

Quick Start Guide (for SIP connection) MM01 Audio over IP Codec

Introduction

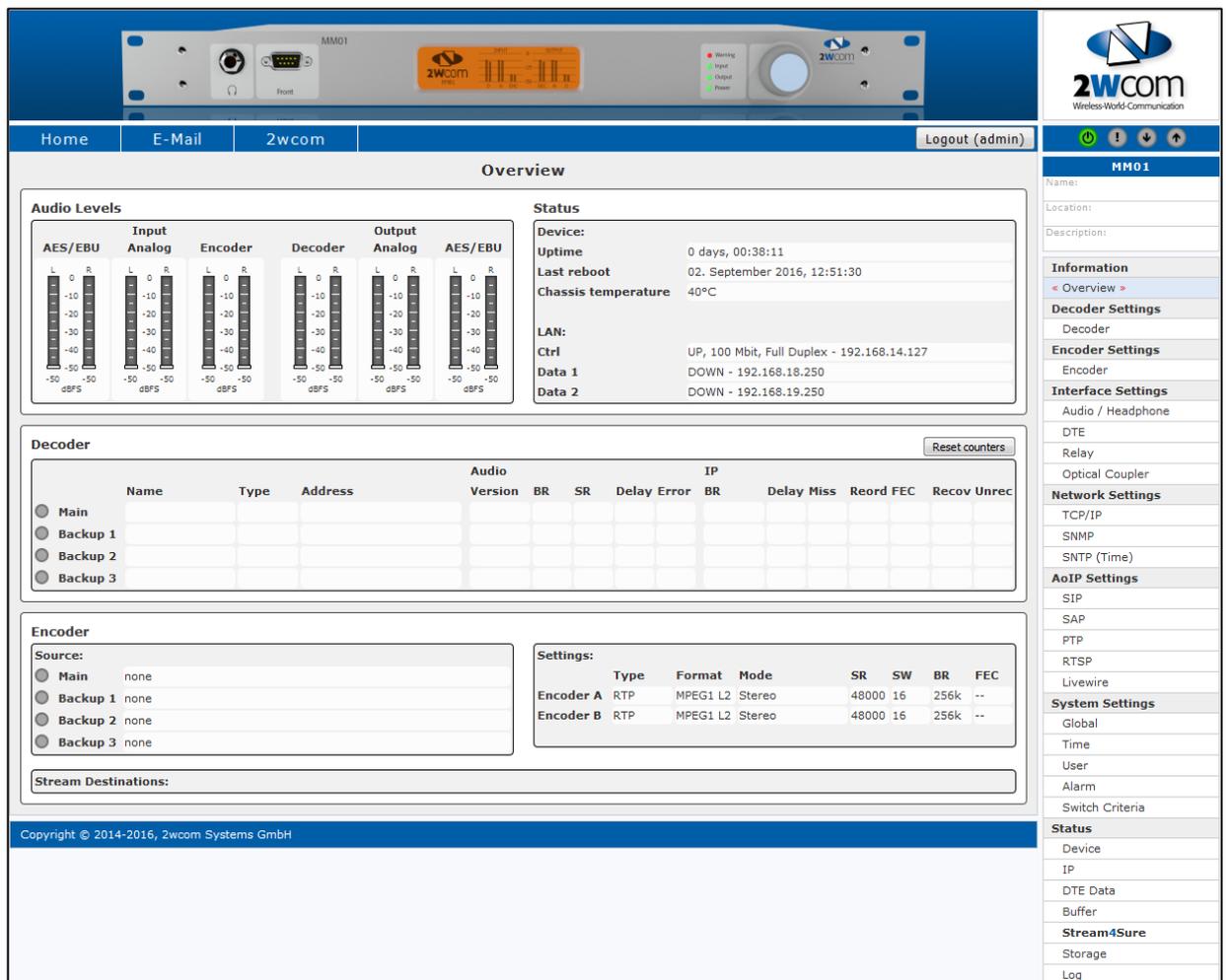
Description The following Quick Start Guide describes the first steps for the operation of the professional MM01 Audio over IP codec.



NOTE: Read this Quick Start Guide carefully before attempting to operate the unit.

For a secure operation of the device the user should read and hold on all safety instructions before the first operation. The complete safety instructions you will find in the User Manual of the device.

Web interface



The screenshot displays the web interface for the MM01 device. At the top, there is a navigation bar with 'Home', 'E-Mail', '2wcom', and 'Logout (admin)'. The main content area is titled 'Overview' and includes several sections:

- Audio Levels:** Six vertical level meters for AES/EBU, Input Analog, Encoder, Decoder, Output Analog, and AES/EBU.
- Status:**
 - Device: MM01
 - Uptime: 0 days, 00:38:11
 - Last reboot: 02. September 2016, 12:51:30
 - Chassis temperature: 40°C
 - LAN: UP, 100 Mbit, Full Duplex - 192.168.14.127
 - Data 1: DOWN - 192.168.18.250
 - Data 2: DOWN - 192.168.19.250
- Decoder:** A table with columns for Name, Type, Address, Audio Version, BR, SR, Delay Error, IP BR, Delay Miss, Reord, FEC, Recov, and Unrec. It lists 'Main' and three 'Backup' entries.
- Encoder:**
 - Source: Main (selected), Backup 1, Backup 2, Backup 3.
 - Settings table:

	Type	Format	Mode	SR	SW	BR	FEC
Encoder A	RTP	MPEG1 L2	Stereo	48000	16	256k	--
Encoder B	RTP	MPEG1 L2	Stereo	48000	16	256k	--
- Stream Destinations:** A section for defining stream destinations.

On the right side, there is a sidebar menu with categories like Information, Decoder Settings, Encoder Settings, Interface Settings, Network Settings, AoIP Settings, and System Settings.

Power supply

✓ You have already unpacked and installed the device in an appropriate place.

NOTICE

Make sure that the device and the contained cords are compatible to the domestic line voltage and frequency!

If the device is compatible, connect the power supply cord fully to the IEC power connector at the back panel of the device and a mains power outlet.

First network configuration

For delivery the device is configured with default settings for the first connection via the IP interface.

To configure the IP settings:

1. Use the jog wheel to select "**Interface**→**TCP/IP**".
2. Configure settings for your existing IP network (IP address, netmask, gateway etc.; consult the responsible network administrator if applicable).
3. Save the settings by using the jog wheel and reboot the device confirming the reboot question.
4. Connect a network patch cable to the "10/100-Base-T" connector on the back panel of the device and your existing IP network.

Access to the web interface

The device can be fully operated with an internet browser via the integrated web interface. For this purpose use a computer that is connected to the same IP network that the device is connected to.

To operate the device via the web interface:

1. Start an internet browser (e.g. Firefox/Mozilla ≥ Version 3.0 or Microsoft Internet Explorer ≥ Version 7.0 (both with Java Script activated)).
2. Enter the configured IP address in the address bar of the browser. If the IP address has not been changed, please enter the default address in the address bar of the browser:
192.168.14.250.
3. A login screen with *Username/Password* appears. Use the default accounts:
 - i. for a read-only access to "Guest account" use "user"/"user"
 - ii. for a full access to "Manager account" without a permission to manage the user accounts use "manager"/"manager"
 - iii. for a full access use "admin"/"admin"



NOTE: Change the login data as soon as possible to avoid unauthorized access to the device and document the login data in a safe place.
You can change your login data under **System Settings**→**User**.

Set up network

1. Select **Network Settings**→**TCP/IP** in the web interface menu. The page *TCP/IP* appears.

VLAN	IP Address	Netmask	Gateway	Primary DNS	Secondary DNS	DHCP
0	192.168.14.127	255.255.255.0	0.0.0.0	0.0.0.0	0.0.0.0	Off

VLAN	Priority	IP Address	Netmask	Gateway
0	0	192.168.18.250	255.255.255.0	0.0.0.0
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	

VLAN	Priority	IP Address	Netmask	Gateway
0	0	192.168.19.250	255.255.255.0	0.0.0.0
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	
0	0	0.0.0.0	0.0.0.0	

Note: Gateway and DNS settings must be configured by using hostnames instead of IP addresses for SIP connection.

2. Click the first "SAVE" button to save the changes in the "Interface Ctrl" block.
3. Click the second "SAVE" button to save the changes in the "Interface Data" block.

Set up encoder

1. Select **Encoder Settings**→**Encoder** to configure the encoder settings.
2. Click the "EDIT" button in the "Source" block to configure the main and backup sources.

Encoder	Configuration
Encoder A	RTSP
Encoder B	RTSP - MPEG1 L2, Stereo, 48000 Hz, 256 kBit/s

3. Select the source for the encoder in the "Source" field, activate the source by selecting "ON" in the virtual switch "Activation" and click the "SAVE" button to save the changes.
4. Click the "EDIT" button in the "Encoder Configuration" block to change the encoder settings.

Set up SIP

1. Select **AoIP Settings**→**SIP** to configure the SIP settings.

registrar	phonenumber	username	password	expires	active	interface
1				3600	<input type="checkbox"/>	Data 1
2				3600	<input type="checkbox"/>	Data 1
3				3600	<input type="checkbox"/>	Data 1
4				3600	<input type="checkbox"/>	Data 1

2. Select the "Mode" (normally "Send receive dynamic")
3. Edit the registrar account settings and activate each account by selecting "ON" in the virtual switch "Activation".
4. Click the "SAVE" button to save and activate all the changes.

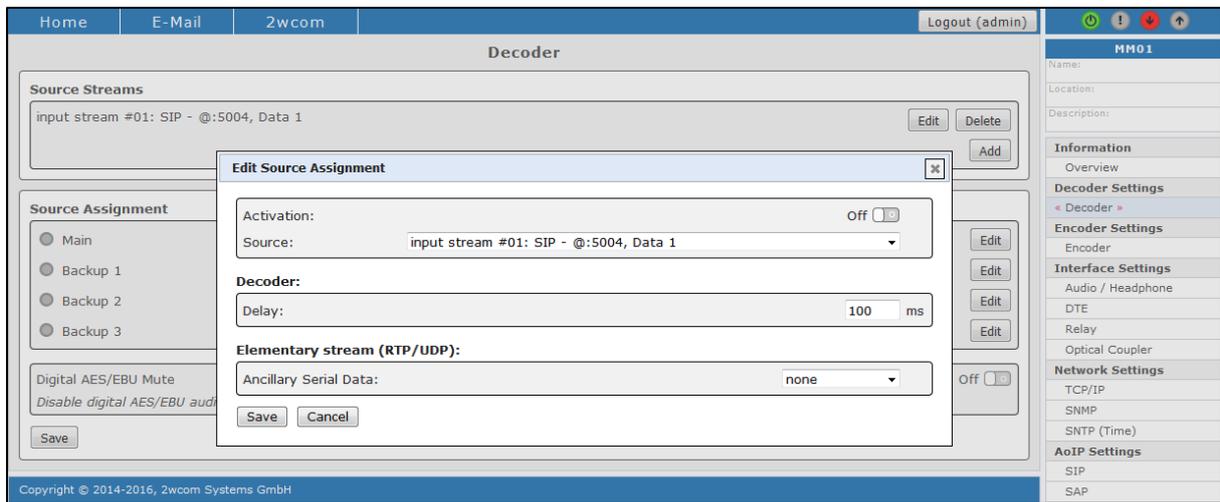
Incoming calls (callee)

Incoming calls must be configured by the decoder to receive connections (**Decoder Settings**→**Decoder**).

1. Click the "ADD" button in the "Source Stream" block to create a new source stream.
2. Click the "EDIT" button to set up a created input stream.

Audio stream (RTP/UDP):	
Connect:	
Ethernet:	Data 1
VLAN:	0
Port:	0
Packet reorder/dejitter delay:	100 ms
Stream4Sure:	Off
Pro-MPEG FEC:	Off

3. Create a source stream for SIP and leave the "**Connect**" field empty.
4. Save this source stream and assign it to "Main" in the "Source Assignment" block.

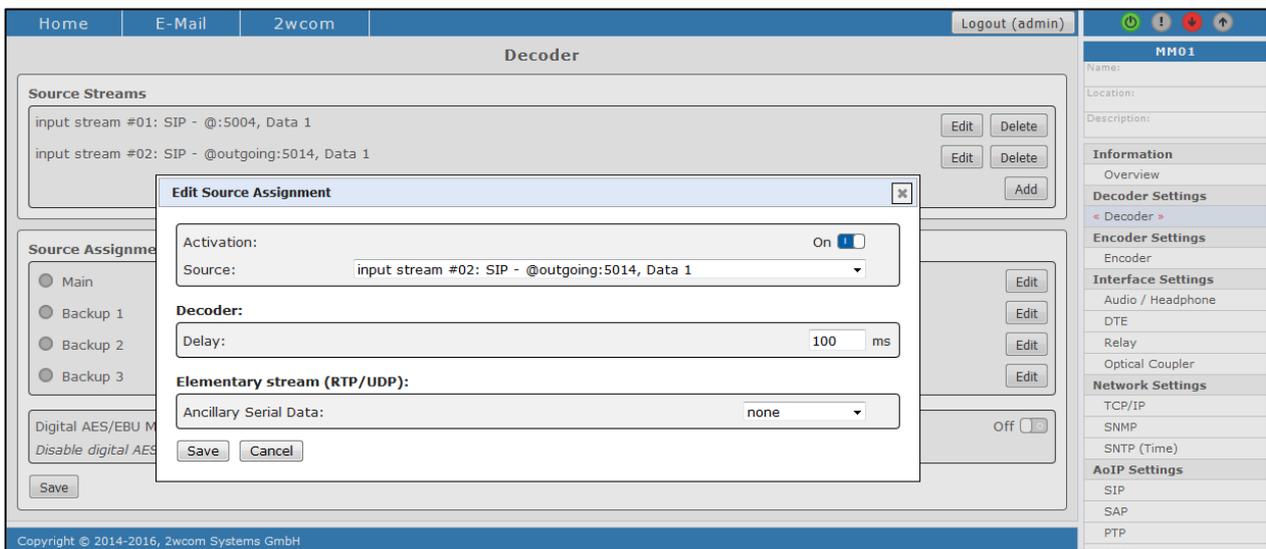


5. Activate the source assignment by selecting "ON" in the virtual switch "Activation".
6. Click the "SAVE" button to wait for incoming calls.
7. To end the connection, deactivate the source assignment by selecting "OFF" switch "Activation" or click several times with the cursor to the virtual LED in the "Source Assignment" block near the source.

Outgoing calls (caller)

Outgoing call must be configured by the decoder to establish a connection to a far end codec.

1. Create a source stream for SIP as described in the following section and enter the name of the far end device (codec) in the "connect" field (SIP URI).



2. Save this source stream and assign it to "Main" source in the "Source Assignment" block.
3. Activate it by selecting "ON" in the virtual switch "Activation".
4. Click the "SAVE" button to start establishing connection to the far end codec.
5. To end the connection, deactivate the source assignment by selecting virtual switch "OFF" "Activation" or click several times with the cursor to the virtual LED in the "Source Assignment" block near the source.