

Introduction

This note explains:

- The purpose of the modification provided by the Talentum UV/IR Adaptor
- The procedure for modifying the Talentum Test Unit to incorporate the Talentum UV/IR Adaptor
- How to test a Detector using the Test Unit

Test Unit with Talentum UV/IR Adaptor

The Talentum Test Unit is designed to assist with performing a functional test without the need of a live flame.

We have developed the Talentum UV/IR Adapter to optimise the output of the Test Unit for testing Talentum UV/IR2, IR2 and IR3 flame detectors only.

We strongly recommend that Test Units are modified with the adapter whenever used to test UV/IR2, IR2 and IR3 flame detectors. Without the modification the torch is less likely to identify a known performance issue with the flame detector.

Flame detectors for which this Test Unit is suitable:

16591 UV/IR2 Flame Detector
16521 UV/IR2 Flame Detector - Flameproof (Exd)
16531 UV/IR2 Flame Detector - Stainless Steel
16561 UV/IR2 Flame Detector - Stainless Steel, Flameproof (Exd)
16581 IR2 Flame Detector
16571 IR2 Flame Detector - Intrinsically safe (IS)
16511 IR2 Flame Detector - Flameproof (Exd)
16501 IR2 Flame Detector - Stainless steel
16541 IR2 Flame Detector - Stainless steel flameproof (Exd)
16589 IR3 Flame Detector
16579 IR3 Flame Detector - Intrinsically safe (IS)
16519 IR3 Flame Detector - Flameproof (Exd)
16509 IR3 Flame Detector - Stainless Steel
16549 IR3 Flame Detector - Stainless steel flameproof (Exd)

The adapter works by changing the light output by the Test Unit so that it is optimised for testing flame detectors. Modifying the Test Unit with the adapter changes the output spectrum of the Test unit so it closely resembles a typical yellow flame, which is better suited to identifying a known performance issue with the flame detector.

Health and Safety

In accordance with the Talentum User Guide, users should conduct regular maintenance and testing of Talentum fire detection products according to the risk and environment in which the product(s) are located. The frequency of such maintenance and test schedule should be revisited at regular intervals to ensure that it remains appropriate.

Please note that the Test Unit does not have an (Ex) approval for hazardous areas. A permit is required to test a detector in such areas. Alternatively, the detector should be removed and placed within a safe location to perform the test.

Testing of a flame detector should only be conducted where it is safe to do so and by personnel with appropriate training and equipment.

Ultraviolet radiation may cause harm. Please avoid any direct exposure to eyes and skin when using the Test Unit.

Talentum UV/IR Test Unit Procedure

How to modify the Test Unit

- 1) Remove the four screws that hold on the plate and filter that cover the bulb of the Test Unit using a 2.5mm Allen/hex key;



- 2) Remove the black cover and the blue filter behind it from the front of the torch including the four screws and washers and put them aside.



- 3) Fit the modification assembly so that the seven optical filters are positioned over the test torch bulb and the UV source sits above the test torch on the keypad side as shown below



- 4) Take the new filter arrangement and, without removing any parts, use the four new screws to locate it on the front of the Test Unit. Gently tighten the four screws so that the filter is held securely.

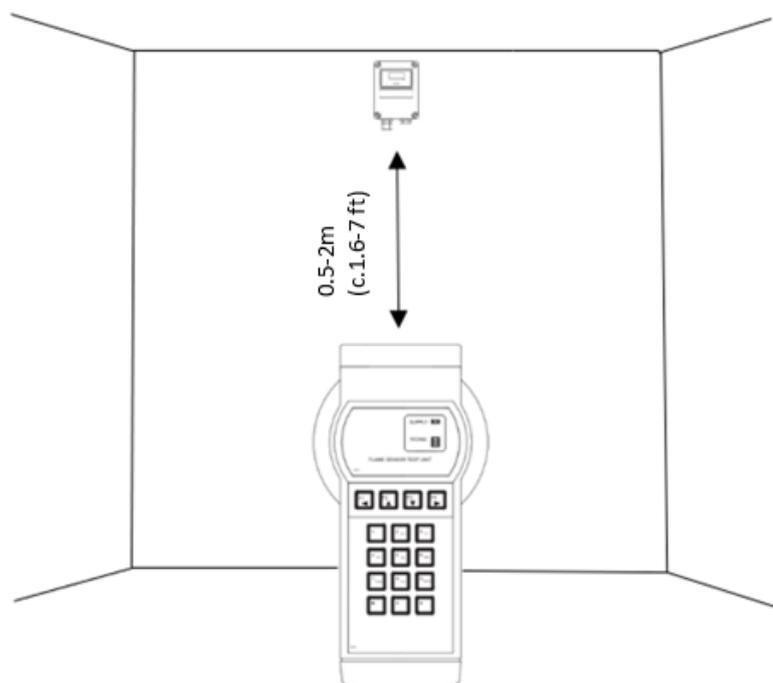
How to test a Detector using the Test Unit

To power up the unit, remove the clip on the base of the Test Unit, operate the power switch to 'ON' and the supply LED will illuminate 'green' if the battery has sufficient charge or flash if the battery is low. Care should be taken to ensure that the Test Unit is sufficiently charged when performing the test and that its bulb is working correctly. If the Test Unit is insufficiently charged or the bulb has failed, it is likely to result in test failure (no response from the detector). Turn on the UV lamp, using the switch at the back of the UV lamp unit. A green LED will indicate that the UV lamp unit is on.



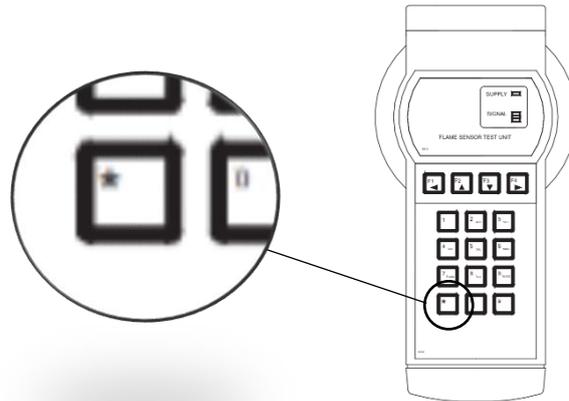
Hold the Test Unit as still as possible at a distance of approximately 0.5-2m (c.1.6-7 ft) from the detector, close to the centre of the detector's line of sight, taking care to point the Test Unit emitter towards the detector's sensors. Some practice may be required to find the ideal distance for a specific detector.

Ultraviolet radiation may cause harm. Please avoid any direct exposure to eyes and skin when using the Test Unit.



Talentum UV/IR Test Unit Procedure

To activate the main output source, press and hold down the * button on the Test Unit. It does not need to be waved back and forth as it already mimics the characteristic flicker of a real flame. The flame detector is expected to alarm within 30 seconds.



If a device is found to be insensitive to this flame sensor test, please contact your FFE account manager for support.

Summary

Test description	Flame dimensions	Distance to detector
Test Unit with UV/IR Adapter	(N/A)	0.5-2m (c.1.6-7 ft)

Warranty

Warranty is not affected by using these components with the test unit, provided that no other modifications are implemented. The test unit should still be serviced and maintained in accordance with the instructions.

The new free-issue components carry a limited 1-year warranty against defects in manufacture, in isolation from the rest of the Test Unit. Any damage resulting from wear and tear or improper use is not covered by this warranty.

Part number: 1800-011

Disclaimer

This test unit is designed to functionally test the detection and alarm functions of the Talentum flame detectors.

The test unit should be held at a distance between 0.5 and 2m from the detector, as close to directly in front of it as is practical.

Optimal distances may vary with the angles involved and ambient lighting conditions.

Some practice may be required to locate the ideal distance.

It is for the operator/end user to determine the most appropriate testing procedure, taking into account the specific characteristics of the installation. Should the operator require further assurance to comply with their risk assessment or testing protocols, they are directed to follow the testing procedures outlined in the relevant standards or return the unit to FFE for service and calibration on a regular basis.

We would like to remind you that the test unit is not intrinsically safe and therefore, it is not approved for use in explosive environments.

For further instructions and guidance see <https://www.ffeuk.com/talentum-flame-detectors/talentum-test-unit>

Note: this document may be subject to change without notice.