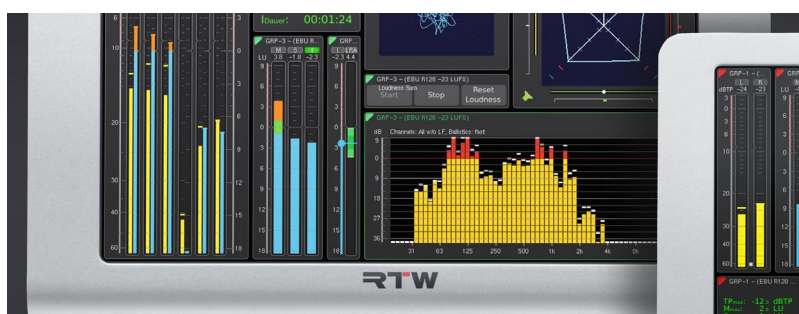
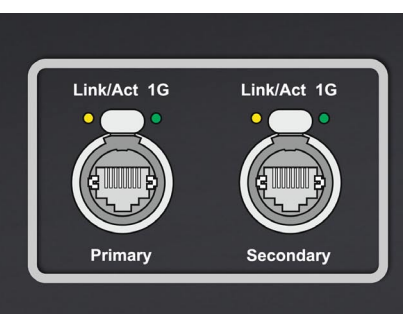


# Addendum to TouchMonitor Manual

## TM7-RAV | TM9-RAV



# Addendum to TouchMonitor Manual

## TM7-RAV | TM9-RAV



Please carefully **read** the following manual, **understand** all instructions and **act** step by step as requested to prevent any damage to the device, to prevent any hazards, or not to violate any laws.



**NOTE** - This manual is an addendum to the common operating manual for the TouchMonitor units. The knowledge of the content, especially the safety information, is required and constitutes the basis for the following additional descriptions.



**WARNING** - In order to observe the EMC values, a **CAT-7 S/FTP** cable with an **etherCON** connector **NE8MX-6-T** or **NE8MX6** shall mandatory be used. According to the assembly instructions of the connector, the **cable shield** shall be wired in the way that it has **connection to the connector housing!**

### Precondition

As any other device in a network, also a TouchMonitor unit with Ravenna interface (TM-RAV) has to be set up for a Ravenna AoIP network. Only then the TM-RAV is able to receive and display signals from a network.



**NOTE** - Please ask the network administrator in case of doubt.

Please proceed as follows:

1. **Mandatory** take a shielded **CAT-7 S/FTP** network cable with its shield wired to the tube of an **etherCON** cable connector **NE8MX-6-T** or **NE8MX6**. Connect it to the **Primary** resp. **Secondary** connector of the TouchMonitor. Connect the other end to the Ravenna network.
2. Access TouchMonitor's **Menu**, touch **System** and then **Audio**.
3. Touch the key of the **AoIP Network Settings** option labelled with the name of your device and open the corresponding menu.

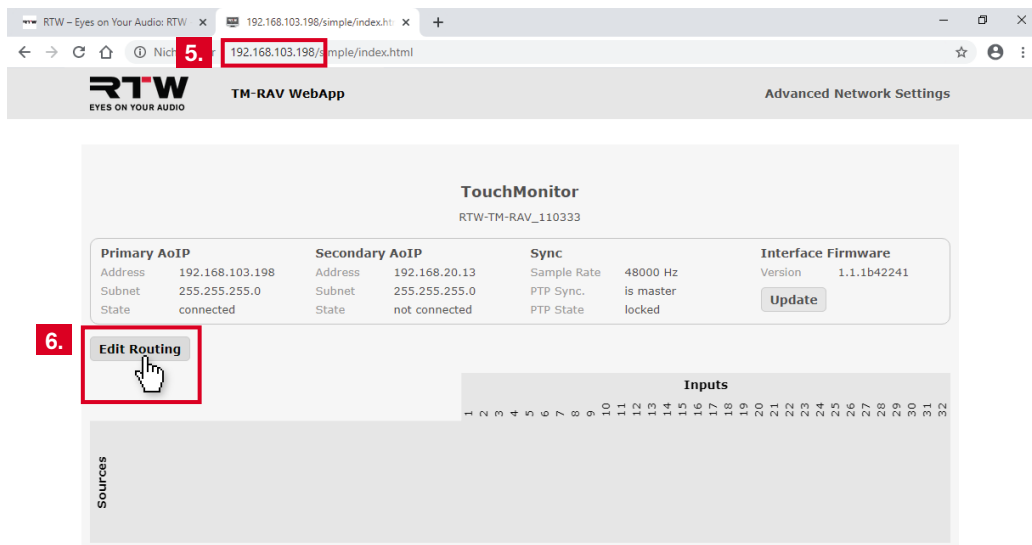
The screenshot shows the 'System' menu with the 'AoIP Network settings' section. The settings are as follows:

AoIP Network settings	
Primary	
Connection	Active
Type	Zeroconf
IP Address	169.254.57.211
Netmask	255.255.0.0
Gateway	0.0.0.0
VLAN	10

At the bottom, there are two tabs: 'Primary' and 'Secondary'. The 'Secondary' tab is highlighted with a red box and labeled '4.'. To the right of the tabs are buttons for 'Save', 'Back', 'Cancel', and 'Help'.



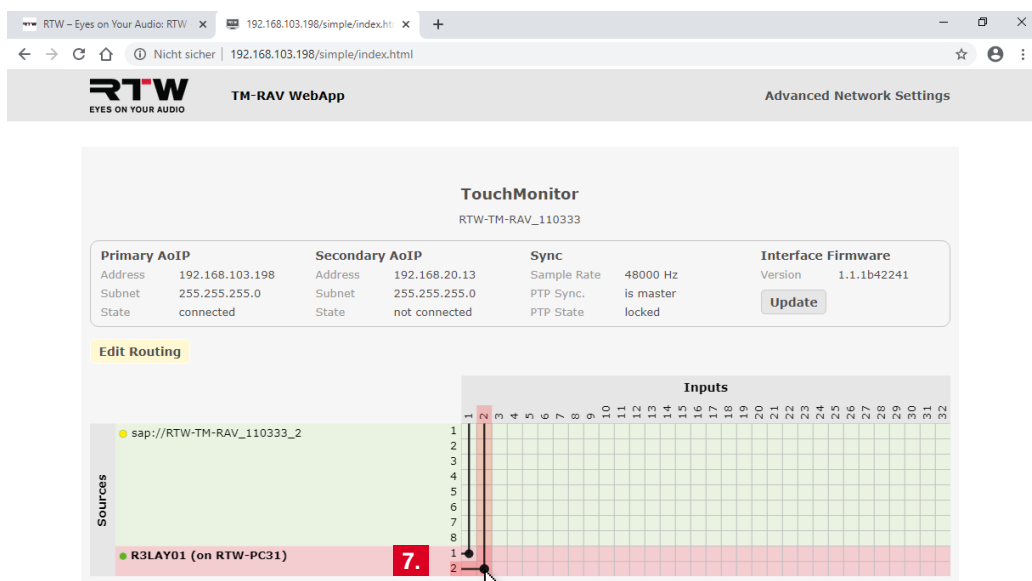
4. Remember the **IP Address**! If required from the network administrator, make the appropriate changes.
5. Open your web browser and enter the IP address. The **TM-RAV WebApp** will open displaying the status information of the network and the at this point blank routing matrix.
6. Click **Edit Routing**.



7. Assign the required **Sources** to the desired **Inputs** of the TouchMonitor by mouse click in the respective crossing fields.



**NOTE** - Ask the network administrator about the signals on the sources.



8. Click **Edit Routing** again. The matrix will be closed, only the source assignments are visible.

The first screenshot shows the 'TouchMonitor' interface with the 'Edit Routing' button highlighted by a red box and a hand cursor. The second screenshot shows the same interface after clicking 'Edit Routing', where the routing matrix is visible. The matrix has 32 inputs and 2 sources. The source 'R3LAY01 (on RTW-PC31)' is assigned to input 1.

**TouchMonitor**  
RTW-TM-RAV\_110333

Primary AoIP		Secondary AoIP		Sync		Interface Firmware	
Address	192.168.103.198	Address	192.168.20.13	Sample Rate	48000 Hz	Version	1.1.1b42241
Subnet	255.255.255.0	Subnet	255.255.255.0	PTP Sync.	is master		
State	connected	State	not connected	PTP State	locked		

**Edit Routing**

Sources	Inputs
● sap://RTW-TM-RAV_110333_2	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
● R3LAY01 (on RTW-PC31)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32

**i** The Ravenna network board used in the devices is compatible with the ANEMAN - Audio Network Manager software from Merging Technologies S.A. which can be used for the configuration, too. Further information can be found on <http://www.aneman.net>, a manual on <https://confluence.merging.com/pages/viewpage.action?pagelId=33260125>.



**NOTE** - The update function of the TM-RAV WebApp only relates to the firmware of the integrated Ravenna network board. This firmware is provided by RTW similar to the TouchMonitor firmware. When updating, assure not to interrupt the power supply.

9. Go on with the next section.

## Operation

If these preconditions are given and the TM-RAV is connected to the Ravenna network, you can start creating presets, define audio groups and assign input signals.



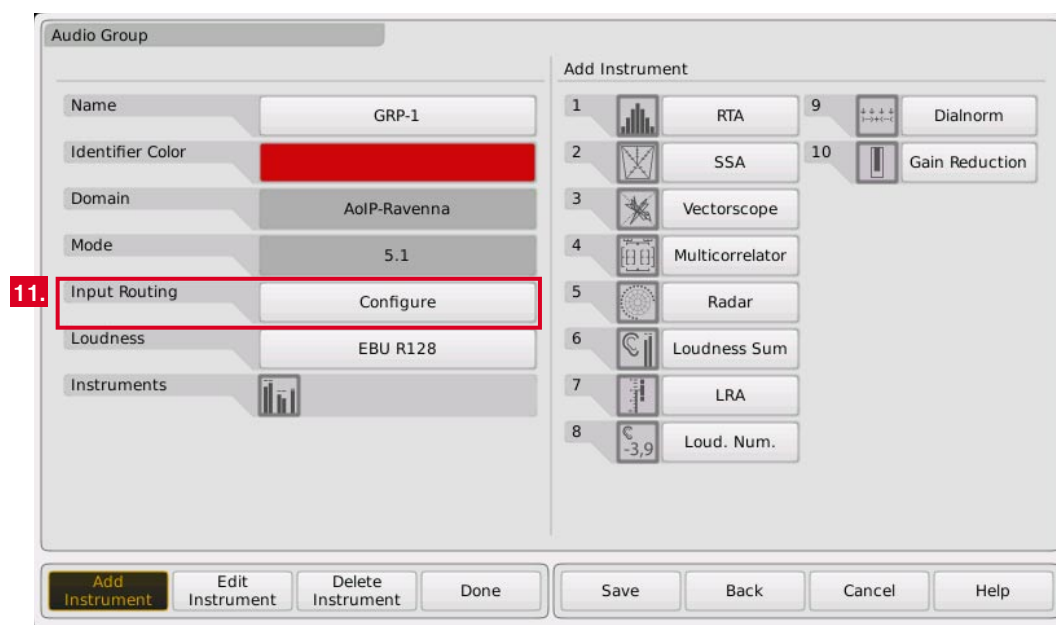
**NOTE** - In each new created audio group of a preset, always the first Ravenna input signals in the order will be assigned to the channels for display. Therefore, please always verify the input routing and adjust the assignment if necessary.

### Proceed as follows:

10. As described in the operating manual, open the menu system on your TouchMonitor and create a new preset.

 Further information on how to create and manage presets can be found in the operating manual of your device.

11. Create a new **Audio Group** and define the operation mode (e. g. 5.1). **AoIP-Ravenna** is set as **Domain**, this cannot be changed. Touch **Configure** in the **Input Routing** section to perform the input routing.



## Operation (continued)

12. One by one touch the buttons in the **Input** column and select the corresponding Ravenna signals, which should be displayed on these input channels.



**NOTE** - The channel designations **01, 02, ..., 32** shown in this documentation correspond to the initial designations in the Ravenna network.

Channel	Input	Name
L	01	L
R	02	R
C	03	C
LFE	04	LFE
LS	05	LS
RS	06	RS

Buttons: Save, Back, Cancel, Help

In the following first example we assumed that the first six Ravenna channels can be assigned to a 5.1 Surround display.

Channel	Input	Name
L	01	L
R	02	R
C	03	C
LFE	04	LFE
LS	05	LS
RS	06	RS

Selection: Input

01	02	03	04
05	06	07	08
09	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32

Buttons: Save, Back, Cancel, Help



## Operation (continued)

In the second example we assumed that the Ravenna channels 7 to 14 belong to a 7.1 DD+ setup.

The screenshot shows the 'Routing' dialog box. On the left, there is a table with columns 'Channel', 'Input', and 'Name'. On the right, there is a 'Selection: Input' grid with buttons numbered 01 to 32. A red box highlights the 'Input' column in the table and the 'Selection: Input' grid. A red arrow points from the '10' button in the grid to the 'Input' field for the 'LFE' channel in the table.

Channel	Input	Name
L	07	L
R	08	R
C	09	C
LFE	10	LFE
LSR	05	LSR
RSR	06	RSR
LS	07	LS
RS	08	RS

Selection: Input

01	02	03	04
05	06	07	08
09	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32

Buttons: Save, Back, Cancel, Help

The screenshot shows the 'Routing' dialog box. On the left, there is a table with columns 'Channel', 'Input', and 'Name'. On the right, there is a 'Selection: Input' grid with buttons numbered 01 to 32. A red box highlights the 'Input' column in the table and the 'Selection: Input' grid. A red arrow points from the '14' button in the grid to the 'Input' field for the 'RS' channel in the table.

Channel	Input	Name
L	07	L
R	08	R
C	09	C
LFE	10	LFE
LSR	11	LSR
RSR	12	RSR
LS	13	LS
RS	14	RS

Selection: Input

01	02	03	04
05	06	07	08
09	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32

Buttons: Save, Back, Cancel, Help



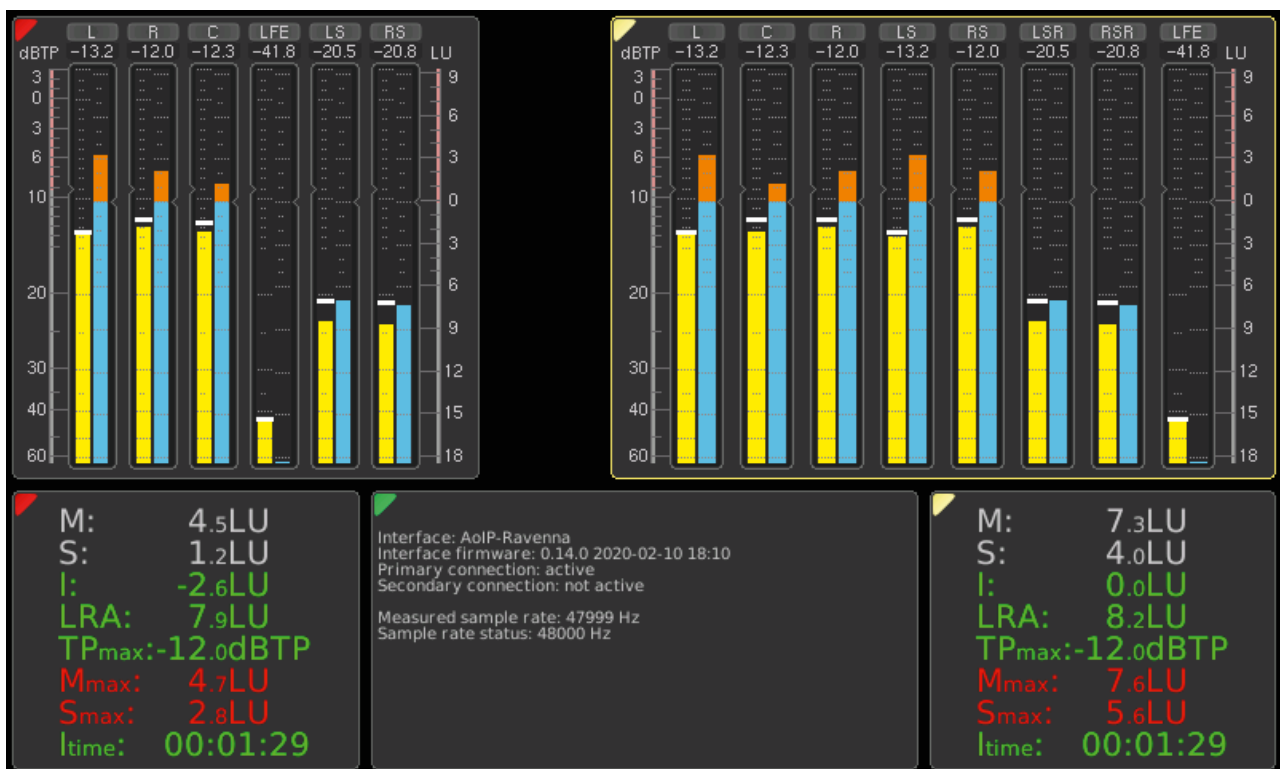
**NOTE** - In one preset, up to 32 channels in several audio groups can be defined. Up to 8 channels can be assigned to one audio group.

- As described in the operating manual, add the instruments you need to the audio groups and place them on the screen (**View**). Create a Non-Audio Group, if you want to activate the network status instrument and place it on the screen. Save your preset.

**14. Now, your TM-RAV is ready to measure and display signals from a Ravenna network.**

## Example

You can see a possible arrangement of the exemplarily created audio groups (left 5.1, right 7.1 DD+) as described in this manual, each extended with the Loudness Numeric instrument. In the middle you find a non-audio group with the network status display.



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