TECHNICAL BULLETIN 20230320

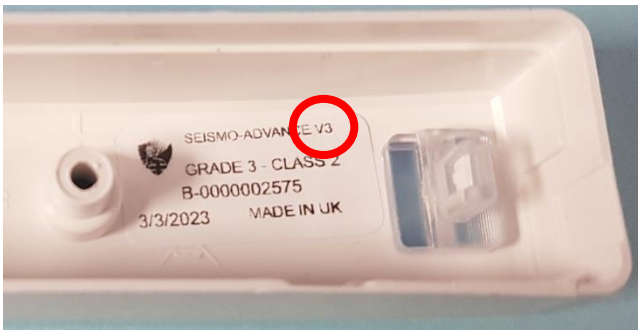
SEISMO VIBRATION/TILT SENSORS

An issue has been identified with the SEISMO range of products that may manifest as incorrect zone resistance readings when connected to CIE. As a result, the CIE will display an abnormal status for the zone that the product is connected to.

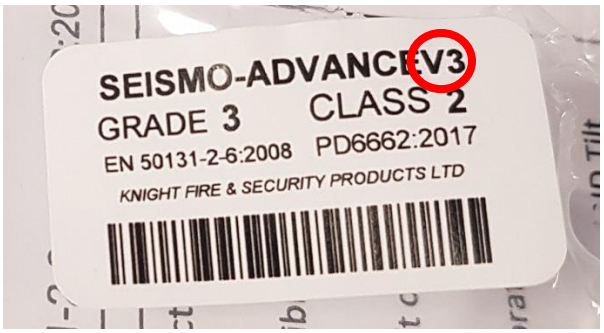
AFFECTED PRODUCTS

PRODUCT	SERIAL NUMBERS	PRODUCTION DATES
SEISMOV3	0000000001 – 0000002091	01/03/2022 – 19/03/2023
SEISMO-ADVANCEV3	0000000001 – 0000002734	01/03/2022 – 19/03/2023
SESIMO-ADVANCE-CV3	0000000001 – 0000000049	01/03/2022 – 19/03/2023
SEISMO-ADVANCE-BKV3	0000000001 – 0000000096	01/03/2022 – 19/03/2023
SEISMO-ADVANCE-GYV3	0000000001 – 0000000004	01/03/2022 – 19/03/2023
SEISMO-ADVANCE-B-CV3	0000000001 - 0000000032	01/03/2022 – 19/03/2023

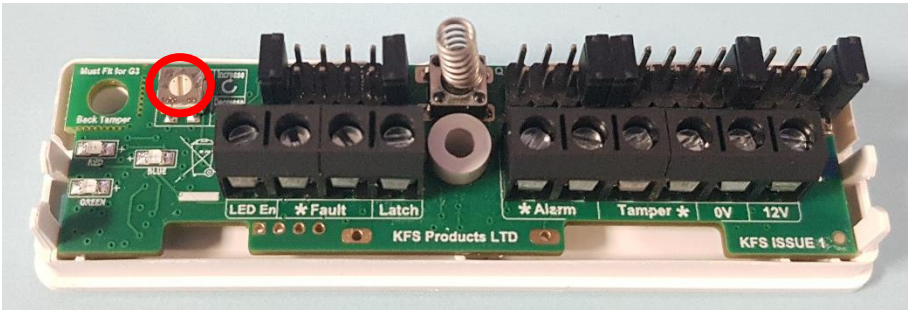
Only v3 products falling within the above serial ranges are affected. They can be identified from the small label placed on the inside of the lid *(1)*. Larger labels on the outer packaging are also marked with v3 for this line of products *(2)*. For products sealed in bags with these labels, it is prudent to assume they are in the scope of this bulletin if purchased prior to 20/03/2023. V3 PCBs will always have a square potentiometer *(3)* – older unaffected versions use a round potentiometer.



1. V3 marking on internal product label



2. V3 marking on external packaging label



3. Square potentiometer on PCB

CAUSE OF ISSUE

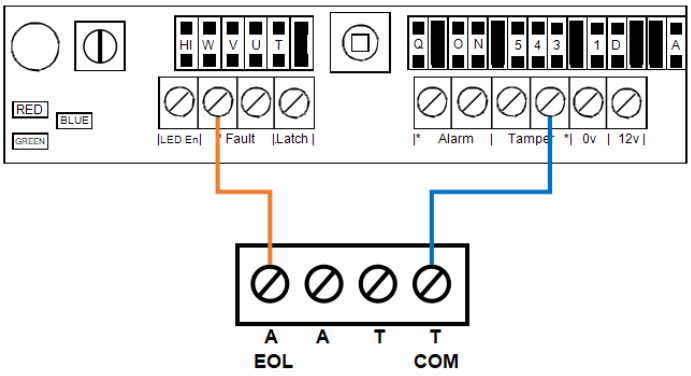
The root cause has been traced to a change to the specification of an onboard ESD protection diode - from bidirectional operation to unidirectional operation. This unidirectional ESD diode will cause a difference in expected voltage if the polarity of the zone connection is reversed in respect to the diode, therefore affecting the displayed zone resistance at the CIE. As both the alarm and fault output relays are protected by these diodes, the issue is compounding if both outputs are used - as in a G3 TEOL installation.

The issue is not detectable with a standard multimeter, but is with an oscilloscope or at the CIE.

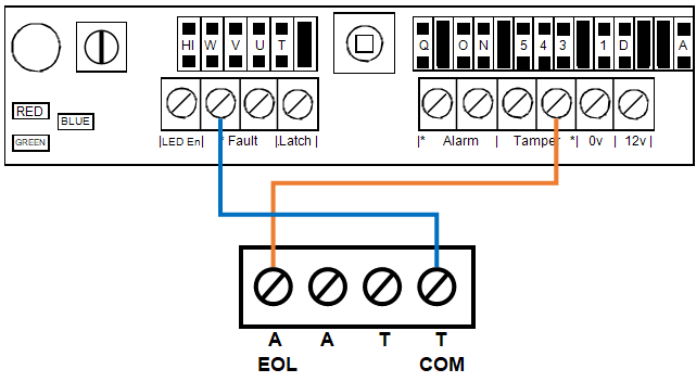
Knight Fire & Security Products Ltd – Unit 84 Seawall Road Ind Est, Cardiff, CF24 5TH.
T: +44 (0) 2920 488129

REMEDY

This issue is resolvable in situ without any need to return the product for repairs or modification. **A reversal of the zone connection wires will restore normal function if this problem is encountered**. See below examples of Pyronix TEOL (2k2/4k7/6k8) installations in both normal and abnormal states:



Abnormal. CIE should read 2k2 secure at this zone, but instead reads 3k5.



Normal. CIE reads zone as 2k2 secure.

If this remedy does not resolve abnormality at the CIE, please contact us for further assistance.

This issue is resolved for ongoing production from 20/03/2023 – products with serial numbers in excess of the above and manufactured beyond the date above will not be affected.