# pH/ORP CONTROLLER

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## FEATURES

Operate as pH or mV controller

Four set points controlling 4 relays plus 2 proportional pulse outputs

**4** line by 20 character backlid LCD display

Configuration, setup and calibrations performed with software. Values are easily changed with rotary encoders

Real time clock with 4-week timer cycles.

Program a timer to enable relay operation only at programmed times.

HE RIGHT CHOICE

Use manual or automatic temperature compensation.

Precision 4-20mA constant current output, electrically isolated from instrument.

Call up the build in help menu to assist in set-up and configurations.

Spacious layout of terminals for the electrical wiring of the instrument.

hermo plastic enclosure with transparent lid.



DPH-64

# pH/ORP CONTROLLER DPH-64

### SPECIFICATIONS

Range:	0-14pH 0.01 pH resolution
	+1000mV 1mV resolution
Display:	Dot matrix 4 line by 20 character backlid LCD display
Electrode: BNC	external of housing.
Temperature:	<i>(pH only)</i> manual or automatic temp. Compensation 0-100 o C.
Signal output:	4-20mA, electrically isolated from instrument. 4-20mA range software selected between 0 to 14pH or 0 to +1000mV. Maximum termination impedance to drive 20mA is 1000 Ohms. Can also be setup to follow setpoint for signal driven metering pumps.
Relay outputs:	2 relays (S1 & S2) switched active with neutral and earth terminals. Contacts rated 240V 5AMPS ( <i>non-inductive</i> ) 2 relays (S3 & S4) with potential free changeover contacts.
	Timers can be activated to enable / disable relay outputs for programmed times.
Set points:	All relays can be configured for up/down dosing. Enable a Time delay of 30 sec to 2min between S3 & S4 if acid / alkaline dosing is required.
Clock:	Real time clock with AM/PM or 24H mode. Four week calender to use for monthly dosing. Battery backed up.
Additional relay	
functions:	S1 & S2 can be set up as timers with real time ON/OFF timing. S1 & S2 setpoint can also be linked to the temperature input for temperature control or alarm. S3 & S4 configurable as a high/low alarm.
Pulse output:	P1 and P2 are <i>(contact closure)</i> non- polarised pulsed outputs. Minimum pulse duration 250mS. 500 volts minimum isolation to instrument output. Maximum voltage across terminals 100 volts.
Pulse rate:	1 pulse to 50 to 100 pulses/minute maximum. Slope of pulse frequency 0.5pH to 2pH above/below SET POINT.
Alarm input:	The operation of all relays can be disabled with a contact closure input. <i>(flow switch)</i>
Power supply:	240V/50H 8VA max.
Construction:	Fully sealed construction with hinged clear
	acrylic front cover. IP55 specifications.
Dimensions:	(W)215mm x (H)185mm x (D)115mm.

### FEATURES

The 4 line by 20-character LCD display allows text messages or prompts in proper language without confusing abbreviations.

Encoder knobs are rotated to scroll through different menus, values or changing set points. Once a mode of operation, calibration value or setpoint is dialled simply push the encoder knob to select. All custom configurations are stored in non-volatile memory.

A real time clock is always present and relay outputs can be linked with a timer to operate only at programmed times.

The **DPH-64** features 6 relay outputs with a multitude of configurations possible to make this instrument suitable for almost every installation where pH, ORP, temperature control or timer output is required. Default label names for these outputs are S1, S2, S3, S4 and P1, P2. Individual labels can be entered to correspond with actual installation names or numbers.

The **DPH-64** is shipped with its basic setup of all four relays set point controlled for up or down dosing. All other features are hidden when scrolling through the software setup. The appropriate setup window only appears once a feature is enabled. Scrolling through a setup is therefore much easier to follow.

#### Extended features possible are:

All relays linked with a timer to operate only at programmed times.

S1 and S2 setup as timer outputs starting in real time. (*biocide dosing etc.*)

S2 used as an alarm with a programmable high, low window.

A time delay between S3 & S4 to avoid overshoot when dosing acid and alkaline simultaneously

S3 and S4 used in proportional mode. (also adaptive proportional)

S3 or S4 linked to the 4-20mA current output for dosing with a current signal controlled pump.

S3 and S4 linked to temperature with programmable temperature setpoint.

P1 and P2 used with dosing pumps requiring a pulse input.

A 2 way terminal connects an alarm input *(opto coupled)* for relay lock out. Flow switches with normally open or closed operation can be used.





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