

INSTRUCTION MANUAL



- 3 in 1, for pain, hot and cold treatment on the knee
- Universal size, individually adjustable with 2 large vlcro fasteners
- For all TENS devices with 2 mm plug diameter
- With 4 cold/hot compresses
- Gel compresses individually removable
- 4 electrodes, can be wetted with water, 2 electrodes each can be addressed with one channel of the TENS device
- Content:
 - 1 knee ache cuff with
 - 4 electrodes
 - 4 cold/hot compresses, diameter ca. 11 cm
- Incl. instruction manual
- 24 months warranty



KMT 285

Version 1, 2011-09

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TABLE OF CONTENTS

No	Subject	Page
1.0	What do the symbols mean?	3
2.0	Basic information	3
2.1	What does TENS mean?	3
2.2	Information on TENS use	3
2.3	Information on cold and hot treatment	3
3.0	Safety instructions	4
3.1	General safety instructions	4
3.3	For which application range/environment is the knee ache cuff suited?	5
3.4	For which application range/environment is the knee ache cuff not suited?	5
3.5	For which application range is the knee ache cuff suited?	6
3.6	For which application range is the knee ache cuff not suited?	6
3.7	Use by children and youths	7
3.8	Use of the knee ache cuff	7
4.0	Where may the knee ache cuff not be used?	8
4.1	Storage/maintenance of the knee ache cuff	8
4.2	Cleaning and care of the knee ache cuff	8
4.3	Disposal of the knee ache cuff	8
4.4	Delivery scope/package contents	9
4.5	Design of the knee ache cuff	9
5.0	Putting on and using the knee ache cuff	10
6.0	Cold treatment with the knee ache cuff	10
7.0	Hot treatment with the knee ache cuff	11
8.0	Technical data, symbols	12
9.0	Warranty	13

BASIC INFORMATION



1.0 What do the symbols mean?

The safety symbols shown in this manual are instructions concerning the proper handling of the knee ache cuff and your safety.

The symbols have the following meaning:



Read and observe the instruction manual!



Warning/Danger: Danger of serious injury/damage in case of improper handling!



You must observe these instructions under all circumstances!



Warning/Danger: The device may not be used by persons with pacemakers!

2.0 Basic information

2.1 What does TENS mean?

TENS: T= Transcutaneous (transmitted via the skin), E= Electric,
N= Nerve, S= Stimulation.

2.2 Information on TENS use

A TENS device generates electric currents in the low frequency range for therapy. The respective application program of the device controls the generated electric impulses, their intensity, frequency and frequency range. The electric impulses are transferred to the nervous system and the muscles by the adhesive skin electrodes. The current flows from one electrode to the other, depending on the pulse type of the device. This method influences the transmission of pain signals to the central nervous system in the applied TENS therapy. The user no longer senses the pain or only to a limited extent. The intensity of the electrodes in the knee ache cuff depends on the setting of the respective device. If your TENS device has two channel outputs, two electrodes can be connected per channel. When attached to the body, the pulses run horizontal to the respective plane of the electrodes.

2.3 Information on cold and hot treatment

The knee ache cuff has 4 side compartments into which you can insert one of the four cold/hot compresses each. The cold/hot compresses have a gel filling that stores heat or cold very effectively. This ensures optimum cooling or heating of the body region around the knee ache cuff.



SAFETY INSTRUCTIONS

3.0 Safety instructions



3.1 General safety instructions

- 3.1.1 In case of a defect, you may not repair, use or modify the knee ache cuff yourself. In case of wrong application, the stimulating current may lead to pain, injury and burns.
- 3.1.2 If you notice any skin changes, pain, swelling, indisposition or other irregularities during the application of the knee ache cuff, stop it immediately and consult your physician.
- 3.1.3 Prior to use, remove all metal objects like jewellery, belts, watches and other utensils from your body so that these do not come into contact with the knee ache cuff.
- 3.1.4 Do not use the knee ache cuff while driving a car and also do not perform any other activities during application.
- 3.1.5 If you have any doubts regarding the application of the knee ache cuff, consult your physician before using it.
- 3.1.6 Do not use the knee ache cuff on points of your body with inexplicable pain, swollen muscles or after grave muscle injuries without consulting your physician. Treatment with the knee ache cuff does not replace medical diagnoses and treatment.
- 3.1.7 Keep this instruction manual for later questions and hand it over to third parties when passing the knee ache cuff on. Also let third parties access these instructions. The instruction manual is part of the knee ache cuff.
- 3.1.8 Prevent abuse and other use of the device that does not correspond to its intended purpose. You may not use any other accessories of other devices. Observe the operating instructions of the manufacturer of your TENS device when connecting the knee ache cuff KMT 285 to this.
- 3.1.9 Do not place any heavy or sharp-edged objects onto the knee ache cuff or the cold/hot compresses.
- 3.2.0 Never use the enclosed cold/hot compresses for treatment without having the knee ache cuff attached between the application site and the cold/hot compress if you have previously heated or chilled the compress. This may lead to chilblains or burns. Test the temperature on the back of your hand prior to use.
- 3.2.1 Please note: not all types of inflammation can be treated with a cold therapy. If in doubt, ask your physician.
- 3.2.2 Do not store the cold/hot compresses permanently in the refrigerator. Do not place the cold/hot compresses for more than 4 hours in the refrigerator.
- 3.2.3 If gel should leak from a compress and come into contact with your skin, rinse the spot very thoroughly under running water.
- 3.2.4 If irregularities should occur during treatment, stop using the device immediately.
- 3.2.5 Keep the instruction manual throughout the service life of the product.

SAFETY INSTRUCTIONS



- 3.2.6 Avoid excessively high pressure during a hot or cold treatment to prevent bad circulation and/or congestion. Adjust the pressure of the knee ache cuff in such a way that the pressure sensation is pleasant. Excessively high pressure constricts the blood vessels and nerves, which may lead to irreparable tissue damage and loss of limbs.

3.3 For which application range/environment is the knee ache cuff suited?

- 3.3.1 Only use the knee ache cuff for the intended purpose for low-voltage application (max. electric pulses up to 120 Hz and max. 120 mA) on your knee.
- 3.3.2 The knee ache cuff is only intended for external application (via the skin) on humans and the treatment of clearly diagnosed chronic pain.
- 3.3.3 Use the knee ache cuff for cold treatments in case of: bruises, sprains, pulled muscles, swelling, inflammation, insect bites, contusions and acute complaints like e.g.: haematoma.
- 3.3.4 Use the knee ache cuff for hot treatments in case of: tension, muscle aches.

3.4 For which application range/environment is the knee ache cuff not suited?

- 3.4.1 The knee ache cuff may not be used together with any other medical and electric devices at the same time.
- 3.4.2 Do not use the knee ache cuff when showering, swimming, going to the sauna, bathing, or in any other environment with a high degree of humidity. Keep any liquid away during application. Injuries or health damage may occur with excess stimulation or in case of a short-circuit - mortal danger!
- 3.4.3 Do not use the knee ache cuff in bed and/or when sleeping.
- 3.4.4 Do not use the knee ache cuff close to easily flammable substances and gasses or close to explosives.
- 3.4.5 The knee ache cuff may interfere with other electric devices or be disturbed by other electric devices. Therefore, do not use the knee ache cuff close to other electric devices.
- 3.4.6 Do not use the knee ache cuff close to shortwave or microwave appliances (less than 1.5 m) or a high-frequency HF surgical device to prevent skin irritation or burns underneath the electrodes. Do not use the knee ache cuff and the stimulator in the mountains at an altitude of above 3000 metres.



SAFETY INSTRUCTIONS

3.5 For which application range is the knee ache cuff suited?

3.5.1 TENS devices only treat symptoms. They cannot heal them. In case of questions concerning your therapy, contact your physician.

3.6 For which application range is the knee ache cuff not suited?

- 3.6.1 In case of the following circumstances you may not use the knee ache cuff: a) heart disease and arrhythmia (may lead to cardiac arrest), b. directly on lesions, c. during pregnancy in the region of the uterus and during contractions, d. in the range of the eyes, e. when wearing a pacemaker, f. on body parts with bad blood circulation, g. on persons with psychological and emotional disorders, h. on persons with diagnosed dementia (mental degeneration), i. on persons with low IQ (intelligence quotient)
- 3.6.2 In case of the following circumstances, you must consult your physician prior to using the knee ache cuff: a. acute illnesses, b. tumours, c. in case of infectious diseases, d. in case of fever, e. blood pressure problems, f. skin diseases, g. after an accident, h. in case of nausea or dizziness, i. at the breakout of an illness, j. as soon as irregularities result, k. in case of inexplicable pain, l. diabetes, m. seizures, n. during menstruation, o. in case of no sensitivity to pain in the respective body part, p. persons with metal in their body
- 3.6.3 In case of unspecific pain like e.g. unspecific headaches, treatment with the knee ache cuff and a stimulator is ineffective.
- 3.6.4 Do not use the knee ache cuff in case you might injure yourself due to sudden startling.
- 3.6.5 The cold/hot compresses as well as the knee ache cuff may not be applied to open wounds, sensitive skin regions and fresh scars.
- 3.6.6 The following persons should not be subjected to a hot/cold treatment: children below the age of 3, helpless persons, allergic persons, persons with a weak immune system, persons with pain of unknown causes or diabetes, persons suffering from circulation problems, persons with blood flow disorders on the outer arteries and tissues, persons with severe cardiac disease. In case of questions, consult your physician.
- 3.6.7 Persons not able to fully feel hot or cold may not be subjected to a cold/hot treatment with this knee ache cuff. Small children are more sensitive to heat and cold! Fragile and handicapped persons may not be able to voice complaints if the temperature is too hot or too cold.

SAFETY INSTRUCTIONS



3.7 Use by children and youths

- 3.7.1 Children may not be treated with this knee ache cuff.
- 3.7.2 Keep the knee ache cuff away from children and youths below the age of 18.

3.8 Use of the knee ache cuff

- 3.8.1 The knee ache cuff may only be connected to stimulators with a 2 mm plug. Make sure that the device/stimulator is turned off when attaching or removing the knee ache cuff.
- 3.8.2 If you want to reposition the knee ache cuff during treatment, turn the device/stimulator off first.
- 3.8.3 Use of the knee ache cuff may result in skin irritation in some cases. In case such skin irritations occur, e.g. redness, blistering or itching, do not use the knee ache cuff anymore. Do not use the knee ache cuff permanently on the same body part, as this may also lead to skin irritations.
- 3.8.4 Prior to the treatment, thoroughly clean and dry the skin regions on which you want to apply the knee ache cuff. The skin regions must be fat-free and clean.
- 3.8.5 Only connect the cables and the knee ache cuff when the stimulation device (TENS device) is turned off.
- 3.8.6 To prevent damage to the cables, do not tug on the cables when removing the plug-type connections from the knee ache cuff. To connect or remove the knee ache cuff, only pull on the plugs or connect them there.
- 3.8.7 You can connect/disconnect the knee ache cuff to the TENS device with the plug-and socket connector featuring the electricity cable.
- 3.8.8 Each person reacts differently to electric nerve stimulation. If treatment is not successful, you should consult your physician.
- 3.8.9 Do not pull on the cable if you want to disconnect the plug-type connector of the knee ache cuff.
- 3.9.0 The knee ache cuff may not be used on body parts with skin inflammation, open and fresh wounds.
- 3.9.1 Only place the knee ache cuff onto the intended parts of your knee.
- 3.9.2 If not prescribed differently by your physician, we recommend an average treatment time of 30 min. up to three times a day.
- 3.9.3 The perception of the intensity depends on your day to day condition and you can adjust it with the intensity control of the of the stimulator to your personal needs.

4.0 Where may the knee ache cuff not be used?

- 4.0.1 The knee ache cuff may not be used on body parts with skin inflammation, open and fresh wounds.
- 4.0.2 Only place the knee ache cuff onto the intended part of your knee and observe the placement instructions.

4.1 Storage/maintenance of the knee ache cuff

- 4.1.1 The knee ache cuff is maintenance-free.
- 4.1.2 Clean the knee ache cuff after each application.
Do not disassemble or repair the knee ache cuff, as this may lead to technical defects or physical accidents.
- 4.1.3 The connection cables as well as the knee ache cuff may not be bent.
- 4.1.4 In case of commercial or business use of the knee ache cuff
KMT 285, a safety check has to be performed every 24 months in line with § 6 MPBetreibV. The safety check must be performed by a specialised medical products company. For more information contact our service centre (see page 13)

4.2 Cleaning and care of the knee ache cuff

- 4.2.1 The knee ache cuff may not be exposed to direct sunlight. Do not place the knee ache cuff on hot surfaces.
- 4.2.2 Carefully clean the surface of the knee ache cuff with a damp cloth. The device/stimulator may not be turned on during cleaning. Therefore remove the batteries from the device/stimulator prior to cleaning it. Let the knee ache cuff dry thoroughly afterwards.
- 4.2.3 For reasons of hygiene, each user should use his/her own knee ache cuff.
- 4.2.4 The TENS device/stimulator may not be turned on during cleaning and maintenance.
- 4.2.5 Use a standard disinfectant for disinfection.
Let the knee ache cuff dry thoroughly afterwards.
- 4.2.6 Let the knee ache cuff dry thoroughly after each cleaning.
Also check the insides of the 4 side compartments (fig. F, page 9) to see that they are properly dry.
- 4.2.7 Observe the washing instructions on the knee ache cuff.

4.3 Disposal of the knee ache cuff

- 4.3.1 If the knee ache cuff is no longer usable, dispose of it in accordance with the statutory regulations. For more information, contact your municipal administration or a disposal company. Dispose of the knee ache cuff in line with the Waste Electrical and Electronic Equipment EU guideline 2002/96/EU-WEEE.

SCOPE OF DELIVERY



4.4 Scope of delivery/package content



1 x Knee ache cuff

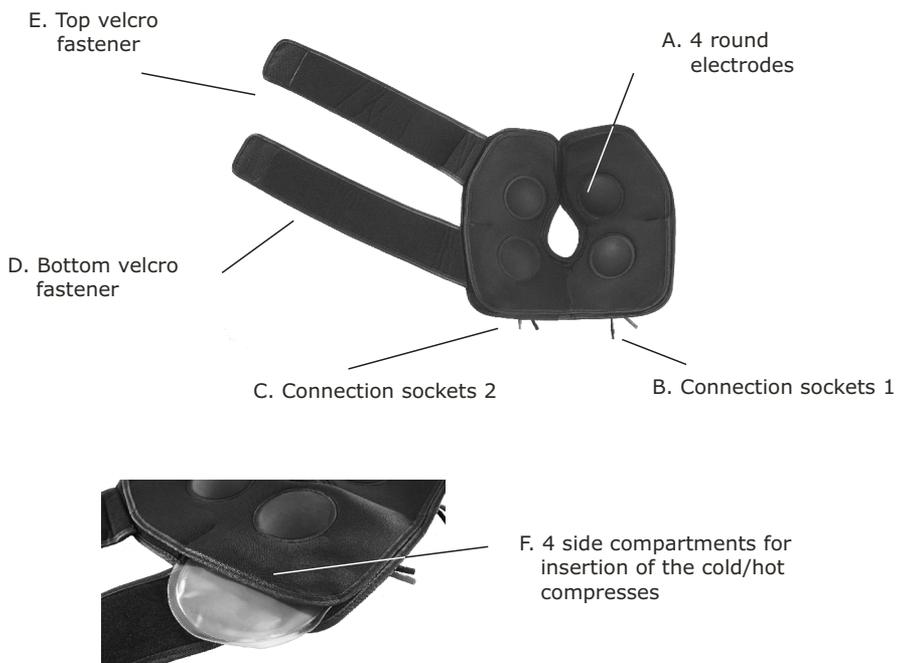


4 x cold/hot compresses



1 x Instruction manual

4.5 Design of the knee ache cuff



5.0 Applying and using the knee ache cuff

Application with a stimulation device (TENS)

Step 1:

For TENS application, you first have to wet the 4 round electrodes (see fig. A page 9) with a bit of water. Best use a damp cloth.

Step 2:

When applying the cuff, make sure that it is placed in position A (fig. 1) in the centre of the thigh. The circular opening B (fig. 1) must be placed centrally to the kneecap.

Step 3:

Wrap the two straps (see fig. D+E page 9) with the velcro fasteners around the knee and fix it in the desired position on the bandage (see fig. 2). The bandage and the 4 electrodes (see fig. A page 9) must be flush to the knee and properly fixed in place.

Step 4:

Now you can connect the TENS device with the connection sockets (B+C page 9). Make sure that the stimulation device (TENS) is turned off when connecting the device. Once the connection is established, you can start the TENS treatment. When attached to the body, the pulses run horizontal to the respective plane of the electrodes.

Step 5:

When you want to stop the treatment, you first have to turn off the stimulation device. Afterwards you can detach the plug connections (B+C page 9) and take the knee ache cuff off.

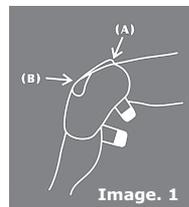


Image 1



Image 2

Cold and hot treatment with the knee ache cuff

Step 1:

For cold or hot treatment, you first have to heat or chill the cold/hot compresses (see 4.4 page 9) in line with the instructions on page 10 + 11. Then slide them completely into the side compartments (fig. F, page 9). The gel compresses may not stick out. Then perform steps 2 and 3 indicated above. After treatment, let the knee ache cuff dry thoroughly.

6.0 Cold treatment with the knee ache cuff

- 6.1 Place the gel compresses in a plastic bag and put them into the refrigerator or freezer for at most 2 hours (max. - 18°C).
- 6.2 Check the temperature of the gel compresses with the back of your hand or lower arm prior to use to make sure that they are not too cold.
Attention: Risk of chilblains.
- 6.3 Do not store the gel compresses permanently in the refrigerator or freezer. Do not chill in the freezer! Risk of chilblains and irreparable tissue damage!
- 6.4 Take the knee ache cuff off your body once it has reached room temperature or if the coldness of the cuff becomes uncomfortable.

COLD/HOT TREATMENT



7.0 Hot treatment with the knee ache cuff

- 7.0.1 Never heat the gel compresses unattended! Check the temperature with the back of your hand or lower arm prior to use to avoid skin burns.
- 7.0.2 Never place the gel compresses directly on the skin; always insert them into the side compartments of the knee ache cuff.
- 7.0.3 Excessively long heating may lead to damage to the gel compresses!
- 7.0.4 Prior to reheating, the gel compresses must have cooled down completely so they do not become damaged. If the gel compresses are too hot, leave them to cool down to the desired temperature.

7.1 Heating in a hot water bath

- 7.1.1 Place the gel compresses in at most 60-80°C hot (not boiling) water for approx. 1 to 2 minutes.
Attention: The water may not boil, otherwise the gel compresses may become damaged. Carefully lift the gel compresses out of the water with e.g. a cooking spoon or a pair of tongs. Then dry them off and place them carefully into the side compartments of the knee ache cuff. Check the temperature with the back of your hand or lower arm prior to use. If the gel compresses are too hot, leave them to cool down to the desired temperature. Attention: Risk of burns!

7.2 Heating in the microwave

- 7.2.1 Heat at low power (max. 180 Watt, thawing stage) for approx. 2 minutes. Do not use a higher wattage. This may damage the gel compresses. If the compresses do not have the desired heat yet, heat again in 15 seconds intervals. Do not leave the gel compresses unattended while heating. If the gel compresses start to bloat, turn off the microwave immediately. A damaged gel compress may not be used again! Then place them carefully into the side compartments of the knee ache cuff using a cloth. Check the temperature with the back of your hand or lower arm prior to use. If the gel compresses are too hot, leave them to cool down to the desired temperature.

Attention: Risk of burns!

Take the compresses off your body once they have reached room temperature or if the heat of the compresses becomes uncomfortable.



TECHNICAL DATA/SYMBOLS

8.0 Technical data, symbols:

Model/Type: Knee Ache Cuff KMT 285
 Electrode surface: Diameter: 4 x approx. 65 mm
 Max. pulse voltage (V): Up to 130 Volt at a load of 500 Ohm per channel
 Max. frequency (Hz): Up to max. 120 Hz (Hz = oscillations per second)
 Max. pulse strength (mA): Up to max. 120 mA at 1000 Ohm load, DC (mA = milliampere, Ohm = electric resistance)

Ambient temperature: 5° to 40°C (Celsius)
 Max. air humidity during normal work: 30% - 80% (percent)



Storage and transport temperature
 5°C to 50°C (Celsius)



Max. air humidity for storage and transport
 10% - 80% (percent)

Weight: approx. 180 g without cold/warm gel compresses
 Material: Metals, polymers, polyester, nylon, silicon
 The knee ache cuff is in conformity with EU guideline 93/42 EU for medical products.
 Batch name: **LOT** V4711KMT285
 Manufacturer: Handelshaus Dittmann GmbH
 Kissinger Straße 68, D-97727 Fuchsstadt/Germany
 Manufacturing date: 2011-09 (year-month)



Significance of the symbol on the product, the package or the instruction manual: Electronic devices are valuable materials and do not belong into the household waste after expiration of their service life! Help us to protect the environment and valuable resources by returning this device to a disposal site near you. In case you have any questions, contact the organization in charge of waste disposal in your district. Dispose of the knee ache cuff in line with the Waste Electrical and Electronic Equipment EU guideline 2002/96/EG-WEEE.

WARRANTY



9.0 Warranty

The knee ache cuff you have purchased was developed and produced with utmost care.

The legal warranty covers a period of 24 months from the date of purchase for material and manufacturing faults of the product.

Please keep your receipt of payment as proof of your purchase of the knee ache cuff to enable you to assert your warranty rights in the event of claims.

The following are excluded from the warranty:

- Damage caused by improper use
- Defects of which the customer was already aware at the time of purchase
- Parts subject to wearing
- Damage caused by unauthorised intervention and personal negligence of the customer

Once the warranty period has expired, you have the chance to send the defect knee ache cuff for repair to the address stated below. Repairs after expiration of the warranty period are subject to charges.

In the event of technical problems, and for questions in relation to warranty claims in regard to this knee ache cuff, you can contact us as follows:

NOTICES: In case of a complaint concerning the knee ache cuff, please contact the service center first!
If necessary, the service center will schedule the collection of your device.
The service center will not accept any FREIGHT FORWARD packages!

Handelshaus Dittmann GmbH
Service Center Department
Kissinger Straße 68
D-97727 Fuchsstadt/Germany
e-mail: hotline@servicecenter.tv
Telephone hotline: 0180-5012678 (0.14 €/min. from German landlines;
max. 0.42 € per minute from German mobile phones)
www.dittmann-gmbh.com

With best regards



Manufacturer: Handelshaus Dittmann GmbH
Kissinger Straße 68
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