MEGAPULSE II

MODEL NO. 65.

Operating Instructions

Electro-Medical Supplies
(Greenham) Limited

Wantage, Oxfordshire, England

MEGAPULSE II

MODEL NO. 65.

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RECORD OF AMENDMENTS MEGAPULSE II

Al No	Date	Section Amended	Amended By	Date
	7.91	Introduction of Screened	M.CRABOL	7.91
		Applicator		
	7.92	Corrections to text	D.JEROME	7.92
	3.94	Amendment to fax number	D.JEROME	3.94

CONTENTS

Warranty 4

General Information 5

Precautions to be taken during treatment..... 5

Technical Specification..... 7

Installation 8

Controls and Markings 9

Operating Instructions 11

Setting up procedure for High Q Applicator..... 12

Setting up procedure for Screened Applicator.....13

Maintenance..... 14

WARRANTY

This Electro-Medical Supplies (Greenham) Ltd,. (hereinafter called the Company) product is warranted against defects in materials and workmanship for a period of one year from the date of shipment. The Company will at its option, repair or replace components which prove to be defective during the Warranty period, provided that the repairs or replacements are carried out by the Company or its approved agents.

The Company will consider itself responsible for the effects on safety, reliability and performance of the product only if:

assembly operations, re-adjustments, modifications or repairs are carried out by persons authorised by it;

the product is used in accordance with the instructions for use;

the electrical installation of the relevant room complies with appropriate national requirements.

Should the product be returned to the Company for repair it must be sent carriage paid.

GENERAL INFORMATION

This manual provides the necessary information for the installation, operation and maintenance of the unit.

These instructions must be studied before putting the unit into operation.

The output of this unit could prove to be hazardous to both patient and operator if used contrary to the best physiotherapy practices.

Precautions to be taken during treatment.

The following list is for guidance only and is by no means exhaustive. If in doubt the patients physician should be consulted.

General:

The Patient Applicator cable is of coaxial construction and may only be replaced by the type specified by the manufacturer. Regularly inspect the insulation of the Patient Applicator and its connecting cable for possible damage.

When operated in PULSED MODE the following precautions should be taken:

1. The function of certain implanted electical devices, for example pacemakers, may be adversely affected during treatment with pulsed shortwave therapy. In case of doubt the advice of the physician in charge of the patient should be sought.

2. Hearing aids should be removed.

3. The function of other patient connected equipment may be adversely affected by the operation of the pulsed shortwave therapy equipment. Maintain maximum distance between units in order to reduce any tendency to interaction.

4. Treatment should not be given through clothing although it is permissable to treat through a dressing or plaster. External conductive material should be removed from the immediate treatment area, however areas containing internal metallic implants may be treated without special precautions.

5. Shortwave should not be used over a pregnant uterus.

6. The patient should not be allowed to come into contact with conductive parts which are earthed or which have an appreciable capacitance to earth and which may provide unwanted pathways for the radio frequency current. In particular beds or chairs having metal frames should not be used.

Standards

The MEGAPULSE II has been designed to meet the requirements of IEC 601-1:1977 (BS5724:Part 1:1979) "Safety of Medical Electrical Equipment, Part 1:General requirements".

In addition the MEGAPULSE II. has been designed to meet the requirements of I.E.C 601-2-3:1984 (BS5724: Section 2.3:1983) "Specification for safety for shortwave therapy equipment".

TECHNICAL SPECIFICATION

Mains Supply	:	240,220,120,100V ac 50/60Hz.
Power consumption	:	220 W max
Mains fuses	:	Externally Replaceable 2 x T2A 20mm for 240 and 220V 2 x T5A 20mm for 120 and 100V Internal F 20A to B.S.88 4 x T315mA 20mm (F1-4) } for 240 and 220V 2 X T500mA 20mm (FS3-4) } for 240 and 220V 1 X T1A 20mm (FS5) } for 240 and 220V 2 X T315mA 20mm (F1-2) } for 120 and 100V 2 X T630mA 20mm (F3-4) } for 120 and 100V 2 X T500mA 20mm (FS3-4) } for 120 and 100V 1 X T1A 20mm (FS5) } for 120 and 100V
Size	:	Approx. H: 870mm D: 410mm W: 410mm
Weight	:	53 kg
Classification	:	Class 1: Type BF. (IEC 601-1:1977)
Frequency	:	27.12 MHz
Output Power	:	150W peak power into 50 Ohm load.
Output modes	:	Only pulsed output waveforms are available as selected by the front panel.
Pulse modes	:	1 in 3, 2 in 3, 3 in 3
Pulse Widths	:	400, 200, 100, 65, 40, 20 us
Pulse Repetition Rate	:	50, 100, 200, 400, 800 pps
Timer	:	The digital treatment timer indicates the set time in minutes and seconds prior to the start of treatment and treatment time remaining during treatment. The maximum setting of the timer is 29 minutes.

Timer accuracy	:	+/- 1 second at all settings
Tuning	:	Manual with Hi Q applicator (C59-5-19) Fixed for Screened Applicator (C59-5-45) from july 1991
Cooling	:	Forced air by integral fan

Each unit is supplied with a mains cable. Both the cable and the plug on the unit conform to international safety standards. Spare fuses are also supplied.

All information on external fuse ratings and type, supply voltages, model, serial number, and month/year of manufacture is located on the rear panel.

INSTALLATION

Upon receipt of the unit check for any damage which may have occurred in transit. If any signs of damage are found then retain all packing material and inform the carrier and the Company or its agent from whom the unit was purchased.

Check that the mains voltage and frequency stamped on the rear panel of the unit are as required. If the mains supply is not within the range specified on the rear panel DO NOT CONNECT THE UNIT TO YOUR MAINS SUPPLY.

If not already fitted, connect a suitable plug to the mains cable. The plug must have provision for an EARTH (GROUND) connection. The mains cable has the following colour code, BROWN is LIVE (LINE), BLUE is NEUTRAL and GREEN/YELLOW is EARTH.

The mains supply must be capable of providing 6A (220-240V 50/60Hz) or 12A (100-120V 50/60Hz).

Connect the mains plug to a suitable socket. The - MEGAPULSE II - is now ready for use.

CONTROLS AND MARKINGS

Refer to figure 1 - MEGAPULSE II - Front Panel. The number associated with each control or indicator in this section corresponds to the labelling in figure 1.

(1)	POWER	Mains on/off switch. Two position rocker, up for on, down for off. The switch is illuminated when the power is on.
(2)	MODE SWITCHES	Membrane push button switches to select pulse pattern. Excepting tune, Mode can only be changed when output is off. The selected mode is indicated by the illuminated LED.
(3)	TIMER DISPLAY	Indicates the treatment time selected or, with the OUTPUT CONTROL advanced, the treatment time remaining.
(4)	TIMER SELECTOR SWITCHES	Used to select the treatment time. Maximum time selectable is 29 minutes.
(5)	OUTPUT DISPLAY	L.E.D.indicators to show that the output is on, pulse selection and tune mode.
(6)	OUTPUT SWITCH	Switches the output on and off as indicated by the OUTPUT ON LED. In tune mode Maximum pulse width and rate is produced for twenty seconds.
(7)	PULSE WIDTH SWITCHES	Selects the pulse width in microseconds as displayed in the PULSE WIDTH DISPLAY. Pressing the "Up Arrow" increases the pulse width to the next setting,pressing the "Down Arrow" reduces it to the next setting.
(8)	PULSE WIDTH DISPLAY	Indicates the PULSE WIDTH in microseconds.

(9) PULSE RATE SWITCHES	Selects the number of pulses per second as displayed in the PULSE RATE DISPLAY. Pressing the "Up Arrow" increases the number of pulses per second to the next setting, pressing the "Down Arrow" reduces it to the next setting.
(10) PULSE RATE DISPLAY	Indicates the number of pulses per second.
(11) SYMBOL IEC 878-03-04	Non-ionising radiation
(12) SYMBOL IEC348	Attention, Consult ACCOMPANYING DOCUMENTS.
(13) SYMBOL IEC 878-02-03	Indicates Type BF Equipment.
(14) SYMBOL IEC 878-03-01	Indicates that high voltage is generated within the Patient Applicator.

OPERATING INSTRUCTIONS

Numbers in brackets in the following operating instructions refer to the front panel drawing, figure 1.

1. Having connected the MEGAPULSE II to a suitable mains outlet energise the unit by pressing the Power Switch (1) up. The Power Switch will light, the buzzer will sound briefly and the Timer Display (3) will show -65-. The microprocessor in the unit now completes a short initialisation routine.

2. After 4 seconds the Timer Display will change to 00.00 , the 1 in 3 indicator LED will light, the PULSE WIDTH DISPLAY (8) will indicate 20uS and the PULSE RATE DISPLAY (10) will show 50 PPS. If the OUTPUT (6) or TUNE switch is pressed with no time set on the display, the buzzer will sound and the output will not be energised.

3. Audible confirmation of the operation of the front panel push switches may be enabled by holding down the tune mode button of the MODE SWITCHES for a few seconds whilst switching the mains power on.

4. Set the required treatment time by pressing the 10 and 1 switches (4). The maximum treatment time allowed is 29 minutes.

SETTING UP PROCEDURE FOR EMS HIGH Q APPLICATOR

1. The patient Applicator has a single control for adjustment of the tuned circuit for maximum efficiency. The associated amber indicator enables the correct adjustment of the tuning control.

2. Select the output mode using the switches (2) marked 1 in 3, 2 in 3, or 3 in 3 . The green indicator LED above each switch shows the current selection.The power output will shut off automatically with the disconnection of the HIGH Q APPLICATOR and sound buzzer for three seconds. Also the power output cannot be switched on when the EMS Hi Q applicator is disconnected.

3. Select the required PULSE WIDTH using the Up and Down Arrow switches (7). The desired selection will be displayed in the PULSE WIDTH DISPLAY (8).

4. Adjust the position of the applicator by slackening the arm handwheels. Position the Patient Applicator over the area of intended treatment allowing an approximate spacing of 3cm between applicator and the body area being treated.

5. When the applicator has been placed in position tighten the handwheels on the arm to prevent movement. Switch treatment ON, the treatment on LED will illuminate and also the tune LED. Turn tuning knob on the applicator to produce maximum brightness of the AMBER indicator on the applicator. At this position the treatment energy is transmitted at greatest efficiency. In order to give a bright indicator when tuning for pulsed mode the unit automatically selects the maximum pulsed output for twenty seconds after switching treatment on. Tune the applicator for maximum brightness during this period, after which the selected output will be given and the tuning indicator may become dimmer.

Should the position of Patient Applicator be changed during treatment the optimum tuning condition should be re-checked by pressing the tune button. This enables the tune mode for a further twenty seconds thereby allowing the applicator to be adjusted to its new optimum tuning condition. If the tune mode is selected when output is off, the buzzer will sound for 3 seconds.

6. During treatment the AMBER indicator on the Patient Aplicator may be illuminated continuously (or flash if the "1 in 3" or "2 in 3" mode is selected) when Pulse Widths in excess of 100 usec. and/or Pulse Repeat Rates in excess of 100 pulses per second are being used.
It should be noted that when Pulse Widths below 100 usec. and/or Pulse Repeat Rates of below 100 per second are used the Amber Indicator will be either completely extinguished or only glow faintly.

7. If at any time during treatment the output is returned to the off position, the timer will stop and then restart when the Output Control is turned on again.

8. At the end of the treatment time, when the Timer Display (3) reaches 00.00, the buzzer will sound and the shortwave power will be turned off.

9. As the MEGAPULSE II is microprocessor controlled it continually "self checks". If an error in the function of the microprocessor is detected the shortwave power will be immediately turned off and the word FAIL will be shown on the Timer Display for approximately 2 seconds after which the microprocessor will attempt to restart as if from power up. If the unit repeatedly fails then qualified service personnel must be called in.

10. The unit incorporates a safety mechanism in case of overheating caused by fan failure. If the unit overheats the treatment is automatically switched OFF, the buzzer sounds intermittently and "Hot" is shown on the timer display.

SETTING UP PROCEDURE FOR EMS SCREENED APPLICATOR

The screened applicator C59-5-45 was introduced in June 1991 to replace the High Q applicator C59-5-19. It has been designed to cut out interference. The main aesthetic differences are :
-there is no tuning knob on the screened applicator (fixed tuning)
-the screened applicator has some slots at the top and bottom for cooling.

The setting up procedure for the screened applicator is the same as the HIGH Q APPLICATOR except paragraph 6 which should read:
-When the applicator has been placed in position tighten the handwheels on the arm to prevent movement. Switch treatment ON, the first 8 bars on the front panel will light. In order to give a bright indicator during the first 20 seconds of the treatment time the unit automatically selects the maximum pulsed output after which time it returns to the selected output.

MAINTENANCE

The unit may be cleaned by wiping over with a clean damp cloth. No parts of the unit are suitable for steam sterilisation.

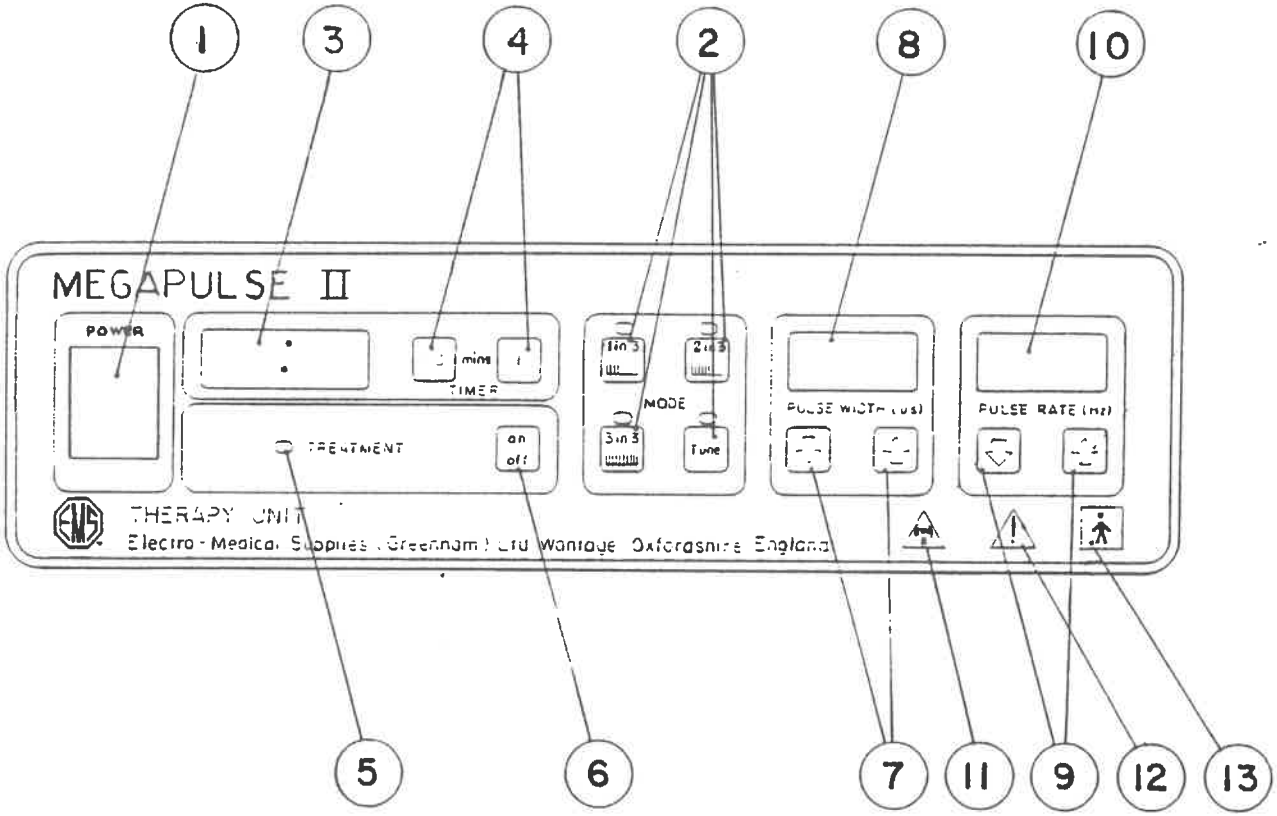
The mains fuses are mounted in the mains filter box underneath the unit. The unit must be disconnected from the mains before any attempt is made to replace these fuses. The fuse holders are of a bayonet type. A suitable screwdriver should be used to lightly press in the fuse holder cap and give it a quarter turn anti-clockwise. Information on fuse type and rating is both on the mains filter box and in section 3 of this manual.

If the mains fuses continue to blow then qualified service personnel must be called in.

To change the internal fuses the front cover must be removed.

THERE ARE NO USER SERVICEABLE PARTS INSIDE THE UNIT AND THE TOP COVER MUST NOT BE REMOVED.

Full servicing instructions are available on request.


1
3
4
2
8
10
MEGAPULSE II
POWER
mins
TIMER
TREATMENT
on
off
MODE
Tune
PULSE WIDTH (us)
PULSE RATE (Hz)
THERAPY UNIT
Electro-Medical Supplies (Greenham) Ltd Wantage Oxfordshire England
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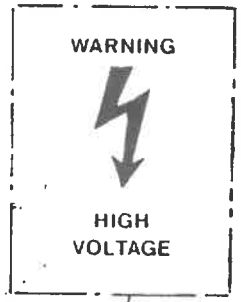
WARNING
HIGH
VOLTAGE

14

CASE HISTORIES

MEGAPULSE THERAPY UNIT

EMS®

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME	RESULT
					Mins	
Traumatic rotator cuff injury	6	Normal	100	100 µSecs	15	Complete Recovery
Sprained ankle 4 months ago	8	Normal	6 @ 200 2 @ 400	5 @ 200 3 @ 400	15	Complete Recovery
Medial Ligament Strain (knee)	10	Normal	8 @ 200 1 @ 100 1 @ 25	8 @ 200 2 @ 200	20	Complete Recovery
Painful Right Knee	9	Normal	7 @ 200 2 @ 400	3 @ 100 3 @ 200 3 @ 400	25	Complete Recovery
Old Fracture of Calcis with lateral ligament injury	8	Normal	200	6 @ 200 2 @ 400	25	Greatly Improved
Tibial Osteotomy	4	Normal	200	100	20	Dramatic improvement after 1st treatment
Soft Tissue Injury hand	8	Normal	100	5 @ 65 3 @ 100	20	Full power regained in hand - only occasional ache
Subluxation (R) acromio-clavicular joint with frozen shoulder	4	Normal	200	65	20	Reduced pain and shoulder movements much improved
Torn lateral ligament (R) ankle	4	Normal	200	65	20	Discharged with normal gait

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME Mins	RESULT
Tennis Elbow Subacute	2	1:3	400	100	8	Painfree if not used for heavy work
	2	2:3	400	200	10	
	4	Normal	400	200	10	
	1	Normal	600	200	10	
	2	Normal	600	400	10	
Painful right elbow	6	1:3	100	65	15	Much less pain & no ache
Soft tissue injury	4	2:3	200	65	15	Complete mobility on discharge.
Traumatic back and hip pain	3	2:3	200	40	15	Symptoms disappeared.
	1	2:3	400	40	15	
	1	2:3	600	40	15	
	1	2:3	800	40	15	
Lumbar pain - strained back	3	2:3	100	65	10	Marked response after first treatment. Steady improvement until discharge
	3	2:3	200	65	10	
Trapped nerve (left wrist) 5 years ago.	1	Normal	200	65	8	Improved after 1st treatment. Fully recovered on discharge
	1	Normal	400	40	8	
	4	Normal	400	100	8	
As above 5 weeks prior to treatment	NB - Had been on medication for 5 weeks (continuous) prior to Megapulse Therapy. Now pain free - no medication required.					

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME	RESULT
			Per Second	µSecs	Mins	
Severe vulval bruising and oedema	4	1:3	100	40	10	Oedema virtually dispersed - bruising pale purple
Lower Back Pain	3 2	2:3 Normal	200 200	40 40	15 15	Good improvement Patient very pleased with amount of pain relief
Strain med. ligament right knee	7	1:3	400	100	15	Pain better after 4 treatments
Lower Back Pain	4 3 2 1	1:3 1:3 2:3 2:3	400 600 600 600	100 200 200 400	10 10 10 10	Very rigid back - obese. Now back to normal mobility. Pain free.
Tennis Elbow	4	Normal	400	65	10	Marked and rapid improvement.
Tennis Elbow	6	Normal	400	65	10	Rapid response.
Bruising left hand and swelling	4	2:3	200	65	15	Complete recovery
Osteoarthritis Right Shoulder	5 2 7	Normal Normal Normal	100 400 200	65 65 200	20 20 15	No pain Fully recovered.

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME	RESULT
			Per Second	µSecs	Mins	
Swollen perineum	3	1:3	100	40	10	Swelling down - bruising faded
Bruised oedematous perineum	4	1:3	100	40	10	Excellent result Fast healing
Bruising of perineum and Haemorrhoids	3	1:3	100	40	15	Haemorrhoids completely disengorged and bruising dispersed.
Haemorrhoids	4	1:3	100	65	10	Haemorrhoids were exceptionally large Recovery good
Oedematous perineum	4	1:3	100	40	10	Oedema completely reduced
Oedematous perineum	3	1:3	100	40	10	Oedema reduced dramatically after 1st treatment
Haematoma of Labia	5	1:3	100	40	15	Haematoma dispersing well.
Inflamed Abdominal wound	15	1:3	15 @ 100	7 @ 40 8 @ 65	15	Almost healed over. More healing than if IR had been used

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME	RESULT
			Per Second	µSecs	Mins	
Torn anterior cruciate	6	Normal	200	4 @ 200 2 @ 400	20	No change (too high output)
Spondylolithesis L4/5	5	Normal	1 @ 200 4 @ 400	400	15	No change (too high output)
Neck Pain	4	Normal	100	3 @ 65 1 @ 100	15	No change (too high output)
Caesarian Section	5	1:3	100	65	10	Pain reduced dramatically Infection dispersed
Caesarian Section (twins)	5	1:3	100	40	10	Helped wound to drain - healing gradually
Epesiotomy and tear	5	3 @ 1:3 2 @ 2:3	100	40	15	Dramatic reduction in bruising
Bruised oedematous labia	3	1:3	100	40	10	Slow reduction of oedema - bruising minimal
Bruised perineum	2	1:3	100	40	10	Excellent recovery slightly uncomfortable from "pulling" stitches
Oedmatous/ bruised labia	3	1:3	100	40	10	Very good result All oedema & bruising resolved

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME	RESULT
			Per Second		Mins	
Painful Right Shoulder	4	Normal	100	65 µSecs	10	Partial Recovery Increased Movembent
Low Back Pain	2	2:3	100	65 µSecs	10	Partial Recovery Less Pain and increased range.
Haematoma of Right Knee and Lateral side of left knee	4 1 4	2:3 2:3 2:3	100 100 100	65 µSecs 65 µSecs 65 µSecs	10 5 10	Complete recovery
Tender Spot on Soleus	3	Normal	400	200 µSecs	8	Partial Recovery. Great improvement after first treatment
Painful shoulder post dislocation	2 6	Normal Normal	200 400	65 µSecs 100 µSecs	8 8	Partial Recovery Pain considerably decreased
Whiplash neck Fell downstairs	1 1 2	Normal Normal Normal	100 400 400	40 µSecs 40 µSecs 100 µSecs	8 8 8	Partial Recovery Great improvement after first treatment
Sprained left Ankle	5	Normal	400	65 µSecs	10	Complete Recovery

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME	RESULT
			Per Second		Mins	
Haemarthrosis right knee Post-op. shaft of femur 'K' nailed	5	Normal	400	65 µSecs	8	Partial Recovery Reduced swelling noted. Increased mobility
Burn to Hand	10		400	65 µSecs		Complete return to normal size and mobility in 3 wks
M.S. Capsulitis Left Shoulder	3	1:3	100	40 µSecs	10	Pain free. Complete recovery
Post operative pain and stiffness	2	Normal	100	65 µSecs	10	Complete recovery Immediate relief of symptoms
Painful cervical and thoracic spine	2	2:3	400	65µSecs	10	Partial Recovery
Disc Degeneration Acute Pain	9	Normal	100	65 µSecs	9	Complete Recovery
Effusion Left Knee	2	1:3	100	65 µSecs	10	Complete Recovery
Sprain ankle Stiff, swollen	12	Normal	400	65 µSecs	8	Complete Recovery

CASE HISTORIES - MEGAPULSE THERAPY UNIT

CONDITION	NO OF TREATMENTS	PULSE GROUP	FREQUENCY	WIDTH	TIME Mins	RESULT
Painful fingers 2-3 right hand	7	Normal	100	65	10	Unable to hold pen with index finger prior to treatment due to pain. Full function and pain free on discharge.
Thoracic pain	1 1	Normal Normal	100 100	65 65	9 10	Complete recovery.
Low back pain for many years	5	Normal	100	65	10	Pain free on discharge

Megapulse Treatment Chart

Registration No.
R0202

Pulses per second	100	200	400	600	800
400	5	10	20	30	40
200	2.5	5	10	15	20
100	1.25	2.5	5	7.5	10
65	0.78	1.56	3.25	4.87	6.5
40	0.5	1	2	3	4
20	0.25	0.5	1	1.5	2

It is the peak power of the pulsed output which produces the effective treatment. However for ease of selecting the control setting the output is expressed in average powers (WATTS).

The chart illustrates the range of powers available for the various conditions to be treated.

ACUTE

Mode of output - Normal (NORM.)

Operation
Unless the correct sequence of operating the controls is followed, the unit will not operate. i.e. Set Pulse Width, then Pulses/sec., Set Timer and then Tune. Finally select either 1 in 3, 2 in 3 or NORM, thus initiating treatment.

Spacing
The applicator should be spaced 1 cm (½ inch) between the rim of the applicator and the patient (thus maintaining a sterile field of treatment).

Conditions

ACUTE

Acute conditions should be treated in the POWER range 0.25W to 3.0W, depending upon the area and depth of tissue to be treated.

Examples - *Ligamentous sprains, Intra-muscular haematoma, Haemmorrhoids, Oedema, Post-Natal conditions (epesiotomy, bruised labia, bruised perineum), acute disc lesions, Periarthritis (acute) Sciatica, Sinusitis.*

Sub-Acute (or resolving) conditions should be treated in the POWER range between 3W and 6.5W.

Examples - *Teno-synovitis, pressure sores, leg ulcers, post-operative oedema, Bursitis.*

Chronic conditions may be treated with the power range of 7.5W upwards

Examples - *Pain relief to osteo-arthritis, low back pain, frozen shoulder, Ankylosing Spondylitis, Sciatica, Sinusitis.*

Indications
Please refer to the manual supplied with every unit. These have been compiled from results obtained during many trials. Also to the information below:-

Contra-Indications
Patients with malignant tumours, uterus treatment during pregnancy, any patient having post radio therapy treatment, cardiac pacemakers or hearing aids.

Treatments
Treatment times should be between 10 and 20 minutes, depending on the required depth and area of treatment. The shorter times for areas of small tissue volume (e.g. hands, forearms, ankles etc.), the longer times for larger tissue volume (e.g. thighs, trunk, abdomen etc.). Where possible treat twice daily; otherwise daily or at least every two days until the condition improves. (Normally between 6 and 10 treatments).

Should any discomfort occur, either during or after treatment, it may be due to excessive output for the condition being treated. In such cases reduce the pulse frequency by one switch position and continue with the treatment. It is always better to reduce the pulse frequency rather than the PULSE WIDTH.

The figures above and those shown in the chart are for the treatment control set to NORMAL (NORM.). Further reductions in average power can be obtained by switching to the "1 in 3" or "2 in 3" positions (i.e. the value of 3W is reduced to 1W and 2W respectively).

IMPORTANT — No heating effect will be felt by the patient at any treatment setting.

Designed and manufactured by:
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