

Device Settings

by Touch Panel Control

The following is a guide to configuring the Settings available within **TPControl for Android** devices.

See also the '<u>TPControl for Android, TPCloud and TPTransfer guide</u>', available from the <u>Downloads</u> section of the <u>Touch Panel Control</u> website.

<u>TPControl for Android</u> is available for download from <u>Google Play</u>, <u>Amazon</u> and various other Android device stores. Click here for more details.



How to access TPControl Device Settings

To access application Settings, make sure that TPControl is running with full screen focus.

Then, select the **MENU** or **BACK** button on your device.

A drop-down menu will appear from the top of the display.

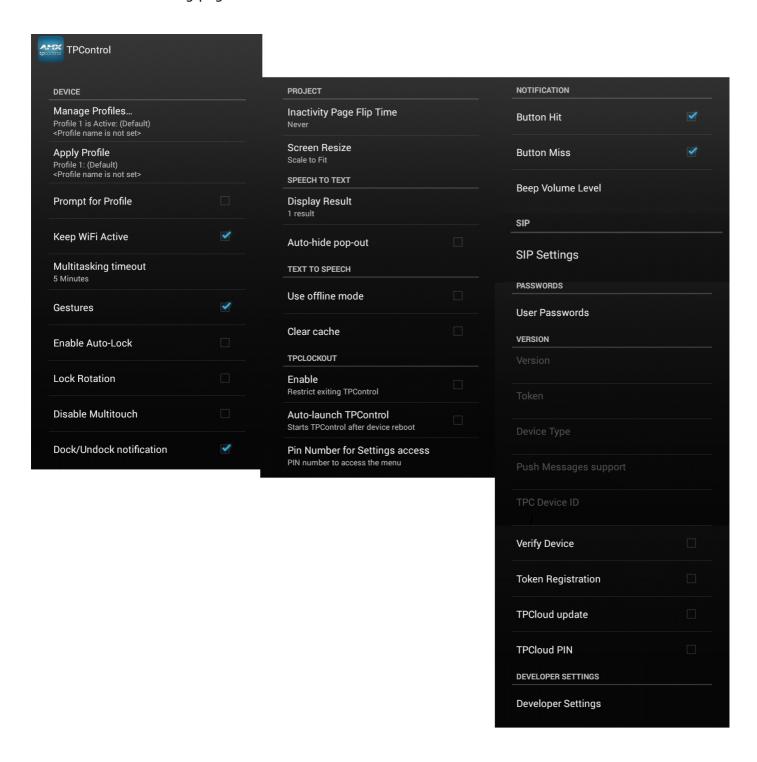
Next, select the **Settings** icon presented in the drop-down menu.

The TPControl Settings menu will appear (see diagram next page)

Programmer note:

- The **SETUP** API command can be issued from a NetLinx master for direct access to Settings.
- The **O-Setup Port; Page-flip: Setup** channel-port/channel-code can be applied to a button in TPDesign4 -> Buttons properties -> Programming for direct access to Settings.

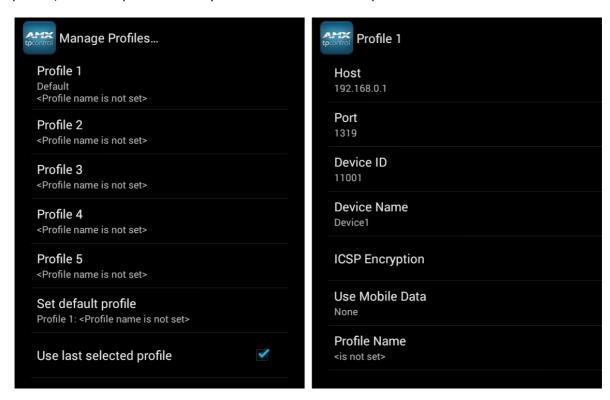
Pictured below are the options available from the primary Settings menu, with detailed descriptions included in the following pages.



Manage Profiles

Profiles provide the ability to define independent connection-based information for TPControl, which can easily and quickly be recalled. API commands support manipulation of all aspects of each profile, providing limitless profile configurations.

Selecting the 'Manage Profiles' option will present 5 profile selection options, an option to define a Default profile, and an option to always use the last selected profile.



Profile 1, 2, 3, 4 or 5

Choosing a profile to edit will present the following options:

Host

The Host field is used to enter the primary address of the NetLinx Master for this profile connection. Supports: IP address and Fully Qualified Domain Name (FQDN e.g. `AMX.touchpanelcontrol.com').

Port

The IP Port number used by the ICSP protocol to the NetLinx Master. Default is port 1319.

Device ID

TPControl will use the *AMX Device ID* to identify itself to the NetLinx Master. AMX programming events utilise this Device ID during communication.

Device Name

This is used as an additional method of identifying TPControl with the NetLinx Master, and is also utilised within TPTransfer to assist in device identification. e.g. "TPControl-Kitchen".

ICSP Encryption

ICSP data communications can be encrypted for an additional level of security. Options provided are:

Enable ICSP Encryption

TPControl will utilise encrypted ICSP communication when enabled.

NOTE: If a device has ICSP Encryption enabled, and the NetLinx Master is not configured for ICSP Encryption, the device will still connect to the NetLinx Master. i.e. ICSP settings are only considered relevant when the NetLinx Master is configured for ICSP Encryption.

Username

Select to enter the username with ICSP Encryption privileges configured on the NetLinx Master.

Password

Select to enter the password associated with the username.

NOTE: ICSP Encryption must be enabled on the NetLinx Master for encrypted ICSP communications to be supported.

Use Mobile Data

The following options are available to for establishing a connection to the NetLinx master:

None

Device will only use the WiFi adapter to establish a connection

With WiFi

Device will use the WiFi adapter to establish a connection if a connection is present. If no WiFi is available, MobileData will be used to establish a connection

· Without WiFi

Device will use only MobileData to establish a connection

NOTE: MobileData may not be supported by the device when an active WiFi connection is in use.

Profile Name

This option provides the ability to name a profile.

Naming a profile is only necessary if you would like TPControl to present the profile as an option within the built in 'Connect using profile' connection window. This is particularly useful when multiple connection profiles are configured. Some example names would be; Profile 1:'Room A', Profile 2:'Room B', etc.

Set default profile

Choose from any 1 of the 5 available profiles to define the default.

The default profile determines which profile TPControl will use at startup. The default profile is used only when starting TPControl if it was not previously running in multi-tasking mode (Home screen). If TPControl was running in multi-tasking mode, the active profile will remain operational.

NOTE: The current active profile will not be affected when setting the default profile.

Use last selected profile

This setting defines whether the last selected profile or default profile is used for reconnection when returning to TPControl.

Disabled: the default profile will be used to reconnect

• Enabled: the last selected or previously active profile will be used to reconnect

Apply Profile

Choose from any of the 5 available profiles, to activate the chosen profile.

NOTE: The profile will be applied once you exit from Settings.

Prompt for Profile

When enabled, independent of whether an active profile connection exists or not, TPControl will present the '<u>Connect using profile</u>' window at application launch, or whenever returning from the device Homescreen or multi-tasking mode.

The following named or unnamed profiles will be shown:

- the current active profile
- the current default profile
- any named profile

NOTE: The **Not Connected** dialog will automatically present the '<u>Connect using profile</u>' window, independent of the *Prompt for Profile* setting.

Keep WiFi Active

When enabled, TPControl will continue to keep a connection live with the NetLinx Master when the device goes to sleep or another application takes device focus e.g. the device Home screen.

Multitasking Timeout

Assuming 'Keep WiFi Active' is enabled, when TPControl is no longer in application focus, this timeout determines if and when TPControl will disconnect ICSP communication with the NetLinx Master, and in doing so, preserving battery life.

Gestures

Enable or disable AMX gesture recognition. Default is enabled. Recommend disabling when Accessibility mode is enabled, due to gesture specific operation of Accessibility functions.

Enable Auto-Lock

When enabled this will allow the Device to run the OS screen lock feature as set in "General Settings" on the device. If Enable Auto-Lock is set to "Off" the screen will stay active until the Power button is pressed.

NOTE: Battery life may be reduced significantly if this feature is not enabled.

Lock Rotation

- Disabled: Allows the project content to rotate based on the orientation of the device.
- Enabled: Prevents the device from rotating the project content based on the orientation of the device.

Disable Multitouch

- Disabled: Allows multitouch operation.
- Enabled: Prevents multitouch operation e.g. a release must be issued before the next press will be recognised.

Dock / Undock notification

When enabled, TPControl will send a string notification to the NetLinx Master each time the device is docked/undocked (same as indicating charging/not charging).

Inactivity Page Flip Time

When a value is set, if a button has not been pressed within the specified time, TPControl will flip to the Inactivity page that has been defined within the properties of the AMX TPDesign4 TP4 file.

Screen Resize

Options provided here allow the TP4 project to be presented in the following modes:

- None
 - No resizing of the original TP4 project is applied, and will be shown using the original aspect and resolution.
- Scale-to-fit (default on first install)
 The original TP4 file will be upsized or downsized, retaining the original aspect-ratio of the project, and may present black-filled areas beyond the project UI; left/right or top/bottom.
- Stretch-to-fit
 - The original TP4 file will be upsized or downsized, stretching independently for the height and width of the project i.e. the aspect ratio of the design *may* be affected as a result, but the project will fill the usable display area of the device.

Speech-to-Text:

Speech-to-Text requires the device to have unrestricted Internet access.



Display Result

The result of Speech-to-Text analysis can be displayed via a brief notification on-screen. Options available are:

- Do Not Display: Results will not be displayed
- 1 result: 1 result will be displayed (default)
- 2 results: Up to 2 results will be displayed
- 3 results: Up to 3 results will be displayed

NOTE: Errors in processing will always solicit a notification independent of this setting.

Auto-hide pop-out

- *Disabled*: TPControl will hide the Speech-to-Text recording dialog only after a successful result is processed.
- Enabled: TPControl will hide the Speech-to-Text recording dialog once processing of recorded audio commences, irrespective of the result.

Use offline mode

- *Disabled*: TPControl will utilise online resources to determine text-to-speech translation (default).
- Enabled: TPControl will utilise device defined language packs to determine text-to-speech translation.

NOTE: In order to operate properly while in offline mode, the device must have an appropriate language pack installed to complete the operation.

NOTE: Results are cached with each completed translation when operating in online mode.

Clear cache

Clears the text-to-speech cache which is created during online operation.

TPCLockOut:

TPCLockOut functionality may vary between different Android devices. Factors that can affect the intended operation can relate to the operating system version installed, and manufacturer or service-provider software operating on the device.



Enable (TPCLockOut)

Enabling *LockOut* will restrict usage of the "Home", "Back", "Menu/Setting", and "Search" soft-or-external button functions on the Android device.

TPControl retains application focus, and if TPControl detects that application focus has been lost, will attempt to automatically regain focus.

Restricted access to TPControl *Settings* is provided through a pin-code (see *Pin number for Settings access*) when TPCLockOut is enabled.

Auto-launch TPControl

Option to automatically launch TPControl when the device boots up.

Pin number for Settings access

When the TPCLockOut functionality is enabled, access to TPControl Settings is restricted by entry of a pin-code.

The pin-code can be updated using this option.

The default pin-code is '0000'.

Notification:

Button Hit

When enabled, Button Hit produces a "Beep" sound when a valid button area is pressed within the touch panel design file.

Button Miss

When enabled, Button Miss produces a "Double Beep" sound when any area outside of a valid button area is pressed within the touch panel design file.

Beep Volume Level

Sets the level at which the volume for the Beep will be announced. When running TPControl, the device Hard Volume buttons will adjust the audible level of the Beep Volume Level.

Passwords:

User passwords

There are up to 4 user passwords that can be used within a TP4 file for protected Page Flip actions, and a 5th for system protected Page Flip actions. Define each password in this section.

SIP Settings

A general purpose SIP softphone is integrated into TPControl and includes both **video** and **audio** SIP support. As such, TPControl will work with any VoIP operator or device that implements SIP. This includes, but is not limited to; door stations, IP phones, and Video conferencing systems. At a minimum, the SIP Server, Username, and Password fields must be configured, based on your relevant SIP service.

Configure SIP related settings within the subsequent TPControl Settings menus:

Enable SIP

When enabled, TPControl will automatically attempt to register with the SIP Server using the defined Username and Password.

Username

The username for authentication with the SIP Server.

Password

The password for authentication with the SIP Server.

SIP Server

The SIP Server (Domain / Realm) for authentication.

Advanced

Advanced configuration settings as follows:

Display Name

A "human" display name.

SIP Proxy

Sets the IP address for the Proxy Server.

This field assumes the same value as the SIP Server unless otherwise specified.

The function of a SIP Proxy server is to forward calls from a private network to the external network.

Port

The SIP port used (default is 5060).

Connection Type

Determines the transport method used based on:

- UDP (default)
- TCP
- TLS

For TLS certificate installation, please refer to our <u>Knowledge Base</u> article; <u>How to install TLS certificates for use with TPControl SIP devices</u>.

Outbound Proxy

When enabled, the SIP Proxy will be used for all Outgoing calls. This is useful when needing to proxy your calls to an external network.

Preferred Video Size

The video size impacts the data bandwidth utilized during video calls. Lower quality options may better suit the network environment, and/or the encoding/decoding capability of the device. Options include:

- HD
- VGA (default)
- QVGA

Video Codecs

All video codec options are enabled by default, with compatibility negotiation occurring during call initiation. If problems are experienced, enable only the option(s) known to be compatible with the end-point.

Options include:

- H264
- VP8

Audio Codecs

All audio codec options are enabled by default, with compatibility negotiation occurring during call initiation. If problems are experienced, enable only the option(s) known to be compatible with the end-point.

Options include:

- Speex
- Opus
- Silk
- AAC-ELD
- G722
- AMR
- PCMU (U-Law)
- PCMA (A-Law)
- GSM
- ILBC

STUN Server

STUN - **S**ession **T**raversal **U**tilities for **N**AT. A protocol that assists devices with their packet routing when behind a NAT (Network Address Translation). Refer to RFC5389.

Enable ICE

ICE – **I**nteractive **C**onnectivity **E**stablishment. A Protocol for Network Address Translator (NAT) Traversal for Offer/Answer Protocols. Refer to RFC5245.

Enable Built-in SIP UI

The built-in TPControl SIP UI is enabled by default, for receipt and placement of SIP calls, as well as in-application SIP related notifications and call status. Turning off this option relies on AMX integrator defined GUI usage in conjunction with the AMX SIP API.

NOTE: For SIP related AMX API commands, refer to AMX PI.

Enable Verbose Debug

When enabled, simplified SIP Debug information will be parsed to the NetLinx master debug port. Future implementation changes may deprecate/replace the initial Debug functionality.

Version:

Version

This is the current software version of TPControl running on the device.

Token

This is the Token that the device is registered to.

Device Type

TPControl will display the device type for licensing classification here.

Push Messages support

TPControl will display if the device supports Push Messaging or not.

TPC Device ID

The Touch Panel Control device identifier, unique to the device. The identifier assists with TPCloud online functionality.

Verify Device

This option provides the ability for the TPControl device to update its license information when changes have been applied at the Touch Panel Control servers. For example, trial-based licenses may be reset/refreshed by a TPC Team member, and then this option can be used to update the license for the device.

When enabled, the function is performed once you return to the main interface. The option is reset back to *off* after the changes have been applied, but can be re-enabled at any time to repeat the verification process.

If successful, a "Device successfully verified" message will be presented briefly within the main interface.

NOTE: Internet access is required from the device to complete the operation.

Token Registration

Select this option to register TPControl with an applicable TPC User ID and Token. **NOTE**: Internet access is required from the device to complete the operation.

TPCloud update

The **TPCloud Update** option provides the ability to update the TPControl **TP4 file** and/or **Settings** via the Internet for any licensed TPControl device, empowering a technician or end-user to update a device at any chosen time.

Management of TP4 file resources and Settings is provided via an account login at tpcloud.touchpanelcontrol.com

Within TPCloud, all TPControl "Tokens" have configurable **TP4 files** and **Settings** options:

- Select Tokens
- Select the Token, followed by the Settings and TP4 files tab
- Use the `TPCloud update options: Enable/Disable' buttons provided, to specify resources available for update.

The information stored within TPCloud will be applied to the device when the "**TPCloud update**" option is enabled on the device, and TPControl is launched.

The following illustrates configuration scenarios for the TP4 files and Settings resources;

nothing (neither the TP4 files update option or Settings update option is enabled)



• the TP4 files update option is enabled



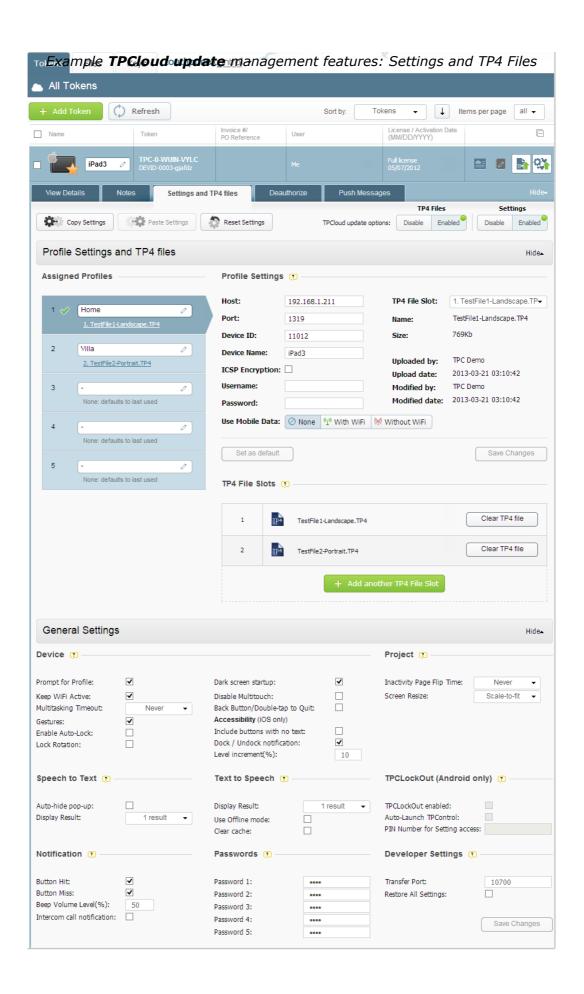
the Settings update option is enabled



both of the TP4 files and Settings update options are enabled



NOTE: Internet access is required from the device to complete the operation. Device registration will be automatically verified prior to any update being applied from TPCloud to the device.



TPCloud PIN

PIN codes can be generated specific to each Token that is stored within TPCloud at tpcloud.touchpanelcontrol.com

PIN codes are used to complete device registrations and deauthorizations.

Select the *TPCloud PIN* option, then enter the unique PIN code as provided by <u>TPCloud</u>. Based on the TPCloud configuration, TPControl will validate the PIN code reference, and act accordingly.

Supported PIN methods:

Device registration:

- 1. The PIN code will register the device with the Token assigned to the PIN code.
- 2. The device will automatically perform a TPCloud update.
- i.e. the device will be issued the *TP4 file* (if enabled) and *Settings* (if enabled), as configured for the Token.

Device deauthorization and registration:

- 1. The PIN code, when entered into the currently registered device, will deauthorize the device allowing the associated Token to be registered to a new device.
- 2. Enter the same PIN code into the new device, to complete registration.

Please refer to TPCloud for further information.

NOTE: Internet access is required from the device to complete the operation. Device registration will be automatically verified prior to any update being applied from TPCloud to the device.

Transfer Port

The port used by TPControl to communicate with TPTransfer. Default port is: 10700.

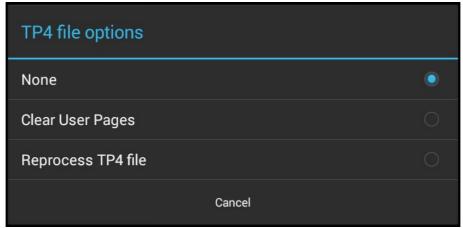
Restore All Settings

When enabled, this will restore all settings on the settings page back to defaults. The option is reset back to *off* after the changes have been applied.

TP4 file options

Operations specific to the TP4 file installed appear here.

- None
 Do nothing
- Clear User Pages
 When enabled, all design files will be removed and the original Demo Pages will be loaded back
 onto the device.
- Reprocess TP4 file
 Clears any caching, and reprocesses the installed TP4 file. This is the same process that runs
 whenever a file is transferred to the device.



Not Connected

The **NOT CONNECTED** warning will automatically appear if TPControl is unable to communicate with the AMX NetLinx control system.

NOTE: TPControl will persistently retry connecting if an active connection is not in place, using the current active profile connection settings.

The **NOT CONNECTED** warning will automatically disappear if TPControl connects to an AMX NetLinx control system.

Pressing the NOT CONNECTED warning will hide the dialog only for the current TPControl session.

The NOT CONNECTED warning indication cannot be permanently disabled or turned off. Its purpose is to avoid users pressing buttons in the UI with the expectation of system control, when there is no chance of that due to there being no communication with the AMX NetLinx control system.



Potential reasons why NOT CONNECTED can appear:

- Ensure WiFi is enabled on the device, and that it is connected to the correct IP Network. Furthermore, ensure the IP address assigned to the device is valid.
- Determine the IP address of the AMX NetLinx control system, and ensure that the *HOST* field within Settings for TPControl has been configured with the IP address of the AMX NetLinx control system e.g. 'Manage Profiles → Profile x → HOST'.
- Ensure that a unique, and correct Device ID has been configured within Settings for TPControl e.g. 'Manage Profiles → Profile x → Device ID'.
 All devices connecting to an AMX NetLinx control system must have unique identifiers in order to connect and operate properly. If the Device ID conflicts with another connected device, one or both devices may not connect, or may work irregularly until the conflict is resolved.
- Is ICSP Encryption enabled on the AMX NetLinx control system? If so, ensure that the connection profile is configured with the relevant ICSP Encryption credentials.

'Connect using profile' window

Within TPControl, the *Connect using profile* window provides a method to very quickly select or change between connection profiles.

NOTE: refer to the <u>Profile Name</u> section for details on naming connection profiles.

Profiles contain connection specific information that TPControl uses when communicating with an AMX NetLinx master.

For multi-TP4 file enabled versions of TPControl, the *Connect using profile* window also provides a method for defining the specific **TP4 File Slot** to use for each profile. See the *Assigning a FILE SLOT to a connection profile* section that follows for more details.

Five user-definable profiles are provided in TPControl (see <u>Manage Profiles</u> above). Although there are only five physical profiles provided, our API can be used to dynamically update any profile, providing limitless profile configurations, which can easily be recalled using either the *Connect using profile* window, or using buttons defined within the user interface design.

For a demonstration TP4 file on how to dynamically update profiles from the UI, please click <u>here</u> or copy the following URL to your browser:

http://www.touchpanelcontrol.com/guest/tpcontrol/ExampleTP4s/TPC%20API%20Profile%20examples.TP4



Connect using profile: Example

Refer to the *Connect using profile: Example* picture above. The example indicates the following:

- Profile 1 has been named <u>Profile 1: Room 10-5</u>
 - the profile has no TP4 file assigned
- Profile 2 has been named <u>Profile 2: Room 10-2</u>
 - the profile has a TP4 file named Room 10-2.TP4 assigned
- Profile 3 has been named Profile 3: Bio
 - the profile has a TP4 file named *BioEnvironment.TP4* assigned
- Profile 4 has been named Profile 4: Home
 - the profile has a TP4 file named <u>TestFile1-Landscape.TP4</u> assigned
- Profile 5 has been named *Profile 5: Office*
 - the profile has a TP4 file named <u>TestFile2-Portrait.TP4</u> assigned
- The default profile is Profile 4
- The current active profile in Profile 5, indicated by the highlighted profile

Selecting a connection profile

To select a profile, simply select the profile *name*. TPControl will attempt to connect to the AMX NetLinx control system using the assigned profile connection settings, and load the applicable TP4 file design assigned to the profile.

NOTE: To ensure the 'Connect using profile' window appears whenever TPControl regains application focus, irrespective of connection status, refer to the Prompt for Profile section.

For more information on API commands, refer to the "<u>TPControl - API Commands supported in addition to AMX commands</u>" document, available for download from our website <u>Downloads</u> section.

Assigning a BYOD system file to a connection profile

When TPControl connects to a BYOD Licensed system;

- If the BYOD TP4/UI file on the BYOD licensed NetLinx Master has changed since the last time TPControl connected (or this is the first time connecting to the system), TPControl will retrieve the BYOD TP4/UI file and assign it to FILE SLOT 0 for the current active connection profile, and then display the BYOD TP4/UI file.
- Otherwise, TPControl will display the last FILE SLOT that was assigned to the current active profile.

NOTE: The FILE SLOT applied to the current active profile may not be the BYOD TP4/UI file, particularly if an alternate FILE SLOT was activated by API command or as per *Error*: Reference source not found.

BYOD System icon behaviour in the Connect using profile window

The following shows an example of how a BYOD System icon appears within the *Connect using profile* window in TPControl for Android. The BYOD System icon is only indicated, if TPControl has retrieved a BYOD TP4/UI file from a TPControl BYOD Licensed NetLinx Master, related to the connection profile.





The BYOD System icon signifies that a BYOD TP4/UI file is available for the profile, but is not currently active i.e. FILE SLOT 1 is active (i.e. a TP4 UI file you may have transferred independently)

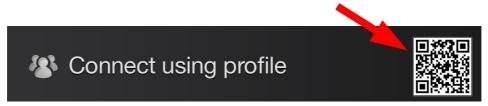
The BYOD System icon signifies that a BYOD TP4/UI file is available for the profile, and is currently active i.e. FILE SLOT 0 is active (i.e. the TPControl BYOD TP4/UI file)

Tap the BYOD System icon, then reselect the profile to switch between FILE SLOT 0 and FILE SLOT 1. For more information about TPControl BYOD, please refer to our <u>TPControl – BYOD How To quide</u>.

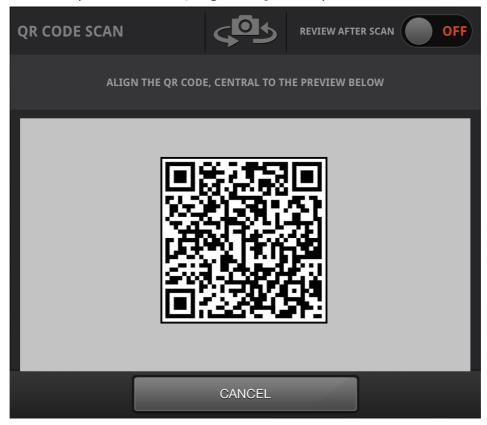
QR Code Scanner

TPControl v2.5.1.0+ for Android includes a built-in Quick Response (QR) Code scanner, which can be accessed via the 'Connect using profile' window.

1. Use a 2-finger swipe from left-to-right gesture to present the Connect using profile window, and press the QR Code icon to begin.



2. Within the camera preview window, align the QR Code you want to scan.



That's it!

If the QR code is encoded with a valid TPControl API command or URI, it will be parsed accordingly. The result of scanning the QR code above is:

'tpccmd-1;LocalHost,192.168.100.11;DeviceID,11001;ProfileName,Boardroom;ScreenResize,Scale;ApplyProfile;'

...and that command translates to:

Configure TPControl "Profile 1" to connect to the AMX system at IP address "192.168.100.11", using AMX Device ID "11001". Name this profile "Boardroom", and set the screen resize option to "Scale to fit". Apply this profile, to invoke these settings immediately.

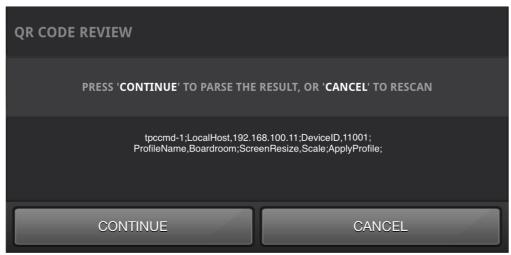
For more information on TPControl API commands, refer to the "TPControl - API Commands" document, available for download from our website **Downloads** section.

QR Scanner options

REVIEW AFTER SCAN:

When turned ON, after successfully scanning a QR code, TPControl will present the scanned result for review.

For example;



Then, upon selection of the 'CONTINUE' option, TPControl will parse the scanned result. Otherwise, selecting 'CANCEL' will return to the QR Code Scan window as in step 2 above.

SWAP CAMERA:



Pressing the Swap Camera icon will toggle between any available device cameras, if applicable.

How do I create a QR Code?

You can **Create QR Codes** via the <u>Touch Panel Control</u> website, direct link here:

http://www.touchpanelcontrol.com/qr-code-generator

Manage AMX Device ID's from code

For example code demonstrating how to manage multiple devices connecting to a system using a common QR Code and AMX Device ID, please refer to our <u>TPControl Dynamic DeviceID assignments</u> from code.AXW workspace, available from our <u>Downloads</u> page.

QR Scanner Tips

Besides configuring TPControl settings and getting connected to AMX control systems, scanning QR Codes within TPControl can have other uses.

Some examples are shown below, which result in launching the respective websites within the devices default web browser:





http://www.touchpanelcontrol.com



https://itunes.apple.com/au/app/tpcontrol/id348715945?mt=8



https://play.google.com/store/apps/details?id=com.touchpanelcontrol.tpcontrol



http://apps.microsoft.com/windows/en-GB/app/tpcontrol/ee1100ec-9caa-4977-8289-508ecdac89fa



Applying Settings

Changes to Settings will be applied when you exit Settings using the **Back** button.

Problem Reporting

We aim to make your integration experience of TPControl within your AMX environment, as seamless as possible.

If you encounter any difficulties using the product or any of its features, please let us know and we will be happy to assist.

The helpdesk on our website at support.touchpanelcontrol.com operates from:

- Monday to Friday; 09:00 to 17:00 (GMT)
- Monday to Friday; 07:00 to 15:00 (AEST)

We appreciate your support,

Touch Panel Control Team.

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