TOTAL SOFTWARE SOLUTIONS

FOR LABORATORIES & SERVICE CENTRES

PROCAL

PCT PROCAL-TRACK

PROCAL / PROCAL-TRACK EVALUATION GUIDE

TRANSMILLE

SOLUTIONS IN CALIBRATION

INSTALLING THE PROGRAMS

The CD provided has both ProCal and ProCal-Track, which have separate installation programs. Please follow the instructions below to install the programs and example files :

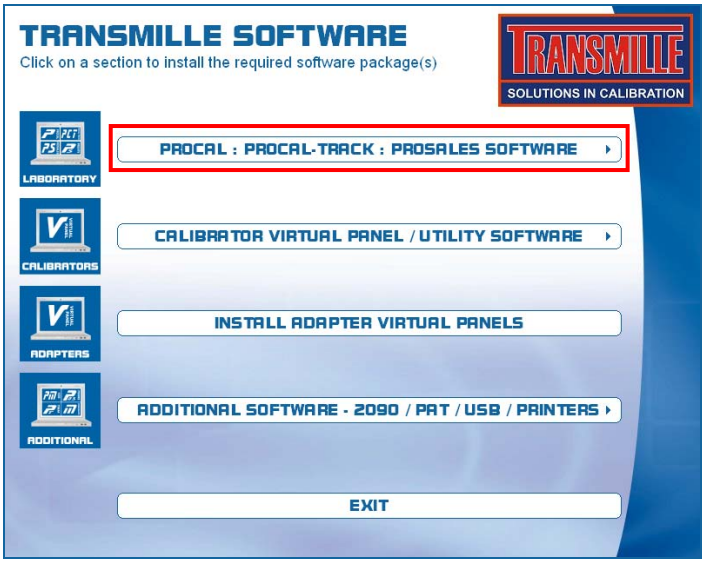
This disk contains the full program versions together with many support files, uncertainty templates and tables for ISO17025, procedures, reports/certificates files in Crystal Reports, etc. plus an example instrument database with 5 instruments, which can be used as examples to evaluate the software.

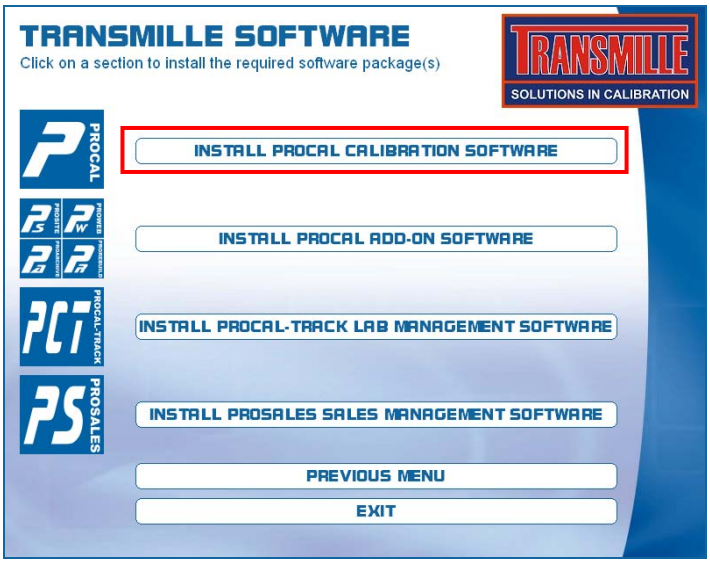
Note to use GPIB control of instruments a NI GPIB(IEEE488) interface will be needed.
To control a Transmille calibrator, use the USB Interface (or USB to RS232 converter if a Serial device).
To evaluate without a system calibrator or DMM select **DEMO** for instruments in ProSet.

The software will work fully for 60 days after installation. After this time a USB 'dongle' will be required to run ProCal and ProCal-Track (separate licence required). The dongle is supplied by Transmille when the software is purchased.

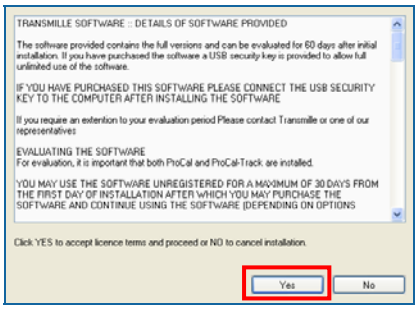
INSTALL PROCAL FROM THE CD

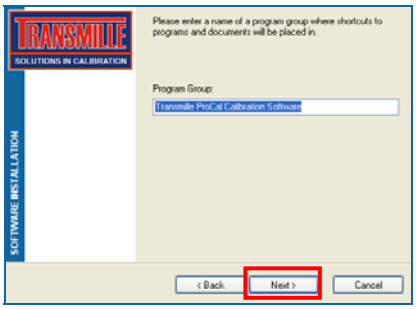
Put the Transmille CD in the drive, and allow to auto run

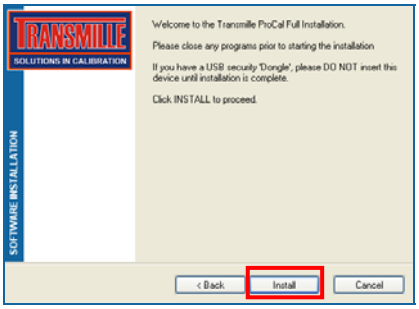




Step through the licence information and program group setting, then click **Install** to proceed :

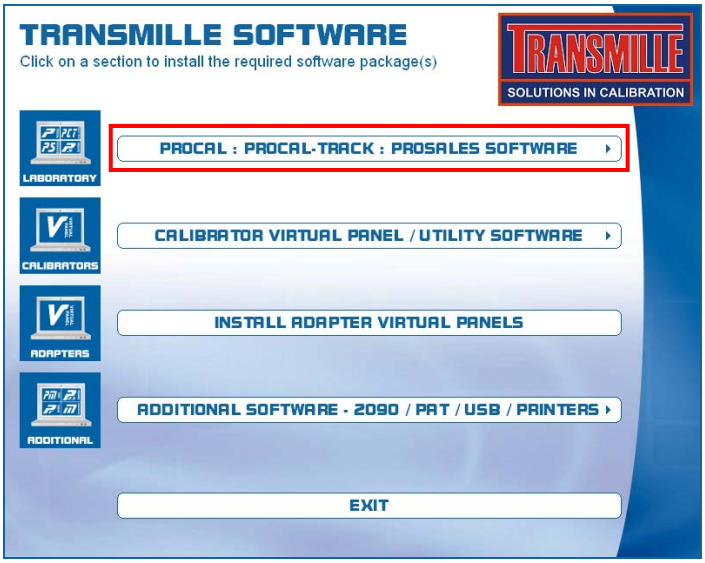


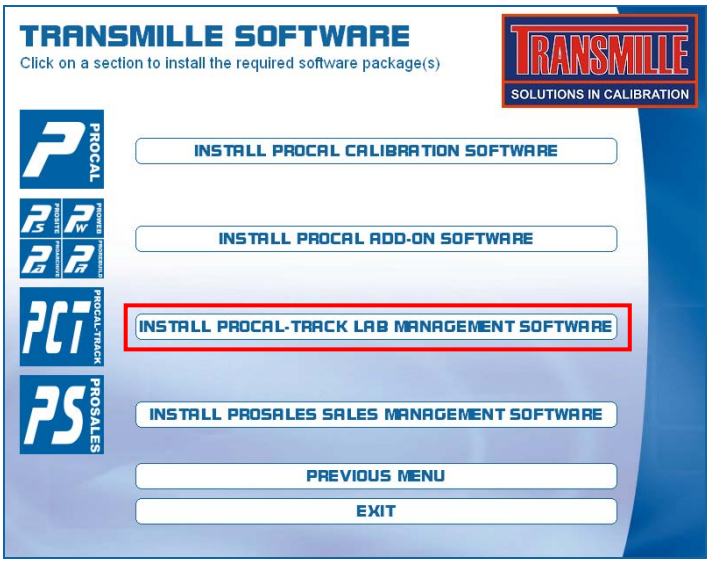




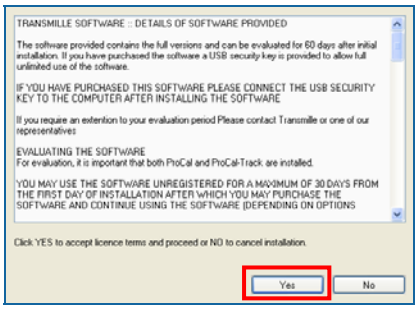
INSTALL PROCAL-TRACK FROM THE CD

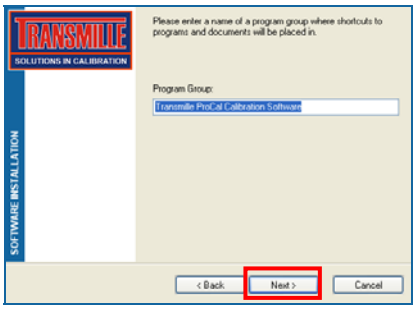
Put the Transmille CD in the drive, and allow to auto run

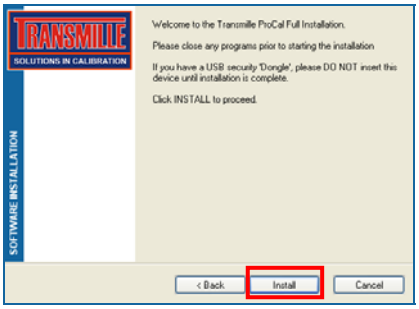




Step through the licence information and program group setting, then click **Install** to proceed :







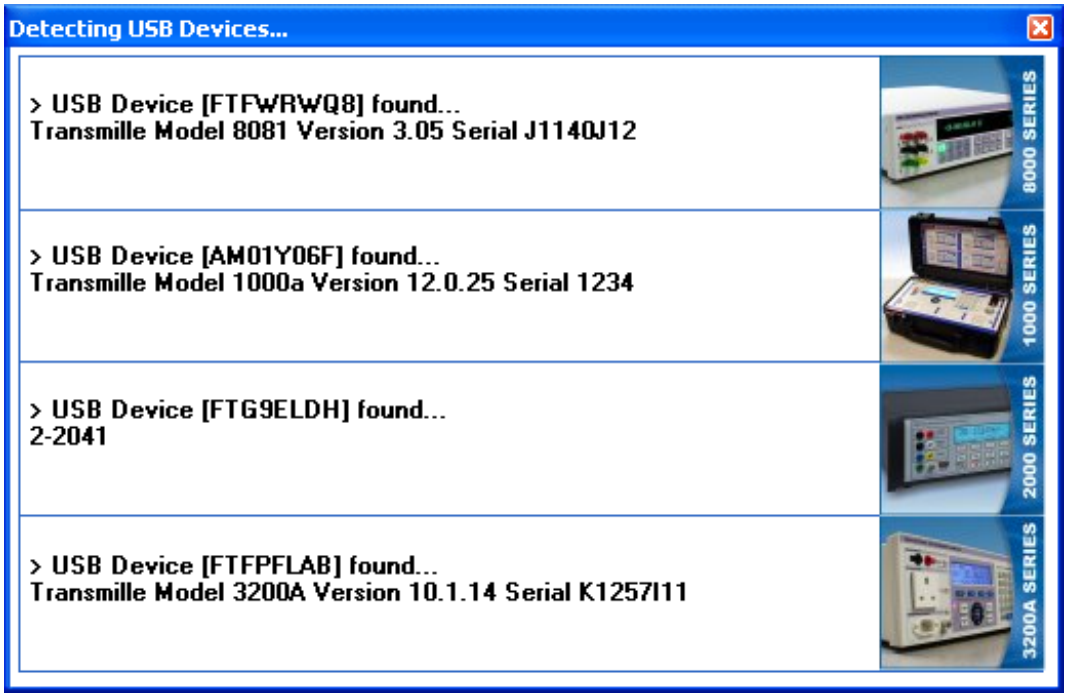
PROCAL SETUP WIZARD : INTRODUCTION

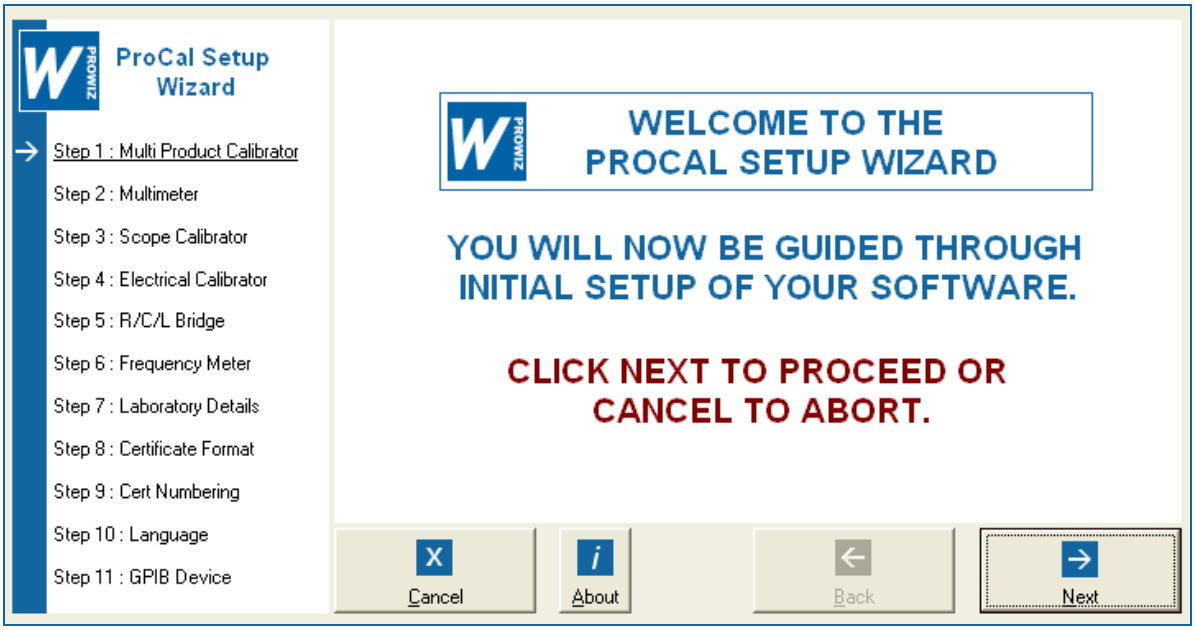
Following the ProCal installation, the computer may need to be restarted.

After the restart (if needed) the ProCal installer will automatically start the ProCal Setup Wizard.

The ProCal Setup Wizard will guide the user through setting up the software for the first time.
It is also useful to run if any changes to setting are required at any time after the initial installation.

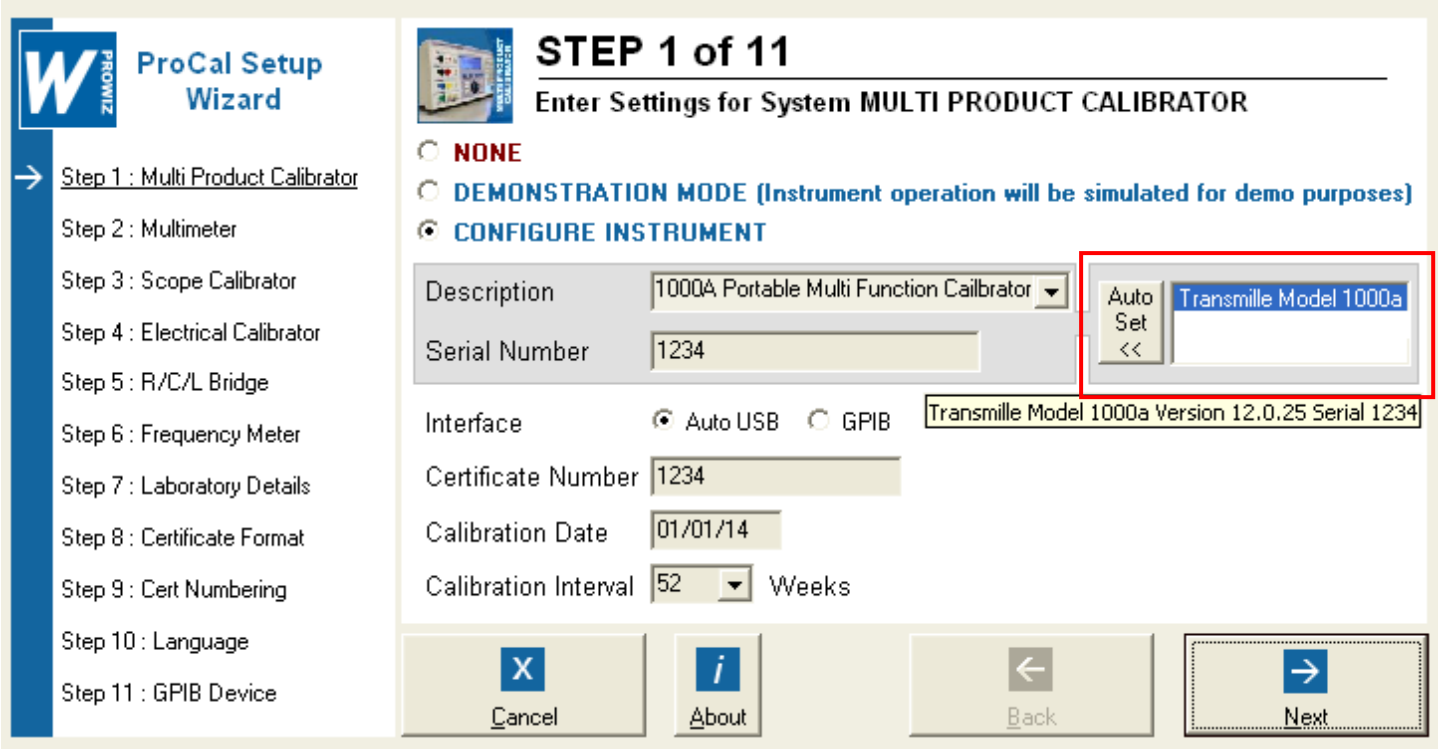
INSTRUMENT DETECTION
If any Transmille USB instruments or USB to RS232 adapters (FTDI type) are connected to the PC, the Wizard will detect and store the device information, ready for selection whilst configuring the system reference instruments.





The Wizard provides step-by-step assistance in configuring reference instruments, laboratory settings and other important settings in one easy to use program. If at any time information is not correctly entered, the Wizard will assist with help messages to indicate which information is not correct, ensuring the program is correctly set up ready for use on completion of the Wizard 11-step process.

PROCAL SETUP WIZARD : STEP 1



Step 1 - Set up the system multi product calibrator.

NONE
If you do not require a multi product calibrator to be configured in your software click NONE

DEMONSTRATION MODE
If the software is being used without any instruments connected, the DEMONSTRATION MODE setting can be selected to simulate the operation of the software without controlling a calibrator.

SETTING UP A CALIBRATOR

Description and Serial Number
Select the instrument from the list displayed on the right hand side of the screen and click **AUTO SET**,
or select the instrument description from the list and enter instrument serial number.

Interface
Set **Auto USB** if the instrument is USB controlled or
GPIB (enter address) if the instrument is GPIB controlled.

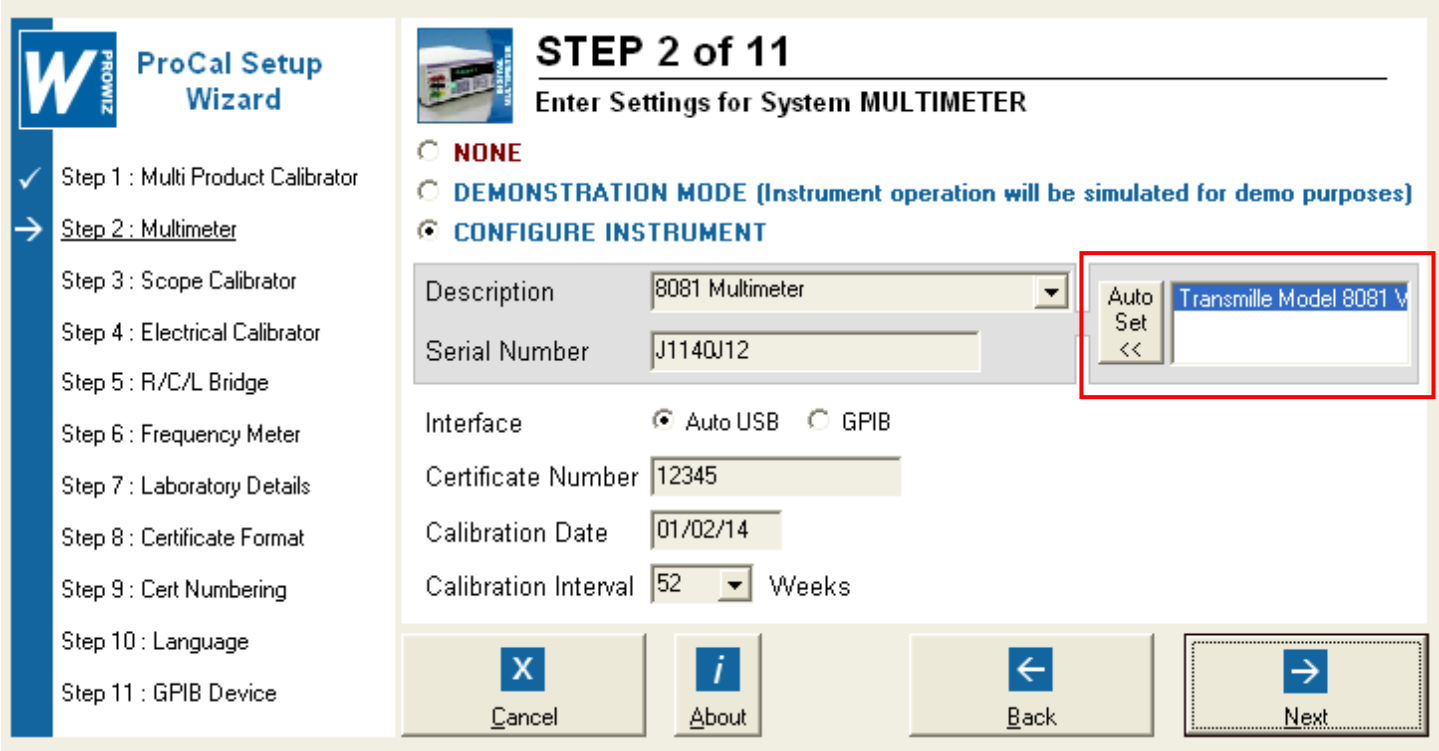
Certificate Number
Enter the certificate number of the instrument

Calibration Date
Enter the calibration date of the instrument in the format dd/mm/yy

Calibration Interval
Enter the calibration interval of the instrument in weeks

Click next to proceed to the next step – the Wizard will check the information entered and advise if any information is missing or incorrect.

PROCAL SETUP WIZARD : STEP 2



Step 2 - Set up the system multimeter.

NONE
If you do not require a multimeter to be configured in your software click NONE

DEMONSTRATION MODE
If the software is being used without any instruments connected, the DEMONSTRATION MODE setting can be selected to simulate the operation of the software without controlling a multimeter.

SETTING UP AN INSTRUMENT

Description and Serial Number
Select the instrument from the list displayed on the right hand side of the screen and click **AUTO SET**,
or select the instrument description from the list and enter instrument serial number.

Interface
Set **Auto USB** if the instrument is USB controlled or
GPIB (enter address) if the instrument is GPIB controlled.

Certificate Number
Enter the certificate number of the instrument

Calibration Date
Enter the calibration date of the instrument in the format dd/mm/yy

Calibration Interval
Enter the calibration interval of the instrument in weeks

Click next to proceed to the next step – the Wizard will check the information entered and advise if any information is missing or incorrect.

PROCAL SETUP WIZARD : STEP 3

Step 3 - Set up the system oscilloscope option / calibrator.

NONE
If you do not require a oscilloscope option / calibrator to be configured in your software click NONE

DEMONSTRATION MODE
If the software is being used without any instruments connected, the DEMONSTRATION MODE setting can be selected to simulate the operation of the software without controlling a calibrator.

SETTING UP AN INSTRUMENT

Description and Serial Number
Select the instrument description from the list and enter instrument serial number.
NOTE : To configure the Oscilloscope option for Transmille calibrators, simply select 3000 Oscilloscope Calibration Module and the traceable information will be linked the calibrator as set in Step 1 automatically.

Interface
Set **Auto USB** if the instrument is USB controlled or
GPIB (enter address) if the instrument is GPIB controlled.

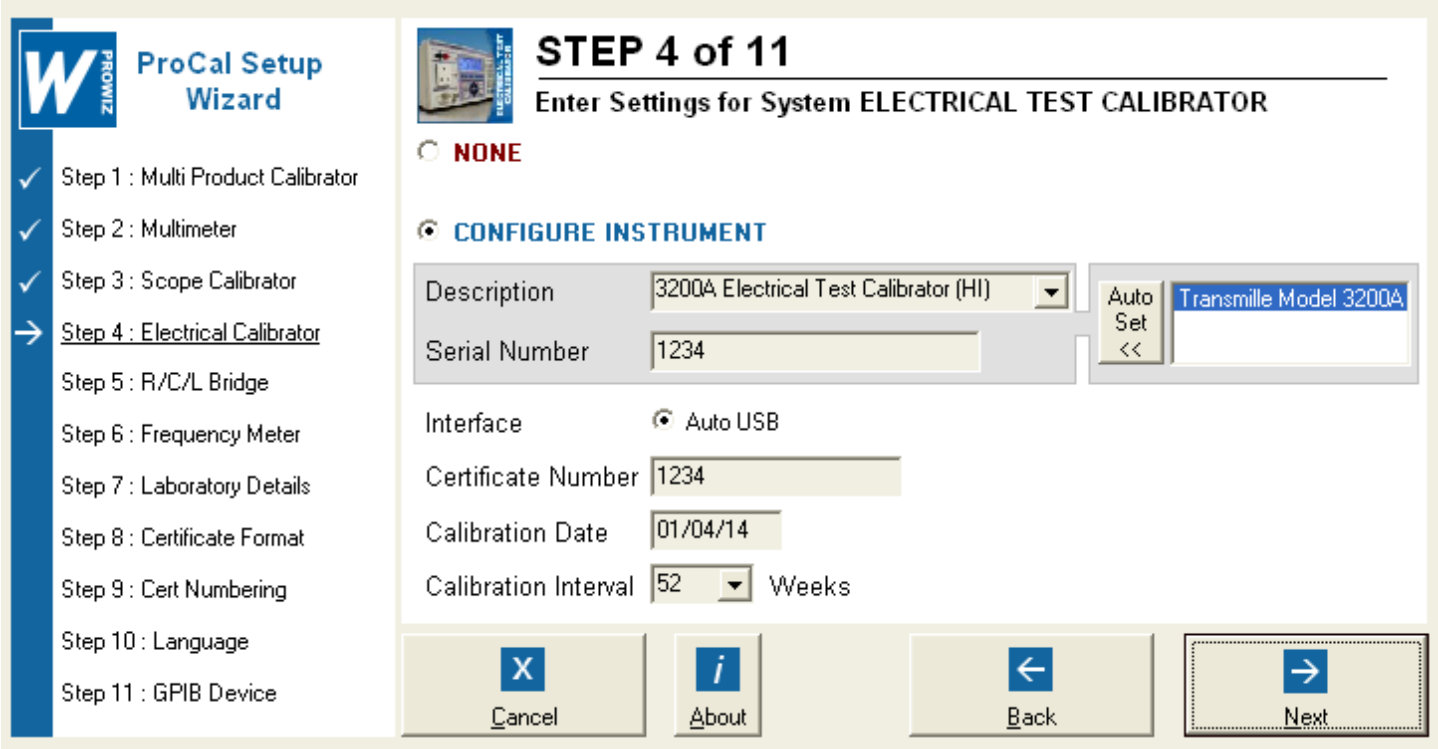
Certificate Number
Enter the certificate number of the instrument

Calibration Date
Enter the calibration date of the instrument in the format dd/mm/yy

Calibration Interval
Enter the calibration interval of the instrument in weeks

Click next to proceed to the next step – the Wizard will check the information entered and advise if any information is missing or incorrect.

PROCAL SETUP WIZARD : STEP 4



Step 4 - Set up the system electrical test calibrator.

NONE
If you do not require a electrical test calibrator to be configured in your software click NONE

DEMONSTRATION MODE
If the software is being used without any instruments connected, the DEMONSTRATION MODE setting can be selected to simulate the operation of the software without controlling a calibrator.

SETTING UP AN INSTRUMENT

Description and Serial Number
Select the instrument from the list displayed on the right hand side of the screen and click **AUTO SET**,
or select the instrument description from the list and enter instrument serial number.

Interface
Set **Auto USB** if the instrument is USB controlled

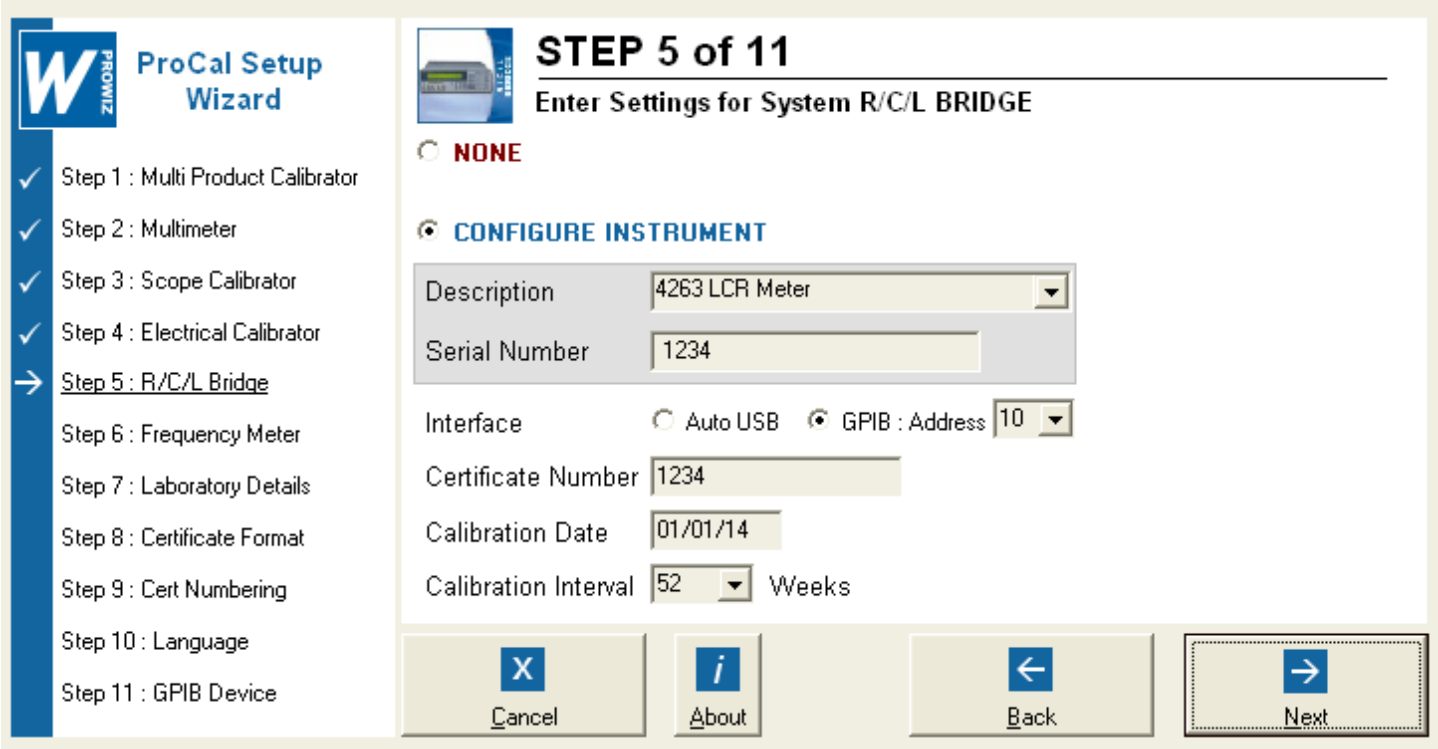
Certificate Number
Enter the certificate number of the instrument

Calibration Date
Enter the calibration date of the instrument in the format dd/mm/yy

Calibration Interval
Enter the calibration interval of the instrument in weeks

Click next to proceed to the next step – the Wizard will check the information entered and advise if any information is missing or incorrect.

PROCAL SETUP WIZARD : STEP 5



Step 5 - Set up the system R/C/L Bridge.

NONE
If you do not require an R/C/L Bridge to be configured in your software click NONE

SETTING UP AN INSTRUMENT

Description and Serial Number
Select the instrument description from the list and enter instrument serial number.

Interface
Set **Auto USB** if the instrument is USB controlled

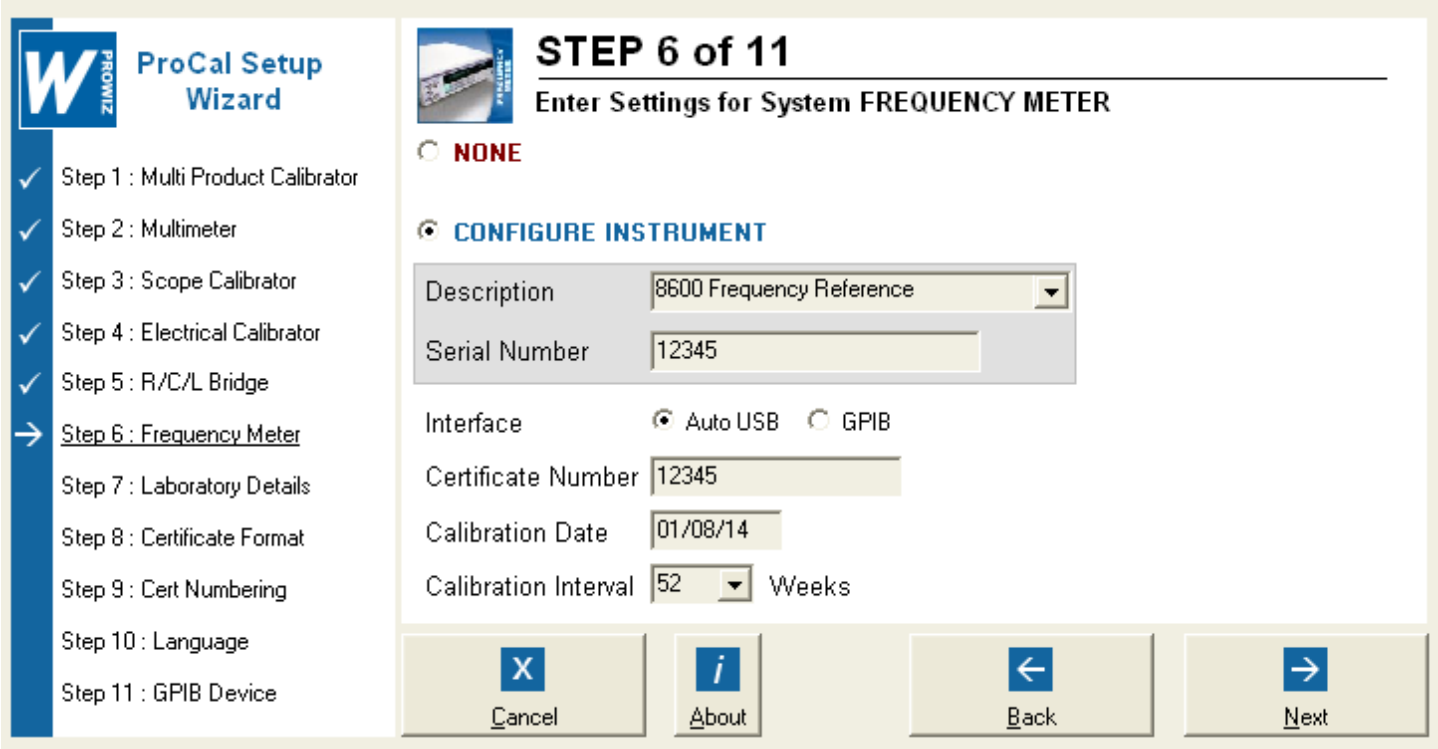
Certificate Number
Enter the certificate number of the instrument

Calibration Date
Enter the calibration date of the instrument in the format dd/mm/yy

Calibration Interval
Enter the calibration interval of the instrument in weeks

Click next to proceed to the next step – the Wizard will check the information entered and advise if any information is missing or incorrect.

PROCAL SETUP WIZARD : STEP 6



Step 6 - Set up the system frequency meter.

NONE
If you do not require a frequency meter to be configured in your software click NONE

SETTING UP AN INSTRUMENT

Description and Serial Number
Select the instrument description from the list and enter instrument serial number.

Interface
Set **Auto USB** if the instrument is USB controlled

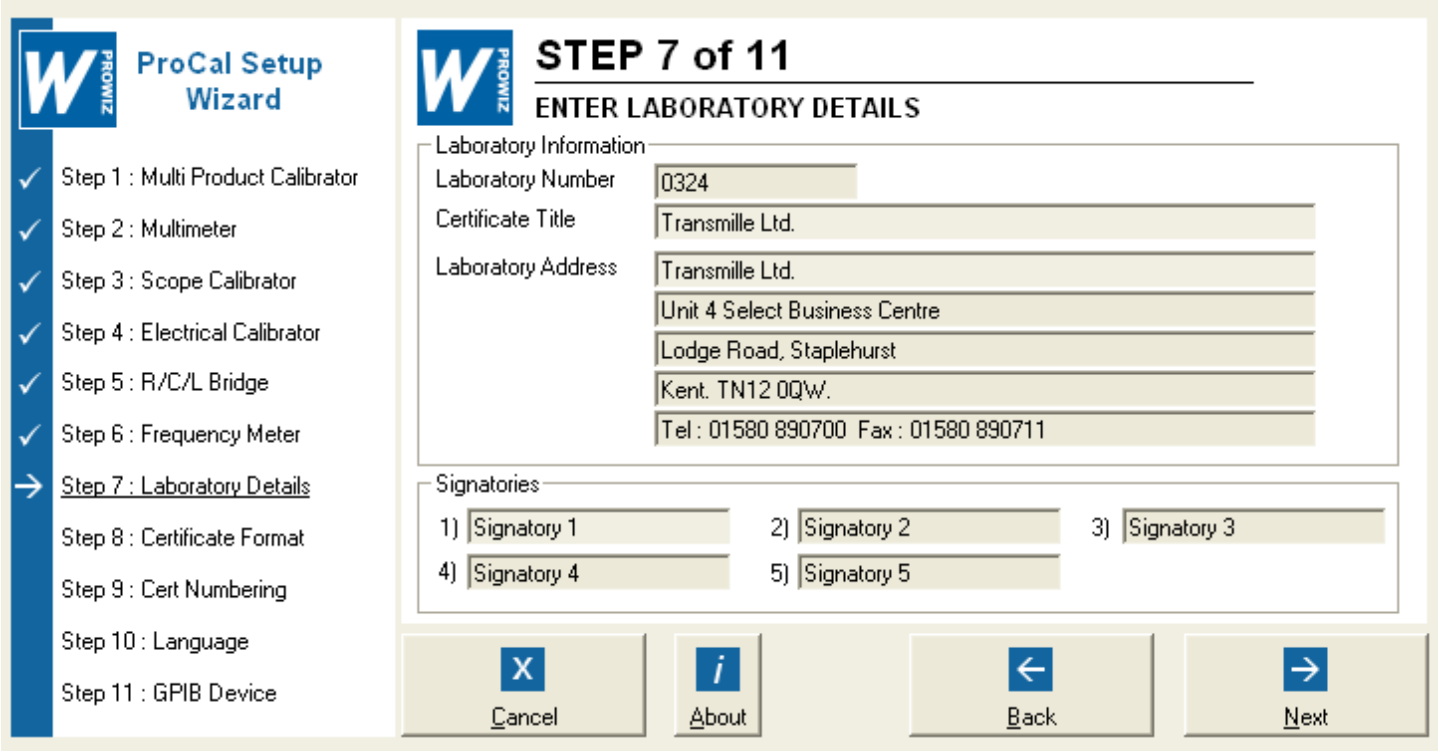
Certificate Number
Enter the certificate number of the instrument

Calibration Date
Enter the calibration date of the instrument in the format dd/mm/yy

Calibration Interval
Enter the calibration interval of the instrument in weeks

Click next to proceed to the next step – the Wizard will check the information entered and advise if any information is missing or incorrect.

PROCAL SETUP WIZARD : STEP 7



Step 7 – Set laboratory details and up to five signatories.

PROCAL SETUP WIZARD : STEP 8

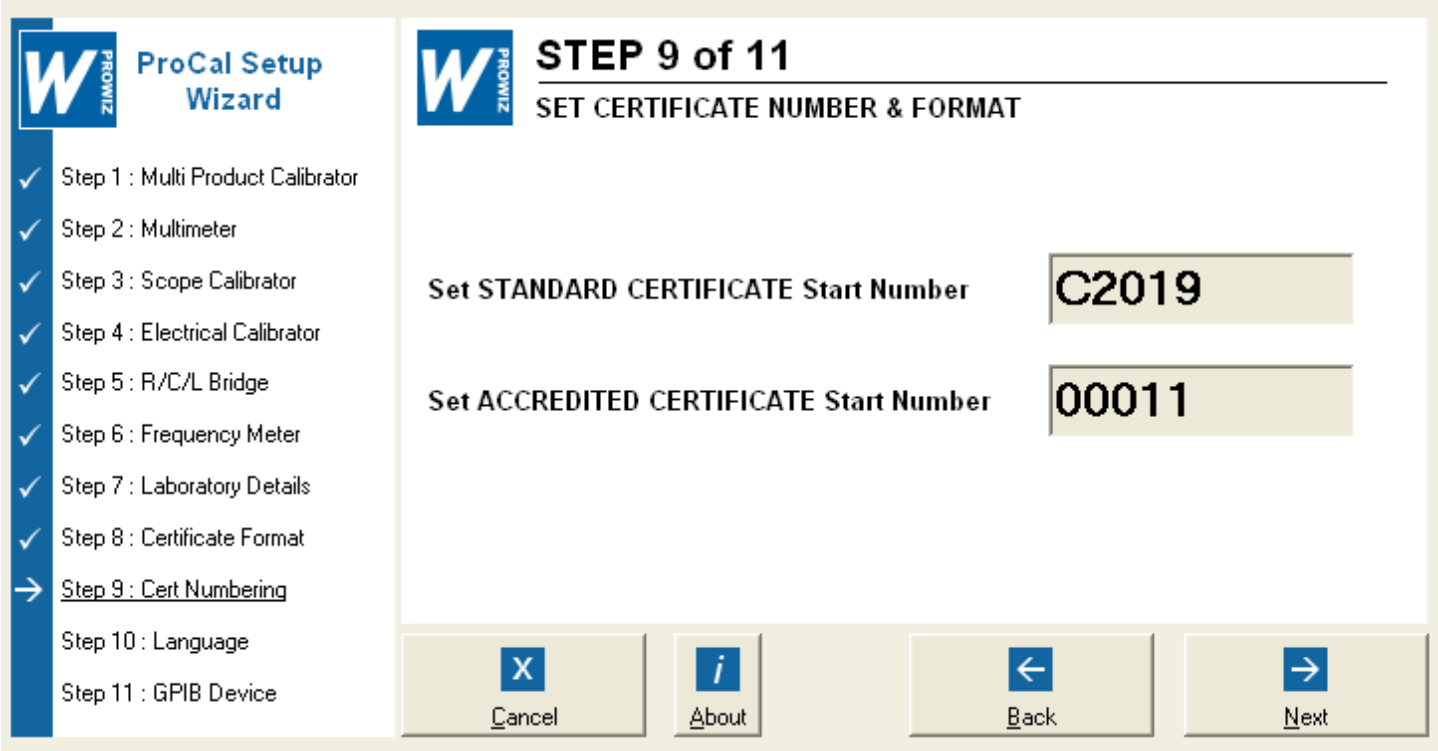
Step 8 - Set the certificate format.

BUILT-IN FORMAT (FIXED)
This is a fixed format, designed to conform to M3003 / ISO17025 guidelines and uses the laboratory address / signatory information as set up in the Wizard (Step 7) and will print a custom company logo (set up via ProCert)

CRYSTAL REPORT TEMPLATE
ProCal installs a default certificate layout which can be edited using Crystal Reports editor software*.
The crystal report template uses the laboratory address / signatory information as set up in the Wizard (Step 7)

*The full version of Crystal Reports is available separately (additional cost).

PROCAL SETUP WIZARD : STEP 9



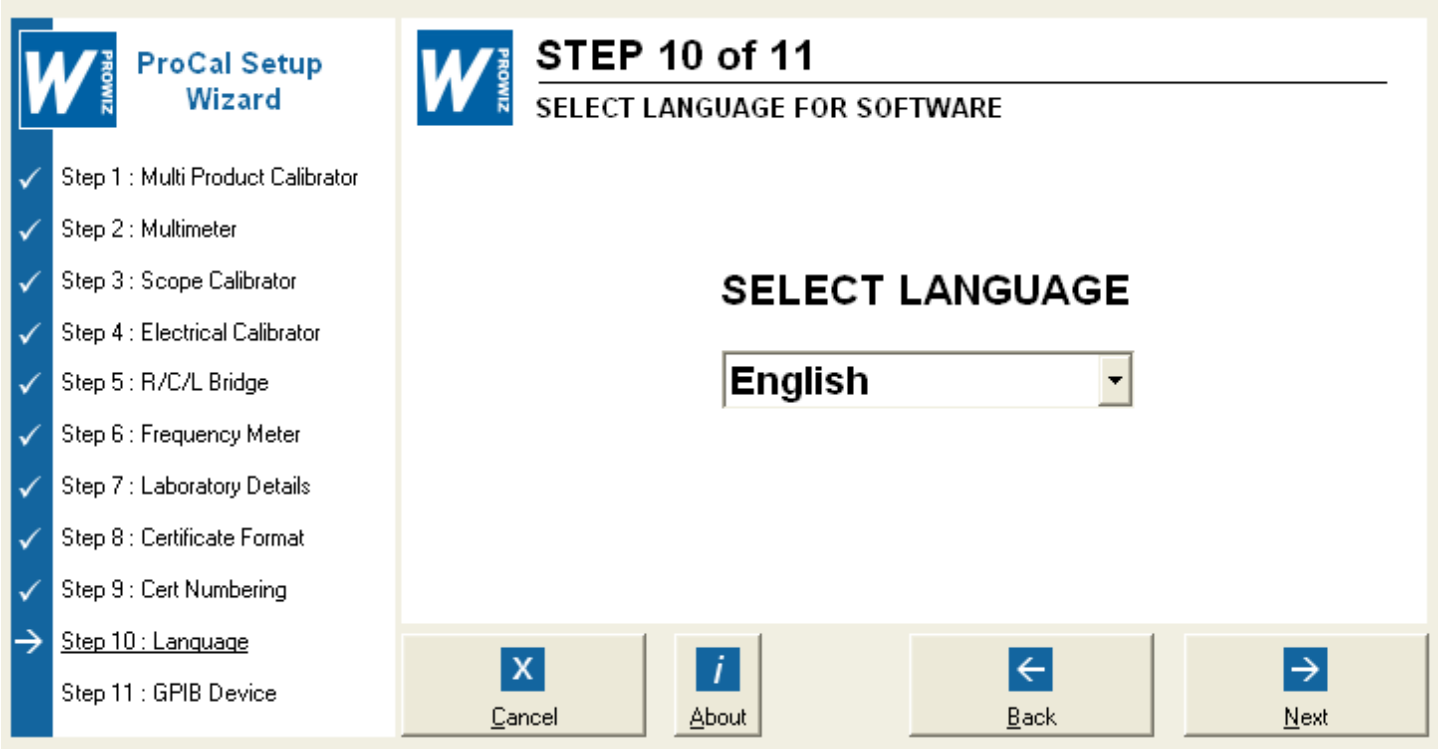
Step 9 - Set start numbers for both STANDARD and ACCREDITED calibrations.

ProCal will increase by 1 the numbers set per calibration type, preserving any prefix or suffix alphabetical characters.

Examples: **00011**
00012
00013

C2019
C2020
C2021

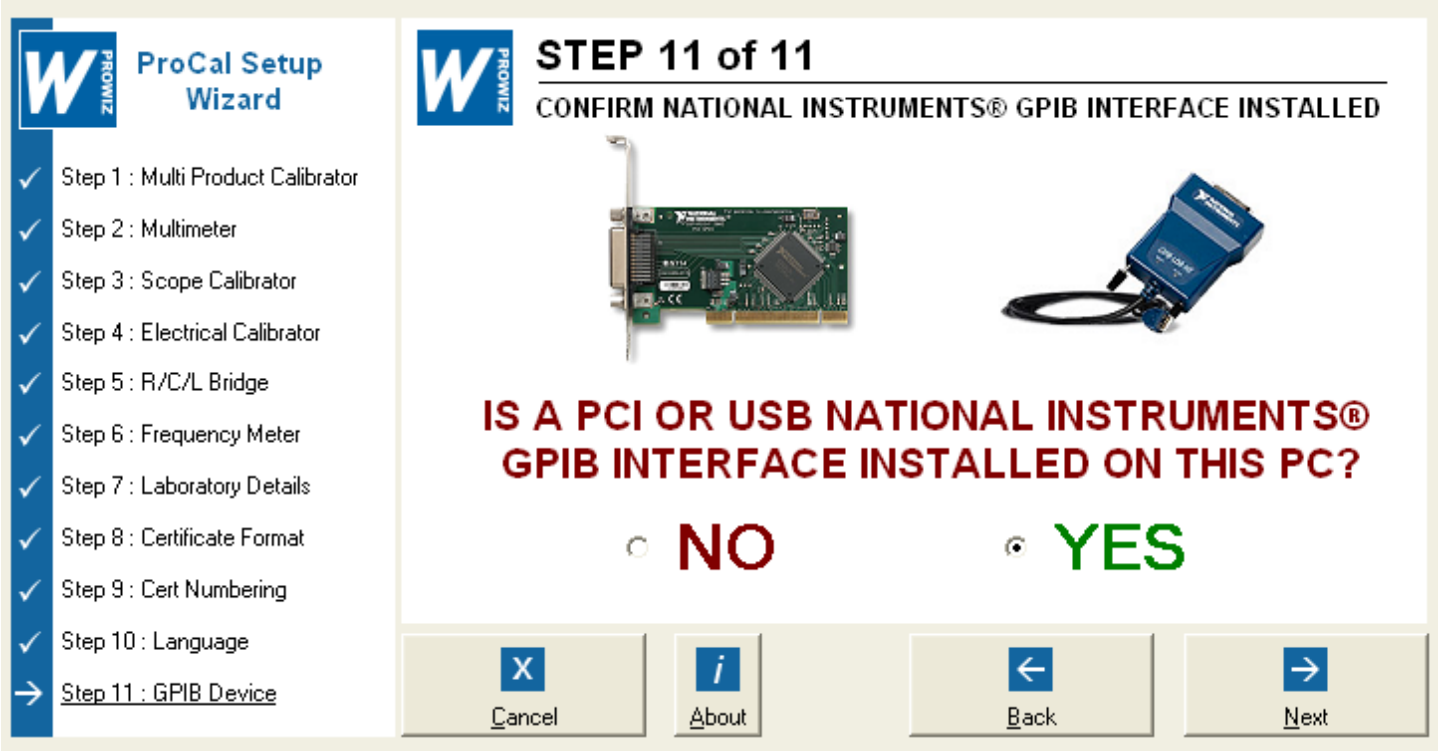
PROCAL SETUP WIZARD : STEP 10



Step 10 - Set language from the list of available translations.

Simply select the language from the list displayed.

PROCAL SETUP WIZARD : STEP 11

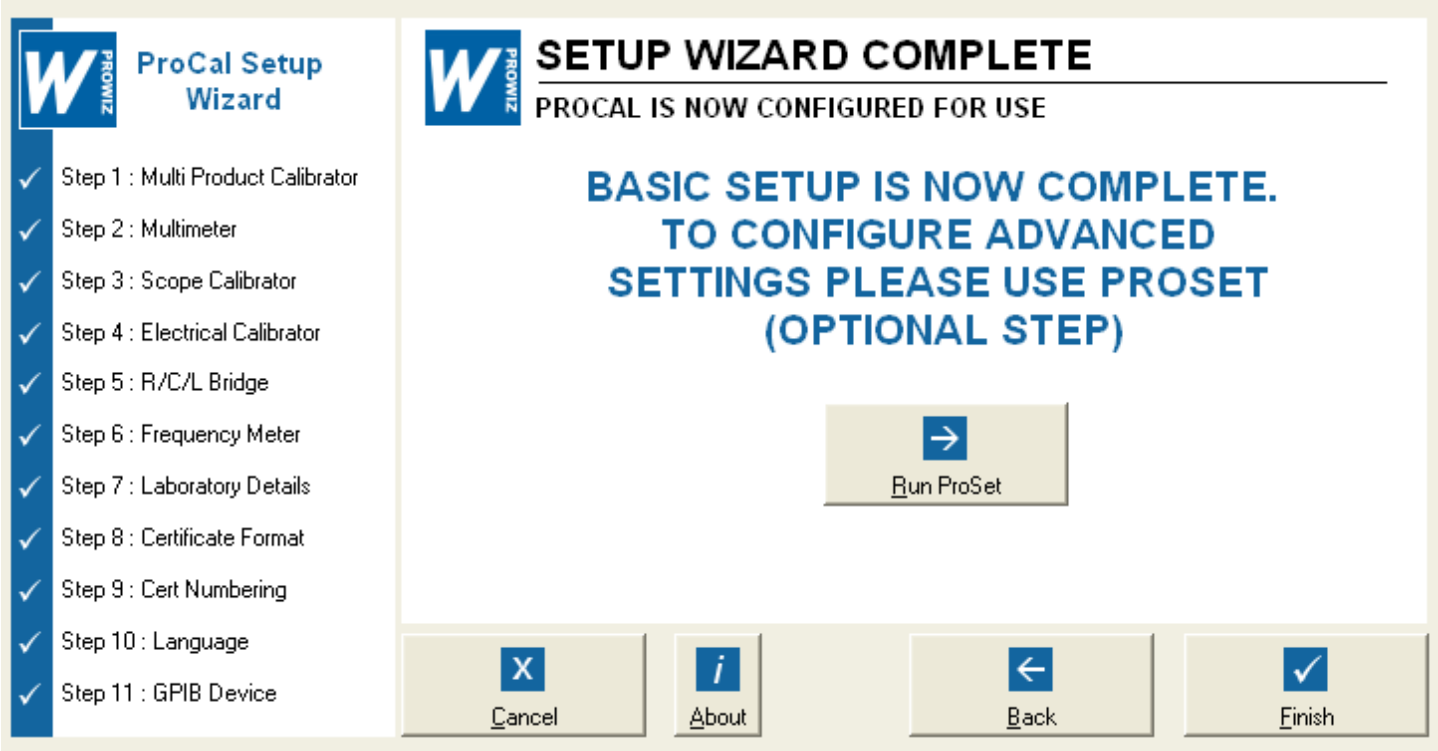


Step 11 - Set ProCal GPIB support for National Instruments Internal (PC Card) and External (USB) devices.

Simply select YES to activate support.

Note : The latest National Instrument GPIB drivers need to be installed (available from **www.ni.com**)

PROCAL SETUP WIZARD : COMPLETION



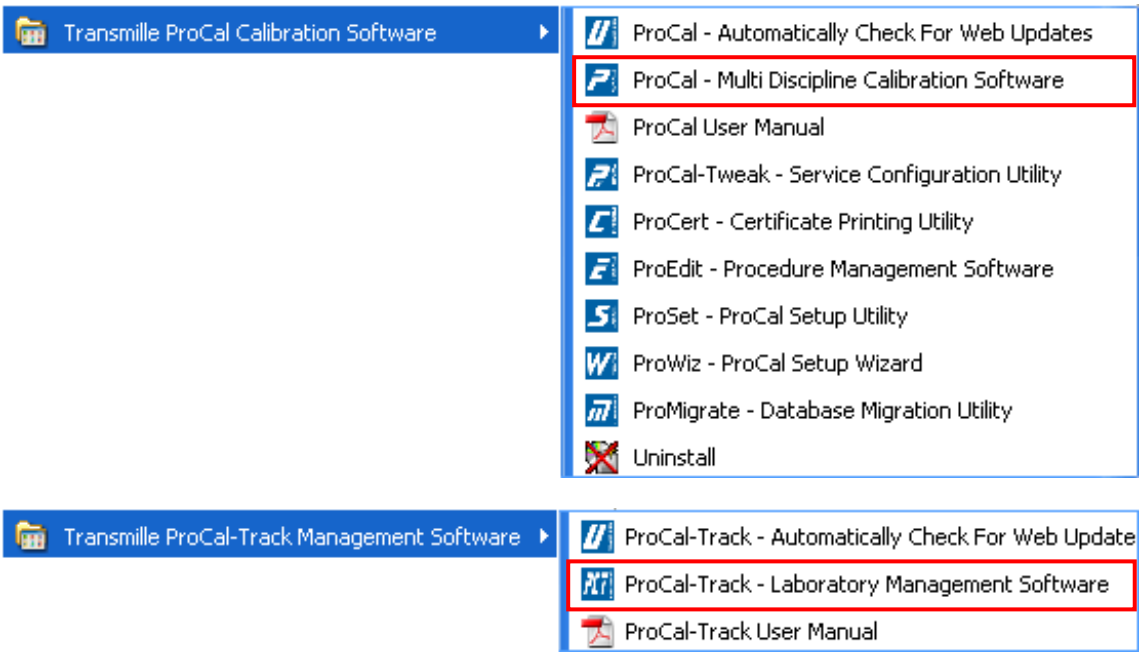
Once all Wizard steps are complete, ProCal is ready for use.

The Wizard will allow the user to run ProSet to configure advanced settings if required, but this is optional and is not required to start using the software.

Note : At any time a previous step can be returned to during the Wizard setup process by clicking the BACK button. The Wizard can also be re-run at any time to change settings as required.

RUNNING THE PROGRAMS

To start ProCal or ProCal-Track, click the Windows Start button, then click Programs. Next select the Transmille Software menu and choose a program to run.

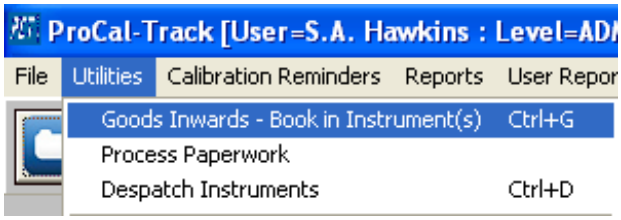


From here select the program required. Note there can be more than one program open at a time – for example ProCal *and* ProEdit.

BOOK IN AN INSTRUMENT WITH PROCAL TRACK.

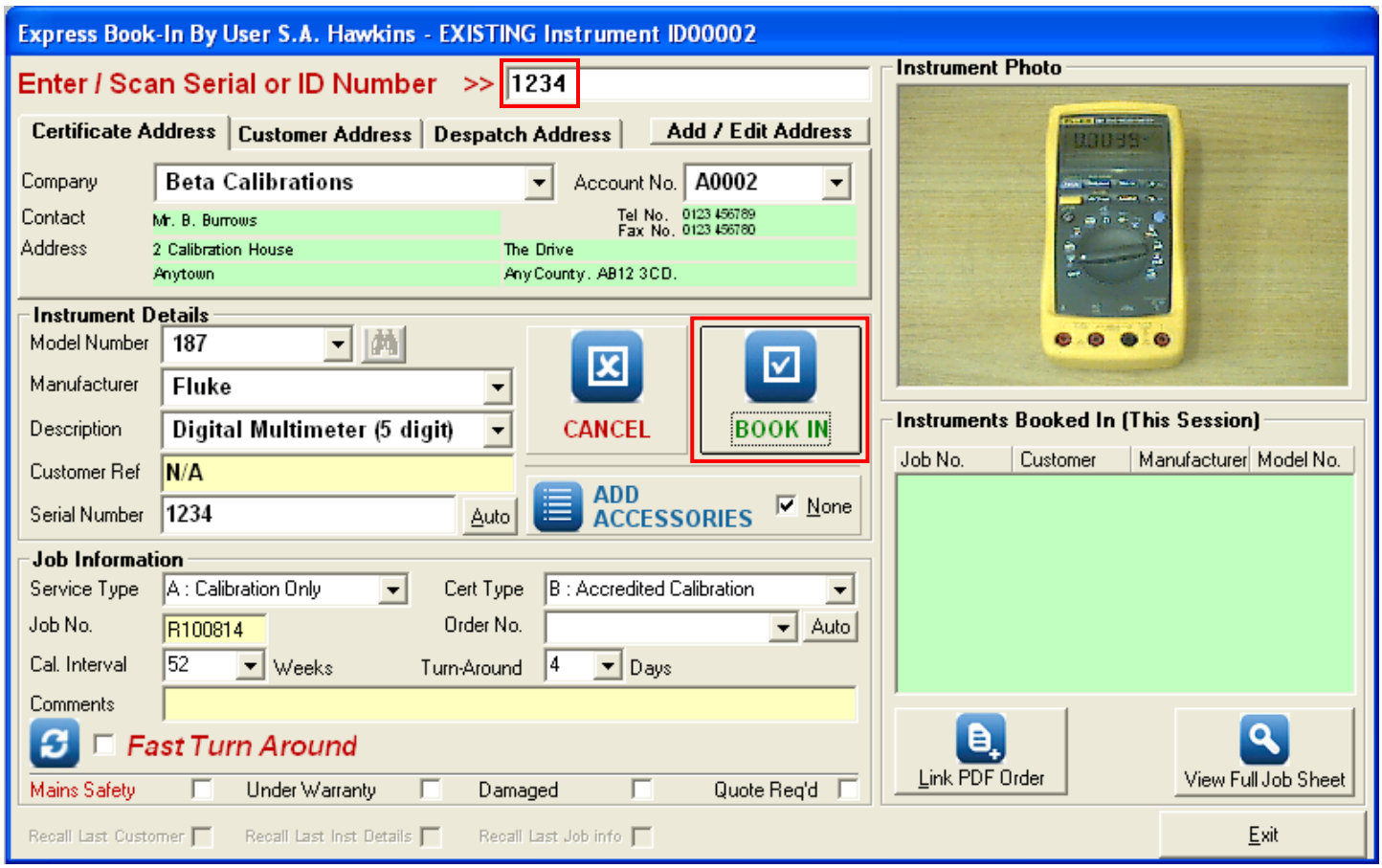
Step 1 Start ProCal Track.

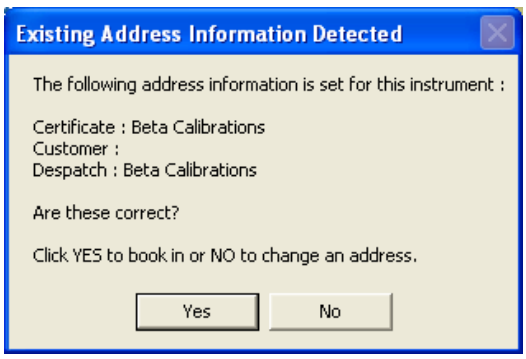
Step 2 Select Utilities → Goods Inwards - Book in Instrument(s)



Type '1234' in the serial number box at the top of the screen then press enter.
(This instrument is pre-installed in the database and known to ProCal).

Step 3 Click the **BOOK IN** button - ProCal Track can print either a Job Label or Job Sheet to identify the instrument.



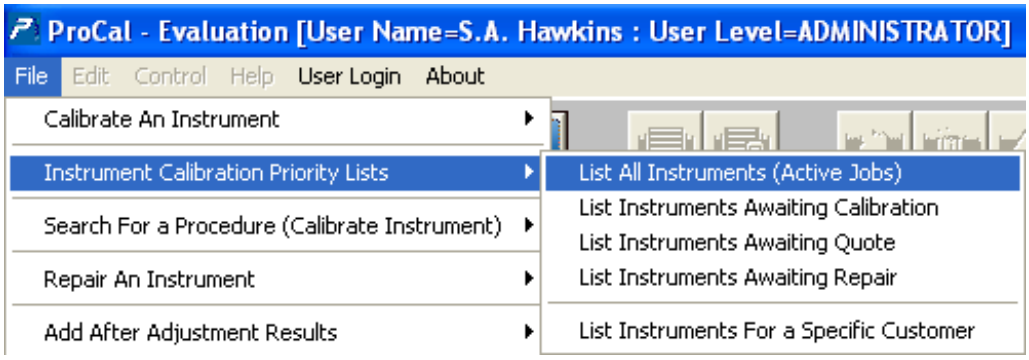


Click YES to confirm the address settings are correct
(this added step allows the user to double check the address settings before committing to book in the instrument)

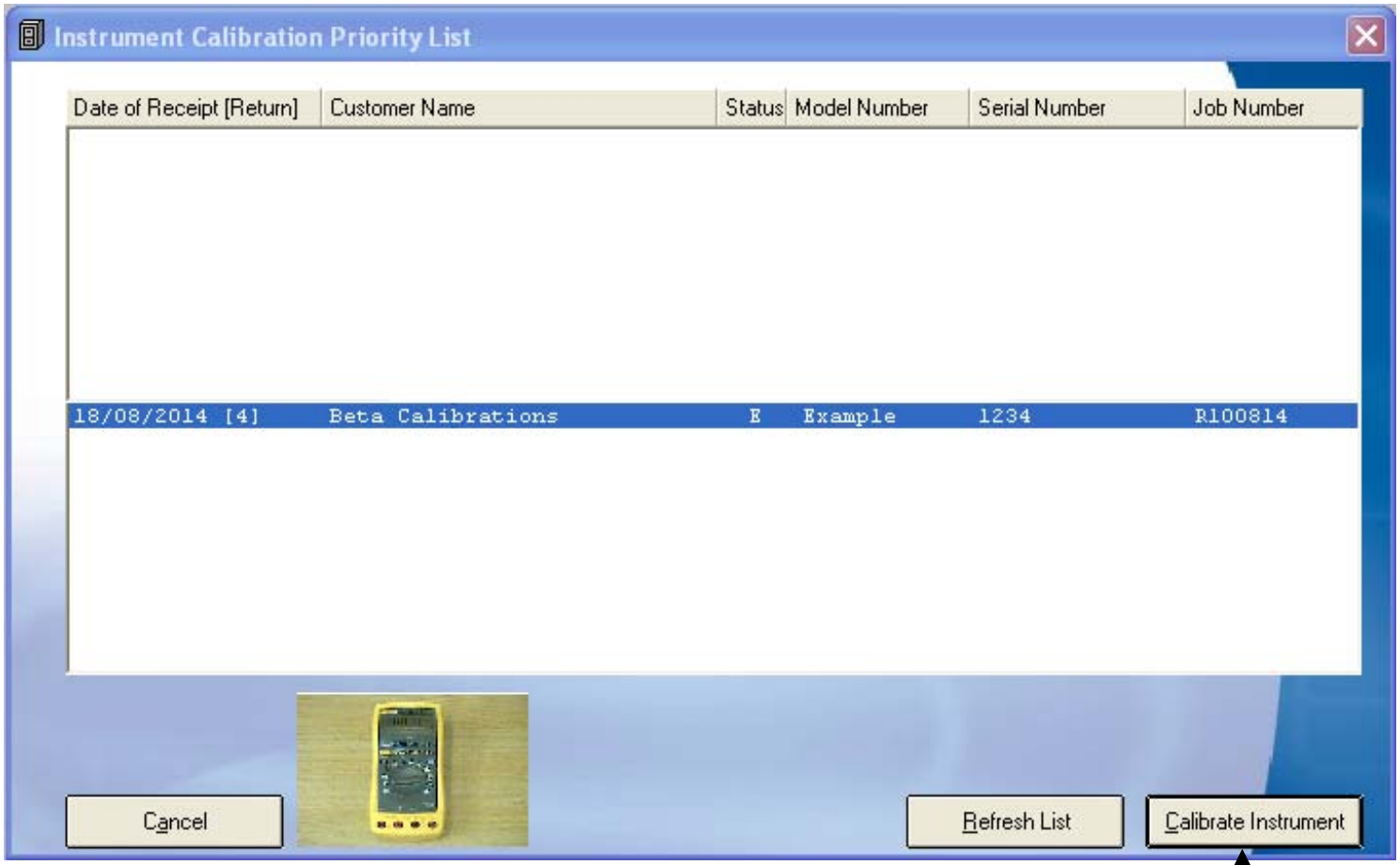
CALIBRATE AN INSTRUMENT

STEP 1 Start ProCal

STEP 2 Select File → Instrument Calibration Priority Lists → List all Instruments (Active Jobs)

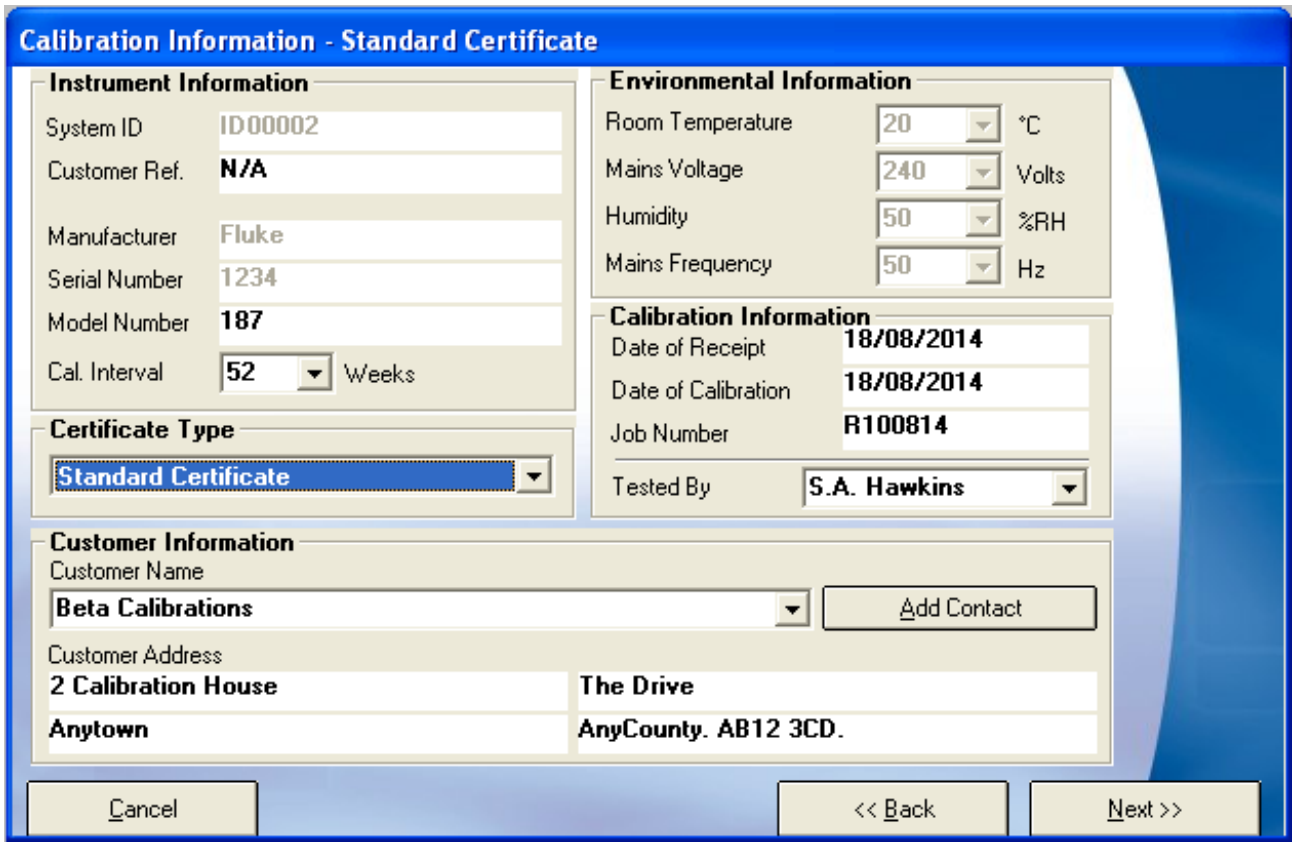


STEP 3 Click on the Fluke 187 (serial number 1234) booked in previously and click **Next >>**

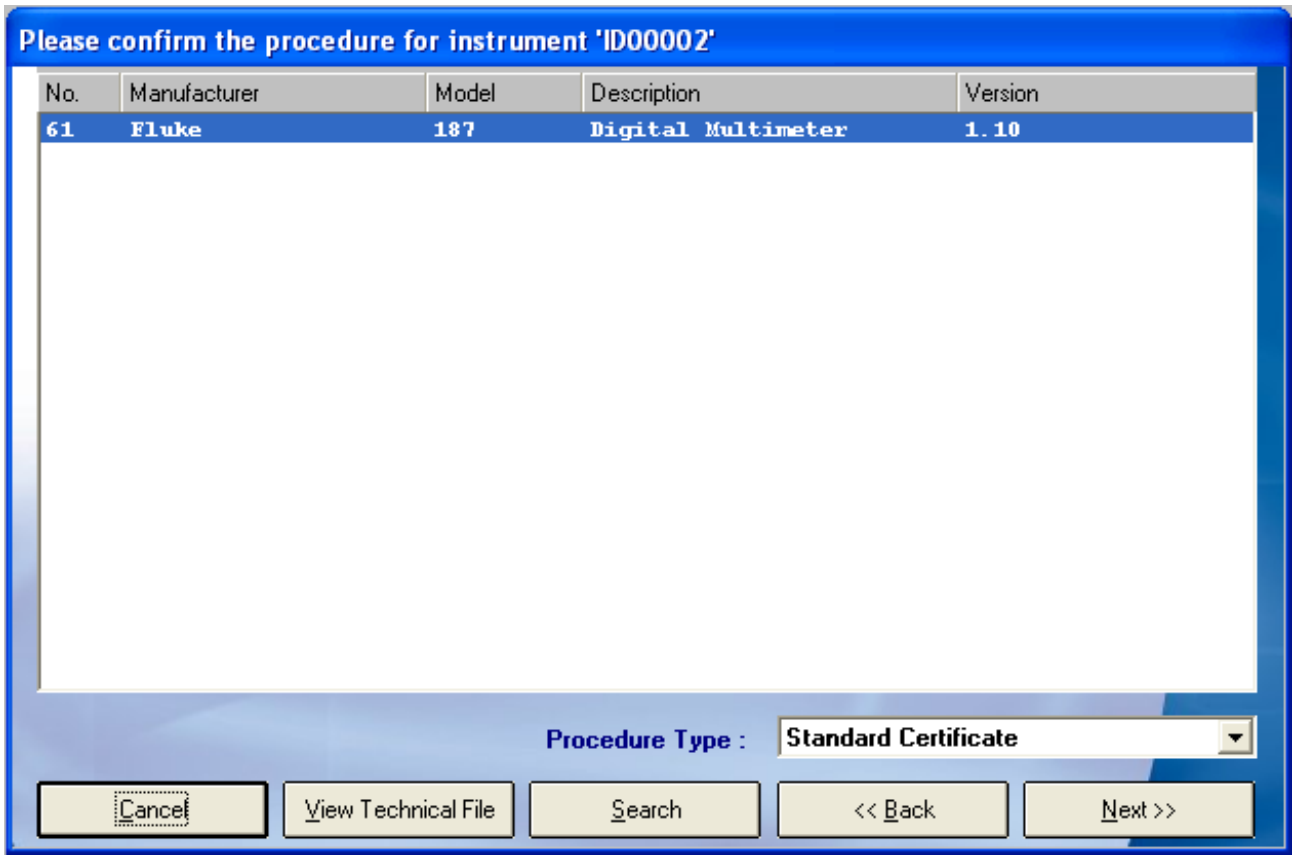


Click 'Calibrate Instrument'

Step 4 The calibration information screen is now displayed, Drop down the 'Tested By' box and select name or type in manually then click Next >>

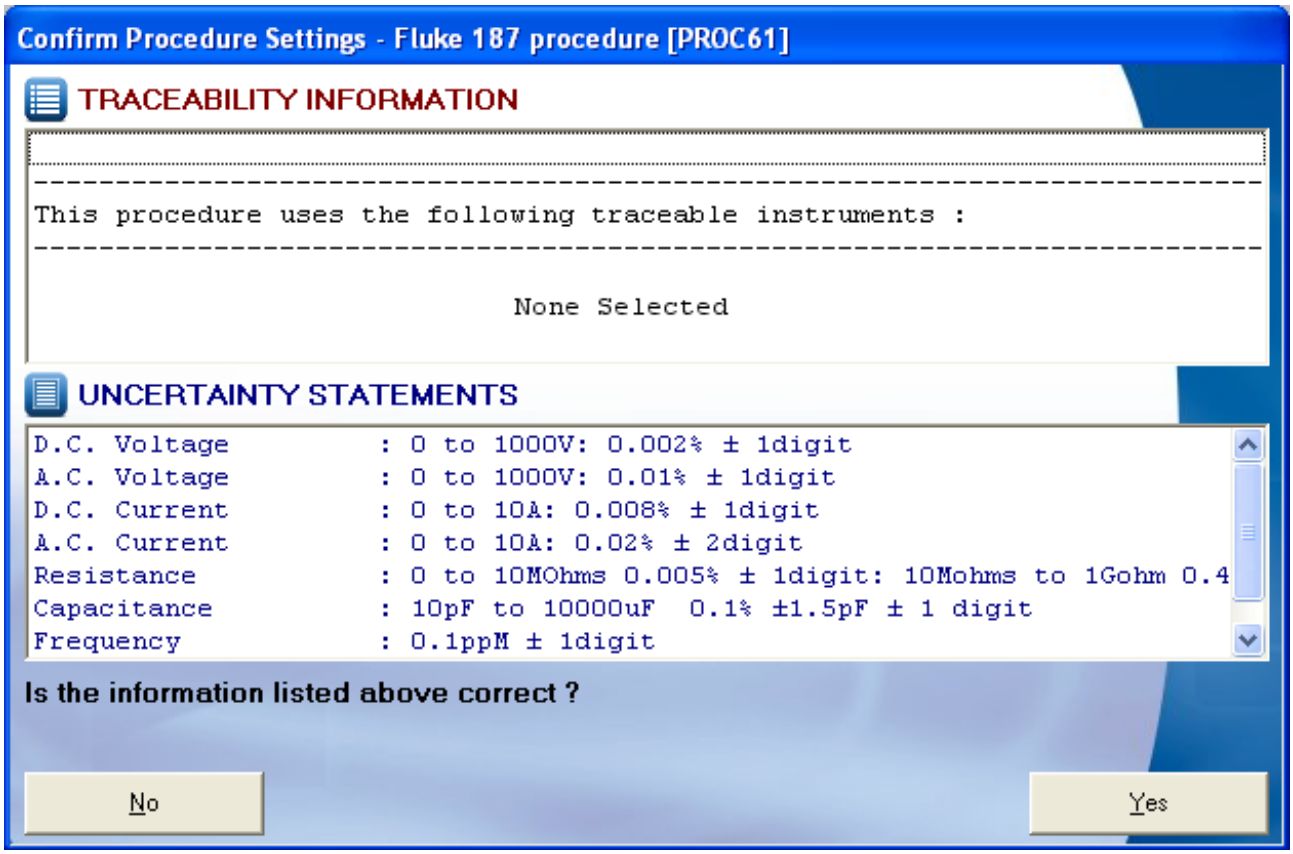


STEP 5 The list of procedures matching the model number will be displayed. Select procedure then click **Next >>**.

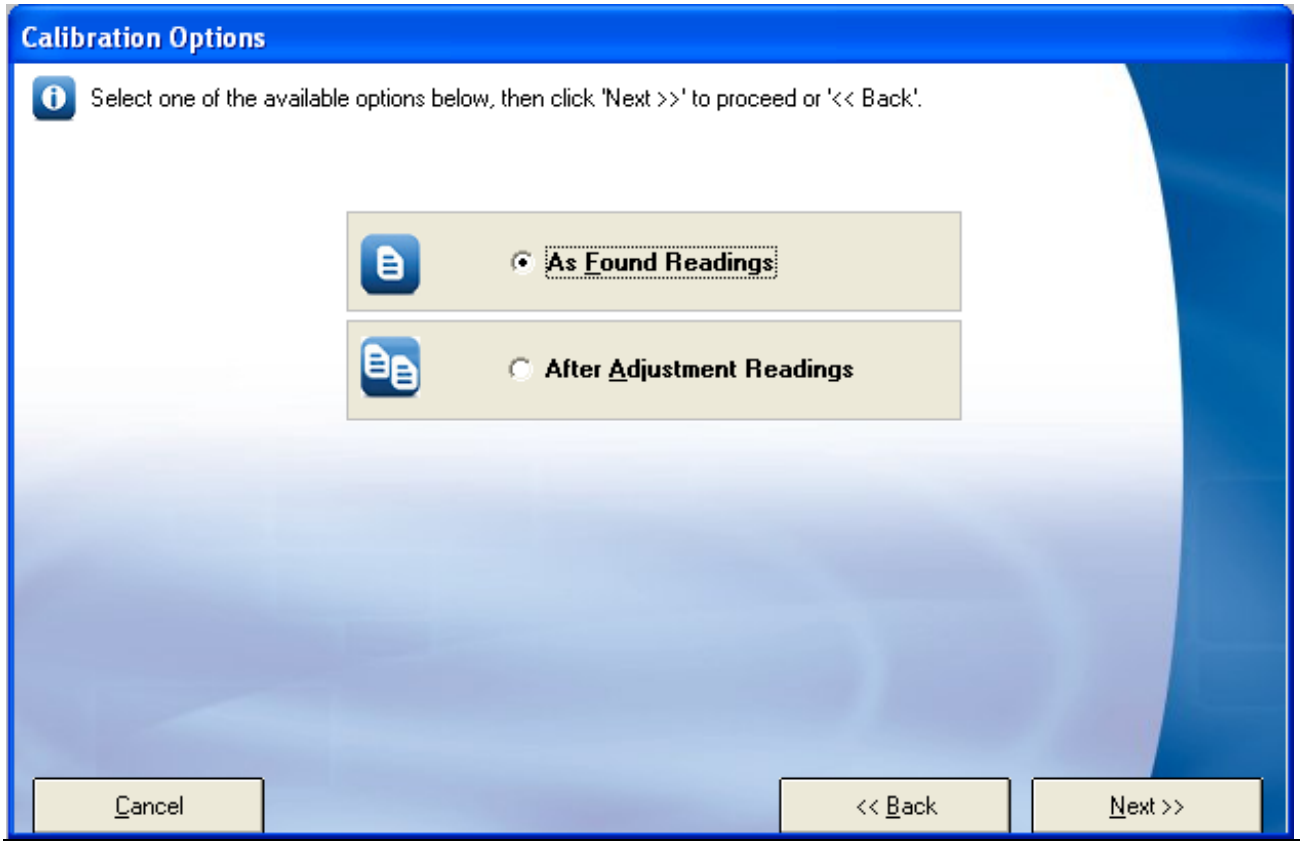


STEP 6 The next window lists reference instruments and uncertainty information.
(Note : In DEMO mode, Traceability Information will indicate **None Selected**)

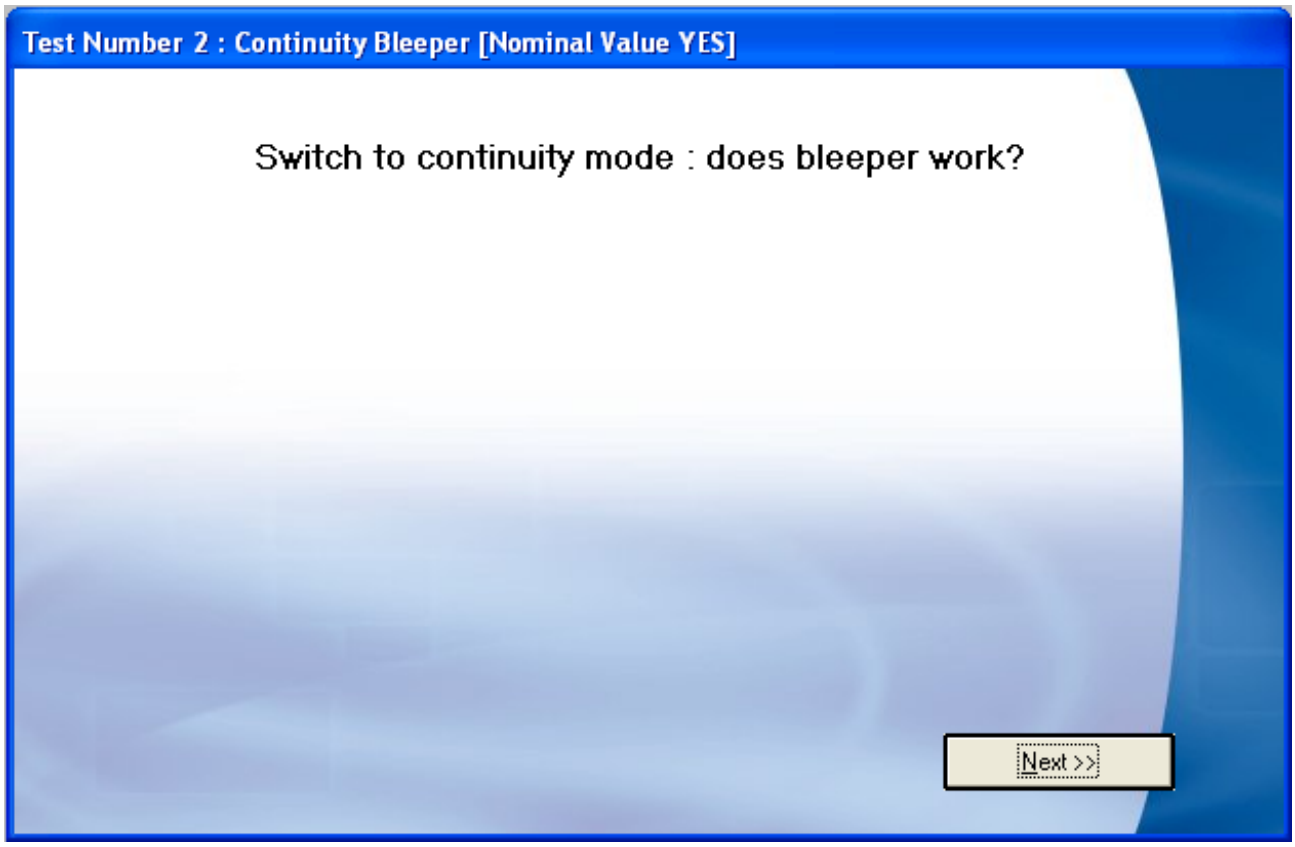
Click **Yes** to proceed.



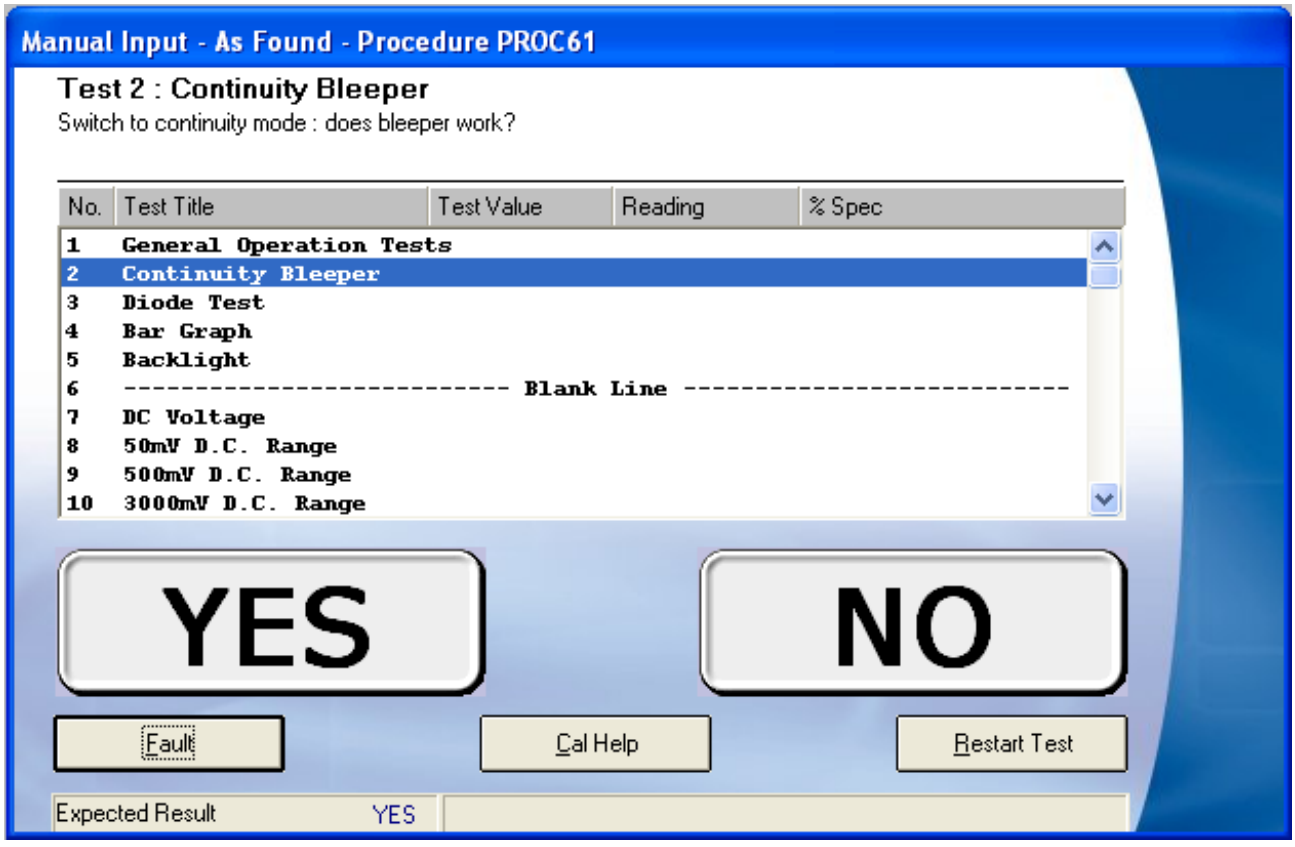
STEP 7 The next window asks if As Found or After Adjustment Readings
- click **As Found Readings**, then click **Next >>**.



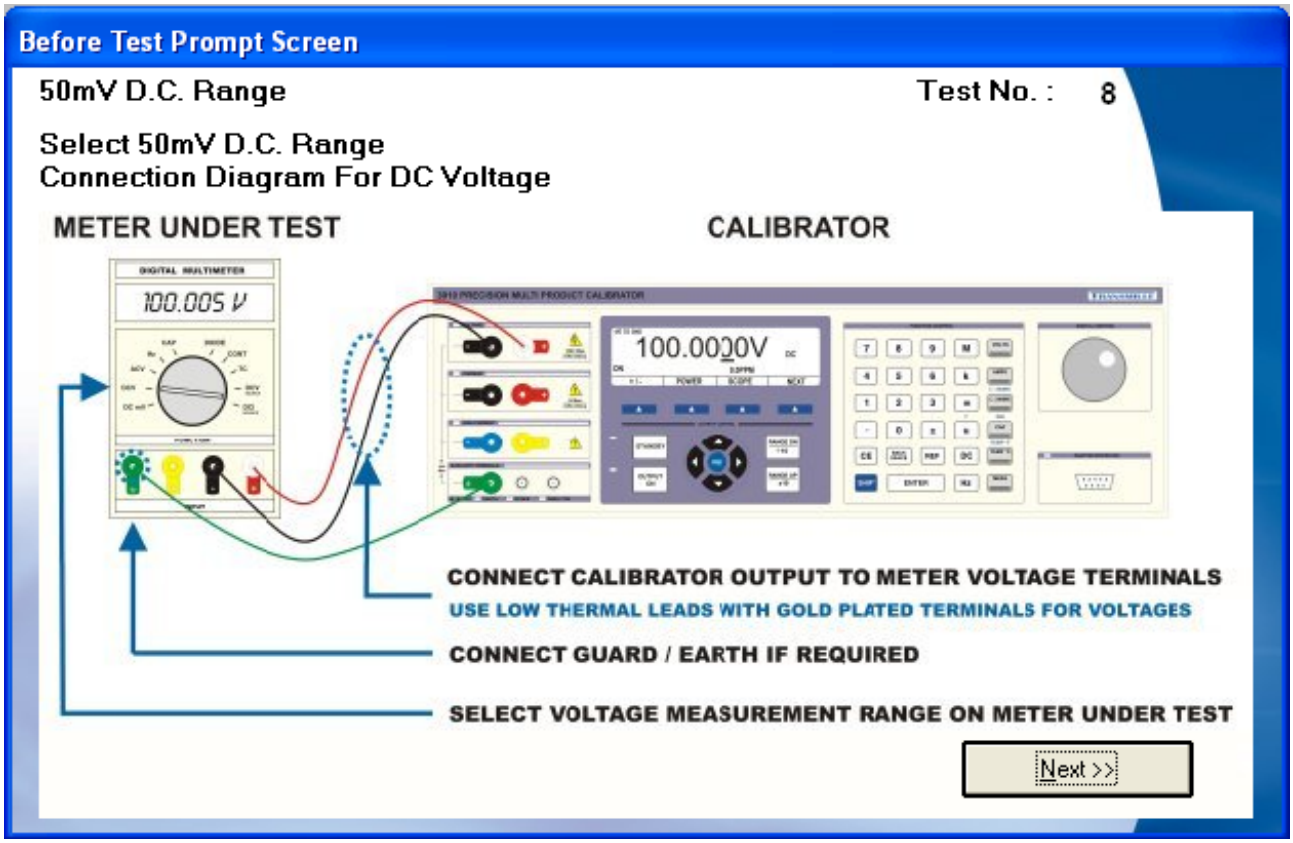
STEP 8 : Prompt for first test is displayed - Click Next >.



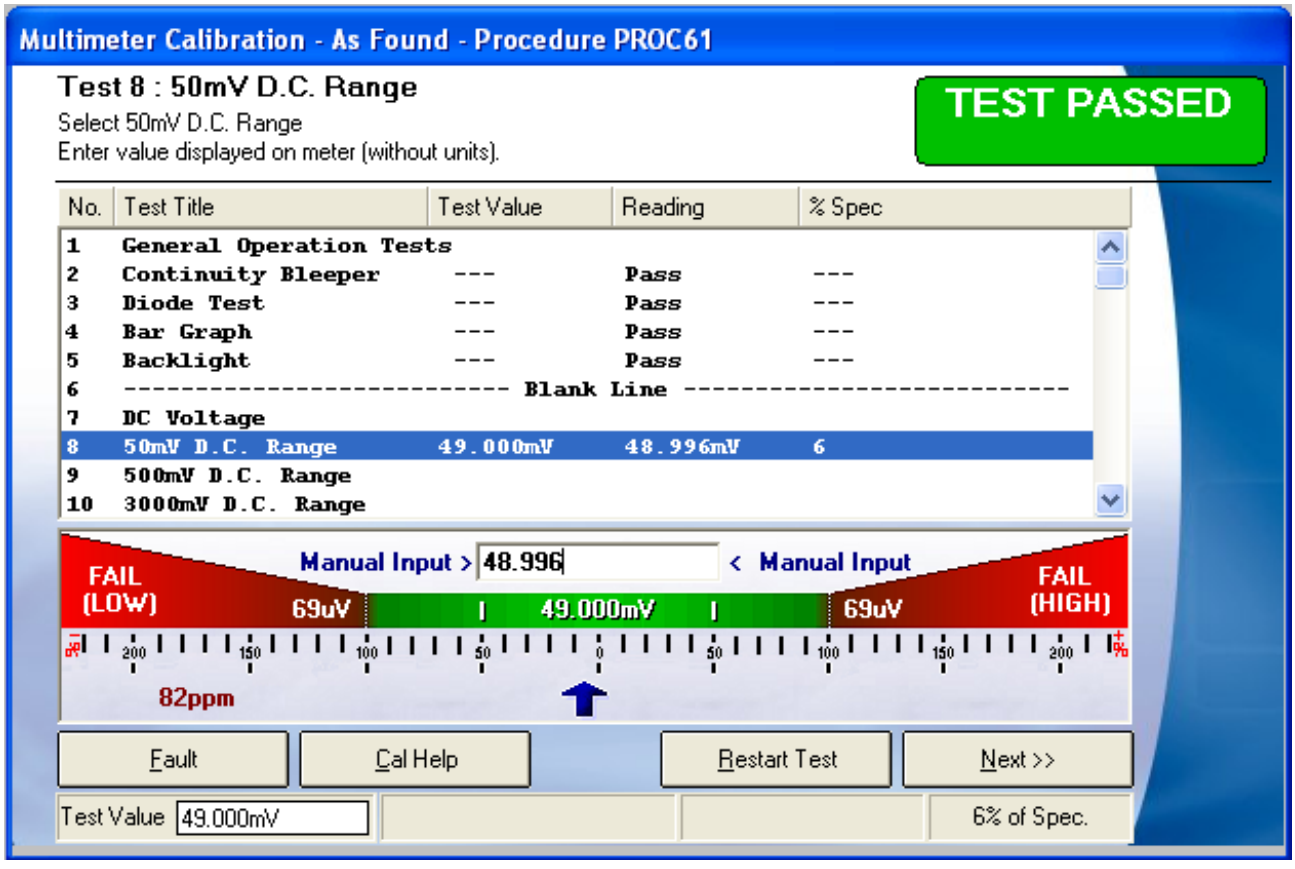
STEP 9 Tests 2, 3, 4 and 5 are YES / NO type tests – select **YES** for each of these tests.



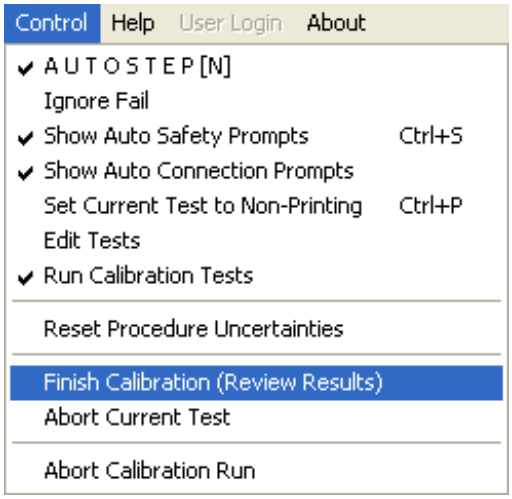
STEP 10 Test 8 displays a picture prompt, demonstrating the graphical capabilities of ProCal in aiding the user.
Click **Next >>** to continue.



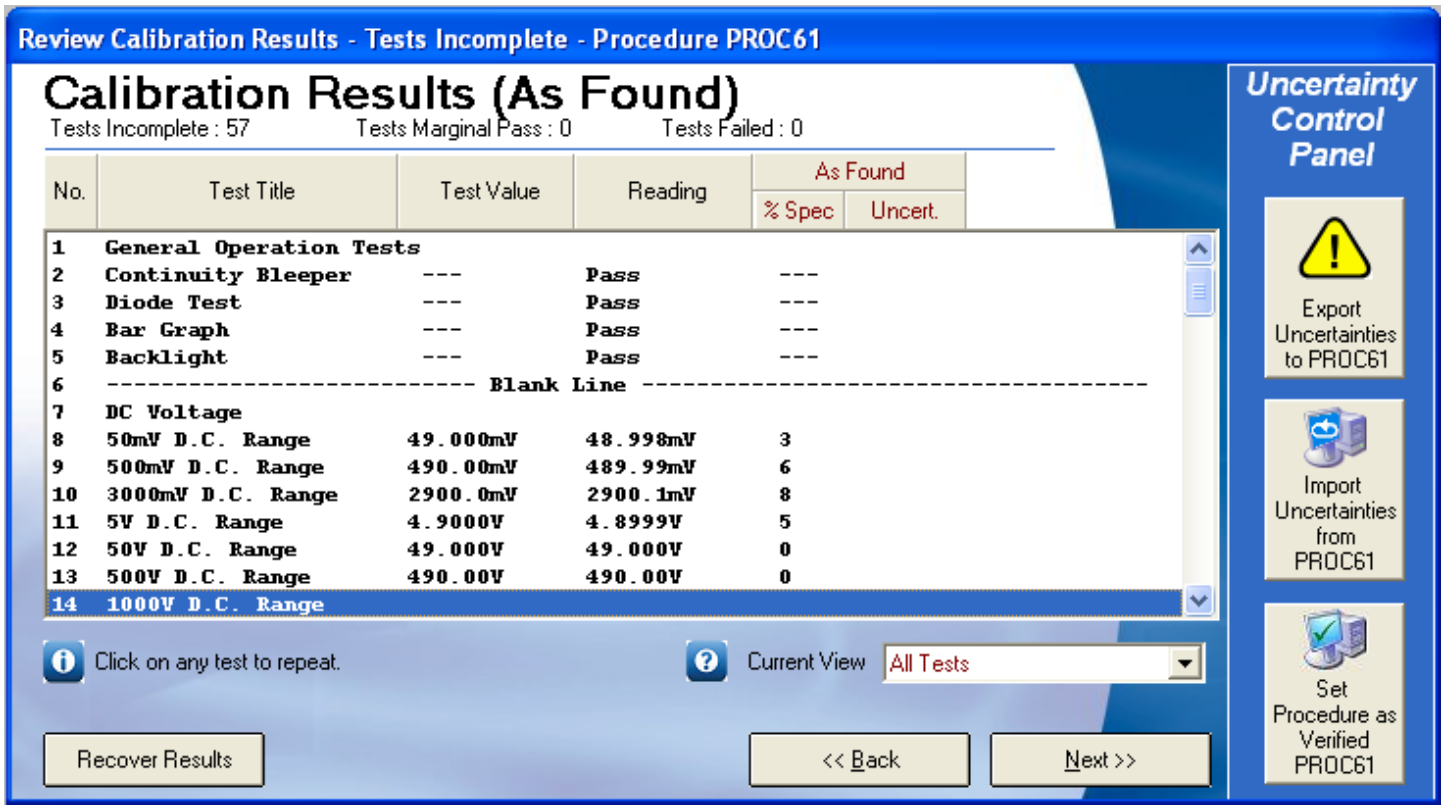
Tests 8 and above are **METER** type tests with keyboard entry of the value –
Type in the reading from the meter display and click **Next >>** to go to the next test.



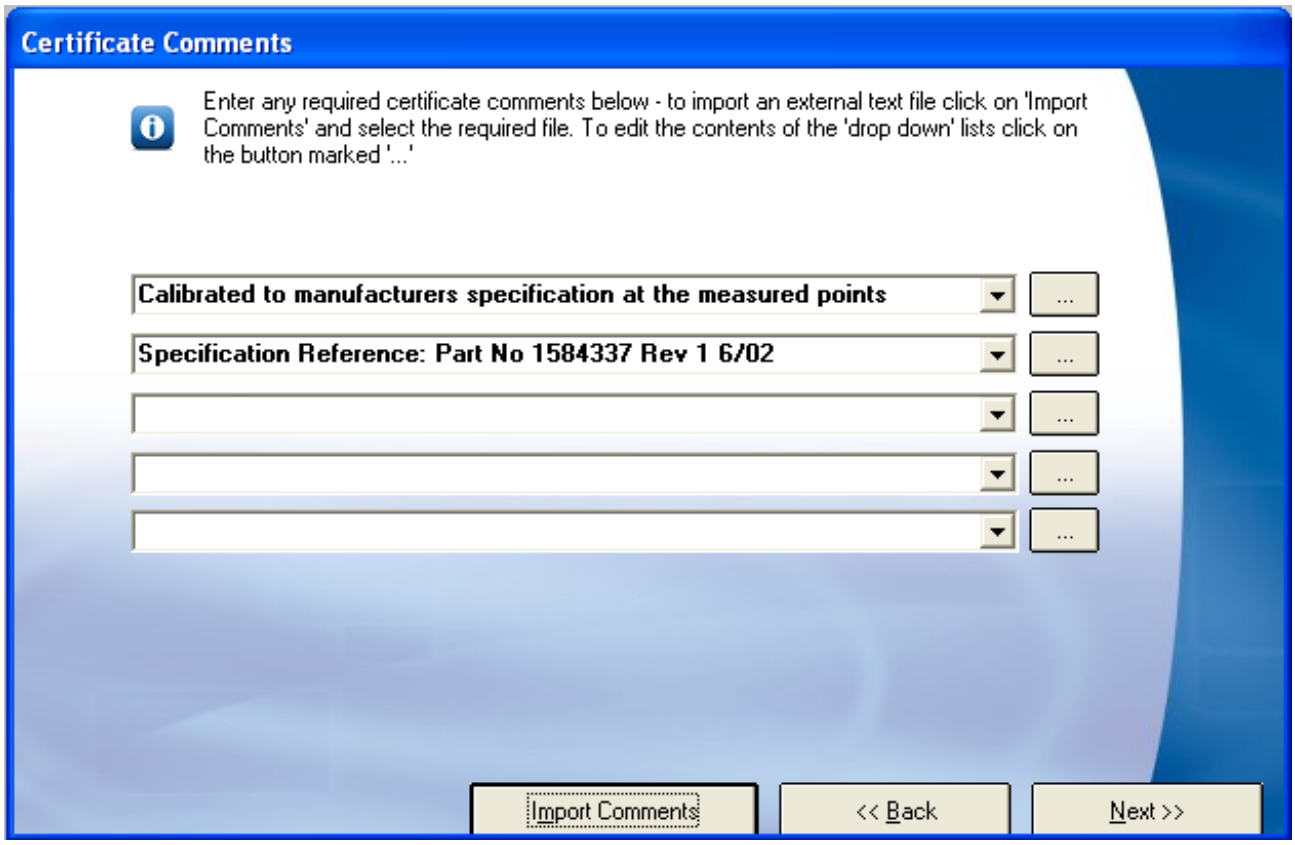
STEP 11 To finish at any time select Control → Finish Calibration.



STEP 12 When the last test is reached, the test Review Screen is displayed - Click Next >>
(if a message stating some tests are not completed appears, simply click YES to proceed)

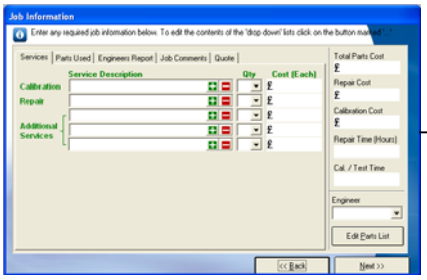


STEP 13 Enter / select certificate comments - Click **Next >>**

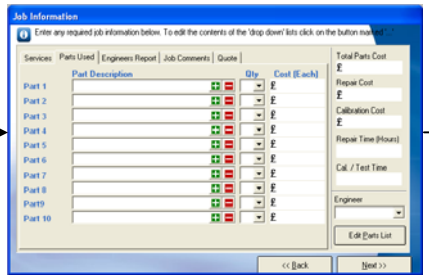


STEP 14 Services, Parts Used & Engineers Report, Job Comments & Quote - click **Next >>** to step through each tab and proceed to the status screen.

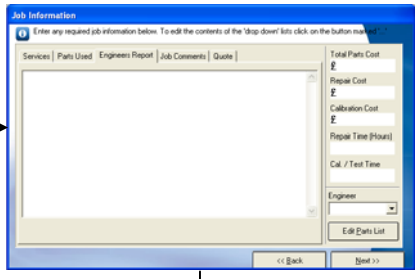
Services Screen

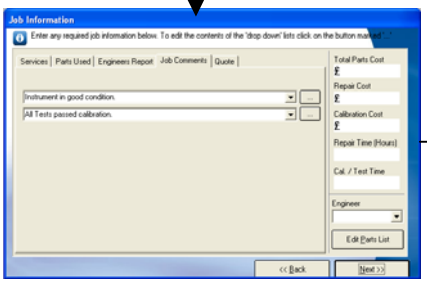


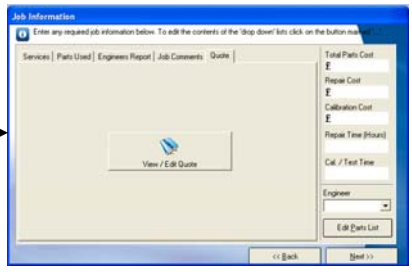
Parts Used Screen



Engineers Report Screen



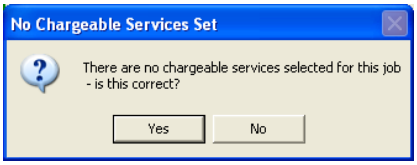




Job Comments Screen

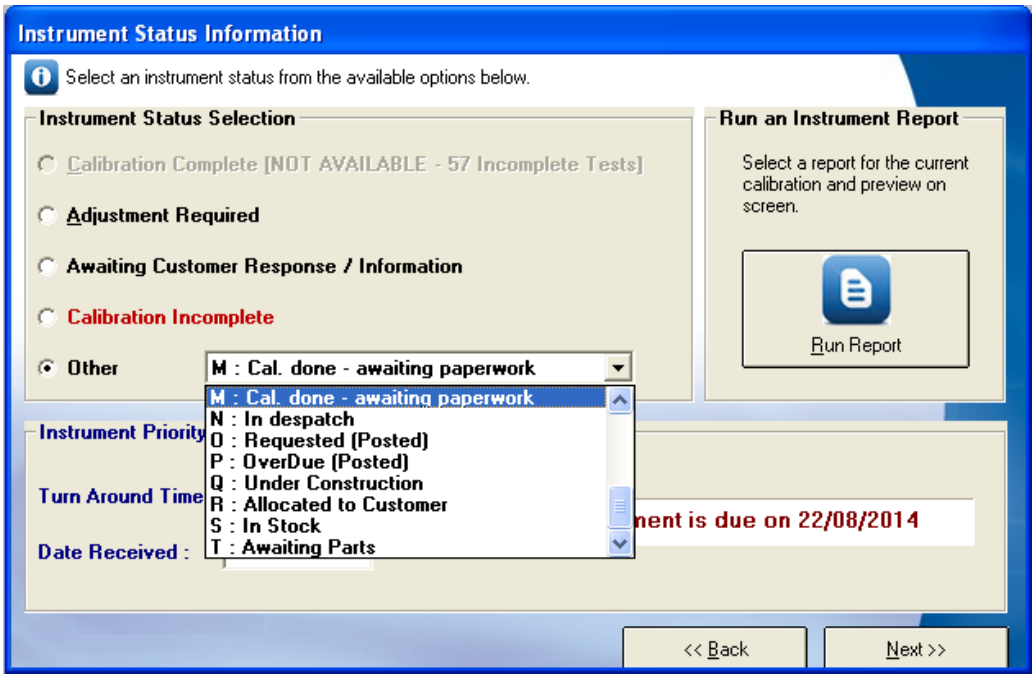
Quote Screen

Note : If no services are selected, ProCal may display a message as follows :



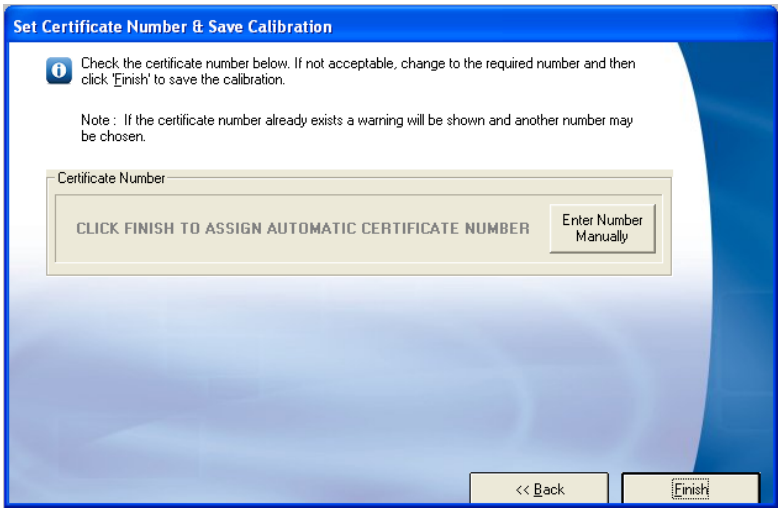
Simply click **Yes** to confirm no chargeable services are required for this particular instrument

STEP 15 Set instrument status - if unfinished, calibration complete will be disabled.
Use 'Other' and manually select **M Cal. done - awaiting paperwork** then click **Next >>**

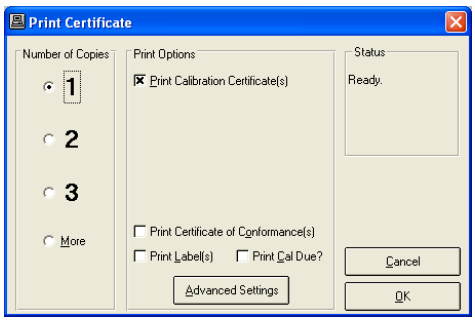


STEP 16 Click Finish to assign certificate number and save the calibration.

Note : To assign a manual certificate number, click **Enter Number Manually**



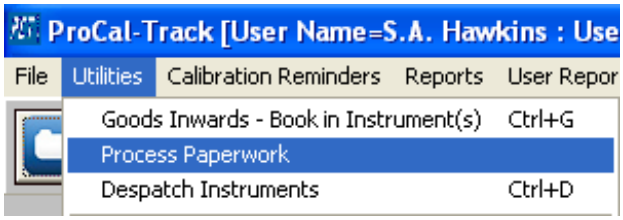
STEP 17 To print the certificate, click **OK** or click **Cancel** to print later using ProCert.



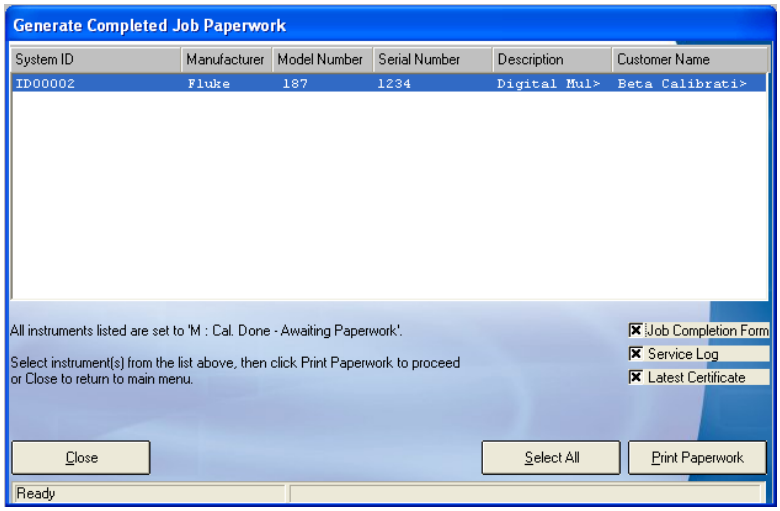
Note : This option to print can be enabled / disabled using ProSet -> Program Options

DESPATCH AN INSTRUMENT WITH PROCAL TRACK

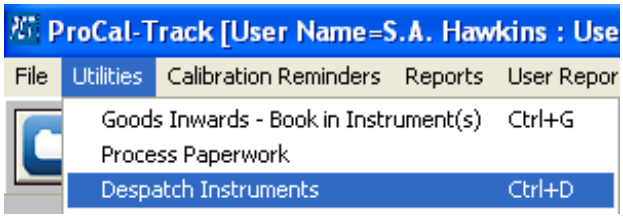
STEP 1 Start ProCal-Track : Select Utilities → Process Paperwork.



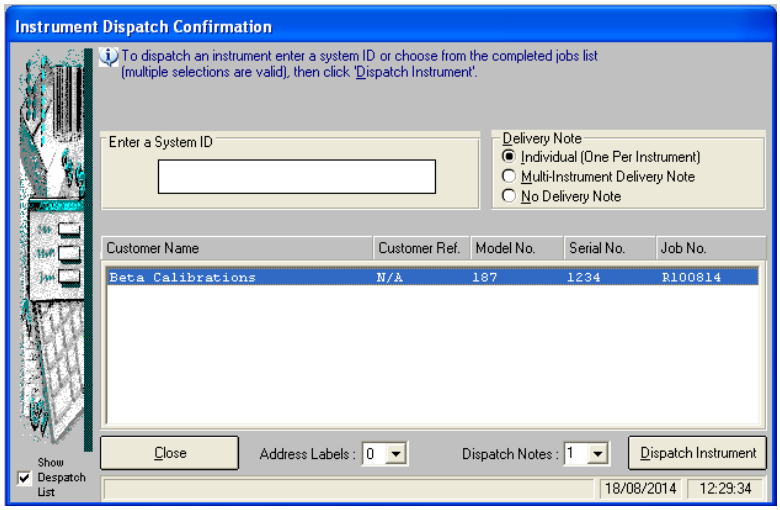
A list is displayed of instruments ready for paperwork processing.
Click on the *Fluke 187* calibrated previously and select the required paperwork items, then click **Print Paperwork**.



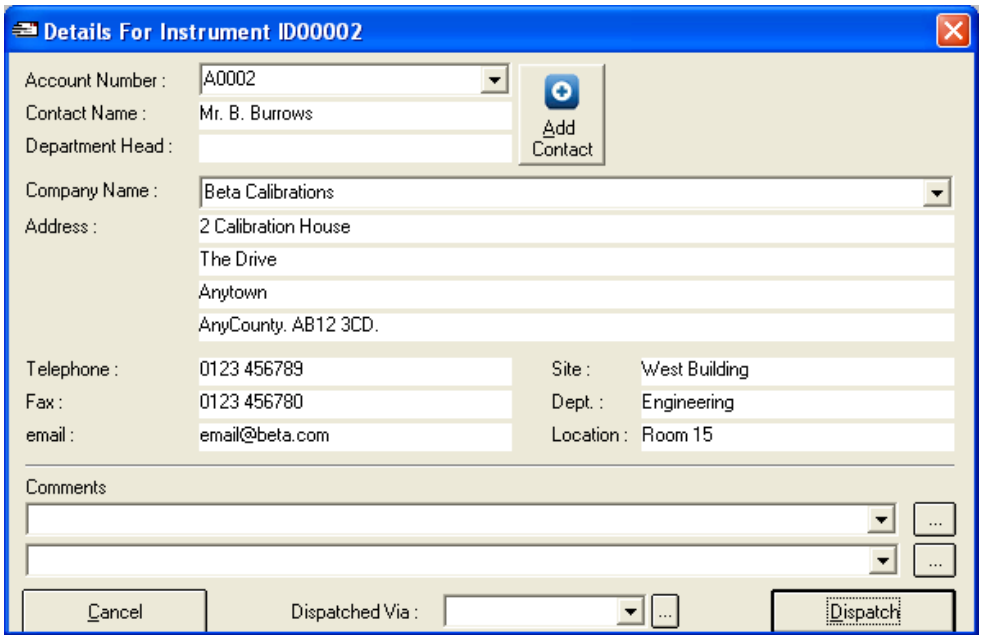
STEP 2 Select Utilities → Despatch Instruments



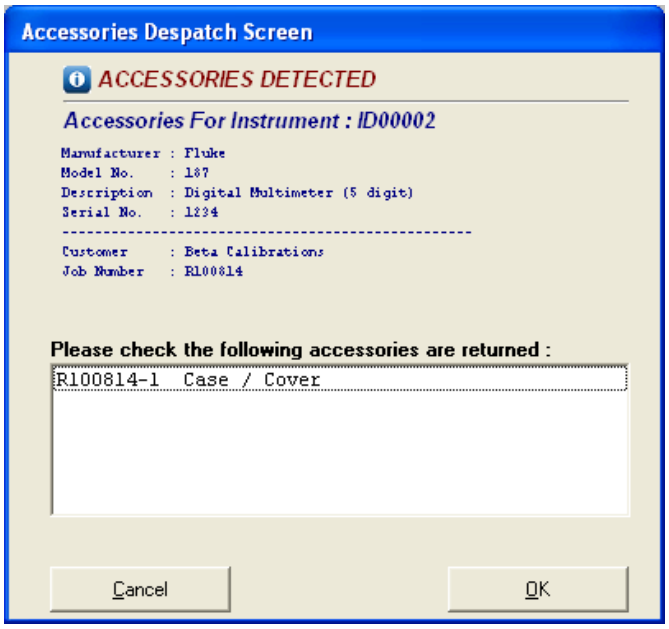
A list is displayed of instruments ready to despatch.
Click on the instrument to produce a despatch note.



STEP 3 Confirm despatch information then click **Despatch**



STEP 4 Confirm Accessories



The software will confirm accessories are returned (if accessories set at time of booking in)

Tip : If the system is running with a barcode scanner connected, a label can be printed with a unique number for each accessory booked in - this label can then be scanned to confirm accessory return prior to the despatch paperwork being printed.

CALIBRATION EXAMPLE COMPLETED

This completes the cycle of calibration and the instrument status is returned to 'A - With Customer' – the calibration date & certificate number are updated automatically.

For more information please see the documentation installed with each program.

Please visit www.transmille.com for application notes and additional user documentation