Force Sensor djb microtech

Installing the Software

To operate the Force Sensor you require version 1.80 or greater of the ALBA Core.

If you require to install the software then place ALBA Disk 1 in your drive. If the installation does not start automatically then type D:\setup.exe from the "run" command where D is the letter of your CD-ROM.

There are three parts to the installation:

The first part installs the latest ALBA core, the Help file and manual.

Next the Disk 1 Applications are installed.

Finally you are asked if you wish to install the Adobe Acrobat Reader if you do not already have it installed.

Note that if in the future you wish to uninstall the ALBA software there are two parts to uninstall: the ALBA Core, and the Applications.

Connecting your Force Sensor

Connect the plugtop power supply to the ALBA Interface then connect the serial cable from the PC to the Interface.

Connect the Force Sensor to Channel 3 or 4 on the ALBA Interface.

Using the Software

The Force Sensor uses the Investigator software.

Click on the ALBA icon on your desktop to launch the software. Depending on what was last connected to your PC you may see the following three screen-shots - even though you have connected the serial cable and powered the Interface.



Select which COM (serial) port	t your ALBA device is connected to.	
If you prefer, select "Auto-Find" t	to find the ALBA device automatically.	
Press "Cancel" to continue w	vithout an ALBA device connected.	
🔘 СОМ 1	🔘 СОМ 5	
🔘 СОМ 2	🔘 СОМ 6	
🔿 СОМ З	🔘 СОМ 7	
💽 COM 4	🔘 СОМ 8	
OK Au	uto-Find Cancel	
	45	



When you select Auto-Find your PC examines each serial port in turn to see if it can identify any hardware. Currently the software supports the ALBA Interface, Ranger, Power-Energy-Cost Meter and the A & D range of Balances. On future occasions, if you use the same serial port, the software will automatically detect the hardware connected to the serial port that you are using. Click on the GO icon to select the Investigator.

Make your choices on :

- how you wish the results displayed
- the number of readings
- the logging interval
- the range i.e. $\pm 10N \text{ or } \pm 50N$
- smoothing on or off

Click the Channels Tab and ensure that the Force Sensor has been recognized by the software.

General	Channels	Calibration	rigger Output X	Output Y L	.oad/Save
Interfa	ce Connec	tion			
	۲	Live (Connected	to PC)	ORem	ote
Shown	During Lo	gging			
0	Table	🔘 Graph	💿 Both	🔘 Meters	(use Table)
- Run P	arameters -				
Numbe	er of Readir	ngs (max 65000):	100 🗹	Continuous	Smooth data
Loggin	g Interval:		100 ms 🔻		min 2 max
			ОК	Car	ncel Help

General	Channels	Calibration	Trigger Outp	out X Output	Y Load/	Save	
Analog	jue Input: C	hannel 1					
🔘 0 to	+5V (🔵 -5 to +5 V	🔵 0 to +10	V 🔿 -10	to +10 V	💽 not u	used
Analog	jue Input: C	hannel 2					
🔿 0 to	+5∨ (🔵 -5 to +5 V	🔿 0 to +10	V 🔿 -10	to +10 V	💿 not u	used
Connec The se	entitying Se st any self-ic nsors found	nsors dentifying sens l are shown be	ors which you low:	want to use to	analogue i	inputs 3 o	r 4.
Analog	ue Input 3:	Force [N]		-1() to +10N		X
Analog	ue Input 4:	Sensor No	Found	-50) to +10N) to +50N		
				ок	Cancel		Help

The ALBA software has a default calibration for both ranges of the force sensor. However users may wish to calibrate the sensor using the ALBA software. This is done in the usual way - if unsure then follow the steps in the Help, 'How to', 'Calibrate a sensor.' The calibration can be allocated to the channel that the force sensor is connected to.

Meter Display

Users who wish the screen to be filled with a large meter display rather than log data, need only tick the Meters box on the first screen of the Investigator.

General	Channels Calibration Trigger	Output	X Output	Y Load/Save	
Analogu	e Input: Channel 1				
Use	Calibration		02		~
Analogu	e Input: Channel 2				
Use	Calibration		02		~
Self-ider	ntifying Sensors				
The Self	den de la company de la company de				
110.000	-identifying sensors connected a	re showr	1 Delow.		
, 10 3 60	Identifying sensors connected a	lie snowr Use	1 Delow.	Calibration	
Input 3:	Force [N]	Use Vse	02	Calibration	~
Input 3:	Force [N] Sensor Not Found	Use	02 Light Volts	Calibration	~
Input 3:	Force [N] Sensor Not Found	Use Vse	02 02 Light Volts 02 Light Volts	Calibration	•
Input 3:	Force [N] Sensor Not Found		02 02 Light Volts 02 Light Volts Force_10N	Calibration	

The Dual Range Force Sensor is supplied to djb microtech by Vernier Software and Technology. djb microtech strongly recommends that you read the instruction sheet supplied by Vernier.

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