

Introduction

This document provides an overview of the new and enhanced features along with other changes that are implemented in the ProColor Series Two Interactive Flat Panel Displays (IFPD) firmware enhancement dated April 19, 2019.

Background

The ProColor Series Two IFPDs all include an embedded Android computer system. This system provides on-screen control functions such as adjusting volume and selecting inputs. It also has the ability to run Android apps such as, the newly added Chrome browser, Boxlight's new Unplug'd Screen Streaming software, and the Client Agent for Boxlight's Networked Device Management System (NDMS).

The firmware upgrade will provide all the new apps and enhance some existing functions.

What's in the Firmware Upgrade?

The firmware upgrade includes:

- Apps
 - Unplug'd – Boxlight's new Screen Streaming Software (replaces ScreenShare)
 - Chrome Browser
- Utilities
 - Networked Device Management System (NDMS) agent – this is the software NDMS used to communicate with the NDMS cloud-based Management Console
 - Security patch – this utility enables configuring the Android system with enterprise grade security
 - Over the Air updates – enables future updates to be done over the network rather than requiring manual interaction and a flash drive
 - Cloud Storage connector in Finder App
- General
 - Enhanced launch screen UI – adds the new apps and provides a fresh, new look
 - Quick side toolbar now has Unplug'd quick access button

- Deletions
 - Screen Share Pro is deleted and replaced by Unplug'd
 - AirClass is removed

How is the Upgrade Implemented?

This firmware upgrade must be done manually using a flash drive equipped with the files that match the diagonal size of the panel.

- Note that there are separate file sets for the 65", 70", 75", and 86" Series Two models 652U, 702U, 752U, and 862U.
- Make a separate flash drive for each file set – it is very strongly recommended the flash drives be clearly labeled and even be different colors. Performing the upgrade with the wrong file can potentially cause serious problems.
- When upgrading it is **essential** to use the file set that matches the IFPD model being updated

Firmware upgrade execution

Tools:

USB disk / Flash drive (Min 4GB Max 16GB, Formatted as FAT32)

Procedure:

(1) Preparing the flash drives

- a. On a PC, format the USB disk as FAT32. (please do this first, it will delete everything on the thumb drive so make sure any files on the disk that are important are moved to another storage device.)

Download all required file sets here- <https://mimio.boxlight.com/procolor-firmware-upgrade/>

- b. Extract (unzip) the upgrade file to your PC and then copy the relevant UPGRADE_510 folder from the correct unzipped file to your flash drive for the size of panel you will be upgrading. Ensure the Upgrade_510 folder is in the root of FAT32 formatted thumbdrive.

(2) Before you Upgrade

- a. Move all stored files on the android internal storage to a USB Drive from the finder app prior to upgrading. The upgrade will remove all files stored on the system.

(3) The Upgrade Process

- a. Insert the appropriate USB disk into the top USB2.0 port of the TV board which is next to the HDMI OUT connector on the right side of the Panel. (when facing the front)

- b. Ensure the Panel is in off mode, the power light should be solid red, not a slow blink (the slow blink designates standby mode) if you flip the hard power switch located next to the power cord input on the bottom of the panel it will start back up in off mode.
- c. Press the POWER key and hold it for 6 seconds until the power LED twinkles in red and blue.
- d. The TV will upgrade first. When finished, the screen will reboot and upgrade MCU automatically.
- e. The Panel will reboot again after MCU Upgrade
- f. After the 2nd reboot you should see the Home screen pictured below
- g. Remove the thumb drive and move to upgrading a different panel. *Ensure the version of firmware on the thumb drive is correct for the next panel.

