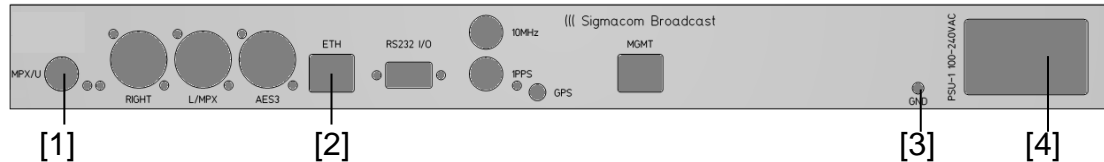# Sigmacom Broadcast
TELECOM INNOVATIONS

EtherMPX NG QUICK USER GUIDE

Installation instructions (Encoder & Decoder):

1. Install both Encoder & Decoder in a 19″ rack.
2. Connect power and Ethernet cables as shown below:

Basic Encoder connections

[1]   [2]   [3]   [4]

1. Connect the MPX output of your audio processor / stereo encoder
2. Connect the RJ45 LAN cable of your local network
3. Connect a proper GROUND connection
4. Connect the IEC power cable (100-240VAC, 50-60Hz) and turn the power switch on

Basic Decoder connections

[1] [2]   [3]   [4]   [5]
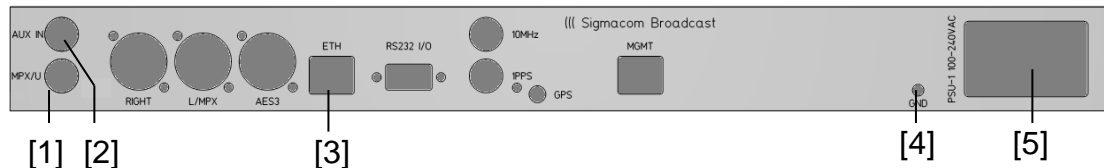
1. Connect the MPX output of the EtherMPX Decoder to your FM Exciter
2. Connect your backup audio source to AUX IN
3. Connect the RJ45 LAN cable of your local network
4. Connect a proper GROUND connection
5. Connect the IEC power cable (100-240VAC, 50-60Hz) and turn the power switch on

3. Get the corresponding Management Software from the EtherMPX website: https://www.ethermpx.com/software/NG (for MS Windows only)
4. Unzip the contents into a folder – it does not need setup.
5. Run the EtherMPX as Administrator and set firewall to allow all connectivity.
6. From the NMS interface menu select the correct IP address of your PC.
7. Click the "Auto discovery" button to find all available devices.

You are now ready to configure the system according to your needs!

- Encoder default IP: 192.168.1.90 / 24 (use only transparent bridge links)
  Default Management IP of Encoder (if SNMP option is installed): 192.168.1.15 / 24
- Decoder default IP: 192.168.1.91 / 24 (use only transparent bridge links)
  Default Management IP of Decoder (if SNMP option is installed): 192.168.1.16 / 24
- Factory setup: Analog MPX, Unicast

Audio levels adjustment (Encoder & Decoder):

Analog audio input at Encoder should not exceed +6dBu (4.37Vpp). Suggested nominal range is 0dBu (2.19Vpp) to +4dBu (3.47Vpp).
The audio outputs at the Decoder will provide the same audio level (1:1) as fed into the Encoder. Analog and digital outputs of the Decoder are operating simultaneously. If you need to attenuate the output of a particular Decoder, adjust the ATT control accordingly from the Management Software, in steps of 0.5dB (default attenuation is 0.0dB, which means no attenuation at all).

Front panel LED indications (Encoder & Decoder):

- PWR LED: Indicates that power is turned on
- PSU 1: Indicates that Power Supply 1 is providing DC power
- PSU 2: Indicates that Power Supply 2 (optional) is providing DC power
- LINK LED: Indicates that an Ethernet connection is present.
- ACT LED: Indicates that audio transmission is active.
- ALM LED: Indicated there is an ALARM condition (ETH fault, or AUDIO is missing)

Note: When Encoder is configured in "Unicast" mode and powered on, it searches for the Decoder (ACT LED is blinking every second). When a connection is established, ACT LED at Encoder & Decoder stay always on. If connection is lost, Encoder will cease transmission after 10 minutes and will start the search sequence each 17 seconds. In multicast or AES67 mode, the Encoder starts immediately transmission.

Silence detector (Decoder only):

The silence detector is an internal watchdog that monitors constantly the audio level. If audio level drops below -35.8dBu for 20 consecutive seconds (for example, IP connectivity is lost), the system switches to AUX input. When the audio level is restored above the -35.8dBu threshold for 5 consecutive seconds, it switches back to digital. You can change these settings from the Management Software.

Rear panel LED indications (Encoder only):

- OVFL LEDs (two, one for each analog input): Indicates extremely audio level that needs immediate attention, otherwise damage may occur at analog input stages of the Encoder.

Support:

For any assistance, don't hesitate to contact your reseller, or Sigmacom support directly at support@sigmacom.eu

Thank you for purchasing EtherMPX!

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