

RIEDEL JUGGLER

Integrated TETRA Radio System for Artist Intercoms

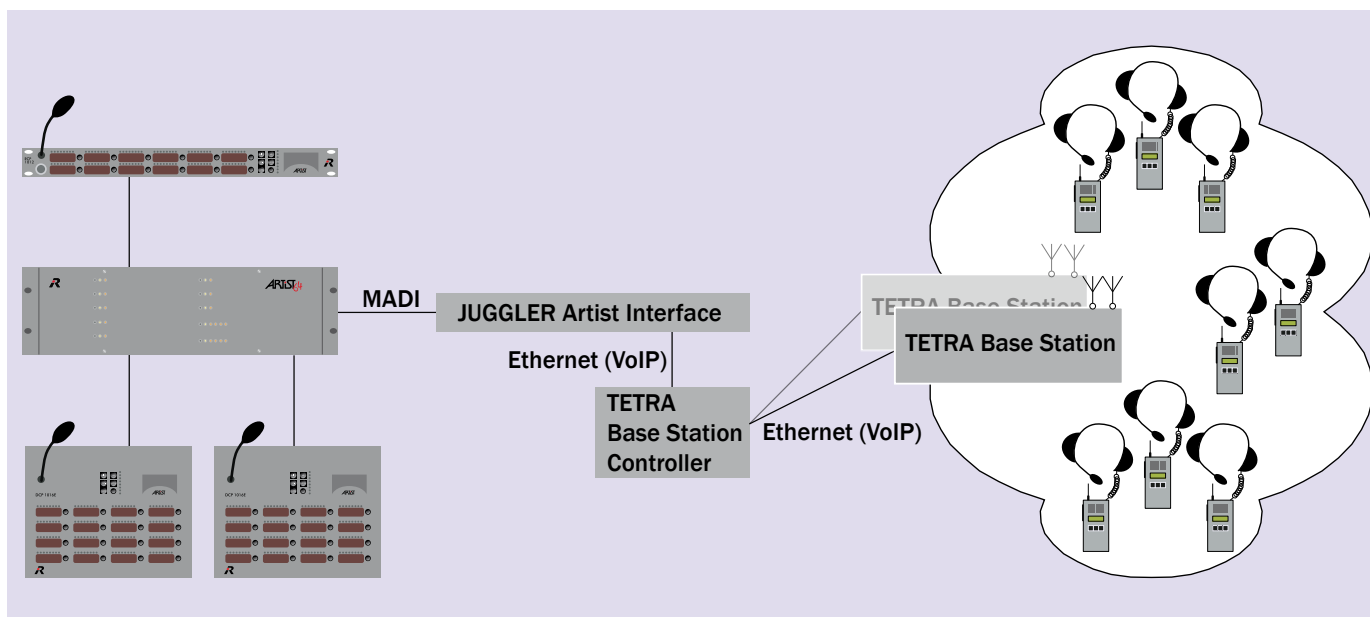
Besides wireless intercom systems, wireless communications at events are usually based on professional mobile radios or digital trunked radios. While analog radios are easily integrated with the wired intercom system via the Riedel RiFace, Riedel now provides JUGGLER, a compact TETRA digital trunked radio network solution for Artist Digital Matrix Intercoms, which provides seamless integration of wired intercom and professional digital radio applications.

While digital TETRA radios have been providing many advantages such as optimal frequency usage, highest transmission quality for audio and data and maximum security against eavesdropping, TETRA remained unsuitable for many applications because the installations were large and expensive. Riedel JUGGLER provides for the first time a cost-effective and compact solution, which makes it ideal not only for fixed installations but also mobile applications and OB trucks.

The new Riedel JUGGLER TETRA solution seamlessly integrates the TETRA radio network into the wired intercom matrix, providing intelligent integration between TETRA radio groups and Riedel Artist intercom ports. The system allows calls from any port/group/conference of the Artist system to up to 64 individual TETRA radio groups and vice versa. JUGGLER works with any TETRA-standard compliant subscriber.

The system consists of the JUGGLER Artist Interface, the TETRA Base Station Controller and the TETRA Base Station. The JUGGLER Artist Interface connects the TETRA Base Station Controller to any given Riedel Artist system via MADI. The TETRA system can be set up as a single-site installation or as a multi-site installation with seamless hand-over.

The IP65 encapsulations of the TETRA Base Station as well as of the TETRA Base Station Controller ensures reliable operation even in harsh climatic environments.



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Specifications:



	JUGGLER Artist Interface	TETRA Base Station Controller	TETRA Base Station
Frequency Bands (other frequencies on request)			
Russia			RX=300-310MHz, TX=336-346MHz, BW=10MHz
China			RX=350-360MHz, TX=360-370MHz, BW=5MHz
Public Safety			RX=380-390MHz, TX=390-400MHz, BW=5MHz
Civil			RX=410-420MHz, TX=420-430MHz, BW=5MHz
450 MHz			RX=450-460MHz, TX=460-470MHz, BW=5MHz
FCC			RX=805-825MHz, TX=850-870MHz, BW=14MHz

Transmitter and Receiver:			
TX power at antenna connector			0.5W to 10W TETRA remotely adjustable
RX sensitivity			-121dBm with diversity -118dBm without diversity
Receiver diversity			Dual as standard
Build-in duplexer			combines TX and one RX antenna
Time and frequency sync			Internal or external GPS
TX power measurement			forward and reflected
RX sensitivity BER measurement			built-in RFTL, -122 to -104dBm

Interfacing			
Interfacing to Artist	MADI (Coax or Optical)		
Interfacing to JUGGLER Artist Interface		RJ45 (Ethernet)	
Interfacing to TETRA Base Station Controller			RJ45 (Ethernet)

Antenna Connections			
Minimum antenna setup			One antenna (no diversity)
Normal antenna setup			Two antennas (dual diversity)
Antenna setup for two Base Stations			Two antennas (dual diversity)
GPS antenna			Active (+5V DC) or passive

General			
Power requirements	85 – 265 V AC / 47 – 63 Hz	100 – 240 V AC / 47 – 63 Hz	48 V DC (provided by base station controller)
Power consumption	120 VA	20 VA	75 W @ 10W TETRA (typical)
H x W x D	88 x 483 x 230 mm (2 RU x 19" x 9")	375 x 283 x 215 (incl. mounting bracket)	333 x 246 x 165 mm (incl. mounting bracket)
Mass (incl. mounting accessories)	2.4 kg	20 kg	9 kg
Operating temperature	-20° to +55° Celsius	-20° to +55° Celsius	-25° to +55° Celsius
Encapsulation	Standard 19"-rack-mount	IP65	IP65