



**SIMCO ION**™  
An ITW Company

# Periodic Verification System

## MODEL 775PVS

The Simco-Ion Periodic Verification System Model 775PVS is a hand-held alternative to a charged plate monitor. It consists of three components—a fieldmeter, a detachable plate, and a charger for measuring static charge and verifying ionizer performance. Used alone, the fieldmeter measures electrostatic fields on any surface.

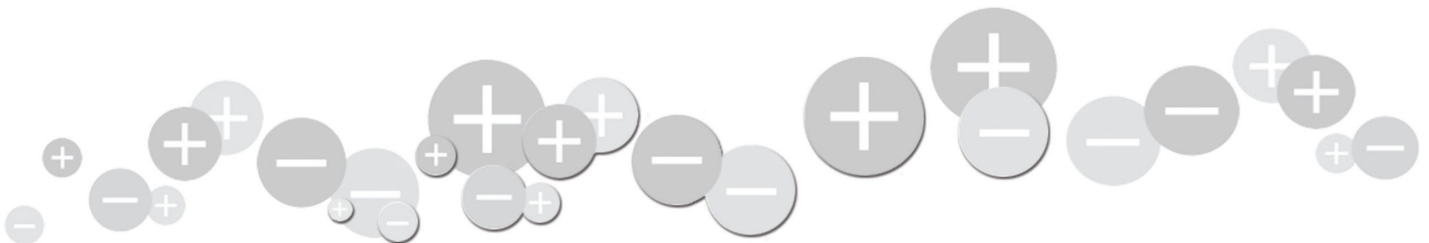
Ranging lights ensure accurate and repeatable measurements by enabling users to determine the exact distance at which the voltage reading is correct. A SAMPLE and HOLD function allows measurements in places difficult to reach with other instruments. Attach the plate and use the charger, and the Model 775PVS can be used to verify ionizer operation and check ion balance and discharge times. The unit is designed to take measurements that correspond to those made by a charged plate monitor following Ionization Standard ANSI EOS/ESD S3.1-2006 of the ESD Association (see graph below). For increased accuracy, the included flexible ground cord should be used to connect to a solid ground during operation.

### Features

- Digital display
- Distance ranging lights
- Chopper circuit
- NIST-traceable calibration

### Benefits

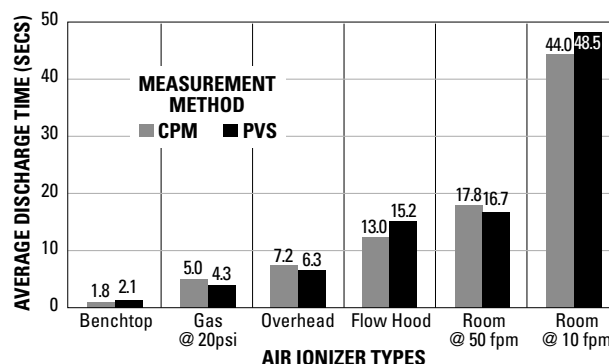
- Easy to read
- Ensures accurate distancing and measurements
- Operates in an ionized environment
- Correlatable to a charged plate monitor



| Specifications               |   |
|------------------------------|---|
| 775 Electrostatic Fieldmeter |   |
| <b>Input</b>                 | 9 VDC alkaline battery included; life in excess of 40 hours   |
| <b>Display</b>               | 3-1/2 digits, 0.4" (1 cm) digit height  |
| <b>Output</b>                | Analog output through miniature jack, 1V corresponds to 10 kV   |
| <b>Response</b>              | 5 Hz at analog output, digital display updates 3 times per second   |
| <b>Features</b>              | HOLD and LOW BATTERY indicators, automatic polarity   |
| <b>Controls</b>              | On/off pushbutton, SAMPLE/HOLD pushbutton, ZERO control   |
| <b>Range</b>                 | ±0.00 to 19.99 kV @ 1" (2.5 cm); higher voltages may be measured if distance is >1" (2.5 cm)                                |
| <b>Accuracy</b>              | ±5%, chopper stabilized (accuracy unaffected by air ionization), least significant digit of display indicates tens of volts |
| <b>Environment</b>           | Operates at 10-40°C (50-104°F) and 0-85% RH (non-condensing)  |
| <b>Ground</b>                | Ground through conductive case or snap-fastener   |
| <b>Dimensions</b>            | 4.2"L x 2.4"W x 0.9"D (10.7 x 6.1 x 2.3 cm)   |
| <b>Weight</b>                | 5 oz (142g) with battery  |
| <b>Warranty</b>              | 2-year limited warranty   |
| <b>Certifications</b>        | CE  |
| 775 Plate Assembly           |   |
| <b>Plate capacity</b>        | 15 picofarads ±2 picofarads   |
| <b>Calibration</b>           | Adjusting screw provided  |
| <b>Range</b>                 | 0-2 kV for either polarity, higher voltages may be measured   |
| <b>Ground</b>                | Ground plate attaches to conductive case of 775 Fieldmeter  |
| <b>Dimensions</b>            | 1.0"H x 3.0"W x 1.3"D (2.5 x 7.6 x 3.3 cm) supported on Teflon™ standoffs   |
| <b>Weight</b>                | 2.5 oz (71g)  |
| <b>Certifications</b>        | CE  |
| 775C Charger                 |   |
| <b>Input</b>                 | 9 VDC alkaline battery included; life in excess of 20 hours continuous operation  |
| <b>Output</b>                | 1300 VDC ±20% for each polarity, current limited to <1 microamp   |
| <b>Power Indicator</b>       | Red LED   |
| <b>Features</b>              | Calibration set screw, pushbutton on/off  |
| <b>Output contacts</b>       | Two stainless steel contact plates, output polarity depends on which plate is grounded                                      |
| <b>Dimensions</b>            | 4.2"L x 2.4"W x 0.9"D (10.7 x 6.1 x 2.3 cm)   |
| <b>Weight</b>                | 4 oz (113g) with battery  |
| <b>Certifications</b>        | CE  |

## Plate Assembly and Charger

The Plate Assembly and Charger have been designed to match the small size of the fieldmeter. The charger contains an isolated power supply with two stainless steel contact plates for positive or negative charging. A set screw in the plate assembly calibrates the measured voltage.



## Ordering Information

|                      |   |
|----------------------|---|
| <b>91-0775PVS</b>    | Periodic Verification System Model 775PVS |
| <b>19-0775PVS-CR</b> | Calibration certificates                  |
| <b>91-0775</b>       | Replacement Fieldmeter                    |
| <b>91-0775C-02</b>   | Replacement Charger                       |