

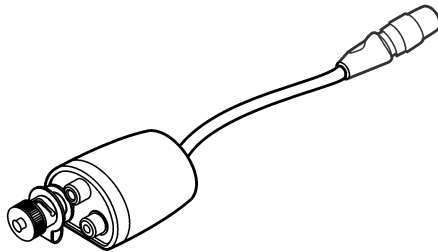


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IntelliCAL Legacy Adapter

04/2026, Edition 1

User Manual



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Section 1 Safety information

The manufacturer is not responsible for any damages due to misapplication or misuse of this product including, without limitation, direct, incidental and consequential damages, and disclaims such damages to the full extent permitted under applicable law. The user is solely responsible to identify critical application risks and install appropriate mechanisms to protect processes during a possible equipment malfunction.

Please read this entire manual before unpacking, setting up or operating this equipment. Pay attention to all danger and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment.

If the equipment is used in a manner that is not specified by the manufacturer, the protection provided by the equipment may be impaired. Do not use or install this equipment in any manner other than that specified in this manual.

1.1 Use of hazard information

▲ DANGER

Indicates a potentially or imminently hazardous situation which, if not avoided, will result in death or serious injury.

▲ WARNING

Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.

▲ CAUTION

Indicates a potentially hazardous situation that may result in minor or moderate injury.

NOTICE

Indicates a situation which, if not avoided, may cause damage to the instrument. Information that requires special emphasis.

1.2 Precautionary labels

Read all labels and tags attached to the instrument. Personal injury or damage to the instrument could occur if not observed. A symbol on the instrument is referenced in the manual with a precautionary statement.



Electrical equipment marked with this symbol may not be disposed of in European domestic or public disposal systems. Return old or end-of-life equipment to the manufacturer for disposal at no charge to the user.

Section 2 Product overview

NOTICE

Only connect analog pH sensors to the IntelliCAL legacy adapter or damage to the IntelliCAL legacy adapter can occur.

The IntelliCAL legacy adapter can be connected to any HQd/HQ series meter to be an interface between the analog pH sensor and the digital HQd/HQ series meter. In addition, the IntelliCAL legacy adapter can be used with the AT1000 series titrator.

Use the IntelliCAL legacy adapter to connect analog pH sensors only in the combinations that follow:

- a pH combined sensor to the BNC socket (Figure 1 on page 4, item 3)
- a pH glass sensor to the BNC socket and a reference electrode to the banana socket (Figure 1 on page 4, item 4)

- a temperature sensor can be connected to the cinch socket (Figure 1 on page 4, item 5), as a separate sensor or as a built in sensor element in the pH sensors

For correct automatic buffer recognition with the HQd/HQ series meter, connect the IntelliCAL legacy adapter to only Ag/AgCl reference electrodes.

Section 3 Component installation

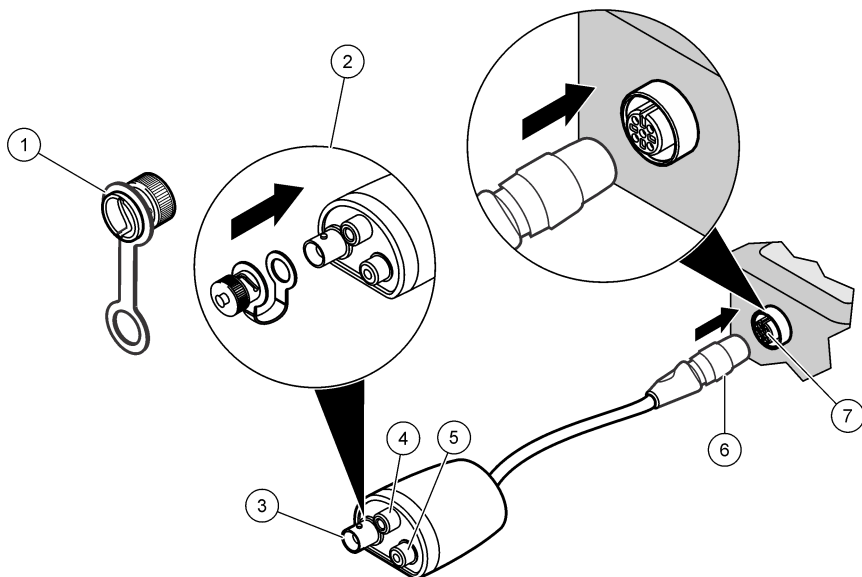
1. Connect the cable of the IntelliCAL legacy adapter (Figure 1, item 6) to the HQd/HQ series meter (or AT1000 series titrator). Make sure that the plug is securely connected.
2. Fix the BNC cap with plastic safety device (Figure 1, item 1) to the BNC socket (item 3).

Note: When the BNC socket is not used, install the BNC cap on the BNC socket to prevent contamination due to water and dust.

3. Connect the analog pH sensor to the BNC socket (Figure 1, item 3) of the IntelliCAL legacy adapter. When using a separate temperature sensor, connect that plug to the cinch socket (Figure 1, item 5). If using a separate reference electrode, connect it to the banana socket (Figure 1, item 4).

Note: If no temperature sensor is connected to the IntelliCAL legacy adapter, the HQd meter prompts with the screen "Manual temperature input". Set the temperature of the sample. This temperature is a fixed temperature as long as no temperature sensor is connected or the value is changed manually. This temperature is also used when performing a calibration with pH buffers.

Figure 1 IntelliCAL legacy adapter



1 BNC cap with plastic safety device	5 Cinch socket
2 Fix the BNC cap with plastic safety device to the BNC socket	6 Multi-pin plug
3 BNC socket	7 HQd/HQ series meter (or AT1000 series titrator) (5-pin M12 connector)
4 Banana socket	

Section 4 pH sensor calibration

When the analog pH sensor needs a calibration, refer to the calibration steps in the HQd or HQ series meter user manual. The calibration data is stored in the IntelliCAL legacy adapter until a new calibration is completed.

Note: *A new calibration is necessary when the analog pH sensor is changed or replaced.*

Section 5 pH measurement

With the IntelliCAL legacy adapter, a pH measurement can be done with an analog pH sensor the same as with a digital IntelliCal pH sensor. The results are stored in the HQd/HQ series meter and can be displayed, printed or transferred to a PC. Refer to the HQd or HQ series meter user manual for more information.

Section 6 Warranty

The IntelliCAL legacy adapter is tested with various analog pH sensors to operate with accurate results and easy handling. However, there might be a pH sensor that does not work properly with the IntelliCAL legacy adapter. In this case, use a different pH sensor or change to a digital IntelliCal pH sensor.



HACH COMPANY World Headquarters

P.O. Box 389, Loveland, CO 80539-0389 U.S.A.
Tel. (970) 669-3050
(800) 227-4224 (U.S.A. only)
Fax (970) 669-2932
orders@hach.com
www.hach.com

HACH LANGE GMBH

Willstätterstraße 11
D-40549 Düsseldorf, Germany
Tel. +49 (0) 2 11 52 88-320
Fax +49 (0) 2 11 52 88-210
info-de@hach.com
www.de.hach.com

HACH LANGE Sàrl

6, route de Compois
1222 Vézenaz
SWITZERLAND
Tel. +41 22 594 6400
Fax +41 22 594 6499