

## Test procedure of Active1D<sup>®</sup> lightning conductor

Active1D<sup>®</sup> lightning conductor can be tested in our factory or directly on site with its test box. However, it is highly recommended to have it tested by skilled professionals from the manufacturer.

### Reminder : Active1D<sup>®</sup> lightning conductor operating

The Active1D<sup>®</sup> excitation advance is obtained by a device named, " impulse device ". Its principle consists in storing electrostatic energy present in the Atmosphere at a stormy cloud approach, to release the ascending discharge excitation in good time.

This device operates at a stormy activity approach by an integrated sensor which measures the surrounding electrical field value.

It provokes then a polarity inversion of the lightning conductor head, creating a sudden amplification of the electrical field on its tip.

### Active1D<sup>®</sup> lightning conductor guarantee : Reminder

Active1D<sup>®</sup> lightning conductor is guaranteed for 18 months. After this time, it is recommended to test lightning conductors to check if they are still working efficiently. Test shall be in accordance with following procedure.

### Testeurs dédiés au paratonnerre Active1D

Active1D<sup>®</sup> lightning conductor can be tested on site, with its tester (initial checking, periodical checking according to NFC 17-102 standard and decrees in force, maintenance....).

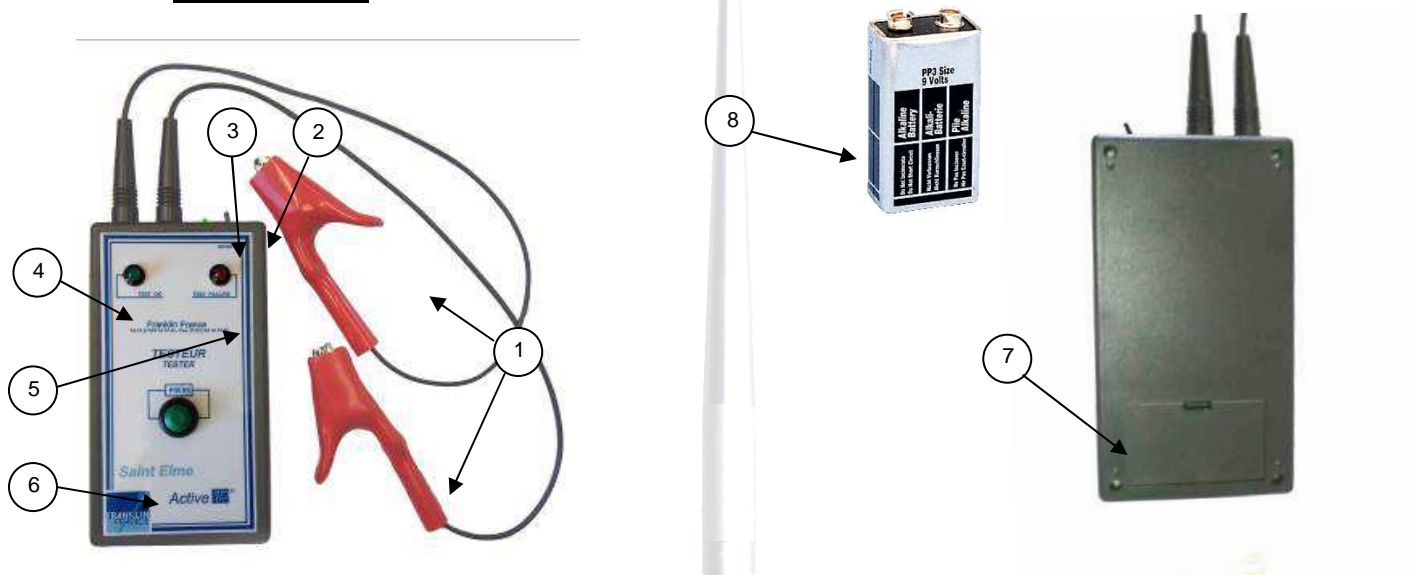
Correct operating of **Active1D<sup>®</sup>** lightning conductor is checked with TESTER ACTIVE 1D. This tester consists of an ABS plastic portable case equipped with a green light for validation of the test, a red light indicating the dysfunction of the lightning conductor, and 2 crocodile clips to connect one at the forefront of the active 1D and the other on the threading of the low spark gap. Power supply of this tester is assured by battery. The display by led indicates immediately the obtained result (positive or negative)

**Reference : AFV 0050 TT**

## Opérating mode

To test Active1D® lightning conductor follow the hereafter procedure:

### 1- Description :



1. Isolated "crocodile » clip
2. Switch On / Off
3. **Green** Led indicator power-on
4. **Green** Led indicator validating the test
5. **Red** Led indicator of test fault
6. **Green** pushbutton
7. Battery compartment cover
8. 9V Battery

### CARACTERISTIQUES :

- **Operating temperature de :** de -20 à +50°C
- **Power supply :** Pile 9 V, type PP3
- **Casing :** ABS (UL94V0), IP54.
- **Dimensions :** 170 x 86 x 34 mm
- **Weight :** ± 200 g
- **Tester guarantee :** 18 months

### 2- Battery set up:

- Remove the cover (7) from the battery compartment.
- Connect the coupler PP3 to the 9V battery (8).
- Put it in the battery compartment.
- Close the cover (7).



### 3- Switch on :

- Put the switch (2) in "on" position: The **green** Led (3) indicates the power is on.

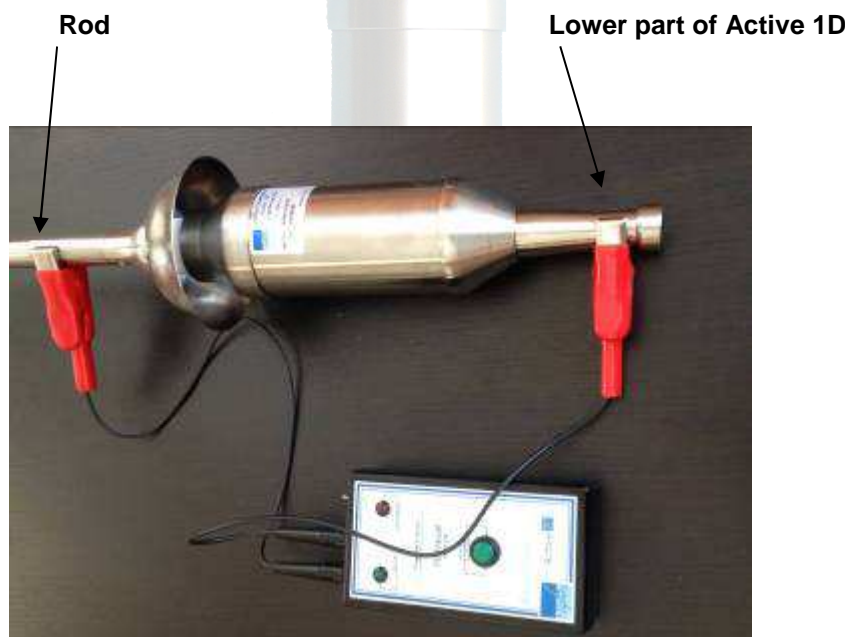


- Push on the button « **PRESS** » (6): The **red** led (5) « **Test Failure** » must be on.



### 4- Test :

- Connect one of the isolated "crocodile" clip (1) to the rod of the **ACTIVE 1D®** and the other one to the lower part.



- Push on the **green** button « **PRESS** » (6): The **green** Led « **Test OK** » (4) must be on: **The ESE status is OK.**



**NB:** When using the tester for the first time, it is possible the **red** Led (5) is on first. If so, you push on the **green** button « **PRESS** » (6) during 3 seconds, and the **green** Led will be on.

#### **5- Tester maintenance :**

Cleaning: clean the tester with a smooth rag and water. To avoid damaging the plastic components, do not use benzene, alcohol, ether, painting thinner, acetone or other solvent when cleaning.

#### **6- Abnormality in operation:**

- If the **green** Led (3) indicator power on is not on:
  - o Check the battery's connection.
  - o Inspect the connector of the battery.
  - o Check the battery voltage.
- If the test indicates that the ESE has some fault (LED **red**):
  - o Repeat the test.
  - o Check the connections of the “crocodile” clips (1) on the tip and on the below spark gap.
  - o Inspect the test cables (possibility to be cut).

#### **7- Repairing :**

For repairing, contact the company:

**Franklin France**, 13 rue Louis Armand, 77330 Ozoir-la-Ferrière, Tel. 33 (01) 60 34 54 44

**DO NOT FORGET TO SWITCH OFF THE DEVICE  
WHEN THE TEST OPERATION IS OVER**