

# **Release Notes**

То:	Customer Distribution
From:	RGB Networks
Subject:	Modular Media Converter (MMC) Release Notes, v1.6_34185
Part Number:	235-0135-01 Rev B
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# 1. Objective

This memo provides information regarding the latest software release for RGB Networks' Modular Media Converter (MMC) and compiles and updates various release notes for this product from previous releases. It is intended to document the current supported features, capabilities, and known bugs of the specific release mentioned above.

# 2. Overview

RGB's Modular Media Converter (MMC) delivers the industry's highest density solution for ASI  $\rightarrow$  Gigabit Ethernet conversion. MMC supports routing and conversion of any ASI input transport stream to any Gigabit Ethernet output port.

MMC accepts any standard definition (SD) or high definition (HD) MPEG-2 transport streams MPEG-2, MPEG-4/H.264 or VC-1 compressed programs. A single MMC chassis supports up to 24 ASI ports using four ASI modules and up to eight Gigabit Ethernet ports. The MMC supports Single Program Transport Streams (SPTS) and Multi Program Transport Streams (MPTS).

The MMC hardware consists of the following modules and components. Some of these modules are programmed during boot-up from a compact flash card and their functionalities are configured through the BNP's graphical user interface.

- GBP Module Gigabit Processor, front chassis access, one GBP board per chassis
- ASI Module Rear chassis access, up to 4 modules per MMC
- MID Mid-Plane, passive assembly, non-removable, one board per chassis
- AC P/S AC Power Supply, rear chassis access, one power supply module per chassis
- DC P/S DC Power Supply, rear chassis access, one power supply module per chassis

# 3. RGB Customer Support Contact Information

Contact RGB Customer Support by any of the following:

Customer Portal: <u>http://support.rgbnetworks.com</u> Phone: 877.RGB.NETW (877.742.6389) –or– +1.408.701.2800 Email: <u>support@rgbnetworks.com</u>

# 3. Release Notes

The following section details the current supported features and any known bugs.

#### MMC Supported Features & Issues Resolved in each software release:

#### ✓ <u>Release 1.0 Features</u>

#### **General Capabilities**

- Routing and conversion of any ASI input transport stream to any Gigabit Ethernet output port.
- MMC accepts any standard definition (SD) or high definition (HD) MPEG-2 transport streams carrying MPEG-2, MPEG-4/H.264 or VC-1 compressed programs.

#### Interfaces

- 4 configurable slots on the rear of the chassis
- Supports up to 4 ASI modules each with 6 ASI ports for a total of 24 configurable ASI input/output interfaces (213 Mbps)
- Simultaneous support of 8 GigE SFP interfaces (copper or optical supported) in addition to one 10/100BaseT port for control processing and network monitoring

### Redundancy

The MMC supports output port redundancy (port mirroring) where any single ASI input transport stream can be mirrored across several Gigabit Ethernet output ports.

#### GUI

- The MMC GUI supports drag and drop grooming of ASI and GigE transport streams.
- The GUI supports transport stream input ASI bit rate monitoring.
- Alarms and Events including alarms for fan failure and detection of missing GigE and ASI inputs.

# MMC New Features by software release:

#### ✓ <u>Release 1.1 New Features</u>

#### Interfaces

• Replicating an ASI input TSs to mirrored GigE ports now supports unique source IP address assignments.

#### GUI

- Alarms are now generated when ASI and GigE port failure events occur.
- The MMC GUI adds supports for Java 6.0. Java 5.0 is also supported.

#### Management

- SNMP traps are now generated when ASI and GigE port failure events occur.
- Service and system event data can be logged using standard remote Syslog support.

#### ✓ <u>Release 1.2 New Features</u>

#### GUI

• The ability to configure GigE auto negotiation as an optional port parameter has been added.

#### Interfaces

• Supports IGMP v3 (IETF RFC-3376) for source IP address specification.

# ✓ <u>Release 1.3 New Features</u>

• No new features were introduced in this release.

# ✓ <u>Release 1.3.1 New Features</u>

- No new features were introduced in this release.
- ✓ <u>Release 1.4 New Features</u>

#### Interfaces

• ASI-2 module support was introduced in this release.

# ✓ <u>Release 1.5 New Features</u>

• No new features were introduced in this release.

# ✓ Release 1.6 New Features

• No new features were introduced in this release.

# MMC Issues Resolved by software release:

# ✓ <u>Release 1.1 Issues Resolved</u>

- Slow display of port descriptions on Chassis screen when clicking the ASI port buttons has been fixed.
- The Fault LED now resets from red to green when no alarms are present.
- SNMP MIB compiler issues with MG Soft products have been fixed.

# ✓ <u>Release 1.2 Issues Resolved</u>

- Creating a TS from GUI now checks that an IP address has been configured first.
- IGMPv3 reports are now sent with correct source address. The report is no longer sent after the mapping is deleted. IGMP leave messages are now sent when mappings are deleted.
- MMC now uses NTP time for logging when this option is configured.
- ASI port alarms now clear properly.

# ✓ <u>Release 1.3 Issues Resolved</u>

 The MMC Element Manager (GUI) interface to the MMC system was updated in this release to address slow refresh over bandwidth restricted connections. MMC now natively uses HTTP for this interface and the GUI refresh is greatly enhanced.

# ✓ <u>Release 1.3.1 Issues Resolved</u>

• TS name editing and name refresh issues have been addressed in this release.

# ✓ <u>Release 1.4 Issues Resolved</u>

• A customer reported issue causing erroneous LED status or ASI link status (constantly blinking LED) has been addressed in this release.

# ✓ <u>Release 1.5 Issues Resolved</u>

• When a source IP address is configured for input multicast TS, MMC now sends a IGMP response when receiving a group-specific query.

- Consecutive MMC reboots no longer causes login failure from the GUI.
- An issue causing program names to be lost after upgrading from release v1.2 and earlier has been addressed. If configured mapped services lose their names after the upgrade, add one of the names back and the rest will appear.
- An issue resulting in video tiling and erroneous CC error output when an SNMP trap modification is made has been addressed.
- SNMP MIB compiler issues with MG Soft products have been addressed.

# ✓ <u>Release 1.6 Issues Resolved</u>

ID	Issue Description
7466	Unnecessary diagnostic messages removed from MMC message log.
9785	MMC intermittently encapsulated less than 7 MPEG packets per Ethernet Frame.
10370	Corruption of IP address information shown in GUI for inputs using IGMPv3/SSM configuration

# **General Notes**

- The GUI will allow the user to configure GigE → ASI conversion, this is not a supported configuration, because it could lead to excessive jitter. The MMC does not provide de-jittering. This is currently beyond the scope of the MMC functionality.
- Upgrading to MMC software version 1.6 requires power-cycle following software upgrade

# **Known Issues**

- Currently only an input missing alarm is generated when no input is detected on either ASI or GigE ports.
- The MMC hardware is limited in terms of detecting lost GigE port link due to the SFP connector being disconnected. The GUI will report a GigE port status as "Active" when only the Ethernet cable is disconnected.
- Several GUI related issues have been noted:
  - After changing the IP address of a GigE port, the original IP address is still displayed when trying to configure unicast TSs. While the actual IP address change is immediate, it may take up to 30 minutes to display this change for unicast TS configuration. It is recommended to reboot the MMC before configuring the unicast TS.
  - Some error messages associated with Drag & Drop grooming have been noted as inaccurate. For example, when grooming between like ports (ASI-to-ASI and GigE-to-GigE) the error messages do not accurately present the correct alternative actions (ASI-to-GigE and GigE-to-ASI).
  - From the Chassis View screen, using the Refresh screen selection can cause can an active GigE port icon, indicated as "green", to gray out. Clicking on the icon should return it back to a "green" display status.
  - The GUI LED emulation may not be fully in sync with hardware LEDs when program input fluctuates.