Multicon
Release Notes

Revision: 6.1.1

2020-09-11

1 Overview

This document contains information about software releases for the Flashlink/VikinX Multicon element manager and system controller. The release note is cumulative, each chapter describing changes since the previous released version.

This document includes release notes for the following products based on hardware revision 5 (mk5) - Sublime X^2:

- SLX2-3GHD3232-CP-DIN (23626)

- SLX2-3GHD3232-CP-HDBNC (23627)

- SLX2-SW-CQ1 (23632)

- SLX2-SW-EMB1 (23633)

- SLX2-SW-VX-WCTRL (23636)

- SLX2-SW-3PP (23637)

- SLX2-SW-ADD4PROCS (23983)

This document includes release notes for the following products based on hardware revision 4 (mk4):

- MCON-HW-MK4 (23529)

- MCON-HW-MK4-SFP (23989)

- MCON-SW-FL-10 (23530)

- MCON-SW-FL-80 (23531)

- MCON-SW-VX-SL (23532)

- MCON-SW-WCTRL (23535)

- MCON-SW-3PP (23536)

- MCON-SW-SECURITY (24194)

The release notes are also applicable for products based on hardware revision 2 (mk2). Note that from release 6.1.0 and later, mk2 isn't supported anymore. The product are:

- Multicon GYDA (18460)

- Multicon N-BOX (18461)

- Multicon N-BOX+ (18462)

- Multicon VX-MOD (18463)

- Multicon GYDA-ONE (18464)

- Multicon FR-2RU (18512)

- Multicon VX-SLC (18514)

2 Release 6.1.1 (BG)

Release date : 2020-09-11
Software version : 6.1.1
Build number : 902

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.1.1.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.1.1.bin

2.1 Improvements:

- Improved support for the following Flashlink cards: 3G-IP-MUX, AV-3G-XMUX-SFP and ETH1000-SW-COM.

2.2 Corrections:

- Fixed an issue where GBE1 and GBE2 status and alarms was swapped on hardware revision 4.2.

- Fixed an issue where aliases and descriptions on level inputs and outputs are lost from SNMP after a reboot.

3 Release 6.1.0 (BF)

Release date : 2019-12-17
Software version : 6.1.0
Build number : 891

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.1.0.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.1.0.bin

3.1 Improvements:

- Improve the front panel on Sublime X^2 to make it possible to control the "normal" video level when 4k level is activated.

- SNMP MIB updated.

3.2 Corrections:

- Adjust time when a region enters/leaves daylight saving time (DST).

- Fixed an issue where a removed passive Flashlink card will come back after reboot.

4 Release 6.0.8 (BE)

Release date : 2019-03-22
Software version : 6.0.8
Build number : 864

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.8.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.8.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.8.bin

4.1 Corrections:

- Fixed issue in 6.0.7 where no cards are detected if MCON-SW-FL-10 product key is used.

5 Release 6.0.7 (BD)

Release date : 2019-03-20
Software version : 6.0.7
Build number : 861

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.7.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.7.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.7.bin

5.1 New features:

- Added support for 3GHD-ETH-D422 and 3GHD-ETH-D422-SFP.

5.2 Improvements:

- Fixed issue when some non-CWDM SFPs was reported as CWDM.

- Logging which bit that changed the state of a trigger.

- Enable parameter control of changeover in QUAD-CHO-2x1.

- Add alarm on changeover in HDSDI-CHO-2x1.

- Date/time configuration changed to set region instead of timezone. The old configura-
  tion will be used to search the region list and select the first region which is using this
  timezone.

- MIB-file updated.

5.3 Corrections:

- Fixed issue where it wasn't possible to change date/time on Sublime X^2.

- Fixed issue where the Flashlink bus is going down every 10 minutes.

- Fixed issue where alarm and SNMP trap settings on power supply in FR202 was lost when
  re-powering.

- Fixed issue where SNMP traps might includes negative module number.

6   Release 6.0.6 (BC)

Release date : 2018-05-29
Software version : 6.0.6
Build number : 833

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.6.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.6.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.6.bin

6.1   New features:

- Added Level Handler Host plugin for controlling dual outputs

6.2   Improvements:

- Increase number of log files on Sublime X^2

6.3   Corrections:

- Corrected issues with GrassValley Native protocol

- Fixed issue in web matrix control scrolling

- Fixed issue with Ethernet link loss on Sublime X^2

- Fixed issue where alarm- and SNMP trap-configuration wasn't saved for triggers

7 Release 6.0.5 (BB)

Release date : 2018-01-17
Software version : 6.0.5
Build number : 819

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.5.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.5.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.5.bin

7.1 Improvements:

- Improved handling of break on QUAD-CHO-2x4

- User management updated with visible Leitch user in Nevion Configurator

- Improved reporting of optical input level on loss of signal on Multicon-SFP

- Improved virtual router status when levels support disconnect

- Added support for new Multicon hardware 4.2

7.2 Corrections:

- Fixed issue where SNMP stopped responding

- Fixed issue with SNMP alarm handling on Modular routers

- Fixed issue with alarm handling on FRS-HD-CHO-ASI

8 Release 6.0.4 (BA)

Release date : 2017-08-15
Software version : 6.0.4
Build number : 803

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.4.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.4.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.4.bin

8.1 Corrections:

- Fixed issue with Multicon loosing status on signal presence from Sublimes during startup

- Fixed error in MIB-file for MonitorTrap

- Fixed issue in Leitch protocol, not able to detect Harris Platinum routers

- Fixed issue in SW-P-02 protocol, disconnect was not reported correctly

- Fixed issue when controlling port direction on AES32 module on Sublime X^2 32x32 and 64x64

9 Release 6.0.3 (AZ)

Release date : 2017-02-15
Software version : 6.0.3
Build number : 772

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.3.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.3.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.3.bin

9.1 New features:

- Added support for QUAD-DA-1x2-PB

- Added support for QUAD-CHO-2x1-PB

- Added support for QUAD-CHO-2x1-PB-4K

9.2 Corrections:

- Fixed issue with SSH connections using subsystems

10   Release 6.0.2

Release date : 2017-01-26
Software version : 6.0.2
Build number : 764

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.2.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.2.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.2.bin

10.1   New features:

- Added support for 4K license feature on Sublime X^2

- Added support for disconnect on data routers from virtual routers

- Added support for FL-PSU-AC-160W-MKII

10.2   Improvements:

- Support SSH subsystems for secure control and configuration

- Improved alarms limits handling on Modular routers - prevents false alarms to be triggered

- Improved control of 3G-IP-MUX on MRP and SNMP

10.3   Corrections:

- Fixed issue with saving of alarm config and label on legacy alarm modules in Flashlink

- Fixed issue with ethernet interface reporting on Multicon Mk4

11   Release 6.0.1

Release date : 2016-10-25
Software version : 6.0.1
Build number : 751

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.1.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.1.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.1.bin

11.1   Improvements:

- Improved robustness of the Grass Valley Native client protocol

- Better handling of TCP connections in the Leitch client protocol

11.2   Corrections:

- Fixed a possible TCP client protocol reconnect issue

12   Release 6.0.0 (AY)

Release date : 2016-10.10
Software version : 6.0.0
Build number : 741

Hardware revision 2 (mk2):

- Multicon firmware: multicon_mk2_6.0.0.bin

Hardware revision 4 (mk4):

- Multicon firmware: multicon_mk4_6.0.0.bin

Hardware revision 5 (mk5) - Sublime X^2:

- Multicon firmware: multicon_mk5_6.0.0.bin

12.1 New features for Sublime X^2 (Mk5) and Multicon Mk4:

- Support for HTTPS and certificates

- Support for secure and authenticated websockets

- Security configuration web page

- Support for SFTP

- Support for SNMP v3 privacy using AES

- Added internal firewall for port security

12.2 Improvements

- Separated strict password setting for HTTP and SNMP

- Removed access to some internal protocols from websockets

- More help texts and new style on web page for SNMP configuration

- Support for MRP control of audio direction on Flashlink cards

- Generate and download support package on the Multicon web page

- More support for SLX2-3GHD6464-CP

12.3 Corrections

- Fixed inresponsive Sublime X^2 control panel when initialised without the Nevion Configurator

- Updated SNMP ID for ASI-CHO-2x2

- Fixed Sublime X^2 menu for version of redundant Multicon if it's not present

13 Release 5.2.1 (AW)

Release date : 2016-08-17
Software version : 5.2.1
Build number : 721

Hardware revision 2

- Multicon firmware: multicon_mk2_5.2.1.bin

Hardware revision 4

- Multicon firmware: multicon_mk4_5.2.1.bin

Hardware revision 5 (Sublime X^2)

- Multicon firmware: multicon_mk5_5.2.1.bin

13.1 New features

- Support for menu on the Sublime X^2 control panel

- Support for SLX2-3GHD6464-CP

- Support for AES-IPMUX and 3G-IPMUX

- Support for SPG-PTP

- Support for alarm on high power usage from Flashlink PSU's

13.2 Improvements

- Use and update labels in alarm texts from Flashlink cards

- Improved handling of configuration and status for reclockers in Flashlink cards

- Updated SNMP MIB for several traps and send more details from VikinX Modular traps

- Log detection of VikinX Modular cards

- Improved support for ETH1000-SW-10G and 10G-TR-2

- More support for nanoseconds in delay blocks for Flashlink cards

- Periodical refresh on the TSL protocol to handle if an UMD restarts

13.3 Corrections

- Fixed an issue related to detection of Flashlink frame type

- Fixed issues related to SNMP and the internal watchdog

- Fixed issue related to reading video format from UDC-3G-XMUX4 on MRP

- Fixed errors and duplicates in the SNMP MIB

- Fixed update of time without reboot on NTP server changes

- Fixed unacknowledge of alarms on MRP clients

- Inverted VikinX Modular router SNMP traps for active and inactive alarms

- Fixed listing of TSL protocol in web UI key manager

- Log status unknown when a Multicon is removed from the system

- Fixed an SL-3GHD128 power alarm label to match label on back of router

14   Release 5.1.1 (AV)

Release date : 2016-08-11
Software version : 5.1.1
Build number : 691

Hardware revision 2

- Multicon firmware: multicon_mk2_5.1.1.bin

Hardware revision 4

- Multicon firmware: multicon_mk4_5.1.1.bin

Hardware revision 5 (Sublime X^2)

- Multicon firmware: multicon_mk5_5.1.1.bin

14.1   Corrections

- Fixed issue with external router control on serial ports from Sublime X^2

15 Release 5.1.0 (AU)

Release date : 2016-03-17
Software version : 5.1.0
Build number : 664

Hardware revision 2:

- Multicon firmware: multicon_mk2_5.1.0.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_5.1.0.bin

Hardware revision 5 (Sublime X^2):

- Multicon firmware: multicon_mk5_5.1.0.bin

15.1 New features

- Support for HD-IP-MUX, AES-IP-MUX, 3GHD-EOOE-SFP-4, CONV-SFP-4 and 10G-TR-2

- Support for T-SFP+ on ETH1000-SW-10G, HD-TD-10GMX-8 and HD-TD-10GX-6-SFP

- Support for string parameters on MRP

- Support for router control of Sublime X^2 64x64

- Support for TSL protocol on IP and serial port

- Support for SFP version of Multicon

- Support for Multicon ethernet settings on the Flashlink web UI

15.2 Improvements

- Updated user manuals for several Flashlink cards

- Minor text improvements on some analog audio Flashlink cards

- Updated SNMP ids for several Flashlink cards

- Improved web display style for AES-VMUX

- Enabled more alarms for the DWC-HD-DMUX

- Improved save and restore of label and alarm settings for Flashklink cards

- Enabled individual 100Mbps throttle for 1G ports on the ETH1000-SW-10G

15.3 Corrections

- Fixed an issue related to changing hold time on some Flashlink cards

- Fixed an issue related to changing ethernet speed on some Flashlink cards

- Fixed level format for the HD-TD-10G to make it work on control panels

- Removed an alarm for the FC-3G-EO-OE-36

- Fixed alarm count SNMP OID

- Avoid removing powerup detected card types on factory reset

- Fixed an issue related to changing serial port mode on some Flashlink cards

- Fixed an issue where netsplit and merge could result in no master for a client system

- Removed a confusing part of some alarm descriptions in the Sublime 128

- Fixed matrix web control view preview text for input and output

- Fixed issue related to detection of some HD-OE cards

16 Release 5.0.5 (AT)

Release date : 2016-02-12
Software version : 5.0.5
Build number : 642

Hardware revision 2:

- Multicon firmware: multicon_mk2_5.0.5.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_5.0.5.bin

Hardware revision 5 (Sublime X^2):

- Multicon firmware: multicon_mk5_5.0.5.bin

16.1 Improvements

- Add alarm count on SNMP and updated MIB

16.2 Corrections

- Fixed an issue where some host protocols could fail to start properly

17   Release 5.0.4 (AS)

Release date : 2015-10-29
Software version : 5.0.4
Build number : 614

Hardware revision 2:

- Multicon firmware: multicon_mk2_5.0.4.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_5.0.4.bin

Hardware revision 5 (Sublime X^2):

- Multicon firmware: multicon_mk5_5.0.4.bin

17.1   Improvements

- Optimized matrix control web interface

- More frequent reconnect to closed TCP sockets

- Use the Flashlink frame label in alarms and log

- Improved synchronization of status on new and lost Multicon(s)

17.2   Corrections

- Fixed a control issue when removing Multicons from the system configuration

- Fixed acknowledge of device, communication and multicon lost alarms from SNMP

- Fixed issue related to loss of HD-OE Flashlink cards and the internal watchdog

- Fixed an endian issue related to SNMP traps on the Multicon Mk4

- Fixed reset revival of removed passive Flashlink cards

18 Release 5.0.3 (AR)

Release date : 2015-09-17
Software version : 5.0.3
Build number : 595

Hardware revision 2:

- Multicon firmware: multicon_mk2_5.0.3.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_5.0.3.bin

Hardware revision 5 (Sublime X^2):

- Multicon firmware: multicon_mk5_5.0.3.bin

18.1 Improvements

- Added new optional Flashlink frame detection method

- Add date and time settings on Multicons without battery backup for RTC

- Better handling of large SNMP walk in some systems

- Improved handling of priority used for switching between master and slave

- More signal presence functionality for the Sublime X^2

18.2 Corrections

- Fixed issue with controlling routers and getting alarms via SNMP

- Fixed issue with ETH1000-SW-COM hotswap handling

- Fixed issue with initial SNMP state causing an internal test failure

- Fixed issue with some restored alarms after power up

- Fixed issue with Sublime X^2 control panel related to virtual routers

- Fixed issue with control panels handling some floating point parameters

- Fixed issue with save GPI labels on Multicon from web pages and SNMP

19 Release 5.0.2 (AP)

Release date : 2015-06-17
Software version : 5.0.2
Build number : 578

Hardware revision 2:

- Multicon firmware: multicon_mk2_5.0.2.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_5.0.2.bin

Hardware revision 5 (Sublime X^2):

- Multicon firmware: multicon_mk5_5.0.2.bin

19.1 Improvements

- Improved switching between master and slave for VikinX Sublime routers

- Improved communication with VikinX 3GHD256 and 3GHD32 modular cards

- Improved handling of communication timeout for VikinX modular routers

20 Release 5.0.1 (AN)

Release date : 2015-06-04
Software version : 5.0.1
Build number : 567

Hardware revision 2:

- Multicon firmware: multicon_mk2_5.0.1.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_5.0.1.bin

Hardware revision 5 (Sublime X^2):

- Multicon firmware: multicon_mk5_5.0.1.bin

New features

- Support for Sublime X^2 3GHD-32x32

    - Configuration of Sublime X^2 processing cores

    - Support for audio matrix

    - New hardware platform inside Sublime X^2

    - Support for redundant Multicon inside Sublime X^2

    - Routing via logical crosspoints (processing cores)

    - 4K routing support

- Support for ETH1000-SW-COM

- Support for DA-3GHD-8-MkII

- Support for HD-TD-10G-MXDX-SFP, HD-TD-3GDX-2-SFP and SDI-TD-3GDX-5-SFP

- Added product key manager in Multicon web pages

    - Licensing of Sublime X^2 processing cores

20.1 Improvements

- Improved health monitoring status

- Improved support of ETH1000-SW-COM with port modes

- Improved alarm handling when changing system configuration

- Improved log entries from interal watchdog

- Improved crosspoint execution time on Modular routers when using single commands on MRP

- Enabled optimized communication between internal Multicon applications

- Improved handling of factory reset

20.2 Corrections

- Fixed issue where Multicon sometimes stops working after long period of time

- Fixed issue where control panels sometimes looses connection to Multicon

- Fixed issue with Flashlink alarms and GPI output status

- Fixed reporting of cable driver status for Flashlink cards on web

- Fixed issue where multiple Multicons (Flashlink/VikinX) are used in the same frame

- Fixed issue with 160W powers loosing alarm and SNMP settings after reboot

- Fixed issue with 160W powers giving false power alarms

21   Release 4.6.3 (AM)

Release date : 2015-03-19
Software version : 4.6.3
Build number : 513

Hardware revision 2:

- Multicon firmware: multicon_mk2_4.6.3.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_4.6.3.bin

21.1   Improvements

- Older Flashlink cards are now showing fw/hw/sw versions on SNMP

- Updated MRP/NCB/GVRS protocols to echo all commands back to client

- Multicon version information is logged during startup

- Adjusted calculation for the almost out of memory alarm

- Better handling of TCP connection errors

21.2   Corrections

- Fixed issue with buffer used on Sublime 128 internal serial port

- Fixed issue with locate card functionality on Flashlink cards

- Avoid possible sticky alarms after multiple loss of communication

- Fixed issue with reconfiguration of systems with multiple Multicons

22   Release 4.6.2 (AL)

Release date : 2015-01-13
Software version : 4.6.2
Build number : 440

Hardware revision 2:

- Multicon firmware: multicon_mk2_4.6.2.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_4.6.2.bin

22.1   Improvements

- Set alarms and status to unknown on loss of Multicon in a system

- More consistent log and alarm on loss of Flashlink cards

22.2   Corrections

- Fixed issue with loss of alarm/snmp settings after Multicon reboot

- Fixed issue where Multicon web interface stopped working

- Fixed minor Flashlink hot-swap issue

23 Release 4.6.1 (AK)

Release date : 2014-11-27
Software version : 4.6.1
Build number : 406

Hardware revision 2:

- Multicon firmware: multicon_mk2_4.6.1.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_4.6.1.bin

23.1 Improvements

- Added support for Flashlink Compact Advanced features (fw 1.3.0)

23.2 Corrections

- Fixed issue with Flashlink configuration not always set from web

- Fixed issue with controlling Flashlink matrices on SNMP

- Fixed manual link for SFP-based Flashlink cards

- Fixed issue with Flashlink card labels not saved persistent

24 Release 4.6.0 (AJ)

Release date : 2014-11-06
Software version : 4.6.0
Build number : 387

Hardware revision 2:

- Multicon firmware: multicon_mk2_4.6.0.bin

Hardware revision 4:

- Multicon firmware: multicon_mk4_4.6.0.bin

24.1 Improvements

- Improved alarm handling for power supplies in Flashlink frame v2

- Improved frame label handling for Flashlink frames, to only show frame label

- Improved handling of connect/disconnect on MRP

24.2 Corrections

- Fixed issue with unknown level status when Flashlink cards are lost

- Fixed issue with controlling mono shufflers on MRP and SNMP

- Fixed issue where serial numbers were missing in webinterface for Flashlink cards

- Fixed configuration issue on 3GHD-OE-18, electrical outputs 11-14 were unaccessible

25 Release 4.5.2 (AH)

Release date : 2014-08-25
Software version : 4.5.2
Build number : 299

Hardware revision 2:

- Multicon firmware : multicon_mk2_4.5.2.bin

Hardware revision 4:

- Multicon firmware : multicon_mk4_4.5.2.bin

> **Note:** Multicon 4.5.2 supports both hardware revision 2 and 4. It is critical to apply the right software file. The screenshot below shows how to determine the hardware revision (2.X implies revision 2).
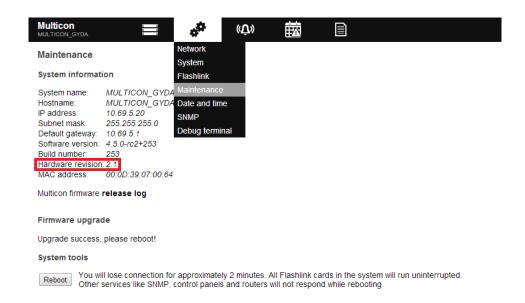

Figure 25.1 Multicon hardware revision

> **Note:** Multicon 4.5.0 has been recalled due to critical support issues. Please upgrade to version 4.5.2 if you have this version installed.

25.1 New features

- New Flashlink UI

  - List-based card navigation

  - Filter cards by label or cardtype

  - Enhanced power supply info

- Support for new Flashlink frame FR202

  - Identifies frame type; FR-2RU-10-2, FR202 and FlashCase

  - Power supply monitoring of temperature and voltages, with alarms and SNMP support

- Added web-based management of firmware files for Flashlink cards

- Added internal health alarms for monitoring Multicon performance

- Added support for getting version info and serial numbers for Flashlink cards on SNMP

- Support hardware revision 4 (Mk4) of Multicon

25.2 Improvements

- More relevant, less redundant and improved descriptions in the log

- Supports change of hostname from Nevion Configurator when configured in a system

- Automatic detection of Multicon in Flashlink frame or N-Box for Flashink control

- Updated error counters to be reset with SNMP set

- Improved UI for HD-TD-10G-MX/DX-6

- MRP supports filter command for alarms

- Optimized reconnect on timeout for Sublime data routers and MRP clients

25.3 Corrections

- Fixed issue with Leitch Host protocol on IP, not able to control inputs

- Fixed control of Mono Shuffler output 2-4 on SNMP

- Fixed issue where Multicon controls other Multicon systems

- Fixed minor issues on AES-VMUX

- Fixed issue with wrong icon on passive Flashlink cards

- Fixed issue where GPI naming was lost during reboot on Multicon GYDA

- Fixed issue on power measurement for DA-3GHD-1x8-PL

- Set crosspoint status to unknown on lost Probel routers

- Update status on changes to ignore on Flashlink alarms

26 Release 4.1.1 (AF)

Release date : 2014-04-02
Software version : 4.1.1
Multicon firmware: multicon_mk2_4.1.1.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_4.1.1_20140402.zip

> **Note:** Multicon 4.1.1 requires **Internet Explorer 10** or higher. The latest version of Chrome and Firefox browsers is also recommended.

26.1 Improvements

- Optimised performance on Flashlink web pages

26.2 Corrections

- Updated power usage and schematics for DA-3GHD-1x8 variants

- SMPTE 2020 enable/disable fixed for UDC-HD-XMUX4

- Proper removal of Multicon alarms on netsplit

27   Release 4.1.0 (AE)

Release date : 2014-02-07
Software version : 4.1.0
Multicon firmware: multicon_mk2_4.1.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_4.1.0_20140207.zip

27.1   New features

- New web-based alarm user interface with filtering capability.

- Alarms for VikinX Sublime devices on IP and Modular routers are added.

- Northbound forwarding of SNMP traps using new generic MIB structure.

- Support for alarm synchronization via SNMP GET.

- Added alarms for monitoring of Multicons in a system.

- Distribution of alarms within a Multicon system.

> **Note:** The legacy SNMP traps for Flashlink are still enabled by default. It is required to actively change to the new MIB structure.

27.2   Improvements

- Support for specifying delay in seconds.

- Added filter for illegal characters when entering Flashlink card and rack labels.

- Improved handling of network split and merge, including re-synchronization of cross-point and alarm status.

27.3   Corrections

- Upgrade of SL128 is fixed.

- Corrected labels on fibre breakage status.

- Fixed reporting of neighbor MAC address in Modular routers.

- Fixed issue with ETH1000MC-SFP and ETH1000MC.

- Fixed issue with Leitch PassThru host protocol and disconnect command.

28   Release 4.0.0 (AD)

Release date : 2013-10-25
Software version : 4.0.0
Multicon firmware: multicon_mk2_4.0.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_4.0.0_20131025.zip

28.1   New features

- Web-based interface for routing control (requires new license Multicon OPT-WC) including the following features:

    – List view for levels and virtual tables

    – Matrix view for levels

    – Salvo execution

    – Lock and protect functions

    – Edit of names and descriptions

- Web-based configuration of typical Sublime routing systems

- Web-based IP configuration

28.2   Improvements

- Tabs in browser shows Multicon hostname.

- AES-VMUX is supported on MRP interface.

- Possible to copy text from web pages.

- Updated power consumption values for downconverter products

28.3   Corrections

- Fixed issues with connection lost on Flashlink web pages.

- Fixed Sublime 128 to support additive input/output keys.

- Fixed handling of strict password on web pages.

29 Release AC

Release date : 2013-09-04
Software version : 3.8.0
Multicon firmware: multicon_mk2_3.8.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_3.8.0_20130904.zip

29.1 New features

- Added support for Leitch PassThru protocol over IP

- Added support for Thomson/Grass Valley native protocol over serial and IP

- Added support for SNMP GET/SET on level, input and output naming

- Added support for AES-VMUX

29.2 Improvements

- Web pages are showing Flashlink cards during detection

- Updated UDC-3G card config with sharpening filters, OP-47 and label generator with moving text

29.3 Corrections

- Fixed module name error on SNMP set

- Fixed wrong manual links on web page

- Fixed minor UI issues

- Fixed scanning process when using Pro-bel SW-P-02 extended commands

30   Release AB

Release date : 2013-08-19
Software version : 3.7.1
Multicon firmware: multicon_mk2_3.7.1.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_3.7.1_20130816.zip

30.1   Corrections

- Fixed issue with Chrome 28 and caching of Flashlink webpages

- Fixed issue with IE8 and IE9, webpages was not shown

31   Release AA

Release date : 2013-05-15
Software version : 3.7.0
Multicon firmware: multicon_mk2_3.7.0.bin
Upgrade firmware : upgrade_syscon_multicon_mk2.bin
Compact flash : multicon_3.7.0_20130515.zip

31.1   New features

- Added support for 3GHD-EO-18 and 3GHD-OE-18

- Added support for HD-TD-10GMX-6 and HD-TD-10GDX-6

- Added support for DA-VAEQ-6

- Added support for setting item description on MRP

- Added support for AV-3G-XMUX audio mixer options on MRP

31.2   Improvements

- New look and feel in the web interface

- Added power configuration (60W/75W) for Flashlink frames

- Updated filter command on MRP

- Labels on Flashlink matrices are shown in Nevion Configurator

31.3   Corrections

- Fixed FRS-HD-DMUX label generator edit issue

- Not all error bits was shown for FRS-HD-CHO and FRS-3G-CHO cards

- Fixed issue with inputs using sync4 on Modular Routers

- Flashlink PSU load value was accumulated on hotswap or reload of backup config

- UDC-3G variants not showing correct feature set

- Minor bugfixes on Flashlink cards using delay blocks

32 Release Y

Release date : 2013-01-04
Software version : 3.6.4
Multicon firmware: multicon_mk2_3.6.4.bin
Upgrade firmware : syscon_multicon_mk2_3.6.4.bin
Compact flash : multicon_3.6.4_20130104.zip

32.1 Corrections

- Fixed issue related to gain settings on LB-EO and LB-OE cards

33 Release W

Release date : 2012-12-14
Software version : 3.6.3
Multicon firmware: multicon_mk2_3.6.3.bin
Upgrade firmware : syscon_multicon_mk2_3.6.3.bin
Compact flash : multicon_3.6.3_20121214.zip

33.1 New features

- Added button for acknowledge all alarms

- Added indication of temperature on SNMP

- Added support for ETH10G-SW, SPG-AVA-DMUX

33.2 Improvements

- Improved performance in modular protocol related to lock

- Removed power down from web page

- Updated MRP default limits on several blocks

- Added manual options in CHO-block on MRP

- Improved performance on GYDA webpages

33.3 Corrections

- Fixed error in xp-status when switching locked outputs on Pro-Bel SW-P-02

- SNMP traps doesn't contain correct value on the "moduleType" variable

- ETH1000 (all variants) - not able to activate send SNMP trap on ethernet alarm

- Modular Routers: Fixed redundancy handling, master and slave are not always in sync

- Modular Routers: Fixed hotswap of xp-cards which makes Multicon sometimes hang or loose card communication

- DWC-HD-DMUX - Fixed offset error when controlled via MRP

- UDC-HD-XMUX-4 - Fixed parameter control on MRP

- HDSDI-CHO-2X1-PB - Fixed parameter control on MRP

- FRS-HD-CHO - Fixed parameter control on MRP

- UDC-HD-XMUX4 - Fixed parameter control on MRP

- Multicon is loosing control of parameter groups when upgrading from 3.6.0 and older versions

- LB-EO/OE - Fixed issue when setting gain to zero

- LB-EO/OE - Fixed laser alarm error

- Fixed masking of video format list from scaler block in MRP

34 Release 19

Release date : 2012-09-24
Software version : 3.6.2

34.1 New features

- Added support for multiple SNMP trap destinations

- Added support for 10G-TR, DVI-SDI-2, SDI-DVI-2

34.2 Improvements

- Added electrical input alarms on 3GHD-EO-D and MR-TR-3G

- Added GPI support on ADP-3G

- Increased rack label and card label size, supports now 63 characters

- List of firmwares when upgrading Flashlink cards are now alphabetically sorted

- Added Moscow (UTC+4) in timezones list

34.3 Corrections

- Fixed problem in Pro-Bel protocol, interface was not starting up correctly

- Fixed reset of error counter on DAC-SDI

- Fixed temperature units card info pages

35 Release 18

Release date : 2012-09-03
Software version : 3.6.1

35.1 New features

- Added support for UDC-3G-XMUX4

- Added salvo trigger plugin

- Added support for FRS-ASI

35.2 Improvements

- Added support for extension commands in Pro-Bel SW-P-02

35.3 Corrections

- Fixed bug when GYDA webpage is not responding

- Fixed bug when hotswapping 3GHD-OE-2

- Fixed minor bugs for FRS-HD-CHO and UDC-variants

- Fixed web image on PGM-HD cards

36 Release 17

Release date : 2011-11-18
Software version : 3.6.0

36.1 New features

- Added navigation buttons on card config pages

- Power supply monitoring is shown in web gui

- Added support for VideoIPath Inventory

- Added support for SPG-AVA-DMUX, FRS-HD-CHO-ASI, ETH-1000MC-MkII, DA-3GHD-1x8, DA-3GHD-1x8-PL and 3G-TDM Dense variants

- Added MRP command si, possible to retreive single destination or subset of destination statuses

- Added support for controlling Flashlink from Multicon GYDA in N-BOX

36.2 Improvements

- New save functionality for card settings

- Alarm limits are now read-only, values are set from the factory

- Added URL upgrade in firmware upgrade website

- Flashlink websites improved with better card detection and status updates

- Supports bi-directional UART on FRS-HD-XMUX(-R)(-L) variants

- AV-HD-XMUX now shows FPGA programming progress on website

- Signal integrity information is updated to show error count on first line

- Avoid leaking memory on reconfiguration of clients with serial port

- Corrections for mnemonics and support for icons and multiple connections in client demo plugin

- New generic configuration functionality for the client demo plugin

36.3 Corrections

- Fixed minor gui errors on AV-HD-XMUX

- RS485 Data alarms are now configurable on XMUX-variants

- Improved handling of FPGA upgrade of AV-HD-XMUX cards

- Fixed sample rate converter settings in audio blocks

- Fixed command echo on NCB host protocol

- Fixed bypass settings in reclocker blocks on several old Flashlink cards

- Fixed execution of salvos containing virtual crosspoints

37 Release 16

Release date : 2011-05-16
Software version : 3.5.3

- Support for new ADP-3G, FRS-HD-PGM, AV-3G-X(L)MUX and CWDM1-18 cards

- Added more signal integrity information and configuration for flashlink on web pages

- Fix bug in upgrade of a MCU in SL128. Don't use "force" when upgrading from version 3.5.2

- Report status as unknown when NCB routers are removed

- Correction for partial lock on virtual routers on MRP protocol

- Bugfix for NCB client protocol redundancy issue when master had no routers

- Correction for flashlink audio block set to automatic on web page

- Support for more 3G-HD-SDI format properties for flashlink cards

- Optimised for reduced time on upload binary file from configurator

- All flashlink parameters was not set when changing many of them on web pages

- Fixed reclocker settings for old EO2 OE2 and MRTR cards

- LB-EO was not able to upgrade as normal through Multicon

- Fixed picture on info-page for DWC-HD-DMUX

- Bugfix for changing user on a lock

- Fixed hot swap bug in data link on AV-HD-XMUX

- Sublime client IP: If not using local lock, unlock all outputs after connection

- Multicon did not always take flashlink commands in web page when pressing OK

- Re-learn flashlink card settings when changing audio direction

- Draw cross on web page on both inputs and outputs for flashlink audio blocks

38 Release 15

Release date : 2011-02-28
Software version : 3.5.2

- Add logging of MRP host IP connections

- Fixed lock from MRP on vitual tables

- Internal Sublime128 firmware upgraded to 2.5.1

- Minor fixes for AAV-SD-MUX and SDI-TD-DMUX-4 web pages

- Improved robustness for configuration of very large systems

- Fixed version and revision text for VikinX modular cards

39 Release 14

Release date : 2011-02-03
Software version : 3.5.1

- Support for new firmware in SDI-TD-MUX/DMUX Flashlink cards

- Improved handling of HD-SDI center crosspoint cards in VikinX 256

- Fixed update of signal presence on input out of partition size

- Added function for loss of signal in Flashlink signal analyzers

- Improved NCB host protocol robustness

40   Release 13

Release date : 2011-01-18
Software version : 3.5.0

- Support for multistatus on virtual destinations

- Support for salvo restore and revert

- Fixed label function on web for AV-XMUX

- Additional configuration for all CRC, UDC and UPC cards

- Fixed for invalid physical in/out values in partition file

- Improved performance for large systems

- MRP support for more parameters in Flashlink changeovers

- Handle saved configuration for Flashlink cards during upgrade from Gyda-SC to Multi-con

- More parameters for control of Flashlink scaler block from MRP

- Improve some buffer overrun checks related to Flashlink cards

- Distribute mnemonics from configuration to the complete system

- Modular routers: more support for SNMP

- Corrected errors in a few manual references

- Added fixes in GYDA webpages for Internet Explorer 8

- Fixed setting of auto/manual mode for Flashlink changeovers on SNMP

- Improved redundancy behaviour for large systems

- Improved Flashlink protocol parsing robustness

- Fixed reading of ipconfig file after GYDA-SC upgrade when file contains both CR and LF

- Support card specific HTML page for Flashlink cards

- Support MRP commands alias and name

- Flashlink, signal integrity, max error rate default value changed to 10

- Multicon web log could cause adm restart: fixed possible buffer overrun

- Removed empty slot from some log messages

- Minor improvements of webpage and error messages in log

- Possibility to upgrade SDI-TD-MUX/DMUX cards from Multicon

- Added Do not edit file in ipconfig file

- Firmware for SDI-OE-x-MkII changed: AutoByPass support removed

- Include hostname in main title on web pages for easier control with several Multicons

- SDI-TD-DMUX-4 alarms and input block

- Improved user access handling on web

- XML support for FRS-HD-XMUX4-T

- Added Multicon firmware upgrade possibility on web pages

- Binary multicast protocol between Multicons to improve performance

- Possibility to set label on a Flashlink rack

- Illegal crosspoints table functionality

41 Release 12B

Software version : 3.4.4 Release date : 2010-11-09

- Fix MRP signal status present filter for virtual sources

- High priority MRP ping command to avoid timeout in huge systems

- Improve performance for large systems with many panels

- Bugfix for 5RU analog audio modular router in stereo mode

- Improve performance on configuration updates, especially for big systems

- Improve Multicon webpage startup

- Fix an uninitialised variable for signal status present on virtual sources

- Minor improvements for host plugin wrapper

- FLP4 XMUX audio source switch off could not be set if present status was auto

- Correct error in image on DWC-HD-DMUX

- Alarm indication in frame was missing when card had alarms

- Client plugin: Avoid starting unconfigured TCP client interface

- Modular 128 router: Avoid logging disconnect status warning

- Manual/auto mode for HDSDI-CHO

- Updated log messages related to Flashlink communication and GYDA

- SDI-CHO 2x1 did not send SNMP trap on active input change

- Add log events for start and stop of hotswap actions

- AV-SD-XMUX - Fix errors in configuring serial link input speed and format

- AAV-XMUX updated with the correct block order

- AV-SD-XMUX firmware drop down lists the HD files

42 Release 12A

Release date : 2010-09-13
Software version : 3.4.3

- Optimalisation for customer host plugin for dynamic mnemonics

- Bugfix for monitor outputs on 3GHD modular router

- Update NCB host protocol to support compact panels without routers

- Bugfixes for virtual router in MRP protocols and host plugin wrapper

43   Release 11

Release date : 2010-07-09
Software version : 3.4.2

- Improved handling of database query errors, which could result in inconsistently initialised virtual router

- Handle read of non-existing file from configuration protocol better.

- Support change of serial port configuration without reboot

- Bugfix for customer host plugin for dynamic mnemonics

- Avoid possible loop when removing a card in modular router and crosspoint queue contain changes

- Made configuration possibility to disable NCB host protocol ACK when XP is not changed

44 Release 10

Release date : 2010-06-30
Software version : 3.4.1

- Bugfix for host and client plugins

- Improved performance in MRP host protocol

- Parsing of modular card version and revision updated

45 Release 9

Release date : 2010-06-14
Software version : 3.4.0

- Add support for usage of utilities in plugins

- Support for 3G modular 256 router

- Improved performance when controlling many subsystems

- NCB host protocol now sends ACK also when XP is not changed

- Added customer host plugin for dynamic mnemonics update in virtual router

- AV-HD-XMUX now also reports laser wavelength and power on web page

- Fix for AAV-HD-XMUX schematic on web page

- Add log entry on SNMP configuration change

- Removed dupliacte time zones and added AWDT time zone

- Show modular VD64 router more correcly in configurator

- Made possibility to configure existing partitions without physical routers

- Handle undefined user ID in log better

- Improved scripts for startup of multicon applications

- Support for diagonal MRP command

- Update salvo user ID on MRP lock command

- FRS-HD-XMUX4: Gyda support

- UDC-HD-XMUX: Add support for extended scaler block

46   Release 8

Release date : 2010-04-26
Software version : 3.3.2

- Correct title on web pages to Multicon

- Minor fix for configuration of wide screen signaling in video DAC's in Flashlink cards

- Fixed UART configuration of parity, datalength and stopbits on XMUX cards

- Speed improvements in kernel and socket handling

- Split log on web pages into smaller pieces and add navigation URL's

- Accept only legal values on MRP lock command

- Show local time in log, depending on web configured timezone

- Add laser on/off configuration on AAV-MUX-T card

- Fixed signal status on HD EO/OE 2 cards

- Improvements for general Flashlink card communication

- Removed upgrade function for Multicon on web

- Fixed audio alarm when FRS-HD-XMUX is used on SD signal

- Fix for temperature alarm in Flashlink cards

- Avoid alarm generation on loss of lock when reclocker is in bypass

- Correct label on information web page on Flashlink changeover when processed video

- Fix for signal integrity alarm on DAC-SDI cards

- Implemented remaining functionality for cascaded mnemonics. Subsystem configuration of local or Multicon mnemonics. Async update of mnemonics from MRP client protocol to MRP host protocol. Start system application earlier in powerup to make initial status more predictable.

- Possibility to set card type for passive Flashlink cards

- Improved support for ARC cards

- Fixed alarm on dynamic voltage usage depending on optical attenuation

- Fixed info status on ETH1000MC cards

- Handle redundant lock/protect/user info on master/slave handover

- Fix for file system check files in powerup

- Improve error handling for bootloader used in upgrade of Flashlink cards

- Speed improvements for web pages

- Add range checks on partitioned inputs and outputs

- Proper initialisation of SNMP protocol for Modular routers

- Support for system overview on web

- Added firmware upgrade functionality and fixed hot-swap for AV-HD-XMUX

47   Release 7

Release date : 2010-02-18
Software version : 3.3.1

- Log improvements

- Various VikinX Modular fixes

- Fixed crosspoint locking on Pro-Bel client protocol

48   Release 6

Release date : 2010-01-25
Software version : 3.3.0

- Support for SL-3GHD128128

- Bugfix for reporting og free CF disk space

- Improvements in syncronisation of system configuration

- Missing Flashlink card removed alarm fixed

- Flashlink: Fixed hot-swap bug for reclockers

- Increased stored log file size

- Various stability and performance improvements for modular routers

- Assigned user logged for 3rd party host protocols

- Fixed read-only CF card problem

- Fixed password protection of web pages

- Fixed NCB Sublime host protocol

- Flashlink card position or label correctly reported in alarm list

- Fixed error messages when setting time zone

- Flashlink: Fixed changeover element handling

- Leitch PT protocol works properly

- Fixed incorrect user ID in salvo status

49 Release 5

Release date : 2009-12-04
Software version : 3.2.0

- Support for client plugins

- CRC support on MRP host and MRP client

- Support for MRP client on serial port

- Flashlink related improvements for: changeover, video processing, delay in XMUX, stability, label generator, 3GHD-OE-L, 3GHD-EO-2, XMUX4, FPGA upgrade, audio, laser, video generator, web page, SNMP traps, card hot-swap

- Added new Flashlink cards: ARC-SD-DMUX, FRS-HD-CHO 2x1

- Improved modular protocol stability and functionality

- Bugfix to make MRP client protocol thread safe

- Redundancy improvements for master-slave handover

- Fix for panel configuration on factory reset

- Corrected system update typo related to host plugins

- Improved, added and removed some log messages

- Fixed reporting of much free CF space

- Bugfix for host plugins to avoid bad performance

50   Release 3

Release date : 2009-10-13
Software version : 3.1.1

- Support for Analog Audio modular routers in stereo mode.

- Modular routers send sequential crosspoint discontinously fix.

- Bugfix for manuals on web page.

- Multicon Gyda bugfixes for TDM-MUX-4 ceq bypass and cho block pri.

51   Release 2

Release date : 2009-10-01
Software version : 3.1.0

- New distributed http log feature on all Multicons.

- Support for new Flashlink cards: DA-3GHD, 3G-HD/OE.

- Stability fixes and improvements for Flashlink and modular.

- Improved support for Probel client protocol.

- SNMP support for router control.

52   Release 1

Release date : 2009-08-19
Software version : 3.0.1

- Speed and stability improvements

53   Release 0

Release date : 2009-07-03
Software version : 3.0.0

- First released version