# 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:

- 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.

Connection	Active			
Type	Zeroconf	7		
P Address	169.254.57.211	1		
Vetmask	255.255.0.0			
Gateway	0.0.0.0			
/LAN	10			

- 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.

//\

RTW - E	yes on Your Audio:	RTW × 🖳 192.168.10	3.198/simple/index	chtr × +					-	٥	×
$\leftrightarrow \rightarrow c$	7 ① Ni	ich <b>5.</b> r 192.168.103	198/s mple/inde	ex.html					☆	Θ	:
		TM-RAV V	VebApp					Advanced Network Set	tings		
	Primary A	voIb	Secondar	V AOIP	Touch!	Av_110333 Sync		Interface Firmware			
6	Address Subnet State	192.168.103.198 255.255.255.0 connected	Address Subnet State	192.168.20 255.255.25 not connect	0.13 55.0 ted	Sample Rate PTP Sync. PTP State	48000 Hz is master locked	Version 1.1.1b42241 Update			
		ng			H N M 4	5 2 2 2 2 2 2 1 0 1 1 0 1 1 0 1 1 0 1 0 1	11 12 13 13 13 14 14 14 14 14 14 14 14 14 14 14 14 14	ts 8 6 0 1 1 1 2 2 2 3 3 1 1 1 2 2 2 3 3 3 1 3 1	31 32		
	Sources										

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.

	r Audio: RTW 🗙 🖳 192.168.1	103.198/simple/inde	ex.htr × +							-
企	③ Nicht sicher   192.168.10	3.198/simple/ind	lex.html							
R EYES ON	YOUR AUDIO TM-RAV	WebApp				Advar	iced Ne	etwor	k Set	ting
			_							
			Touc	hMonitor						
			RTW-TM	-RAV_110333						
Prim	ary AoIP	Seconda	ry AoIP	Sync		Interfa	nce Firi	nwar	e	
Addre	ess 192.168.103.198	Address	192.168.20.13	Sample Rate	48000 Hz	Version	1.	1.1b4	2241	
Subn	Subnet 255.255.0 Subnet		255.255.255.0	PTP Sync.	is master	Update				
						Upda	te			
State	connected	State	not connected	PTP State	locked	Upda	te			
State	connected	State	not connected	PTP State	locked	Upda	te			
State Edit	e connected	State	not connected	PTP State	locked	Upda	te			
State Edit	e connected	State	not connected	PTP State	locked Inpu	Upda ts	n + in	25 27 28	29	31
Edit	e connected Routing sap://RTW-TM-RAV_110333	State	not connected	۲۳ State ۲۰ ۵ ۰ ۵ ۵ ۹	locked Input	Upda ts	0 7 10 10	27 28	30	31 32
State Edit	e connected Routing sap://RTW-TM-RAV_110333	State	not connected	PTP State           * ۲۰ ۵ ۸ ۹	Iocked Input	Upda ts	0 + 50	26 27 28	30	31 32
Edit	sap://RTW-TM-RAV_110333	State	not connected	PTP State	locked	ts		20	30	31 32
Edit	sap://RTW-TM-RAV_110333	State	not connected	PTP State	locked	ts	2 * 12 I	26	30	31 32
Edit	connected Routing sap://RTW-TM-RAV_110333	_2_2	not connected	9TP State	locked	Upda ts		26	30	31
State Edit	sap://RTW-TM-RAV_110333	_2_2	not connected	4 50 0 N 20 0 0	Iocked	Upda ts	2 * 10 × 10	26	30	31
State Edit Sources	connected Routing sap://RTW-TM-RAV_110333 R3LAY01 (on RTW-PC31)	_2	not connected	PTP State	Inpu Inpu	ts	2 * 10 Y	26	30	31

>

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



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?pageld=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.
  - **I** 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.

Identifier Color Domain AoIP-R Mode	avenna	2		SSA	10	Ī	Gain Reductio
Domain AoIP-R	avenna	3				_	
Mode			13%	Vectorscope			
3	.1	4		Multicorrelator			
Input Routing Cont	figure	5		Radar			
Loudness EBU	R128	6	<b>S</b> I	Loudness Sum			
Instruments		7		LRA			
		8	© -3,9	Loud. Num.			

>

## **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.

Routing		
hannel	Input	Name
L <mark>1</mark> 2	01	L
	02	R
2	03	с
LFE	04	LFE
.S	05	LS
RS	06	RS

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

Routing										
Channel	Input	Name	Selection: Inpu	Selection: Input						
L	01	L	01	02	03	04				
R	02	- î-	05	06	07	08				
С	03	с	09	10	11	12				
LFE	04	LFE	13	14	15	16				
LS	05	LS	17	18	19	20				
RS	06	RS	21	22	23	24				
			25	26	27	28				
			29	30	31	32				
			Save	Back	Cancel	Help				

>

### **Operation (continued)**

outing									
Channel	Input	Name	Selection: Input						
L	07	L	01	02	03	04			
R	08	R	05	06	07	08			
С	09	с	09	10	11	12			
LFE	10	■ + ::::	13	14	15	16			
LSR	05	LSR	17	18	19	20			
RSR	06	RSR	21	22	23	24			
LS	07	LS	25	26	27	28			
RS	08	RS	29	30	31	32			
		/L							
				1	1	٦٢ .			

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

Routing										
Channel	Inp	ut	Name	Selection: Input						
L		07	L	01	02	03	04			
R		08	R	05	06	07	08			
С		09	С	09	10	11	12			
LFE		10	LFE	13	14	15	16			
LSR		11	LSR	17	18	19	20			
RSR		12	RSR	21	22	23	24			
LS		13	LS	25	26	27	28			
RS		14		29	30	31	32			
			-	,						
				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.

- 13. 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.



© 08/2020 | RTW GmbH & Co. KG | Changes without prior notice | ANEMAN is registered trademark of Merging Technologies S.A.

RTW GmbH & Co. KG Am Wassermann 25 | 50829 Köln | Germany Phone: +49 221. 70 913-0 | Fax: +49 221. 70 913-32 Internet: www.rtw.com | E-Mail: rtw@rtw.com

