TPControl BYOD License solution

The following is a guide to:

- **Creating a TPControl BYOD License file for use with an AMX NetLinx Master**

- **Generating a BYOD compatible TP4 file for storage on an AMX NetLinx Master**

- **Placing the BYOD files on the AMX NetLinx Master**

What do I need to get started?

1. Any device capable of running; TPControl for Apple, Android or Windows 8/Windows RT

2. A TPControl BYOD License Token e.g. 'BLT-0-xxxx-xxxx'

3. An AMX NetLinx Master running v3 or later firmware, and its primary MAC address.
   (see *How to locate the NetLinx Masters MAC address* below)

4. Access to TPCloud for initial administration via an Internet browser.
   NOTE: Internet access is only required for the initial BYOD License registration. During operation, Internet access is NOT required by the NetLinx Master, nor the TPControl devices that will connect to it.

5. A TP4/UI file - optional, but thoroughly recommended

How to locate the NetLinx Masters MAC address

The MAC address is typically located on the rear or bottom of the NetLinx master, and is represented in alphanumeric character formats e.g.**00609F964FF8**.
Alternately, **telnet** to the NetLinx master, type *show device* followed by <enter> and note Device 00000's Physical Address (MAC address) value.

What does BYOD stand for?

Bring **Y**our **O**wn **D**evice.

How is BYOD relevant to TPControl?

Firstly, any **licensed** or **unlicensed** TPControl device will connect to a TPControl BYOD Licensed NetLinx Master!

Secondly, upon connection, TPControl will retrieve and present the BYOD TP4/UI file stored on that NetLinx Master!

In a nutshell, you simply download TPControl from the respective device AppStore (Apple, Android, or Windows – all free downloads), then configure TPControl to locate your BYOD Licensed NetLinx Master (perhaps via a QR code), and before you know it, you are up and controlling your system!

Is code required for TPControl BYOD to work?

No, not at all. No code is required to be running on the AMX NetLinx master in order for TPControl BYOD to work with TPControl devices.

How many TPControl devices can I use?

There is *no* restriction on how many TPControl devices can connect to a BYOD Licensed NetLinx Master, *outside of the normal AMX memory and/or concurrent device connection constraints*!

What versions of TPControl support BYOD?

TPControl BYOD support is available in:

TPControl v2.5.0.0+ for Apple
TPControl for Apple is available for download via the Apple iTunes Store.
NOTE: *iOS5 or later is required for BYOD support*
Click here for more details.

TPControl v2.5.0.0+ for Android
TPControl for Android is available for download from Google Play, Amazon and various other Android device stores.
Click here for more details.

TPControl v1.4.0.0+ for Windows 8 / Windows RT
TPControl for Windows8/RT is available for download from the Windows Store. Use the *Store* application on the Windows8/RT device and search for *TPControl*.
Click here for more details.

Create a TPControl BYOD License file

Do you have a TPC User ID/Email account?

- If you already have an account with Touch Panel Control (http://www.touchpanelcontrol.com), then you already have a *TPC User ID* and account for TPCloud.
  Jump to 'Add the BYOD License Token to your TPCloud account'.

- If you do not have an account, go to TPCloud (http://tpcloud.touchpanelcontrol.com) and Register – it's free to do.
  The email you use to register becomes your TPC User ID

Add the BYOD License Token to your TPCloud account

BYOD Tokens that are prefixed with '**BLT-0-**' are already assigned to an account.
Tokens with this prefix have been distributed directly by Touch Panel Control.

BYOD Tokens that are prefixed with '**BLT-1-**' (or similar) are not initially assigned to an account.
Tokens with this prefix have been distributed via an AMX Distribution channel.

Now, follow these steps:

1. Log into '***TPCloud***' *then select the '**BYOD Tokens**' tab.*
   If the BYOD Token already appears in your list, go to Step 3.

2. Select the '***Add BYOD Token***' option.
   Enter the *BYOD Token* value in the respective field.
   Optionally enter a "Purchase Order/Reference".
   When you are ready, press the '***Add Token***' button.
   The BYOD Token will be added to your list of BYOD Tokens.

Generate the License Key file for your NetLinx Master

3. Next, select the BYOD Token icon to present the information provided within the '*View Details*' tab.

4. Press the option.

5. Next, in the field provided, enter the AMX NetLinx Master's MAC address.

   Ensure the accuracy of the MAC address. Once generated, the Key is locked to the BYOD License Token.

6. Follow up by pressing the button.

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Download the License Key file

7. Press the **Download Key** option, and select to either;

      a) have the license key file sent directly to your accounts email address

         or

      b) choose the '*Download Key*' button, to save the file directly to your computer.

      The filename is '***system_license.tpc***'.
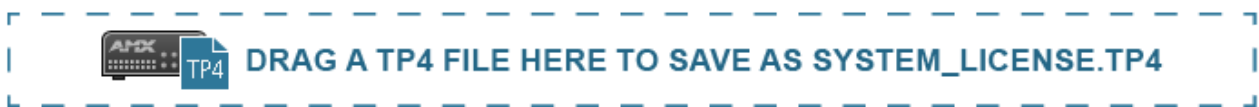
Generate a BYOD compatible TP4 file

TP4 files that you create in AMX TPDesign4 *must* be parsed via either **TPTransfer** or **TPCloud** in order to function properly in TPControl.

Baring that in mind, there are 2 methods available for *generating a BYOD compatible TP4 file*; **TPTransfer** or **TPCloud**. Once this is done, the file can be placed on the NetLinx Master.

The following describes each of the methods available:

Option 1: Generate a system_license.tp4 file using TPTransfer

If you have not already, download and install **TPTransfer** v1.4.0.0 (or later) for Windows. At the bottom of the main application window, a drag-and-drop area has been provided.

You can either;

a) Drag-and-drop a file from the TPTransfer 'Filename' history column, or

b) Drag-and-drop from a file-store location on your computer.
   To avoid a potential file-open warning, ensure the file is not open in TPDesign4.

You will be prompted to save the '*system_license.tp4*' file directly to your computer.

Jump to *Place the BYOD files on the NetLinx Master*.

Option 2: Generate a system_license.tp4 file using TPCloud

Within TPCloud, and following on from step 7, select the button.

You will be presented with a file dialog window listing TP4 files that you have previously uploaded to TPCloud, from which you can choose one, and then press the '*Select File*' button to save the '*system_license.tp4*' file directly to your computer.
An option to upload more files to TPCloud is provided.

Jump to *Place the BYOD files on the NetLinx Master*.

IMPORTANT:

To further stress the importance of using **TPTransfer** or **TPCloud**, if you rename a standard/non-converted TP4 file to '*system_license.tp4*', the file *will not work properly* in TPControl. This is due to dependencies in TP4 files that are required and added whenever files are sent via TPTransfer or TPCloud.
Hence, you must use either **TPTransfer** or **TPCloud** to generate TPControl BYOD compatible files.
For the purpose of BYOD Licensed NetLinx masters, those files are called '*system_license.tp4*'.

Place the BYOD files on the NetLinx Master

Now that you have both assets that complete the TPControl BYOD solution...

1. '*system_license.tpc*'

2. '*system_license.tp4*'

...all that remains is to place both of these files on the NetLinx Master. To do this, use your preferred FTP client.

For example, Windows users can launch *Windows Explorer*, and type in:

ftp://<NetLinxMaster_IP_address>

...where *<NetLinxMaster_IP_address>* is the IP address of your NetLinx master, and press *<Enter>.* An FTP session will be initiated and you will likely be presented with a login/credential window.

The default FTP login/credentials for NetLinx masters are:

Username: *NetLinx*

Password: *password*

Once logged in, copy and paste both the '*system_license.tpc*' file and '*system_license.tp4*' file into the **root** folder of the NetLinx master.

Congratulations!

The AMX System is now BYOD licensed for use with any licensed or unlicensed TPControl device. Connecting TPControl to the NetLinx Master will result in the BYOD TP4/UI file being retrieved by TPControl and presented for use with the system.

Refer to the following guides for additional BYOD information:

TPControl for Apple, TPCloud and TPTransfer guide
TPControl for Apple - Device Settings

TPControl for Android, TPCloud and TPTransfer guide
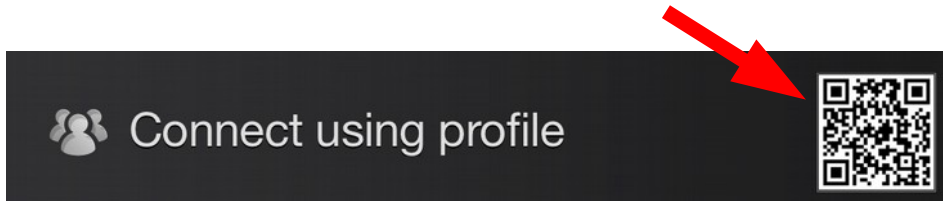**TPControl for Android - Device Settings**

TPControl for Windows 8/RT, TPCloud and TPTransfer guide
TPControl for Windows 8/RT - Device Settings

These documents are available from the Downloads section of the Touch Panel Control website.
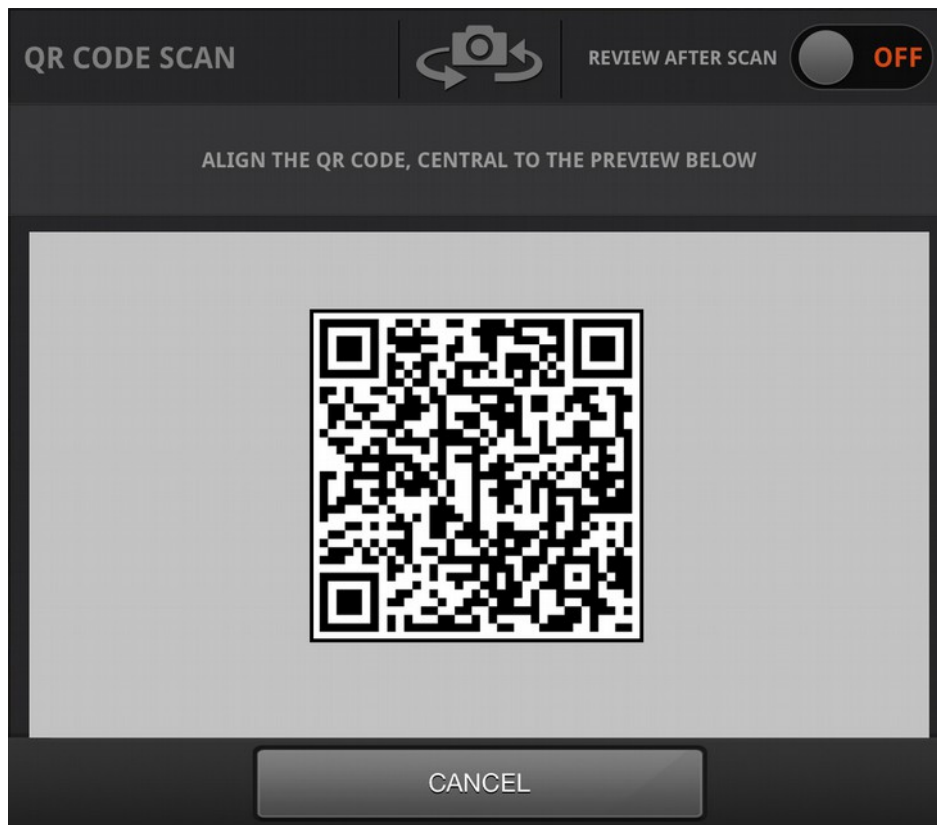
QR Code Scanner

TPControl v2.5.1.0+ for Apple and TPControl v2.5.1.0+ for Android include 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.
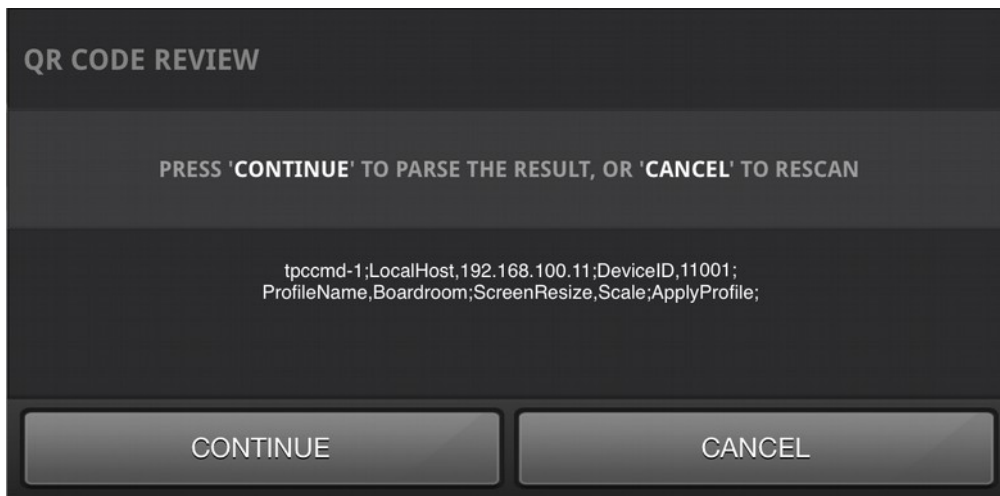
For more information on TPControl API commands, refer to the *"**TPControl - API Commands**"* document, available for download from our website *Downloads* section.

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 Touch Panel Control 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 TPControl Dynamic DeviceID assignments from code.AXW workspace, available from our Downloads 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

Things of Note and Tips

NOTE*:* Only **one** BYOD TP4 file is stored on the BYOD Licensed NetLinx Master at any time. All devices that connect to the BYOD Licensed NetLinx Master will retrieve the same TP4/UI file.

TIP: If required, using TP4 File Slots within TPControl (where applicable), will provide the ability to recall alternate TPControl device stored files, independent of the BYOD NetLinx Master TP4/UI file.

See the *TPControl - API Commands* document for information on managing file-slots, including BYOD file selection.

TIP: Refer to the example *TPControl Dynamic DeviceID assignment from code* workspace for an introduction to managing AMX Device ID assignments via code.

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.