

POCKET EMAVIT



USER MANUAL

Instructions

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**ATTENTION: READ CAREFULLY THE
INSTRUCTIONS BEFORE USE**

Cap.1 – PRESENTATION

POCKET EMAVIT belongs to the new line of electromedical instruments for physiotherapy. The reduced dimensions, the facility of use and the versatility are the principal characteristics of this innovative line of products.

1.1 – What is POCKET EMAVIT

The constant search in the sector of the medical devices has brought to the creation of the new system for magnetotherapy, constituted by the generator POCKET EMAVIT. The innovative software inserted inside the instrument, allow the generation of magnetic fields to therapeutic purpose for the treatment of common pathologies (lesions, accidents, illnesses) through the use of preset programs ready to the use. Its memory also contains a free space to set and record new protocols with parameters personalized for the patient, that subsequently can be modified or cancelled.

The possibility to adjourn the device and the programs, the technological innovation and the facility of employment make it an extremely versatile and innovative product in the electromedical instruments field.

1.2 – What is POCKET EMAVIT for ?

With POCKET EMAVIT it is possible to apply magnetic fields with benefits effects on the reconstruction of the bony fabric and, in general, for the regeneration of damaged fabrics. Checking the effects and the course of the therapy, it is possible to suit the therapy for the demands of the patient and to realize new protocols with more effective parameters.

1.3 – Who can use POCKET EMAVIT ?

POCKET EMAVIT finds in the medical field (physiotherapy particularly) the fittest environment to express completely his/her own potentialities. Nevertheless, for the simplicity of use, it is usable, over that from physicians and therapists of the rehabilitation, also from who desires to use it at home, thanks to the immediateness and versatility of the product.

Cap.2 – INDICATIONS AND CONTRAINDICATIONS

2.1 – Indications

The pathologies most common that are taken care of with the magnetic fields they are those to load of the apparatus osteo-muscle-tendineo and, particularly they are suitable in the treatment of:

- periostitis;
- tenonitis;
- arthrosis;
- muscular contractures;
- cicatrizations;
- organized oedemas.

Besides, the magnetic fields preserve today also one born validity in the treatment of rheumatologic abarticular alterations as the shoulder periarthrits, the epicondylitis of the elbow and other pathologies, thanks to the analgesi, fybrolitic and decontracturant effect.

The interested structures mainly suffer the most greater traumas in the physical activity but, in many cases, they can also be caused by the aging (rheumatisms, muscular ipotrofia, lack of equilibrium for the scarce movement); these cases, are particularly in strong increase for progressive rising of the middle age, not followed by a suitable improvement of the quality of the life.

In the sporting disciplines the most frequent traumas strike the articulations of the knee and the ankle and they can be treated with the magnetic fields through of the daily and repeated applications for a certain number of sessions. The treatments are effected above all to analgesic purpose propedeutico to the sessions of kinesitherapy.

2.2 – Contraindications

The magnetic fields have the same side effects of the phisic therapies that act with the endogenous production of heat:

- degenerative osteoporosis;
- presence of metallic fragments;
- varicose veins;
- thrombosis and acute thromboflebitis;
- arteriopathologies with hemorrhages;
- menstruations;
- tumors;
- tuberculosis;
- acute inflammatory trials;
- cutaneous lesions;
- alterations of the sensibility.

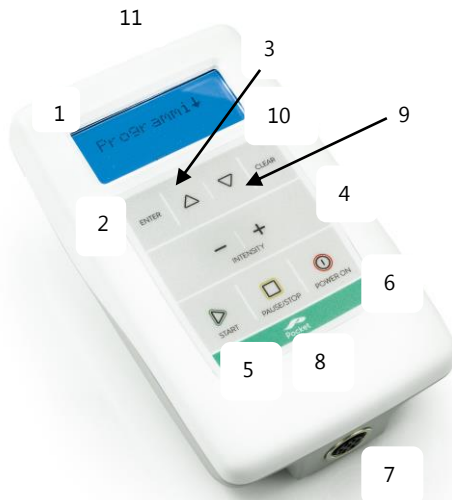
In the applications of magnetic fields, the use is dissuaded on:

- specialized tissues (fertile metaphysis, testicles, ovaries), because they can be damaged;
- avoid the use in cardiac area and, particularly, in presence of electric equipments (pace-maker), because it can cause permanent damages.

NOTES:

- Particular precautions must be adopted when applications are effected on the back bone of patients, with diagnosis of laminectomy, for possible damages to the bone marrow.
- The applications cannot be effected in the immediate proximities of the ocular globes and the uterus (abdomen / lumbar zone) in case of pregnancy for the risk to provoke the phenomenon of the cavitation, dosing hips corrected.
- The presence of articular prosthesis and a halves of metallic synthesis is problematic because they can absorb a superior quantity of magnetic fields and be deteriorated or cause damages to the adjacent structures.
- The use of this physical therapy is dissuaded the treatment of pathologies of the juvenile age and, above all, childish (ex. fertile cartilages of conjugation).

Cap.3 – OPERATIONS



- 1 - Display LCD
- 2 - ENTER: selection confirmation
- 3 - Cursor up
- 4 - (+)/(-) : intensity regulation
- 5 - START: begin the program
- 6 - (I) = ON/OFF: turn on / turn off

- 7 - Cable Output
- 8 - PAUSE STOP: interruption
- 9 - Cursor down
- 10 - CLEAR: delete / go back
- 11 – Output for feeder

NOTE: before applying the magnetotherapy, check the side effects and consult a physician.

3.1 – Solenoids' connection and application

To connect the cable of the solenoids to the taking of exit of the instrument. to insert the connectors, to rotate so that the connections coincides with the taking of exit; once inserted to screw until after all to fix well the cables to the instrument. For the applications with the solenoids in rubber, to support them on the zone to treat staring at them in way adherent with the elastic bands. For the application with pillow and carpet (not inclusive) it is enough to support you above the zone to treat (ex. head, shoulders, back, basin, feet, etc.); the band (not inclusive) dam can be used for the limbs (braccia, legs, articulations) or open supporting you above the interested zone.

To perform correctly the applications follow the photos of the Cap. APPLICATIONS.

3.2 – Turn on the device

To turn on POCKET EMAVIT press the key (I) - ON/OFF. The display shows the version and the Selection Menu.

3.3 – Program selection

In the selection Menu that appears on the display, use the keys ARROW UP / ARROW DOWN to choose the type of program:

- **Programs** (preset protocols ready for use);
- **Free Prog** (free programs to set and memorize new customised parameters).

Press ENTER to confirm the choice and go to next Menu.

3.3.1 - Preset programs

From **Programs** you can get to preset programs Menu; select the program with ARROW DOWN/UP and confirm with ENTER.

3.3.2 - Free Programs

From **Free Prog** you can get to free programs Menu. Press ENTER when the cursor is on “-----” to realize different new therapy sequences with customized parameters (see Chap. FREE PROGRAMS).

3.3.2.1 - Memorized free programs

Inside the **Free Prog** Menu you can find also the memorized free programs. Select and confirm with ENTER one of the memorized programs and after select one of the followings voices:

- **Start + ENTER** (to begin the program);
- **Edit + ENTER** (to modify the parameters and/or the Phases);
- **Delete + ENTER** (to cancel the program and get the memory free);

3.4 – Start of the therapy

Before the beginning the display shows the message ">START<": press START to begin the therapy; the intensity of stimulation (%) is already set but can be manually changed with the (+)/(-) keys.

NOTE: if you press START and the solenoid is not inserted in the instrument, the stimulation interrupts and the display shows the message "SOLENOID"; when the solenoid is connected the therapy starts automatically.

3.5 – Setting the intensity

The intensity can be set by the keys (+)(-),pressing more times or holding up to reach the desired power. The minimum increase of intensity is 1% and the maximum intensity is 100%, that correspond to 120 Gauss (60x2 close solenoids). Generally the most used intensity is among 60 and 100% for the shorter daily applications (30-60 minutes) and less than 50% for a prolonged therapy (more than 60 minutes); in case of pain or elevated heating of the treated zone it is necessary to decrease the intensity with the key (-) or interrupt the therapy.

3.6 – End or interruption of the session

The stimulation automatically interrupts when the Timer reaches 0 and you hear the acoustic repeted signal of program end; if you want to interrupt before the end press the key **PAUSE STOP**: once for a break (to continue press **START**); twice to finish the program and to get back to selection Menu.

3.7 – Turn off the device

To turn off the instrument press and hold the key **(I) ON/OFF** for some seconds. If after the end of a program the instrument is not used, it automatically turn off after a few minutes.

3.8 – Symbols on display



ERROR: wrong operation



BATTERY feeding with charge level



MAINS feeding



Connected solenoid



Rectangular magnetic field



Sinusoidal magnetic field

Cap.4 – PRESET PROGRAMS

The preset programs listed in the following chart are divided in type of pathologies to treat:

- 1) **Bony pathologies:** treatment of the pathologies to load of the bony apparatus and the attached structures (fractures, delays of consolidation...).
- 2) **Joints' pathologies:** specific programs for the therapy of traumatic, chronic or degenerative pathologies on charge of the articulations and the cartilages (distorsions, arthritises, peri-arthritis, arthrosis...).
- 3) **Muscular lesions:** specific programs for the therapy of pathological or traumatic situations on the muscles (contractures, tears, edemas...).
- 4) **Tendon pathologies:** programs for the treatment of tendon inflammations (tenonitis, tenovaginitis, etc...) and bursitis.
- 5) **Nervous System lesions:** specific programs for the therapy of pathological situations of the nervous system (ex. neuralgias).
- 6) **Skin alterations :** specific programs for the therapy of lesions cutaneous and other pathologies (psoriasis, acne, sore, etc.).
- 7) **Pathologies of the abdomen:** programs for the treatment of pains and inflammations in the zone of the abdomen and the low abdomen (stomach, backs, app. urogenital, etc.).
- 8) **Various pathologies:** programs for the therapy of various type of pathologies (problems of circulation, diabetes, dizziness, etc.).

4.1 – Preset programs' list

POCKET EMAVIT has 25 different preset programs and offers the possibility to set and to memorize up to 5 free protocols. The programs are listed in the following chart and I are selectable as described in the Chap. OPERATIONS.

N.	NAME	TIME (min)	INTENS. G
1	Fratture	75	96
2	Osteopor.	90	84
3	Articolaz	60	104
4	Edemi	40	72
5	Strappi	30	102
6	Tendiniti	45	120
7	Lombalgia	60	108
8	Circolaz.	60	96
9	Dol.acuti	60	120
10	Dol.cron..	90	96
11	Artrite	35	48
12	Periartr.	25	96
13	Artropat.	45	84

14	Artrosi P.	35	48
15	Artrosi G.	50	48
16	Coxoartr.	40	60
17	Lussazion	60	120
18	Cont. Diff	60	86
19	Contrattu	40	62
20	Miosite	60	84
21	Borsite	40	108
22	Epicond.A	40	96
23	Tend.Pied	30	108
24	Cervicale	50	48
25	Sciatalg.	60	120

Preset Programs

Pathology	Program	Name on Display
Bony Pathologies	Fractures	Fractures
	Recent Fractures	Recent Fr.
	Fractures (minor articulations)	Fractur.SJ
	Fractures (major articulations)	Fractur.BJ
	Consolidation delay	Cons.delay
	Initial pseudo-arthrosis	I.pseudoar
	Advanced pseudo-arthrosis	A.pseudoar
	Initial Osteoporosis	I.osteopor
Advanced Osteoporosis	A.osteopor	

Joints' pathologies	Arthritis	Arthritis
	Periarthritis	Periarthr.
	Arthropathies	Arthropat.
	Arthrosis of minor articulations	Arthros.SJ
	Arthrosis of major articulations	Arthros.BJ
	Coxoarthrosis	Coxoarthr.
	Chronic coxoarthrosis	Chr.coxoar
	Chronic heel sprain	C.heel sp.
	Acute heel sprain	A.heel sp.
	Knee sprain	KneeSprain
	Dislocation	Dislocat.
	Twisted neck	Twist.neck
Whiplash	Whiplash	
Muscular lesions	Local bruises	Loc.bruis.
	Diffuse bruises	Dif.bruis.
	Muscle contractures	Musc.contr
	Muscle strains	Mus.strain
	Myositis	Myositis
	Multiple sclerosis	Mul.scler.
Tendon pathologies	Tenonitis	Tenonitis
	Tenovaginitis	Tenovagin.
	Carpal Tunnel	Carp.Tunn.
	Bursitis	Bursitis
	Chronic epicondylitis	C.epicond.
	Acute epicondylitis	A.epicond.
Nervous System lesions	Foot tenonitis	Foot tenon
	Cervical	Cervical
	Chronic lumbago	C. lumbago
	Acute lumbago	Ac.lumbago
	Sciatalgia	Sciatalgia
	Head neuralgia	Head neur.
	Body neuralgia	Body neur.
Paresis	Paresis	

4.2 – Program selection

In the following charts the different preset programs are described and divided in the categories indicated in the previous table. In each of the following charts it is pointed out in the first column the visualization of the program on the display, to allow a more immediate identification of it, together with the duration in minutes, while the second column contains the explanations on the program and the relative applications.

Programs description

BONY PATHOLOGIES	
NAME ON DISPLAY	DESCRIPTION
Fractures - 35 min	Treatment for bony hardening in case of fractures.
Recent Fr. - 45 min	Treatment to consolidate the bony fabric in case of recent fractures.
Fractur.SJ - 40 min	Treatment for the consolidation of the bony fabric in case of fractures to load of the small articulations.
Fractur.BJ - 60 min	Treatment for the consolidation of the bony fabric in case of fractures to load of the great articulations.
Cons.Delay - 60 min	Treatment for the consolidation of the bony fabric in case of delays in the consolidation of the bony fabric.
I.Pseudoar. - 45 min	Treatment for the pseudoarthrosis in the initial stadium.
A.Pseudoar. - 55 min	Treatment for the pseudoarthrosis in the stadium advanced or chronic.
L.osteopor -50 min	Treatment for the osteoporosis in the initial stadium.
A.osteopor - 60 min	Treatment for the osteoporosis in the advanced stadium (risk fractures).
JOINTS' PATHOLOGIES	
NAME ON DISPLAY	DESCRIPTION
Arthritis - 35 min	Treatment for the arthritis to the small and great articulations.
Periarthr. - 25 min	Treatment for the periarthrits (pains of shoulder, unstable shoulder, etc.).
Arthropat. - 45 min	General treatment for the arthropathologies.
Arthros.SJ - 35 min	Treatment for the arthrosis of the small articulations.
Arthros.BJ - 50 min	Treatment for the arthrosis of the great articulations.
Coxoarthr. - 40 min	Treatment for the arthrosis of the articulation of the hip.
Chr.coxoar - 50 min	Treatment for the chronic arthrosis of the articulation of the hip.
C.heel.sp. - 35 min	Treatment of the chronic distorsions of ankle; it stimulates the normalization of the local metabolism.
A.heel sp. - 45 min	Treatment of the acute distorsions of ankle; it stimulates the reduction of the inflammation provoked by the trauma.
Knee sprain - 55 min	Treatment of the distorsions to the knee; it stimulates the normalization of the local metabolism and the reduction of the pain.
Dislocat. - 60 min	Treatment of the dislocations; it stimulates the normalization of the local metabolism and the reduction of the pain.
Twist.neck - 35 min	Treatment of the twisted neck; it stimulates the normalization of the local metabolism and the normalization of the muscular fibers at the base of the neck.
Whiplash - 40 min	Treatment of the hit of whip; it helps to decontrol the cervical column and to decrease the local pain.
MUSCULAR LESIONS	

NAME ON DISPLAY	DESCRIPTION
Loc.bruiis. - 45 min	Treatment of the muscular edemas located following bruises
Dif.bruiis. - 60 min	Treatment of the diffused muscular edemas following bruises
Musc.contr - 40 min	Treatment of the muscular contractures
Mus.strain - 50 min	Treatment of the muscular tears
Myositis - 60 min	Treatment of the myositis
Mul.scler. - 40 min	Treatment of the multiple sclerosis

TENDON PATHOLOGIES

NAME ON DISPLAY	DESCRIPTION
Tenonitis - 30 min	Treatment inflammations to load of the wide and flat tendons (ex. achillis tendon).
Tenovagin. - 35 min	Treatment inflammations to load of the sinovial scabbard of the long tendons (ex. fingers of the hands).
Carp.Tunn. - 25 min	Treatment inflammations of the tendons of the inside forearm and the wrist (syndrome of the carpal tunnel).
Bursitis - 40 min	Treatment inflammations to load of the sinovial purses situated between tendons and bones.
C.epicond. - 30 min	Treatment chronic inflammations to load of the insertion of the muscles of the external forearm on the elbow (the tennis player's elbow)
A.epicond. - 40 min	Treatment acute inflammations to load of the insertion of the muscles of the external forearm on the elbow (the tennis player's elbow)
Foot tenon - 30 min	Treatment tendineous inflammations of the foot (back, plants).

NERVOUS SYSTEM LESIONS

NAME ON DISPLAY	DESCRIPTION
Cervical - 50 min	Treatment of the cervical pains; it stimulates the normalization of the local metabolism and the reduction of the pain.
C.lumbago - 45 min	Treatment chronic lumbago; it stimulates the reduction of the inflammation with the normalization of the local metabolism.
A.lumbago - 55 min	Treatment of the acute lumbago; it stimulates the reduction of the inflammation with the normalization of the local metabolism.
Sciatalgia - 60 min	Treatment of the sciatalgia or lombosciatalgia; it reduces the to propagate him some inflammation in the lower limb.
Head neur. - 20 min	Inflammations of nerves of the head and, particularly, of the face.
Body neur. - 45 min	Inflammations of nerves of the body (especially inferior limbs).
Paresis - 35 min	Treatment for paresis to favor the nervous control of the stricken zones

SKIN ALTERATIONS

NAME ON DISPLAY	DESCRIPTION
Skin les. - 40 min	Treatment of the cutaneous lesions
L.bed sor. - 45 min	Treatment of the located bedsores
D.bed sor. - 60 min	Treatment of the diffused bedsores
Acne - 30 min	Treatment of the acne
Psor. Ecz. - 35 min	Treatment of psoriasis and eczemas.
Scars - 40 min	Treatment of the scars
Dermatitis - 35 min	Treatment of the dermatitis

ABDOMEN PATHOLOGIES

NAME ON DISPLAY	DESCRIPTION
Uro.illnes - 45 min	Treatment of the urogenital illnesses
Uro.inflam - 55 min	Treatment of the urogenital inflammations
Prostatitis - 40 min	Treatment of the prostatitis
Menstr.prob - 50 min	Treatment of the menstrual problems
Gastritis - 45 min	Treatment of the gastritis
Haemorrh. - 45 min	Treatment of the hemorrhoids
Ulcer.col. - 40 min	Treatment of the ulcerous colitis
Nephritis - 50 min	Treatment of the nephritis (renal problems)

VARIOUS PATHOLOGIES

NAME ON DISPLAY	DESCRIPTION
Arteriop. - 60 min	Treatment of the problems of circulation
Migr.Head. - 30 min	Treatment of migraine and headache
Br.asthma - 55 min	Treatment of the bronchial asthma
Toothache - 30 min	Treatment of the dental pains
Cold hands - 50 min	Treatment of the Raynaud syndrome or cold hands
Diabetes - 60 min	Treatment of the diabetes
Adiposity - 50 min	Treatment of the adiposity or elevated accumulation of fats
Cellulitis - 60 min	Treatment of the cellulitis
Stress - 60 min	Treatment of the stress
Depression - 55 min	Treatment of the depression
Vertigo - 45 min	Treatment of the dizziness

Cap.5 – FREE PROGRAMS

The free programs can be used for the creation of new therapies or aesthetic treatments (up to 5) with the parameters desired by the consumer.

5.1 – Setting

To access to the setting it is necessary to confirm with ENTER on "-----"; you get into the Phases setting; select one Phase with the keys ARROW UP / ARROW DOWN (always begin from Phase 1) and confirm with ENTER to access to the parameters' setting. Every parameter can be selected with ARROW UP / ARROW DOWN and the value with the keys (+)/(-). The available values for the parameters of the free programs are in the following chart.

NAME ON DISPLAY	PARAMETER	AVAILABLE VALUES
Emis.	Impulse wave form	Sin. (sinusoidal) Rett (rectangular)
Freq.	Frequency	1-100 step 1 Hz
Mod.	Frequency modulation	CONT./1/2, 1/5, 1/10
Inten	Preset intensity	1-100 (%=0,5 to 60 Gauss)
Time	Program Duration	1-60 minutes
Stop	Phase interruption	YES/NO

To correctly plan the parameters in the free protocols, furnishes in the following chart some lines it drives: in the first column we find the available parameters with the respective setting values, while in the second column they are reported the areas of affiliation and the relative type of applications.

Wave form (Emiss.)	Utilizzo
Ret. (rettangolare)	Short and localised applications
Sin. (sinusoidale)	Long and diffuse applications
Frequency (Freq.)	Effetto
1-30 Hz	Heating/Relaxing/Antistress*
30-60 Hz	Vascular/Altered functions*
60-80 Hz	Analgesic
80-100 Hz	Regenerating
Modulation frequency (F.Mod.)	Riferimento
1/10	Pains / circulation / Longer applications
1/5	Acute Patologies / Long applications
1/2	Chronic Patologies / Long applications
CONT	Inflammations / Fractures / Short applications
Program Duration (Time)	Obiettivo
30 – 45 min	Analgesic / relaxing effect
+ 45-60 min	Regenerating effect

* Analgesic or regenerating effect in long applications (2-4 hours).

NOTE: to realize longer therapies (some hours) set more phases to reach the desired time (max 60 minutes per 4 Phases = 4 hours).

See the following examples for most common applications:

ANALGESIC/ANTINFLAMMATORY

Emiss. – Sin.
Freq. – 80
Mod. – CONT
Inten - 80
Time – 45
Stop – NO

REGENERATING

Emiss. – Sin.
Freq. – 100
Mod. – CONT
Inten - 80
Time – 60
Stop – NO

The last voice in low in the parameters Menu is **End**. Confirming with **ENTER** the parameters' setting is memorized and you get back to the Menu of the Phases; now it is possible to set the following Phase or go down with **ARROW DOWN** and choose one of the following options:

- **Save + ENTER** - to save the program and set the desired name (up to 10 characters), choosing the letter with the keys + and - and moving the cursor on the following letter with the keys Arrow On / Arrow Down'. At the end press **ENTER** to memorized the set parameters;
- **Start + ENTER** – to begin the program;
- **Quit + ENTER** – to exit from setting without save the program.

5.2 – Use and modify a free program

A memorized free program can be used as a normal preset program and after modified in the parameters for the evolution of the treatment or cancelled for freeing the memory. To access the free memorised programs, from the selection Menu press **ENTER** on **Free Prog** and choose the program with the keys **ARROW UP** / **ARROW DOWN**, always confirming with **ENTER**. The executive Menu is showed on display and it is possible to effect the operations described at par. 3.3.2.1.

Cap.6 – APPLICATIONS

In the coloured pages at the center of the Manual some examples of possible applications are visualized with the solenoids and with carpet, pillow and conductive band (not included); **read carefully the contraindications before using the therapy.**

ATTENTION: apply two solenoids with the spiral side one in front of the other (ex. in joints - elbow, knee, ankle) otherwise the magnetic fields annul itself instead of adding; apply the different faces.

6.1 – Therapy planning

Apply the magnetic therapy every day by following the doctor's indications. At the end of the therapy, if the problem is still present, talk to the doctor.

6.2 – Intensity regulation

The regulation of the intensity differs in base to the type of program that he is using, to the duration of the application and the characteristics of the patient. The intensity can be increased, during the program, to produce more effects or decreased in case of overheating or feeling of pain.

NOTE: if the intensity or its regulation cause elevated heating or pain in the treated zone it is necessary to immediately reduce the intensity of stimulation or eventually to interrupt the application.

Intensities recommended for most common applications:


Zone of application	Intensity advised
Bones	100%
Muscles	80-90%
Tendons / Ligaments	60-70%
Joints / Cervical / Lumbago	60-100%
Prolonged applications (+ di 60 minutes)	30-50%

6.3 – Position to be maintained during the sessions

The ideal position to be maintained during the programs is relaxed in which the body is extended supine or prone according to the zone of application. The position must be maintained during all the session to facilitate the effects produced by the magnetic field, particularly the increased blood influx following the expansion of the vases, consequence of the induced heating in the treated zone.

Cap.7 – POWER SUPPLY

POCKET EMAVIT can be supplied by power mains with the feeder in endowment or with the rechargeable inside battery Ni-Mh 6V - 1,8Ah, that, under conditions of normal use, has an autonomy of some hours. The guaranteed autonomy change in base of the program, the intensity and the time of application.

 For the correct identification of battery and feeder furnished in endowment of base, consult the Chap. "Technical characteristics". Neither the feeder, neither the battery must be replaced from personal not experienced and with different devices from those furnished from the house builder.

7.1 – Charge indication

When POCKET EMAVIT is fed by the inside battery on the bar of the symbols of the display the symbol Battery it appears "■".

■ - charge battery

□ - empty battery

The intermediary charge levels are suitable from a partial filling of the Battery symbol "▣".

Soon after the state of discharge battery is signalled, it is opportune to proceed with the cycle of recharge. For the guardianship of the same battery POCKET EMAVIT is endowed with a system of auto-turning off: from the state of unloaded battery, if he doesn't proceed to the recharge, it warns the consumer sending forth an acoustic notice and it extinguishes the instrument.

7.2 – Battery recharge


To recharge the battery of POCKET EMAVIT connect the feeder on the back of the instrument and to the electric net. When the charge begins the symbol of battery appears on the display. Leave the device on charge until the symbol of battery appears completely filled on the display (■); the recharge lasts around two hours. When the recharge is complete disconnect the feeder.

7.3 – Battery maintenance

The life of a rechargeable battery is tied up to the number of cycles of charge / discharge to which is submitted and to the way to which these cycles are effected. Following we furnish some suggestions to increase the life of the battery: in the case POCKET EMAVIT is not used, it is suggested to recharge the battery monthly; to prolong the life of the battery it's recommended to discharge it completely (see empty battery symbol) before the recharge.

7.4 – Battery substitution

The index of the battery exhaustion is the duration after a normal recharge. When the battery life is sensitively inferior (only 30-60 minutes), it is necessary to replace it. For the substitution of the battery call an authorized Center of Assistance, to replace the battery maintaining the safety of the instrument and to send the exhausted battery in the right place.

 Never reverse the polarity of the connections of the battery, not to cause the destruction of the electronic circuits.

7.5 – Use precautions

- (1) not to throw the exhausted battery with the ordinary refusals, but to deliver her/it to personal authorized to his/her disposal.
- (2) not to open neither to throw in the fire the battery.
- (3) not to short-circuit the terminals.
- (4) to avoid to provoke sparks or flames, above or around the battery.
- (5) in the case has escaped you of material from the battery and that inside comes to contact with the skin, or with the garments, to immediately wash with water. In the case comes to contact with the eyes, to wash abundantly with water and to immediately consult a physician.

Cap.8 – SYMBOLS



CLASSE II DEVICE



BF TYPE DEVICE



ATTENTION, CONSULT THE ATTACHED DOCUMENTATION



0476

THIS DEVICE IS CE MARKED ON CEE NORM 93/42 No. 0476.

Cap.9 – MAINTENANCE

9.1 – Solenoids, band, cushion and carpet

The cable of connection must periodically have checked for verifying that there is no cracks possible cause of the dispersion of the magnetic fields,; to periodically clean solenoids, cushion and carpet and with a damp cloth.

9.2 – Device and feeder

To clean both the feeder and the instrument, it's recommended to use a damp cloth. Don't use in any case liquid, because these devices are not protected from their entry (IP20).

9.3 – Feeder substitution


Check the state of the isolations (wrap and cables) of the feeder, before connecting it. If it's damaged, also only partially, immediately replace the feeder.

9.4 – Immediate maintenance

Immediate maintenance must be executed by New Age Italia or authorized personnel if one of the following situations happens:

- external mechanical solicitations (ex. serious falls);
- strong overheating (ex. if left next to sources of intense heat);
- some liquids can be penetrated inside the device;
- the feeder, the wrap or other parts of the instrument are damaged, broken or lacking;
- the functionality of the instrument appears altered.

 To the goals of the safety it recommends him not to operate with accessories (es. you manipulate and feeder) different from the furnished ones as endowment of base.

 The frequency of maintenance, of functional control and verification of correspondence to the safety norms EN60601-1 for the medical devices, to perform him with secur-tester, it is annual. The useful life of the tool is guaranteed only from the firm if such maintenance is regularly effected.

NOTA BENE: it is recommended to make the controls be performed only by New Age Italia; the device can be sent directly to the laboratories of assistance or delivered to the retailer where it has been purchased.

Assistance:

New Age Italia srl

Via De Brozzi, 3 - 48022 Lugo (RA) - Tel.:+39-0545.32019 - Telefax: +39-0545.369028

Web: www.newageitalia.it - E-mail: info@newageitalia.it

Cap.10 – WARNINGS

- Do particular attention in the employment of the solenoids not to compromise the effectiveness of the treatment.
- Use the instrument only with electric structures conforming to the actual safety Norms.
- The instrument has degree of protection IP20 (see Chap. "Technical features") and do not use it close to liquids, because it's not protected from their entry.
- Do not use close to cellular telephones (maintain at least one meter of distance).
- To operate close (less than 1 meter) to an instrument with short waves therapy or microwaves, because it can produce instability in the emission.
- Don't simultaneously connect the patient with the POCKET EMAVIT and with a surgical instrument HF, to avoid dangers for the patient and for the instrument.
- The device works according to its specifications if the environment is maintained to a temperature between the 5° and the 40° C and with damp inferior to the 80%. The same conditions must be maintained during the transport and the store.
- In case of malfunctions and breakdowns, it is opportune to exclusively send the device to the house builder.
- It's recommended not to operate in proximity of inflammable substances.
- Don't use gel and different accessories from those furnished in endowment.
- It's important to inform the patient on the type of feeling to perceive during the therapy, to immediately intervene or interrupt the session switching off the device or removing the solenoids, in case of different or uncorrect perceptions.
- If the power or its regulation cause elevated heating or pain in the treated zone it is necessary to immediately reduce the intensity of stimulation or eventually interrupt the application.
- Keep away from children.

Cap.11 – TECHNICAL FEATURES

11.1 – Power supply

Feeder: L'Arson Nuova mod. KC 135-120100

PRI: 230V~ 50Hz SEC: 12V- 1A

Inner feeding: rechargeable battery Ni-MH 6V-1,6 Ah

11.2 – Output features

Max power intensity (P): 120 Gauss (60x2 close solenoids)

Frequency: 1-100 Hz

Frequency modulation: continue / modulated ON/OFF (1/2, 1/5, 1/10)

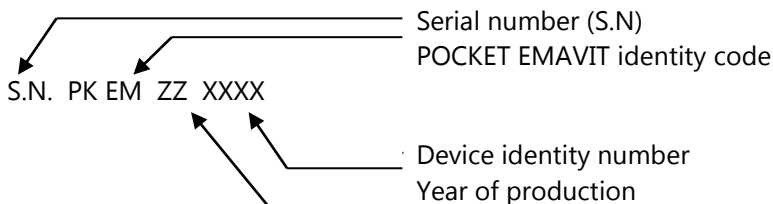
Modulation wave form: rectangular, sinusoidal

11.3 – Other features

- Dimensions: 175x105x40h [mm]
- Weight: 400 [g]
- Class: II Type: BF
- Classification to liquids entry: IP20
- Safety in presence of inflammable anaesthetic gas: it's not of AP or APG category
- Device for working: continuous

Built according to the rules:

- EN 60601-1 (1998) – Electromedical devices: Safety General rules
- EN 60601-1-2 (1998) – Collateral norm: Electromagnetic compatibility - Prescriptions and tests
- EN 60601-1-4 (1997): Collateral rule: electromedical programmable systems
- EN 60601-2-5 (2001) – Electromedical devices: particular rules for the safety of the equipments of magnetotherapy
- IEC 601-2-10 (1987) – Electromedical devices: particular rules for the safety of neuromuscular stimulators.
- CEI 62-84 (1997) – Symbols for electromedical devices
- EN60601-1-1 (2002): Collateral rule: Safety prescriptions for electromedical systems.



Cap.12 – ENDOWMENT OF BASE / ACCESSORIES

POCKET EMAVIT is furnished with an endowment of base for the principal applications. To effect other types of applications or to replace material consumed or finished it is possible to purchase some accessories apart.

12.1 – Endowment of base

Device

Feeder

N.1 rubber solenoids couple

N.2 elastic bands

Instructions

Carrying case

12.2 – Accessories and consumed materials

Rubber solenoids couple

Elastic bands

Cushion solenoid cm 45x45

Carpet solenoid cm160x60

Conductive band with velcro

Cap.13 – BIBLIOGRAPHY

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