

Test Report to

EN 300 330-1 : 2001

EN 300 330-2 : 2001

Type :

SOS-Life

SOS-Positioner

## TÜV Rheinland Product Safety GmbH

Am Grauen Stein, D-51105 Köln

**Test Report No.** 21102045\_002

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**Client** SOS-Life N.V.  
LANDHUIS JOONCHI  
KAYA RICHARD J. BEAUJON Z/N  
CURACAO  
NETHERLANDS ANTILLES

**Test item** earthquake / emergency alarm

**Identification** SOS-Life / SOS-Positioner

**Receipt No.** 60226

**Serial No.** ---

**Date of Receipt** 2002-06-11

**Place of Testing:** Köln

**Date of Test** 2002-06-11 till 2002-06-17

**Testbasis** EN 300 330-1:2001  
EN 300 330-2:2001  
Power Class 2  
Receiver Class 1

**Test Result** The a. m. product passed.

Tested by: O. Schäfer

Checked by: G. Zimmermann

2004-06-04 O. Schäfer  
Date, Signature

2004-06-04 G. Zimmermann  
Date, Signature

Other Aspects Annex

Page

used testequipment

| Testequipment                            | Type                          | Manufacturer                      | Ser. / Inv. –<br>No. | next<br>Calibration |
|--|-------------------------------|-----------------------------------|----------------------|---------------------|
| Messreceiver 9kHz-30MHz<br>Shielded room | FMLK 1518 D<br>B 83102 S1-X10 | Schwarzbeck<br>Siemens            | 14200382             | 10.02<br>N/A        |
| Messreceiver 25 -1GHz<br>HF-Generator    | VUMA 1521 A<br>PSG 1000 B     | Schwarzbeck<br>Farnell            | 14200621<br>14200612 | 01.04<br>05.03      |
| Amplifier<br>HF-Millivoltmeter           | 150 A 220<br>URV 5            | Ampl. Research<br>Rohde & Schwarz | 94150452<br>14200452 | N/A<br>07.03        |
| HF-Probe 100 V<br>Open Test Side         | URV 5-Z4                      | Rohde & Schwarz<br>TÜV Rheinland  | 14200561<br>14200575 | 08.02<br>09.03      |
| Antenna                                  | HFRA 9150                     | Schwarzbeck                       |                      | 12.02               |
| Antenna                                  | UHALP 9108                    | Schwarzbeck                       | 14200591             | 11.03               |
| Controller                               | HD 100                        |                                   | 104459               | N/A                 |
| Tower                                    | MA 260                        | H.Deisel                          |                      | N/A                 |
| Analyser                                 | ESMI                          | Rhode & Schwarz                   | 14200550             | 02.03               |
| Power Supply                             | TCE 8815                      | Töllner                           | 14200579             | 10.02               |
| Testreceiver                             | MES 1000                      | Schomandl                         | 14200666             | 11.02               |

## Product documentation

For production of this report the following product documentation was used:

| Description:          | Date:      | Identifications: |
|-----------------------|------------|------------------|
| Technical description | 2002-06-11 | ---              |
| Manual                |            |                  |
|                       |            |                  |
|                       |            |                  |
|                       |            |                  |
|                       |            |                  |
|                       |            |                  |
|                       |            |                  |
|                       |            |                  |

The above-mentioned documentation will be filed at TÜV Rheinland Product Safety GmbH for a period of 10 years following the issue of this report.

## Observations and comments:

## Conclusions

The samples satisfied all applicable requirements relating to the network interface types of Radio Land Mobile, Low Power Applications.

## LIST OF MEASUREMENTS

The complete list of measurements is given below.

| SUBCLAUSE | PARAMETER TO BE MEASURED  | TEST              |
|-----------|---|-------------------|
| 7.2.1     | H-FIELD, FIELD STRENGTH<br>(Class 1)  | yes               |
| 7.2.2     | TRANSMITTER CARRIER OUTPUT CURRENT (CONDUCTED)<br>(Class 2)                   | n.a. <sup>1</sup> |
| 7.2.2     | TRANSMITTER CARRIER OUTPUT CURRENT (CONDUCTED)<br>(Class 3)                   | n.a. <sup>1</sup> |
| 7.2.3     | E-FIELD, FIELD STRENGTH (measured as H-field)<br>(Class 4)                    | n.a. <sup>4</sup> |
| 7.3       | PERMITTED RANGE OF OPERATING FREQUENCIES FOR<br>WIDEBAND EQUIPMENT (> 25 kHz) | yes               |
| 7.4.2     | TRANSMITTER SPURIOUS EMISSIONS CONDUCTED<br>operating                         | n.a. <sup>1</sup> |
| 7.4.3     | RADIATED FIELD STRENGTH<br>(< 30 MHz) operating                               | yes               |
| 7.4.4     | EFFECTIVE RADIATED POWER<br>(> 30 MHz) operating                              | yes               |
| 7.5       | DUTY CYCLE  | yes               |
| 8.1       | ADJACENT CHANNEL SELECTIVITY - IN BAND  | yes               |
| 8.2       | BLOCKING OR DESENSITIZATION   | yes               |
| 8.3       | RECEIVER SPURIOUS RADIATION   | yes               |

Insert comments e.g. yes or n.a.\*

### Remarks

- n.a.<sup>1</sup> not applicable, because EUT has no antenna connector
- n.a.<sup>2</sup> not applicable, because EUT is no channelised equipment
- n.a.<sup>3</sup> not applicable, because EUT has no stand-by function
- n.a.<sup>4</sup> not applicable, because EUT is no a class 4 equipment

Ambient temperature: 23 °C

Relative humidity: 55 %

H-FIELD FIELD STRENGTH  
 (Class 1)

subclause 7.2.1

Rated field strength (maximum) ..19,5...cBµA/m at 10 metres

Antenna size 6 cm<sup>2</sup>

| Test conditions                  |                      | Transmitter field strength (dBµA/m) |
|----------------------------------|----------------------|-------------------------------------|
|                                  |                      | CH 1                                |
| T <sub>nom</sub> (23)°C          | V <sub>nom</sub> ()V | 19.5                                |
| Measurement uncertainty (dBµA/m) |                      | ± 6 dB                              |

|                                      |     |
|--------------------------------------|-----|
| The equipment meets the requirements | yes |
| Further test results are attached    | no  |

Ambient temperature: 23 °C

Relative humidity: 55 %

PERMITTED RANGE OF OPERATING FREQUENCIES FOR WIDEBAND EQUIPMENT (> 25 kHz) subclause 7.3

Applicants declared operating frequency band:

| Test conditions                                   |                          | Frequency kHz |         |
|---|--------------------------|---------------|---------|
| T <sub>nom</sub> (23)°C                           | V <sub>nom</sub> (4.8)V  | FL            | 500.100 |
|   |                          | FH            | 500.100 |
| T <sub>min</sub> (-20)°C                          | V <sub>min</sub> (4.32)V | FL            | 500.040 |
|   |                          | FH            | 500.040 |
|   | V <sub>max</sub> (4.8)V  | FL            | 500.040 |
|   |                          | FH            | 500.040 |
| T <sub>max</sub> (55)°C                           | V <sub>min</sub> (4.32)V | FL            | 500.080 |
|   |                          | FH            | 500.080 |
|   | V <sub>max</sub> (4.8)V  | FL            | 500.080 |
|   |                          | FH            | 500.080 |
| Measurement uncertainty ± 1 × 10 <sup>-1</sup> Hz |                          |               |         |

Where FL Lowest frequency at the appropriate spurious emission level  
 FH Highest frequency at the appropriate spurious emission level

Band edge limits: FLM = Lowest FL (measured) 500.040  
 and  
 FHM = Highest FH (measured) 500.100

|                                      |     |
|--------------------------------------|-----|
| The equipment meets the requirements | yes |
| Further test results are attached    | no  |

Test are carried out by using a test picture.







Ambient temperature: 23 °C

Relative humidity: 55 %

ADJACENT CHANNEL SELECTIVITY - IN BAND

subclause 8.1

| CH 1            |                          |
|-----------------|--------------------------|
| Equipment class | Channel spacing > 25 kHz |
| 1               | 74 dB                    |

|                                      |            |
|--------------------------------------|------------|
| The equipment meets the requirements | <b>yes</b> |
| Further test results are attached    | <b>no</b>  |

Test are carried out by using a test ficture.

Ambient temperature: 23 °C

Relative humidity: 55 %

BLOCKING OR DESENSITIZATION

subclause 8.2

| CH 1            |                          |
|-----------------|--------------------------|
| Equipment class | Channel spacing > 25 kHz |
| 1               | > 42 dB                  |

|                                      |            |
|--------------------------------------|------------|
| The equipment meets the requirements | <b>yes</b> |
| Further test results are attached    | <b>no</b>  |

Test are carried out by using a test ficture.



Photographs of the equipment are to be provided as part of the Test Report.

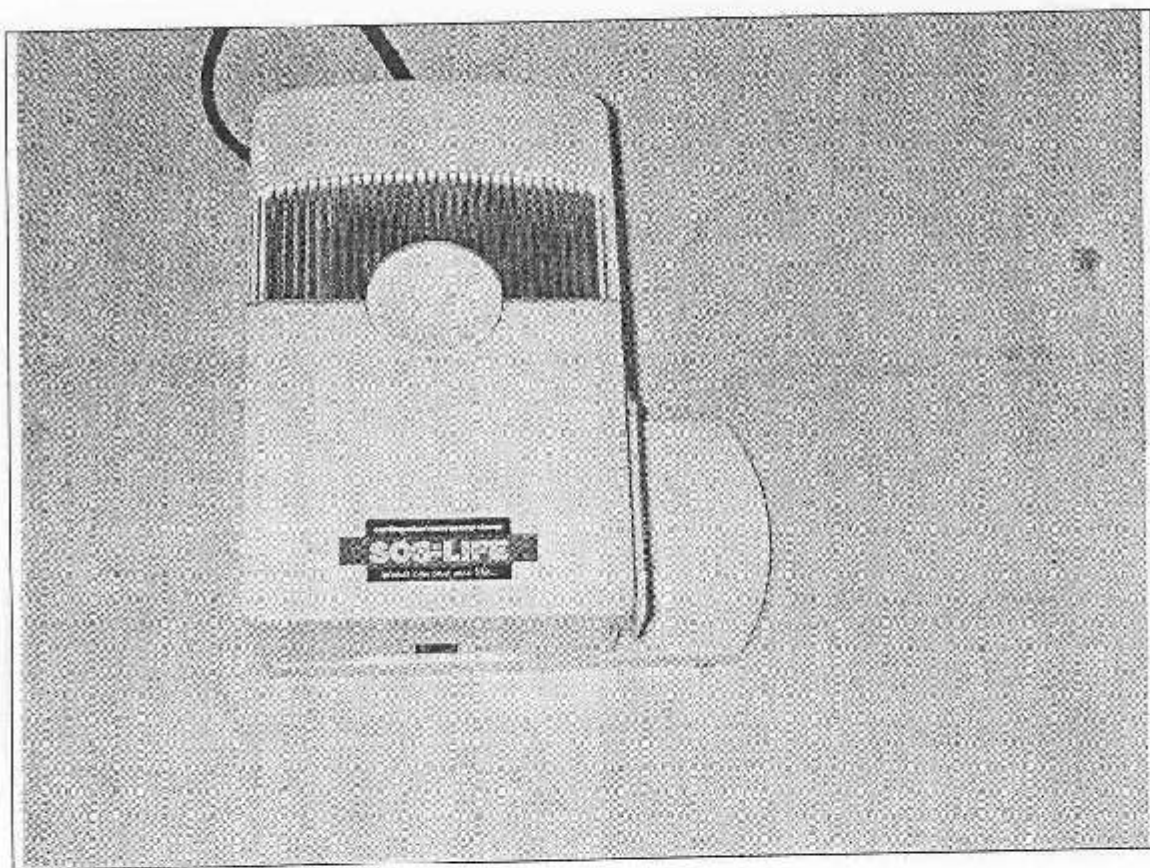
1. Assembly of units or parts

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Photographs of the equipment are to be provided as part of the Test Report.

2. Front of unit (Showing controls, labelling etc)

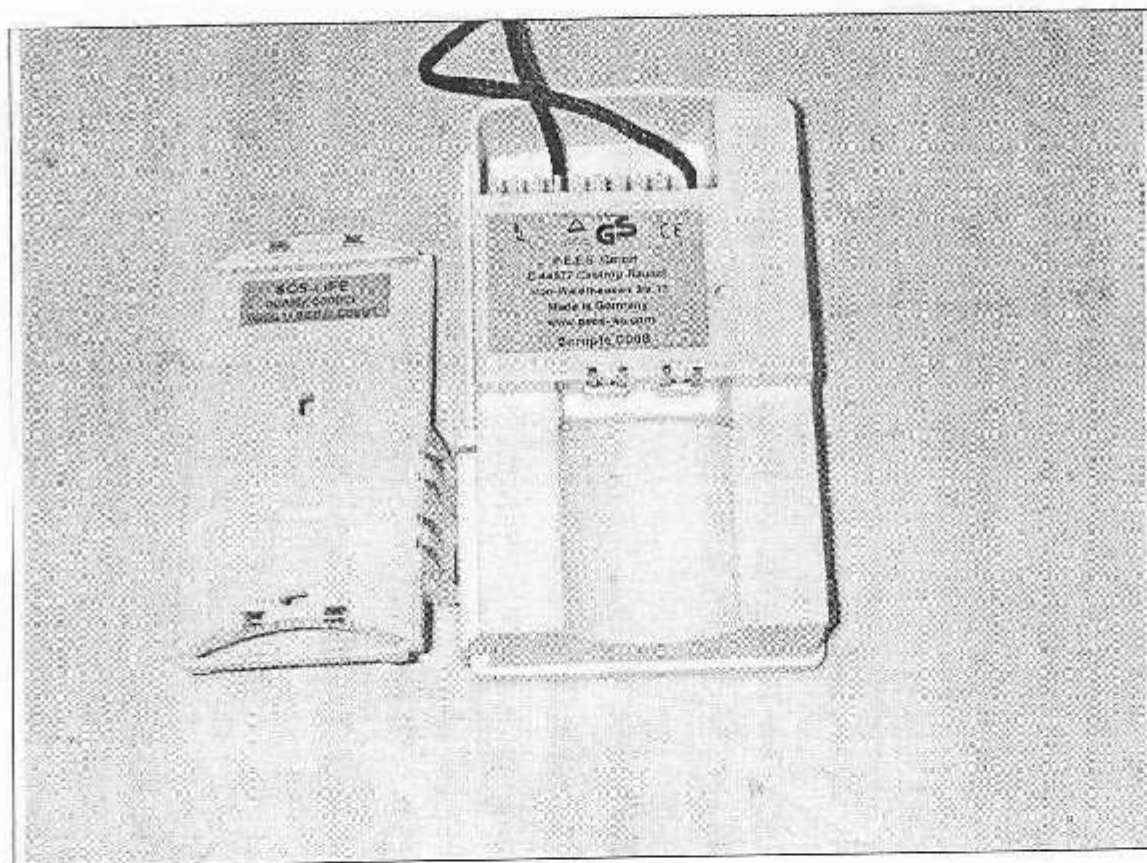
Transmitter



Photographs of the equipment are to be provided as part of the Test Report.

3. Rear of unit (Showing antenna connector, labelling etc)

Transmitter



Photographs of the equipment are to be provided as part of the Test Report.

4. If the label or identifying mark is affixed on a surface other than at 2. or 3. above a photograph of this shall be provided

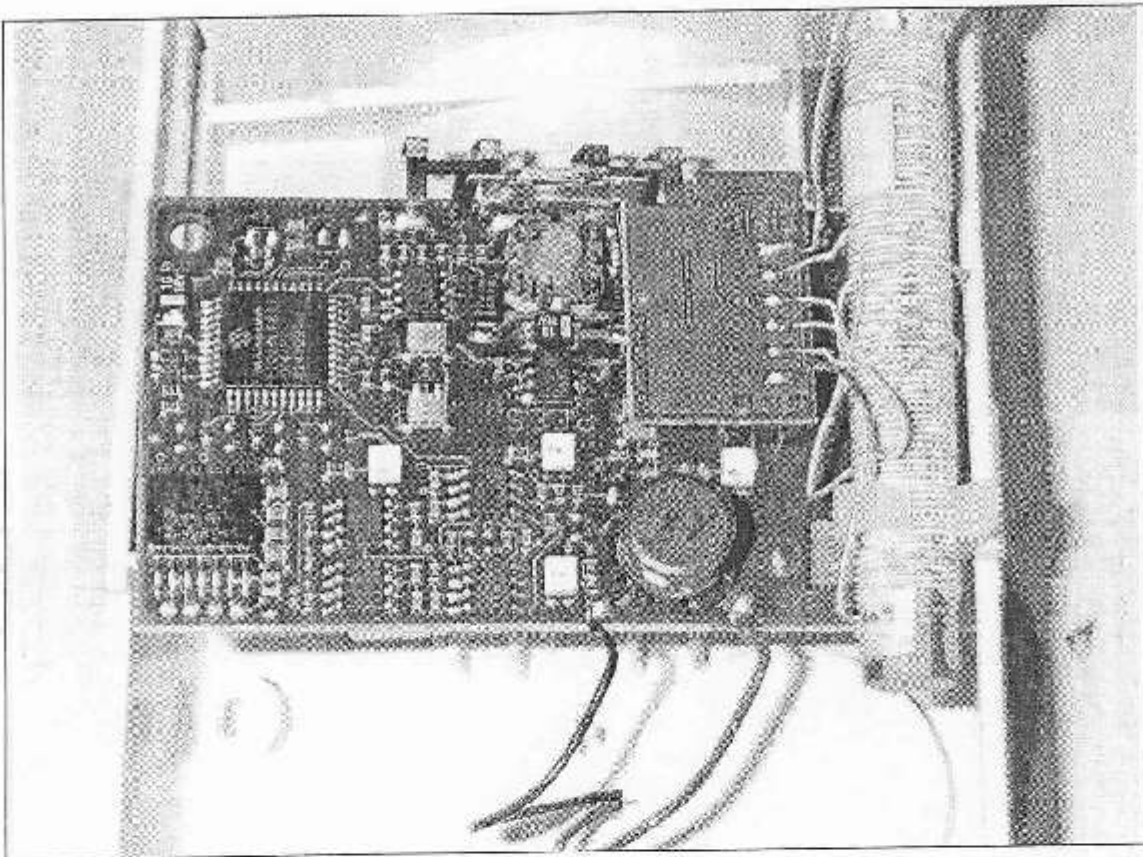
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Photographs of the equipment are to be provided as part of the Test Report.

5. The equipment shall be opened and photographs of the internal construction shall be made (Upper Side)

Transmitter

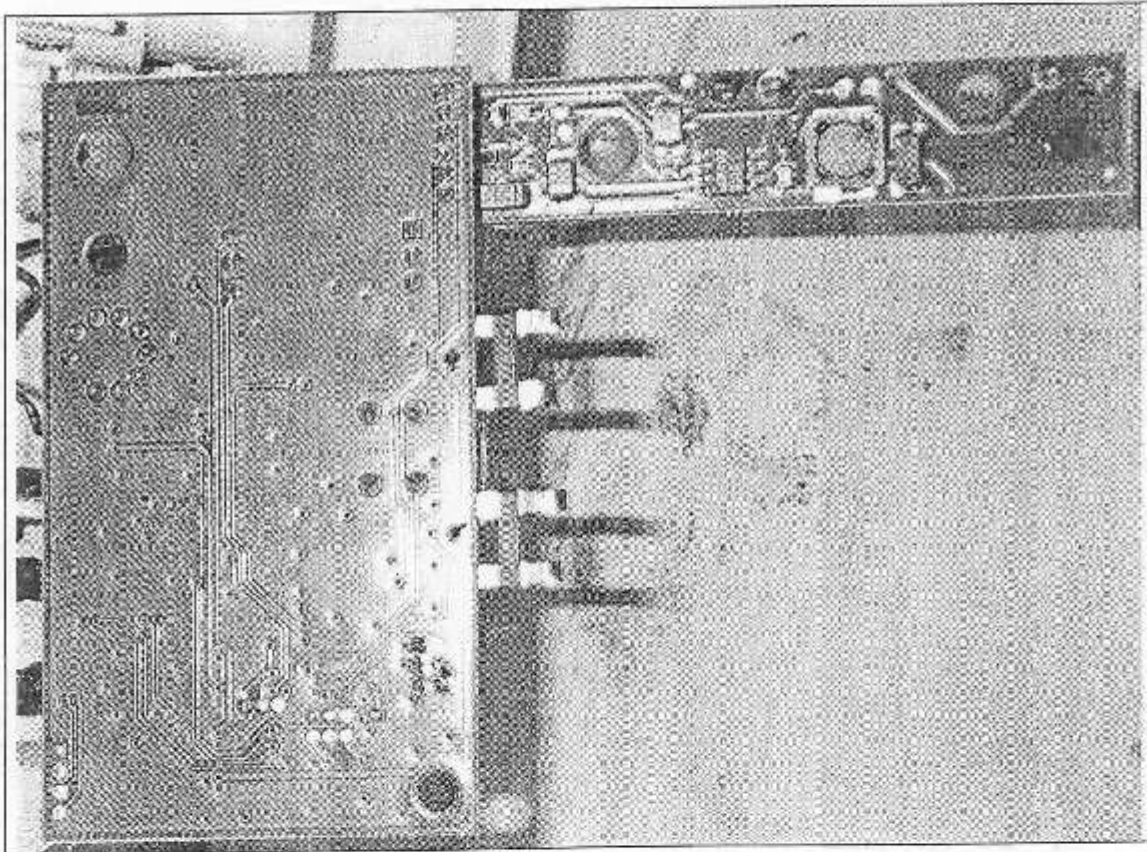




Photographs of the equipment are to be provided as part of the Test Report.

6. The equipment shall be opened and photographs of the internal construction shall be made (Lower Side) Transmitter Part

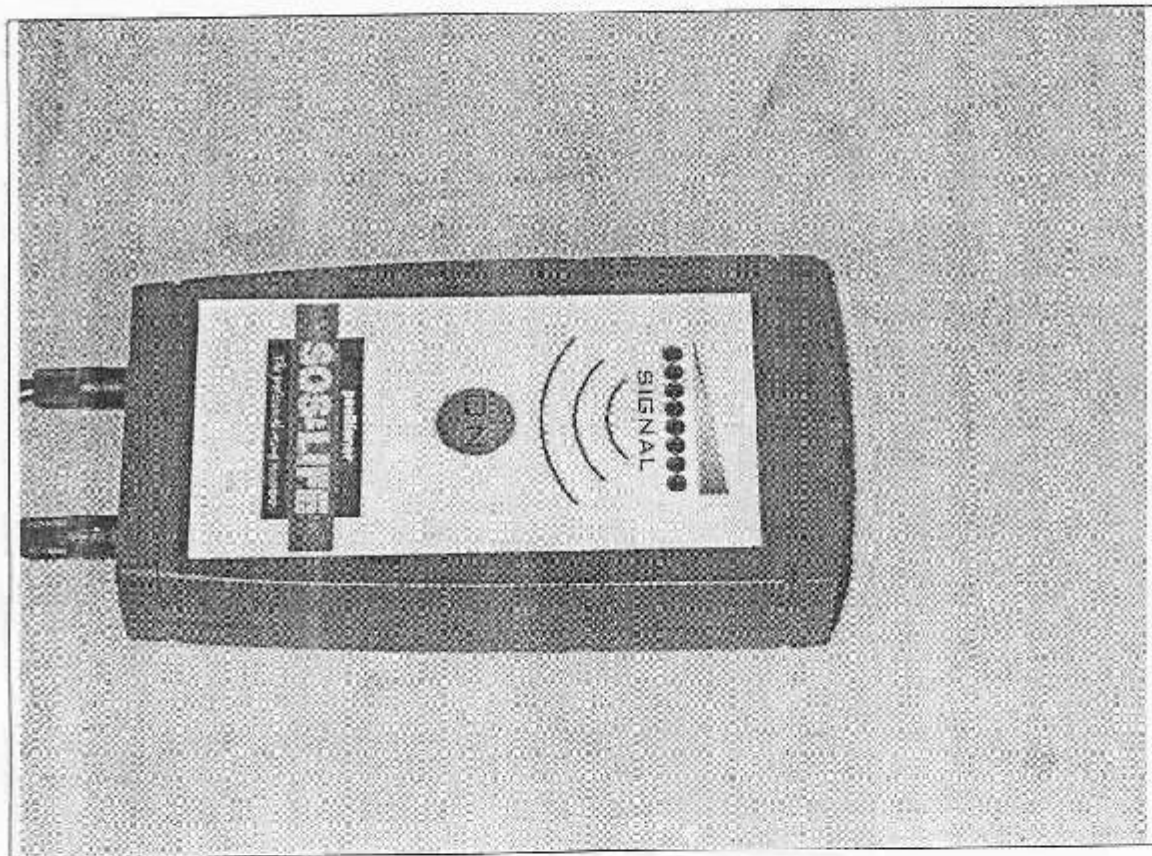
Transmitter



Photographs of the equipment are to be provided as part of the Test Report.

2. Front of unit (Showing controls, labelling etc)

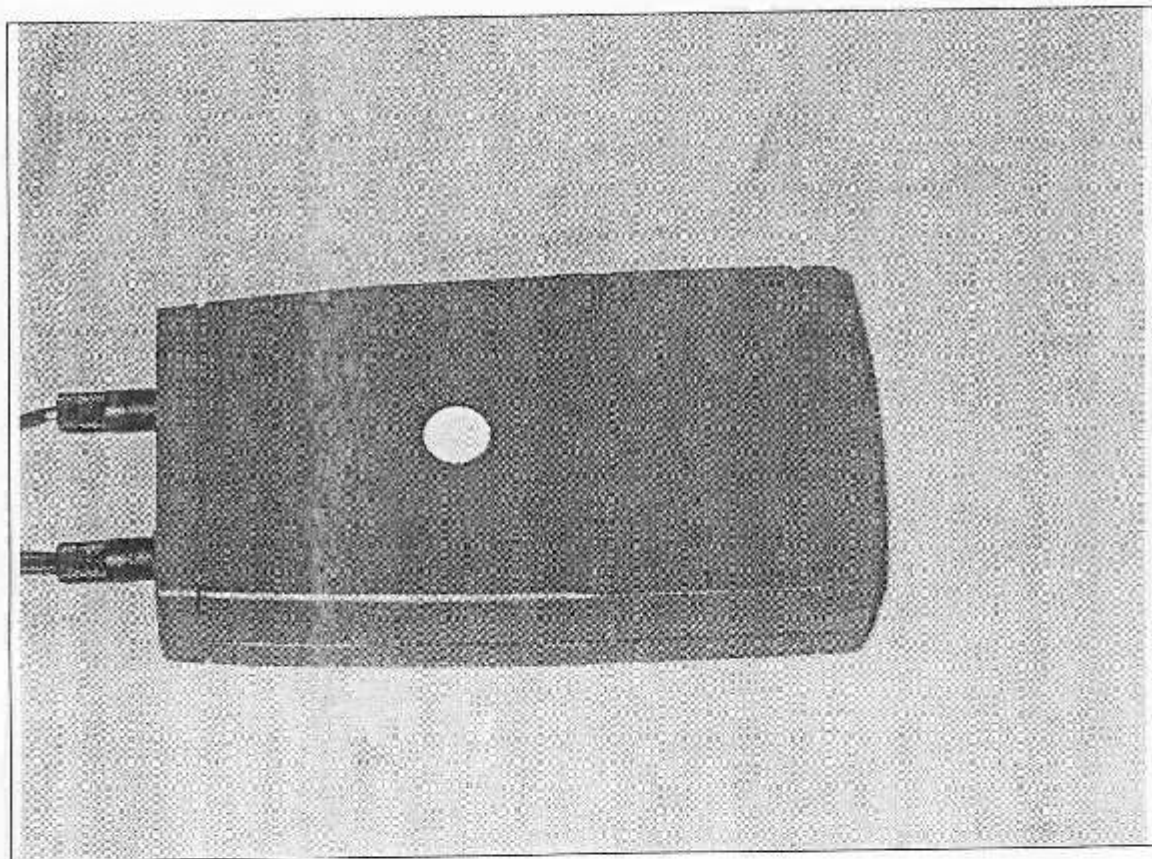
Receiver



Photographs of the equipment are to be provided as part of the Test Report.

3. Rear of unit (Showing antenna connector, labelling etc)

Receiver



Photographs of the equipment are to be provided as part of the Test Report.

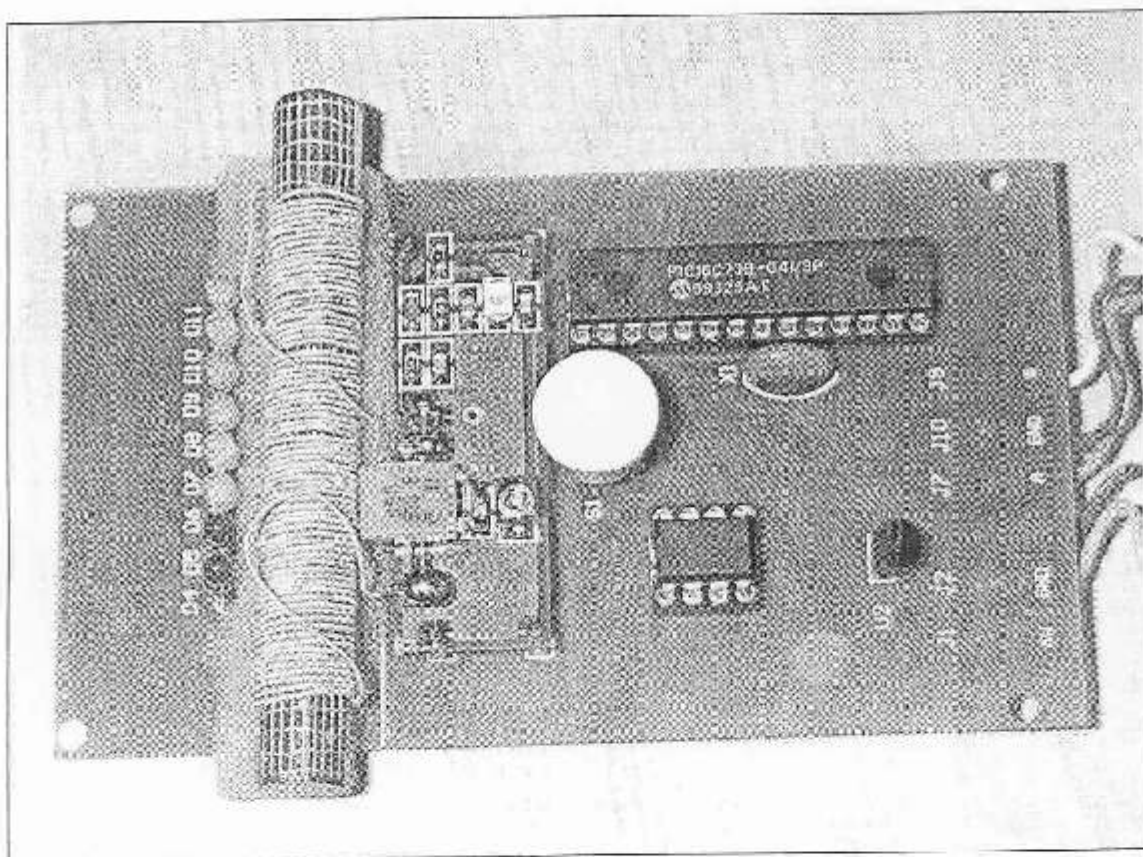
4. If the label or identifying mark is affixed on a surface other than at 2. or 3. above a photograph of this shall be provided

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Photographs of the equipment are to be provided as part of the Test Report.

5. The equipment shall be opened and photographs of the internal construction shall be made (Upper Side)

Receiver





Photographs of the equipment are to be provided as part of the Test Report.

6. The equipment shall be opened and photographs of the internal construction shall be made (Lower Side) Transmitter Part

Receiver

