

# Gluteal Intramuscular Injection Model

LM-027

## Instruction Manual

Thank you for purchasing the LM-027 Gluteal Intramuscular Injection Model.  
Please read this instruction manual carefully to ensure correct use of the product,  
and store it in a safe place for easy access.

Manufacturer:

**KOKEN CO., LTD.**

1-4-14 Koraku, Bunkyo-ku, Tokyo 112-0004 JAPAN

URL:<http://www.kokenmpc.co.jp>

E-mail:[customer@kokenmpc.co.jp](mailto:customer@kokenmpc.co.jp)

EU Authorized Representative for KOKEN CO., LTD.:

**EC REP**

MDSS GmbH

Schiffgraben 41

30175 Hannover, Germany

[www.mdss.com](http://www.mdss.com)



## Table of Contents

1. Description & features
2. Component names & functions
3. How to use the LM-027
4. Caring for the model
5. Model Configuration Chart
6. Specifications
7. Replacement parts (sold separately)



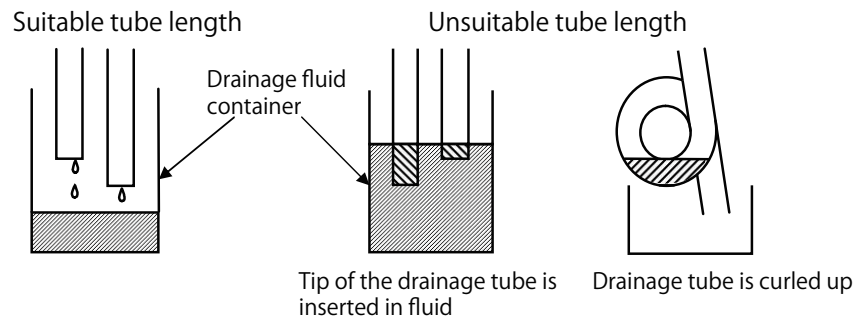
## Handling and Safety Precautions

**These precautions should be strictly observed in order to ensure safe, long-term use of the product.**

### **The following precautions should be observed particularly strictly:**

1. Use water only for the simulated injection fluid as colored fluids may stain the model.
2. Use only AA size batteries.
3. The model is made using special silicone rubber to simulate the texture of human skin, so we recommend that it be handled carefully in the same manner as an actual person.
4. Inserting an injection needle in the alarm sensor sites will cause the alarm to sound. If this occurs, please remove the needle immediately. Proceeding to inject the simulated injection fluid (water) outside of the correct injection site may cause the model to malfunction.
5. Fill the syringe with the simulated injection fluid (water) before attempting to use the model. Failing to use a full syringe may prevent the alarm from sounding when the needle is inserted outside of the correct injection site.
6. If the alarm fails to sound after injecting the alarm sensor site while the power lamp is illuminated, check to see if the low battery (LOW BATT) lamp is lit up. If the LOW BATT lamp is lit up, please replace the batteries. If the LOW BATT lamp is not lit up, please contact the supplier to have the model repaired.
7. The simulated injection fluid (water) should only be injected after the needle tip has been inserted at least 20 mm into the correct injection site. If the needle is inserted less than 20 mm into the injection site, the model cannot absorb the simulated injection fluid (water) and the fatty layer may also be damaged.
8. Use injection needles with a size of 22~23G, and with a total length of 20 mm or more.

9. The supplied drainage tube is 2 meters in length, so please cut it to a suitable length before use. Using the tube in its original length may impede drainage and cause overflow of injection fluid from the injection site.



10. Do not wash or submerge the model in water.
11. Apply baby powder or a similar product to the epidermis if it feels oily to the touch.
12. To clean the epidermis, use a neutral solvent diluted with water. If this fails, wipe the epidermis with a piece of gauze moistened with ethanol. Do not use thinners, benzene or similar solvents.
13. Attached batteries are for the usage of operation check. There is a possibility that battery life is short.

# 1. Description & features

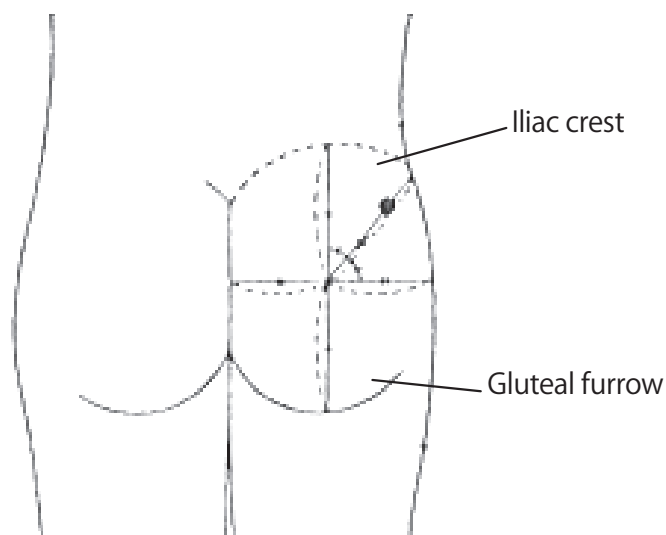
## Description

The injection sites in this model are in the upper outer quadrants of the buttocks. The model is designed to simulate the actual sensation of the human skeletal structure required to determine the correct injection sites.

## Features

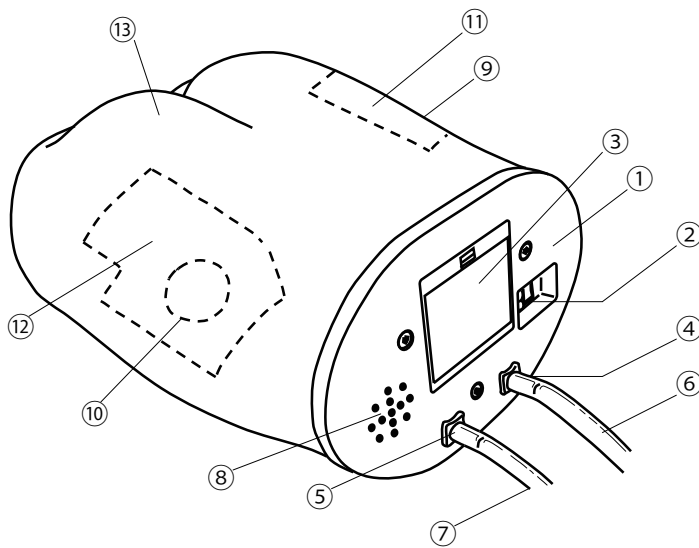
1. Inserting the injection needle into an area other than the correct injection site causes the alarm to sound.
2. Users can practice a range of injection procedures, including needle puncture and infusion of simulated injection fluid (water). The injection fluid is discharged from the model via the drainage tube.
3. The model closely simulates the human body so that users can practice locating and maintaining the correct injection site and performing injections at various angles under realistic conditions.
4. The injection site components and epidermis are easy to replace.

### Injection site



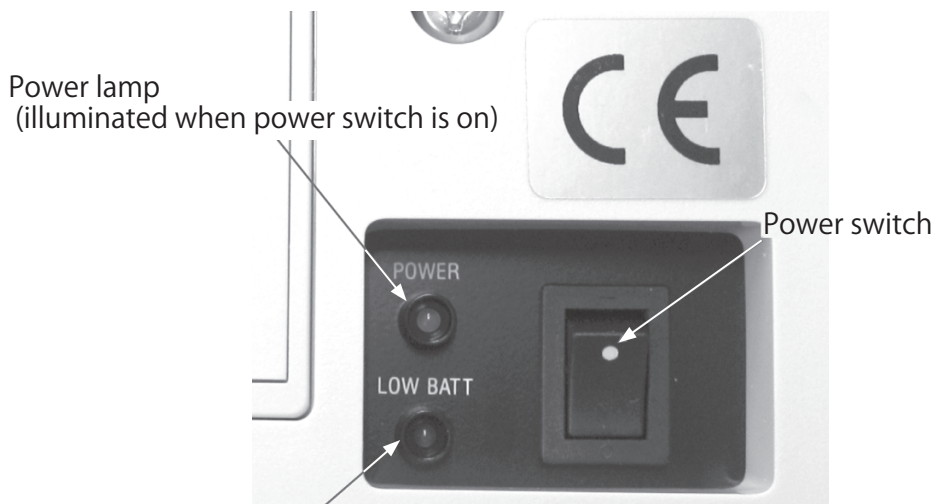
## 2. Component names & functions

### Component names



- ① Front panel
- ② Switch panel
- ③ Battery box
- ④ Drainage connector (left)
- ⑤ Drainage connector (right)
- ⑥ Drainage tube (left)
- ⑦ Drainage tube (right)
- ⑧ Alarm speaker
- ⑨ Injection site (left)
- ⑩ Injection site (right)
- ⑪ Alarm sensor site (left)
- ⑫ Alarm sensor site (right)
- ⑬ Epidermis

### Operation switch



Power lamp  
(illuminated when power switch is on)

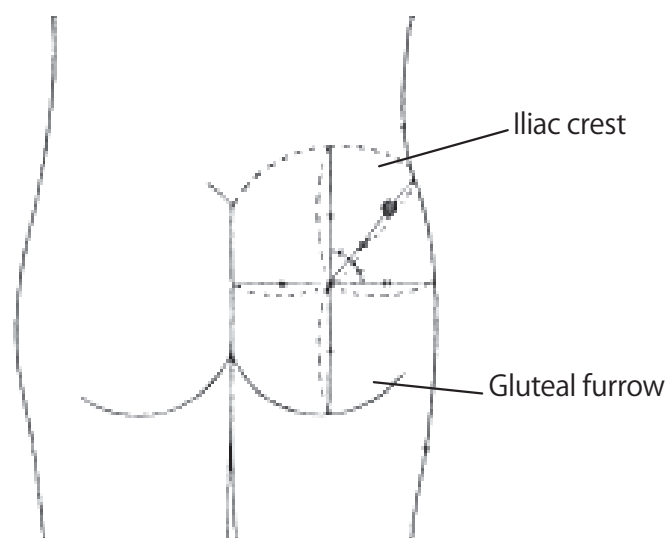
LOW BATT lamp  
(illuminated when battery voltage is low)

\* If the LOW BATT lamp lights up,  
please change the batteries immediately.

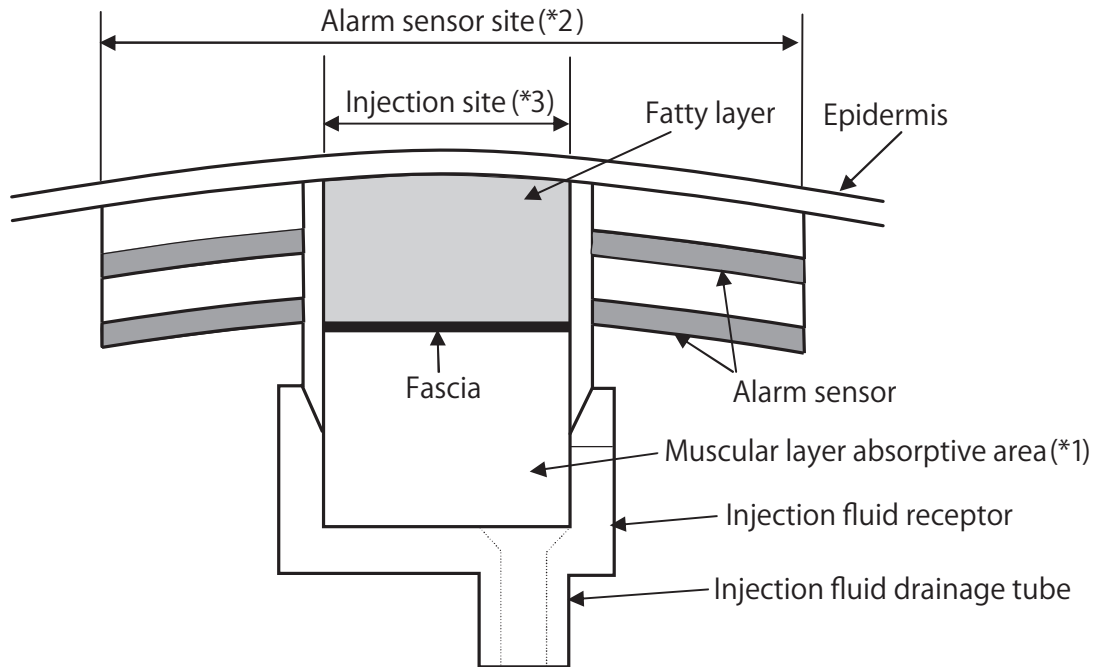
### 3. How to use the LM-027

1. Insert the connector of the supplied drainage tube into the model's drainage connector, and place the other end of the drainage tube into a bucket or container.
2. Turn the power switch to ON and make sure that the power lamp is illuminated. If the LOW BATT lamp is lit up, change the batteries before attempting to use the model.
3. Inserting an injection needle in any part of the alarm sensor site will cause the alarm to sound. If this occurs, please remove the needle immediately. The correct injection site is located on the diagonal line bisecting the gluteal region's upper right quadrant, and is 1/3 the distance from the iliac crest or the side of the body.
4. The simulated injection fluid (water) should only be injected after the needle tip has been inserted at least 20 mm into the correct injection site. If the needle is inserted less than 20 mm into the injection site, the model cannot absorb the simulated injection fluid (water).
5. After use, turn the power switch to OFF.
6. Refer to page 8 for instructions on how to care for the model after use.

#### Injection site



## Internal structure of the injection site & alarm sensor site

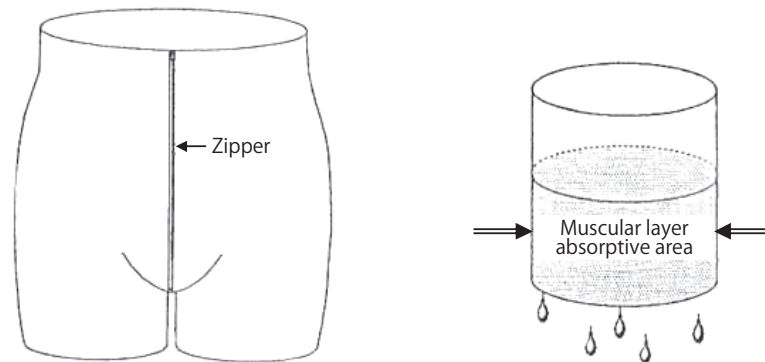


- \*1. The muscular layer absorptive area temporarily absorbs simulated injection fluid (i.e., water).
- \*2. The alarm sensor site emits a warning sound when the injection needle is inserted in an area outside the correct injection site.
  - If the alarm sounds, please remove the needle immediately.
- \*3. Injection site (5 cm cylindrical area).

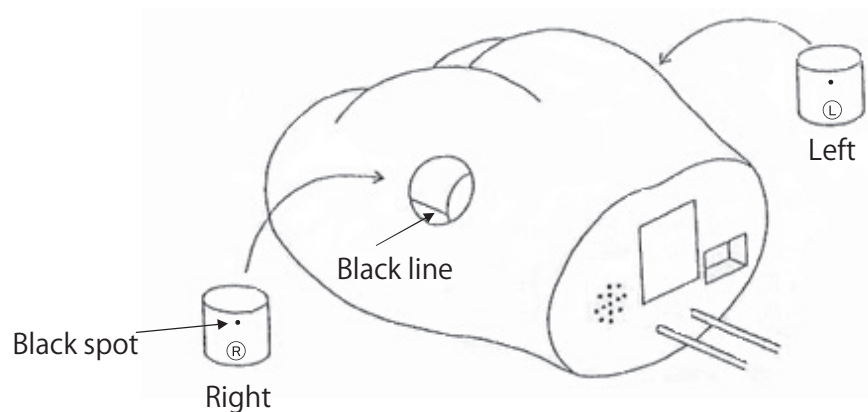


## 4. Caring for the model

1. To replace the epidermis, unzip the epidermis zipper and remove it from the model. Do not use excessive force when removing the epidermis to avoid damaging it.
2. After use, remove the injection site component from the model.
3. Dry the injection site component by squeezing out the simulated injection fluid (water) that has accumulated in the muscular layer absorptive area.



4. The left and right injection site components are different, so check for the left or right marking on the side of the component.
  - \* Make sure that the black spot on the injection site component aligns with the black line inside the model before inserting it.
  - \* Apply some baby powder to the side of the injection site component if it is difficult to insert.
  - \* Be careful not to insert the injection site component upside down. Proceeding to inject the simulated injection fluid (water) into an area other than the correct injection site may cause the model to malfunction.



## 5. Model configuration chart

Item	Quantity
Main body	1 unit
AA size batteries	4 pcs
Spare injection sites (left & right)	1 pc each
Drainage tubes (left & right)	1 pc each
Storage case	1 pc
Instruction manual (this document)	1 copy

## 6. Specifications

Item	Length	Width	Height	Weight
Main body	Approx. 36 cm	Approx. 32 cm	Approx. 20 cm	Approx. 3.6 kg
Storage case	Approx. 39 cm	Approx. 42 cm	Approx. 32 cm	Approx. 4 kg
Injection site	Approx. 5 cm	Approx. 5 cm	Approx. 5 cm	Approx. 40g/pc

## 7. Replacement parts (sold separately)

Item		Units
Injection site (left & right)	LM-0271	1 each/set
Epidermis (skin)	LM-0272	1 pc