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.

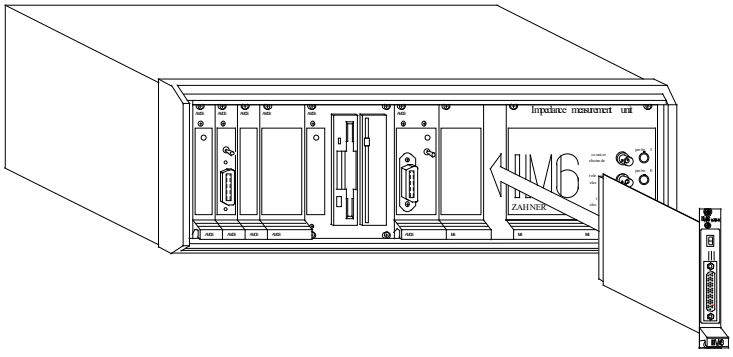
!	**Please take care that only one potentiostat EITHER the internal OR an external is connected to the PMUX-S. If both potentiostats are connected at the same time the system will get damaged.**

!	**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.