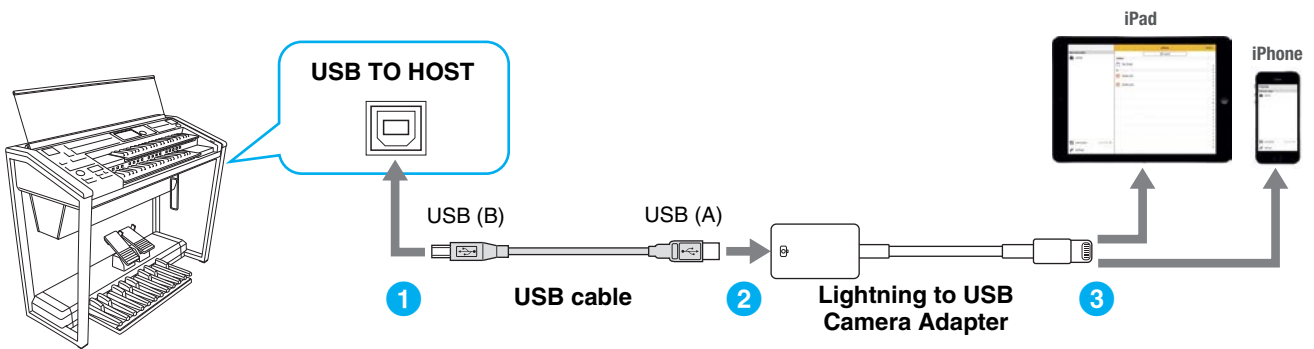
Connection B

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



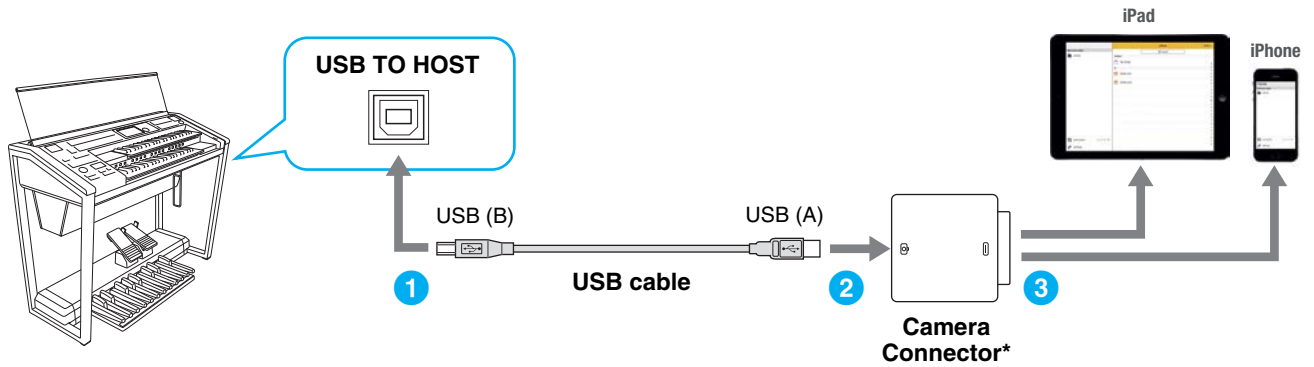
Connection C

For connection instructions, see [page 15](#).



Connection D

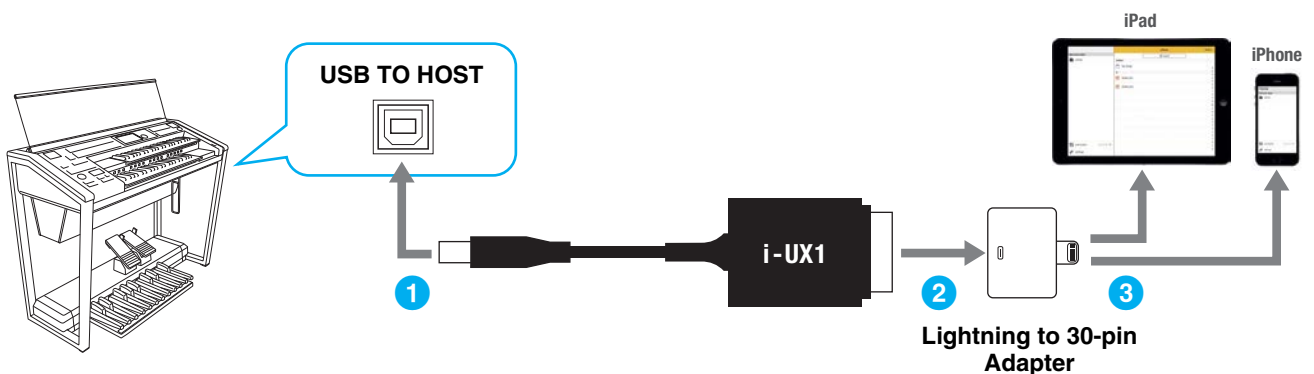
For connection instructions, see [page 15](#).



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

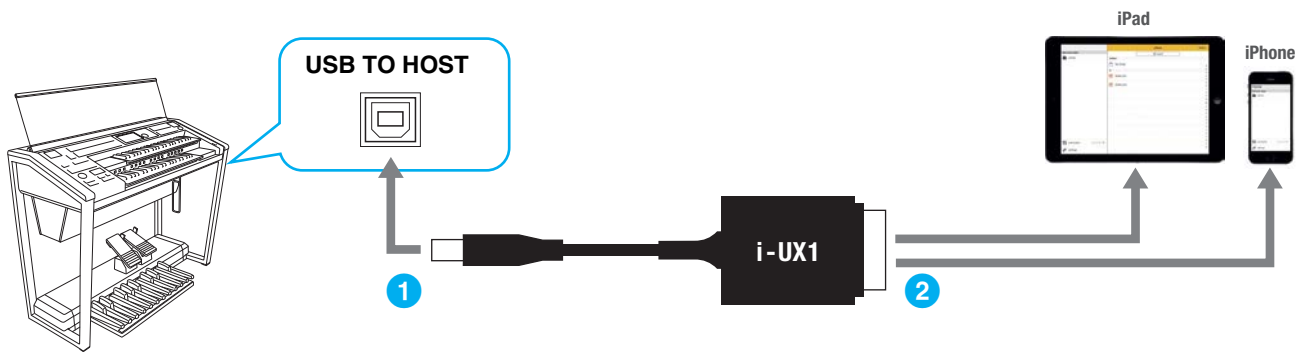
Connection E

For connection instructions, see [page 15](#).



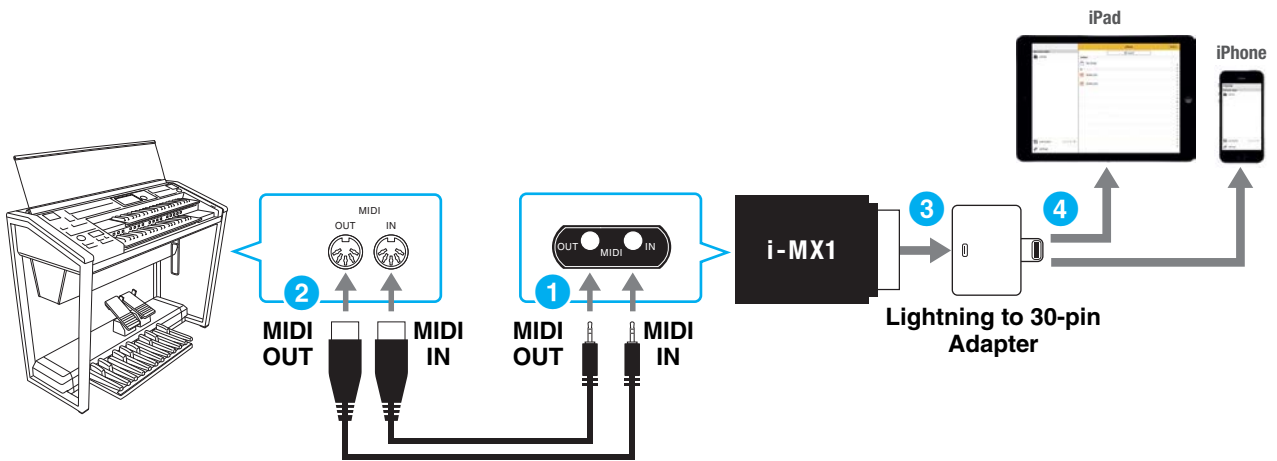
Connection F

For connection instructions, see [page 15](#).



Connection G

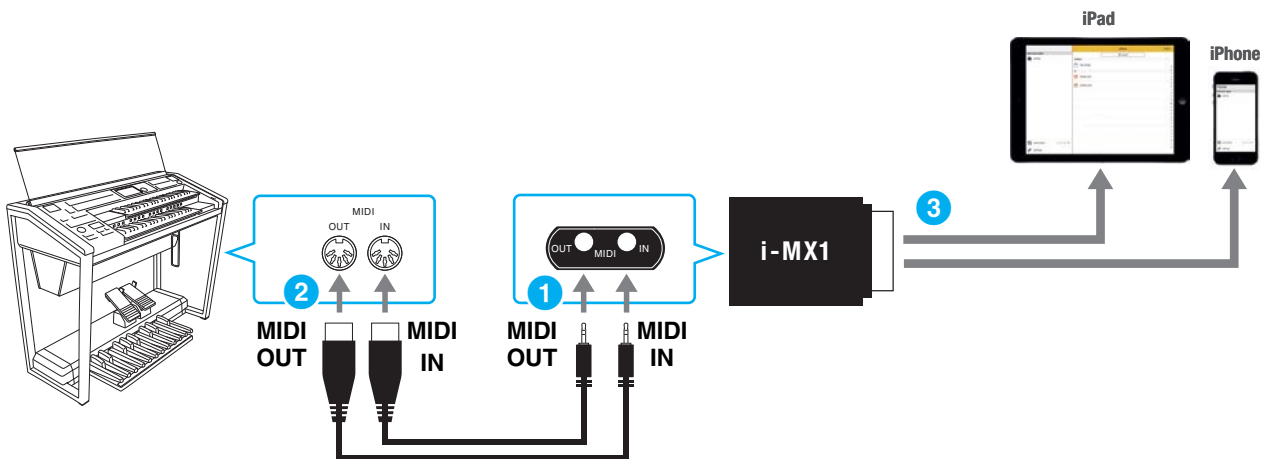
For connection instructions, see [page 15](#).



Make sure that i-MX1 MIDI OUT terminal is connected to the MIDI IN terminal of the Electone, and the i-MX1 MIDI IN terminal to the MIDI OUT terminal of the Electone.

Connection H

For connection instructions, see [page 15](#).



Make sure that i-MX1 MIDI OUT terminal is connected to the MIDI IN terminal of the Electone, and the i-MX1 MIDI IN terminal to the MIDI OUT terminal of the Electone.

Connecting the Electone to an Access Point Using a USB Wireless LAN Adaptor (Connection A)

■ Wireless connection of the Electone to an iPhone/iPad, via an access point using a USB wireless LAN adaptor

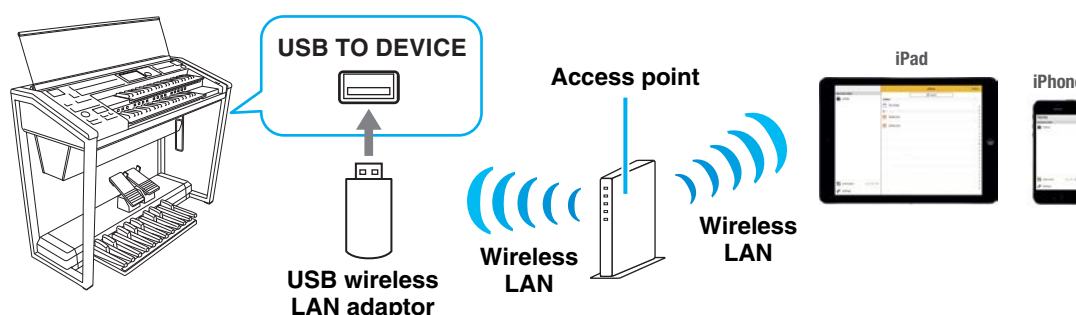
Required devices

- USB wireless LAN adaptor *

*For details about wireless LAN adaptor, contact your nearest Yamaha representative or the distributor listed at the end (or beginning) of your Owner's Manual. Or you can access the following website and contact Yamaha support at your location.

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

- Access point with router (This is unnecessary if your modem has router capability.)



1 Turn off the power to the Electone.

Quit any open application software on your iPhone/iPad.

2 Connect the USB wireless LAN adaptor to the [USB TO DEVICE] terminal of the Electone.

3 Turn on the power to the Electone.

4 If your Electone 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 New Functions PDF of your Electone.

5 Connect the Electone 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.

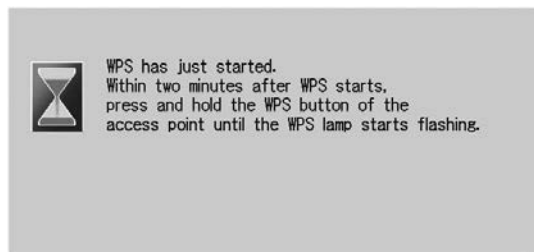
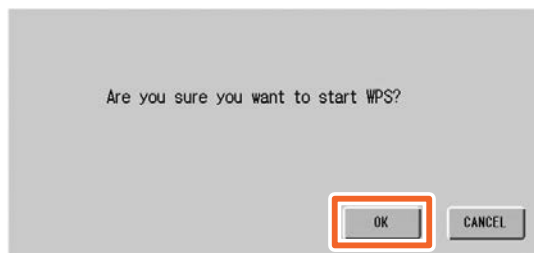
Automatic Setup by WPS

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

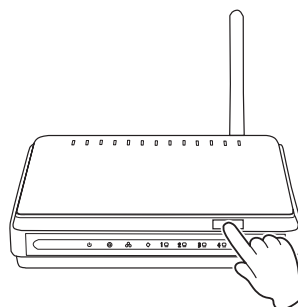
NOTE Check whether your access point supports WPS by referring to the owner's manual for the access point you are using.

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

Example display from ELS-02/ELS-02C (including Vitalize unit): [UTILITY] button → [WIRELESS LAN]



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



Press the WPS button on your access point.

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 Electone has been completed. Proceed to step 6 on [page 11](#) 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 Electone to the network by selecting it in the wireless LAN display on the Electone. For more information on displaying networks in the wireless LAN display of the Electone, refer to the Owner’s Manual or the New Functions PDF of your Electone.

1 Press the [UPDATE] button to show the available networks in the wireless LAN display of the Electone.

Example display from ELS-02/ELS-02C (including Vitalize unit): [UTILITY] button → [WIRELESS LAN]

The “Connected” indication appears when the Electone and the access point have been successfully connected.



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

NOTE If the Electone has been successfully connected to a network, “Connected” is shown on the upper right of the display, and the color of the connected network indication changes to orange.

2 Connect the Electone 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 Electone and the access point is complete. Proceed to step 6 on [page 11](#) 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.”

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

Manual Setup

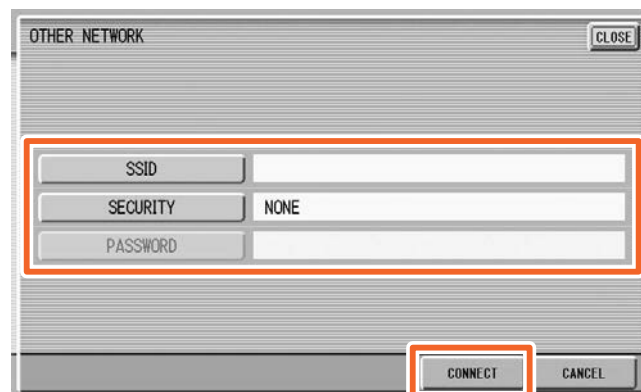
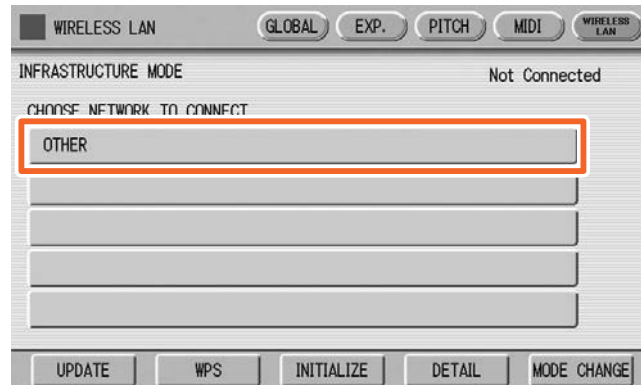
If you cannot find the desired network on the display because SSID broadcast was disabled or the WPS function is not installed in the access point, you will need to manually input the SSID, security and password settings for connection on the setting display of the Electone.

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 Electone, refer to the Owner's Manual or the New Functions PDF of your Electone.

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

Example display from ELS-02/ELS-02C (including Vitalize unit): [UTILITY] button → [WIRELESS LAN] → [OTHER]



Set these to the same as the settings on the access point.

2 Press the [CONNECT] button as illustrated.

The necessary information is set, and the connection between access point and the Electone has been completed. Proceed to step 6 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."

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 Electone in step 5. If the password is required, input the password, then connect.

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

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

Connecting Directly Using a USB Wireless LAN Adaptor (Connection B)

■ Direct wireless connection of the Electone to an iPhone/iPad, using a USB wireless LAN adaptor

Required device

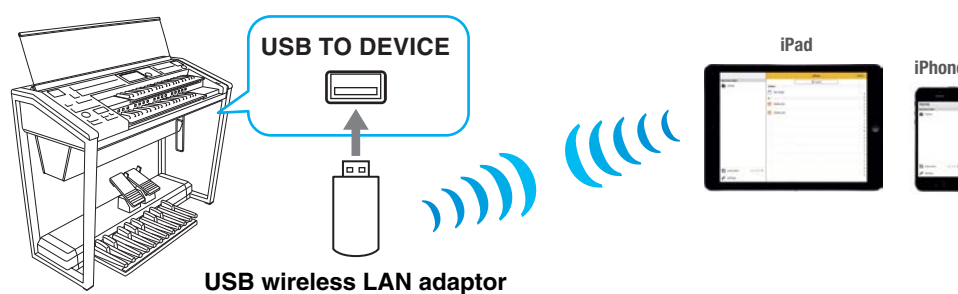
- USB wireless LAN adaptor *

*For details about wireless LAN adaptor, contact your nearest Yamaha representative or the distributor listed at the end (or beginning) of your Owner's Manual. Or you can access the following website and contact Yamaha support at your location.

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

NOTE This connection is only for Electones which have the Ad Hoc mode function.

NOTE Note that when your Electone 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.



1 Turn off the power to the Electone.

Quit any open application software on your iPhone/iPad.

2 Connect the USB Wireless LAN Adaptor to the [USB TO DEVICE] terminal of the Electone.

3 Turn on the power to the Electone.

4 Switch the Electone to the Ad Hoc mode.

Select the Ad Hoc mode in the Wireless LAN mode setting. For details, refer to the Owner's Manual or the New Functions PDF of your Electone.

Ex. shown, ELS-02/ELS-02C (including Vitalize unit): [UTILITY] button → [WIRELESS LAN] → [MODE CHANGE]



5 As necessary, set the SSID and so on.

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

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

6 Save the settings.

The settings for the Electone are complete.

7 Connect the iPhone/iPad to the Electone.

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 Electone that you set to Access Point mode or Ad Hoc mode. If the password is required, input the password, then connect.

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

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

Troubleshooting Problems with Wireless LAN Connections

Factors such as electromagnetic interference can result in disconnection 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 A)	Connection not via an access point (Connection B)	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 New Functions PDF that came with your Electone for details regarding Wi-Fi channels.)	When, in addition to the access point to which the Electone 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 B (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 Electone's Wi-Fi settings page or iOS is low.
Move the Electone slightly away from the access point.	✓	–	When the Electone 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.

Connecting to an iPhone/iPad Using a Cable (Connection C, D, E, F, G, H)

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

1 Turn off the power of the Electone.

Quit any open application software on your iPhone/iPad.

2 Connect your iPhone/iPad to the Electone.

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

3 Turn on the Electone.

4 The connection procedures are completed at step 3. Use the application on your iPhone/iPad to communicate with your Electone.

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

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.
DHCP	The standard for assigning required information, including an IP address etc., automatically to a computer, whenever you connect to the Internet.
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 "http://www.yamaha.com/" 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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