

IONISATION VERIFICATION KIT Installation, Operation and Maintenance



Figure 1. 223506 Ionisation Verification Kit.

Description

The 223506 is a compact charge plate specifically for testing the effectiveness of air ionisers. The kit consists of field meter, charge plate adapter, charging source and rechargeable battery. The charge plate measures voltage decay time via a built in timer, which is automatically triggered when the start voltage is achieved. The charge plate is smaller than specified in EN 61340-5-1, to aid portability, but the system can still be used for general verification tasks. This is consistent with Annex A Test Method A.6.

Inspection

Remove the test unit from the carton and inspect for shipping damages. Each 223506 unit includes the following:

- 1 Field meter and Charge Source
- 1 Stand and Charge Plate
- 1 Croc Clip
- 1 Light Coiled Lead, 2.5m
- 1 Rechargeable Battery
- 1 UK Battery Charger

System Set-up

1. Ensure you are familiar with the function of the field meter.
2. Place the foam stand on a firm surface with the large metal side down. Attach a lead between one connector on the side of the stand and earth. Attach another lead between the other connector and the charge source.

3. Remove the distance posts from the top of the field meter (if attached).
4. Separate the two sections of the charge plate, by pulling them apart from one-another.
5. Secure the lower section of the charge plate to the top of the field meter. The screws should be securely tightened by hand.
6. Place the upper section of the charge plate onto the lower section. The plastic lugs fit over the hexagonal head screws of the lower plate.
7. Turn the unit on.
8. The unit should display 'Dist. = 2cm' in the top row of the LCD.
9. Press and hold the button for 2 seconds, until the lower line of the LCD says 'Change cm'.
10. Press the button again to increase the distance setting. Press the button repeatedly until the top row of the LCD reads 'CPS-MODE!' (Note that the button must be pressed within two seconds of selecting the 'Change cm' function or the unit will reset. If this happens repeat from step 8.)
11. Place the charge plate into the stand as pictured.
12. The charge plate monitor is now ready for use.

Measuring Charge Decay

1. Place the field meter in its stand underneath the ioniser to be tested.
2. If the field meter is switched off repeat steps 6 to 10 above.
3. Pick up the charge source and press the button.
4. Place one of the metal probes against the charge plate. The two metal probes are marked '+' and '-'. They will charge the plate accordingly.
5. The unit will start timing automatically when the voltage drops to 1000V.
6. Timing will end when 100V is reached.
7. The LCD will show the elapsed time in seconds.

8. Press the button on the field meter to reset the test.
9. When the unit is powered down you will need to repeat steps 6 to 10 in the set-up procedure.
10. Press the on/off button twice rapidly to switch off the unit.

Notes:

- Remember that the charge plate size is not as set in the EN 61340 standard. This must be considered when analysing the function of ionisers. In real terms the difference will be minimal.
- As a rough guideline, decay times above 10 seconds are often considered excessive.
- Once the unit has completed one charge decay test it displays the charge plates voltage continually.

Limited Warranty

Vermason expressly warrants that for a period of one (1) year from the date of purchase, Vermason Ionisation Verification Kits will be free of defects in material (parts) and workmanship (labour). Within the warranty period, a unit will be tested, repaired or replaced at Vermason's option, free of charge. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and for proper shipping instructions and address. Any unit under warranty should be shipped prepaid to the Vermason factory. You should include a copy of your original packing slip, invoice, or other proof of purchase date. Warranty repairs will take approximately two weeks.

If your unit is out of warranty, Vermason will quote repair charges necessary to bring your unit to factory standards. Call Customer Service at 0044 (0) 1462 672005 for a Return Material Authorisation (RMA) and proper shipping instructions and address.

Warranty Exclusions

THE FOREGOING EXPRESS WARRANTY IS MADE IN LIEU OF ALL OTHER PRODUCT WARRANTIES, EXPRESSED AND IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE SPECIFICALLY DISCLAIMED. The express warranty will not apply to defects or damage due to accidents, neglect, misuse, alterations, operator error, or failure to properly maintain, clean or repair products.

Limit of liability

In no event will Vermason or any seller be responsible or liable for any injury, loss or damage, direct or consequential, arising out of the use of or the inability to use the product. Before using, users shall determine the suitability of the product for their intended use, and users assume all risk and liability whatsoever in connection therewith.