



Megapulse® II

SHORTWAVE DIATHERMY SYSTEM

P R O D U C T S P E C I F I C A T I O N S

MEGAPULSE® II

Shortwave Diathermy System with Delta T Temperature Dose Control

Product Highlights

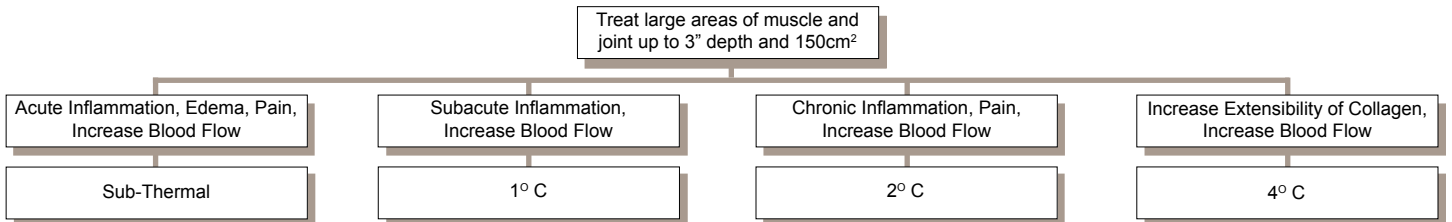
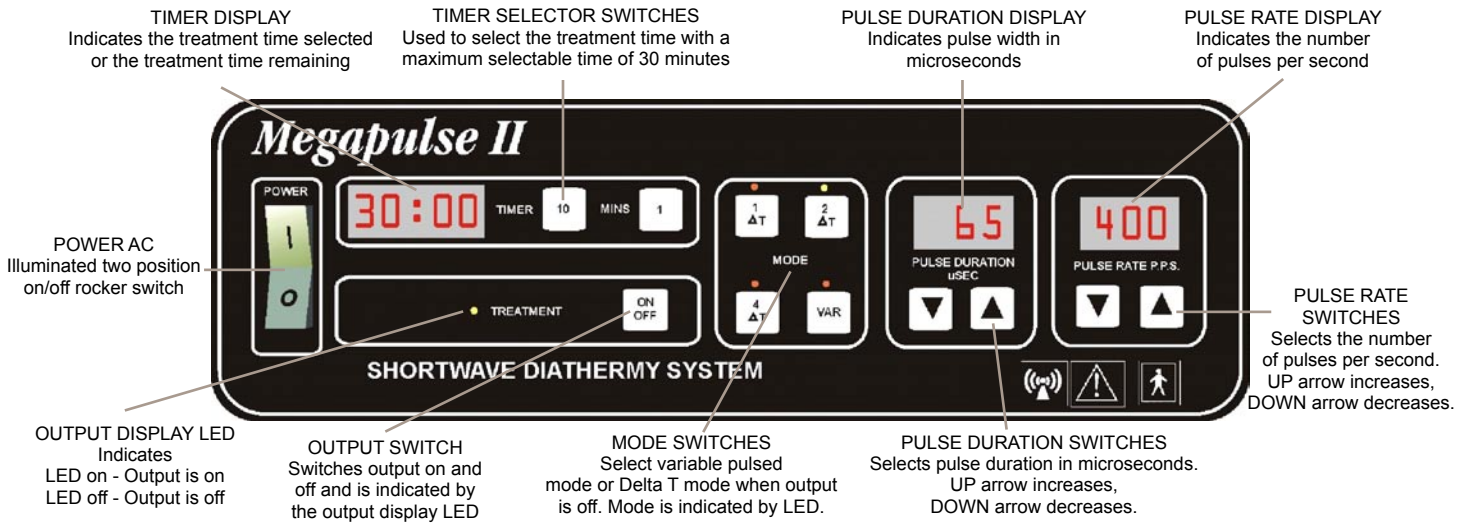
The Megapulse® II Pulsed Shortwave Diathermy provides clinicians with state-of-the-art thermal and sub-thermal treatment capabilities addressing a wide variety of clinical diagnoses. Equipped with a complete range of pulsed shortwave output parameters and an innovative system to control tissue temperature for reproducible dosages, the Megapulse® II provides clinicians with superior technology and treatment versatility.

- Patented Delta T Temperature Control technology ensures reproducible dosage for treatment consistency, ease-of-use and clinician efficiency
- Uniformity of heating makes treatment very comfortable for patients
- Automatic tuning
- Treats large tissue areas up to 150 cm²
- Protocols are well researched and parameters are supported in refereed literature
- Parameters may be easily selected to accommodate individual patient conditions
- HI-Q applicator is heavily shielded to protect the operator and patient from unintended exposure and electrical interference



*Revolutionizing
Rehabilitation*

CONTROLS AND FUNCTIONS



CLINICAL APPLICATIONS

The Megapulse® II Shortwave Diathermy system is indicated for use in the following conditions or applications:

Summary of Physiologic Effects

- Vasodilation of blood vessels
- Increase in arterial, venous and lymphatic circulation
- Relieve traumatic edema
- Decrease pain due to drop in local supply of kinins, prostaglandins and lactic acid based on improved drainage
- Increase the extensibility of collagen tissue
- Increase in reabsorption of exudates and toxins
- Relaxation of muscle spasm

Primary Patient Applications

- Pain Management
- Contracture Management
- Tenosynovitis, Bursitis, Synovitis
- Muscle Spasms
- Increasing Blood Flow
- Chronic Inflammatory Pelvic Disease
- Reduce Joint Stiffness
- Chronic Inflammatory Conditions
- Edema Reduction

Healthcare Settings

- Inpatient /Outpatient
- Post-Acute Care
- Skilled Nursing Facilities
- Sports Medicine
- Assisted Living Facilities
- Orthopedic

After 7 days of treatment with a shortwave diathermy, a notable drum impression of decreased ecchymosis could be seen in the area being treated. The effect of this is a decrease in muscle spasm and pain.



TECHNOLOGY HIGHLIGHTS AND FEATURES

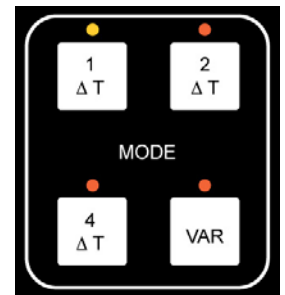
Technology Highlights

Pulsed Shortwave Diathermy (PSWD) uses high frequency shortwave energy to generate thermal and sub-thermal effects in body tissues. The system automatically tunes to the patient load for maximum convenience and safety. PSWD's greatest advantage in clinical treatment is the capacity to treat large tissue areas conveniently and effectively. The system produces mild, moderate or vigorous tissue temperature increases to increase blood flow, treat subacute and chronic inflammation, manage pain, reduce muscle spasms and heat tissue prior to stretching (heat and stretch).

PULSE DURATION	AVERAGE POWER IN WATTS (W)						EFFECT
	3.0W	6.0W	12.0W	24.0W	36.0W	48.0W	
400 μ Sec	3.0W	6.0W	12.0W	24.0W	36.0W	48.0W	4°C
200 μ Sec	1.5W	3.0W	6.0W	12.0W	18.0W	24.0W	2°C
100 μ Sec	.75W	1.5W	3.0W	6.0W	9.0W	12.0W	1°C
65 μ Sec	.49W	1.0W	2.0W	3.9W	5.9W	7.8W	SUBTHERMAL
40 μ Sec	.30W	.6W	1.2W	2.4W	3.6W	4.8W	
20 μ Sec	.15W	.30W	.60W	1.2W	1.8W	2.4W	
PULSE RATE	50 PPS	100PPS	200PPS	400PPS	600PPS	800PPS	

Delta T Automatic Tissue Temperature Dose Control

The Megapulse® II's patented Delta T technology automatically sets treatment parameters and treatment time to provide reproducible dose and eliminate time consuming therapist calculations for thermal treatment dosages. Therapists simply position the Hi-Q applicator over the treatment area, select the desired temperature increase, and initiate treatment. This innovative technology was developed following published clinical research and provides consistent, reproducible thermal diathermy for optimized outcomes and clinician efficiency.



Additional Features

The unit's convenient design includes push button controls, digital displays for monitoring parameter values, and an adjustable support arm for easy positioning of the Hi-Q screened applicator. The Megapulse® II provides a complete range of pulsed shortwave outputs and is housed in an easy-to-clean durable cabinet featuring a watertight push button control panel with digital display. ACP also offers a complete line of infection control products for the Megapulse® II to meet the challenges of today's demanding clinical settings with their increasingly stringent infection control requirements.



The Megapulse® II Pulsed Shortwave Diathermy provides clinicians with state-of-the-art thermal and sub-thermal treatment capabilities addressing a wide variety of clinical diagnoses.



Patented Delta T Temperature Control technology ensures reproducible dosage for treatment consistency, ease-of-use and clinician efficiency. Uniformity of heating makes treatment very comfortable for patients.

PRODUCT SPECIFICATIONS



MEGAPULSE® II TECHNICAL SPECIFICATIONS

Power Supply: 120V, 60Hz.

Power Consumption: Instruction mn. 180w

Size: Approx. H: 34 in (870 mm), D: 16 in (410 mm), W: 16 in (410 mm)

Weight: 86 lbs (39 kg)

Classification: Class 1: Type B F. (I EC 601-1: 1977)

Frequency: 27.12 MHz

Output Power: 150W peak power into 50 Ohm load pulsed mode

Output Modes: Pulsed output waveforms are available as selected on the front panel. In pulsed mode the output is square wave modulated.

Pulse Mode Presets:

VAR - Timer is variable from 0 - 30 mins, but Variable preset at 30 mins, pulse rate is set to 100 PPS, 65 μ Sec pulse duration. Pulse rate, timer and pulse duration are variable over their full range in this mode.

1 Δ T - Timer is preset to 20 mins, pulse rate is set to 800 PPS and pulse duration to 100 μ Sec.

2 Δ T - Timer is preset to 20 mins, pulse rate is set to 800 PPS and pulse duration to 200 μ Sec.

4 Δ T - Timer is preset to 20 mins, pulse rate is set to 800 PPS and pulse duration to 400 μ Sec.

Variable (VAR) Mode Options:

Pulse Duration: 400, 200, 100, 65, 40, 20 μ s available

Pulse Repetition Rate: 50, 100, 200, 400, 600, 800 pps available

MODEL NUMBER: 1903029

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 30 minutes. Timer increments are in 1 minute units.

Timer Accuracy: +/- 1 second at all settings

Tuning: Automatic with Hi-Q applicator

Electrodes: Hi-Q inductive field applicator

Cooling: Forced air by integral fan

Standards: Each unit is supplied with a main hospital grade power 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.

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 IEC 6012-3:1984 (BS5724: Section 2.3:1983) "Specification for safety for shortwave therapy equipment."

Meets U.S.A. F.C.C. requirements.

ACP reserves the right to change technical specifications and product availability without notice. Federal Law restricts this device to sale by or on the order of a physician or other health care practitioner.

Accelerated Care Plus Corp.

4850 Joule Street, Suite A1

Reno, Nevada 89502

Phone: (800) 350-1100 Fax: (800) 350-1102

Phone: (775) 685-4000 Fax: (775) 685-4013

www.acplus.com

