Connecting digital microphones, 10/2020

Connecting digital microphones of SCHOEPS (SuperCMIT, CMD 42*Beta*)

The *SuperCMIT* conforms to the AES42 standard, Mode 1. You connect it to an interface offering Digital Phantom Power (DPP, 10 Volts). The *SuperCMIT* runs on its own internal clock. If you run more than one *SuperCMIT* or if you prefer to use an external clock, your digital input must use sampling rate converters (SRC). Furthermore, in a normal workflow, the digital input should also offer sufficient gain (20 - 30 dB) for recording and monitoring in real time.

The *CMD 42 Beta* conforms to the AES42 standard, Mode 1 and 2. The *CMD 42 Beta* can run on its clock (Mode 1) or be synced from an external device (Mode 2).

Mini-DA42

AES42/AES3 converter with analog outputs

The Mini-DA42 powers digital microphones and has both digital and analog outputs. All inputs and outputs are available through a Sub-D breakout cable.

On the Mini-DA42 there are a green Power LED and a red "Unlocked" Error LED which turns off as soon as the device successfully locks to the connected digital microphone.

Input:

- AES42, Mode 1 (XLR-3F, 100 Ohms, black label)
- power: DC 12-18V/200-500 mA, available through included AC adapter for 100 - 240 V, 50 / 60 Hz with HIROSE plug.

Outputs (available through included Sub-D breakout cable):

- AES3 (XLR-3M, 100 Ohms, blue label)
- 2 * analog (XLR3-M, yellow and red label), balanced, referring to ground, maximum cable length: 300 m

Specs:

- output level: max 14.5 dBU @ 0 dBFS.
  In normal operation, the analog outputs will require some amplification, since digital input signal levels are typically rather far below full scale. When using the +30dB level boost of the SCHOEPS SuperCMIT, normal line inputs are sufficient.
- power consumption (including SuperCMIT): 200 mA
- dimensions in mm: 84 * 84 * 34; weight: 173 g

Mini-DA42:
AES42 converter with analog outputs

Breakout cable for Mini-DA42:
*input: 1 * AES42,*
*output: 1 * AES3 out, 2 * analog*

PSD 2U

Digital Phantom Powering (AES42/AES3 converter)

The PSD 2U provides the digital phantom power (DPP, 10V) for a digital microphone like the SuperCMIT. It can be connected to a normal digital AES3 input (XLR/RCA).

Inputs:

- AES42, Mode 1 (XLR-3F)
- power: DC 12 - 18V / 500 mA, available through included AC adapter for 100 - 240 V, 50 / 60 Hz with HIROSE plug

Outputs:

- AES3 (XLR-3M) and AES3id (RCS)

PSD 2U:
Powering box for digital microphones with AES3 outputs (XLR/RCA)

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Device	DPP 10V	SRC	Analog output	Digital Gain	
Power adapters					
1. SCHOEPS PSD 2U	✓	-	-	-	
2. SCHOEPS Mini-DA42	✓	-	✓	-	
3. RME DMC-842	✓	✓	✓	✓	
4. Neumann Connection Kit and DMI-2	✓	-	-	-	
Mixer, Recorders					
5. SoundDevices 633, 833, Scorpio	✓	✓	✓	✓	
6. ZAXCOM Nomad, Nova, Deva24	✓	✓	✓	✓	
7. AATON Cantar-X3, Cantar Mini	✓	✓	✓	✓	
8. Sonosax SX-R4+, SX-M2D2	✓	✓	✓	✓	
Wireless					
9. Zaxcom TRX743	✓	-	-	✓