

Model 9-7 Ion Chamber Display Unit

Part Number: 48-3689

Features

- Display Range: 0.001 R/hr to 19.99 kR/hr
- Direct Replacement for Eberline RO-7, Adapts to Existing Eberline RO-7 Detectors
- Digital Readout & Controls
- Backlit Display
- Handle & Folding Tripod Stand
- Separate Battery Compartment
- Detectors Have Removeable Beta Shields
- Waterproof Detector Housing Option

Introduction

The Ludlum Model 9-7 Ion Chamber Display Unit is a digital readout and control unit that can be connected to any compatible ion chamber (sold separately) to provide remote monitoring in high-range beta and gamma fields. This instrument is a direct replacement for the discontinued Eberline Model RO-7, and will work with any of the existing RO-7 series detectors, extensions, and cables.

The gamma measurement range is 0.001 R/hr to 19.99 kR/hr, covered by four separate ion chamber detectors. These ion chambers can be connected either directly to the instrument or via rigid extensions and/or flexible cables to achieve the length required. The detectors will remain functional with extensions/cables up to 152 m (500 ft) in length. The Model 9-7 automatically recognizes which detector is connected so no recalibration or adjustment is required when switching detectors.

The instrument display and controls are very similar to the original RO-7 to minimize any procedural changes or re-training. The backlit LCD displays three easily-readable digits with a floating decimal point to indicate the measurement along the R/hr scale. When connected to the highest range detector, a separate kR/hr indicator is prominently illuminated to warn the operator of the higher scale in use. Controls include a rotary switch for selecting instrument on/off and battery status, an LCD backlight switch (lamp on/off), and a zero adjust knob.

Also Available: Model 9-7-1 (PN 48-3756), a version that displays measurements in Sv/h units.

Note: The Model 9-7 is *not* RoHS compliant.



Controls and Digital Readout



Model 9-7 with Detector (available separately)

Specifications

COMPATIBLE DETECTORS: Sold separately. Accommodates Ludlum Model 9-7 (see below) and Eberline RO-7 detectors.

DISPLAY: 3½-digit LCD with 1.3 cm (0.5 in.) digits, floating decimal point, and negative sign; backlit illumination controlled by switch

INDICATORS: Battery OK (green lamp), kR/h range active (red lamp)

RESPONSE TIME: Approximately 2.5 seconds to 90% of final reading

CONTROLS: OFF, BAT TEST, ON rotary power switch; LAMP ON-OFF toggle switch (for display backlight); ZERO ADJUST knob

POWER: Two "D" cell batteries, approximately 160 hour battery life

TEMPERATURE RANGE: -20 to 50 °C (-4 to 122 °F)

HUMIDITY: 0 to 90%, non-condensing

CONSTRUCTION: Aluminum housing with beige powder coat, includes carrying handle and folding tripod stand

SIZE (H x W x L): 24.1 x 9.7 x 23.6 cm (9.5 x 3.8 x 9.3 in.), excluding detector

WEIGHT: 1.6 kg (3.5 lb), including batteries

Detectors *(available separately)*

Model	9-7-BLD	9-7-BHL-1 *	9-7-BM	9-7-BH
Part Number	47-3693-1	47-3882-1	47-3694	47-3696
Range	0.001 to 1.999 R/hr	0.01 to 19.99 R/hr	0.1 to 199.9 R/hr	0.01 to 19.99 kR/hr
Resolution	0.001 R/hr (1.0 mR/hr)	0.01 R/hr (10 mR/hr)	0.1 R/hr (100 mR/hr)	0.01 kR/hr (10 R/hr)

* **Note:** The Model 9-7 requires modification to use the 9-7-BHL-1 detector.

Options *(other cable lengths are available)*

- Cable, 4.6 m (15 ft)
(PN 8293-689-15)
- Cable, 9.1 m (30 ft)
(PN 8293-689-30)
- Cable, 18.3 m (60 ft)
(PN 8293-689-60)
- Cable, 30.5 m (100 ft) with Kellems grip
(PN 8293-689-100GR)
- Cable, 61 m (200 ft), with Kellems grip
(PN 8293-689-200GR)
- Rigid Detector Extension, 0.6 m (2 ft)
(PN 4293-843)
- Rigid Detector Extension, 1.5 m (5 ft)
(PN 4293-844)
- Detector Underwater Housing with 18.3 m (60 ft) cable
(PN 4536-046)
- Detector Underwater Housing with 30.5 m (100 ft) cable
(PN 4536-047)



Model 9-7-BM Mid-Range Ion Chamber



Underwater Housing for Model 9-7 Detector

Ludlum Measurements, Inc. P.O. Box 810, Sweetwater, Texas 79556

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Note: specifications subject to change without notification. We are not responsible for errors or omissions.