LabTrax 8/16 Internal NOTES

M-B Factors standalone program for LabTrax 8/16 acquisition board allows the use of Input and Output channel calibration factors (M and B factors), as well as factory settings of the calibration factors and maximal range for the selected motor, without using the MDAC interface.

By setting these values the M-B Factors standalone program stored permanently channel Input and Output factors (M-B factors), as well as calibration factors for the selected motor on LabTrax 8/16 acquisition board, which are loaded by MDAC. Changes can only be made WPI. The settings are compatible with older version of MDAC.

First, select the VISA COM port for the LabTrax 8/16 acquisition board.
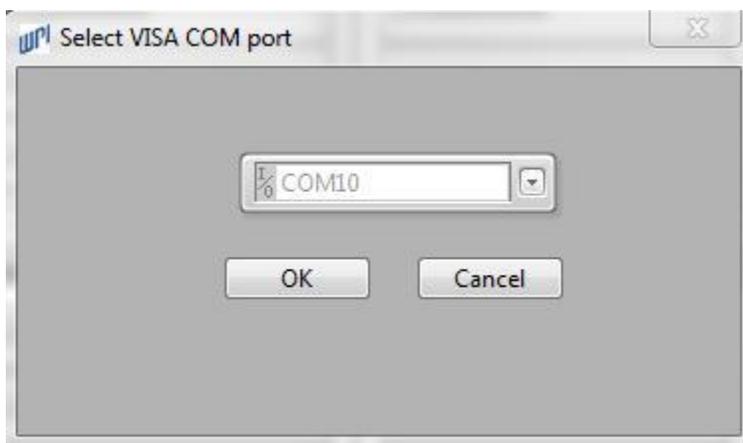
Fig. 1

The LabTrax 8/16 Calibration pop-up window opens.
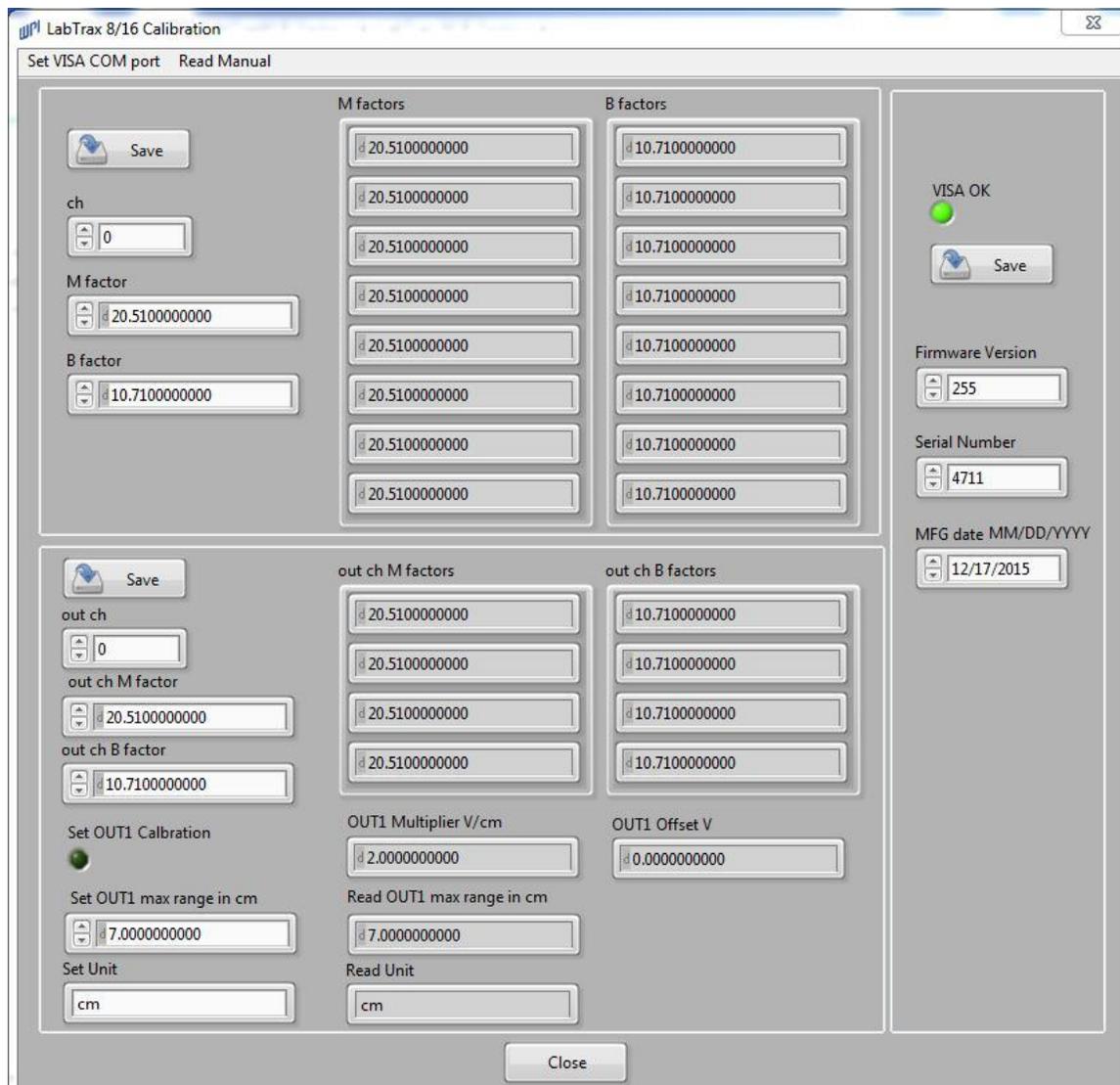
Fig. 2

As MDAC can be used as an 8-channel interface, all 8-Input channels are displayed and can be modified (fig. 2).

- To set **Firmware Version**, **Serial Number** and **MFG date**, change the value in the corresponding field (Fig. 2). Press **Save** to store the data in the LabTrax 8/16.

- To set Channel Input M-B factors, select the desired channel (**ch**), change the **M factor** and/or **B factor** value (Fig. 2). Press **Save** to store the data in the LabTrax 8/16. The modified input M- and B- factor is displayed in the **M factors** and **B factors** array.
  Repeat this action for each input channel.

- To set Channel Output M-B factors, select the desired channel (**out ch**), change the **out ch M factor** and/or **out ch B factor** value (Fig. 2). Press **Save** to store the data in the LabTrax 8/16. The modified output M- and B- factor is displayed in the **out ch M factors** and **out ch B factors** array. For this action, the **Set OUT1 Calibration** LED is not activated.
Repeat this action for each output channel.
- To set the Motor calibration values, activate the **Set OUT1 Calibration** LED (Fig. 3). To change the motor calibration values change the **OUT1 Multiplier** value and/or **OUT1 Offset** value, using the corresponding unit. The maximal usable range of the motor can be changed in the field **Set OUT1 max range**, as well as the used unit by **Set Unit**. Press **Save** to store the data in the LabTrax 8/16. The modified calibration values are displayed in the field **OUT1 Multiplier**, **OUT1 Offset**, **Read OUT1 max range** and **Read Unit**.
Calibration values are set in V/Unit for the multiplier and Volts for the offset.
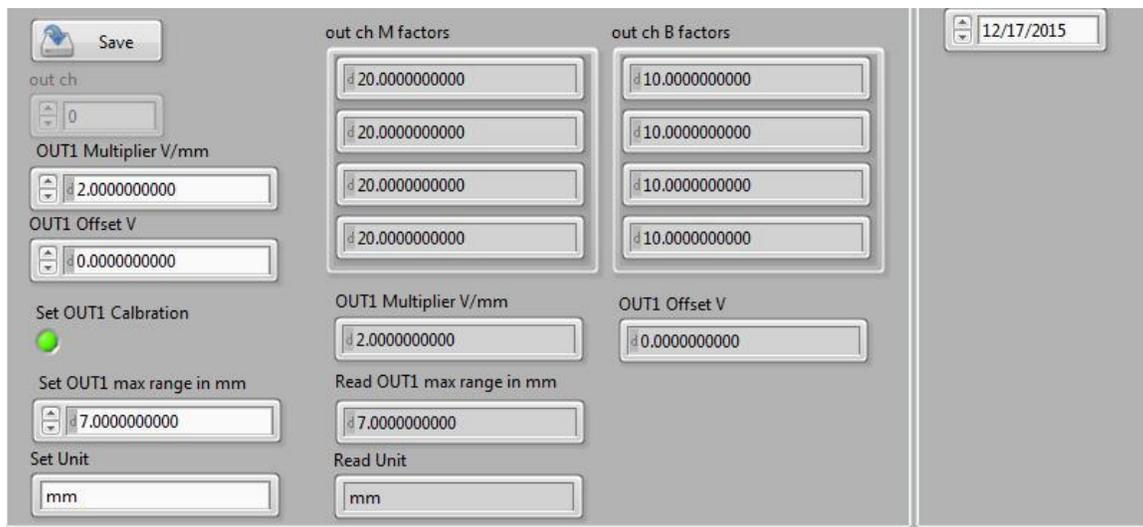
Fig. 3

Remark: Motor calibration values and Motor maximal range are used in MDAC, because the position protocol uses length units to indicate the desired amplitude. The Motor max range value, checks during the programming if the desired amplitude is available for the selected motor.