

Wireless DCP

Owner's Manual

Introduction

Thank you for downloading the Wireless DCP app for Yamaha Matrix Processor MTX-series. Wireless DCP allows these processors to be controlled remotely using smart devices. In specific terms, it has been designed to allow users to control volumes and presets on MTX processors via a simple, intuitive graphical interface from anywhere within wireless range.

The latest version of the firmware for MTX-series products can be downloaded from the following web site.

<http://www.yamahaproaudio.com/>

The descriptions in this document use display examples on an iOS device. If you are using an Android device, the instructions are the same; simply follow along with the display on your device.

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Contents

1. System Requirements	3
2. Getting Started	3
3. Configuration	4
3.1 MTX Processor	4
3.2 iOS Device	7
3.3 Wireless DCP	11
3.3.1 Offline Demo Mode	12
3.3.2 Making Connections	14
3.3.3 Entering a PIN	15
3.3.4 Resetting PINs	17
3.3.5 Manual IP	18
4. Controller Screen	23
5. Preset Screen	25
6. Player Screen	26
7. Settings Screen	30
7.1 Overview	30
7.2 Selecting a Device	32
7.3 Changing PINs	33
7.4 Staff Settings	34
7.5 Device Date and Time	35
7.6 Style (Controller Formats)	36
7.7 Displaying App Information	37
8. Troubleshooting	38

1. System Requirements

- **Smart devices supported:**

iPhone (iPhone3GS or later), iPod touch (3rd generation or later), iPad
Android OS 4.2 or later

Please refer to the Yamaha Pro Audio website shown below for the latest tested Android devices and OS versions.

<http://www.yamahaproaudio.com>

- **Yamaha Matrix Processor MTX-series**
- **Wi-Fi access point (preferably with 802.11n, 5-GHz capability)**
- **Cat 5e cable (for connecting MTX processor and Wi-Fi access point)**

2. Getting Started

Set up your Wi-Fi access point as described in the manual that came with it. While no special settings are needed, we recommend using WPA security or the like in order to prevent unwanted devices from joining the network. Less experienced Wi-Fi users may benefit from the following suggestions.

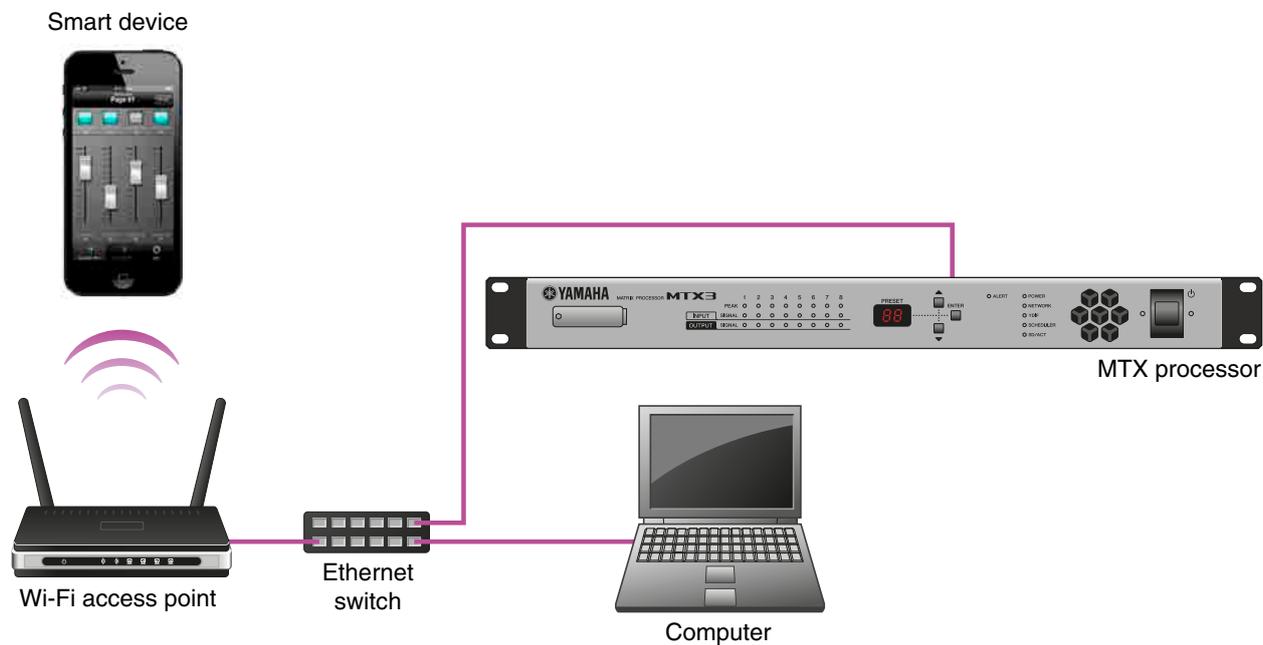
1. Assign a name to your wireless network.
2. Activate a security mode (such as WPA2) and set a password.
3. Select a wireless mode such as 802.11n or 802.11g.
4. If available, enable Auto Channel Selection so that the wireless channel with the lowest level of interference will be automatically selected.

We recommend using 802.11n networks as they support faster communication between smart devices and Wi-Fi access points. We also recommend using Wi-Fi access points with multiple external antennae as this makes it easier to connect to the network. For increased security, meanwhile, we recommend using a stealth mode or MAC address filtering.

3. Configuration

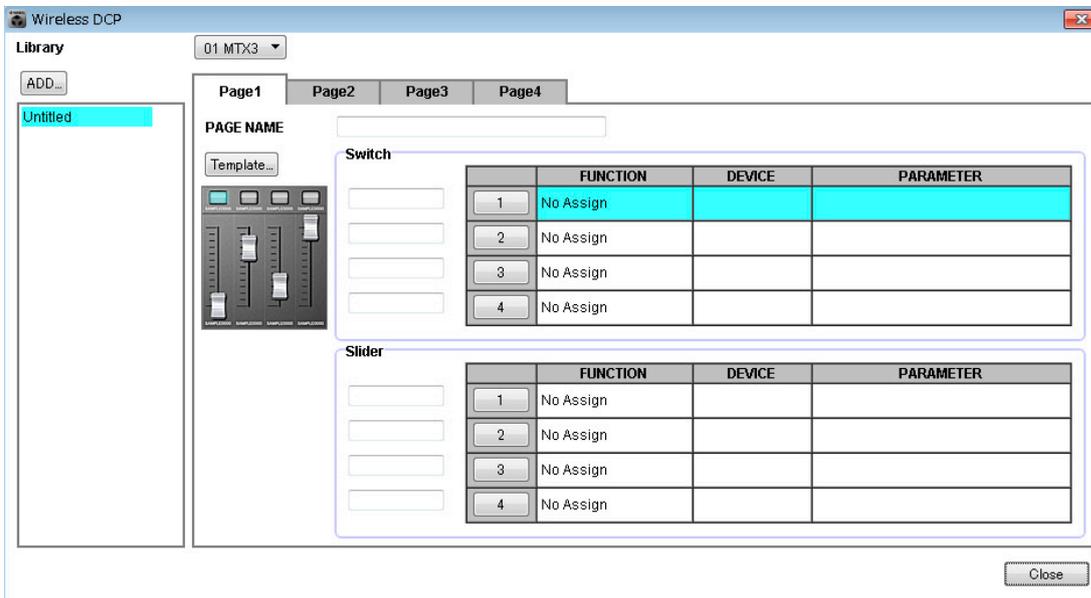
3.1 MTX Processor

Using a Cat 5e cable, connect your Wi-Fi access point to the Network port on the MTX processor. Insert an Ethernet switch as necessary.

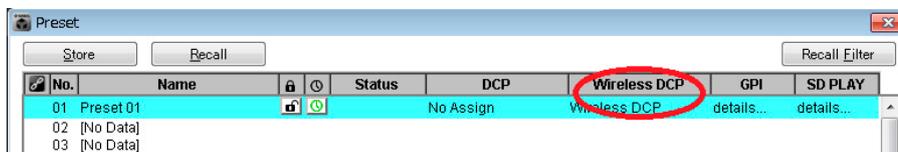


Refer to the MTX setup manual for instructions on setting the MTX processor.
 Configure Wireless DCP according to the MTX Editor User's Manual.

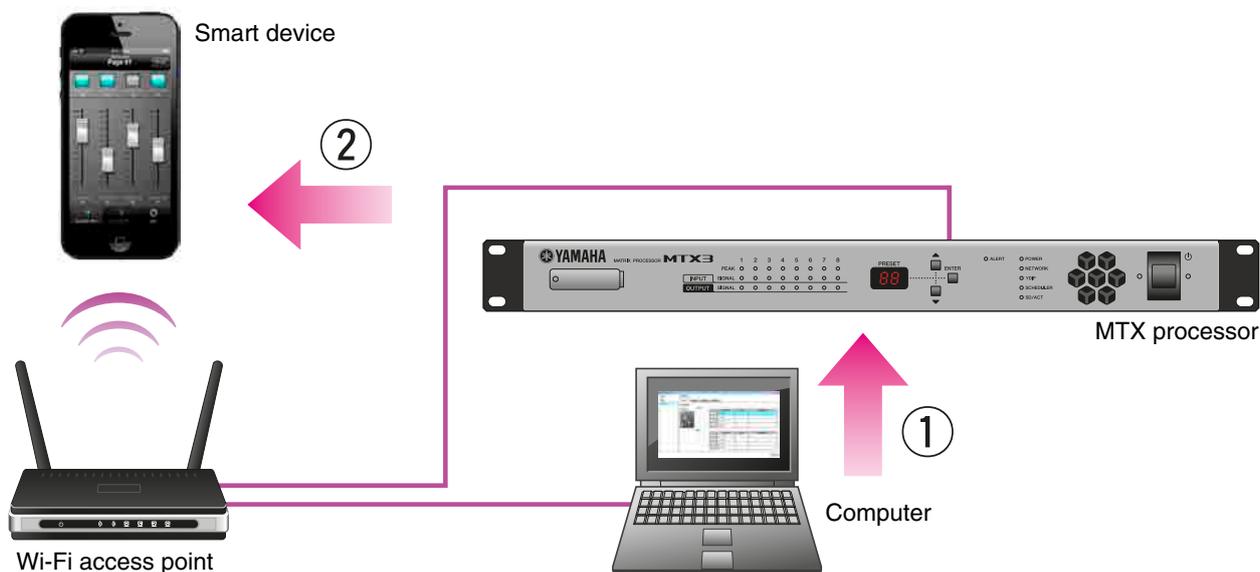
● **Setting the controllers (Wireless DCP dialog box)**



● **Setting the presets (Preset dialog box)**



When the above settings are sent from the MTX Editor to the MTX processor (①), the Wireless DCP operates to retrieve the contents (②).



● Setting Up

Below are instructions for the basic configuration.

1. Check IP address mode of the MTX processor to which the Wireless DCP will be connected.

Check that DIP SW6 on the rear panel of the MTX processor is set to UNIT ID (upper position).

The IP address of the MTX processor is now set as the UNIT ID (i.e., 192.168.0.[UNIT ID]).

2. Set the PC's IP address to DHCP (obtain an IP address automatically) for use with MTX Editor. The PC will obtain its IP address from the DHCP server on the access point.

3. Change the IP address of the Wi-Fi access point.

The IP address of the MTX processor and the Wi-Fi access point should be the same subnet. Use 192.168.0.254 for the access point Wi-Fi IP address, ensuring this does not conflict with any other devices on the network, such as a gateway address. Refer to the user manual of your particular access point to set the IP address of the Wi-Fi access point.

4. Configure the DHCP server function in the Wi-Fi access point.

The IP address of the Wi-Fi access point and the DHCP address range must not have the same IP address as any other device (i.e., MTX/XMV) in the network. We recommend a setting the DHCP address within the range of 192.168.0.150 to 192.168.0.200. Refer to the user manual of your particular access point. It is important to ensure that no IP addresses are duplicated by multiple devices.

5. Launch MTX Editor and configure the Device Configuration Wizard according to the devices present.

6. Configure the Wireless DCP settings in MTX Editor and store them as a library.

7. Assign the Wireless DCP library to all presets requiring control.

8. Go online and synchronize to the devices.

This will send all configured settings to the MTX processors.

9. Recall the preset made in step 7 from MTX Editor or the front panel of the MTX processor.

10. Configure the Wi-Fi settings of the smart device.

Refer to the Wi-Fi configuration in ["iOS Device"](#) in section 3.2 about the iOS device.

11. Launch Wireless DCP on your smart device.

12. Confirm that the MTX processor is present in the "Select Device" screen.

If no MTX processor is present, turn off Wi-Fi in the smart device settings, then turn it back on again.

If the "Not connected" screen is displayed, check again that all presets to be controlled have the wireless DCP library assigned to them in MTX Editor; otherwise no MTX processor will be recognized by the Wireless DCP. If the MTX processor is not automatically present in the "Select Device" screen after the above settings are made, manually add the MTX processor's IP address ([3.3.5 Manual IP](#)).

13. At the "Select Device" screen, select the MTX processor that you configured.

14. Unless a PIN (a four-digit number) has already been set, tap "Join" on the onscreen keyboard.

15. The "Controller 1" screen will appear.

The Change PINs ([page 33](#)), and Staff Settings ([page 34](#)) can be configured according to the project.

NOTE

When changing previously configured Wireless DCP library settings, such as assigning parameters to switches and knobs, the latest settings will not be reflected automatically on the smart device after going online to other devices. The first time after going online, always recall the preset from the front panel or within MTX Editor.

3.2 iOS Device

1. Go to Settings. Tap Wi-Fi.



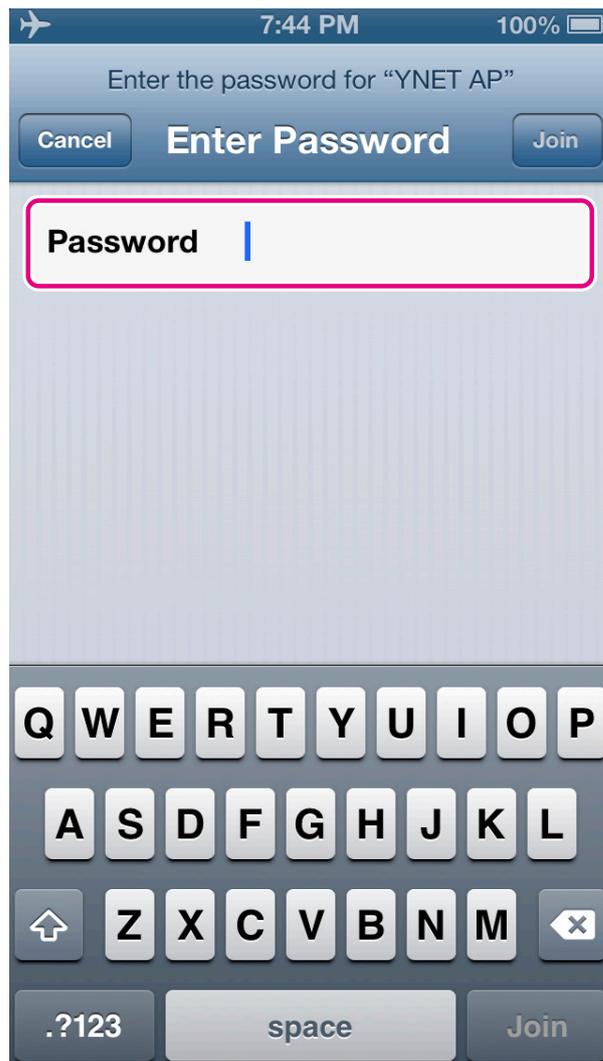
2. Turn on Wi-Fi.



3. Under Choose a Network..., select the Wi-Fi access point to which the MTX processor is connected.



4. Enter the Wi-Fi access point's password. Refer to Section 2. [Getting Started](#) for more details.



5. Configure your network as follows. (Use Procedure [5-1](#) if the network assigns IP addresses automatically; use Procedure [5-2](#) if not.)

5-1. Select DHCP if the network's DHCP server automatically determines IP addresses.

5-2. Select Static if you need to manually set an IP address.

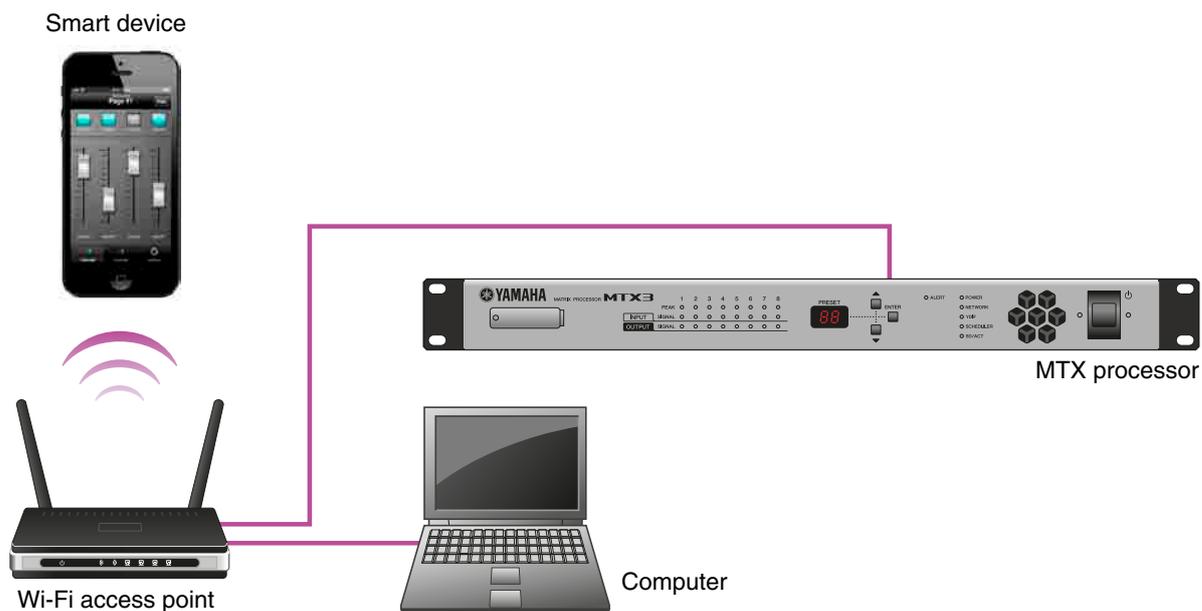


1. Verify that settings have been made for IP Address, Subnet Mask, Router, and DNS.
2. Press the Home button to complete the network setting process.



1. IP Address: For the first three numbers, use those from the MTX processor's IP address. Set a different value for the fourth number.
2. Subnet Mask: Enter "255.255.255.0".
3. Router: Enter the IP address of the router or Wi-Fi access point to be used.
4. Enter the IP address of the DNS or Wi-Fi access point to be used.
5. Press the Home button to complete the network setting process.

● Key points for network configuration



1. The devices to be connected must have IP addresses from the same network (or subnet).

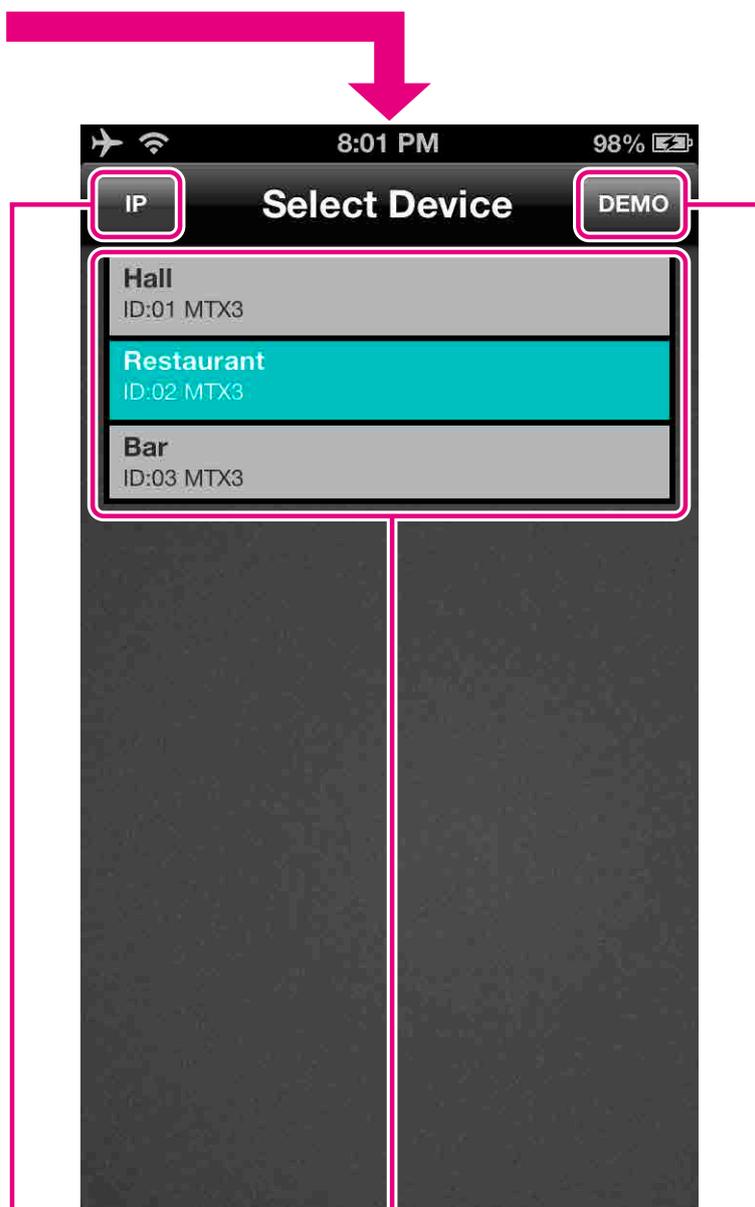
	Good combination of settings	Incorrect combination of settings
Router with integrated Wi-Fi* and DNS	<u>192.168.0.254</u>	192.168.11.1
MTX processor	<u>192.168.0.1</u>	192.168.0.1
Smart device	<u>192.168.0.200</u>	192.168.11.50
Computer	<u>192.168.0.253</u>	192.168.0.253

*: If using a Wi-Fi access point that is not also a router, set the IP address for accessing it.

2. Eight smart devices running Wireless DCP can be connected to each MTX processor. (However, only one device can be logged into with an administrator PIN.)
3. Connect the MTX processor to the LAN connector of the Wi-Fi access point.
If you connect to a WAN (Internet) connector, the smart device will not be able to communicate properly with the MTX processor.

3.3 Wireless DCP

Tap the Wireless DCP app to launch it. The Select Device screen will be displayed.



Manual IP list button

The Manual IP screen will be displayed. Refer to Section [3.3.5 Manual IP](#) for details.

Device list

MTX processors available for connection are displayed here. When you select one, the Enter PIN screen will be displayed.

DEMO button

Tap DEMO on this screen to activate Offline Demo mode. In this mode, you can try out Wireless DCP functions and the user interface without performing any actual operations on the MTX processor.

If you launch Wireless DCP with Auto-connect mode active, the app will automatically reconnect to the MTX processor it was most recently used with. You can use the Auto-connect switch to modify this setting. Refer to Section [3.3.3 Entering a PIN](#) for details.

■ 3.3.1 Offline Demo Mode

In Offline Demo mode, Wireless DCP disconnects from the MTX processor so you can try out the app's functions and user interface without performing any actual operations. To activate this mode, tap DEMO on the Select Device screen.

Controller pane

Use this pane to try out the faders and buttons.

Page button

Tap to display the Select Page screen.



Controller 1 and Controller 2 buttons

Tap to switch the Controller pane's display.

Preset button

Tap to display the Preset screen.

Player button

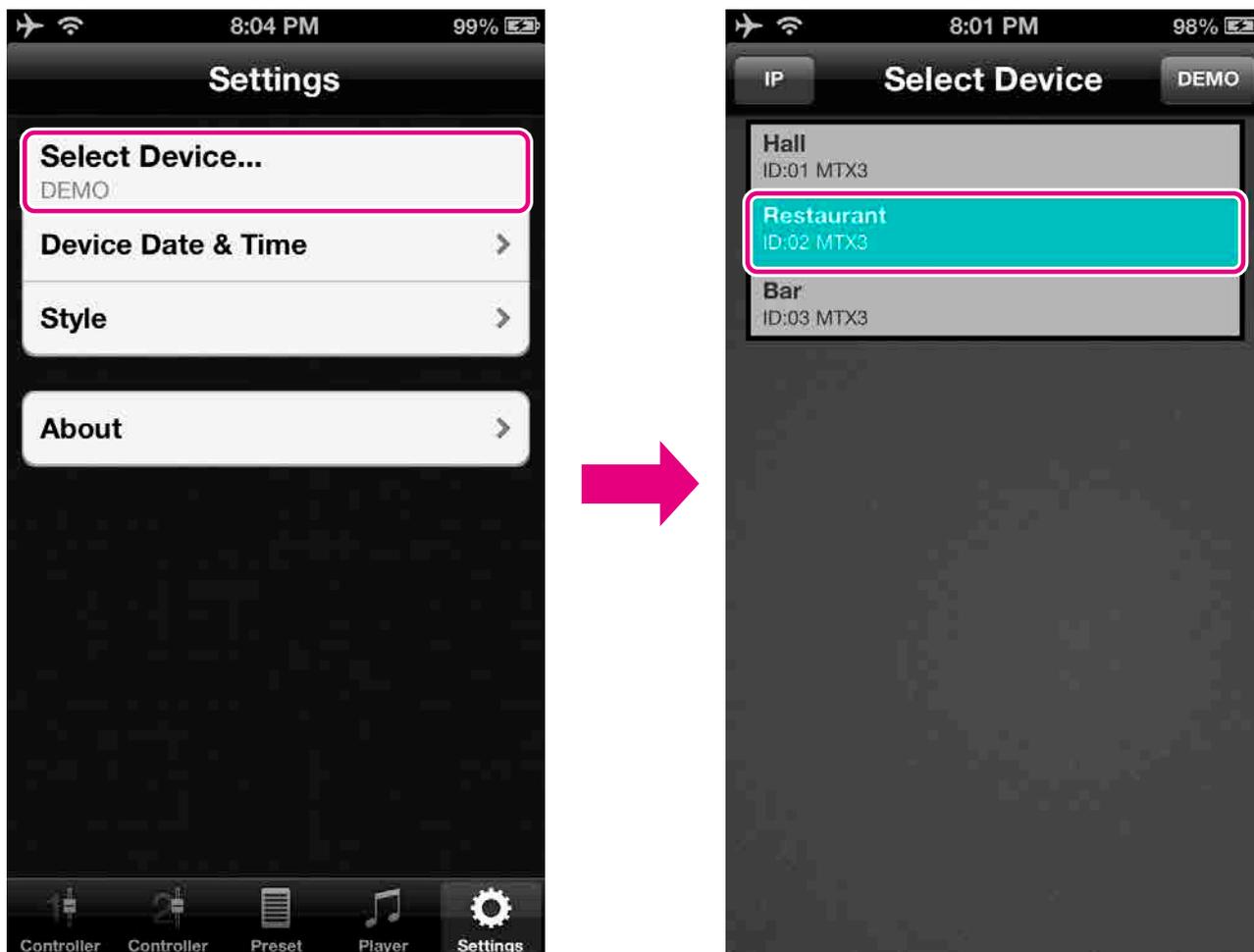
Tap to display the Player screen.

Settings button

Tap to display the Settings screen.

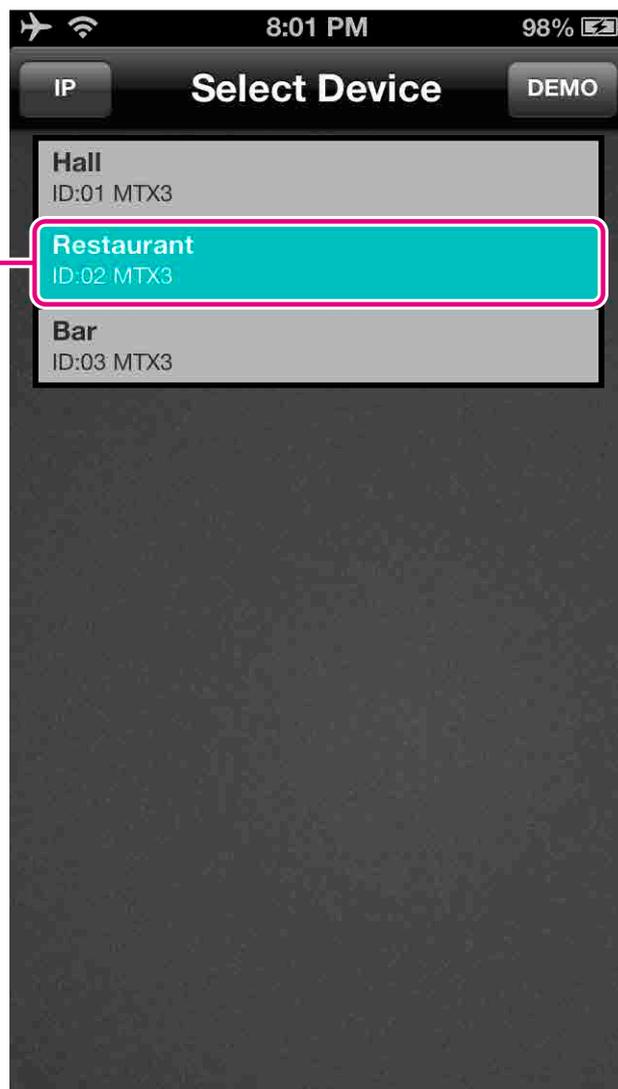
- **From Demo mode to Normal mode**

On the Settings screen, tap Select Device... to display the Select Device screen. Here, you can select the MTX processor to be controlled. When you do so, the Enter PIN screen will be displayed.



■ 3.3.2 Making Connections

On the Select Device screen, tap the MTX processor to be controlled.



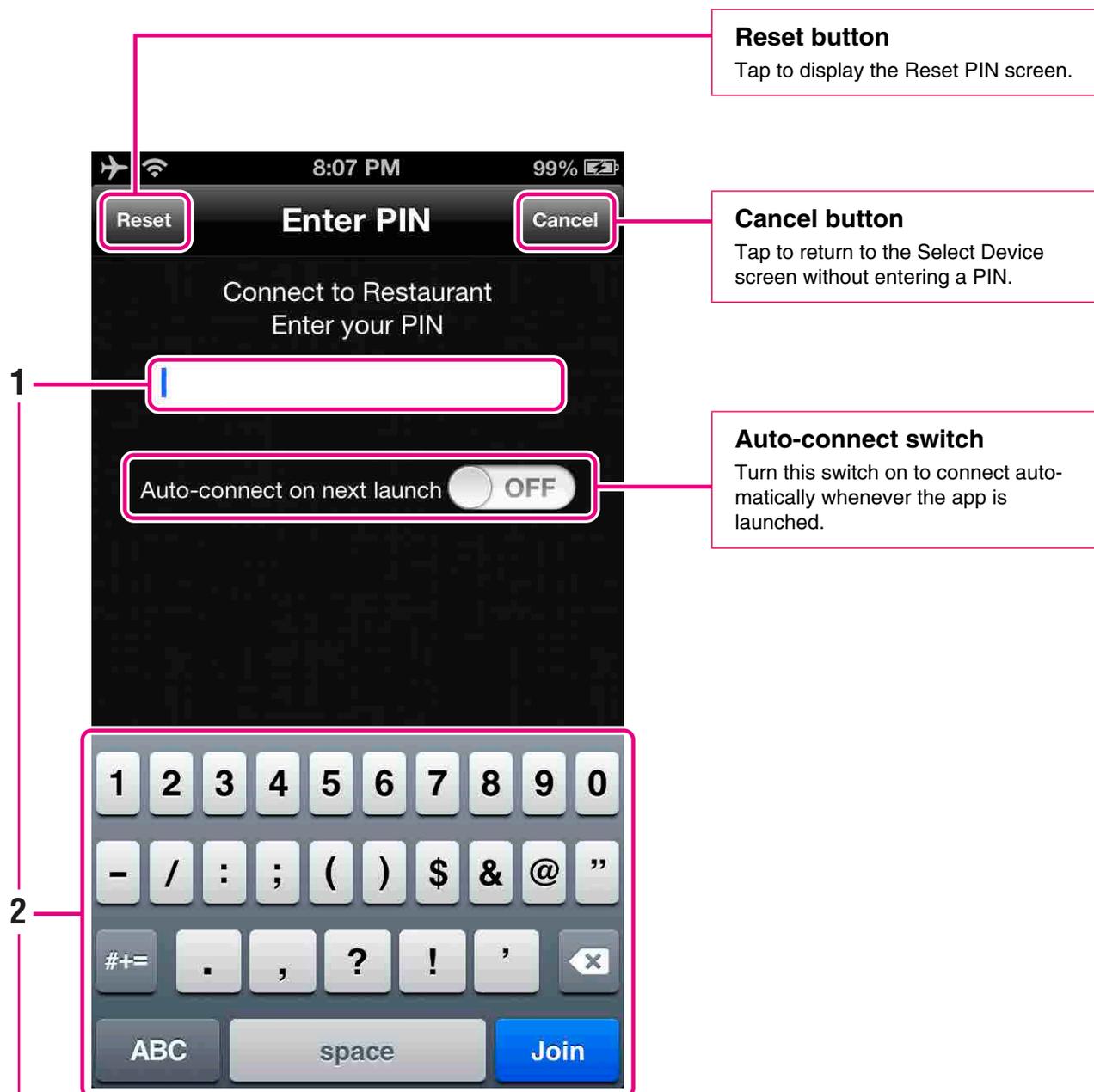
When you select a processor, the Enter PIN screen will be displayed.

Information displayed

Upper line: Device name (configured using MTX Editor)
Lower line: Unit ID and model name

■ 3.3.3 Entering a PIN

Enter a valid PIN to connect to the selected MTX processor.



■ To enter a PIN

1. Enter your PIN using the keyboard.
2. Tap Join to connect to the MTX processor. Upon connection, the Controller 1 pane will be displayed.

NOTE

PINs take the form of a four-digit number, and none are set when the app is first launched. In this condition, it is possible to log into Wireless DCP without entering a PIN by simply tapping Join. It is important, therefore, to set PINs. Refer to Section [7.3 Changing PINs](#) for details.

There are two different types of PIN—one for administrator, one for staff. As shown below, certain functions are available only when logged into the MTX processor using an administrator PIN.

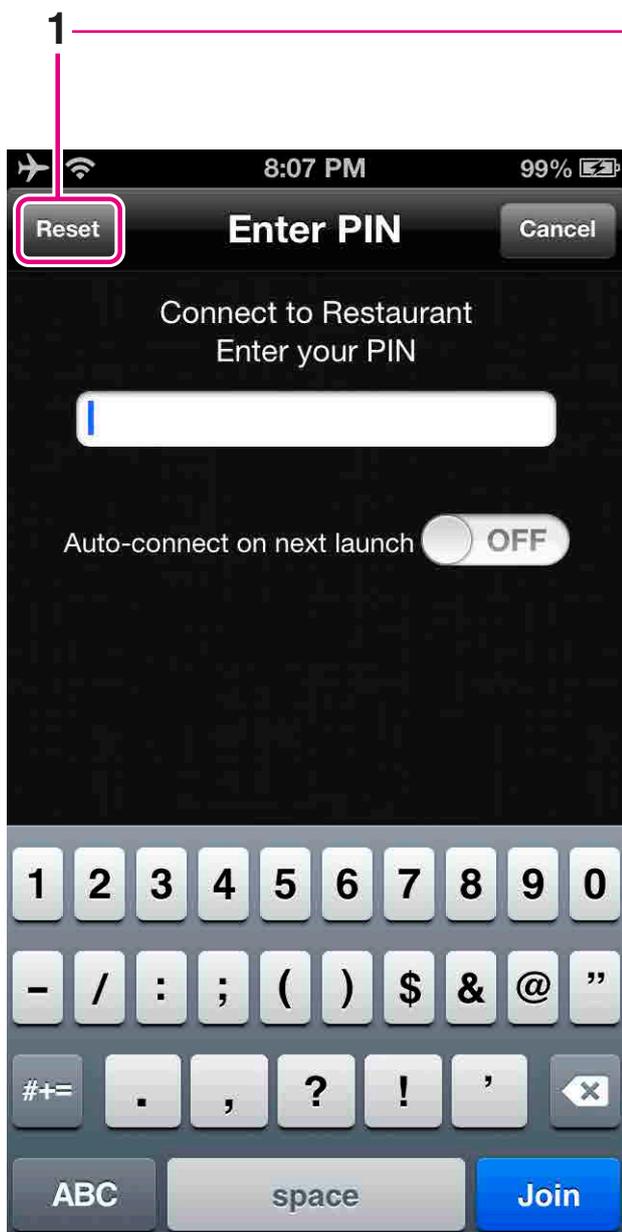
	Administrator	Staff
Preset	✓	✓ (but restricted by administrator)
Player	✓	✓ (but restricted by administrator)
Device Date and Time	✓	✓ (but restricted by administrator)
Change PIN	✓	×
Staff Settings	✓	×
Style	✓	✓ (offline demo mode only)

NOTE

If you assigned the same PIN for both administrator and staff, you will not be able to log in as staff.

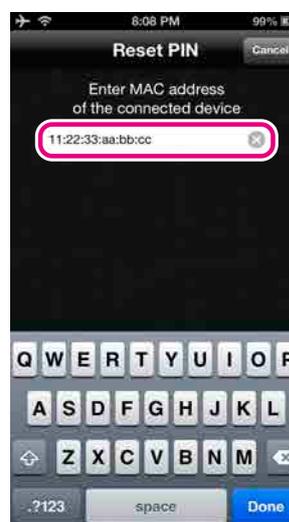
■ 3.3.4 Resetting PINs

Reset the PINs for Wireless DCP.



■ To reset PINs

1. Tap Reset to display the Reset PIN screen. If, for example, you forget a PIN, you can use this screen to reset (or remove) it. Note that both administrator and staff PINs are reset by this action.
2. Enter the MAC address of the MTX processor to connect using the keyboard. You can check the MAC address from the MTX Editor.

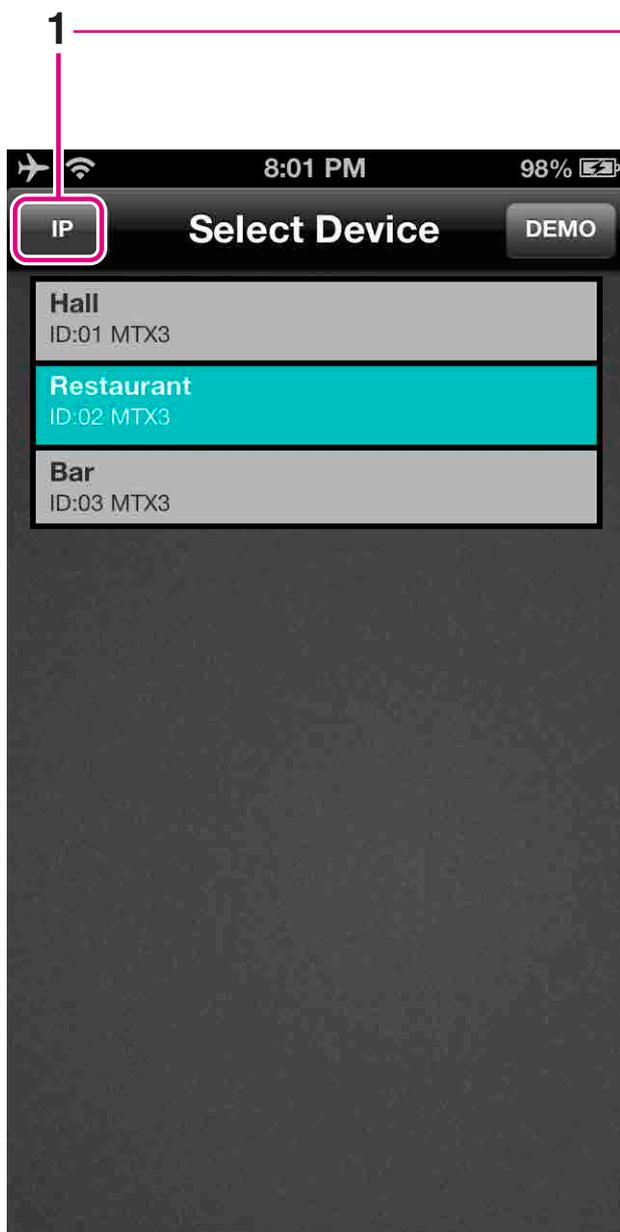


3. You will be asked to confirm that you wish to reset the PINs. Tap Yes to do so.



■ 3.3.5 Manual IP

Add the IP address to connect the MTX processor and manually display the device for connection on the device list.



■ Entering the IP address

● Step A : List button

1. Tap the Manual IP list button to display the Manual IP screen.
2. Tap the + button to display the Add IP Address screen.



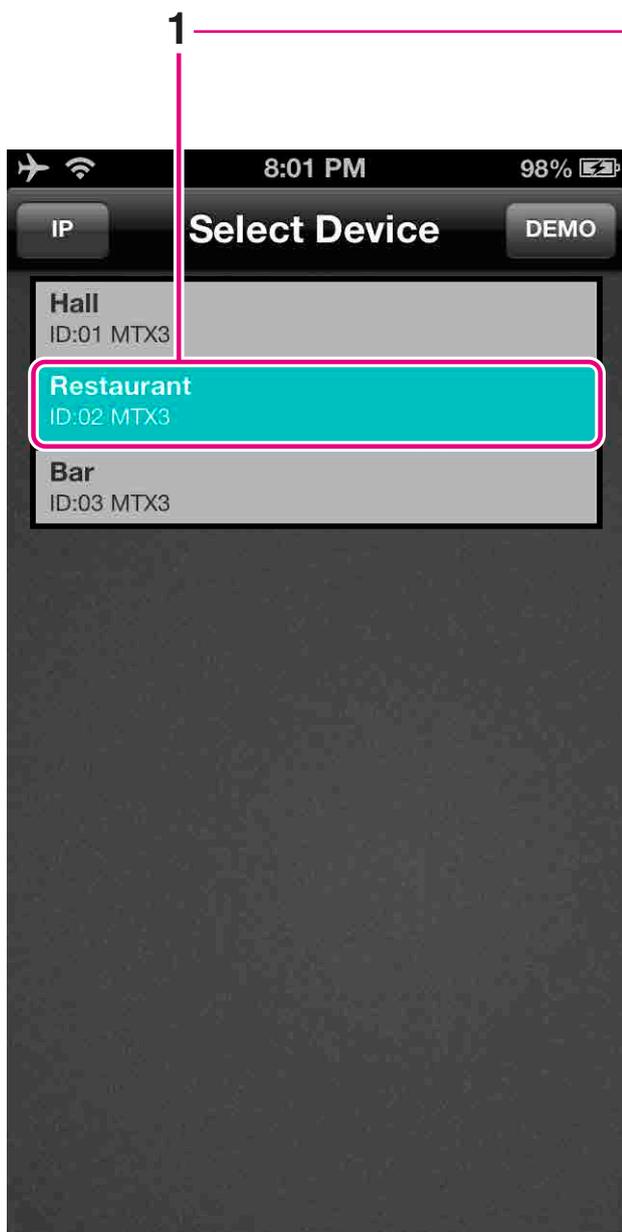
3. Enter the IP address using the keyboard.



4. Tap the Done button to check the added IP address on the Manual IP screen.



Normally, MTX processors are automatically detected and displayed on the Select Device list. However, in rare cases auto-detection may not be possible with certain Wi-Fi device specifications. In such cases, use the Manual IP function to instead manually add the MTX processor's IP address. Once the IP address is added into the Manual IP list, that MTX processor becomes available on the Select Device list.



■ Entering the IP address

● Step B : Device name

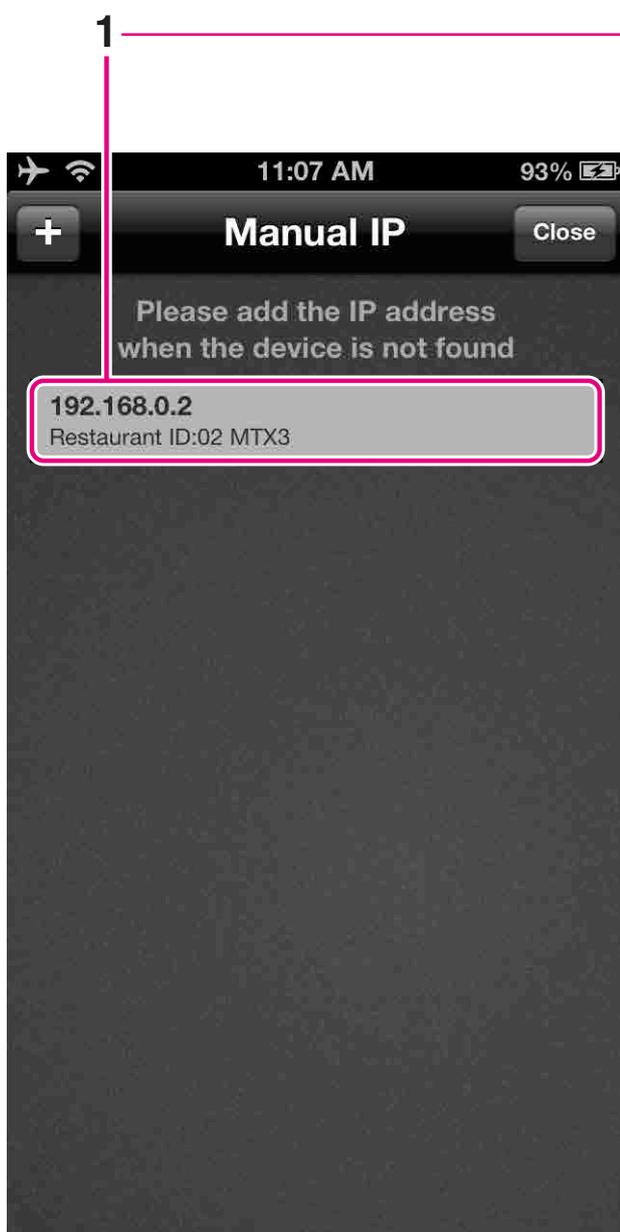
1. Tap and Hold (Long press) the device name to display the pop-up screen for confirming the IP address.
2. Tap the Yes button to add the device's IP address into the Manual IP list. An "Added" popup message displays.



3. Tap the OK button.



You can edit the added IP address or delete it.



■ Editing the IP address

1. Tap the IP address for editing to display the Edit IP Address screen.
2. Edit the IP address as desired and tap the Done button.

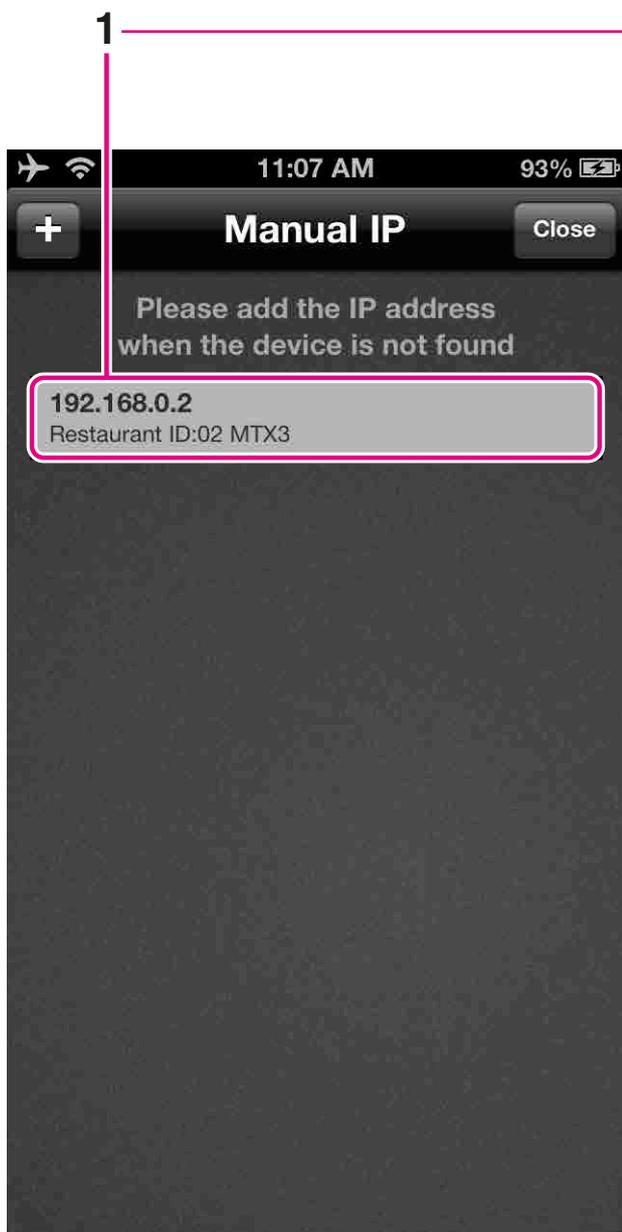




■ Deleting the IP address

● Step A: Tap

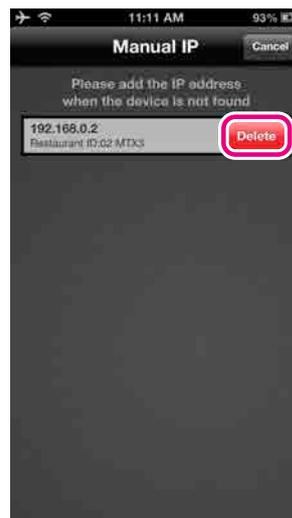
1. Tap the trash button to delete the IP address.



■ Deleting the IP address

● Step B: Swipe

1. Swipe an IP address to display the delete button.



2. Tap the delete button to delete the IP address.

4. Controller Screen

The Controller screen is used to remotely control the connected MTX processor.

The screenshot shows a mobile application interface for controlling an MTX processor. At the top, the status bar displays the time (8:24 PM) and battery level (100%). The main display area shows the name of the connected device, 'Banquet Hall', and the current page, 'Page #1'. Below this, there are four control panels for 'Lobby', 'Bar', 'Hall', and 'Patio'. Each panel includes a status indicator (a blue bar) and a vertical fader. At the bottom, there is a navigation bar with five buttons: 'Controller 1', 'Controller 2', 'Preset', 'Player', and 'Settings'. Callout boxes provide detailed descriptions for these elements.

Controller pane
This pane contains switches and faders configured and arranged using MTX Editor.

Information displayed
Upper line: Name of connected device
Lower line: Page name

Page button
Tap to display the Select Page screen.

Controller 1 and Controller 2 buttons
Tap to switch the Controller pane's display.

Preset button
Tap to display the Preset screen. Refer to Section 5. [Preset Screen](#) for details.

Player button
Tap to display the Player screen. Refer to Section 6. [Player Screen](#) for details

Settings button
Tap to display the Settings screen. Refer to Section 7. [Settings Screen](#) for details.

The Controller screen displays controllers configured using MTX Editor. The positions of the faders and switches can be edited using that application and saved as a preset. These presets can then be recalled from the MTX processor's main panel, a digital control panel (DCP), or this app. For more details regarding controller settings, please refer to the MTX Editor Owner's Manual.

- **Page buttons**

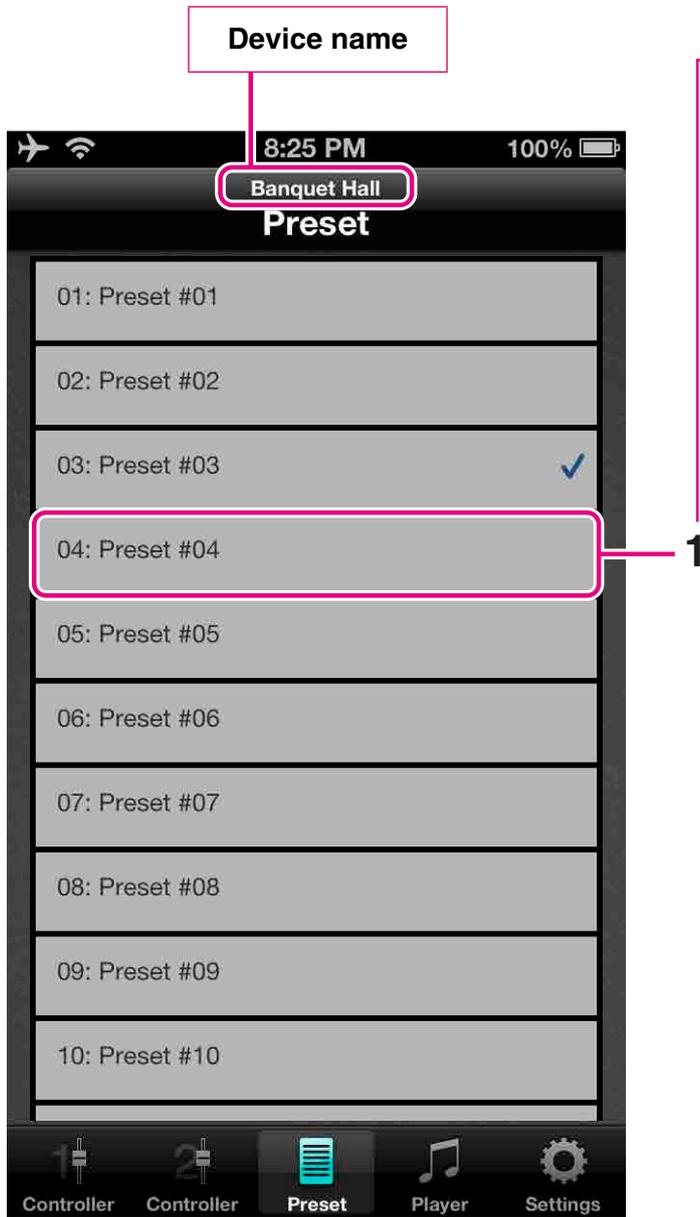
Using MTX Editor, four controller screens can be registered as pages.



On the Select Page screen, you can select the pages to be displayed in the Controller 1 and Controller 2 panes. Administrators can restrict the pages available for selection by staff. Refer to Section [7.4 Staff Settings](#) for details.

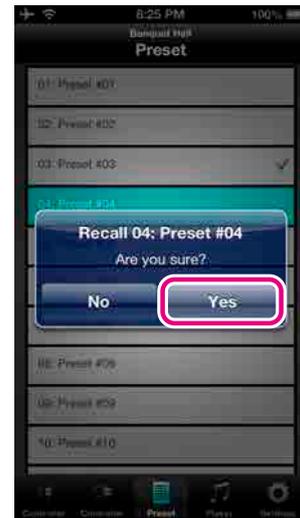
5. Preset Screen

The Preset screen is used to recall presets.



■ Preset Recall

1. Select the preset to recall.
2. A prompt appears asking for confirmation of recalling the selected preset. Tap Yes to confirm.



3. Preset recall is initiated.



6. Player Screen

The Player screen is used to operate the SD Player.

It displays a list of MP3 and WAV files (below “song files”) stored in the SD memory card that is inserted into the MTX processor’s SD memory card slot.

Use this screen to play desired song files.

The Browser screen displays the song files contained in the SD memory card. Use this screen to browse the contents of the Root folder and its subfolders.



Device name

Folder name

Tap a folder name to display the contents of the folder.

Tap a song file to display the screen (page 27) for confirming playback.

Tap Root to display the Root screen.

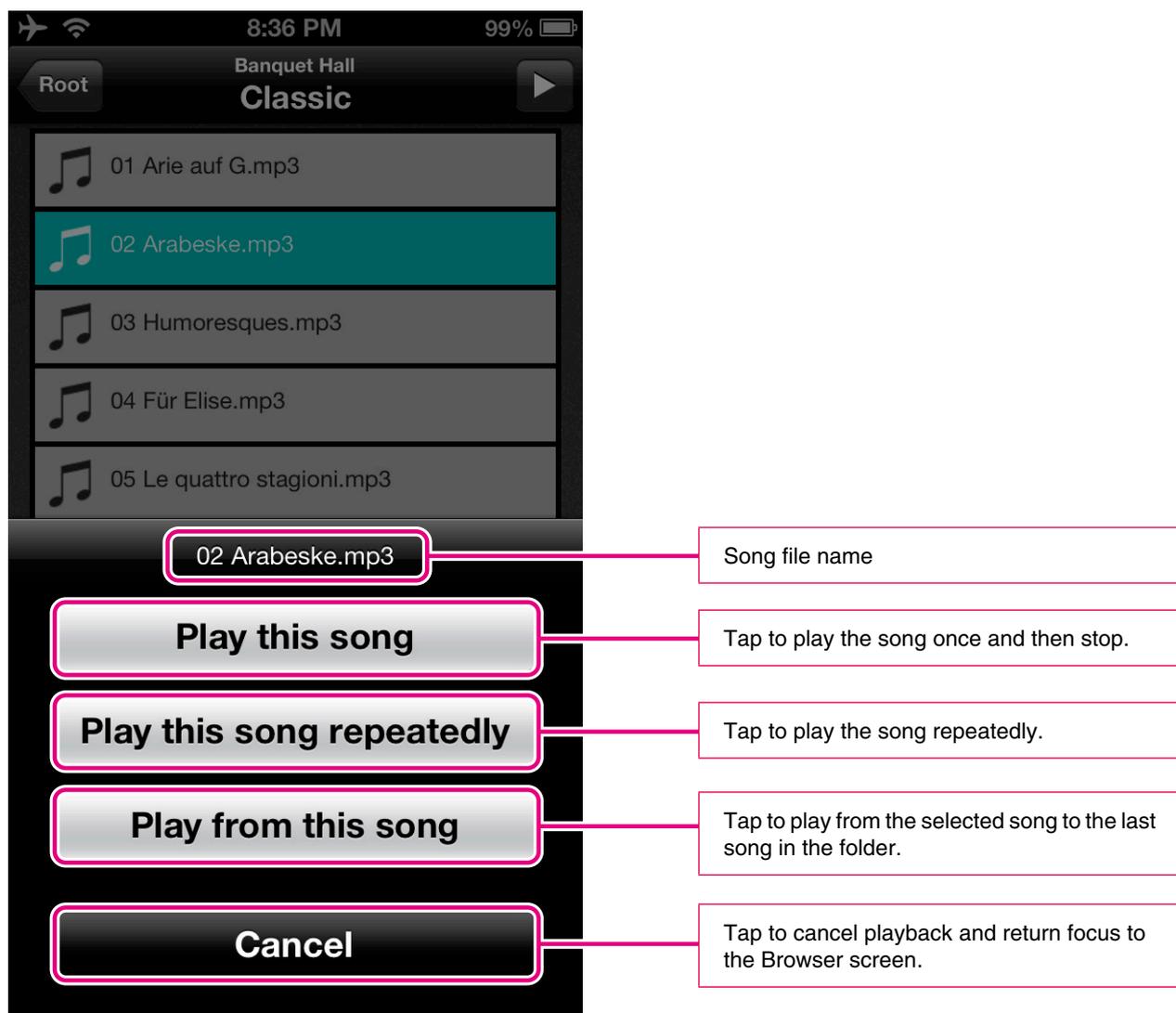
Tap the Play button to display the Now Playing screen (page 28).

Device name

Folder name

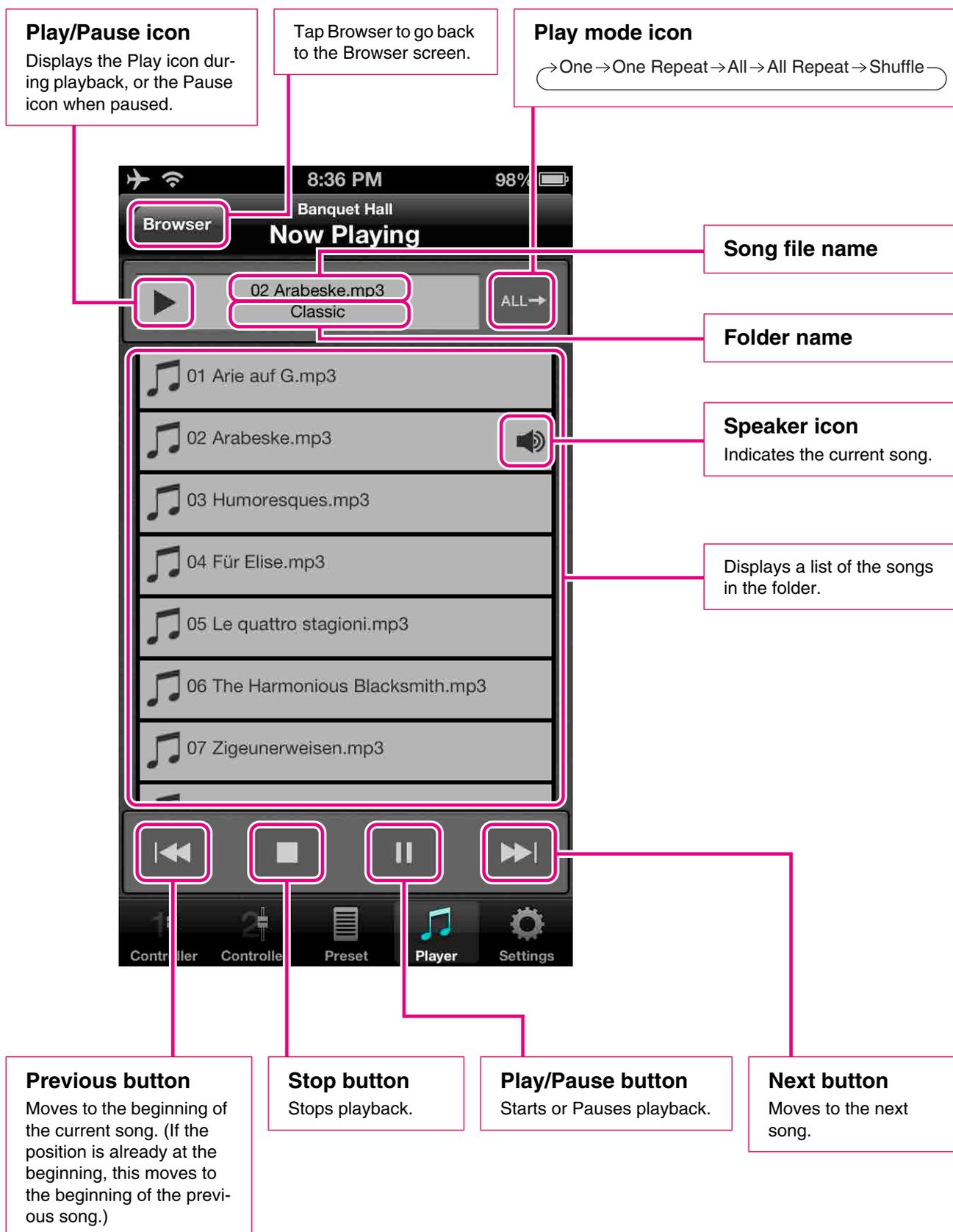


Use the screen below to confirm playback and select the play mode.



Select the play mode to display the Now Playing screen ([page 28](#)).

The Now Playing screen is used to select different playback options.



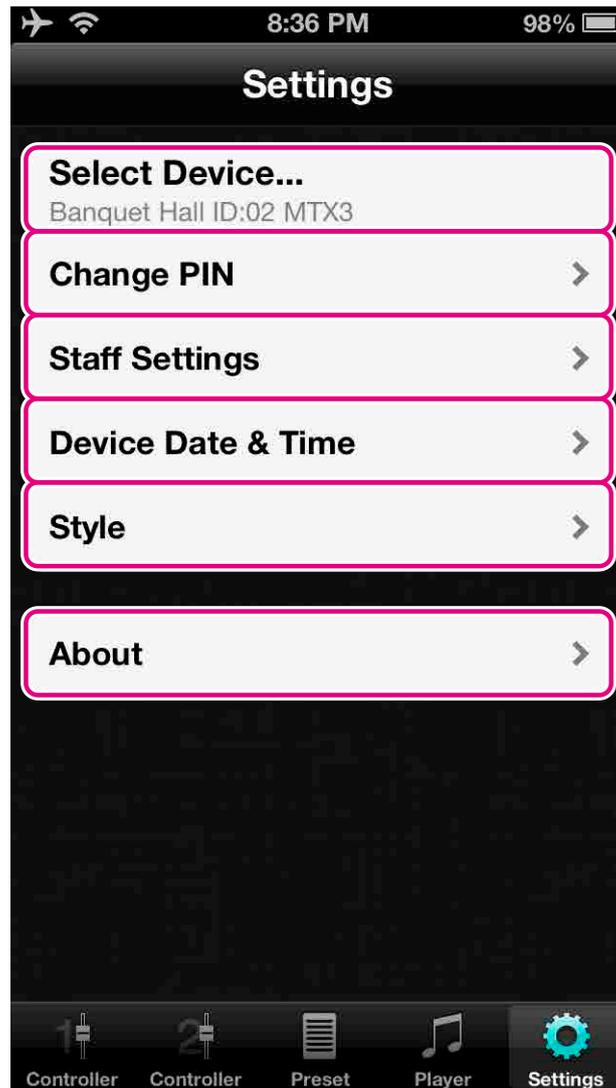
Play mode icon toggles the display.

 One	Play the song one time and then stop.
 One Repeat	Repeatedly play a single song.
 All	Play from the current song to the last song in the folder and then stop.
 All Repeat	Repeatedly play all songs of the current folder in order.
 Shuffle	Randomly play all songs in the current folder.

7. Settings Screen

7.1 Overview

The Settings screen is used to set various Wireless DCP parameters.

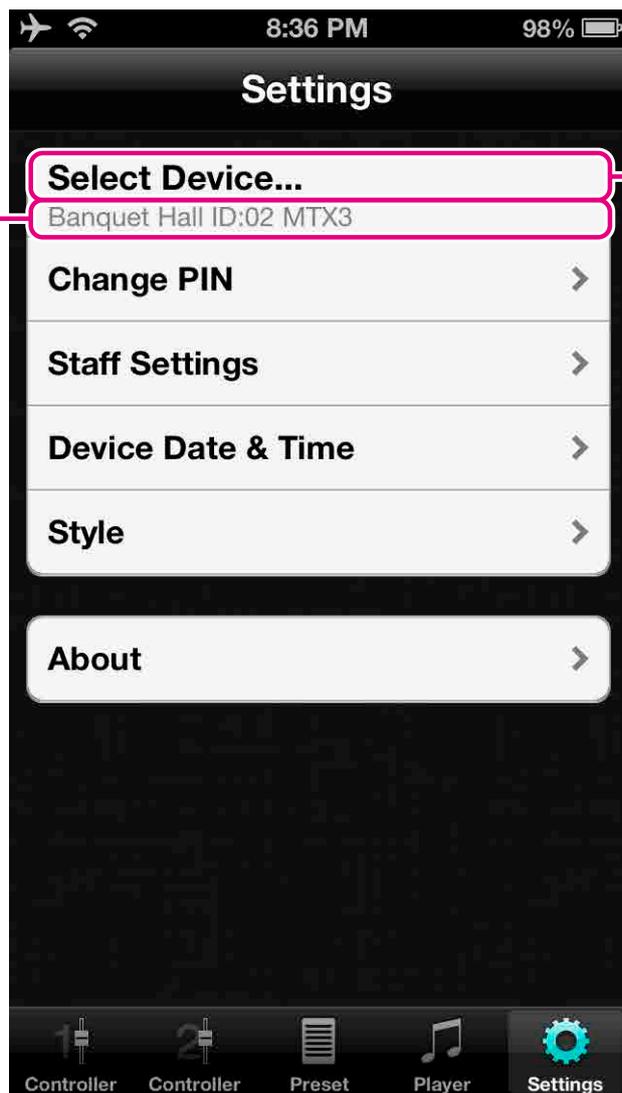


As shown below, certain items in the Settings screen are available only when logged into the MTX processor using an administrator PIN.

	Administrator	Staff
Select Device	✓	✓
Change PIN	✓	×
Staff Settings	✓	×
Device Date and Time	✓	✓ (but restricted by administrator)
Style	✓	×
About	✓	✓

7.2 Selecting a Device

Information on the currently connected MTX processor is shown in the Select Device field. In addition, you can tap Select Device... to connect to a different MTX processor.



Device name, unit ID, and model name are displayed here.

■ To connect to a different device

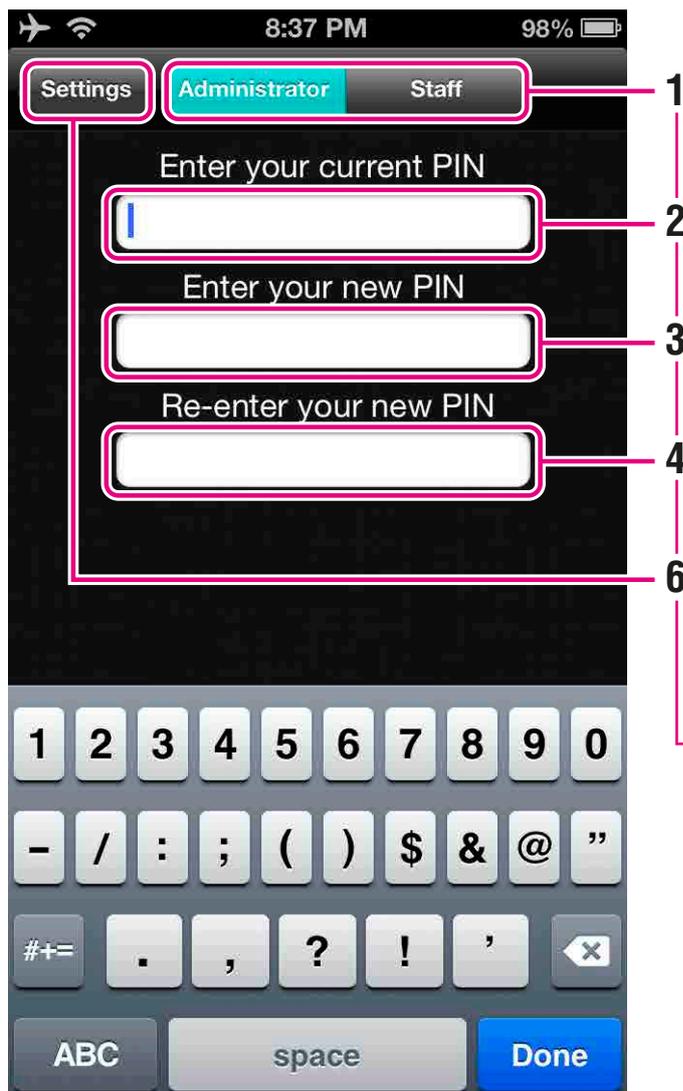
1. Tap Select Device... .
2. You will be asked to confirm that you wish to disconnect from the current MTX processor. Tap Yes to do so.



3. The Select Device screen will be displayed. Refer to Section [3.3.2 Making Connections](#) for details on how to proceed.

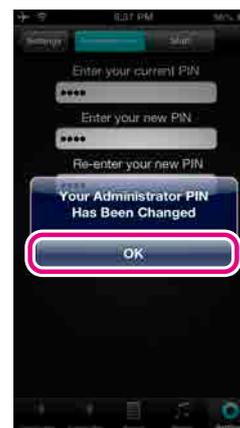
7.3 Changing PINs

Tap Change PIN to modify the PINs set for Wireless DCP on the currently connected MTX processor.



■ To change a PIN

1. Select the type of PIN to be changed (i.e., administrator or staff).
2. Enter the current PIN.
3. Enter the new PIN.
4. Re-enter the new PIN for confirmation.
5. A message will be displayed to indicate that the PIN has been successfully changed. Tap OK to continue.



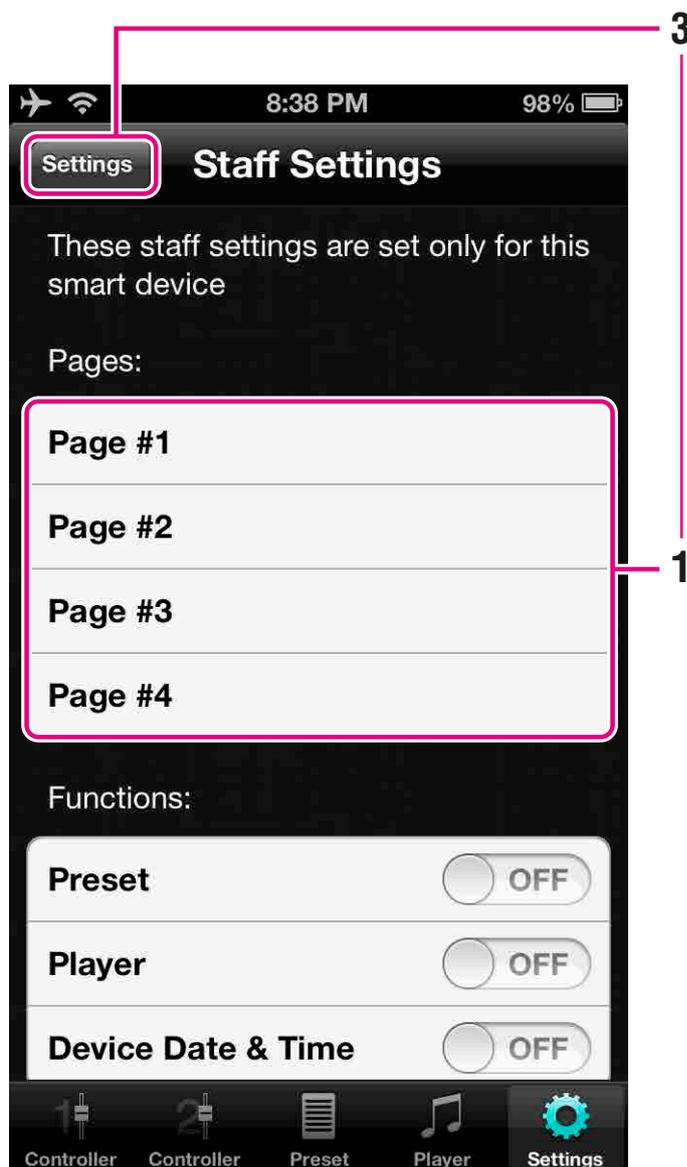
6. Tap Settings to return to the top level of the Settings screen.

NOTE

PINs can be changed only when logged into the MTX processor using an administrator PIN.

7.4 Staff Settings

Using the Staff Settings screen, you can select the pages and functions that will be available for selection by staff.



■ Staff Settings

1. Tap individual pages to select them.

NOTE

These settings apply to all presets.

2. Tap switches to set functions that are available to staff.



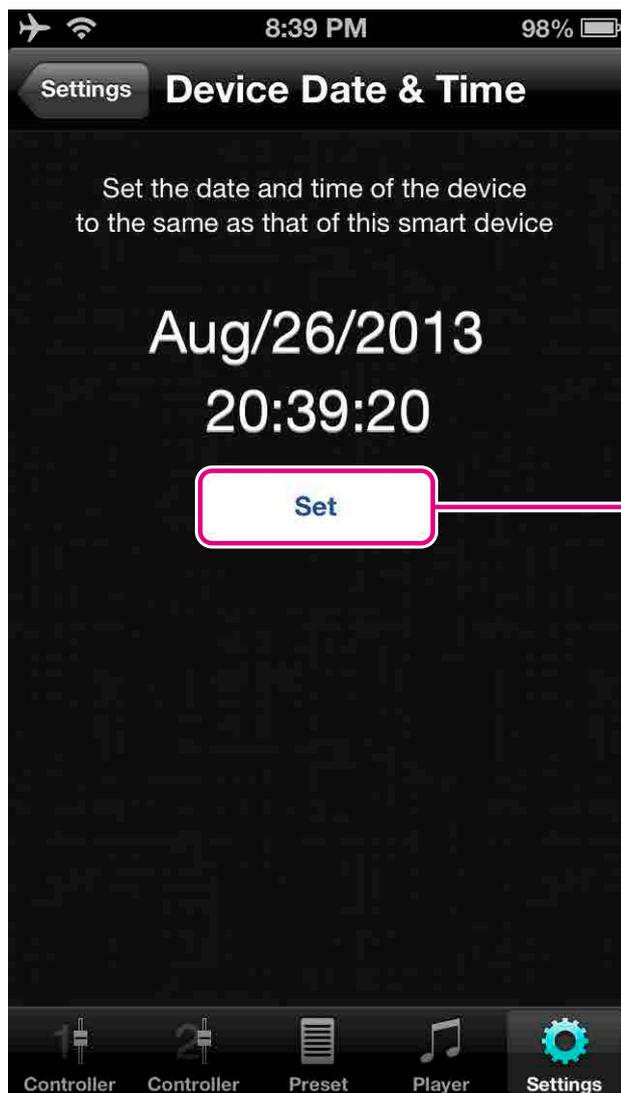
3. Tap Settings to return to the top level of the Settings screen.

NOTE

- Staff pages can be selected only when logged into the MTX processor using an administrator PIN.
- This setting is saved locally per smart device. Also, you can change the settings connected for each MTX processor.

7.5 Device Date and Time

Set the internal clock of MTX processor to the date and time of the smart device.



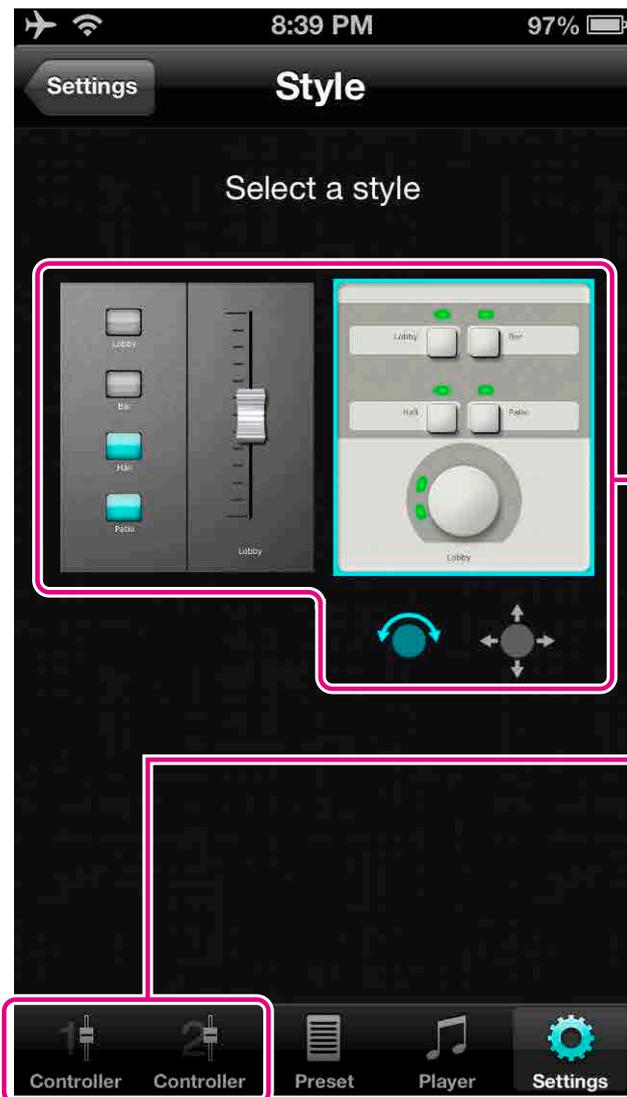
■ Device Date and Time

1. Tap Set.
2. A message appears prompting you to set the device. Tap Yes to confirm.



7.6 Style (Controller Formats)

This determines the operational formats for Controllers 1 and 2.



■ Select the style or controller format.

1. Select the desired format from the two displayed.
If you've selected the format with the rotary knob, you can specify the operation below:

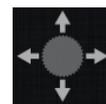
- **Rotate button**

Operates by moving along the knob.



- **Cross button**

Operates vertically/horizontally in cross pattern.



2. Tap Controller 1 or Controller 2 to use the selected format.
3. You can confirm the format on the Controller screen.

- **Example formats:**

Four switches



NOTE

- Refer to the MTX Editor User's Manual for setting the controllers of switches and rotary knobs.
- This setting is saved locally per smart device. Also, you can change the settings for each connected MTX processor.

7.7 Displaying App Information

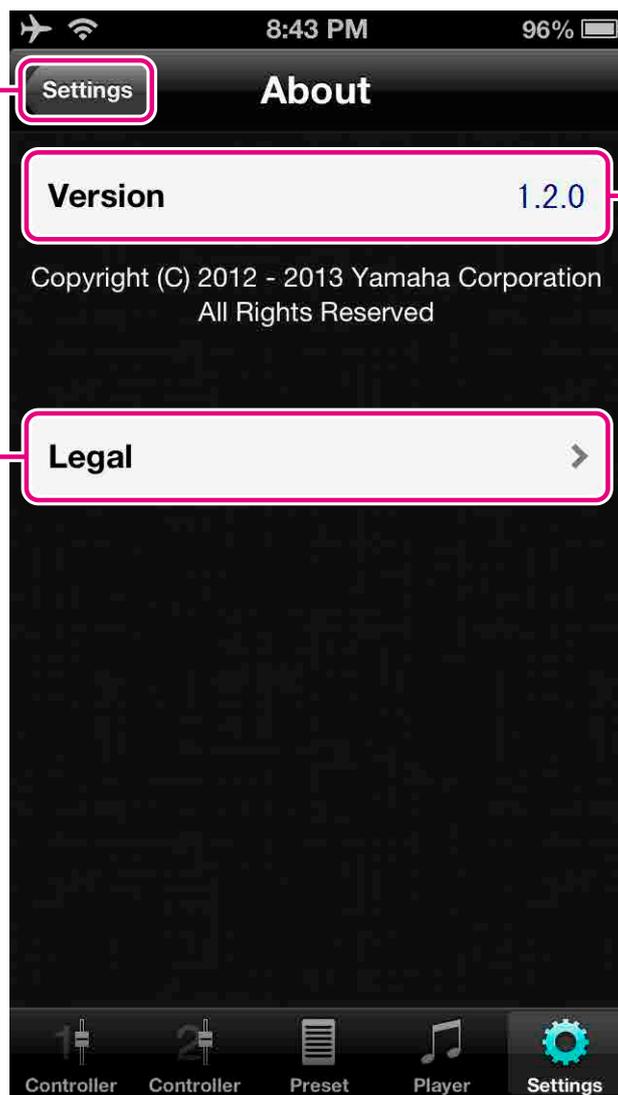
Tap About to display the current version number, copyright details, and other information about the Wireless DCP app.

Settings button

Tap to return to the top level of the Settings screen.

Version

Displays the current Wireless DCP version.



Legal

Displays open source licenses and other library-related information.

8. Troubleshooting

● No Wi-Fi available



Possible cause

- Wi-Fi is turned off.
- The smart device is not connected to a Wi-Fi access point.

Action

Refer to [Setting Up \(page 6\)](#) and Section [3.2 iOS Device](#).

• If the connection is periodically lost:

You should also ensure that the IP addresses of the router and DNS have been set.

● Failed to establish connection



Possible cause

- Incorrect network settings on the smart device.
- MTX processor is turned off.
- Already connected to a different smart device.

Action

Refer to Section [3.1 MTX Processor](#) and Section [3.2 iOS Device](#).

● Connection has been lost



Possible cause

- MTX processor is turned off.
- The smart device is out of Wi-Fi range.
- Connection is lost when the smart device is locked.

Action (for the iOS device)

Tap Reconnect to reconnect to the MTX processor, and continue controlling it.

If this message occurs frequently, we recommend that you set the iOS device's auto-lock time to Never as described below.

1. Go to Settings on your iOS device.
2. Tap General.
3. Tap Auto-Lock and select Never.

● Not connected



Possible cause

- Another smart device is already connected to the selected MTX processor.
- The smart device has become disconnected from the Wi-Fi access point due to weak signal.
- The network settings are invalid.
- No Wireless DCP settings have been registered in any MTX processor presets.

Action

Refer to Section [3.1 MTX Processor](#).

Eight smart devices running Wireless DCP can be connected to each MTX processor.

● Log-in failed



Possible cause

You have logged in with an administrator PIN to an MTX processor to which another smart device for an administrator is already connected.

Action

One smart device can be connected for an administrator, and another one can be connected for a staff member.

● Emergency mode



The MTX processor is set to Emergency Mode in the case of a disaster.

● Emergency Notification



The MTX processor is set to Emergency Mode in the case of a disaster.

● Failed Internet connection

Possible cause

Attempting access to the Internet via the Wi-Fi access point (or router).

Action

Make sure the Wi-Fi device is set properly, for example, with no redirect setting.

Note that Internet connection is not required in order for Wireless DCP to connect to an MTX processor.

For details on setting instructions, contact the device's dealer.

● To disable automatic connection

• Step A : From the Controller screen

1. Tap Settings in Wireless DCP.
2. On the Settings screen, tap Select Device.
3. As described in [“To connect to a different device” \(page 32\)](#), select the MTX processor being controlled.
4. Automatic connection will be disabled when the Enter PIN screen is displayed.

• Step B : Start-up

1. Tap Cancel when the Enter PIN screen is displayed.
2. Automatic connection will be disabled when the Select Device screen is displayed.

<ul style="list-style-type: none"> ● Difficulty moving multiple faders (for the iPad) 	<p>Possible cause</p> <p>If Multitasking Gestures is turned on, it may not be possible to move more than three faders simultaneously in Wireless DCP.</p> <hr/> <p>Action</p> <p>When using this app on your iPad, therefore, we recommend that you turn Multitasking Gestures off as described below.</p> <ol style="list-style-type: none"> 1. Go to Settings on your iPad. 2. Tap General. 3. Tap the Multitasking Gestures switch to turn it off.
<ul style="list-style-type: none"> ● Difficulty operating multiple switches (for the iOS device) 	<p>Possible cause</p> <p>If Zoom is turned on, it may not be possible to operate more than three switches simultaneously in Wireless DCP.</p> <hr/> <p>Action</p> <p>When using this app on your iOS device, we recommend that you turn Zoom off as described below.</p> <ol style="list-style-type: none"> 1. Go to Settings on your iOS device. 2. Tap General. 3. Tap Accessibility. 4. Tap the Zoom switch to turn it off.
<ul style="list-style-type: none"> ● Difficulty operating player and setting presets 	<p>Possible cause</p> <ul style="list-style-type: none"> • The firmware for the MTX processor is an older version. • Offline demo mode state. <hr/> <p>Action</p> <p>Use the latest version of the firmware for MTX processor. Use MTX Editor to update the firmware for the MTX processor or check the firmware version. Refer to the MTX Editor User's Manual.</p>