

How to use TENS device (Omron HV-F 128)

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How to Insert Batteries

1. Turn the Intensity Adjustment Dial/Power Switch to the “OFF” position.
2. Open the battery cover on the back of the main unit.
3. Insert batteries according to the polarities shown in the battery compartment.
4. Close the battery cover.

General advice on the handling of batteries

- The supplied batteries are prepared for this study only.
- Insert the batteries with the polarities (+ and –) in correct alignment.
- Battery Life is approx. 3 months: when used 15 minutes a day continuously.
- If you feel the massage stimulation is weak, the batteries may be worn. Replace the batteries with new ones.

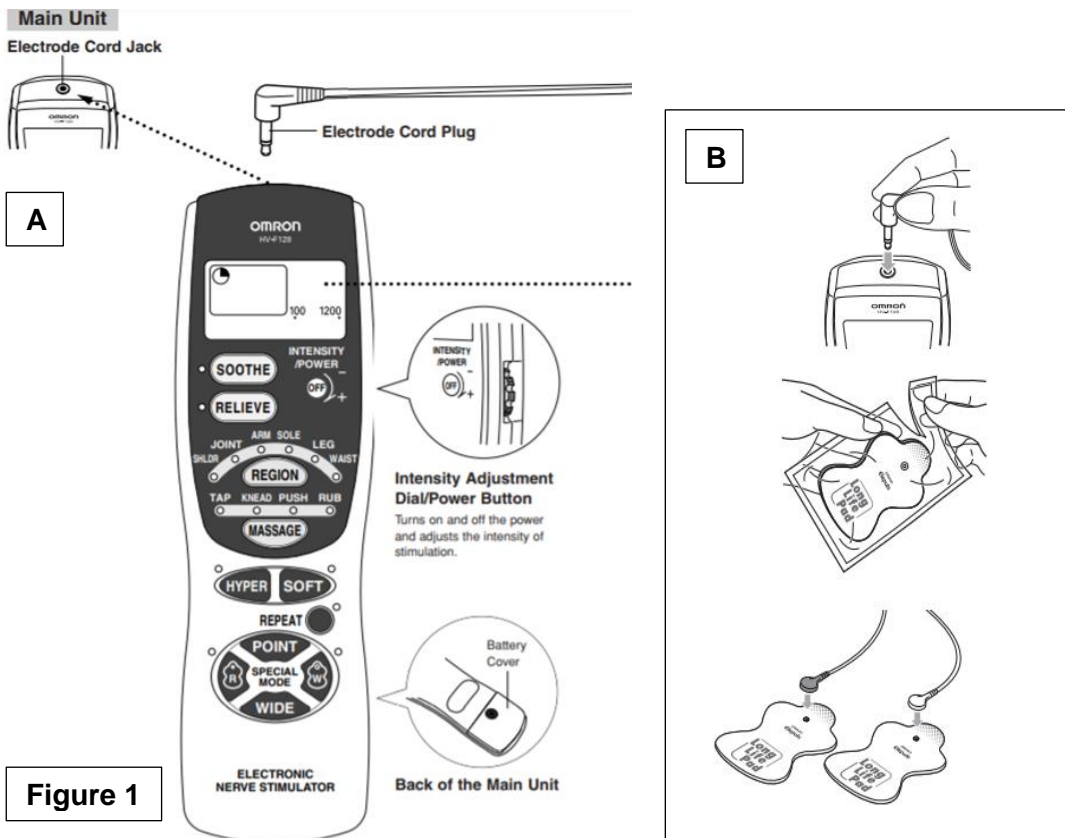


Figure 1

How to Connect the Electrode Cord (Figure 1A)

1. Turn the Intensity Adjustment Dial/Power Switch to the “OFF” position.
2. Connect the Electrode Cord with the Main Unit. Insert the Electrode Cord Plug into the Electrode Cord Jack.
3. Connect the Electrode Cord to the Electrode Pads as described below.

When using the unit for the first time (Figure 1B)

- Take out the Pads from the clear plastic bag.
- Do not peel off the clear film attached to the Pad at this time.
- Place the Pad on a flat surface and securely connect the Electrode Cord Plug with the Pad.
- Although Electrode Cord Plugs are provided in red and white, either plug can be connected with one of the Pads irrespective of color.

How to Attach the Pad to the skin

1. When you use the unit for the first time, a clear plastic film is attached to the Pad.
2. The Pad has a strong adhesive that is covered in a clear film. Peel off the clear plastic film from the Pad and attach the Pad to the skin at the junction of the buttock and upper thigh. The center of the Pad should be placed along the line of the gluteal fold (Figure 2).
3. Discard the peeled-off clear film – do not reapply to the pad.
4. It may be difficult for you to attach the Pad behind your body around the buttock. It is a good idea to ask someone in your family or caregiver to help you.
5. If the Pad comes off from the skin, the unit will turn off automatically in approximately 7 seconds.

Turn the Power to OFF, then re-attach the Pads correctly and turn on the power again.

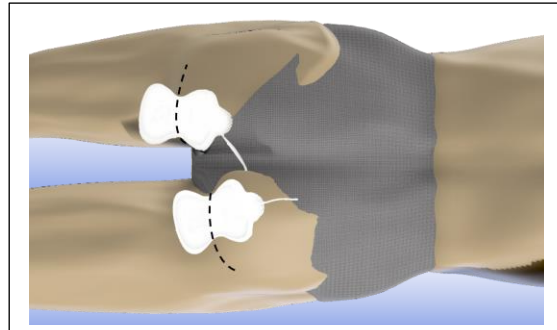


Figure 2

General Advice on the handling of Pad

- Do not place pads one on top of the other.
- Do not bend the Pad.
- Do not touch the adhesive surface with your fingers.
- Ensure you wipe sweat off the region you want to put Pads before using the unit.
- If the Pad becomes adhered to clothing or another item and does not come off easily, do not use force to peel it off. Instead, moisten the back of the cloth to which the Pad is attached with a small amount of water, and then the Pad will come off easily.
- If you need to wet the Pad let it dry sufficiently. Especially let the adhesive surface air-dry.

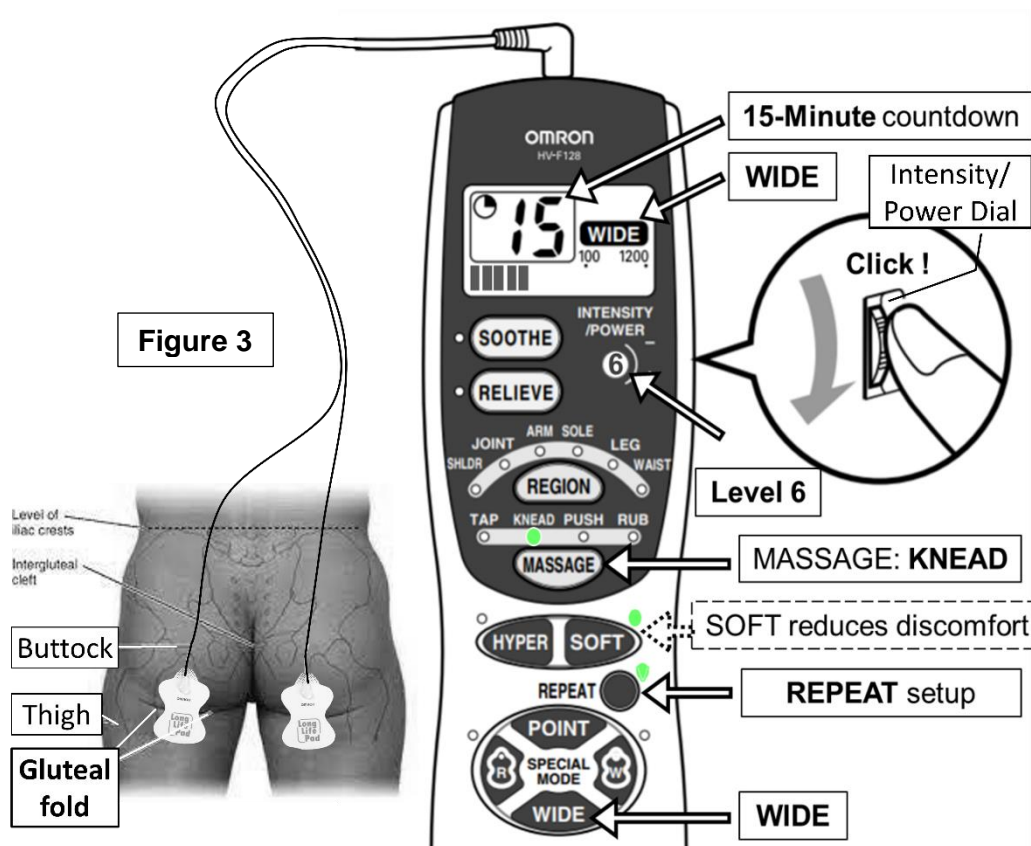
How to Apply Electrical Stimulation (Figure 3)

1. Turn on the power.

- Rotate the Intensity Dial/Power Button downwards. When you hear a click, the power is turned on and the stimulation starts.

- The special mode of **KNEAD**, **REPEAT** and **WIDE** has been pre-set by the research team. These parameters provide 25 Hz pulses with 4-second stimulation and 1-second pause cycle.

- Then you will see the Massage Button at **KNEAD** and **REPEAT** lights are flashing. At the unit screen, counting down 15 minutes, frequency bars and **WIDE** will be displayed.



2. Select one stimulation method.

- If you could not see the setting as mentioned above or if you noticed a different flashing location, you can reset it by pressing the button of MASSAGE until the green light stops at **KNEAD**, press **REPEAT** button to see its green light turned on and press **WIDE** button to see **WIDE** on the screen.

- When you use the unit for the second time and after, the Buttons and settings you used in the previous setup will flash and automatically start.

- If the Pads come off from the skin, the power will be turned off automatically in approximately 7 seconds. If it happens within the first half of stimulation, you can re-attach the Pad and restart

TENS again. Otherwise, discard applying TENS of that day. If the Pad does not stick anymore, please contact the research team to get the new Pad.

3. Adjust the intensity of stimulation.

- For the first use, it is better to rotate slowly the Intensity Dial/Power Button from level 1 to 6 within 30-60 seconds. Set the intensity **Level 6** for the optimal electrotherapy. Duration of **15-minute** stimulation will automatically show and count down on the screen. If you are familiar with this setting after several uses, you can quickly rotate the Intensity Dial to Level 6.

Advice

When using TENS unit, you can see muscle twitching or feel tingling as normal responses. However, if you feel uncomfortable, irritation, increased pain, increased spasticity or severe muscle contractions (e.g., Jerky movements), you can reduce the Intensity by following these steps:

- Firstly, press the button "SOFT" (soft stimulation without giving the feel of irritation). If there is still discomfort, then
 - Secondly, lower the Intensity Dial from 6 to 5. If necessary, then
 - Thirdly, lower the intensity from 5 to the level that you feel comfortable.
- NOTE: The intensity below 4 might not provide the effective electrotherapy.

4. End of stimulation

- The power will be turned off automatically in approximately 15 minutes after the stimulation starts. Even when the power is turned off automatically, turn off the Intensity Dial/Power Button by rotating the Intensity Dial/Power Button upwards until you hear a click, the power is turned off. If this is not done the batteries will wear out slightly faster.

- Remove the Electrode Cord Plug from the Main Unit.
- Peel off the Pad from the skin.
- Hold the Tab to peel off the Pad without touching the adhesive surface.
- Lightly attach the Pad to the Electrode Holder for storage. This step is important otherwise the pads will become dirty and the adhesiveness will deteriorate.

5. Store the unit.

- You may leave the Electrode Cord connected with the Pad as it is.
- Bundle the Electrode Cord and wrap it around the clean Electrode Holder.
- Wrap the Electrode Cord loosely.
- Store the Main Unit and the Electrode Holder in the Soft Fabric Case.

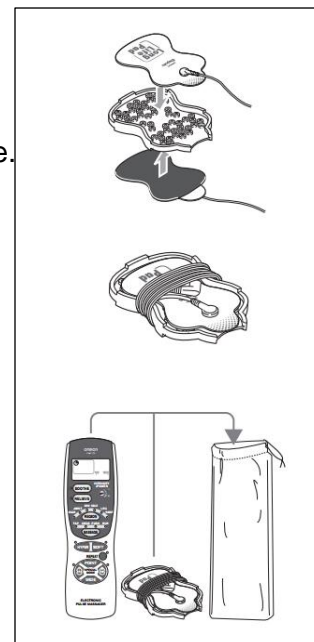


Figure 4

Advice on Maintenance of Pads

- The Long-Life Pads are good for up to 150 uses or 5 months based on daily usage. However, if the Pad is difficult to attach or the adhesive surface of the Pad becomes dirty, you can wash the Pads. (Please see the instruction manual: page 20)
- Do not press the Pad hard against the Electrode Holder. It may cause the adhesive surface to be damaged.
- In the event pads are damaged, please contact the research team to get new Pads.
- If you find you are allergic to the adhesive surface, please inform us and we will provide hypoallergenic adhesive Pads.

How to clean the Unit

- Please keep the unit clean all the time. Be careful so that **NO Water** should get into the Main Unit.
- Be sure to turn off the Power and remove the Electrode Cord from the Main Unit when cleaning the unit.
- Wipe off the stain on the Main Unit with a soft cloth.
- If the unit is heavily stained, wipe it with a cloth moistened with water or detergent, then squeeze it well. Wipe off the unit with a dry cloth.

Troubleshooting

If you have any problems, please contact us at Tel: 022-1843224 (24/7 available on a mobile phone) or you can check the Troubleshooting in the Instruction Manual (Omron-TENS Therapy Device) page 22 for remedial action advised.

Live and Video Tutorial

Please watch the video tutorial before the zoom meeting.

VDO Link: https://mediastore.auckland.ac.nz/uploaded/project/CMS_FMHS/public/08-2021/fcb68dde5b874be68a1b3611ebb2434c.preview

During the zoom meeting, we can replay this video again if you wish.

You will receive the study package as seen in Figure 5.

We will have a live demo on a mannequin as seen in Figure 6.

Finally, you will be asked to practice applying TENS on a plastic sheet model as seen in Figure 7.



Figure 5. The package contains one TENS device, two electrode pads, a practicing model, and a measuring container for urine volume measurements (25 - 500 ML).



Figure 6. A live tutorial and video clip of using TENS on a dummy (mannequin torso) with silver strips demonstrating the gluteal fold (the junction between the back of upper thigh and buttock).

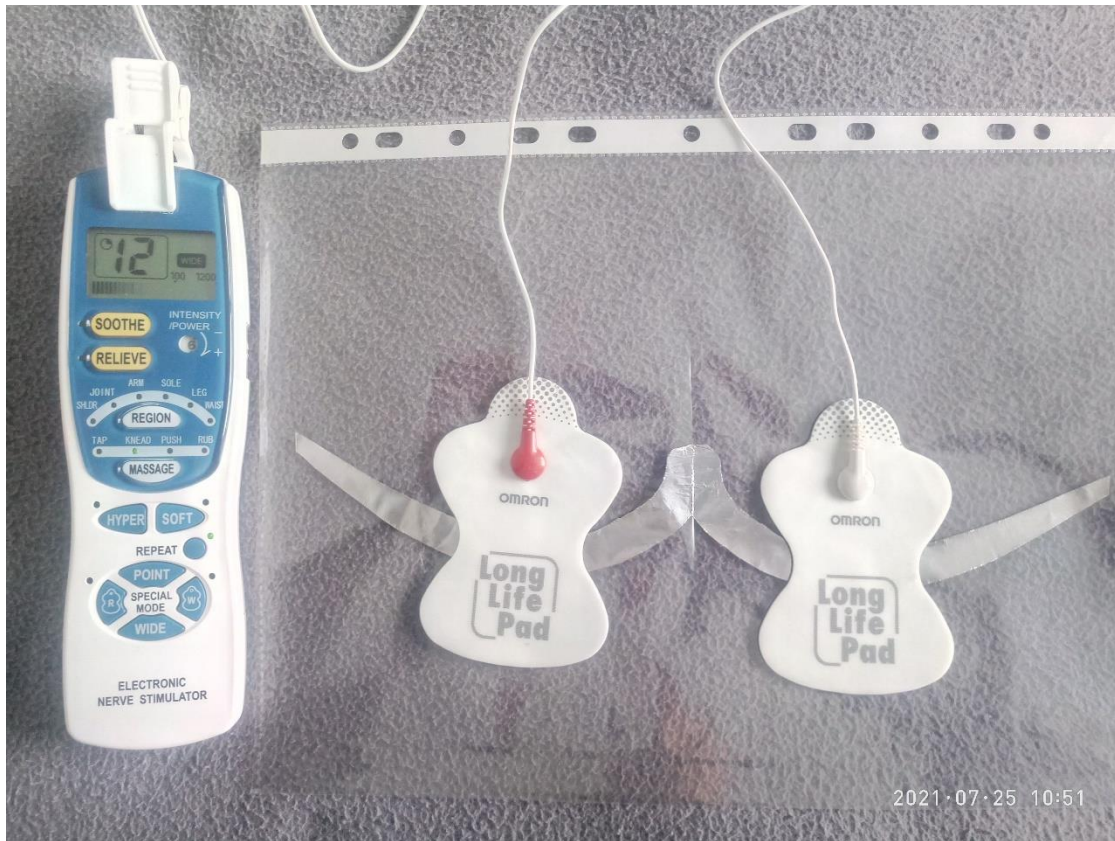


Figure 7. Live practice applying TENS therapy on the practice model, plastic sheet with silver strips representing the gluteal fold or the junction between the back of upper thigh and buttock.

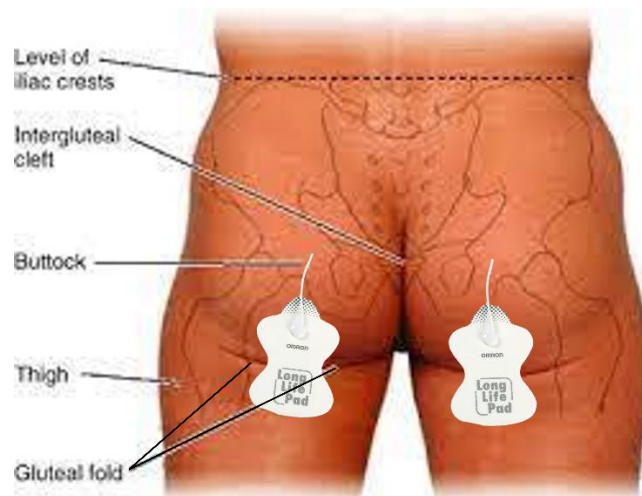


Figure 8. Illustration of real use of applying electrode pads along the gluteal fold directly on the skin (NO need of silver strips). The center of electrode pad is in-line with the gluteal fold.