

Pressure Calibration Using Pressure Modules

EA006/TPM

Overview – Connecting the Pressure Module

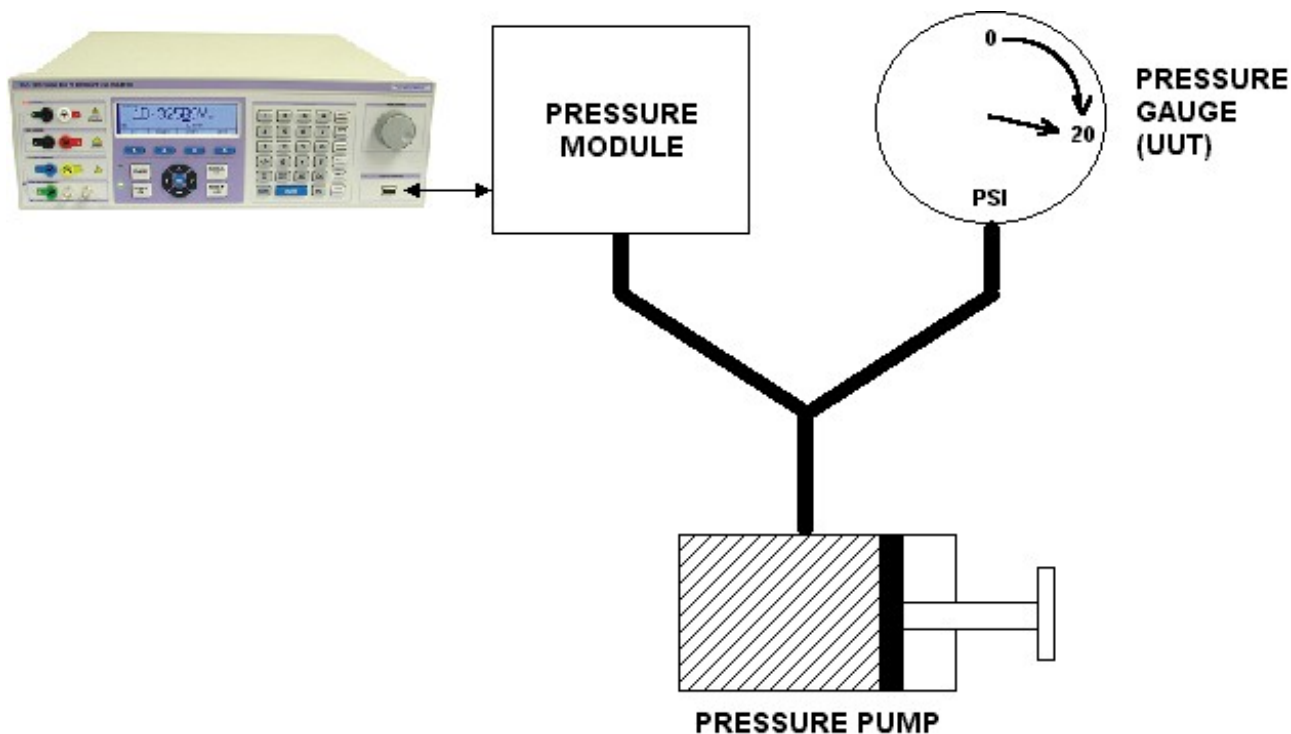
The pressure measurement module connects to the 3000 series calibrator using the adapter interface connector via a normal serial connection lead (supplied).



Adapter interface connector

The pressure calibration adapter connects to a pressure source (e.g. pressure pump) and the UUT gauge allows pressure to be injected into the pressure transducer which is measured and displayed by the calibrator.

This is compared to the pressure readback by the gauge to allow the gauge to be calibrated.



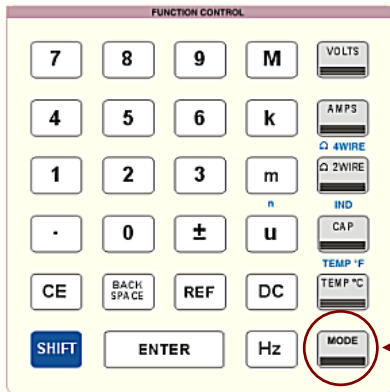


TPM Pressure Calibration Modules

For the 3000 Series Calibrators

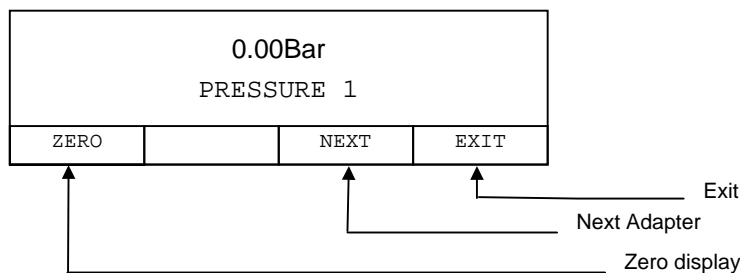
Pressure Measurement Using the 3000 Series Calibrator

Using the **MODE** button on the calibrator, calibration adapters can be read back directly to the 3000 Series front panel display. To initiate this mode, simply click the **MODE** button on the front panel keyboard :



Click MODE to enter adapter measurement

Once the measurement mode is selected, the calibrator screen will display as follows :



Function summary

ZERO : Use this function to reset the measurement to zero (NULL)

NEXT : Cycle through the available calibration adapter channels

EXIT : Return to DC voltage mode

ZERO

With the pressure module connected, press the ZERO softkey to set the display to zero prior to applying pressure.

NEXT

The 'next' softkey allows the calibrator to be set to the correct calibration adapter.

The sequence of adapters is as follows :

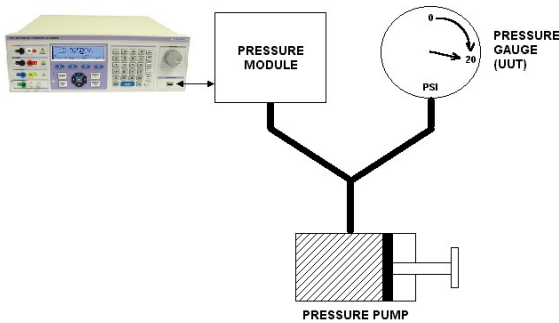
- Pressure 1 : Pressure Module 1
- Pressure 2 : Pressure Module 2
- Pressure 3 : Pressure Module 3
- Voltage : Direct Voltage Read back
- Torque 1 : Torque Module 1
- Torque 2 : Torque Module 2
- Torque 3 : Torque Module 3
- Torque 4 : Torque Module 4
- Torque 5 : Torque Module 5
- Torque 6 : Torque Module 6

Note : The adapter supplied will be labelled to indicate which adapter channel they are calibrated for use with

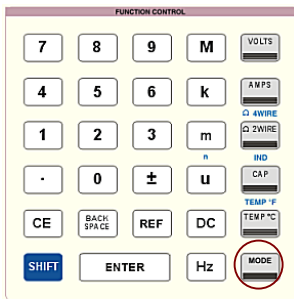


Using the Pressure Modules

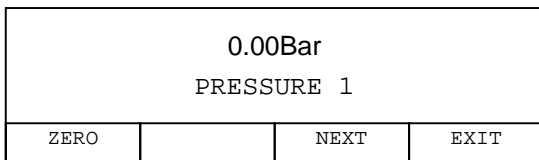
STEP 1 : Connect pressure module to adapter interface connector on the 3000 Series calibrator



STEP 2 : Select MODE button to set 3000 Series calibrator to measurement mode



STEP 3 : Use the NEXT button to select the correct calibration adapter channel

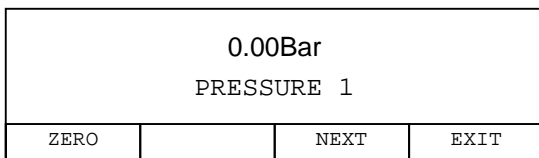


Select NEXT adapter from sequence :
 Pressure 1 → Pressure 2 → Pressure 3 → Voltage → Torque 1 → Torque 2 →
 Torque 3 → Torque 4 → Torque 5 → Torque 6

To cycle around the available channels, keep pressing next – this function will 'wrap around' from Torque 6 back to Pressure 1.

Note : The adapter supplied will be labelled to indicate which adapter mode they are calibrated for use with e.g. Select Pressure 1 if the pressure module is labelled Pressure 1

STEP 4 : Use the ZERO button to null the readback prior to applying pressure



Select ZERO to reset display to zero Bar (NULL)