

# 1 GENERAL INFORMATION

## 1.1 Product description

The ARVA is an avalanche beacon; transmitter-receiver systems. The ARVA Advanced is worn on body during mountains climbing or skiing; It emits a beep as long as it is set in S.O.S. mode. In case of somebody buried under an avalanche, a rescue person, can set its ARVA Advanced in receiver mode, locates the victim accurately under snow, and then extricates the victim. A multiple indicator, with automatic synchronization on the nearest victim, tells to the rescuers, when all victims have been rescued.

The ARVA Advanced is automatically switch on when inserting the strap into the device. It works with 4 alkaline batteries.

The ARVA ADVANCED has two operating modes:

- Standard (numerical), involving use of the right and left directional arrows. The device automatically locks on to the closet victim. Follow the indications given in the form of figures and the direction shown by the red diode.
- Advanced (analogue with numerical aids): indication of a scale of progress and, in multiple victim situations, indication of estimated distance along field lines.

The ARVA Advanced is a product developed by the OPTION Company

For more information, see product's data sheet at section 1.6.

## 1.2 Related Submittal(s) / Grant(s)

All host equipment used in the test configuration are FCC granted, when relevant.

## 1.3 Tested System Details

The FCC IDs for all equipment, plus description of all cables used in the tested system are:

**See test report files.**

## 1.4 Test Methodology

Both conducted and radiated testing was performed according to the procedures in ANSI C63.4 (2003).

Radiated testing was performed at an antenna to EUT distance of 10 meters. During testing, all equipment's and cables were moved relative to each other in order to identify the worst case set-up.

## 1.5 Test facility

Tests have been performed on October 13<sup>th</sup>, 2004.

The test facility used to collect all the radiated and conducted data is the SMEE *Actions Mesures* facility, located ZI des Blanchisseries, 38500 VOIRON, France.

This test facility has been fully described in a report and accepted by FCC as compliant with the radiated and AC line conducted test site criteria in ANSI C63.4 in a letter dated July 19, 2002 (registration number 94821).

This test facility has also been accredited by COFRAC (French accreditation authority for European Union test lab accreditation organization) according to NF EN ISO/IEC 17025, accreditation number 1-0844 as compliant with test site criteria and competence in 47 CFR Part 15/ANSI C63.4 and EN55022/CISPR22 norms for 89/336/EEC European EMC Directive application. All pertinent data for this test facility remains unchanged.

## 1.6 Data sheet of the ARVA

### **ARVA** *A.D.vanced*

#### **Exclusive features of the ARVA Advanced:**

- A powerful 457 kHz  $\pm 20$  Hz transmitter with transmission level independent of battery power.
- In numerical (standard) mode, the search band width is 40 m.
- Multiple victim indicator and automatic synchronisation on closest victim.
- In Advanced (= analogue) mode, indication of a scale of progress and, in multiple victim situations, indication of estimated distances along field lines.
- Auto-control of frequency adjustment and transmission level every 5 minutes.
- 16 bit processor with extremely fast analysis speed.