

PMUX-S (serial)

Contents of package

- 1 PMUX-S 'high current cell multiplexer'
- 1 Controller card RMUX/P (plug-in card for IM6/6eX)
- 1 cable SUBD44 to SUBD25 (RMUX/P->PMUX)
- 1 IM connector cable set (banana->Lemosa, red/black, blue/green)
- 1 PP connector cable set (banana/banana red/black, banana/Lemosa blue/green)
- 16 sets of cell cables (4 lines each: red/black, blue/green)
- 1 RMUX cable set (Lemosa/Lemosa, only use if RMUX is used without PMUX)

CAUTION

The PMUX-S is configured for sequentially measuring through up to 16 individual cells using either the internal potentiostat of the IM6/6eX **OR** an external potentiostat of the PP-series or an electronic load of the EL-series.



Please take care that only one potentiostat EITHER the internal OR an external is connected to the PMUX-S. If both potentiostats are connected at the same time the system will get damaged.



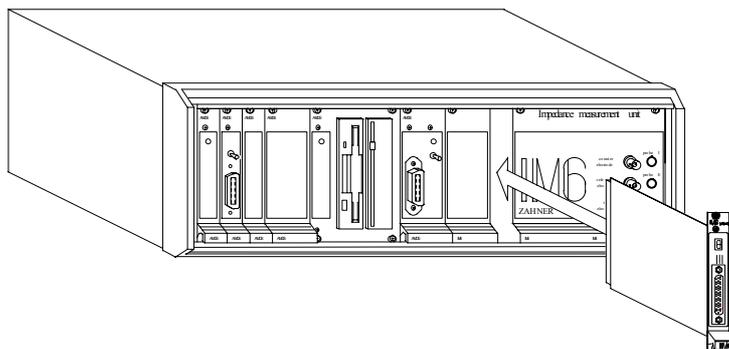
Please take care that the maximum current is 5 A. Higher currents will damage the PMUX-S.



If you intend to use the RMUX without the PMUX-S the RMUX hardware setting must be changed. Please contact ZAHNER for more information. The RMUX cable set is used only for that application.

Hardware installation

Switch off the IM6 and remove the dummy front panels named 'IM6 extension' **RIGHT** to the 'AHSI-2' card. Push in the **RMUX** card in one of the empty extension slots and fix the screws. If the **EPC40** for connecting the PP is not installed, do it now in the same way.



Connection of modules when using the internal IM-POT

1. Connect the PMUX-S to the RMUX/P using the multi-pin Sub-D/Sub-D cable. Connect the 44-pin (3-row) Sub-D connector to the RMUX/P and the 25-pin Sub-D connector to the CTRL terminal of the PMUX-S.
2. Connect the PMUX-S to the IM6/6eX using the two banana/Lemosa cables red/black and blue/green. Connect the banana plugs (red/black and blue/green) to the outlets **RE_{IM}** (green), **TES_{IM}** (blue), **CE_{IM}** (red), and **TE_{IM}** (black) of the PMUX-S. Connect the Lemosa plugs to the **Probe-I** and **Probe-E** outlets of the IM6/6eX.
3. **LEAVE** all connectors in the section **PP System** (TES_{IM}, RE_{PP}, CE_{PP}, and TE_{IM}) **UNCONNECTED !!**
4. Connect the channels you need (1 – 16) using all four lines each (RE, TES, CE, and TE) to the according electrodes or points of your cells. Channel 1 to cell 1, channel 2 to cell 2, etc.

RE = reference electrode (green)
TES = test electrode sense (blue)
CE = counter electrode (red)
TE = test electrode (working electrode) (black)

Connection of modules when using an external POT

1. Connect the PMUX-S to the RMUX/P using the multi-pin Sub-D/Sub-D cable. Connect the 44-pin (3-row) Sub-D connector to the RMUX/P and the 25-pin Sub-D connector to the CTRL terminal of the PMUX.
2. Connect the PP device to the EPC40 card as described in the PP manual.
3. Connect the PMUX-S to the PP using the thick banana/banana cable red/black and the banana/Lemosa cable blue/green. Connect the blue and green banana plugs of the banana/Lemosa cable to the **TES_{PP}** and **RE_{PP}** outlets of the PMUX-S and the Lemosa plug to the **Sense** outlet of the PP device. Connect the small banana plugs of the red/black to the outlets **CE_{PP}** (red), **TE_{PP}** (black) of the PMUX-S and the other end to the **Power** outlets of the PP.
4. **LEAVE** all connectors **RE_{IM}** (green), **TES_{IM}** (blue), **CE_{IM}** (red), and **TE_{IM}** (black) in the section **IM System UNCONNECTED !!**
5. Connect the channels you need (1 – 16) with all four lines each (RE, TES, CE, and TE) to the according electrodes or points of your cells. Channel 1 to cell 1, channel 2 to cell 2, etc.
6. Be careful not to exceed the maximum current of +5 A.