

# **VIP5xxx v 2021.07.15-B2392 RELEASE GUIDE**

Authors: Chad Gloege, Ande Schlim  
Team: Processor Engineering





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## **Section 1: Document Revision History**

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Revision	Date	Author	Remarks
1.0	10/29/2013	Jason Jungers	First release of this documentation
1.2	11/18/2013	Jason Jungers	Updated with known issues from regression testing
1.3	11/18/2013	Jason Jungers	Added multi-color status indicator chart
1.4	11/18/2013	Jason Jungers	Fixed some grammatical errors
1.4	01/02/2014	Jason Jungers	Began updates for first 2014 release
1.5	01/17/2014	Jason Jungers	Added more updates for 2014 release
1.6	01/30/2014	Jason Jungers	Added updates for 2014 release
1.7	02/07/2014	Jason Jungers	Final updates before release
1.8	03/26/2014	Jason Jungers	Updates for March release
1.9	03/31/2014	Jason Jungers	More "final" updates...added more than a dozen known issues
2.0	04/02/2014	Jason Jungers	Synced known issues to bugs in general/Havana project
2.1	04.02.2014	Jason Jungers	Included Matt S. suggestions/changes
2.2	04/03/2014	Jason Jungers	Added info about IP address field being too short
3.0	05/01/2014	Jason Jungers	Began prep for may release
3.1	05/02/2014	Jason Jungers	Continued updates for May release
3.2	07/03/2014	Joseph Cheadle	Began prep for July release
3.3	09/28/2014	Chad Gloege	Update for 2014 Sept release
3.4	03/13/2015	Chad Gloege	Update for 2015 Feb release
3.5	07/21/2015	Chad Gloege	Update for 2015 June release
3.6	9/28/2015	Chad Gloege	Update for 2015 Aug release (TFS# 185000)
3.7	10/08/2015	Chad Gloege	Update for 2015 Sept release (TFS# 188019)
3.8	03/15/2016	Chad Gloege	Update for the 2016-03 release: Proxy, OAAA (TFS# 218513)
3.9	10/10/2016	Chad Gloege	Update for 2016-09-30 release: New UX, shipped config rescue button, removed multicast routing, LOD reporting, CANmods configurable timeout (TFS# 272118)
4.0	05/09/2017	Chad Gloege	Update for 2017.04.24-b1961 release. Continued UX improvements, including Calibration (TFS#306261)
5.0	7/21/2017	Chad Gloege	Update for 2017.7.21-b2095 release. Nginx log retrieval timeout, CANModule bootloading fix, Factory Calibration support of PL50/51 & PL52/53/55 (TFS# 338412)
6.0	10/09/2017	Chad Gloege	Update for VIP-5xxx 2017.10.09-b2119 (SNAP) TFS#348846
7.0	02/21/2018	Chad Gloege	Update for VIP-5xxx 2018.01.16-b2182 (Morpheus, NPP) TFS# 372815
8.0	04/12/2018	Chad Gloege	Update for VIP-5xxx 2018.02.20-b2194 (Venus Diagnostics, Morpheus peripheral, Nginx Update) TFS#404714
9.0	05/18/2018	Chad Gloege	Update for VIP-5xxx 2018.04.17-b2235 (ECCB CA, Stoer Dimming, Dropbear Security, Flash Bad block) TFS#407248
10.0	10/12/2019	Chad Gloege	Update for VIP-5xxx 2019.09.20-b2307 (sensor bootloading, Venus diagnostics, security updates) TFS#416729
11.0	11/19/2019	Chad Gloege	Update for VIP-5xxx 2018.10.18-b2309 (#4701044)
12.0	04/19/2019	Chad Gloege	Update for VIP-5xxx 2019.02.21-b2313 (#490174)
13.0	06/18/2019	Chad Gloege	Update for VIP-5xxx 2019.06.10-b2323 (#522458)
14.0	11/01/2019	Chad Gloege	Update for VIP-5xxx 2019.10.16-b2330 (#566325)
15.0	04/21/2020	Chad Gloege	Update for VIP-5xxx 2020.04.06-b2341 (#668537)





16.0	06/25/2020	Chad Gloege	Update for VIP-5xxx 2020.05.07-b2369 (#668559)
17.0	08/07/2020	Ande Schlim	Update for VIP-5xxx 2020.07.16-b2370 (#728309)
18.0	10/05/2020	Ande Schlim	Update for VIP-5xxx 2020.08.21-b2372 (#748033)
19.0	02/24/2021	Ande Schlim	Update for VIP-5xxx 2021.01.25-b2380
20.0	03/17/2021	Ande Schlim	Update for VIP-5xxx 2021.01.25-b2383 (#819353)
21.0	06/17/2021	Ande Schlim	Update for VIP-5xxx 2021.05.19-b2389 (#842668)
22.0	08/02/2021	Ande Schlim	Update for VIP-5xxx 2021.07.15-b2392 (#878982)





## Section 2: Introduction

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### 2.1 Purpose of this Document

This document's release is to coincide with each new release of the VIP 5xxx firmware. It is meant to inform users of any issues that the firmware may have, and all changes made to it since the last release.

### 2.2 Target Audience

Because of the Known Issues/Work Around section, it is important that even beginning users read this document, but it is not meant as an introduction to the VIP 5xxx; it is an update. All users must have some experience with the VIP5xxx for this document to have meaning.

### 2.3 Associated Products and their Versions

Product	Version	Notes
VIP5xxx	2021.07.15-b2392	Debian package for updating firmware through the UX. Dak3024 Location: <a href="#">DD2087893</a>
uSD card	2021.07.15-b2392	ZIP package and tools for creating uSD cards for reflashing VIP firmware back to factory defaults. Dak3024 Location: <a href="#">DD2298327</a>
Discovery utility "Display Finder"	1.2.1.0	This utility program will discover a VIP if it is on a similar subnet as the computer executing the program. Dak3024 location: <a href="#">DD1808863</a>

### 2.4 References

Release Guide Template	<a href="#">Link to release guide template</a>
Display Finder	<a href="#">Link to DisplayFind.exe on DakFiles</a>
Installation and setup	Installation and Setup Manual (in progress)

## Section 3: Product Information

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### 3.1 Processor Description

The VIP5x60 processor is meant to be used in situations where VMAX/HSDSI is not necessary in order to reduce the cost of the control system and ProLink6 out to the display is required.

The VIP5x50 processor is meant to be used in situations where VMAX/HSDSI is not necessary in order to reduce the cost of the control system and ProLink5 out to the display is required.

## 3.2 Supported DVI resolutions

800x600 DVI-D (WxH)

1280x720 DVI-D (WxH)

1440x900 (reduced blanking) DVI-D (WxH) (Rev 2 (VIP51xx) boards only)

## 3.3 Multi-color Status LED indicators

\*These indicators are only viewable on rack-mount VIPs

### ***DS23*** – generic indicator

States:

Red:	LOS on primary PL6
Green:	Network failure (may eventually be Eth0 status)
Blue:	DVI input failure
White:	No problems
Yellow:	eth0 is in auto IP mode with a 169.254.xxx.xxx address

### ***DS24*** – generic indicator

States:

Red:	LOS on secondary PL6
Green:	Network failure (may eventually be USB0 status)
Blue:	DVI input failure (may eventually be local rendering failure)
White:	No problems
Yellow:	eth0 is in auto IP mode with a 169.254.xxx.xxx address

## Section 4: Known Issues

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This section provides a list of known issues in the current version of The VIP 5xxx.

### 4.1 Gradient Test pattern does not run smoothly (TFS# 111178)

**Symptoms:**

When playing the scrolling gradient test patterns, a noticeable stutter will occur intermittently.

**Work Around/Recommendations:**

None.

### 4.2 Connectivity will be interrupted during a firmware update (TFS#111225)

**Symptoms:**

The user may be prompted that a timeout has occurred while the VIP is rebooting during a firmware update.

**Work Around/Recommendations:**

If the user interface is not restored, refresh the web browser.

### 4.3 Back-dating from current releases to releases earlier than 2013.6.27 is NOT supported (TFS#111226)

**Symptoms:**

Due to compatibility issues, back-dating VIP firmware from current releases to version prior to 2013.5.27 cannot be supported.

**Work Around/Recommendations:**

None

### 4.4 ProLink devices serial ID is not reported correctly (TFS#111230)

**Symptoms:**

When viewing a ProLink devices serial family ID through advanced diagnostics (or IDM), the value reported by the VIP5x60 is incorrect.

**Work Around/Recommendations:**

None, this value is currently not utilized

#### **4.5 Min/Max dimming level may be ignored due to rounding errors (TFS#111217)**

**Symptoms:**

Even though a user has set a minimum or maximum dimming level, the rounding errors created by dimming level conversion may allow the “actual” dimming level to exceed those bounds.

**Work Around/Recommendations:**

If the amount that the actual level deviates is unacceptable, adjust the min/max values to compensate for the rounding.

#### **4.6 Ethernet link may go down after a firmware back-date (TFS#111215)**

**Symptoms:**

During firmware back-dating, the VIPs Ethernet device may get into an unresponsive state resulting in loss of connectivity and the status LEDs indicating “green” or disconnected Ethernet cable.

**Work Around/Recommendations:**

Unplug the Ethernet cable and re-insert it or reset the VIP to regain communication.

#### **4.7 BadGateway Response received after attempting to connect to a VIP that has just been reset (TFS#111212)**

**Symptoms:**

A user logging into a VIP that has just been reset may receive a 502 “BadGateway” response.

**Work Around/Recommendations:**

Wait 30 seconds and attempt to reconnect.

#### **4.8 VIP5x60 may experience excessive reboots during a firmware update (TFS#111208)**

**Symptoms:**

During a firmware update, it is possible for the VIP to take longer than expected to return to a functional state.

**Work Around/Recommendations:**

Wait 30 seconds and attempt to re-connect, do NOT power cycle the VIP until this has been attempted.

## **4.9 Controller connected sensors may report -182d when initially plugged in (TFS#106303)**

### **Symptoms:**

When a VIP is configured for a sensor but the sensor is unplugged. Upon re-connection of that sensor, the user interface will show -182d for a brief time.

### **Work Around/Recommendations:**

None.

## **4.10 Upscaling content may produce undesired results. (TFS#106360)**

### **Symptoms:**

Upscaling video may produce undesired results the more aggressive the scale factor becomes.

### **Work Around/Recommendations:**

Avoid upscaling the incoming video; make sure the source and target areas are set identically.

## **4.11 When the VIP is in remote mode, “desired dimming” will not match “actual dimming”. (TFS#108088)**

### **Symptoms:**

If the user observes the “desired” and “actual” dimming levels displayed in the tools tab of the configuration interface it should be noted that they will not match ONLY when the VIP is in “remote dimming” mode.

### **Work Around/Recommendations:**

None, this is expected behavior.

## **4.12 PUT configuration does not work immediately after a VIP is re-imaged with a micro-SD card. (TFS#108908)**

### **Symptoms:**

After re-flashing a VIP and attempting to configure it, the configuration must be sent multiple times as it will be ignored the first time.

### **Work Around/Recommendations:**

Send the configuration multiple times.

## **4.13 JFFS2 spinlock may randomly occur causing the VIP to become un-responsive and/or reset. (TFS#110060)**

### **Symptoms:**

Due to file system issues it has been observed that when the VIP is kept excessively “busy” and cannot defragment its flash storage it may eventually enter a state where it will become un-responsive and reset itself to regain normal operation.

**Work Around/Recommendations:**

Reboot the VIP to recover from an un-responsive state. Avoid excessive and consistent configuration writes.

#### **4.14 Legacy UX - configuration tool allows for DCIO devices to be configured for addresses beyond the supported range. (TFS#111177)**

**Symptoms:**

The user is able to configure a DCIO device for an address that cannot exist and is not supported by the VIP. The VIP accepts DCIO devices of address 0-5.

**Work Around/Recommendations:**

Ensure that a configured DCIO device has an address less than 6.

#### **4.15 LED status indicators do not behave as expected when the VIP is configured for bridging. (TFS#111179)**

**Symptoms:**

With the VIP in a “bridging mode” such as bridging the Ethernet connection to its USB connection, the user will note that the status LEDs no longer correctly indicate DVI, Ethernet or ProLink connectivity.

**Work Around/Recommendations:**

None.

#### **4.16 Changing the management port via a fusion connection does not re-direct the user (TFS#111180)**

**Symptoms:**

When connecting to the VIP via the Fusion interface and subsequently changing the management port, the VIP attempts to re-direct the user.

**Work Around/Recommendations:**

None. This is not necessary as the user is NOT connected through the management port, but rather via Fusion.

#### **4.17 The current time-zone database on the VIP 5060 has a number of incorrect entries (TFS#111183)**

**Symptoms:**

See work item for incorrect time zones. Using one of those time zones will result in un-expected GPS dimming.

**Work Around/Recommendations:**

None.



#### **4.18 Sending Prolink6TypeColorCorrection subresource to Config Resource, loads in bad default Config (TFS#111187)**

**Symptoms:**

An incorrect default configuration may be loaded.

**Work Around/Recommendations:**

None.

#### **4.19 File calibration results may be unacceptable if attempting to apply a field calibration file with the VIP in video mode. (TFS#111206)**

**Symptoms:**

With the VIP in video mode, should the user attempt to send a field calibration file, the results may not be what is desired.

**Work Around/Recommendations:**

Make sure the VIP is in test pattern mode displaying blank or a test pattern of none before sending a field calibration file.

#### **4.20 Dimming status dimming levels may not be an accurate reflection of actual dimming levels. (TFS#111207)**

**Symptoms:**

Should the user compare dimming levels reported in “advanced status” they may find the levels differ from what is being reported elsewhere in the user interface. This is due to rounding errors with the dimming levels.

**Work Around/Recommendations:**

None.

#### **4.21 Status LEDs do not accurately depict the VIPs state when DVI changes from a plugged in state to unplugged. (TFS#111204)**

**Symptoms:**

Should the VIP be in test pattern mode and the user unplugs DVI and switches the VIP to video mode the status LEDs will show solid blue instead of blinking blue.

**Work Around/Recommendations:**

None.

## **4.22 After disabling or unplugging PL6 output, display may not blank, leaves faint after-image. (TFS#111587)**

### **Symptoms:**

Upon unplugging or disabling the only ProLink output operating a display, the user may witness that the display does not blank but continues to show a faint image of what was last showing on the display.

### **Work Around/Recommendations:**

Power cycle the display, re-enable the VIP output or reboot the VIP.

## **4.23 VIP must only read the boot load bit and not the entire word to determine if the display device is in boot strap mode. (TFS#112663)**

### **Symptoms:**

When the state of the display device is such that a specific set of bits indicating its state are set, the VIP may incorrectly ignore diagnostics from that device because the VIP believes the device to be in boot load mode.

### **Work Around/Recommendations:**

Power cycle the device to clear any state flags

## **4.24 ProLink diagnostics stop when the VIP loses video input when in video mode. (TFS#112872)**

### **Symptoms:**

Display diagnostics stop when the VIP is set to video mode AND the video input is removed.

### **Work Around/Recommendations:**

re-connect the video input

## **4.25 Test pattern quick resource does not contain a namespace. (TFS#121170)**

### **Symptoms:**

The TestPatternList schema contains a namespace, so creating an object model from the schema results in an object that the quick resource can't serialize against..

### **Work Around/Recommendations:**

none.

#### **4.26 Legacy UX - diagnostic patterns configuration update is different between web browsers (TFS#118591)**

**Symptoms:**

Using a 5060, when opening diagnostic test patterns on Internet Explorer, the UX puts the asterisk signifying that the configuration has changed. This does not occur in Chrome or Firefox.

**Work Around/Recommendations:**

none.

#### **4.27 Video not synced (across modules) when the VIP boots up with the boot sequence set to none (TFS#119822)**

**Symptoms:**

Set the VIP boot sequence to none and reset it. When video resumes after reboot, not all the mods will come on at the same time. This was found in b973 on the 4mm in building 5.

**Work Around/Recommendations:**

none.

#### **4.28 Legacy UX - Panel adjust zoom slider does not zoom out far enough (TFS#120360)**

**Symptoms:**

If panel adjusting a large display, the user may encounter a situation where the panel adjust zoom ability does not go far enough to prevent the user from having to scroll horizontally or vertically in order to reach the edges of the display being adjusted.

**Work Around/Recommendations:**

None.

#### **4.29 Legacy UX - can set the static IP first octet to 255 (TFS#125686)**

**Symptoms:**

In some conditions it is possible for the UX to “auto-fill” the first octet to 255.

**Work Around/Recommendations:**

Verify IP address before accepting.

#### **4.30 Display diagnostics data does not always refresh on the redundant/silent VIP (TFS#155697)**

**Symptoms:**

The redundant/silent VIP may fail to update diagnostics on some random display components (PLRs, modules). This may cause alerts to be triggered in IDM.

**Work Around/Recommendations:**

None.

#### **4.31 eCCB & GS6 (Galaxy) TTable multi-face/zone support parsing and generation does not work properly (TFS#151522)**

**Symptoms:**

Multi-face or “zoned” displays may not display correctly.

**Work Around/Recommendations:**

Galaxy: The TTable must be created as a single faced large display, the Player must be configured to stripe (handle the zones through content duplication).

ECCB: Special custom made TTable is required.

#### **4.32 VIP-5x6x ProPixel TTable takes exceptionally long time to load (TFS#187496)**

**Symptoms:**

ProPixel displays without cabinets can take an exceptionally long time (up to 30min) to be processed and loaded by the VIP. During this time the VIP may indicate timeout errors and be unresponsive.

**Work Around/Recommendations:**

Wait until the VIP finishes processing the TTable, it will begin to operate normally or create a new TTable using cabinets.

#### **4.33 VFC: Mod Generated Test Pattern is Turned Off By the VIP UX (TFS#183721)**

**Symptoms:**

If VIP UX is open and Player starts a test pattern the “configuration change” pop up in the VIP UX occurs, respond “YES” and the test pattern will stop.

**Work Around/Recommendations:**

None.

#### **4.34 ECCB: Power cycling display causes messages to not render or render garbled (TFS#169807)**

**Symptoms:**

When content is running on the display and power is lost, on power up the content may show blank or garbled.

**Work Around/Recommendations:**

Reload the TTable, soft reset or additional power cycles are unlikely to resolve the issue.

#### **4.35 The default HTML UX in b2095 or higher doesn't do everything the legacy UX could do?**

**Symptoms:**

The new UX does not currently support some capabilities such as advanced config. Some features such as advanced status and advanced diagnostics are available, but not directly accessible through a link/button in the UX.

**Work Around/Recommendations:**

The legacy UX is still available and fully functional. If a capability is needed that is not currently supported by the new UX, simply switch to the legacy UX. It can be reached by clicking on the "Legacy" button in the UX or by directly entering the url for the legacy UX.

If unable to access the HTML interface or unable to access some new features or elements, such as calibration, in the HTML interface after a firmware update, then clear your browsers cache and try again. More details can be found in KB [DD3645318](#).

Legacy UX url: "http://yourVIPID/config.html"

New UX url: "http://yourVIPID/ux/index.html"

Advanced Status UX url: "http:// yourVIPID /ux/index.html#advancedstatus"

Advanced Diagnostics UX url: "http://hav68b35d/ux/index.html#advanceddiag"

#### **4.36 New HTML5 UX, when using Internet Explorer during panel adjustment, unable to select some modules**

**Symptoms:**

When panel adjusting large displays, if all modules cannot fit in the panel adjust window, scroll bars are provided that allow the user to move to all modules in the display. However, in some cases the User is unable to select the desired module. This has only been observed with Internet Explorer.

**Work Around/Recommendations:**

Switch to the Chrome browser.



## Section 5: Bug Fixes

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This section provides a list of issues that have been corrected.

### 5.1 TBU: beacons stop working until VIP-5xxx is rebooted (#862686)

**Symptoms:**

Display begins to have difficulty toggling beacons, reporting sensor values, or changing dimming.

There is a memory leak on controllers that have a CAN IO and fan RPM sensor configured. If there are beacons configured, toggling them exposes the leak faster.

**Work Around/Recommendations:**

Update VIP to b2392 or later.

## Section 6: Previously fixed bugs

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5xxx Rev	Issue
2021.07.15-b2392	TBU: beacons stop working until VIP-5xxx is rebooted (#862686)
2021.05.19-b2389	Sensors briefly show as disconnected (ESR-2468) (#738132)
2021.05.19-b2389	VCS registration code displaying on boot when boot sequence is set to none (#822281)
2021.03.15-b2383	MDLS sensors (rev12+) show as disconnected when configured on a PLR
2021.03.15-b2383	VIP UX does not load on Internet Explorer (#816491)
2020.08.21-b2372	VIP security concerns due to outdated Nginx version (ESR-2537) (#739604)
2020.08.21-b2372	VFC: The incorrect dimming level is being applied to the display. (ESR-PennDOT) (#744578)
2020.08.21-b2372	The VIP shows as online in VCS but the DMP shows as offline. (ESR-2442) (#654944)
2020.07.16-b2370	VCB: When frequently toggling a beacon, after several days the VIP may fail to correctly adjust the displays dimming value due to a memory leak. (#727281)
2020.04.06-b2341	After a reboot the VIP fails to establish a connection to the network. (#631626)
2020.04.06-b2341	After a reboot, GreenMode settings are not applied. (#643493)
2019.10.16-b2330	Diagnostic Interpreter error is displayed in the UX when bootloading VCBs. (#455374)
2019.10.16-b2330	Remote Dimming: The remote (slaved) VIP fails to show the correct dimming level after its network connection is lost and reestablished. (#552321)
2019.10.16-b2330	Manufacturing: The VIPs networking fails to function after running through an ATF flow. (#566333)
2019.06.10-b2323	Security – UX network tools endpoint is susceptible to command line injection. (#533291)
2019.06.10-b2323	ESR-2233 – The UX doesn't apply MTU changes when in Bridge Mode. (#524578)
2019.06.10-b2323	Busclient is not able to connect to the server. (#522459)
2019.06.10-b2323	Testing - Morpheus I/O board Fan RPM configuration changes are rejected/fail to take effect. (#531546)
2019.06.10-b2323	MDLS and Light Lux sensors time out when configured to connect to the same PLR. (#522729)
2019.02.21 b2313	When bootloading a display, the VIP remains in bootload mode for several minutes even though all nodes have been successfully bootloaded. (#481249)
2019.02.21 b2313	UX - The number of nodes bootloaded is shown as the wrong value in the UX log. (#490180)
2019.02.21 b2313	UX – The UX incorrectly shows “Diagnostic Interpreter Error” after bootloading VCBs if they have CAN sensors configured. (#482413)
2019.02.21 b2313	Logging – Temperature sensor values are logged every 30s if the temperature is negative
2019.02.21 b2313	The timestamp is not set properly on on the Diagnostics 2.0 resource
2018-10.18.b2309	After running fine for a period of at least a day, all ProLink6 (PLR) connected sensors time out and stop updating. (TFS#471684)
2018.09.20-b2307	Busclient was updated to version 1.5.28.0 to resolve excessive User-Agent field. (TFS#449080)
2018.09.20-b2307	ESR-2038: Security: IP forwarding is enabled for all configurations. (TFS#436674)
2018.09.20-b2307	ESR-1924: VIP is unable to ping/communicate out. (TFS#411242)
2018.09.20-b2307	Hardware ID and Error Flags elements may generate an error if being modified. (TFS#434665)
2018.09.20-b2307	VIP firmware update is corrupted. (TFS#417691)
2018.09.20-b2307	When retrieving logs using Internet Explorer the .tar.gz extension is dropped from the filename. (TFS#432766)
2018.09.20-b2307	Selftest: When running selftest from the SD card, the card could become corrupt. (TFS#425023)
2018.09.20-b2307	The time is incorrect after setting the date/time. (TFS#372919)



2018.09.20-b2307	PL6/PLR sensors randomly disconnect. (TFS#446998)
2018.04.17-b2235	Dimming of display will start out at full bright during boot sequence until sensor level is read. (TFS#106358)
2018.04.17-b2235	ESR-1839 – Dropbear security vulnerability. (TFS#411222)
2018.04.17-b2235	TTables generated with VTour/DCU version < 4.56 fail to load. (TFS#410710)
2018.04.17-b2235	Selftest – DVI and ProLink6 tests fail due to incorrect configuration. (TFS#411021)
2018.04.17-b2235	Display enters thermal dimming even if as few as a single module is returning a very high temperature. (TFS#213014)
2018.04.17-b2235	Unable to send config when disk space is low. (TFS#272840)
2018.04.17-b2235	Display fans continue to run at full speed when changing from an all ON test pattern to video. (TFS#227568)
2018.04.17-b2235	The date/time may not be set correctly through the UX if the update button is pushed more than once in quick succession. (TFS#372919)
2018.02.20-b2194	Configuration for VCB connected sensors are corrupted if saved through the VIPs UX (TFS#391506)
2018.02.20-b2194	TTable is not included in config recovery resource (TFS#402768)
2018.02.20-b2194	ESR-1655 Nginx denial of service vulnerability (TFS#397100)
2018.02.20-b2194	DakBus Managers are not actually removed after deleting them in the UX (TFS#391506)
2018.01.16-b2182	Upload of configuration fails when power control configuration is not present (TFS#382839)
2018.01.16-b2182	TTables utilizing Unix or Windows line endings will fail to parse and load (TFS#360746)
2017.10.09-b2119	UX: The VIP may not set the time correctly when the synchronize button is pushed quickly in succession (TFS#373151)
2017.10.09-b2119	UX: The SyncEnable and BlankEnable settings are cleared upon save of a new configuration (TFS#372086)
2017.10.09-b2119	Debug: Prettyprint does not represent values over 16bits correctly (TFS#364450)
2017.10.09-b2119	Some sensor types in the log are not human readable (TFS#227567)
2017.10.09-b2119	Test patterns and default content fails to play on very small displays (TFS#365630)
2017.10.09-b2119	The VIP is not able to connect to a VIP connected CAN sensor (TFS#368690)
2017.10.09-b2119	Excessively high CPU usage and boot sequence fails to play on very small displays (TFS#365628)
2017.10.09-b2119	Dimming log values may be double printed (TFS#227566)
2017.07.21 b2095	VFC: The VIP UX reports “Failed – Server problem” when a Save Logs is attempted (TFS#350576)
2017.07.21 b2095	VFC: The VIP drops out of bootloading early if diagnostics are not present (TFS#349062)
2017.04.24 b1961	Hardware Test Pattern: ProLink hardware address test pattern may turn on full bright, regardless of configured display brightness (TFS#317718)
2017.04.24 b1961	Sensors: ProLink6 connected sensors can incorrectly timeout (TFS#309888)
2017.04.24 b1961	Flashing: VIP Player input size is being set to 256x512 (TFS#284890)
2017.04.24 b1961	Selftest: Fails CAN0 and CAN1 Every Time (TFS#274722)
2017.04.24 b1961	VFC: Exporting VFC Config is allowed even if the USB drive is not connected (TFS#272337)
2017.04.24 b1961	VFC: content can incorrectly blank during a player reboot (TFS#284382)
2016.09.30 b1688	ESR-2004: The VIP becomes a multicast router for all devices on the network (TFS#276203)
2016.09.30 b1688	VFC: Module generated test patterns continue to play after a VIP power cycle for 10 minutes (TFS#230616)
2016.09.30 b1688	VCB: diagnostics data is not processed correctly (TFS#267300)
2016.09.30 b1688	SmartLink: fails to execute vpmp messages (TFS#267239)
2016.09.30 b1688	Diagnostics may fail to work on new module (TFS#256436)
2016.09.30 b1688	VFC: DCIO rising or falling edge devices may fail to have their status updated (TFS# 252732)
2016.09.30 b1688	ATF: Test patterns not playing with switching compositor from DefaultPlayer to InternalPlayer (TFS#259048)



2016.09.30 b1688	Memory leak associated with CanDCIO2In1Out Sensors (TFS#262114)
2016.09.30 b1688	VFC: VIP fails to parse management port for DCIO events (TFS#242885)
2016.03.10 b1550	DVI input may fail to lock on a Player restart (TFS#235231)
2016.03.10 b1550	Boot sequence may not be shown on a Player restart (TFS#236110)
2016.03.10 b1550	Smartlink power control signal strength is not shown in the UI (TFS#212876)
2016.03.10 b1550	Display firmware may not bootload correctly on modules with bootstraps 0A74 or E9B6 (TFS#220596)
2016.03.10 b1550	ITS pixel failure test may randomly indicate false failures (TFS#218377)
2016.03.10 b1550	VIP product family is not correctly reported in Venus (TFS#198283)
2016.03.10 b1550	VCB connected CAN fan RPM sensor values not reported correctly (TFS#219836)
2016.03.10 b1550	VCB connected CAN IO board does not respond (TFS#218372)
2016.03.10 b1550	VCB Connected CAN IO board can report the wrong number of inputs/outputs (TFS#219852)
2016.03.10 b1550	Run LED fails to run after a rescue button reset (TFS#225301)
2016.03.10 b1550	Translation Table name is not shown in the boot sequence (TFS#127557)
2016.03.10 b1550	ECCB: temperature sensor offset options stays visible and changeable when sensor is OFF (TFS#188671)
2016.03.10 b1550	Duplicate diagnostic packets are generated when multiple different diagnostics versions are mixed in the display (TFS#210477)
2016.03.10 b1550	Diagnostics/commissioning Test Patterns may time out (TFS#191851)
2016.03.10 b1550	Additional flash corruption mitigation improvements (TFS#194328)
2015.11.06 b1432	Managed release only (not released to full production for all products)
2015.09.21 b1362	Display component diagnostics query failure (TFS#190141)
2015.09.21 b1362	FCGI spinlock may cause connection failure during display firmware package update (TFS#111219)
2015.09.21 b1362	When adding a door switch peripheral it will now default to active-falling (TFS#162536)
2015.09.21 b1362	Invalid xml can be returned if a map is missing (TFS#178740)
2015.09.21 b1362	VIP failure to boot due to flash corruption (TFS#184538)
2015.09.21 b1362	Flashing or bootloading failure due to circular locking dependency error (TFS#161288)
2015.09.21 b1362	Display Firmware Package update fails due to closed connection, because of FCGI spinlock failure (TFS#111219)
2015.09.21 b1362	UI: Special characters "!%^@\$#~)(" are allowed to be entered for Network Time Protocol (NTP) URI (TFS#127555)
2015.09.21 b1362	UI: Send configuration notification "*" is not present when adding some peripherals (TFS#130180)
2015.08.21 b1340	Discovery fails to work immediately after configuring a DHCP bridge (TFS#111221)
2015.08.21 b1340	Spyder reboot/restore causes VIP-5x60 DVI lock up (TFS#122774)
2015.08.21 b1340	Cabinet fan sensor high trip point is non-functional (TFS#175521)
2015.08.21 b1340	Test Fixture: SATA loopback testing is supported and works consistently (TFS#179080)
2015.08.21 b1340	VFC: Disconnected sensors on the VIP CAN port never time out (TFS#179565)
2015.08.21 b1340	LoadFile parsing error prints multiple times (TFS#182197)
2015.08.21 b1340	VFC: VIP test patterns fail to display (TFS#183672)
2015.08.21 b1340	When bootloading displays with different HW IDs, the results may incorrectly show some modules failed to bootload (TFS#183720)
2015.08.21 b1340	PL5 diagnostic test patterns for the EPLD, Micro, HW ID, Temp do not show the correct values (TFS#183702)
2015.06.29 b1288	Remove '-' from filtered list of characters (TFS#155260)
2015.06.29 b1288	Bootloading can fail if TTable is updating (TFS#168937)
2015.06.29 b1288	A DCIO event can occasionally be missed (TFS#161668)
2015.06.29 b1288	Selecting a single default content file to download may lock up the UX (TFS#160827)
2015.06.29 b1288	Clicking the default content download button with no file selected will lock the UX (TFS#160828)
2015.06.29 b1288	If GPS is unconfigured a user error is not generated (TFS#146767)



2015.06.29 b1288	Diagnostic information fails to randomly update for some display components (TFS#151521)
2015.06.29 b1288	Full IPV4 address is not visible in the Silverlight User interface. (TFS#111683)
2015.06.29 b1288	Invalid characters may be pasted into DeviceName text box (TFS#116428)
2015.06.29 b1288	Thermal Dimming Manager Does not account for PLCs (TFS#150857)
2015.02.09 b1113	Remote dimming becomes non-functional if master and/or client clocks are out of sync. (TFS#106359)
2015.02.09 b1113	Vague error given to user when loading a translation table that has an issue or is corrupt (TFS#111218,111182)
2015.02.09 b1113	Having a space in the USB configuration recovery filename will prevent it from being loaded (TFS#111205)
2015.02.09 b1113	Utilizing the USB drive restore functionality without a TTable specified will delete the current TTable (TFS#111220)
2015.02.09 b1113	Remote dimming clients do not re-sync to master after master is reset (TFS#119832)
2015.02.09 b1113	Remote dimming is not configurable for ports other than 80 (TFS#119833)
2015.02.09 b1113	Time based dimming constraints, upper limit can be set lower than min limit. (TFS#122934)
2015.02.09 b1113	Recovery USB only works on port 80 (TFS#125685)
2015.02.09 b1113	Remote Dimming Follows “desired dimming” rather than “actual dimming” (TFS#125971)
2015.02.09 b1113	Config command optional element parameters are not handled correctly (TFS#127533)
2015.02.09 b1113	VPMP external diagnostics used the wrong offset while parsing calibration data (TFS#130590)
2015.02.09 b1113	VPMP does not return “family” ID as part of hardware ID (TFS#130591)
2015.02.09 b1113	Module Locator Test Pattern is not “Hold Timeable” (TFS#131335)
2015.02.09 b1113	VIP Sensors fail to report properly if status is read very shortly after a configuration change (TFS#130592)
2015.02.09 b1113	A kernel oops related to the networking subsystem causes communication failures and other errors (TFS#129232)
2015.02.09 b1113	Malformed syscontrol error message (TFS#149310)
2015.02.09 b1113	Publishing outputs on a VCB using Quick Resources doesn’t work (TFS#150827)
2014.09.26 b1008	Detection/correction of TTable corruption causing scrambled, blank, or rolling content on the display. (TFS#121815)
2014.09.26 b1008	Resolution of DakBus Client not re-connecting to IDM (Fusion) after numerous disconnects (TFS#106356)
2014.09.26 b1008	Resolution of Translation Tables with cabinets wired PortA-A or PortB-B fail to display properly. (TFS#121815)
2014.09.26 b1008	Content-MD5 header is now being used with VPMP transactions. (TFS#107363)
2014.09.26 b1008	Resolution of content not show properly on some ProPixel displays. (TFS#117321)
2014.09.26 b1008	Now able to connect to more than one Fusion server at the same time. (TFS#127636)
2014.09.26 b1008	DVI sync-loss counter will no longer overflow (TFS#105022)
2014.09.26 b1008	Resolution of loading a cal bitmap of an unsupported type (not 24 bits) puts the VIP into a bad state (TFS#106362)
2014.09.26 b1008	VIP input monitor will display mod IDs test pattern. (TFS#111421)
2014.09.26 b1008	Test pattern names are standardized (TFS#111024)
2014.09.26 b1008	Color space conversion improvements (TFS#110124)
2014.09.26 b1008	VIP5060 EDID shows preferred resolution (TFS – 109678)
2014.09.26 b1008	The thermal dimming thermal scalar property is not set in the schema (TFS#111204)
2014.09.26 b1008	The module IDs test pattern does not center the ID numbers on 16iL modules. (TFS#111203)
2014.09.26 b1008	Minimum dimming levels of less than 1% cannot be set. (TFS#113909)
2014.09.26 b1008	DCIO output level changes every 5 seconds. (TFS#114968)
2014.09.26 b1008	VIP5xxx test fixture gives error “invalid test ID 20”. (TFS#112238)
2014.03.21	DCIO door switch actuation corrupted VIP configuration (TFS#108583)
2014.03.21	VIP configuration was not power-loss safe. (TFS#110113)
2014.03.21	U-Boot settings were incorrectly configuring RAM sizes on Rev2 (VIP 5160) boards. (TFS#107635)
2014.03.21	The application on the VIP that manages sensors received major performance improvements. (TFS#110527)
2014.01.29	Correction made to GPS dimming algorithm. (TFS – 89229)



2014.01.29	Improvements made to DCIO edge triggering. (TFS – 93534)
2014.01.29	Absolute file cal will fail directly after the browser cache is cleared. (TFS – 92110)
2014.01.29	Diagnostic fixes for specific numbers of modules in PLR sections. (TFS – 91896,91278,90950)
2014.01.29	Improvements made to some DST time zones. (TFS – 91772)
2014.01.29	A missing configuration will now be replaced with a default. (TFS – 90476)
2014.01.29	File deletion response now correctly handles the deletion of an already deleted file. (TFS – 89314)
2014.01.29	Sensor revisions were not being correctly reported in the UX. (TFS – 89277)
2014.01.29	Resolution of a namespace issue was preventing correct ATF functionality. (TFS – 88912)
2014.01.29	Resolution for GPS coordinates failing to apply. (TFS – 102049)
2014.01.29	The VIP was not correctly handling translation tables with section breaks. (TFS – 101658)
2014.01.29	VIP error flags are no longer set to 0xFFFFFFFF after reset. (TFS – 97353)
2014.01.29	FCGI spinlock failure no longer occurs during firmware update. (TFS – 98570)
2014.01.29	DMP8000 - Tracert network tool never reaches destination when behind 8000. (TFS – 70075)
2014.01.29	Desired Dimming Level Shown with Excessive Digits and Error in Tools Tab. (TFS – 97134)
2014.01.29	Module User Array Luminance Values off by Factor of 1000, (TFS – 96810)
2014.01.29	UX Reports IP of 0.0.0.0 when directly connected to computer. (TFS – 96158)
2014.01.29	Minimum-Maximum dimming dialog buttons are not responsive. (TFS – 98335)
2014.01.29	Panel Adjust throws an error the first time you use it after opening a new browser session. (TFS – 85573)
2013.06.27	Loading a VIP4060 Interleave translation table on a VIP5x60 no longer causes incorrect display output. (TFS – 82798)
2013.06.27	Setting up a static IP without a gateway on the same subnet, causes hello packets to not be sent (TFS – 69062)
2013.06.27	Panel Adjust no longer throws an error the first time you use it after opening a new browser session (TFS – 85573)
2013.06.27	The VIP5x60 UX now accepts default content with an extension that has a capitol letter in it. (TFS – 85589)
2013.06.27	Invalid characters no longer allowed for Display Description. (TFS – 85598)
2013.04.15	USB AUTO IP now displays. (TFS – 81016)
2013.04.15	USB IP address will now display on 1st boot after configuring it. (TFS – 81009)
2013.04.15	Cabinet sensor trip point changes will not take effect until a reboot of the 5x60. (TFS – 80818)
2013.04.15	Door switch change acknowledged immediately after boot. (TFS – 77603)
2013.04.15	Wrapped pixels during upscaling resolved (TFS – 64260)
2013.04.15	Downscaling pixel issue resolved. (TFS – 68629)
2013.04.15	Switching between Panel adjust and gradient improved. (TFS – 80523)
2013.04.15	SelfTest documents will now get installed preventing firmware update error. (TFS – 81842)
2013.04.15	Ethernet throughput issues resolved. (TFS – 81050)
2013.03.19	Falling and Rising DCIO EventCounter now properly increments. (TFS – 77379)
2013.03.19	VIP5x60 reverse ProLink Path no longer corrupts output data. (TFS – 77593)
2013.03.19	DCIO detection now properly detects a “rising” event. (TFS – 77497)
2013.03.19	Multiple player improvements. (TFS – 64802,77249,69183,70549)
2013.03.19	UX Presentation of MDLs now correctly displays front/back readings. (TFS – 74552)
2013.03.19	Improvements made for door switch debouncing. (TFS – 75620)
2013.03.19	GPS coordinates no longer lost by configuration utility. (TFS – 76113)
2013.03.19	Video output no longer jitters when source area is modified from default. (TFS – 75267)
2013.01.30	Updated init.d scripts to prevent apps spawning multiple times. (TFS – 75001)
2013.01.30	Default content may not cycle through all stored content. (TFS – 75209)
2013.01.30	Status LEDs now reflect current state accurately. (TFS – 75603)



2013.01.30	Busmanagerd back off functionality correctly handles unregistered state. (TFS – 77336)
2013.01.30	DCIO “rising” state detection improved. (TFS – 77379)
2013.01.30	GPS coordinates being lost in configuration utility. (TFS – 76113)
2013.01.30	Resolved case where default content would not play when switching from DVI. (TFS – 77553)
2013.01.30	Improvements to Appweb for handling ttable app. (TFS – 76670)
2013.01.30	Resolved issue where manual dimming would change to 7 after reset. (TFS – 75621)
2013.01.30	Door switch error counter was counting multiple events upon door opening. (TFS – 75620)
2013.01.30	Reverse data path from VIP5x60 causing display data issues (TFS – 77593)
2012.12.19	Resolved erroneous user prompt after loading configuration backup file (TFS –73262)
2012.12.19	Advanced status GPS sensor readings now match UX reported data (TFS – 72981)
2012.12.19	Door switch status now correctly reflected in UX (TFS – 72752)
2012.12.19	Resolved error where DST was not being acknowledge for April in Australia (TFS – 72161)
2012.12.19	Resolved issue with PLR fan relay not dis-engaging at below zero temps (TFS – 72006)
2012.12.19	Invalid characters in translation table name cause 5x60 crash (TFS – 72004)
2012.12.19	Diagnostic and display data issues affecting multiple face displays (TFS – 71992)
2012.12.19	NTP requests not being sent after boot up (TFS – 72000)
2012.12.19	Disconnect/reconnect with temp and MDLS attached to 5x60 does not recover to a connected state until power cycle (TFS – 73229)
2012.12.19	VIP5x60 full boot sequence no longer fully functional after bridging addition (TFS – 73403)
2012.12.19	Modifying the manual dimming and waiting on Tools tab for the update causes Configuration Changed popup to appear (TFS – 74162)
2012.12.19	Dimmgrd does not seem to be recovering after running for long periods of darkness (TFS – 74328)
2012.12.19	Attempting to change password creates error saying a file could not be found (TFS – 75040)
2012.12.19	Display not staying blank before boot sequence and flickering after with video (TFS – 75154)
2012.12.19	External sensor temps are not being handled correctly when they go below zero (TFS – 75200)
2012.12.19	Default content may not cycle through currently loaded default content (TFS – 75209)
2012.12.19	A configured and connected PLR sensor will toggle between “connected” and “disconnected” (TFS – 71755)
2012.12.19	UniquelD displayed in advanced diagnostics missing data (TFS – 71721)
2012.12.19	Ethernet Syncross counter not incrementing in direct connect scenario (TFS – 68989)
2012.12.19	LightLUX sensor will eventually revert to a reading of 0 even with light shone on it. (TFS – 68640)
2012.12.19	A newly added DCIO output will default to-enabled instead of disabled (TFS – 68383)
2012.12.19	When disabling ProLink6 output from VIP5x60, display would not blank (TFS – 63750)
2012.12.19	When boot loading, the user feedback has duplicate information for current boot load file to be installed (TFS – 66596)
2012.12.19	Content Limit 5 min average is only computed correctly at 60hz (TFS – 66621)
2012.12.19	Communication is lost until power cycled after setting a specific configuration (TFS – 67385)
2012.12.19	Havana does not handle incorrect Ttable format correctly (TFS – 67938)
2012.12.19	Display data diagnostic fixes (TFS – 74415)
2012.10.24	Fixes for boot loading with ranges (TFS –69705)
2012.10.24	Corrected error descriptions and the “ping” command in network tools (TFS – 70543,70547)
2012.10.24	Bug fixes for DakBus support (TFS – 70531,70971,70996,71002)
2012.08.31	Time zone now correctly sets when using “set date time” button (TFS – 66779)
2012.08.31	Calibration/panel adjustments are now working at this time. (TFS – 66750,66761)
2012.08.31	Firmware updates through IDM no longer create duplicate user feedback. (TFS – 66802)



2012.08.31	Display firmware with boot strap revs of E9B6 and 0A74 now handled properly. (TFS – 66923)
2012.08.31	Time zone for Europe-Moscow now corrected. (TFS – 66989)
2012.08.31	The status of the PLR sensor is now correct. (TFS – 67025)
2012.08.31	Asterisk no longer erroneously appearing in ux title. (TFS – 67029,67393)
2012.08.31	Uploading a TTable while set to an inactive video input no longer throws an error. (TFS 68275)
2012.08.31	4mm modules are no longer reported as 2.33mm. (TFS – 64808)



## **Section 7: New Features**

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This section lists features that were added in this release.





7.1

## **Section 8: Previously added Features**

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5xxx Rev	Feature
2021.05.19-b2389	Support for the RC5883 receiver card for Galaxy (#793179)
2021.05.19-b2389	Updated to latest busclient v21.4.2804.0 (#840546)
2021.01.25-b2380	VCS Registration Code Support (#727368)
2021.01.25-b2380	Millisecond resolution added to door sensor log (#781456)
2021.01.25-b2380	User Manual updated to Rev 16 (#754304)
2020.05.07-b2369	UX: Password Rules can be enabled through the UI. (#629817)
2020.05.07-b2369	UX: SSL can be enabled through the UI. (#629817)
2020.05.07-b2369	UX: Kassel Germany added to the location database. (#668557)
2020.04.06-b2341	Single-file bootloading support added for PL54 series modules (HWID: 0x29xx). (#643497)
2020.04.06-b2341	Protobuf module map support added for CAN modules. (#668558)
2019.10.16-b2330	Logging: Door Sensor – When the door sensor changes state the date/time and sensor state are now captured in
2019.10.16-b2330	Transportation VFC: FTP authentication for the Player connection has been removed in NAT configuration.
2019.10.16-b2330	Transportation: Added support for VCB controlled display power limits (UPS-Ready Product). (#566377)
2019.06.10-b2323	ESR-2078–The DMP can now receive VIP status information if the default password has been changed (#514512)
2019.06.10-b2323	Morpheus I/O board beacons are now supported (#514508)
2019.06.10-b2323	The busclient output is now logged (#522463)
2019-.02.21 b2313	Added the ability to customize the Light – CAN Lux sensor's value versus the corresponding brightness/dimming response (#490176)
2019-.02.21 b2313	Updated the manual to Rev 15 (#503350)
2019-.02.21 b2313	Manufacturing/Engineering – Added tile diagnostics support for current/duty gain, User, and Dynamic Arrays
2019-.02.21 b2313	Engineering – Added PLR62xx bootloading support
2019-.02.21 b2313	Engineering – Diagnostics 2.0 response has the OSF added to the response
2018.09.20-b2307	Added support for bootloading PL6/PLR connected sensors (TFS#416680)
2018.09.20-b2307	Factory Calibration: NPN Module serial flash storage, duty gain, and tile bootloading support added (TFS#443571,
2018.09.20-b2307	NPN diagnostics support added for Venus (VCS) (TFS#442175)
2018.09.20-b2307	More verbose logging of incorrect ProLink diagnostics packets received (TFS#452787)
2018.09.20-b2307	Thermal data and fan activation data is now logged (TFS#427623)
2018.09.20-b2307	Added an endpoint to verify the VIP can support the pixel count defined in the Table (TFS#452853)
2018.04.17-b2235	ATF: Fans will stay active when the input is set to blank (TFS#417567)
2018.04.17-b2235	Selftest: Status LEDs don't start until the end of the boot process (TFS#412941)
2018.04.17-b2235	NPN tile level adjustment support (TFS#404924)
2018.04.17-b2235	Various array size limit increased beyond 32 to support NPN products (TFS#404923)
2018.04.17-b2235	Test: PowerControl Serial Loopback test is now accessible without a device configured (TFS#404082)
2018.04.17-b2235	Added Nano text editor for command line use (TFS#407285)
2018.04.17-b2235	Fixed "XML Bash Injection" security vulnerability (TFS#162422)
2018.04.17-b2235	ECCB: Added ability to show temperature in Celsius (TFS#413864)
2018.04.17-b2235	ECCB: Added ability to show 24-hour time format (TFS#413864)
2018.04.17-b2235	The VIP can now tolerate bad flash blocks if they occur (TFS#400046)
2018.02.20-b2194	Support for direct connection of Morpheus sensors and peripherals (TFS#398295)
2018.02.20-b2194	VIP-5xxx Diagnostics 2.0 Service support for VCS display diagnostics (TFS#388521)
2018.01.16-b2182	MTU size for ethernet communication is now configurable through the new UX (TFS#338518)
2018.01.16-b2182	Initial Morpheus Display Systems support (TFS#369283, 381678)



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2018.01.16-b2182	Initial NPN-4100 (NPP) Display Systems support (TFS#372806, 389517, 372916)
2018.01.16-b2182	Logs can be saved to a backup USB drive (TFS#372806)
2018.01.16-b2182	DVI source loss is now logged to the messages file (TFS#339920)
2018.01.16-b2182	If package verification fails during a firmware update, set the appropriate error message in the log file
2018.01.16-b2182	MFG: Dedcrease the time needed to bootload a single-file (TFS#381951)
2018.01.16-b2182	NTP status and changes are now logged (TFS#365244)
2017.10.09-b2119	Factory Calibration: Supports PL52/53/55 and PL50/51 series modules (TFS# 333470)
2017.10.09-b2119	Log and message file size reduction (TFS#354519, TFS#339919)
2017.10.09-b2119	Sensor/dimming log updates (TFS#351551)
2017.10.09-b2119	Initial release of module Auto Blending (SNAP) (TFS#315087)
2017.10.09-b2119	Configuration change history is kept (TFS#365887)
2017.08.14 b2100	Sensor/dimming log updates (TFS#351551)
2017.07.21 b2095	Factory Calibration: Supports PL52/53/55 and PL50/51 series modules (TFS# 333470)
2017.07.21 b2095	Log and message file size reduction (TFS#354519, TFS#339919)
2017.04.24 b1961	New HTML5 UX Updates, including Panel Adjustment, Camera Calibration, backup/restore, advanced user status, and advanced user diagnostics
2017.04.24 b1961	Selftest: right angle USB test added to VIP-5x5x assemblies (TFS#284483)
2017.04.24 b1961	VFC: Added support for general purpose inputs (DCIO CAN Sensor and VCB) (TFS#251809)
2017.04.24 b1961	VFC: VIP supports collecting data from the differential airflow sensor (TFS#268597)
2017.04.24 b1961	Flashing: VIP no longer requires a double-reboot after flashing with the SD card (TFS:214948)
2017.04.24 b1961	TTable loading timeout has been increased to 10 minutes (TFS#318848)
2017.04.24 b1961	30fps content and test patterns is now supported (TFS#289248)
2016.09.30 b1688	Initial release of new User Experience (UX) (TFS#266904)
2016.09.30 b1688	VIP-5xxx replacement of Havana Toolchain (TFS#230411)
2016.09.30 b1688	Added single file bootloading support for PL55 series modules (TFS#261066)
2016.09.30 b1688	Factory/Shipping configuration stored on the VIP (TFS#266656)
2016.09.30 b1688	VFC: CAN module time until blank is now configurable by the user (TFS#278698)
2016.03.10 b1550	Added OAAA rev1 monitoring service support (TFS#186546)
2016.03.10 b1550	Added ability to connect to Fusion/IDM via a proxy server (TFS#131786)
2016.03.10 b1550	Added MLC517x support for DVX-2800 (10mm outdoor SMT display) (TFS#231955)
2016.03.10 b1550	Prettyprint – added operation state to output and error checking to array name parameter (TFS#218524)
2016.03.10 b1550	Added ability to request different Various Arrays through the command line (TFS#191902)
2016.03.10 b1550	Logging improvements for sensors and dimming to aid in troubleshooting (TFS#192940, TFS#194324)
2016.03.10 b1550	Independently wired ProLink5 face support (TFS#151522)
2016.03.10 b1550	Added Network Address Translation (NAT) support (TFS#190137)
2015.09.21 b1362	When in bridge mode Eth0 disconnects will be sent to USB0 (TFS#184572, 174941)
2015.09.21 b1362	Device counts added to Prettyprint help menu (TFS#188103)
2015.09.21 b1362	CPU utilization lowered by combining Fansd and Thermalmgrd (TFS#189377)
2015.08.21 b1340	Platform CAN light sensor 10 min average as well as other related data is now available (TFS#177007)
2015.08.21 b1340	When using discovery the device will accurately reflect what the device variant actually is (TFS#180436)
2015.08.21 b1340	It is possible to force bootloading of engineering revisions (TFS#182252)
2015.08.21 b1340	Bus Manager can now handle multiple input arguments (TFS#184126)
2015.06.29 b1288	Initial support for eCCB product
2015.06.29 b1288	Initial support for Galaxy GC6 product



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2015.06.29 b1288	Initial support for PL52 (Antaios G1) Series modules
2015.06.29 b1288	Diagnostic Interpreter added
2015.06.29 b1288	Initial Onaka Aux Control Panel (ACP) Support (TFS#130595)
2015.06.29 b1288	Vanguard/VFC Frame Sync support (TFS#149225)
2015.06.29 b1288	Added display node address to diagnostic test patterns (TFS#151790)
2015.06.29 b1288	Support for Password and Configuration Recovery (TFS#125144)
2015.06.29 b1288	Thermal dimming support for PLC51xxs and CANbus modules
2015.06.29 b1288	Dimming based fan control, fans can be turned ON based on dimming level (TFS#166532)
2015.06.29 b1288	DMP8065 MAC address can be held on VIP-5xxx reboot (TFS#150844)
2015.06.29 b1288	CPU usage lowered when sensors are connected (TFS#110527)
2015.05.12 b1211	Initial support for Galaxy GC6 product
2015.04.21 b1191	Initial support for eCCB product
2015.02.09 b1113	VIP "Family ID" was Or'ed into the hardware ID in the status file (TFS#132623)
2015.02.09 b1113	A kernel oops, will now cause a VIP reset, so the VIP will return to Aa fully operational state (TFS#129232)
2015.02.09 b1113	Default content download support (TFS#151110)
2014.09.26 b1008	Module Id test pattern updated to better support large displays (TFS – 121289)
2014.09.26 b1008	Several new test patterns were added (TFS – 111030)
2014.09.26 b1008	Thermal dimming algorithm updated to match industry standard "PID Thermal Dimming" (TFS – 11091)
2014.09.26 b1008	FPGA Diagnostics FIFO Overflow Prevention (TFS – 126646)
2014.09.26 b1008	PID Thermal Dimming Temporary override (TFS – 1220266)
2014.09.26 b1008	New module locator testpattern (TFS – 125762)
2014.09.26 b1008	New VPMP 3 <sup>rd</sup> Party Integration Support (TFS – 113862)
2014.09.26 b1008	New Time Based Brightness (dimming) Control Constraints (TFS – 114767)
2014.09.26 b1008	Update Curl to version 7.36 (TFS – 130856)
2014.09.26 b1008	Update SSL to version 1.0.1g (TFS – 130857)
2014.03.21	VIP5060 will now maintain a blank output state during display firmware package loading to display (TFS#105027)
2014.03.21	A tool tip was added to the GUID copy button (TFS#109244)
2014.03.21	VIP management port dialog moved to networking section of Silverlight UX. (TFS#104556)
2014.03.21	A more clear display firmware package message is presented on VIPs that have never had a display firmware
2014.03.21	PLR connected sensor revisions are now available in the UX. (TFS#105023)
2014.01.29	Ability for a VIP5x60 to be dimmed by a master VIP5x60. (TFS – 87933)
2014.01.29	Fusion client can differentiate between a VIP5050 or 5x60. (TFS – 92006)
2014.01.29	Support for lower dimming levels. (TFS – 91280)
2014.01.29	Ability to trigger DCIO events on edges. (TFS – 90502)
2014.01.29	VIP5050 diagnostics supported. (TFS – 89175)
2014.01.29	Ability to cancel a firmware upload to the VIP BEFORE the file upload has completed. (TFS – 79128)
2014.01.29	The words "Desired" and "actual" dimming levels added to dimming level numbers. (TFS – 76902)
2014.01.29	Support added for DVI frame size 1440x900. (TFS – 99200)
2013.06.27	VIP5x60s can now be configured so that they follow the dimming level of another VIP5x60.
2013.06.27	AppWeb was replaced with a more robust app, nginx.
2013.06.27	Passwords are now supported for longer than eight characters.
2013.06.27	***This release breaks backwards compatibility with previous releases*** (TFS# 111226)
2013.04.15	ErrorFlags implemented to give 5x60 operational state feedback. (TFS – 71985)
2013.04.15	Improved handling for frequent clicking of Panel Adjust start/stop. (TFS – 80522)



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2013.04.15	Replaced "Freelimage" player with "directFB" player. (TFS – 84332)
2013.03.19	Added "Blank" display mode. (TFS – 74750)
2013.03.19	Added Cabinet sensor. (TFS – 78435)
2013.03.19	Support for USB to Ethernet bridging. (TFS – 70157)
2013.03.19	Contrast scalar now defaults to 50. (TFS – 75443)
2013.03.19	Added test patterns for field calibration. (TFS – 69183)
2013.03.19	Added last five firmware installation records to downloaded log files. (TFS – 78240)
2013.03.19	Package installer now verifies against ".list" file after installation. (TFS – 78296)
2013.03.19	Updated online manual to reflect changes. (TFS – 77112)
2013.01.30	Timestamps added to watchdog logs. (TFS – 74507)
2013.01.30	System time now synced to RTC time daily to prevent drift. (TFS – 75015)
2013.01.30	New player mode "blank" now available in configuration utility. (TFS – 74750)
2013.01.30	Correction of saturation and hue controls in configuration utility. (TFS – 72003)
2013.01.30	Free memory reported in the configuration utility is more accurate. (TFS – 72392)
2012.12.19	Improvement to UX tools tab data alignment (TFS – 72237)
2012.12.19	Cron logs added to logrotate (TFS – 72075)
2012.12.19	UX – Implement method to configure bridged interfaces (TFS – 71940)
2012.12.19	Add timeout to dhcp lease attempts on bridge interface (TFS – 71951)
2012.12.19	Add bridge device to status schema and status collector (TFS – 71957)
2012.12.19	Player Boot sequence update to multiple interfaces/br0 (TFS – 71961)
2012.12.19	VIP5x60 fan relay functionality implantation (TFS – 71975)
2012.12.19	Tie I/O for fan relay to fansd application (TFS – 71976)
2012.12.19	Status – Add display firmware package information to tools tab (TFS – 72408)
2012.12.19	Status – Add total and free memory to tools tab (TFS – 72409)
2012.12.19	Implement MDF auto boot loading (TFS – 72418)
2012.12.19	ProPixel Diagnostics Support - (TFS – 72424)
2012.12.19	Config Utility Load Backup should load the TT first then the Config file (TFS – 72667)
2012.12.19	IDM monitoring timer (TFS – 72809)
2012.12.19	Package Builder Cannot Retrieve Versions of Coax PLR(PLR615x) (TFS – 72932)
2012.12.19	VPMP standards now followed to use "face" instead of "facemask" (TFS – 71106)
2012.10.24	Monitoring service now implemented (TFS – 69678)
2012.10.24	Initial support for PLR sensors (TFS – 69827)
2012.10.24	Implementation of customer diagnostics (TFS – 69905)
2012.10.24	Addition of cancel button to network tools (TFS – 71419)
2012.10.24	Addition of temp sensor values to "tools" tab (TFS – 71485)
2012.10.24	Silverlight UX timeout increased to 15 from 12 seconds for slower networks (TFS – 71420)
2012.10.24	Implemented a polling "back-off" feature to the IDM client in order to save bandwidth (TFS – 65184)
2012.08.31	Management port allowed to be set to values higher than 100. (TFS – 66904)
2012.08.31	Content limit implemented. (TFS – 67202)
2012.08.31	Unsupported file types no longer allowed to be selected for file calibration. (TFS – 68306)
2012.08.31	Added support for network troubleshooting tools. Includes ping, DNS lookup and tracert. (TFS – 65067,65068)
2012.08.31	Added support for displays with multiple faces
2012.08.31	Added support for remembering the last known state of Diagnostics (hardware) patterns. The user can now also save this last known state to a file. (TFS – 65233)

5xxx Rev	Feature
2012.08.31	Added support for displays with "OT" or "IL"modules

