

## Field of application and characteristics

The system is suited for the undisturbed isolated transmission of audio signals in surroundings with high demands on electromagnetic compatibility.

After connecting all dAV-TRX mobile and table top devices with the dAV-TRX-Matrix using optical fibers, the dAV-TRX devices can communicate with each other.

- **Audio Communication in groups**

One or more groups can be created. Each device can be in either no or one group. All dAV-TRX devices within the same group can talk to each other. Only one dAV-TRX device can speak at a time, while the others in the group can only listen (half duplex).

- **Broadcast function**

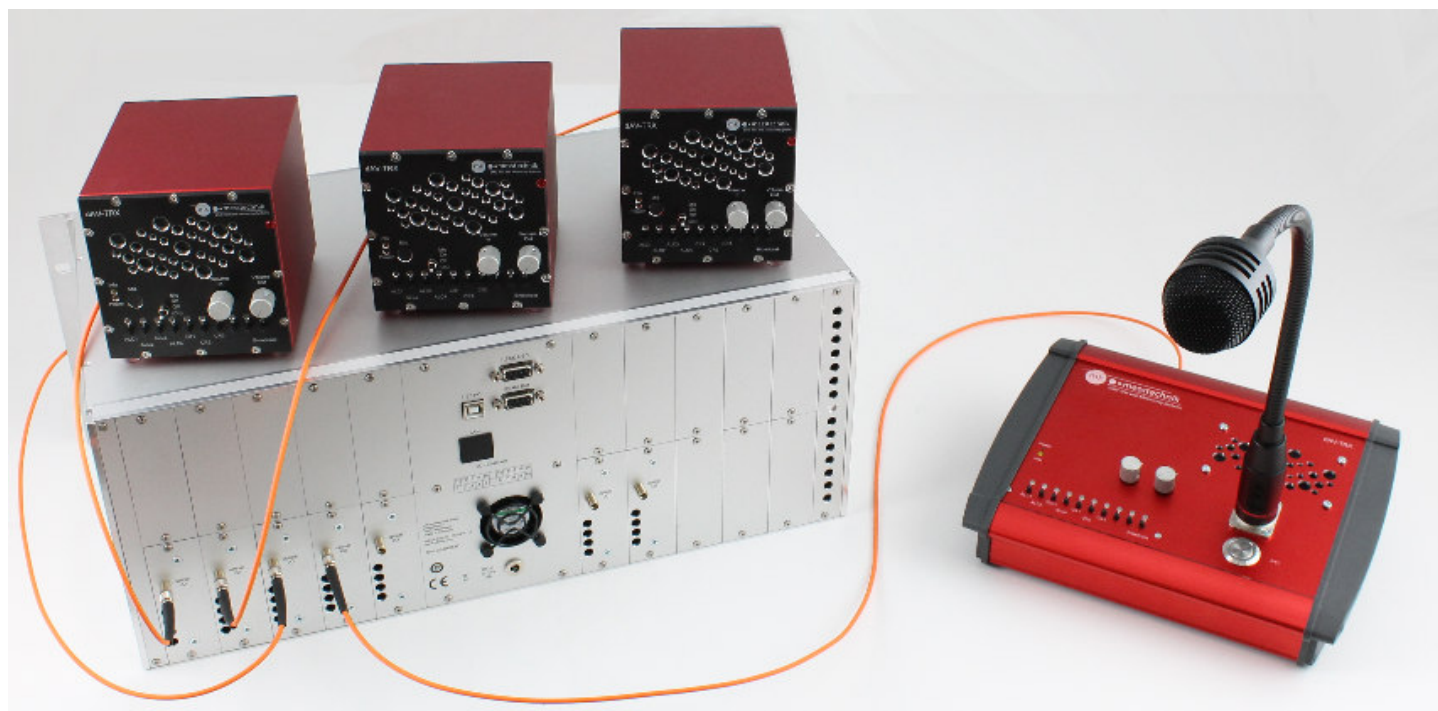
The broadcast function allows you to communicate with all active stations.

- **Adjustable Volume for the microphone and speaker**

The microphone and speaker volumes can be adjusted independently to suit your applications.

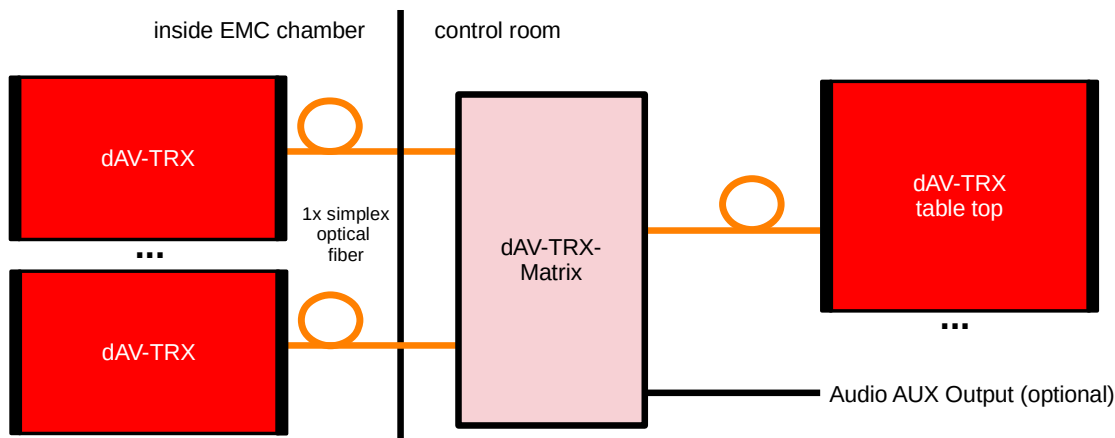
- **"Permanent On" mode**

The "permanent on" operation mode enables hands-free talking. Any ongoing transmission can be interrupted by another dAV-TRX device, but it resumes when the other dAV-TRX device stops transmitting.



*Example of a intercom matrix system with three mobile devices (dAV-TRX, dAV-TRX matrix (19"), and dAV-TRX table top*

## Application



## Technical data

<b>Channels:</b>	9 receiver channels, 1 AUX channel
<b>Data direction:</b>	bidirectional talking modes: half duplex
<b>Input:</b>	audio input via built-in microphone (dAV-TRX) gooseneck microphone (dAV-TRX table top), mono
<b>Frequency range:</b>	approx. 60 Hz – 15 kHz (-3 dB) gain of microphone and speaker volume adjustable independently
<b>Talking modes:</b>	<b>mic on/off:</b> temporary on (push-to-talk = PTT), permanent on or off <b>groups:</b> temporary groups of two or more stations, extra broadcast group with all stations <b>speakers/listeners:</b> one active speaker per group, all other stations listen; system internally tracks list of speakers per group; if the active speaker of a group switches its mic off, the next station with mic on become new active speaker
<b>Output:</b>	integrated loudspeaker in dAV-TRX and dAV-TRX table top, mono
<b>Power supply:</b>	integrated batteries 4 Ah, consisting of 10x NiMH cells, 12 V operating time with fully charged batteries: approx. 24 h operating time can be extended with an external battery pack
<b>Charging connector:</b>	dAV-TRX: push-pull 12 mm PP12 or Binder 712 (9 mm PP9 on request) dAV-TRX table top and dAV-TRX-Matrix: DC In 5.5/2.1 mm for external power supply
<b>Housing:</b>	dAV-TRX: anodized aluminum case with rubber feet 100 mm x 100 mm x 150 mm

	dAV-TRX table top: 250 mm x 100 mm x 200 mm dAV-TRX-Matrix (19", 4HU): 483 mm x 179 mm x 250 mm
<b>Weight:</b>	dAV-TRX: 1600 g dAV-TRX (no battery): 800 g dAV-TRX table top: 1400 g dAV-TRX-Matrix (19", 4HU): > 4000 g (depends on number of channels)
<b>Optical connector:</b>	1x FSMA for each channel / simplex multimode fiber 62.5/125 µm, 850 nm

### Scope of delivery

- 1x dAV-TRX-Matrix 19", 4HU
- dAV-TRX – amount depends on order
- dAV-TRX table top – amount depends on order
- 20 m simplex multimode optical fiber (OM1) FSMA/FSMA, 850 nm – amount depends on order
- charger for the integrated batteries (dAV-TRX only), AC plug types available: A(US), C(EU), G(UK) and I(AUS)
- external power supply for dAV-TRX table top and dAV-TRX-Matrix

### Accessories and options

<b>Optical fiber – types:</b>	FSMA, ST, FC, LC, E2000 (combinations possible), 62.5/125 µm or 50 µm. 850 nm
<b>Optical fiber – lengths:</b>	0.5 m – >100 m
<b>Optical fiber – feedthrough:</b>	FSMA/FSMA, ST/FSMA, ST/ST, FC/FC
<b>Optical fiber – cleaning:</b>	Fiber optic cleaning set  protective cap/cover for male FSMA optical fibers
<b>Optical connector – protective caps:</b>	captive cap/cover for male FSMA optical fibers (connected to the cable => does not get lost)
<b>Optical connector – protective caps:</b>	Protective cap/cover of FSMA optical input/output of mk devices  captive cap/cover of FSMA optical input/output of mk devices for run time enhancement of the device in the EMC chamber 4 Ah or 10 Ah (additional high capacity charger needed)
<b>External battery pack BP120:</b>	(not possible for dAV-TRX matrix with the option (no battery, no ON/OFF button), as the batteries can be deeply discharged if used with this device)
<b>Power supply PS120:</b>	for constantly powering the device in the control room