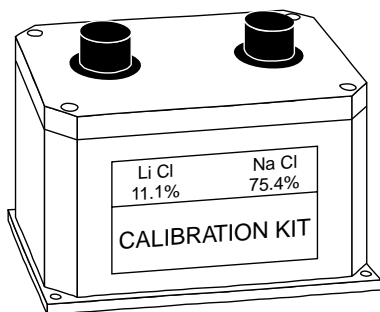


Instruction Manual

HI 7101 • HI 7102 RH Calibration Kits



HANNA
instruments
www.hannainst.com

Dear Customer,
Thank you for choosing a Hanna product.
Please read this instruction manual carefully before using the instrument. This manual will provide you with the necessary information for correct operation.
If you need additional technical information, do not hesitate to e-mail us at tech@hannainst.com.

PRELIMINARY EXAMINATION

Remove the calibration kit from the packing material and examine it carefully. If any damage has occurred during shipment, immediately notify your Dealer or the nearest Hanna Customer Service Center.

Note: Conserve all packing material until the kit has been observed to function correctly. Any defective item must be returned in its original packing.

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GENERAL DESCRIPTION

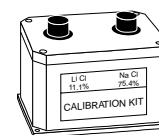
HI 7101 and HI 7102 portable chambers allows you to calibrate your hygrometers. These kits include two thermally isolated chambers, each one equipped with a cap and three bottles containing the appropriate precalibrated saturated salts to produce a known RH value: two 15-gram bottles of Lithium Chloride (LiCl) and one 33-gram bottle of Sodium Chloride (NaCl).

HI 7101 is used with HI 8564, HI 9064, HI 9065, HI 9161 and HI 91610.

HI 7102 is used with HI 93640 and HI 8666.

They measure only 190 x 115 x 110 mm.

You can check the status of your probe and perform a quick recalibration (with an accuracy of $\pm 5\%$) by using the Hanna mini-calibration chambers HI 7101 and HI 7102.



CALIBRATION

PREPARING THE CALIBRATION SOLUTIONS:

- Pour approximately 26 cc of distilled water into a glass container.
- Immerse this container into a bath of ice and water and shake briefly.
- Slowly add the contents of a HI 7111 bottle containing LiCl into the glass container while continuing to shake.
- When the salt has dissolved completely, add all the content of the second bottle of HI 7111.
- Allow the solution obtained to cool, and then pour it into the chamber marked "RH11.1%", making sure that no residue remains on the walls of the glass container.
- Seal the chamber well when not in use, as the LiCl solution is extremely hygroscopic and tends to capture the humidity present in the air causing the solution to expand in volume and to overflow from the container.



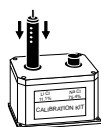
- Pour approximately 12 cc of distilled water into the other chamber marked "RH 75.4%".
- Add all the content of the HI 7121 bottle containing NaCl while continuously shaking the container to avoid the formation of lumps. Seal this container well when not in use.



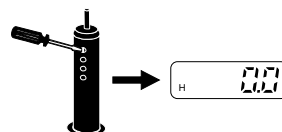
The calibration kit needs 4 hours for stabilization.

RH CALIBRATION PROCEDURE :

- Bring the calibration kit to a temperature of approximately 20°C.
- Remove the cap from the "RH 11.1%" chamber containing the LiCl solution and insert the probe paying attention not to dip it into the liquid.
- Remove the adhesive sticker which covers the calibration trimmer access holes.



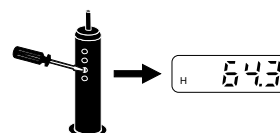
- Switch the RH meter on.
- Wait for the measurement to stabilize (this takes about 4 hours).
- Turn the low humidity trimmer (see Hygrometer Instruction Manual) until a value of 0.0% is seen on the readout (reading between 0.0% and 1.0% RH is also acceptable).



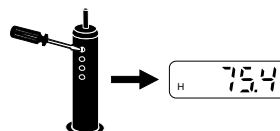
- Remove the probe and tightly seal the chamber containing the LiCl solution.
- Remove the cap from the "RH75.4%" chamber containing the NaCl solution and insert the probe.
- Wait for the measurement to stabilize (approximately 4 hours).



- Turn the high humidity trimmer until the readout on the display is 64.3%.



- Wait for 1 hour and readjust if necessary.
- Leaving the probe in the "RH 75.4%" chamber, adjust the low humidity trimmer until the value of 75.4% is read.



- Now, the humidity calibration is complete.

ACCESSORIES

HI 7111/P Spare saturation salts (6 x 15 g bottles of LiCl) for low range humidity calibration

HI 7121/P Spare saturation salts (6 x 33 g bottles of NaCl) for high range humidity calibration

WARRANTY

HI 7101 and HI 7102 are warranted for two years against defects in workmanship and materials when used for their intended purpose and maintained according to instructions. This warranty is limited to repair or replacement free of charge.

Damages due to accidents, misuse, tampering or lack of prescribed maintenance are not covered.

If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the problem. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization Number from the Customer Service department and then send it with shipment costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.