

Kathrein's 860 10025 and 860 10118 Remote Control Units (RCU) allow operators to control the electrical tilt of compatible antennas without direct access to the antenna.

- Automatically calibrate to the antenna. There is no need to preset the antenna's electrical tilt or the RCU when installing the unit.
- Allow control of the antenna either locally through a laptop computer, on site desktop computer, the optional central control unit; remotely via an ethernet network or over the internet.
- May be retrofitted to compatible antennas without dismantling or removing the antenna.
- Suitable for daisy chain and splitter solutions.
- · Suitable for outdoor use.

#### **Specifications:**

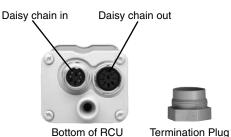
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Protocols	AISG 1.1 and 3GPP/AISG 2.0 compliant
Logical interface ex factory <sup>1)</sup>	AISG 1.1 860 10025 3GPP/AISG 2.0 860 10118
Input voltage range	10-30 V (pin 1 and pin 6)
Power Consumption	<1 W (standby); <8.5 W (motor activated)
Connectors 2)	2 x 8 pin connector according to IEC 60130-9 conforming with AISG Daisy chain in: male; Daisy chain out: female
Hardware interfaces	RS485A/B (pin 5, pin 3 ) power supply (pin 1, pin 6); DC return (pin 7) conforming with AISG
Adjustment time (full range)	40 seconds (typical, depending on antenna type)
Adjustment cycles	>50,000
Temperature range	-40°C to +60°C
Protection class	IP 24
Housing material	Profile: Aluminum, coated Cover: Zinc diecast, coated varnished housing (RAL 7035, light gray)
Weight	1.16 lb (525 g)
Dimensions	7 x 2.4 x 2 inches (178 x 60 x 50 mm)
Shipping dimensions	9.6 x 4 x 3.7 inches (245 x 102 x 93 mm)
Standards	EN 60950-1 (Safety) EN 55022 (Emission) EN 55024 (Immunity) ETS 300019-1-4 (Environmental) UL 60950-1; 1st edition
Certifications	CE, UL, FCC 15.107 Class B

#### Order Information:

Model	Description
860 10025	Remote control unit (AISG 1.1 start-up)
860 10118	Remote control unit (3GPP/AISG 2.0 start-up)



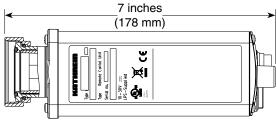


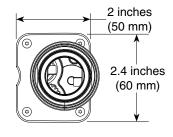


The protocol of the logical interface can be switched from AISG 1.1 to 3GPP/AISG 2.0 and vice versa with a vendor specific command. Start-up operation of the RCU 860 10025 is only possible in a RET system supporting AISG 1.1 and start-up operation of the RCU 860 10118 is only possible in a RET system supporting 3GPP/AISG 2.0.

**Please note:** If the Primary of the RETsystem does not support the standard of the 'logical interface ex factory', the RCU must be switched to the appropriate standard of the Primary before installation. Please contact Kathrein for further information.

2) The tightening torque for attaching the connector must be 0.5–1.0 Nm (hand tightened).





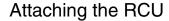






All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.









### Step 1

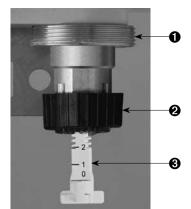
Remove the protective downtilt adjustment cap completely from the antenna.

Remove the black locking ring **2** by pulling it downward.

Check the phase shifter for proper function by turning the gear wheel **⑤**. The phase shifter will go smoothly between minimum and maximum tilt when functioning properly.

Reset the downtilt to 0 degrees.

- Threaded attachment fitting for the downtilt adjustment cap and the RCU.
- 2 Locking ring.
- Owntilt adjustment spindle with integrated downtilt degree scale.
- 4 Antenna tilt control housing.
- Gear wheel for the RCU.





#### Step 2

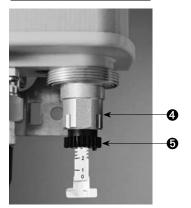
Clean the thread surface.

Apply the mounting-paste evenly onto the full circumference of the thread as illustrated in the figure.

### **ACAUTION**

Avoid ingestion of mounting-paste or contact with eyes. In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice. Avoid long-term contact with skin. In case of contact with skin wash off with soap and water.

For further information please read the 'Safety data-sheet (91/155 EEC), Anti-Seize 'High-Tech' Assembly Paste different packing sizes' by company WEICON GmbH & Co. KG, Königsberger Str. 225, D-48157 Münster, http://www.weicon.de





### Step 3

Push the attachment nut of the RCU down towards the RCU housing.

Place the RCU carefully over the adjustment spindle ③. Be sure the flat side of the spindle is aligned with the flat side of the antenna tilt control housing ④.

Carefully push the RCU onto the antenna until it is firmly seated.

# **ACAUTION**

The RCU must be kept in vertical alignment with the antenna during installation or the downtilt adjustment spindle ® may be damaged.



To set the downtilt angle exactly you must look horizontally at the scale. The lower edge of the gear wheel must be used for alignment purposes.



### Step 4

Hand tighten the RCU attachment nut (41 mm).

Torque setting: 11 lb ft (15 Nm)

Connect the RCU control cable.

## **ACAUTION**

In cases where a mechanical downtilt is installed do not set the mechanical tilt more than 14 degrees or the unit may be damaged.