

Release Notes Firmware 1.40

Watch for new updates at <http://www.medianumerics.com>.

This firmware is not interoperable with previous firmware versions, so you have to update your whole System to use the new firmware revision 1.40.

HOW TO UPDATE

Remove your remote head amp cable before update on RN.341.MY or RN.141.MY cards and do not touch the console buttons of other RockNet Devices, otherwise the update progress may fail.

1. Be sure your remote head amp cable is removed from RN.341.MY or RN.141.MY cards.
2. Start your RockFlash 1.40 Software on your PC or MAC.
3. Connect you RockNet Device with your PC or MAC via USB.
4. The RockFlash software will tell you the actual firmware version of your RockNet Device.
5. Press the Button "Update Firmware"
6. Firmware is getting updated, the display shows "UPDATE". **Do not unplug power or USB cable now and also do not touch buttons of your device.**
7. When firmware update is finished the device boots up, showing the new firmware revision in display. An Error named [E0 00 08] may occur and should be ignored.
8. Always do a power cycle after flashing a device to make sure that everything works properly.

If the firmware update failed, please leave your PC or MAC connected and do a power cycle with your RockNet device. The device would not light up, but the RockFlash software will show "Boot Mode" and an update will be possible again.

Changes since release 1.21:

- Identification of MY-Cards changed
- Configuration of independent gain changed
- Independent gain possible on all RN.300 series devices
- Single channel routing possible on all RockNet devices
- Display in Quads or Channels possible
- Local phantom control possible on RN.301.MI devices
- Connection state display
- Configuration via Ethernet possible
- Bug Fixes

Identification of MY-Cards

The identification of the MY-Cards has changed so that we don't need a preamp count any more. Within this firmware release, you only have to tell the card, where it is used. For this reason we introduced a DeskID and a SlotID as a unique identification of MY-Cards.

The DeskID is a unique id of the console that the card is plugged into, and the SlotID is the number of the YGDAI-Slot in this console.

If a combination of DeskID / SlotID is used twice in the Network an error occurs and the display starts blinking.

Configuration of Independent Gain

The independent gain function has made a major change in this firmware release. Devices are no longer assigned to Gain Groups as done in previous firmware releases. The Independent Gain function is now configured with the Gain Type directive.

There are three possible values that can be configured in RockWorks software or via options menu []:

NONE [6n t- --]

This device does not participate on independent gain and the gain of the real preamp is played out. In this case the RockWorks software shows the real preamp gain.

SLAVE [6n t- SL]

This device compensates the value of the real microphone preamp to its own gain, which is configured via console display or RockWorks software. There can be up to 9 devices that allocate the same network channel as gain slaves.

MASTER [6n t- 6n]

This device has control over the real preamp. The gain of the preamp can be controlled via console display or RockWorks software. Within MY-Cards the gain and phantom values can also be controlled from the mixing console. If more Channels of this device have the same network channel assigned, only the first one has the control, the other ones act as gain slaves. Only one device can allocate a network channel as gain master.

Independent Gain on all RN.300 series devices

The independent gain feature can be used with all RN.300 series output devices and can be controlled by RockWorks software but also via console display.

If you want a device to participate on independent gain, adjust the GainType in the options menu [●● ○○ ●●] to [Gn t- 5L] or [Gn t- 6i] as mentioned above.

RN.302.LO

If you press and hold a channel button, the display in the middle shows the Gain of the channel and you can adjust it to your needs with the two buttons below this display.

RN.331.DD and RN.332.DO

If you press and hold a channel button, the display in the middle shows the gain of channel A and the display on the right shows the gain of channel B and you can adjust it to your needs with the two buttons below each display.

Single Channel Routing on all RockNet devices

Single Channel routing can be configured on all RockNet Devices via RockWorks Software.

On RN.300 series devices (except MY-cards) it can also be configured on console display as follows:

1. Press the two buttons below the quad display until the display starts blinking to enter quad-edit mode.
2. Now press and hold the channel button of the channel you want to assign.
3. Dependent on the channel display mode the display shows [Ch -0 0 1] or [Ch 1- 0 1].
4. Now you can adjust the channel using the buttons below the middle and right display. The buttons below the middle display adjust the channel in blocks of four and the buttons below the right display allow single stepping.
5. Your adjustment is applied if you release the channel button. If you don't have assigned the channels in quad-groups now, the display shows "Single Channel" [5C] for this Quad.

Within digital AES/EBU devices (RN.330 series) always two channels are adjusted with this method.

Channel Display Mode

For displaying single channels in the RockNet network, there are two different methods, which can be switched over in the options menu [●● ○○ ●●] of the clock master or in the RockWorks software:

Quad based [CH nd -4]

Single channels are displayed in groups of four from 1.1 to 40.4

Channel based [CH nd - 1]

Channels are displayed as numbers from 1 to 160

Local Phantom Control

For default the phantom power of RN.301.MI device is controlled by the GainMaster (e.g. a mixing console). For some reasons it can be helpful to control the phantom power from the device itself. Therefore you can change over the phantom control with RockWorks software or in the options menu [●● ○○ ●●] of the device from remote [PH An rE] to local [PH An L0]. Now the phantom power can only be controlled by the device itself.

Connection State Display

You can get detailed information about the connection state of the device, by pressing any key below the display. To navigate through the various messages, press this key multiple times. When no message is shown, everything is ok. Possible messages are mentioned in the Reference Cards at the end of this document.

Configuration via Ethernet

The RockWorks configuration software can now be connected via USB or Ethernet port. The default IP of each RockNet Device is 192.168.1.222 and can be changed via RockWork software (maybe connected via USB) or via Special Menu [●● ●● ●●].

Please make sure that your PC or MAC is configured in the same subnet (IP should be in the range 192.168.1.xxx).

To connect to RockNet via Ethernet enter the IP-Address of the connected RockNet device (default 192.168.1.222) and press the "Connect" button.

Known Issues

System does not play with two active clock masters

If you configure a primary and a secondary clock master and plug the network together, only the primary master is getting active. If you now isolate the two masters by disconnecting two sides of the ring and each master has other devices attached, both masters get active in their part of the network.

If you now connect the two network parts, there are two active clock masters in the network and the system will never come up until you switch off one of the masters.

Reference Cards

Options Menu (hold [●● ○○ ●●] 2 sec)

[M A 5t 0F] [P M] [5 M]	master OFF primary master ON secondary master ON
[6n t- --] [5L] [6M] <small>(LO,DD,DO only)</small>	gain type: none (independent gain OFF) gain type: gainslave gain type: gainmaster
[Ph An rE] [Lo] <small>(MI only)</small>	48V phantom power: remote controlled 48V phantom power: local controlled
[ES 4n 0F] [0n] [1] ... [8] <small>(Master only)</small>	external synchronisation: OFF external synchronisation: WCLK-IN (BNC rear connector) external synchronisation: AES-IN 1...8 (DI only) AES-IN 1...4 (DD only)
[80 Ch 0F] [0n] <small>(Master only)</small>	80 channel mode: OFF 80 channel mode: ON
[Ch nd 4] [1] <small>(Master only)</small>	channel display mode 4: show quad numbers channel display mode 1: show channel numbers
[LO Cd 0F] [0n]	lock display: OFF lock display: ON
[di SP 0n] [0F]	display/LEDs ON display/LEDs OFF
[tE M P --]	temperature in °C

Special Menu (hold [●● ●● ●●] 2 sec)

[IP 1.1 92]	IP-address block 1
[IP 2.1 68]	IP-address block 2
[IP 3.0 01]	IP-address block 3
[IP 4.1 22]	IP-address block 4
[nM 1.2 55]	subnet mask block 1
[nM 2.2 55]	subnet mask block 2
[nM 3.2 55]	subnet mask block 3
[nM 4.0 00]	subnet mask block 4
[LE 00 00]	link error counter: link input port link output port
[CP U 00]	CPU usage %
[ME M 00]	memory usage %

Error Codes

display	error	solution
[E0 00 01]	display controller error	hardware problem, please contact service
[E0 00 02]	the device type could not be obtained	hardware problem, please contact service
[E0 00 04]	the I/O card could not be initialized	hardware problem, please contact service
[E0 00 08]	invalid data in non volatile memory	ignore after a firmware update , contact service otherwise
[E0 00 10]	rx buffer overrun	restart device, report error to service
[E0 00 20]	unexpected rx error	restart device, report error to service
[E0 00 40]	error in remote head amp communication	restart device, report error to service
[E0 00 80]	configuration reset to default cause of invalid configuration version	ignore after a firmware update , contact service otherwise

Connection State

display	error	solution
[n0 n 5t]	no clock master in system	determine a primary master (PM)
[L1 P nC]	link input port not connected	check cable connection on the link input port
[L0 P nC]	link output port not connected	check cable connection on the link output port
[L1 P Er]	connection error on link input port	replace bad/damaged cable on link input port
[L0 P Er]	connection error on link output port	replace bad/damaged cable on like output port
[r 0P En]	(hint) ring open (no redundancy mode)	to get into redundancy mode, connect/check all cable connections

Configuration Errors

display	error	solution
[##] / [Er] alternates	At least one channel of this quad is added of another device, channel is muted. OR system is running in 80Ch mode and at least one channel of this quad is assigned above 80 (quad 20)	resolve collision by assigning a new quad or channel
[Pr] / [Er] alternates	there are two primary masters in network	switch off one primary master or configure to secondary master
[Sr] / [Er] alternates	there are two secondary masters in network	switch off one secondary master or configure to primary master
[Gr] / [Er] alternates	two gainmasters allocate the same channel (system is still functional, one of the gainmasters is treated as gainslave)	configure one of the gainmasters as a slave or change channel assignment
[Gt] / [Er] alternates	the limitation of 10 devices that allocate the same channel as gainslaves is passed over	configure one or more of the devices as gaintype=none or change channel assignment
MY-cards: display blinks	one of the collisions mentioned above occurred	connect MY-card to RockWorks software to show the error message