

Panel-Mounted pH Indicators & Controllers



Dear Customer,

Thank you for choosing a Spark Instruments product. Please read this instruction manual carefully before using these instruments. This manual will provide you with the necessary information for correct use of these instruments.

MAJOR EXAMINATION

Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipping. If there is any damage and each meter is supplied with:

- Mounting brackets
- Instruction manual
- Two screwdriver for install and calibration

GENERAL INFORMATION

SP22 is panel-mounted pH indicators and controllers designed for simplicity of use in a wide range of industrial applications. Connections and wiring to electrode, power supply and contacts are made via the terminal blocks on the rear panel.

The meters are equipped with a BNC socket and accept input from any conventional pH electrodes. Other features include: overtime control system, selection of dosing direction (Acid/Alk.), one dosing contact, multi-color LED for indicating if the meter is in measurement/dosing/ alarm condition, possibility to set (Off-Auto-On switch) dosing action mode SP22 powered at 220 Vac.

SPECIFICATIONS

Range	0.0 to 14.0 pH
Resolution	0.1 pH
Accuracy	Accuracy (@ 25 °C / 77 °F) ± 0.2 pH
Calibration	Calibration Manual, through CAL (Offset) & Slope tune trimmer
Dosing	Dosing Contact Maximum 2A (fuse protected), 250 Vac.
Dosing Selection Acid or Alk.	Contact Open=Acid dosage=Relay ON if Measure > Set point Contact Close=Alk dosage=Relay ON if Measure < Set point
Set point	Set point Adjustable, from 0 to 14 pH
Overtime	Overtime Adjustable, typically from 5 to approx. 30 minutes
Power Consumption	10 VA
Power supply	External (fuse protected), 220/230 Vac ; 50/60 Hz
Dimensions	93 x 100 x 79 mm

CALIBRATION

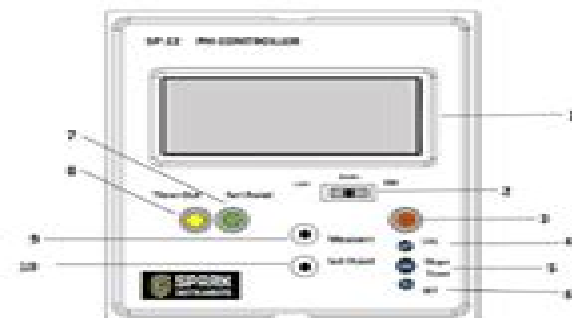
To achieve best measurement, we recommend to calibrate the instrument once every week. And the procedure as following: - with meter in measurement mode, immerse electrode and Matching Pin (if available) in pH 7.01 buffer solution, shake briefly and wait for reading to stabilize. Adjust the CAL trimmer until "7.0" is displayed on the LCD. And for more accurate result use 4.01 buffer solution and Adjust the Slope Tune trimmer until "4.0" is displayed on the LCD.

ACCESSORIES

- Calibration and Installation screwdrivers
- Mounted bracket

FEATURE DESCRIPTION

Front panel



1. Liquid Crystal Display
2. Switch for selecting dosing mode:
 - OFF = Dosing disabled
 - Auto =Automatic dosage, depending on set point
 - ON = Dosing always active
3. RGB-LED indicator:
 - Green = meter in measurement mode
 - Orange/Yellow = dosing in progress
 - Red, blinking = indicates an alarm condition
4. CAL to adjust the pH offset value during calibration
5. Slope Tune to adjust the pH slope tune value during calibration process
6. SET to adjust the set point take value (0 to 14 pH)
7. SET Point indicator green led flashing when set point switch is pressed
8. Time Out indicator yellow led flashing when dosing setting over time dosing for protection.
9. Measure key to set the instrument to measurement mode
10. SET Point key to display and set the set point value

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