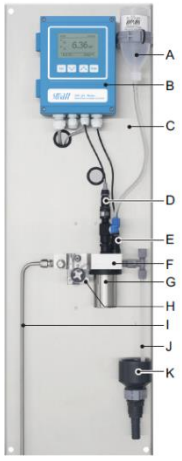
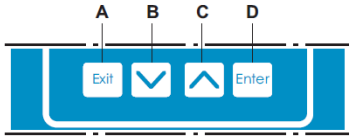
Swan AMI pH / Redox
Quick Reference Guide

Overview



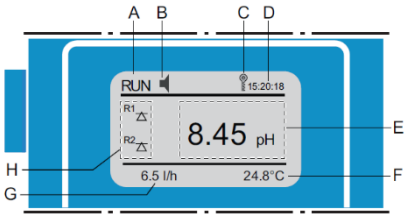
A – KCl Bottle
B – Transmitter
C – Oxygen Sensor
D – pH/Redox sensor
E – Temperature sensor
F – Flow cell
G – Calibration vessel
H – Flow sensor
I – Sample inlet
J – Sample outlet
K – Drain

Keys



A – to exit a menu or command (rejecting any changes) to move back to the previous menu level
B – to move DOWN in a menu list and to decrease digits
C – to move UP in a menu list and to increase digits
D – to open a selected sub-menu to accept an entry

Display



A – RUN normal operation
HOLD input closed or cal delay: Instrument on hold (shows status of signal outputs).
OFF input closed: control/limit is interrupted (shows status of signal outputs).

B – ERROR Error Fatal Error
C – Keys locked, transmitter control via Profibus
D – Time
E – Process values
F – Sample temperature
G – Sample flow - 4 to 15 l/h
H – Relay status

Relay status, symbols

upper/lower limit not yet reached
upper/lower limit reached
control upw./downw. no action
control upw./downw. active, dark bar indicates control intensity
motor valve closed
motor valve: open, dark bar indicates approx. position
timer
timer: timing active (hand rotating)

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Maintenance

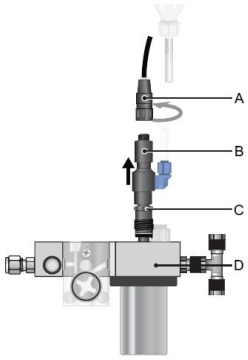
Monthly

- Check level in electrolyte bottle and replace if necessary

Quarterly

- Slightly open the sensor cap of the reference sensor and allow a little electrolyte (~ 5 ml) to flow out. Fasten cap hand-tight.
- Clean flow cell and flow sensor, if dirty

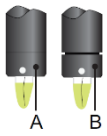
How to remove and clean Electrodes



A – Connector
B – Electrode
C – Union screw
D – Flow cell block

Note: Do not remove the KCl bottle from its holder or the KCl supply pipe from the KCl bottle when removing the electrode. Do not put the electrodes into acids to clean them.

- Unscrew and remove the connector [A] from the electrode [B]
- Unscrew and remove the electrode [B] from the flow cell block by turning the union screw [C] counterclockwise
- Wipe the electrode shaft and the green tip carefully with a soft, clean, and damp paper tissue
- Remove grease with a tissue moistened with alcohol
- Slightly open the sensor cap of the reference sensor and allow a little electrolyte (~ 5 ml) to flow out
- Tighten the sensor cap hand tight again
- Rinse the electrode tip thoroughly with clean water
- Install the electrode into the flow cell again
- Let the electrode run-in for 1 h before the first calibration



A – Sensor cap tightened
B – Sensor cap slightly opened

Calibration

DO NOT REMOVE TEMPERATURE SENSOR FROM FLOW CELL.
Calibration must be performed with all probes installed in the flow cell block. Use flow cell vessel to hold calibration standard.

Calibration Video

- Calibration must be performed with a clean sensor (and a clean calibration vessel)
- Calibration solutions must be clean. Do not use if expired
- Always rinse and dry electrodes before immersing them into the calibration solutions
- Ensure pH standard temperature compensation factors are set up in the software before proceeding with calibration. See manual for more information
- Navigate to <Maintenance>/<Calibration> and select <Standard pH>. Follow the instructions on the screen
- Calibration of Standard 1 is successful if the Offset Value is in the range of +/- 30mV
- Calibration of Standard 2 is successful if the Slope Value is in the range of 56 – 61 mV/pH

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Reorder codes

Product Code	Description	Image
A-87.893.500	Filling solution 3.5M for Swansensor pH SI+FL; 200ml	
A-87.860.100	Swansensor Reference FL	
A-87.150.200	Swansensor pH FL	
A-87.110.200	Swansensor pH SI	
A-87.411.200	Swansensor Redox FL	

Error Messages

To view active error messages, press ENTER to open menu system, select MESSAGES -> PENDING ERRORS. Consult the manual for a full list of error messages.

HINT: With any Swan system, press ENTER 3 times from the home screen to bring up the PENDING ERRORS list.

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