

MICROWAVE CHECKER

User Manual

Issue 1.4



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SAFETY

Please read this manual carefully to make yourself familiar with the capabilities and functions of the Microwave Checker before attempting to use it.

1. Never place the unit inside the microwave.
2. There are no user serviceable parts in this unit. Under no circumstances should the user attempt to open the unit. If opened, the warranty will be invalidated.
3. The Microwave Checker is guaranteed for one year from the date of purchase. Please keep your invoice as proof of purchase.
4. Should the unit require a service, repair or calibration, please return it to:

First Stop Safety
11 Glaisdale Road
Northminster Business Park
York YO26 6QT
Tel: 01904 791050

When returning the unit, please contact the Sales Department to advise us of its return. The owner will be advised of any costs prior to work commencing.

INTRODUCTION

The Microwave Checker is an easy to use, accurate meter for checking leakage from Microwave Ovens. It can also be used for checking Radio Frequency emission levels from a variety of sources.

Package includes:

- Microwave Checker with 9v PP3 battery fitted.
- User Manual
- 25 RF emission test labels.

Features

- RF measurement range from 0.07 mW/cm² to 7.1 mW/cm².
- 10 LEDs to show level in this range.
- Easy to read red/amber/green indication.
- 50 mm spacer built into product.
- Simple push button operation.
- Power On indication.
- Battery Low indication.
- 25 RF emission tested labels included.



OPERATION

LEAKAGE TEST

1. Place a large mug of cold water inside microwave.
2. Switch on for 2 minutes at full power. (If the microwave oven has a radiant heater for roasting or baking, then make sure that this is not turned on. Only use the microwave oven on microwave power).
3. Place Microwave Checker as shown below in each position for about 15 seconds and note maximum position. By touching the surface of the microwave, you will be at the correct distance (50mm) for the measurement.



Move side to side



Move side to side



Move up and down



Move up and down



Move in a circle around the glass window

4. If measurements are not complete, then replace mug of water with a fresh mug of cold water and switch on for another 2 minutes.
5. If illuminated LED is in green area then this is an acceptable level of leakage.
6. If illuminated LED is in amber area, then this indicates that the leakage is acceptable, but is above what a new microwave would give. We would advise you to consider replacing the microwave oven within a year.
7. If illuminated LED is in red area, do NOT use the microwave. Remove from service immediately.

INTERLOCK TEST

1. When the microwave is working, open the door and check that the oven switches off. You can use the Microwave Checker to check for levels.
2. If the oven is switched off, then the interlock will be working.

If both the Leakage Test and the Interlock Test have passed, then write out and apply a PASS label.

SPECIFICATION

Range: 0.07 mw/sq cm to 7.1 mw/sq cm

LED	Power mw/sq cm	Field strength (V/m)	Action
#1	0.07	16	pass
#2	0.1	19	pass
#3	0.15	24	pass
#4	0.23	30	pass
#5	0.37	37	pass
#6	0.6	48	pass
#7	1.0	62	replace soon
#8	1.9	85	replace soon
#9	4.0	123	fail
#10	7.1	163	fail

Accuracy: ± 3 dB

Frequency Range: 2.45GHz \pm 50MHz

Probe Direction: At front of checker as marked

Distance to antennae from front end: 50mm \pm 2mm

Power Supply: 1 X 9V PP3 Battery

CARING FOR YOUR MICROWAVE CHECKER

Annual calibration

Your Microwave Checker tester is an accurate instrument and it is important to make sure that it is continuing to measure correctly. A faulty tester could fail to pick up any faults with electrical appliances and result in passing them. To prevent this and ensure the accuracy of your Microwave Checker, we recommend that calibration is carried out annually. We will send you an annual reminder by e-mail or letter.

When you return the Microwave Checker to us we check it out thoroughly and:

Calibrate it with traceability back to National Standards.

We refurbish the unit and upgrade it if required.

We issue a Calibration Certificate.

Collection & Delivery Service

We can arrange for the Microwave Checker to be collected for calibration and delivered back to you. The turnaround is 5 working days from receipt of the tester. All you have to do is to order on-line or send us a completed order form.

Lifetime Warranty

As long as your Microwave Checker is calibrated annually by First Stop Safety we provide a Lifetime Warranty. Should the Microwave Checker fail for any reason between annual calibrations please give us a call. We will repair it and ship it back to you free of charge. By calibrating your tester annually your Lifetime Warranty will cover your Microwave Checker for many years.

Booking a calibration

This couldn't be easier. You can request your calibration in a number of ways.

Download a booking form from our website

www.firststopsafety.co.uk

Send us an e-mail to calibrations@firststopsafety.co.uk

Ring us on 01904 529054

Remember: All you have to do is to send us the order. We will do everything else!



Lifetime Warranty Conditions

First Stop Safety have complete confidence in our Microwave testers enabling us to provide a Lifetime Warranty free of charge.

To retain the validity of the Lifetime Warranty the unit must be returned to First Stop Safety annually for a recalibration

Note: If the calibration is allowed to expire, the Lifetime Warranty is invalidated.

We have a one month grace period with regards to your calibration date. This means that you have one calendar month after the calibration expiry date in which to book your tester in for calibration.

The Lifetime Warranty covers the Microwave Checker unit only, not accessories.

If your unit develops a fault we repair it free of charge as long as your units Lifetime Warranty has been maintained and your account is up to date.

What is not covered by the Lifetime Warranty

- If the unit has been water damaged.
- If the unit has been physically damaged beyond fair wear and tear.
- Repairs if the unit has not been returned for annual calibration.
- The cost of the annual calibration.