

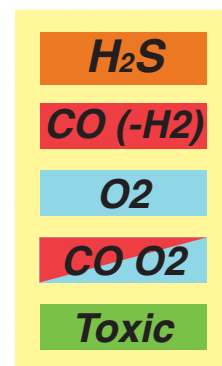


Features

- Continuously operate for over one year (H₂S & CO)
- Toxic gases include: NH₃, Cl₂, HCN, NO₂, PH₃ & SO₂
- CO with H₂ elimination
- CO & O₂ Dual Sensor
- Field serviceable
- Pocket size 2.1"(W) x 2.6"(H) x 0.9"(D), 2.8 ounces
- Impact, dust, and water resistant (IP-67)
- Replaceable rubber boot
- Alligator clip with 360° rotation
- Audible / visual / vibration alarms
- Automatic backlight
- Intrinsically safe, ATEX and C / US approvals
- 3 Year warranty*

Applications

- Hazardous material
- Mining
- Refineries / petrochemical
- Water / wastewater treatment
- Pharmaceuticals
- Utilities
- Chemical plants
- Fire services
- Steel Mills



The 04 Series single gas monitor is designed to operate for many years with field replaceable sensors and filters. The 04 Series can be operated continuously for up to 9,000 hours on (2) AAA size alkaline batteries (depending on model). The 04 Series has 3 preset alarms that are user adjustable. Each version is also equipped with visual, audible, and vibration alarms as standard.

The replacement sensors are inexpensive, easily field replaceable, and are interchangeable with other popular RKI instruments like the GX-3R, GX-3R Pro, and GasWatch 3. Sensors have a life expectancy of over 3 years and are backed by a 3 year warranty.*

Each 04 Series monitor is impact, dust, and water resistant with an IP-67 ingress protection rating. 04 Series instruments are safe for use in hazardous locations, classified as intrinsically safe ATEX/IECEX and by QPS to U.S. and Canadian standards for Class I, Division 1, Groups A, B, C, and D atmospheres. For additional information please visit our web site at www.rkiinstruments.com.

* 3 year warranty on material and workmanship including sensors
(1 year warranty for Ammonia and Chlorine sensors)



04 Series

Gases & Detectable Ranges				
Gas	Part # (Model)	Detection Range (Increments)	Alarm Set Points	Continuous Operation
Hydrogen Sulfide (H ₂ S)	73-0063 HS-04	0 - 100.0 ppm (0.1 ppm)	A1: 5 ppm	9,000 hours
			A2: 30.0 ppm	
			A3: 100.0 ppm	
			TWA 1.0 ppm	
			STEL 5.0 ppm	
Carbon Monoxide (CO)	73-0065 CO-04	0 - 2000 ppm (1 ppm)	A1: 25 ppm	9,000 hours
			A2: 50 ppm	
			A3: 1200 ppm	
			TWA 25 ppm	6,200 hours
			STEL 200 ppm	
CO (-H ₂)	73-0067 CO-04C		A1: 19.5 Vol.	
			A2: 18.0 Vol.	
			A3: 23.5 Vol.	3,000 hours
Oxygen (O ₂)	72-0018 OX-04	0 - 40% Vol. (0.1%)	A1: 25 ppm	4,600 hours
			A2: 50 ppm	
			A3: 1200 ppm	
			TWA 25 ppm	
			STEL 200 ppm	
Dual Sensor CO / O ₂	73-0069 CX-04	CO 0 - 2000 ppm (1 ppm)	A1: 19.5 Vol.	3,000 hours
			A2: 18.0 Vol.	
			A3: 23.5 Vol.	
			TWA 25 ppm	
			STEL 200 ppm	
		O ₂ 0 - 40% Vol. (0.1%)	A1: 25.0 ppm	
			A2: 35.0 ppm	
			A3: 300.0 ppm	
			TWA 25.0 ppm	
			STEL 35.0 ppm	
Ammonia (NH ₃)	73-0077 SC-04	0 - 400.0 ppm (0.5 ppm)	A1: 1.00 ppm	3,000 hours
			A2: 2.00 ppm	
			A3: 10.00 ppm	
			TWA 0.50 ppm	
			STEL 1.00 ppm	
Chlorine (Cl ₂)	73-0075 SC-04	0 - 20.00 ppm (0.05 ppm)	A1: 5.0 ppm	3,000 hours
			A2: 10.0 ppm	
			A3: 30.0 ppm	
			TWA 4.7 ppm	
			STEL 10.0 ppm	
Hydrogen Cyanide (HCN)	73-0071 SC-04	0 - 30.0 ppm (0.1 ppm)	A1: 2.0 ppm	3,000 hours
			A2: 4.0 ppm	
			A3: 20.00 ppm	
			TWA 0.50 ppm	
			STEL 1.00 ppm	
Nitrogen Dioxide (NO ₂)	73-0073 SC-04	0 - 20.00 ppm (0.05 ppm)	A1: 0.30 ppm	3,000 hours
			A2: 0.60 ppm	
			A3: 1.00 ppm	
			TWA 0.30 ppm	
			STEL 1.00 ppm	
Phosphine (PH ₃)	73-0079 SC-04	0 - 20.00 ppm (0.01 ppm)	A1: 2.00 ppm	3,000 hours
			A2: 5.00 ppm	
			A3: 100.0 ppm	
			TWA 2.00 ppm	
			STEL 5.00 ppm	
Sulfur Dioxide (SO ₂)	73-0081 SC-04	0 - 100.00 ppm (0.05 ppm)	A1: 2.00 ppm	3,000 hours
			A2: 5.00 ppm	
			A3: 100.0 ppm	
			TWA 2.00 ppm	
			STEL 5.00 ppm	

Common Specifications			
Sample Method	Diffusion		
Response Time	T90 in 30 seconds		
Alarm Types	Gas alarm		Trouble alarm
	1st, 2nd, and 3rd (user adjustable), OVER alarm, STEL, and TWA		Sensor connection, low battery, circuit failure, and calibration range error
Alarm Methods	Gas Alarm	Trouble Alarm	STEL / TWA
	Flashing LED's, intermittent buzzer, flashing gas value, and vibration	Flashing LED's, intermittent buzzer, and display of error message	Flashing LED's, intermittent buzzer, flashing gas value, and vibration
Datalogging	10 sec. intervals = 10 hrs. 5 min. intervals = 300hrs, 10 min. intervals = 600 hours		
	Instrument records alarms, alarm trends, gas readings, calibration & bump test history, instrument settings		
Battery Options	Alkaline dry cell (2-AAA size)		
Display	Digital LCD, gas name & concentration, auto backlighting during alarm, operation icon, battery icon		
Operating Temp. & Humidity	-4°F to 122°F (-20°C ~ +50°C), 0- 90% RH non condensing		
Dimensions	2.1" W x 2.64" H x 0.94" D (54 x 67 x 24 mm) 2.8 ounce (80g)		
Enclosure	Dust and water resistant with IP-67 rating		
Safety Rating	ATEX/IECEx approved. QPS classified, "C / US", as intrinsically safe, Class I, Division 1, Groups A, B, C, D		
Standard Accessories	<ul style="list-style-type: none"> • Rubber boot • Alligator clip • Datalogging software • Alkaline batteries 		
Optional Accessories	<ul style="list-style-type: none"> • Calibration cap • Wrist strap • Calibration kit • Belt clip • Datalogging download cable • SDM-04 Calibration Station (Q4 2022) 		
Special Functions	Manual backlight for LCD (automatically lit during alarm), Peak hold, STEL & TWA		
Warranty	3 year warranty (1 year for Ammonia and Chlorine)		

Specifications subject to change without notice.



INSTRUMENTS

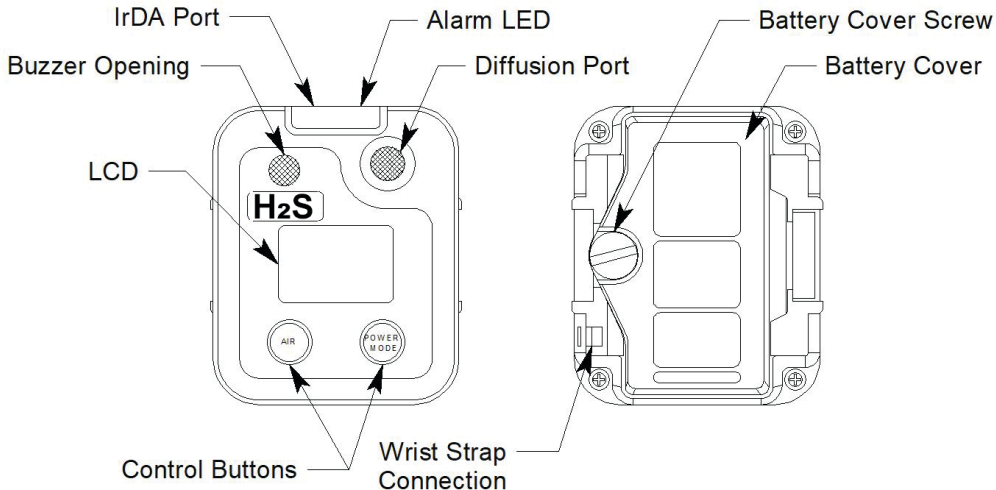
Toll Free: (800) 754-5165 • Phone: (510) 441-5656

Fax: (510) 441-5650 • www.rkiinstruments.com

Authorized Distributor:

04 Series Quick Reference Guide

Applies to models: HS-04, CO-04, CO-04C, OX-04, CX-04, SC-04 (NH₃,Cl₂,HCN,NO₂,PH₃,SO₂)



RKI Instruments, Inc. 33248 Central Ave, Union City, CA 94587

Phone (510) 441-5656 • (800) 754-5165 • www.rkiinstruments.com



04 Series Quick Reference Guide

Applies to models: HS-04, CO-04, CO-04C, OX-04, CX-04, SC-04 (NH₃,Cl₂,HCN,NO₂,PH₃,SO₂)

Turning on your instrument

- Press and hold POWER MODE button. Release it when the instrument beeps.
- When warm-up sequence is completed, the normal operating screen is displayed.
- If Cal Limit Display or Bump Test Limit Display are on and calibration or bump test is due, see operator's manual for warm-up sequence.

Note: If a failure occurs, press and release the POWER MODE button. The instrument cannot be used if a sensor failure occurs. Replace the failed sensor.

Performing fresh air adjustment

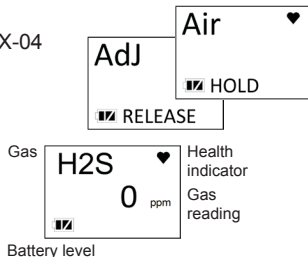
- Press and hold the AIR button in a fresh air environment. The LCD will display "HOLD".
- Release the AIR button when "RELEASE" is displayed.
- The instrument will set reading to 0 ppm for all models except CX-04 and OX-04 (O₂ reading set to 20.9% Vol.)

Normal operating mode

- The gas concentration is displayed.
- Battery charge level is indicated in lower left corner.
- The heart symbol displayed in the upper right corner flashes while the instrument is functioning properly.

Turning the instrument off

- Press and hold the POWER MODE button for approximately five seconds to turn off the unit.

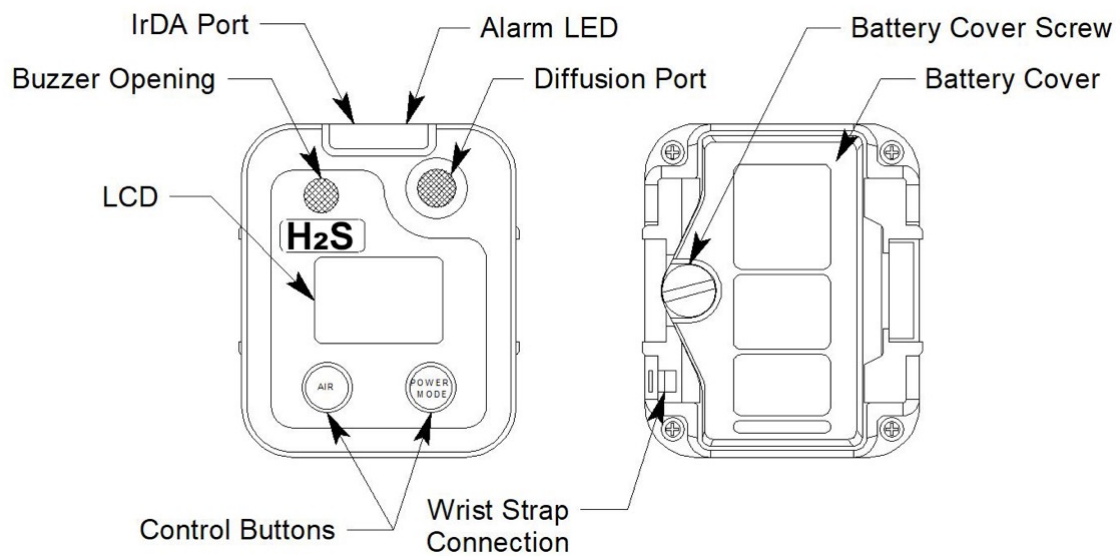


04 Series

Service PowerPoint



1



2

Agenda

- Control Buttons
- Start-up procedure
- Fresh air adjust
- Display Mode
- Calibration
- Filter & sensor replacement
- Battery replacement



3

Control Buttons

04 Series



Button	Function(s)
AIR	<ul style="list-style-type: none"> • Turns on LCD backlight • Reset alarm button for latching alarms • Enters User Mode, Maintenance Mode, and Gas Select mode when used with POWER MODE • Activates the demand zero for fresh air reading • Changes the value of a parameter available for adjustment • Scrolls through parameter options
Power MODE	<ul style="list-style-type: none"> • Turns the 04 instrument on and off • Turns the LCD backlight • Enters and scrolls through Display Mode • Save button • Reset alarm button for latching alarms • Enters User Mode, Maintenance Mode, and Gas Select mode when used with AIR

4

Start-up Procedure

04 Series



Press and hold **POWER MODE** button.
Release the button when you hear a beep.

5

Start-up Procedure

04 Series

Start-up sequence will commence



Date / Time



Battery Voltage



Gas

6

Start-up Procedure

04 Series



Full Scale



Warning Alarm



First Alarm

Start-up Procedure

04 Series



High Alarm



STEL



TWA

Start-up Procedure

04 Series



Normal Operation Screen (Measuring Mode)

9

Fresh Air Adjust

04 Series

Verify that the instrument is in
a fresh air environment



- Press and hold the **AIR** button
- Release when the display says "Release"
- Instrument will return to Normal screen

10

Display Mode

04 Series

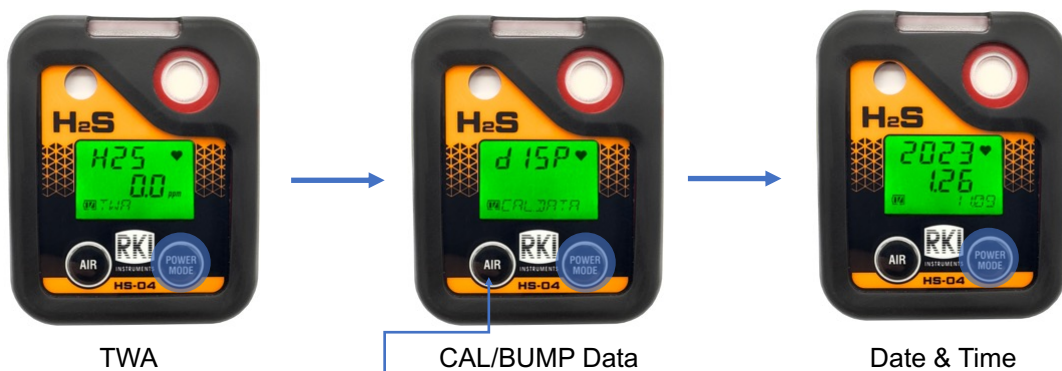
From the Normal Operation Screen (Measuring Mode)
Press **POWER/MODE** to cycle through the Display Mode's menu items



11

Display Mode

04 Series



Press AIR to view CAL/BUMP data

12

Display Mode

04 Series



Temperature

Buzzer volume

Alarm points

Press AIR to change Buzzer volume

13

Calibration (GAS CAL)

04 Series



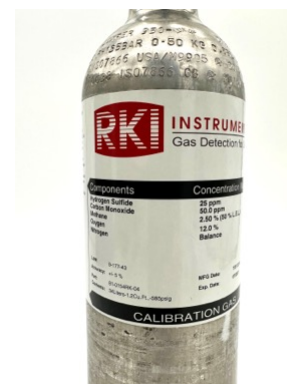
Tubing



0.25 LP Fixed Regulator



Cal Cup



Calibration Cylinder

14

Calibration (GAS CAL)

04 Series

Take the 04 instrument to a non-hazardous location and turn it off if it is on.



- Press and hold **AIR**, then press and hold **POWER MODE**.
- When you hear a beep, release the buttons.

15

Calibration (GAS CAL)

04 Series

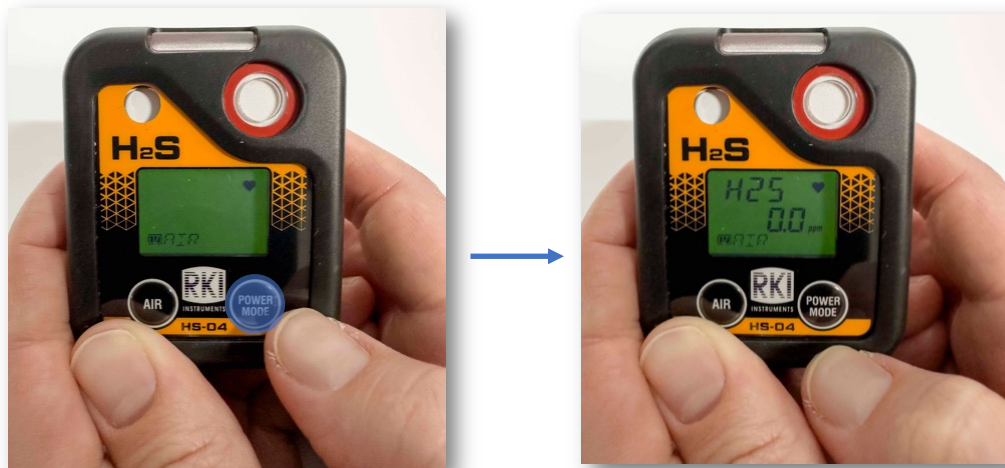


BUMP will be the first screen. Press **AIR** to scroll to the next menu item, which is GAS CAL. Press **POWER/MODE** to enter the menu.

16

Calibration (GAS CAL)

04 Series



The AIR item appears, then press **POWER/MODE** to enter the menu. The next screen prompts you to perform a fresh air adjustment.

17

Calibration (GAS CAL)

04 Series



Press and hold the **AIR** button until it prompts you to release it.

18

Calibration (GAS CAL)

04 Series



After performing a fresh air adjustment, the screen will return to the AIR menu.
- Press the **AIR** button to scroll to the A-CAL menu, then press **POWER/MODE**.

19

Calibration (GAS CAL)

04 Series

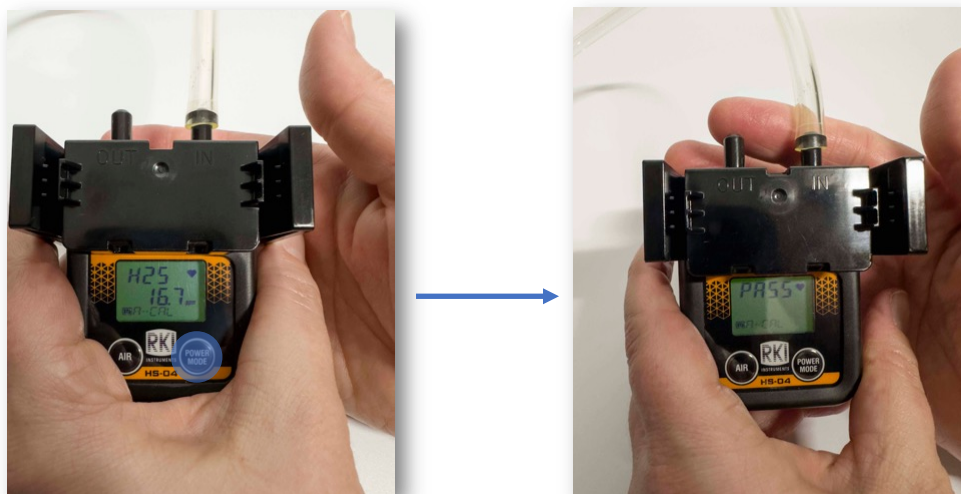


The screen will show the calibration value, which should match the calibration cylinder.
- Proceed to attach the cal-cup onto the instrument, and attach the hose into the "IN" inlet.

20

Calibration (GAS CAL)

04 Series



Press **POWER/MODE** to proceed with the calibration. The reading will flash between “APPLY” and “A-CAL”. Turn the regulator knob to open the gas flow from the cylinder. Let the gas flow for approximately 1 minute. After reading stabilizes, press the **POWER/MODE**.

21

Calibration (GAS CAL)

04 Series



PASS

The instrument indicates that the calibration passed. Press **POWER/MODE** to enter the Normal Operation Screen .



FAIL

The instrument indicates that the calibration failed. Press **POWER/MODE** to return to the A-CAL menu.

22

Filter & Sensor Replacement

04 Series

Take the 04 instrument to a non-static environment and turn it off if it is on.

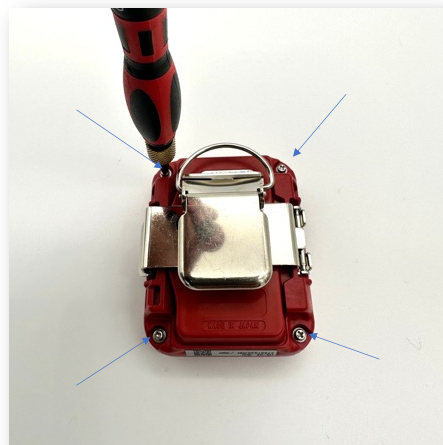


Remove the rubber boot.

23

Filter & Sensor Replacement

04 Series



Unscrew the four captive screws.

24

Filter & Sensor Replacement

04 Series



Gently remove the front case.

25

Filter & Sensor Replacement

04 Series

Filter Part #'s

- 33-7100: CO Charcoal filter disk
- 33-7136: Humidity filter disk for H₂S/PH₃
- 33-7138: Filter for HCN
- 33-7139: Filter for SO₂/NO₂
- 33-7141: Humidity Filter disk for NH₃



Carefully remove the filter and replace as needed.

26

Filter & Sensor Replacement

04 Series

Sensor Part #'s

ESR-A13i-H2S: **H2S** Sensor
ESR-X1DP-CX: **CO/O2** Combo Sensor
ESR-A13P-CO: **CO** Sensor
ESR-A1CP-CO-H: **CO** with H2 comp.
ESR-X13P-OXY: **O2** Sensor
ESR-A13D-HCN: **HCN** Sensor
ESR-B136-CL2: **CL2** Sensor
ESR-A13D-PH3: **PH3** Sensor
ESR-A13D-NO2: **NO2** Sensor
ESR-B134-NH3: **NH3** Sensor
ESR-A13D-SO2: **SO2** Sensor



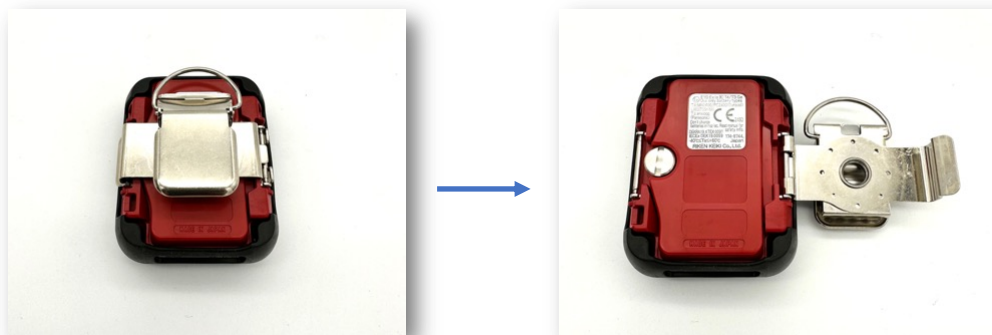
Remove the sensor and replace as needed.
Make sure the contact points on the sensor match the sensor-well.

27

Battery Replacement

04 Series

Take the 04 instrument to a non-static environment and turn it off if it is on.

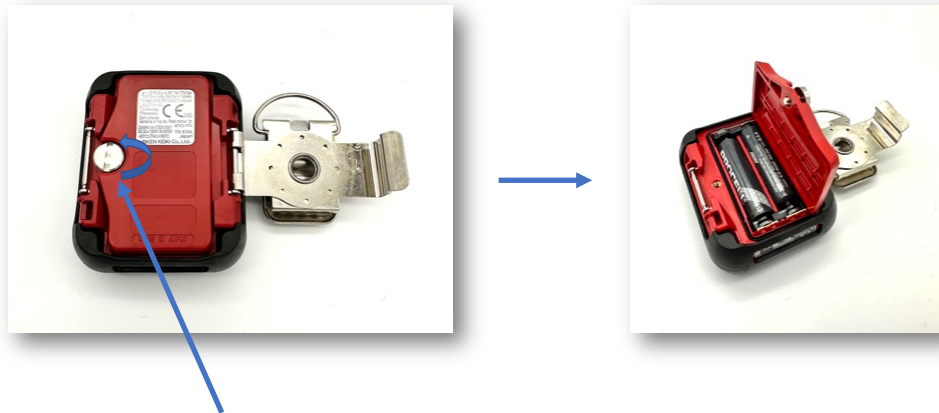


Release the side of the alligator clip that is opposite the hinge.

28

Battery Replacement

04 Series



- Rotate the captive battery cover screw counterclockwise.
- Remove the battery cover, and replace the batteries as needed.

Note: New batteries must be installed within 5 minutes to avoid having to reset the date/time.



This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.