INDEX

1. Safety-Instructions:

- Don't continue using the product if fit is damaged.
- Keep electronic assemblies and components away from children!
- Products that carry electric voltages must be handled by taking care about the valid instructions and regulations.
- If the product must be repaired, only use original spare parts! Using different parts may cause property damage and personal injury! The repair has only to be done by an expert!
- Before applying main-voltage the product must be securely build into a housing to provide protection against accidental contact!
- The installation has to be done by a skilled expert.
- Cables that carry dangerous voltages (e.g. main-voltage) must be installed according to the valid instructions and regulations. The needed safety-distances have to be maintained.
- Connection-cables have to be chosen according to the needed diameter.
- Before working on the product all supply-voltages have to be securely cut of.
- The product is designed to work in clean and dry areas inside buildings.
- Prevent the product of humidity, water and heat.
- Don't use the product in areas where explosive gases, vapour or dust are or may occur.
- Don't let the product fall or apply mechanical stress as the product may be damaged.

Follow the instructions in this installation-guide carefully. Ing.-Buero Alba de Schmidt cannot be held liable for damage of other equipment (e.g. rotor-control-boxes) due to wrong connections or handling.

2. General information according the installation:

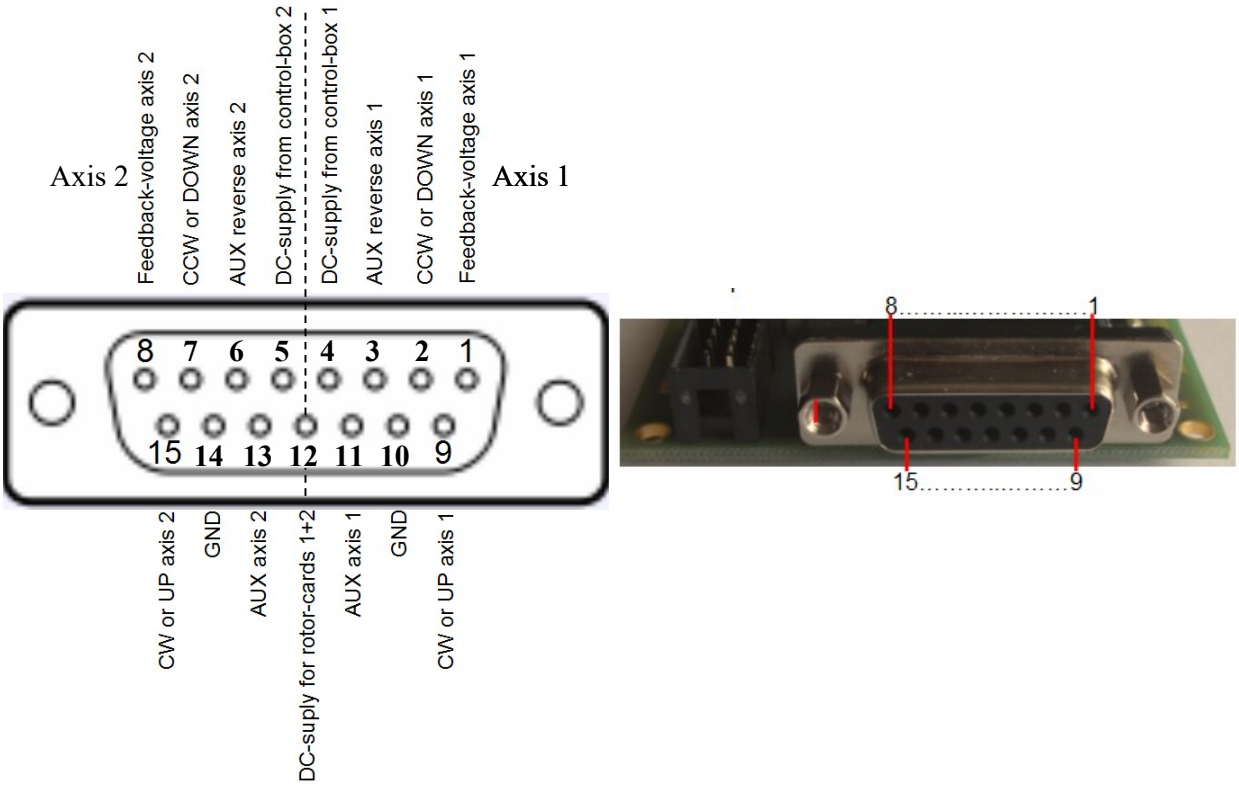
There are 2 ways of connecting a rotor-control-box to the ERC-M:

- the control-box has a remote-connector and can be connected directly to the D-SUB15 of the ERC-M without use of a Rotorcard.
- the control-box doesn't have a remote-connector and a rotor-card is needed

Therefore the installation-guide is divided into 2 parts: with or without use of Rotorcard(s).
This document is for installations without Rotorcard(s).

3. Connect Control-boxes to the D-SUB15 of ERC-M

All connections needed are available through the15-pin DSUB-connector.



All control-boxes (except the dual-axis control-boxes) can be connected to either axis 1 or axis 2 of the ERC-M. Therefore the connections are shown in the connection-tables for axis 1 and for axis 2.

If you use a single AZ-rotator, connect it always to axis 1.
If you use an AZ- and an EL-rotator, connect AZ to axis 1 and EL to axis 2

All connectors in this instruction are shown like this:

- looking from outside to the connectors of the control-boxes
- looking on the solder-pins of the connectors that fit into the control-box

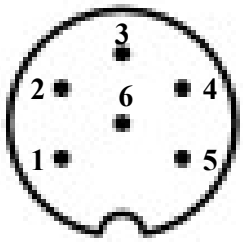
Create: ERC-51, ERC5A-P (Elevation), RC5A-3-P, RC5B-3-P


Rotor-specific information:

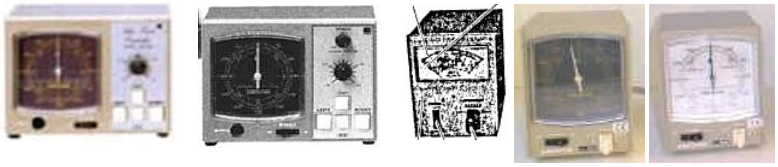
- The rotator only works with the remote-connector J1, if the switch S1 on the backside of the rotor-controller is in the lower position and if the switch on the front-panel is set to P.SET.
- Settings of AUX-relay in Service-Tool: SPEED REVERSE
- DC-supply of ERC-M through the remote connector: YES (11V / 400mA)
- 10(14) connected to the shielding of the connector

Function	6-pin DIN	D-SUB 15 axis 1	D-SUB 15 axis 2
Feedback voltage	1	1	8
CW/UP	2	9	15
Not used	3		
DC-supply	4	4	5
CCW/DWN	5	2	7
AUX	6	11	13
GND	Shield	10	14

6-pin DIN looking from outside to the connector of the control-box



Emotator: 747SRX, 750FXX, 1200FXX, 1300MSAX, 1800FXX, EV800X

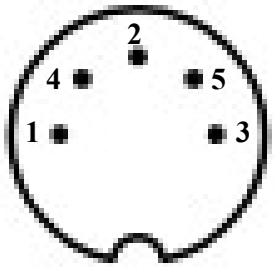


Rotor-specific information:

- Settings of AUX-relay in Service-Tool: NONE
- DC-supply of ERC-M through the remote connector: YES
- 10(14) connected to the shielding of the connector

Function	5-pin DIN	D-SUB 15 axis 1	D-SUB 15 axis 2
Feedback voltage	1	1	8
CW	2	9	15
Not used	3		
DC-supply	4	4	5
CCW	5	2	7
GND	Shield	10	14

5-pin DIN looking from outside to the connector of the control-box



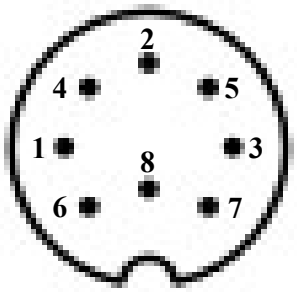
Emotator: EV-800DX (Azimuth&Elevation)

Rotor-specific information:

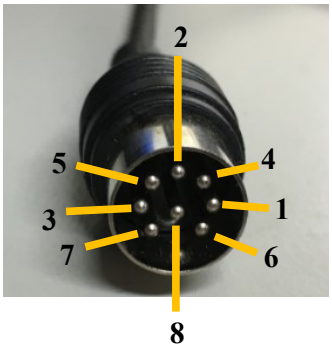
- Settings of AUX-relay in Service-Tool: NONE
- DC-supply of ERC-M through the remote connector: YES

Function	8-pin DIN	D-SUB 15 axis 1	D-SUB 15 axis 2
CCW	1	2	
CW	2	9	
UP	3		15
DWN	4		7
Feedback voltage AZ	5	1	
Feedback voltage EL	6		8
DC-supply	7	4	
GND	8	10	

8-pin DIN female connector
looking from outside to the control-box



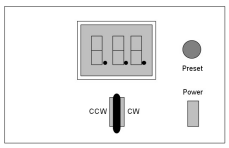
8-pin DIN male connector



If a cable with an 8-pin DIN-connector is used, the colours of the wires, that belong to the pins of the connector, must be identified:

- Dismantle the end of the cable and the end of the single wires.
- Measure the connection of the single wires with an Ohm-Meter / beeper against the pins of the male connector shown above (right picture).
- Note the corresponding colours of the single wires to the pins of the connector in the table above.
- Solder the wires to the D-SUB-connector.

PRO.SIS.TEL: Model B

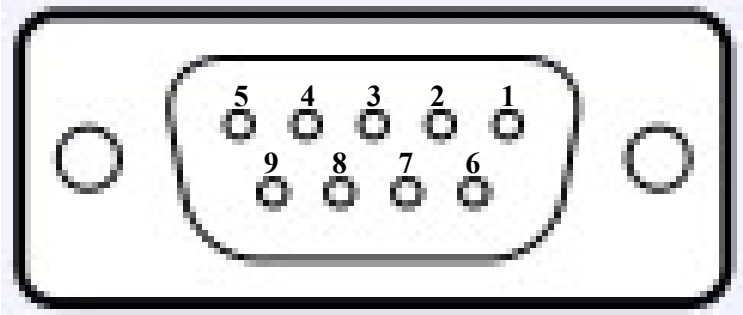


Rotor-specific information:

- Settings of AUX-relay in Service-Tool: NONE
- DC-supply of ERC-M through the remote connector: NO

Function	9-pin D-SUB	D-SUB 15 axis 1	D-SUB 15 axis 2
Not used	1		
Not used	2		
Not used	3		
Not used	4		
Not used	5		
GND	6	10	14
Feedback voltage	7	1	8
CW	8	9	15
CCW	9	2	7

D-SUB 9 looking from outside to the connector of the control-box



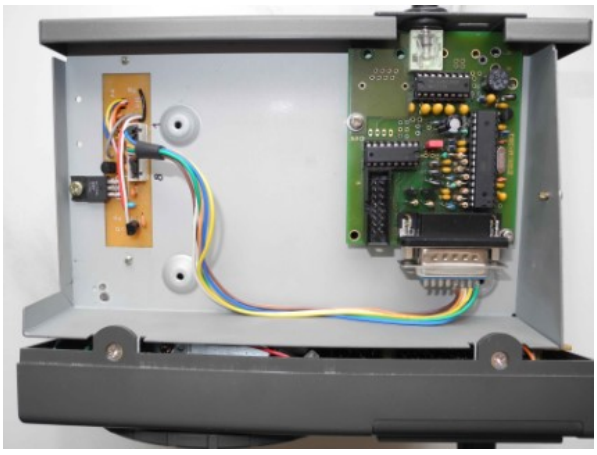
Yaesu/Kenpro : G/KR-800/1000/2700/2800 SDX

Rotor-specific information:

- The connector is inside the control-box in the upper part of the cabinet
- Settings of AUX-relay in Service-Tool: SPEED
- DC-supply of ERC-M through the remote connector: YES (12V / 100mA)

Function	8-pin flat connector	D-SUB 15 axis 1	D-SUB 15 axis 2
CW	1	9	15
CCW	2	2	7
AUX reverse	3	3	6
Feedback voltage	4	1	8
GND	5	10	14
Not used	6		
DC-supply	7	4	5
Not used	8		

8-pin flat connector looking from top to the connector inside the control-box



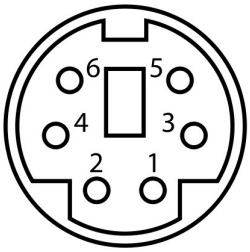
Yaesu : G-800DXA/C – G-1000DXA/C – G-2800DXA/C

Rotor-specific information:

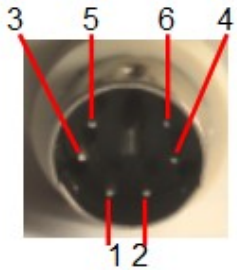
- Settings of AUX-relay in Service-Tool: SPEED
- DC-supply of ERC-M through the remote connector: NO

Function	6-pin Mini-DIN	D-SUB 15 axis 1	D-SUB 15 axis 2
CW	1	9	15
CCW	2	2	7
AUX reverse	3	3	6
Feedback voltage	4	1	8
GND	5	10	14
Not used	6		

6-pin Mini-DIN female connector looking from outside to the control-box



Cable with 6-pin Mini-DIN



If a cable with a 6-pin Mini-DIN-connector is used, the colours of the wires, that belong to the pins of the connector, must be identified:

- Dismantle the end of the cable and the end of the single wires.
- Measure the connection of the single wires with an Ohm-Meter / beeper against the pins of the male connector shown above.
- Note the corresponding colours of the single wires to the pins of the connector in the table above.
- Solder the wires to the D-SUB-connector.

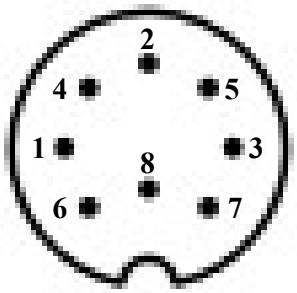
Yaesu/Kenpro : G/KR-5400/5500/5600 with DIN-Connector (Azimuth&Elevation)

Rotor-specific information:

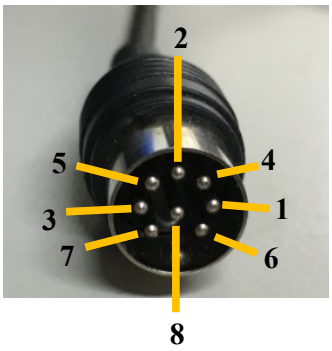
- Settings of AUX-relay in Service-Tool: NONE
- DC-supply of ERC-M through the remote connector: YES

Function	8-pin DIN	D-SUB 15 axis 1	D-SUB 15 axis 2
Feedback voltage EL	1		8
CW	2	9	
UP	3		15
CCW	4	2	
DWN	5		7
Feedback voltage AZ	6	1	
DC-supply	7	4	
GND	8	10	

8-pin DIN female connector
looking from outside to the control-box



8-pin DIN male connector



If a cable with an 8-pin DIN-connector is used, the colours of the wires, that belong to the pins of the connector, must be identified:

- Dismantle the end of the cable and the end of the single wires.
- Measure the connection of the single wires with an Ohm-Meter / beeper against the pins of the male connector shown above (right picture).
- Note the corresponding colours of the single wires to the pins of the connector in the table above.
- Solder the wires to the D-SUB-connector.

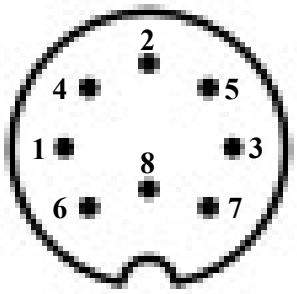
Yaesu : G-5500DC (Azimuth&Elevation)

Rotor-specific information:

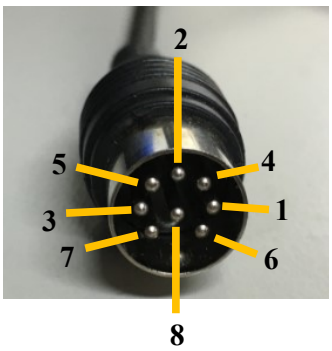
- Settings of AUX-relay in Service-Tool: NONE
- DC-supply of ERC-M through the remote connector: YES

Function	8-pin DIN	D-SUB 15 axis 1	D-SUB 15 axis 2
Feedback voltage EL	1		8
CW	2	9	
UP	3		15
CCW	4	2	
DWN	5		7
Feedback voltage AZ	6	1	
DC-supply	7	4	
GND	8	10	

8-pin DIN female connector
looking from outside to the control-box



8-pin DIN male connector



If a cable with an 8-pin DIN-connector is used, the colours of the wires, that belong to the pins of the connector, must be identified:

- Dismantle the end of the cable and the end of the single wires.
- Measure the connection of the single wires with an Ohm-Meter / beeper against the pins of the male connector shown above (right picture).
- Note the corresponding colours of the single wires to the pins of the connector in the table above.
- Solder the wires to the D-SUB-connector.