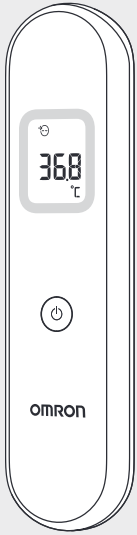
OMRON

Forehead Thermometer
MC-F300

INSTRUCTION MANUAL



3147808-6 H

■ Warranty

Please keep your original receipt as proof of purchase. To obtain warranty service, please register warranty online.

- Do away with manual forms that need to be sent out
- No need to keep receipts and warranty cards after online registration
- Receive enhanced customer support from OMRON
- Get updated on important information regarding product updates or recommendations

REGISTER WARRANTY ONLINE

https://www.omronhealthcare-ap.com, select the country that you are based in, and click on

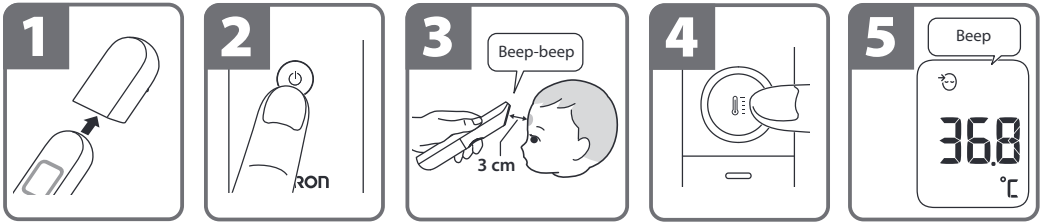
Menu > Support > Warranty Registration

Warranty period depends on different region. For the Terms and Conditions, please refer to the warranty website.

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Quick Guide



Introduction

Thank you for purchasing the OMRON Forehead Thermometer.
Be sure to read this Instruction Manual thoroughly before use.
Keep this Instruction Manual at hand for future reference.

Intended Use

Intended Purpose
This device is a digital thermometer intended for use in measuring temperature from the forehead.

Intended Patients
All generations

Intended Users
All generations (may include the patient themselves) who can understand this instruction manual

Clinical Benefit
User's temperature can be measured safely, comfortably and quickly in a home environment.

Type of Use
This device is intended to be multiple patient multiple use.

Limitation
Patient's temperature must be 34.0 °C (93.2 °F) to 43.0 °C (109.4 °F) under 5.0 °C (41.0 °F) to 40.0 °C (104.0 °F) environment

Indication
This device is used by individuals in a general household situation for measuring temperature.

Receiving and Inspection

Remove this main unit and other components from the packaging and inspect for damage. If this main unit or any other components is damaged, DO NOT USE and consult with your local OMRON representative.

Important Safety Information

Read the Important Safety Information in this instruction manual before using this device.
Follow this instruction manual thoroughly for your safety.

Contraindications

DO NOT use this device if the forehead has scars or skin injuries, such as burns.

Side Effects

No known side-effects

⚠ **Warning**	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

- Conducting self-diagnosis based on the measurement results can be dangerous. Consult with and follow the instructions of your doctor. Self-diagnosis may lead to the worsening of existing disease conditions.
- A high or prolonged fever requires medical attention, especially for small children. Please contact your doctor.
- Keep the device out of children's reach.
- DO NOT throw batteries into a fire. The battery may explode.
- DO NOT use the device with other medical electrical (ME) equipment simultaneously. This may result in incorrect operation of the device and/or cause an inaccurate reading.
- Keep the battery out of the reach of children, toddlers and infants.

⚠ **Precaution**	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient, or cause damage to the equipment or other property.

- If a child swallows the battery, immediately consult with a doctor.
- Remove the batteries when the device will not be used for 3 months or more. Failure to do so may lead to fluid leakage, heat generation or bursting, resulting in damage to the device.

- DO NOT drop or subject this device to strong shocks or vibrations.
- The device is not waterproof. Be careful when handling this device so that no liquid gets into the device. When the device is wet with steam, wipe it lightly with a soft dry cloth.
- DO NOT disassemble, repair, or modify the device. It may cause inaccurate reading and/or result in incorrect operation of the thermometer.
- If there is any temperature difference between the places where the device is stored and where you are going to measure, leave the device in the room where you are going to use it for more than 30 minutes to allow it to reach room temperature first, then measure.
- If the forehead is cold, wait until the forehead is warmed up before taking a temperature measurement. The measured result may indicate low when you use an ice bag or an ice pack, or immediately after coming in from the outside in winter.
- DO NOT use the device when the forehead is wet, such as after swimming, bathing, or through sweating after physical exercise, because skin temperature may have fallen. Wipe away moisture and allow 30 minutes for the body to acclimate to room temperature before measuring.
- DO NOT touch the sensor with a finger or breathe on it.
- DO NOT attempt measurements when the device is wet because readings may be inaccurate.
- Check the icon on the display before and after the measurement to ensure the measurement is taken in the appropriate mode.
- When you inform your doctor of your temperature, make sure that you specify that the temperature was measured on the forehead.
- Dispose of the device, batteries, components according to applicable local regulations. Unlawful disposal may cause environmental pollution.
- DO NOT use the device to measure any item with a temperature higher than 90.0 °C (194.0 °F).
- During measurement, make sure that no mobile phone or any other electrical devices that emit electromagnetic fields is within 30 cm of this device. This may result in incorrect operation of the device and/or cause an inaccurate reading.
- DO NOT use this device other than for measuring human forehead temperature and/or surface measurement.

- DO NOT insert the batteries with their polarities incorrectly aligned.
- ONLY use 2 AAA alkaline batteries with this device. DO NOT use other types of batteries. DO NOT use new and used batteries together. DO NOT use different brands of batteries together.
- If battery fluid should get in your eyes, immediately rinse with plenty of clean water. Consult a physician immediately.
- If battery fluid should get on your skin, wash your skin immediately with plenty of clean, lukewarm water. If irritation, injury or pain persists, consult a physician.
- DO NOT use batteries after their expiration date.

Some Useful Information

How the Forehead Thermometer MC-F300 Works

This device measures the temperature at the surface of the forehead by sensing infrared emission of the skin at the measured point, and then calculates the ear-equivalent value using a unique algorithm based on actual body temperature survey data.

About Body Temperature

Body temperature refers to the stable temperature of the inner body (also known as core body temperature). While temperature measurements at the armpit or ear provides surface temperature values, holding the thermometer steadily at the measurement point for approx. 10 minutes provides a temperature measurement more closely representing that of core body temperature.
Since forehead temperature measurement involves no bodily support of the thermometer, the resulting measured temperature is typically lower than that of the armpit or ear.
However, since the forehead has blood vessels that are much less prone to vascular constriction (a natural function of body temperature adjustment), it is supposedly a better measurement area for determining core body temperature, even in a lower temperature environment. By contrast, temperature measured at the arm or leg, for example, is not a suitable gauge of core body temperature, since such body areas are more subject to vascular constriction. (Note that temperature measured at the forehead may still be influenced by other conditions, such as sweating, or wind from an air conditioner, etc. It is therefore advised to perform measurement in as stable an environment as possible.)
When measuring the temperature of an infant, note that infant body temperature is generally higher than adult body temperature and easily affected by external factors. For example, body temperature tends to increase after nursing or crying.
Therefore, it is recommended to take measurements with the infant in calm and normal condition.

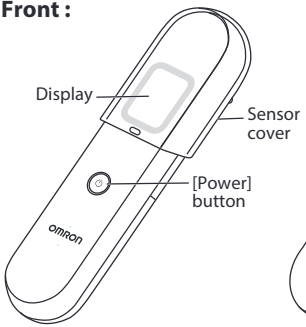
Knowing One's Normal Temperature

In order to make a correct judgment of suspected fever conditions, it is important to know one's normal temperature. Normal temperature varies with the individual and also changes depending on the time through a day. In addition, measured body temperatures may vary depending on the thermometer or the body part where you measure. To find out one's normal temperature, therefore, we recommend performing regular measurements under the following conditions:

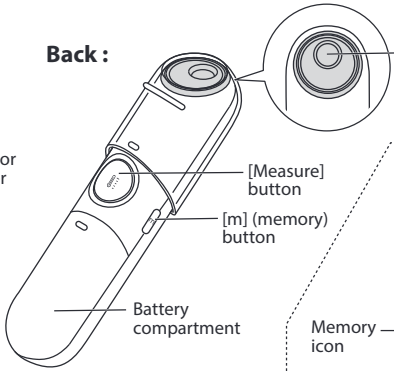
- Measure with the same thermometer.
- Measure at the same area.
- Measure at the same time of day.

1 Overview

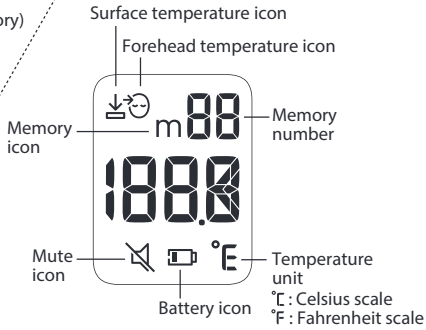
Front :



Back :



Display :



Contents

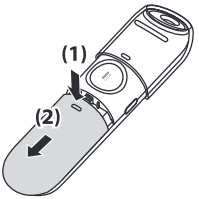
Main unit, 2 AAA batteries, sensor cover, instruction manual

2 Preparation

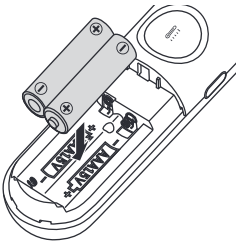
2.1 Installing/Replacing the Batteries

1 Remove the battery cover.

- Press down arrow(1) on the battery cover and slide in the direction of the arrow(2).

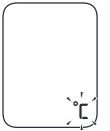


2 Insert 2 AAA alkaline batteries as indicated in the battery compartment.



3 Close the battery cover.

- The display is shown as in the figure below.



- Press the [Power] button to turn the device off.
- The device automatically turns off if no button is pressed for 30 seconds.

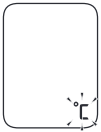
- When " " (the battery icon) flashes on the display, it is recommended that you replace the batteries.
- To replace the batteries, turn the device off and remove all batteries. Then, replace with 2 new batteries at the same time.
- The supplied batteries may have a shorter life span than new batteries.
- Disposal of used batteries should be carried out in accordance with local regulations.

2.2 Switching Between °C and °F

The unit can be switched only when installing the batteries.
When the unit is switched between "°C" and "°F", all the readings stored in the memory are deleted.
The unit is set to "°C" as default.

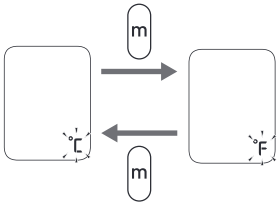
1 After installing the batteries, make sure that "°C" is displayed.

- If nothing is displayed, remove the batteries and **wait more than 1 minute**, then install them again.



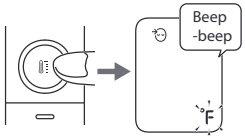
2 Press the [m] button.

- The unit changes each time you press the [m] button.



3 Press the [Measure] button.

- The unit is set with 2 short beeps, then the device is ready for use. To start a temperature measurement immediately, refer to step 3 of section 3.1.



Note :

- If the [Power] button is pressed instead of the [Measure] button, the unit is set with a short beep and then the device turns off.

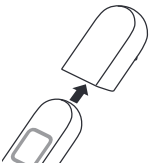
3 Using the Thermometer

3.1 Taking Body Temperature (Forehead Measurement Mode)

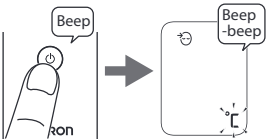
This mode displays the ear-equivalent value of the measured forehead temperature.

1 Gently pull off the sensor cover to remove it.

- Measuring with the sensor cover on cannot measure accurately.



2 Press the [Power] button.



- All indicators appear on the display for 3 seconds.
- When "°C" (or "°F") flashes, the device is ready for measurement.

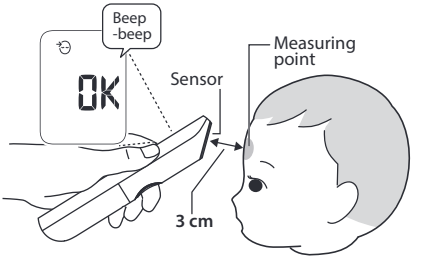
Note :

- If a reading is stored, the previous reading appears. Then, the device is ready for measurement.



3 Point the sensor toward the forehead.

- When the sensor reaches the best distance for measuring (approx.3 cm from the forehead), the short buzzer beeps twice.

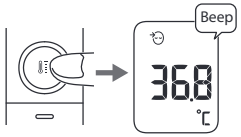


Note :

- Always make sure the sensor is clean and undamaged, and the forehead is clean with no sweat, cosmetics, scars, etc.

4 Press the [Measure] button.

- The measurement is completed in 1 second with a long beep.



5 Check the measurement result.

- After 1 second, "°C" (or "°F") flashes. Then, the device is ready for the next measurement.
  To start a temperature measurement again immediately, repeat the steps from step 3.

6 Press the [Power] button.

- The device turns off with a short beep.
- The device automatically turns off if no button is pressed for 30 seconds.
- Put on the sensor cover after measuring to protect the sensor.

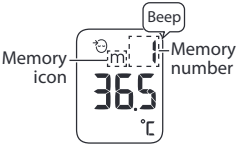
- Do not take a bath or exercise within 30 minutes before the measurement.
- Remain in a stable environment for at least 5 minutes before the measurement.
- It is recommended to take 3 measurements. If the 3 readings are different, select the highest one as the correct temperature.

3.2 Checking the Memory

This device automatically stores the last 30 readings. The saved readings can be checked on the display of the device.

1 Press the [m] button.

- The most recent reading appears with a long beep. "m" (the memory icon) appears on the display.
- The previous reading and its memory number are displayed each time you press the [m] button. When the oldest reading is displayed, pressing the [m] button shows the latest reading again.



Note :

- If the [Measure] button is pressed while browsing the memory, the device will be ready for measurement.

2 Press the [Power] button.

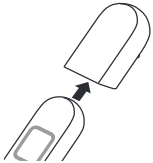
- The device turns off with a short beep.
- The device automatically turns off if no button is pressed for 30 seconds.

3.3 Taking Surface Temperature (Surface Measurement Mode)

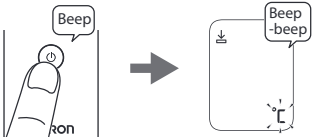
In the surface measurement mode, the device shows the actual and unadjusted surface temperature of an object.
The forehead measurement mode is set as default. Follow the steps below to switch to the surface measurement mode.

1 Gently pull off the sensor cover to remove it.

- Measuring with the sensor cover on cannot measure accurately.



2 Press and hold the [Power] button for 3 seconds.



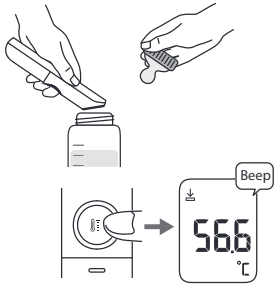
- All indicators appear on the display for 3 seconds.
- When "⏚" (the surface temperature icon) stays lit and "°C" (or "°F") flashes, the device is ready for measurement.

Note :

- If the [Power] button is released within 3 seconds, " " (the forehead temperature icon) is displayed and the device enters the forehead measurement mode. Turn the device off and try again.

3 Move the device close to the object to be measured and press the [Measure] button. Recommended distance between the device and the object is 3 cm.

- The measurement is completed in 1 second with a long beep.



4 Check the measurement result.

- After 1 second, "°C" (or "°F") flashes then the device is ready for the next measurement.
  To start a temperature measurement again immediately, repeat the steps from step 3.

5 Press the [Power] button.

- The device turns off with a short beep.
- The device automatically turns off if no button is pressed for 30 seconds.
- Put on the sensor cover after measuring to protect the sensor.



- When the power is turned off, the device returns to the forehead measurement mode.
- Surface measurement readings are not stored.
- While the surface measurement mode is enabled, the buzzer does not beep even if the distance from the object is 3 cm.
- In the surface measurement mode, the device shows the object's surface temperature reading. The object's surface temperature and internal temperature may be different.
- Make sure it is safe when measuring an object with extremely high or low temperature.
- To prevent damage to this device, DO NOT use this device to measure any item with a temperature higher than 90.0 °C (194.0 °F).
- Inaccurate readings may result depending on objects.
- Surface measurement mode is not intended for body temperature measurement or medical use.

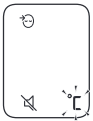
4 Settings

4.1 Setting the Buzzer

The buzzer is enabled by default. To disable the buzzer, follow the steps below.

Make sure that the power is off.
While holding the [Measure] button, press the [Power] button.

- After all indicators appear on the display,
  " 🔕 " (the mute icon) appears on the display.



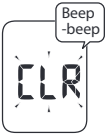
- To enable the buzzer, repeat this step. "°C" (or "°F") appears without " 🔕 " (the mute icon).

4.2 Delete All Readings

To delete all the readings stored in the device, follow the steps below.

1 Make sure that the power is off. While holding the [m] button, press and hold the [Power] button for more than 3 seconds.

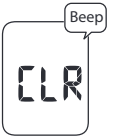
- "CLR" flashes with 2 short beeps.



- To cancel the deleting process, press the [Power] button.

2 Press the [m] button for more than 2 seconds.

- "CLR" stops flashing with a long beep, then all readings are deleted.



3 Press the [Power] button.

- The device turns off with a short beep.
- The device automatically turns off if no button is pressed for 30 seconds.

5 Maintenance

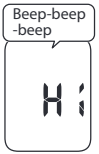
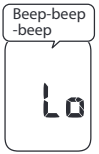
- **Store the device with sensor cover.**
- **Check that the device can be operated properly if it is dropped. If unsure, contact your local OMRON representative to have the device checked.**
- **When the device becomes dirty, wipe it lightly with a soft dry cloth.**
  For stubborn stains, wipe the device with a cloth that has been dampened with water or a neutral detergent solution and then wring thoroughly.
- **Wipe the sensor carefully to avoid damaging it.**
  - Use a 70 % alcohol swab or soft cotton moistened with 70 % alcohol to wipe the sensor.
  - Allow the sensor to fully dry for at least 1 minute before use.
- **To avoid damage to the device, do not store the device in places such as:**
  - Wet locations.
  - Locations with high heat and humidity or those that are exposed to direct sunlight.
  - Areas close to heating equipment, dusty locations, or environments where there are high salt concentrations in the air.
  - Locations where the device will be tilted, is likely to drop, or will be subjected to shock or vibration.
  - Pharmaceutical storage areas or locations where corrosive gases are present.

6 Troubleshooting

In case of any of the problems below occur during measurement, check that no other electrical device is within 30 cm of the device. If the problem persists, please refer to the table below.

Display/Problem	Possible Cause	Solution
flashes	The batteries are low.	Replacing both batteries with new ones is recommended. (Refer to section 2.1)
appears	The batteries are depleted.	Immediately replace both batteries with new ones. (Refer to section 2.1)
The temperature indicated is rather high.	The device has been stored in a cold room.	When the device has been stored in a cold room, the readings may be rather high if you take the temperature shortly after bringing the device to a room that is at normal temperature. Take the temperature after leaving the device for 30 minutes in the room where it will be used. It is recommended to store the device in the room where you are going to take the temperature.
	The sensor has been exposed to direct sunlight.	Store the device in a place away from direct sunlight.
	Measurement was taken shortly after the subject cried. Crying can increase facial temperature.	Take the temperature again after a while.
	Measurement was taken outside.	Take the temperature in a room.
	Measurement was taken at the place where wind blows or the outside air comes in.	Take the temperature at the place where wind does not blow or the outside air does not come in.

Display/Problem	Possible Cause	Solution
The temperature indicated is rather low.	The forehead is wet.	Do not use the device when the forehead is wet after swimming, bathing, or through sweating after physical exercise, as skin temperature may have fallen. Wipe away moisture and allow 30 minutes for the body to acclimate to room temperature before taking the temperature.
	The sensor is dirty.	Wipe the dirt of sensor. (Refer to section 5)
	Measurement was taken in the surface temperature mode.	Take the temperature in the forehead measurement mode.
	Measurement was taken shortly after the subject was outdoors in cold weather.	Wait until the forehead has warmed up.
	Measurement was taken at a location other than the forehead.	Be sure to take the temperature exactly at the forehead, not surrounding areas such as the hairline.
	Measurement was taken with some object between the device and forehead.	Be sure to take the temperature without hair or cover between the device and forehead.
	Measurement was taken at the forehead with cosmetics.	Be sure to measure the forehead without cosmetics.
	The device was held for an extended time.	Allow the device to rest in a room at room temperature.

Display/Problem	Possible Cause	Solution
	**Forehead measurement mode:** The temperature reading is higher than 43.0 °C (109.4 °F). **Surface Measurement Mode:** The temperature reading is higher than 90.0 °C (194.0 °F).	Take the temperature within its measurable range.
	**Forehead measurement mode:** The temperature reading is lower than 34.0 °C (93.2 °F). **Surface Measurement Mode:** The temperature reading is lower than 0.0 °C (32.0 °F).	

Display/Problem	Possible Cause	Solution
	The ambient temperature is higher than 40.0 °C (104.0 °F).	Take the temperature in a room above 5.0 °C (41.0 °F) and below 40.0 °C (104.0 °F).
	The ambient temperature is lower than 5.0 °C (41.0 °F).	

7 Specification

Product Description	Forehead Thermometer
Model	MC-F300
Sensor	Thermopile
Temperature Display	3-digit, °C display in 0.1 degree increments 4-digit, °F display in 0.1 degree increments
Accuracy	**Forehead measurement mode**: ±0.2 °C (+34.0 to +43.0 °C) ±0.4 °F (+93.2 to +109.4 °F) **Surface measurement mode**: ±2.0 °C (less than +40.0 °C) /±3.6 °F (less than +104.0 °F), ±5 % (greater than or equal to +40.0 °C (+104.0 °F))
Measurement Time	1 second measurement
Measurement Range	**Forehead measurement mode**: +34.0 to +43.0 °C (+93.2 to +109.4 °F) **Surface measurement mode**: 0 to +90.0 °C (+32.0 to +194.0 °F)
Memory	30 memories
Power Supply	DC 3.0 V (2 AAA alkaline batteries)
Power Consumption	0.2 W

Durable Period	3 years (3 measurements/day)
Battery Life	With new alkaline batteries, approx. 1100 measurements or more
Operating Conditions	+5 to +40 °C (+41.0 to +104.0 °F), 15 to 95 %RH (non-condensing), 700 to 1060 hPa
Storage/Transport Conditions	-25 to +55 °C (-13.0 to +131.0 °F), 15 to 95 %RH (non-condensing), 700 to 1060 hPa
Protection against electric shock	Internally powered ME equipment
IP Classification	IP22
Applied Part	Type BF (main unit)
Operation Mode	Continuous operation
Measurement Mode	Adjusted mode
Measurement Position	Forehead
Reference Body Site	Ear temperature
Weight	Approx. 102 g (with batteries installed)
Outer Dimensions	157(W) × 37(H) × 27.5(D) mm (without sensor cover)
Package Contents	Main unit, 2 AAA batteries, sensor cover, instruction manual

Notes:

- The specification may be changed without prior notice.
- IP classification is degrees of protection provided by IEC 60529.
  This device is protected against solid foreign objects of 12.5 mm diameter and greater such as a finger.
  This device is protected against oblique falling water drops which may cause issues during a normal operation.
- Operation mode classification complies with IEC 60601-1.
- This device fulfills the provisions of the European Standard EN ISO 80601-2-56: 2017+A1: 2020: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement.
- Please report to the manufacturer and the competent authority of the Member State in which you are established about any serious incident that has occurred in relation to this device.
- Please refer to "UDI [8012] x.x.x" for the software version/build number; "x.x.x" may consist of a set of 2 to 6 numbers.
- The normal temperature varies according to different locations on the body.
  The "Clinical Bias" is -0.1 °C.
  The "Limits of Agreement" is 0.2 °C.
  The "Repeatability" is 0.11 °C.
  This device is an adjusted mode thermometer that converts the forehead temperature to display its "ear equivalent".

CE 0197

Symbols Description

	Applied part -Type BF Degree of protection against electric shock (leakage current)
SN	Serial number
IP XX	Ingress protection degree provided by IEC 60529
CE	CE Marking
	Humidity limitation
	Temperature limitation

	Atmospheric pressure limitation
MD	Medical Device
	Date of Manufacture
UDI	Unique device identifier
	Recycling mark
	Need for the user to follow this instruction manual thoroughly for your safety. (Background: blue)
REF	Catalogue number