# Operating instructions   EP0205040 MultiGround Monitor
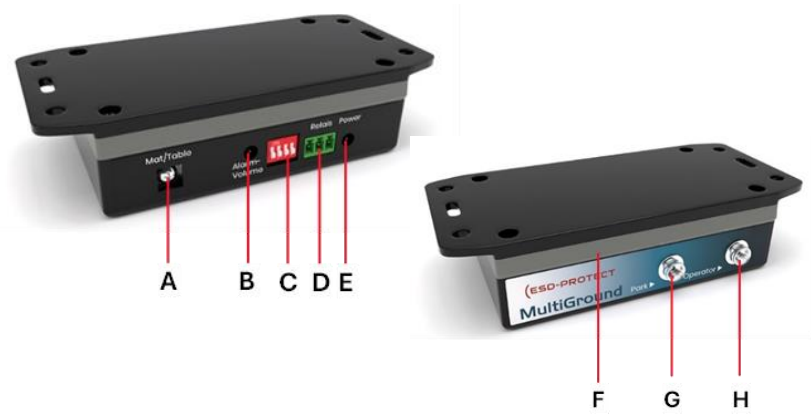
**(ESD-PROTECT**

## Overview

The MultiGround Monitor permanently monitors the grounding of a person and an ESD work surface. If the user unintentionally disconnects from the ground, or if the connection of the work surface to the ground is lost, a visual and audible alarm is triggered in the device and a relay output is activated.

## Connections and functions

| | |
|---|---|
| A | Connection work surface |
| B | Volume control buzzer |
| C | Dip switch |
| D | Relay connection |
| E | Connection desktop power supply |
| F | Status-Leuchtring |
| G | DK-10 Connector for parking position |
| H | DK-10 Wrist Strap Connector |



## Installation and commissioning

1. Connect the power supply to a suitable socket.
2. Determine the mounting location of the MultiGround monitor. The connections should be easily accessible to the operator and the LED ring (**F**) should be easily visible. Screw the MultiGround monitor securely into place. To do this, use the screw outlets in the lid of the monitor.
3. Connect the work surface to the work surface (A) connector using the ground wire **provided**.
4. Put on your wrist strap and connect to the push button (H) via the connection cable. The LEDs on the monitor should now light up permanently green.
5. If you want to leave the workplace, detach the cable from the wrist strap and plug it into the DK-10 connector of the parking position (G) within 5 seconds.
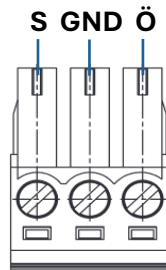
## Light indicator status

| | |
|---|---|
| Blue | Parking position, wrist cable on (**G**) and (**H**). |
| Green | Grounding wrist strap and/or work surface ok. |
| Red | Grounding wrist strap faulty. |
| Flashing red | Grounding work surface faulty. |
| Blue & Red Flashing | Parking position, wrist cable on (**G**) and (**H**). Grounding work surface faulty |

## DIP Switch Settings

| No. | Function | Default setting |
|---|---|---|
| 1 | Monitor desktop (ON=enabled) | OFF |
| 2 | Unoccupied | OFF |
| 3 | Relay output active (ON=activated) | ON |
| 4 | Internal buzzer active (ON=enabled) | ON |

Version: Mrz–25 uwk

## Relay Output

The MultiGround monitor has a relay output, which is switched on in the event of an alarm. This changeover can be wired either as a normally open or as an NC.

**S  GND  Ö**

| | |
|---|---|
| **S** | **=** Close contact |
| **GND** | **=** Common |
| **Ö** | **=** Opening contact |

## Specifications

| Operating voltage | 24V DC |
|---|---|
| Power supply<br>  Entrance<br>  Exit<br>  Output cable<br>  Input plug<br>  Output plug<br>  Dimensions | Desktop Power Supply SPU16A-108<br>90-264 VAC<br>DC +21V/27V/055A/0.72A Länge: 1.20m<br>IEC320 C14<br>Barrel connector 3.5mm x 1.35 mm (PE + RTN connected)<br>118mm x 52mm x 34,5 mm |
| Housing Dimensions | 145mm x 65mm x 35mm (width x depth x height) |
| Weight | Approx. 165 g |
| Fortification | 4 pcs 4 x 16 mm Wooden Countersunk Screws |
| Visual display | LED light ring red, green, blue & red flashing |
| Acoustic alarm | Internal buzzer (adjustable, switchable) |
| Relay Output | Changeover (NO, NC) can also be switched off via DIP switch |
| DK 10 connector (front) | Hand-held strap |
| DK 10 connector (front) | Parking position for wrist cables |
| Mat connection (rear) | For work surfaces M3 for M3/M4/M5 ring eyelets |
| Working surface threshold | < 10 MΩ |

## Scope of delivery

1  MultiGround Monitor
1 power supply SPU16A-108
1 IEC plug for power supply
1 Velcro strap for attaching power supply
1 push-button universal kit (DK-10 connection points for table surface or table mat)
1 grounding cable for work surface 0.35m
1 grounding cable for work mats 2.50 m
1 wood screw 3.5 X 16 for connection point to bottom table top
4 wooden countersunk screws Screws 4mm x 16mm for mounting MultiGround Monitor
1 connector, 3-pin for relay output