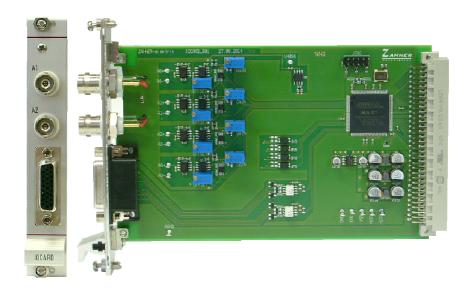


## **MIO**

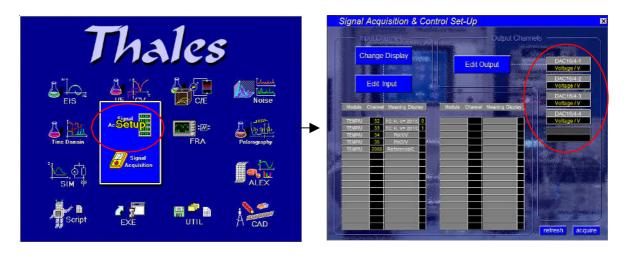
## **Analog Output Extension Board with Digital I/Os**



MIO is a member of the extension board family available for the Zahner Electrochemical Workstations. It allows to output up to four analog signals with a resolution of 16 bit and an output voltage range of  $\pm 10$  V.

Additionally the *MIO* provides four digital inputs and four isolated output channels. Up to four *MIO* addon cards can be addressed by the Thales software so that 16 analog output channels can be handled.

The *MIO* channels are configured from the Thales software directly. Point with the mouse cursor on the *Signal Acq.* -> *Setup* Icon to open the *Signal Acquisition Setup* page.

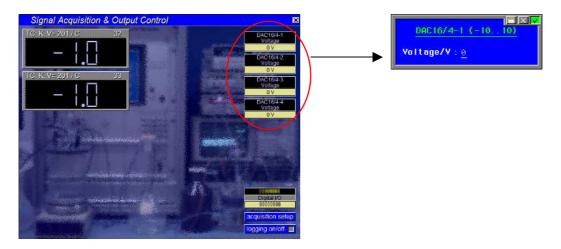




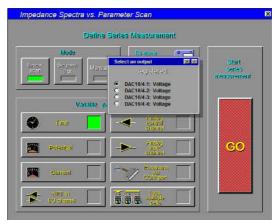
Here you input the "physical meaning", the "physical unit", and the "proportionality factor" for each output channel.



On the Signal Acquisition & Output Control page you enter the voltages to be output.

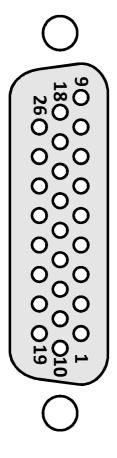


On the *Impedance Spectra vs. Parameter Scan* page you can select an analog control channel for EIS series measurements.





## Pin Assignment SUB-D HD26



1 digital input #4 + 2 digital input #4 -3 digital input #3 + 4 digital input #3 -5 digital input #2 + 6 digital input #2 -7 digital input #1 + 8 digital input #1 -9 GND 10 digital output #4 + 11 digital output #4 -12 digital output #3 + 13 digital output #3 -14 digital output #2 + 15 digital output #2 -16 digital output #1 + 17 digital output #1 -**18 GND** 19 analog output #4 + 20 analog output #4 -21 analog output #3 + 22 analog output #3 -

23 analog output #2 + 24 analog output #2 -25 analog output #1 + 26 analog output #1 -

## **Technical Specifications**

Card type	IM6/Zennium extension slot card
Number of analog ouput channels	4
Analog output range	±10 V
Resolution	16 bit
Number of digital input channels	4
Number of digital output channels	4
Digital output type	isolated (photo relais with 300 mA <sub>max</sub> )