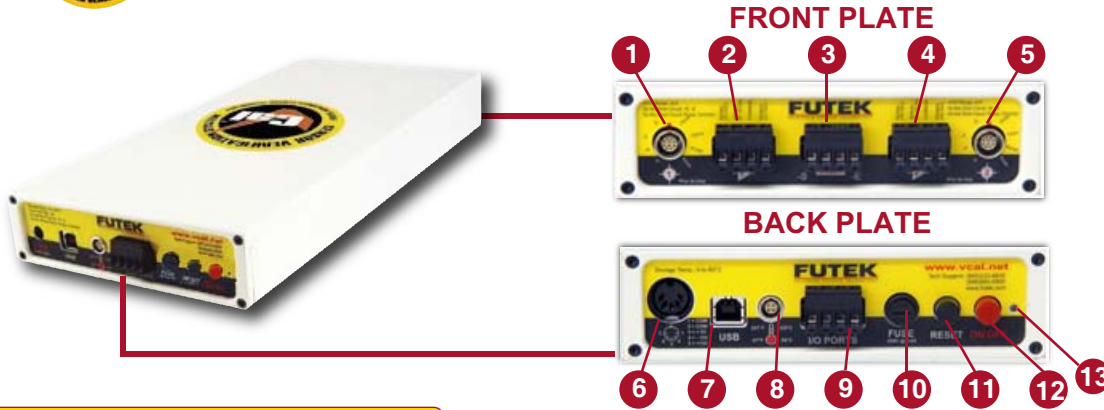




# VCal™ System & Accessories



1. Ch. 1 Strain Gage Sensor Connection
2. Ch. 1 Amplified VDC or mA Sensor Connection
3. Shunt Cal Connection
4. Ch.2 Amplified VDC or mA Sensor Connection
5. Ch. 2 Strain Gage Sensor Connection
6. DC Power Supply 15VDC, 2A(MAX)
7. USB Connection
8. Temperature Input
9. I/O Connection
10. Fuse
11. RESET Switch
12. ON/OFF Switch
13. Power LED

## STANDARD ACCESSORIES



## OPTIONAL ACCESSORIES



## REFERENCE SENSORS

Futek Certified Reference Sensor

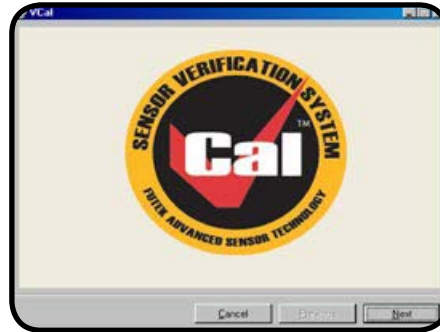




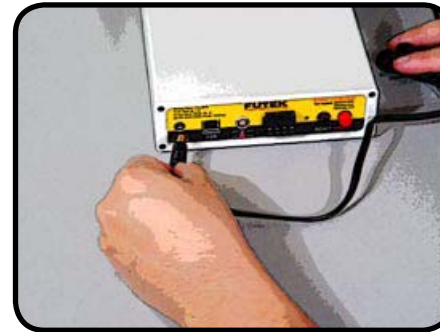
# Setting Up Your VCal™ (1)



**1** Insert CD.



**2** Follow steps and proceed with installation.



**3** Connect power supply jack.



**4** Connect USB cable.



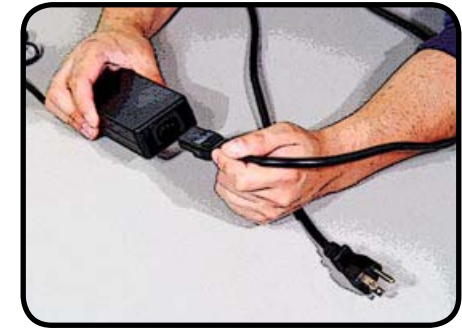
**5** Connect temperature probe.



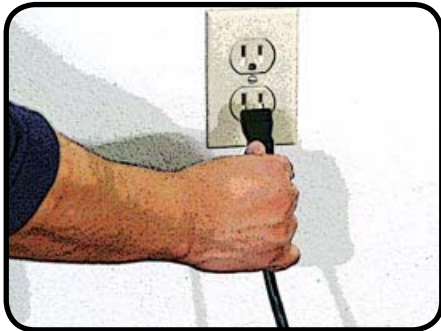
**6** Connect USB cable to PC.



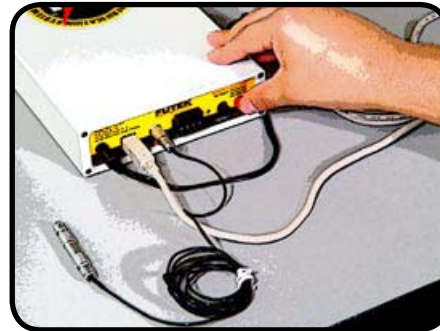
**7** Ready for power connection.



**8** Connect AC cable to power supply.



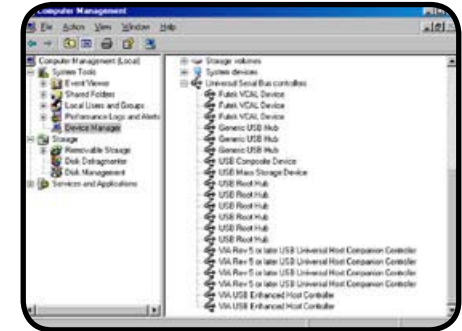
**9** Connect to AC power.



**10** Turn VCal power switch to ON.



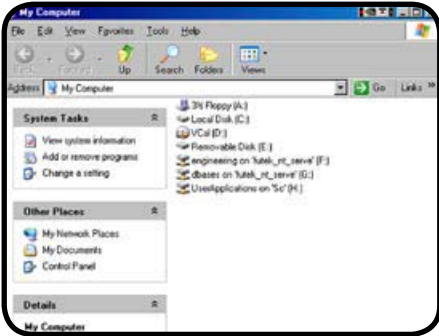
**11** New Hardware Wizard will guide you with driver installation.



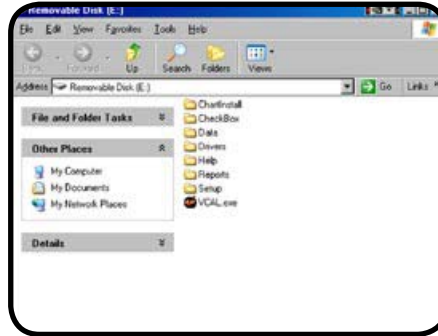
**12** Device Manager will show you correctly installed drivers. If "Futek VCal Device" is not properly initialized, turn power OFF then ON.



# Setting Up Your VCal™ (2)



**13** Open My Computer and look for Removable Disk (:X) (Note: X could be any drive mapped).



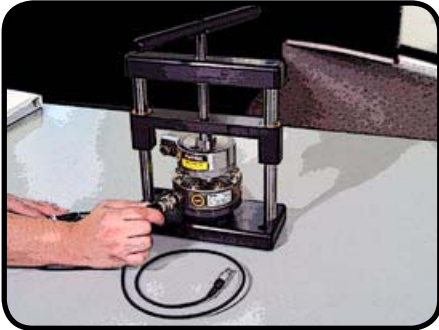
**14** Locate VCAL.EXE and execute program.



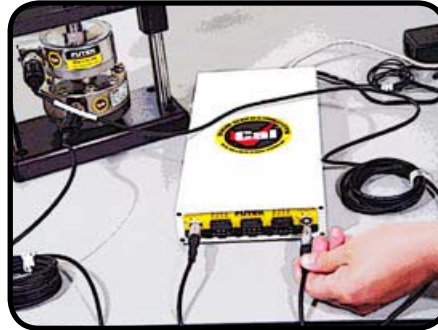
**15** On the login screen choose your company name and enter "VCAL1234" default password. (Note: This password can be changed at any time).



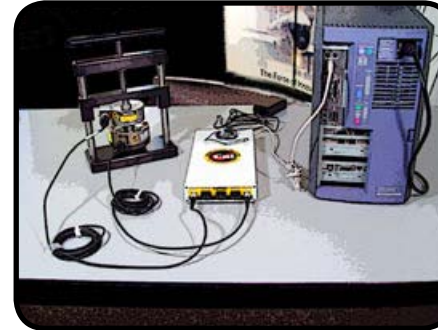
**16** Install your VCal reference sensor and sensor under test on your loading fixture.



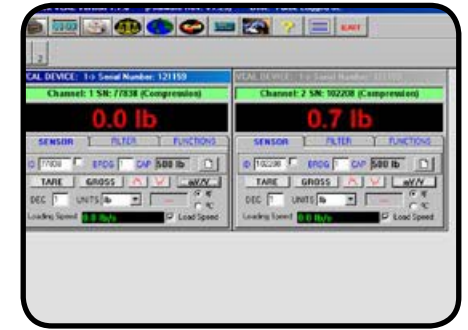
**17** Connect your cable to each sensor.



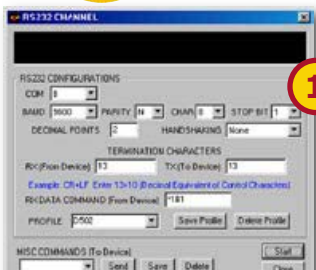
**18** Connect 10 pin connector to VCal.



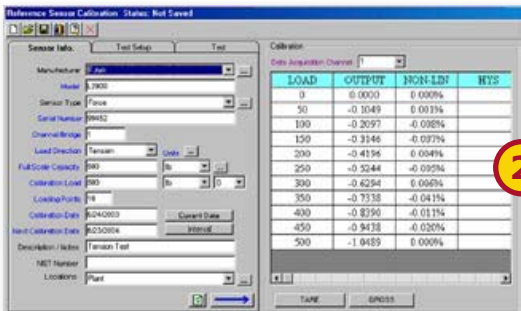
**19** Your VCal is ready to use.



**20** Please proceed to Software Diagram.



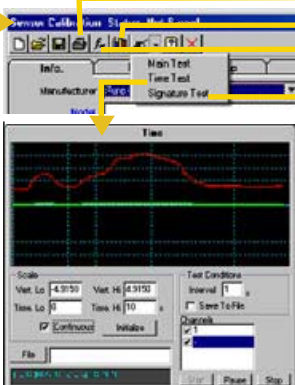
1. RS232 Setup (VCal Manual p. 23)



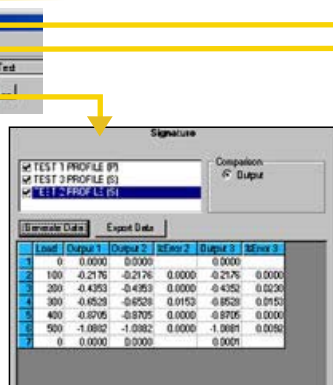
2. Reference Channel Calibration (VCal Manual p. 24)



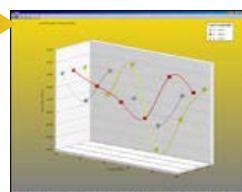
3. Test Sensor Calibration (VCal Manual p. 29)



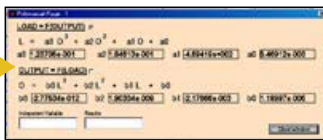
3-1. Time Test



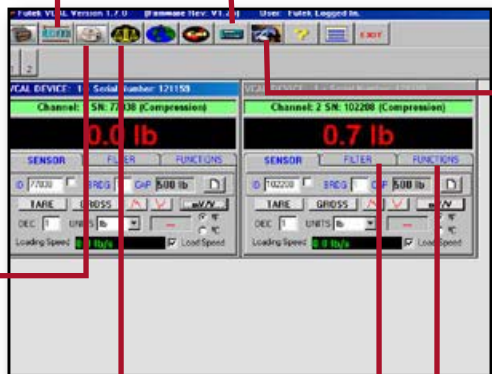
3-2. Signature Test



3-3. 3-D Graph



3-4. Polynomial Windows



## MAIN SCREEN



4. Calculator Tools (VCal Manual p.34)



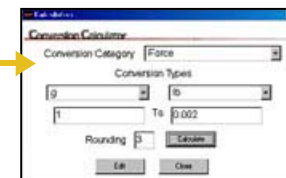
5. Management Tool (VCal Manual p. 34)



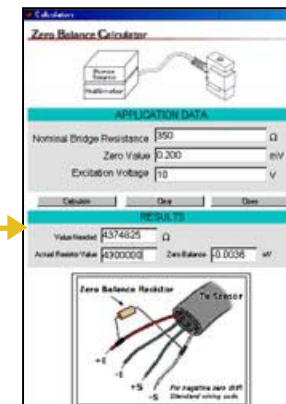
6. Filter (VCal Manual p. 21)



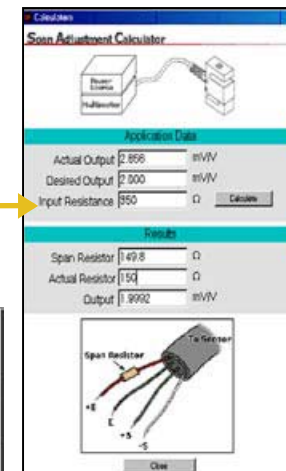
7. Function (VCal Manual p. 22)



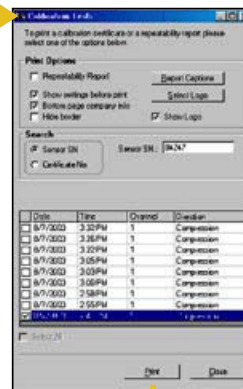
4-1. Unit Conversion Calculator



4-2. Zero Balance Calculator



4-3. Span Adjustment Calculator



3-5. Print Certificate



3-5-1. Calibration Certificate