ICTD

Model 9-4 Ion Chamber Training Device

ICTD Features:

- Simulates all features and functions of the Ludlum Model 9-4 Ion Chamber

- Built with real Model 9-4 hardware

- Provides all device controls and beta window

- Responds realistically to changes in doserate

- Supports all fault conditions

- Designed for manual or automatic dose rate input

Train Your Radworkers To:

- Respond to dose rates based on distance to one or more TWR "Live" Sources

- Understand $1/R^2$ principle

- Hear audible click rate as radiation levels change

- Operate all device controls

- Adjust mR/h rate scales

- Observe open and closed window response

- Recognize device faults and failures

RSCS

Specifications:

Model	ICTD9-4 (Ion Chamber Training Device, Model 9-4)
Physical Dimensions	Same as Ludlum Model 9-4 Ion Chamber Survey Meter
Color	Ludlum beige (Option – black, to discriminate as a training device)
Power Requirements	Same as Ludlum Model 9-4 Ion Chamber Survey Meter • (2) "D" cell alkaline batteries
Battery Life	Up to 8 hours
Environmental	Same as Ludlum Model 9-4 Ion Chamber Survey Meter
Wireless Communication	IEEE 802.15.4, 2.4 GHz, 0.44 mW UWB (ultra-wide band) 6.4 GHz (6.2-6.7 GHz), <0.001 mW
EMI	• FCC Part 15 Subpart B, Class A; verified • Industry Canada RSS -220 Issue 1; verified • EU; CE
Features	• Operates independently with any SIM-Teq TWR Source (omni-directional), OR manually controlled by instructor • Ludlum external components include; meter movement, switches, case top, battery compartment, handle and case latches – looks, feels and responds like the real meter • Display Range up to saturation (0 – 500mSv/h, 0 – 50,000mR/hr) • Response performance characterized from real instrument • Functional 5-range selector switch, light, zero adjust , battery test and reset pushbutton features • Functional Beta Window with default and programmable measurement offset • NO calibration or setup required
Range of Operation	100 ft. line of sight. Depending upon material composition, obstructions may reduce operational distance. (For both manual and auto dose rate input)

Control Options	• Automatically responds to any SIM-Teq TWR Source (omni-directional)
	• Manual control via Simulation Control Center (SCC) application available from Windows Store, runs on Windows 10® tablet with SIM-Teq USB Dongle. Features include;
	  ▪ Manual control of dose rate input
	  ▪ Configurable Open/Close Beta Window measurement offset
	  ▪ Continuous display of current measurement from training meter
	  ▪ Swap between manual control and auto-response to simulated source
	  ▪ Up to 8 training meters independently auto-respond to up to 8 TWR Sources

The SIM-Teq® System is a wireless training network of simulated dosimeters, survey meters, and TWR Sources managed and controlled by the Simulation Control Center (SCC) application.

SIM-Teq® Features:

• Easy to setup.

• SCC application operates on any Windows 10® tablet with a USB Dongle and up to 32 simulator training devices

• Wireless direct control of devices through SCC or automatic response of devices to TWR "live" sources.

• Multiple models supported. Future training devices seamlessly added.

• Free SCC software updates provided via Microsoft Windows Store.