

MAGNETER CMP 50



USER MANUAL

- Instructions -

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INDEX

Cap.1 – PRESENTATION	4
1.1 – What is MAGNETER CMP 50.....	4
1.2 – What is MAGNETER CMP 50 for ?.....	4
1.3 – Who can use MAGNETER CMP 50 ?	4
Cap.2 – INDICATIONS AND CONTRAINDICATIONS	5
2.1 – Indications	5
2.2 – Contraindications.....	5
Cap.3 – OPERATIONS	7
3.1 – Solenoids' connection and application	7
3.2 – Turn on the device	8
3.3 – Program selection	8
3.4 – Starting the therapy.....	8
3.5 – Setting the intensity	8
3.6 – End or interruption of the session	8
3.7 – Turn off the device.....	9
Cap.4 – PRESET PROGRAMS.....	9
Cap.5 – APPLICATIONS.....	11
5.1 – Therapy planning.....	11
5.2 – Intensity regulation.....	11
5.3 – Body position during the sessions	11
Cap.6 – POWER SUPPLY	12
Cap.7 – SYMBOLS	12
Cap.8 – MAINTENANCE	13
8.1 – Solenoids, band, cushion and carpet	13
8.2 – Device and power supply cable	13
8.3 – Feeder substitution	13
8.4 – Immediate maintenance	13
Cap.9 – WARNINGS	14
Cap.10 – TECHNICAL FEATURES	15
10.1 – Power supply	15
10.2 – Output features	15
10.3 – Other features	15
Cap.11 – ENDOWMENT OF BASE / ACCESSORIES	16
11.1 – Endowment of base	16
11.2 – Accessories and consumed materials.....	16
Cap.12 – BIBLIOGRAPHY	16

Cap.1 – PRESENTATION

MAGNETER CMP 50 belongs to MODUL LINE, the new type of electromedical instruments for physiotherapy, that can combined together up to 3 different therapies in the same machine. The reduced dimensions, the facility of use and the versatility are the principal characteristics of this innovative line of products.

1.1 – What is MAGNETER CMP 50

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 MAGNETER CMP 50. The innovative system of the software, electronic cards of small dimensions 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 use.

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 MAGNETER CMP 50 for ?

With MAGNETER CMP 50 it is possible to apply magnetic fields with benefits effects on the reconstruction of the bones and, in general, for the regeneration of damaged tissues. Checking the effects and the course of the therapy, it is possible to suit the therapy for the demands of the patient.

1.3 – Who can use MAGNETER CMP 50 ?

MAGNETER CMP 50 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.

ATTENTION: for home use follow carefully the indications of the therapist.

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

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 periarthrititis, 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.

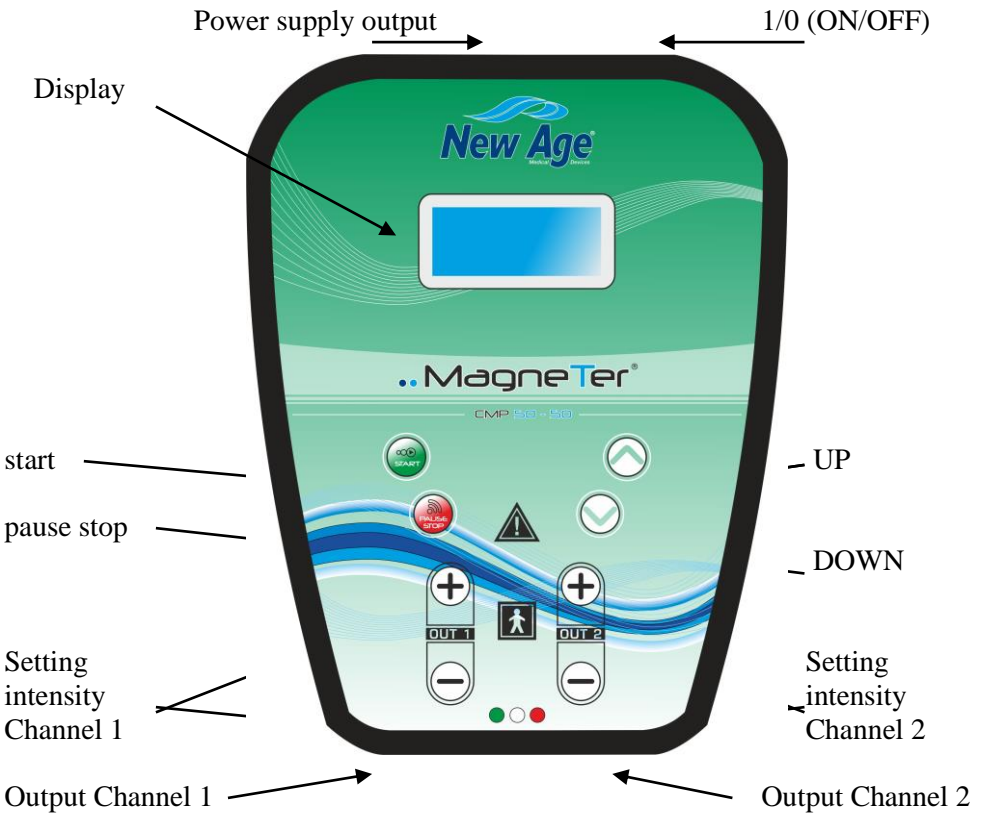
In the applications of magnetic fields, the use is dissuaded on:

- specialized tissues (fertile metafisis, 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



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

3.1 – Solenoids' connection and application

Connect the cable of the solenoids to the front output of the instrument. Insert the connector by rotating till the connections coincides with the output; screw until the connector fix tight. To use the rubber solenoids, apply them over the zone to treat and fix them with the elastic bands.

ATTENTION: when you apply two solenoids one in front of the other (ex. Joints like elbow, knee, ankle), place on the skin the same draw (spiral) so that the magnetic fields of the two solenoids is added.

To use cushion and carpet (not included), just apply over them the interested zone (ex. head, shoulders, back, basin, feet, etc.) or the whole body; the magnetic band (not included) can be used: closed like a ring for the limbs (arms, legs, joints) or

open and applied above the treating zones. To perform correctly the applications follow the indications of the Chap. APPLICATIONS and see the attached photos.

NOTE: if the carpet (not included) is connected to one channel, it is not possible to connect other solenoids into the other channel (ERR4).

3.2 – Turn on the device

To turn on MAGNETER CMP 50 press 1 on the rear key ON/OFF. The display shows firm and device's name and places on the first program.

3.3 – Program selection

Select the program with **DOWN/UP** keys (see list of Chap. PRESET PROGRAMS).

3.4 – Starting the therapy

Press (**start**) to begin the therapy.

NOTE: do not press **start** with no solenoid connected to the device (the display show the message "Insert solenoid 1 Insert solenoid 2"; after connecting one or two solenoids, press **start**.

3.5 – Setting the intensity

The intensity (G=Gauss) is preset but can be manually set with (+)/(-) keys of the used Channel. The minimum increase is of 1 G and the maximum is 50 G. Set an intensity of 50 G for the briefer daily applications (30-60 minutes) and inferior to 50 G for a prolonged therapy (more than 60 minutes); in case of pain or elevated heating in the treated zone it is necessary to decrease the intensity with the key (-) or interrupt the therapy by pressing **pause stop**.

If only one output cable is connected to the device, the display show the message "N.C." on the unused channel.

NOTES: the instrument recognizes the type of connected solenoids (it doesn't recognize different solenoids from those suitable from the house builder). If the greatest solenoids are connected (carpet or pillow - not inclusive) the preset and the maximum intensity varies in the following way:

- 1) **carpet:** intensity multiplied for 4; maximum intensity 200 G, step 4 G; the other channel is not usable and the intensity is not visualized.
- 2) **cushion:** intensity multiplied for 2; maximum intensity 100 G, step 2 G.
- 3) **velcro band:** same intensity regulation like rubber solenoids.

3.6 – End or interruption of the session

To interrupt before the end press the key **pause stop**: once for a break (to continue press **start**); twice to finish the program.

3.7 – Turn off the device

To turn off the instrument press 0 (zero) on the rear key ON/OFF.

Cap.4 – PRESET PROGRAMS

MAGNETER CMP 50 has 48 different preset programs The programs are listed in the following chart.

N° Prog.	Programs	Timer (m)	Intensity (G)	Frequency (Hz)
1.	Fractures	20	30	60
2.	Consol.delay	60	50	12
3.	Pseudoarthr.	60	50	12
4.	Osteoporosis	60	50	15
5.	Arthritis	25	20	12
6.	Periarthritis	15	40	12
7.	Arthrosis	60	50	25
8.	Sprains	45	50	60
9.	Dislocation	60	50	50
10.	Twisted neck	30	50	30
11.	Bruises	40	50	50
12.	Contractures	30	30	20
13.	MuscleStrains	50	50	80
14.	Myositis	20	40	12
15.	Multiple Scl.	30	30	12
16.	Tenonitis	45	50	20
17.	Carpal tunnel	30	40	12
18.	Bursitis	40	50	40
19.	Epicondylitis	30	50	30
20.	Foot tenonitis	50	50	70
21.	Cervical	30	20	15
22.	Lumbago	50	50	30
23.	Sciatalgia	60	50	50
24.	Head neuralgia	10	20	15
25.	Body neuralgia	40	50	50
26.	Paresis	30	50	25
27.	Bed sores	35	50	20
28.	Skin lesions	30	40	25
29.	Urogenital illn.	25	20	25
30.	Menstrual probl.	30	30	12
31.	Gastritis	40	50	12
32.	Haemorrhoids	40	50	20
33.	Ulcerous colitis	30	30	12
34.	Nephritis	30	50	12

N° Prog.	Programs	Timer (m)	Intensity (G)	Frequency (Hz)
35.	Vascular pathol.	30	30	50
36.	MigraineHeadache	30	50	12
37.	Bronchial asthma	35	50	12
38.	Toothache	30	20	15
39.	Cold hands	30	20	50
40.	Cellulitis	60	50	50
41.	Consol. Delay 4h	4 hours	30	12
42.	Pseudoarthros.4h	4 hours	30	12
43.	Osteoporosis 4h	4 hours	30	15
44.	Consol. Delay 8h	8 hours	20	12
45.	Pseudoarthros.8h	8 hours	20	12
46.	Osteoporosis 8h	8 hours	20	15
47.	Acute pain	30	50	100
48.	Chronic pain	60	50	80

Cap.5 – APPLICATIONS

See in the attached photos some examples of possible applications with the solenoids and with carpet, pillow and band (not included); **read carefully the contraindications before using the therapy.**

5.1 – Therapy planning

Apply the magnetic therapy following your doctor's indications. Generally magnetotherapy is used every day and, if necessary, 2 or 3 sessions a day after some hours. At the end of the programmed therapy if the problem is still present talk to the doctor.

5.2 – Intensity regulation

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 reduce immediately the intensity of stimulation or eventually to interrupt the application.

Recommended intensities for most common applications:


Zone of application	Intensity advised
Bones	50 G
Muscles	40-50 G
Tendons / Ligaments	30-40 G
Joints / Cervical / Lumbago	30-50 G
Prolonged applications (+ di 60 minutes)	20-30 G

5.3 – Body position during the sessions

The ideal position of the body during the sessions is relaxed and supine or prone according to the application zone. The position must be maintained during all the session to facilitate the effects produced by the magnetic field, particularly the increased local blood flow, consequence of the induced heating in the treated zone.

Cap.6 – POWER SUPPLY

MAGNETER CMP 50 must be supplied by power mains with the provided cable.

 For the correct identification of power supply cable 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.

Cap.7 – SYMBOLS



CLASSE II DEVICE



BF TYPE DEVICE



ATTENTION, CONSULT THE ATTACHED DOCUMENTATION



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

Cap.8 – MAINTENANCE

8.1 – Solenoids, band, cushion and carpet

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

8.2 – Device and power supply cable


To clean power supply cable and instrument, use a damp cloth. Don't use in any case liquids, because these devices are not protected from their entry (IP20).


8.3 – Feeder substitution

Check the state of the isolations of the power supply cable, before connecting it. If it's damaged, also only partially, immediately replace it.

8.4 – 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.

NOTE WELL: 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 center:

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Cap.9 – 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 MAGNETER CMP 50 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.10 – TECHNICAL FEATURES

10.1 – Power supply

Power supply: power mains PRI: 230V~ 50 Hz

10.2 – Output features

Max power intensity (P): 50 Gauss per solenoid/velcro band
100 Gauss per cushion
200 Gauss for the mattress

Frequency (f): 1-100 Hz

Frequency modulation: continue

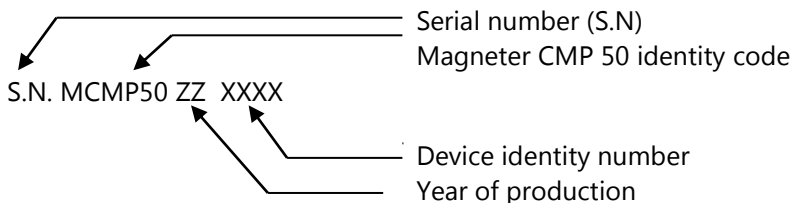
Modulation wave form: rectangular

10.3 – Other features

- Dimensions: 225x170x120h [mm]
- Weight: about 1 [Kg]
- Class: I Tipo: 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.11 – ENDOWMENT OF BASE / ACCESSORIES

11.1 – Endowment of base

Device

Power supply cable

N.1 rubber solenoids couple

N.2 elastic bands

Instructions

Carrying case

11.2 – Accessories and consumed materials

Rubber solenoids couple

Elastic bands

Band solenoid with welcro cm 91,5x20,5 (open)

Cushion solenoid cm 45x45

Carpet solenoid cm160x60

Cap.12 – BIBLIOGRAPHY

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