

## **CALIBRATION of the x0.1 RANGE LOW VOLTAGE HEADSTAGE (SEC SYSTEM)**

This headstage has an output current range of  $\pm 15\text{nA}$  into maximum  $100\text{ M}\Omega$ , and the noise and bias current are reduced by a factor of 10 compared to the standard headstage. Therefore it is recommended for whole cell patch clamp recordings, although it can be used also with high resistance sharp microelectrodes.

All **current** related signals have to be divided by 10.

- CURRENT DISPLAY: XXX pA /no decimal point (100 = 100 pA)
- HOLDING CURRENT: XXX pA (100 = 100 pA)
- Input sensitivity: BNC labeled 1 nA/V has now 0.1 nA/V i.e. 1V = 100 pA  
BNC labeled 0.1 nA/V has now 0.01 nA/V i.e. 1V = 10 pA)
- Output sensitivity: 1V/nA-100V/nA
- BRIDGE BALANCE: (XXX) x10 M $\Omega$
- R<sub>EL</sub> mode display: XXXX M $\Omega$  (i.e. 10 is 100 M $\Omega$ )

The **potential** input and output signals are **not** affected.