
Installation notes for MultiWE32

1. MultiWE32 module

The Ivium Technologies MultiWE32 is a high quality electronic module for use in combination with the Ivium CompactStat or IviumStat. It enables electrochemical potentiostatic control and impedance measurements of 32 working electrodes simultaneously versus one counter electrode and one reference electrode.

2. Technical Specs

The MultiWE32 module will accommodate cells with 32 Working Electrodes, that share a single CE and RE. The potential is applied to all channels simultaneously, thus applied E is **not** multiplexed!

Each channel:

- Max current +/- 1mA
- Applied potential +/-20V (depending on controlling potentiostat)
- Programmable offset +/-2V, 0.0625 mV resolution, independent for each channel
- 2 modes:
 - Simultaneous
 - CV/LSV/DPV/SQRwave/ChronoAmperometry
 - Data acquisition of 32 WE currents at the same time,
 - maximum rate of 10 samples/sec (0.1sec interval time)
 - Sequential
 - All electrochemical potentiostatic methods possible
 - Frequency response analysis
- Voltage Input: 5V \pm 0.2Vdc
- Max. input current: 400mA
- Max. power: 2W

3. Software instructions: Download latest version of the IviumSoft

The latest version of the IviumSoft can be downloaded at:

www.ivium.com/Support

This will give you the latest version of the IviumSoft.exe. Replace the one in your C:\Iviumstat-filedirectory with this one. Then open the IviumSoft and upgrade the firmware of your IviumStat (for ref. see User Manual).

4. Connection to potentiostat

To connect the MultiWE32 to an IviumStat or CompactStat:

1. Take the 40 cm M/F HD15 cable. Insert the M-side into the Cell-connector of the IviumStat or CompactStat. Insert the F-side into the HD-15 connector at the front of the MultiWE32.
2. Insert the multi electrode cable to the HD-37 connector at the back of the MultiWE32.
3. Connect the 5Vdc power adapter to the MultiWE32 (at the back). The green power LED at the front will now light up.
4. Switch in the IviumStat or connect the CompactStat.

The MultiWE32 is now ready for use.

5. Multi Electrode Cable

In the table below the color code of the individual electrode cables is given for each of the electrodes.

Note: both RE shield leads are present in the cable as shielding for the RE, but they are not carried out to a banana plug.

MultiWE32 cable assignment		
Electrode	Color	HD37 Pin number
CE	black	21
CE shield/Ground	green	3
RE	blue	20
RE shield	<i>white (not external lead)</i>	<i>1</i>
RE shield	<i>brown (not external lead)</i>	<i>2</i>
WE1	brown-blue	22
WE2	yellow	4
WE3	white-red	23
WE4	pink	5
WE5	brown-red	24
WE6	grey	6
WE7	white-black	25
WE8	red	7
WE9	brown-black	26
WE10	violet	8
WE11	yellow-grey	27
WE12	grey-pink	9
WE13	green-grey	28
WE14	red-blue	10
WE15	yellow-pink	29
WE16	green-white	11
WE17	green-pink	30
WE18	green-brown	12
WE19	yellow-blue	31
WE20	white-yellow	13
WE21	green-blue	32
WE22	yellow-brown	14
WE23	yellow-red	33
WE24	white-grey	15
WE25	green-red	34
WE26	brown-grey	16
WE27	yellow-black	35
WE28	white-pink	17
WE29	green-black	36
WE30	pink-brown	18
WE31	pink- blue	37
WE32	white-blue	19