

Therapy Guide – Principles

PetCellpen®

Available steel core electrode



Ear

Optimised for use in the external auditory canal for the treatment of otitis externa and other dermatological indications. Can also be used in perforated eardrums.

Available glass electrodes



Curved

Intense, spot-focused impact with improved depth of penetration, especially for orthopaedics.



Straight

Universal use, spot-focused or wide-area (lateral) application, dermatology and orthopaedics.



Comb

Especially suitable for longer coats and for multipoint use: muscles, back conditions.



Disc

Especially for dermatology, wide-area, gentler effect, for sensitive, painful areas.

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Settings



- Activate the pen using the «Amplitude» rotary control only after the electrode has been inserted.
- When the battery is fully charged, you can use the pen for at least 30 to 60 minutes.
- If the battery charge is sufficient, the LED flashes green. Otherwise it flashes red.
- When the LED lights up solid red, you can continue to use the pen for 10 minutes.
- Always hold the pen behind the marking line to ensure the best power output from the pen.
- Place the pen directly on the skin (at a distance of 0–2mm) and let it glide slowly (1–2 cm/s) over the treatment area without breaking contact.



«Impulses/s» rotary switch

- Allows adjustment of the pulse frequency from 10 to 100 Hertz (pulses per second).
- Special function at level 10: the device's pulse frequency and output power are automatically and synchronously modulated up and down from the lowest to the highest setting. The amplitude rotary switch is disabled with this function. This mode allows higher doses to be applied to sensitive areas and ideal for neurodesensitisation.
- Low pulse frequencies are suitable for orthopedic therapies.
- High pulse frequencies are suitable for dermatological therapies.

«Amplitude» rotary switch

- Allows the device's output power to be regulated in 9 steps, which determines the intensity of the therapy.
- For habituation select a low setting and increase it.
- The higher the setting, the greater the depth of penetration into the tissue.



Therapy duration

- The treatment time per unit area under the electrode is 60–90 seconds at the highest amplitude. Always move the electrode. With a lower amplitude, the therapy duration must be extended according to the lower amplitude selection and thus reduced power.

Therapy Guide – Indications

Indication for small animals	Impulses/s	Amplitude	Interval/week	Electrode type
Dermatology				
Disinfection	100	9		all
Abrasion injuries	100	6 to 9	2	straight, disc, comb
Abscess	100	9	2 to 3	straight, disc, curved
Acne (feline)	100	6 to 9	2	straight, curved
Anal gland inflammation	100	6 to 9	2	straight, curved
Aural hematoma	40	6 to 9	2	straight, disc
Burns	100	6 to 9	2	straight, disc
Calluses	100	9	2	straight, curved
Decubitus ulcer	100	6 to 9	2	straight, disc
Dermatophytosis	100	6 to 9	2	straight, disc, comb
Eosinophilic granuloma	100	6 to 9	2	straight, curved
Furunculosis	100	6 to 9	2	straight, disc, curved
Hotspots	100	6 to 9	2	straight, disc, comb
Interdigital furunculosis	100	6 to 9	2	straight, curved
Intertrigo	100	6 to 9	2	straight, disc
Malassezia dermatitis	100	6 to 9	2	straight, disc, comb
Miliary dermatitis (feline)	100	6 to 9	2	straight, disc, comb
Otitis externa*	100	6	2	ear
Paronychie	100	6 to 9	2	straight, curved
Pododermatitis	100	6 to 9	2	straight, curved
Problems with wound healing**	100	6 to 9	2 to 3	straight, disc, curved
Pyoderma	100	6 to 9	2	straight, disc, comb
Scars	100	6 to 9	2	straight, disc, curved
Suture dehiscence	100	6 to 9	2	straight, disc, curved
Tail gland hyperplasia	100	6 to 9	2	straight, disc, curved
Orthopaedics				
Arthritis				
Elbow	40	6 to 9	2	straight, curved
Knee	40	6 to 9	2	straight, curved
Toe joints	40	6 to 9	2	straight, curved
Back conditions/lumbago				
Discopathy (conservative)	10 or 40	6 to 9	2 to 3	straight, comb, curved
Muscle spasms	10 or 40	6 to 9	2 to 3	straight, comb, curved
Radiculopathies	10 or 40	6 to 9	2 to 3	straight, curved
Spondylosis (symptomatic)	10 or 40	6 to 9	2	straight, comb, curved
Bursitis	40	6 to 9	2	straight, comb, curved
Carpal hyperextension	40	6 to 9	2	straight, comb, curved
Hematoma/seroma	40	6 to 9	2	straight, comb, curved
Myositis and distensions	40	6 to 9	2	straight, comb, curved
Tendonitis/insertional tendinopathy	40	6 to 9	2	straight, comb, curved
Trigger points/hyperesthesia	10 or 40	9	2 to 3	straight, comb, curved
Acupuncture points***	40	9	2	straight, curved

* A duration of 2 minutes is sufficient for treatment in the ear canal with the settings mentioned.
** For the debridement effect on hypergranulating wounds with the maximum settings 90–120 seconds per unit area.
*** For acupuncture points a treatment duration of 30 seconds per point is sufficient.

Instructions for Use

PetCellpen®

Handling the pen



Always hold the pen behind the marking line to ensure the best power output from the pen. Place the pen directly on the skin and let it glide slowly over the treatment area without breaking contact.

Basic rules for electrode selection and therapy times

Calculation basis: 60 – 90 sec. per treatment area under the electrode at the highest amplitude. Always move the electrode. With a lower amplitude, the therapy duration must be extended according to the lower amplitude selection and thus reduced power.

The treatment time required can be estimated by comparing the area to be treated on the patient with the area covered by the electrodes. If, for example, the area to be treated is twice as large as the area covered by the electrode, the time is extended to 120 – 180 sec. With the disc, it is exactly the area of the electrode that counts. For the straight or curved electrode (with the tip applied), a circle with a diameter of 15 mm should be used. When the electrodes are placed sideways, the covered areas increase accordingly. The different shapes of the electrodes allow the best solution to be selected.

If you wish to go beyond the disinfecting and stimulating effect (e.g. to dry out and debride an oozing or hypergranulating wound with astringent application), the application time can be extended under visual monitoring of the effect on the tissue. With enough treatment time, the wound will look less wet and therefore more matt. Granulation tissue indicates cell inhibition by a change in colour from red to greyish.

Basic rules for the settings on the device

1. First select the frequency according to the indication.
2. Use the amplitude rotary switch to adjust the device (only if an electrode is inserted) and determine the intensity of the treatment („Accelerator“).
3. Always start with amplitude 2 to 4 to get patients used to the therapy.

Skin

Infections and wounds: always select frequency 100 together with the maximum tolerated amplitude. The therapy times given above are based on the optimised disinfection effect achieved with the highest amplitude setting (maximum device power). Antisepsis can be achieved from amplitude 6. However, the contact time must be extended accordingly to compensate for the lower amplitude selection and thus reduced power.

Muscles

Stimulation at a frequency of 40 Hz is most effective in restoring physiological function and thereby relieving muscle stiffness. Set the amplitude as high as can be tolerated so that maximum deep effect can be achieved. The therapy time must correspond to the size of the muscles to be treated and can be checked on the basis of the success of treatment.



Neurodesensitisation

At frequency setting 10 (first dot), a special function is programmed on the latest generation devices with which the device automatically modulates up and down from minimum to maximum, both in terms of amplitude and frequency. With this setting, the amplitude rotary switch only switches on/off. Trigger points and areas of hyperaesthesia are desensitised by rotating the tip on the sensitive area until the sensitivity decreases. Rotation is important so that the skin is not over-treated, as usually only a small area needs to be treated intensively.

Treatment intervals

In the first week of treatment: two applications per week.
From the second week of treatment: if the response is good, one application per week. If necessary, continue treatment every two to three days.