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User's Manual

48 Pins Calibration test POD, Type I



The 48 Pins Calibration test POD, Type I

The **48 Pins Calibration test POD, Type I** is designed for testing calibration status of 48-pin universal programmers and multiprogrammers. There is needed only precise voltmeter (multimeter) and/or oscilloscope (optionally for checking programmer's internal frequency) to perform a calibration test on the programmer using the 48 Pins Calibration test POD, Type I.

Content of the 48 Pins Calibration test POD, Type I package

- The 48 Pins Calibration test POD, Type I
- Faston and toothed lock washer for the programmer's earthing point

Procedure for mounting an earthing point on the programmer's case (optional for programmers without ISP connector)

- 1. Disconnect supply and communication cables from the programmer.
- 2. Place the programmer on the bench so, that connectors point to you.
- Unscrew one of the screws from the upper edge of rear side of the programmer. You
 can unscrew any screw (for multi programmers we recommend unscrew one of the
 screws closer to the center of the programmer).
- 4. Faston and toothed lock washer (in this order) put on the screw and screw it back to the programmer's case. Faston must be orientated upward or to side, see picture below. Tighten the screw.



Description of the 48 Pins Calibration test POD, Type I:



- 1. Jumper **JP2** selects source pin for supply current load generator on the 48 Pins Calibration test POD, Type I. Default position of jumper is *opened*.
- Jumper JP1 connects tested pin (of the programmer) to the current load generator on the 48 Pins Calibration test POD, Type I. Default position of jumper is unconnected.
- 3. Meas- wire-wrap for connect voltmeter common clip.
- 4. Meas+ wire-wrap for connect voltmeter positive clip.
- 5. The faston for earthing cable (connect an earthing cable here if the programmer is not equipped with an ISP connector.
- 6. Connectors for and ISP cable (earths POD to the programmer through an ISP cable).
- 7. The 48 jumpers for connecting tested pin of the programmer into testing circuits on the 48 Pins Calibration test POD, Type I.

Procedure for testing calibration of the programmer

- Insert the 48 Pins Calibration test POD, Type I into the ZIF socket of tested programmer. Interconnect ISP connector of tested programmer with appropriate connector on the 48 Pins Calibration test POD with an ISP cable (accessory of tested programmer). If programmer is not equipped with an ISP connector attach the earthing cable of the 48 Pins Calibration test POD, Type I to the earthing point mounted on the programmer's case.
- Run command Programmer / Calibration test ... to start performing calibration test:



- Program will display window with instructions you have to follow out before calibration test will be started.
- During performing calibration test program writes information about tested voltage source and allowed voltage interval into LOG window.

L0440: Pin 48 (5.00V) = pass.	Tested voltage source	Nominal load current from tested pin
L0441 L0442 VCCP voltage levels test	Allowed volta on teste	ge interval d pin
Requested voltage on tested pi	voltage interval: from 1.71V to	1.897, Iload=75.00mA
Addresses (hex)	Programmer	

 Program will instruct you what jumper must be switched to measure voltage level on the tested pin.

L0143: Instruction what jumper	Enter measured value	
L0145: must be switched on L0146: Campation by uping 48 F	Connect jumper for pin 4. Enter measure	ed voltage:
L0147: Pull-up levels test:	OK Cancel	Back
Lo of programmer's ZIF pin 3 ass. Lo151: Pin 2 (1.20V) = pass.	2	Next
L0152: Pin 3 (1.73V) = pass.	Navigation buttons enable modify values for already tested pins	Write voltage measured on pin

- Write voltage measured on the pin into box in displayed window. After measured voltage value entered, program will write result of current pin test into LOG window.
- Some of tested voltage sources have to be loaded with nominal current, in this case
 program will instruct you what jumpers on the 48 Pins Calibration test POD, Type I
 must be switched for proper testing.

- Optionally, software allows checking accuracy of an internal frequency for some types of programmers. This frequency calibration tests is not compulsory. This feature is accessible from version 2.65 of PG4UW.
- When all pins and voltage sources was tested, program will give you a choice what to
 do with report from the calibration test (you can save report into the text file and/or
 print it or you can cancel it).
- Calibration test can be aborted anytime by hitting button Cancel in the window Enter measured value.