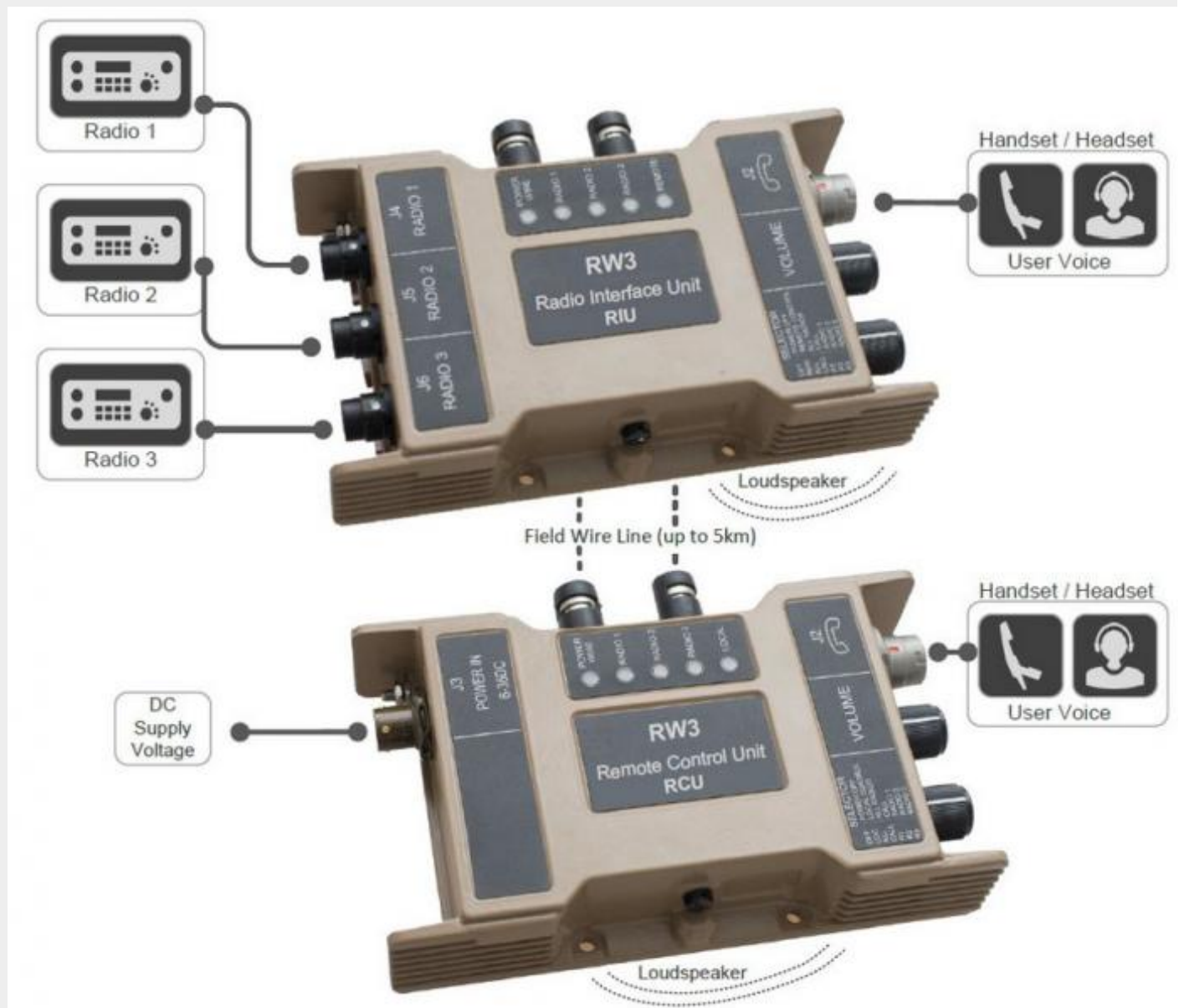# RW3 - Three-Radio Remote Set

RW3 - Three-Radio Remote Set

Functions and Applications:

- ✓ Radio remote operation up to 5km away
- ✓ Supports up to 3 radios

☑ Monitor voice on all 3 radios simultaneously

Features & Benefits:

☑ Robust design
☑ Field wire compatible
☑ Ease of installation and use
☑ Continuous field wire integrity checking
☑ Built-in Loudspeaker

Radio Remote Operation And Control

The RW3 Three-Radio Remote Set allows an operator to use radios from a remote location up to 5 km away using D-10 o
P-274 field wire. The remote operator can select one of the three connected radios to use and speak over the selected
radio.

The RW3 can be used to set up radio communications for open-pit or underground mining applications, rapid high-site
installations and general radio remote use scenarios.

The RW3 system consists of two parts:

☑ **Radio Interface Unit (RIU):** Connects to the radios
☑ **Remote Control Unit (RCU):** Used by the remote operator

*The RIU and the RCU must be connected to each other using D-10 or P-274 field wire (not included).

The RW3 also provides an operator CALL function between the Radio Interface Unit and Remote Control Unit

Radio Interface Unit Capabilities

The Radio Interface Unit (RIU) connects to the Radios. It indicates the status of the power supply, radio connection(s) and
the integrity of the Field Wire line. The RIU is powered directly from any of the connected radios.

Remote Unit Capabilities

The Remote Control Unit (RCU) provides the interface from which to operate the radio(s). It has a handset connection wit
volume control which allows normal voice operation. It also has a selector switch to select the radio and mode of
operation. The RCU connects to the RIU via a length of Field Wire. The RCU is powered from an external DC power
source.

Remote To Local Communication

The RW3 units provide a CALL mechanism between the RIU and RCU units. This allows the RIU to be manned and
receive voice calls from the RCU operator. Alternatively, the RIU operator can receive calls from various radios and route
them to the RCU unit operator

Built-In Loudspeaker

Both RW3 units are fitted with internal waterproof loadspeakers to alert operators of incoming calls or to monitor radio activity

Radio Remote Set Package

The RW3 package includes:

- ☑ 1x Remote Control Unit - RCU
- ☑ 1x Radio Interface Unit - RIU
- ☑ 1x DC Power Cable (unterminated)
- ☑ 1x H-250 type handset
- ☑ 1x User Manual
- ☑ 2x Earth straps

Field wire not included (D-10 or P-274 up to 5km)

Accessories

RIU to Radio Cables (required): Contact AT Communication for the appropriate cables for your radio models.
Accessories: Please contact AT Communication for handsets / headsets and Accessory Information.

RIU Hardware		RIU Environmental	
Size & Weight	165 X 96 X 37 mm (W X D X H) 800 g	Temperature	Operating: -20°C to +60°C Storage: -40°C to +70°C
Colour	Light Grey	Immersion	IP67: 30 min at 1m
EMI	EN 55022, EN 55024, MIL-STD-461E	Environmental	MIL-STD-810G: Humidity, Shock, Vibration, Dust
RIU Interfaces	Description		
2x Wire Line Posts	FIELD WIRE: 2-Wire interface. D-10, P-274 or similar line. 5km maximum length.		
Handset (U-183)	Handset or Headset (D)MIC: 150 Ohm Coil, PHONES: 300 - 1,000 Ohm, PTT_IN (I), PTT_OUT (O), GND, HSET_SUPPL (15V)		
Radio (P17N)	Audio (R1, R2, R3) : (D) AUD_TX 220mV 150Ω, (B) AUD_RX 220mV 150Ω , (H) AUD_COM, (C) PTT (open collector), (A) GND (G) Power (R1, R2, R3): Input to RIU, 6 – 36 VDC MIL-STD-1275 Vehicle Power & polarity protection.		
Volume	11 Position Volume Control		
Selector	Mode selector switch: OFF, REM (Remote Control), ALL (All Radios), CALL (Call RCU), R1 (Radio 1), R2 (Radio 2), R3 (Radio)		
Status LEDs	Power indication, WIRE LINE connectivity indication, RADIO 1, RADIO 2, RADIO 3 connectivity indication, RCU call indication.		
Speaker	2x 4 Watt 8 Ohm internal		
RCU Hardware		RCU Environmental	
Size & Weight	165 X 96 X 41mm (W X D X H) 800 g	Temperature	Operating: -20°C to +60°C Storage: -40°C to +70°C
Colour	Light Industrial Grey RAL9002	Immersion	IP67: 30 min at 1m
EMI	EN 55022, EN 55024, MIL-STD-461E	Environmental	MIL-STD-810G: Humidity, Shock, Vibration, Dust
RIU Interfaces	Description		
2x Wire Line Posts	FIELD WIRE: 2-Wire interface. D-10, P-274 or similar line. 5km maximum length.		

Handset (U-183)	Handset or Headset (D)MIC: 150 Ohm Coil, PHONES: 300 - 1,000 Ohm, PTT_IN (I), PTT_OUT (O), GND, HSET_SUPPL (15V)
Ethernet (62IN8-4F)	(1) RX+, (2) RX-, (3) TX+, (4) TX-
Volume	11 Position Volume Control
Selector	Mode selector switch: OFF, REM (Remote Control), ALL (All Radios), CALL (Call RCU), R1 (Radio 1), R2 (Radio 2), R3 (Radio)
Status LEDs	Power indication, WIRE LINE connectivity indication, RADIO 1, RADIO 2, RADIO 3 connectivity indication, RCU call indication.
Power	6 – 36 V DC, MIL-STD-1275E Vehicle Power & polarity protection.
Speaker	2x 4 Watt 8 Ohm internal

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