Profile EMS

Instructions for use

HEALTH body clock CARE

Before you use your Body Clock Profile EMS, it is important that you read this manual carefully.

It contains all the information you need to ensure you are using the unit safely and correctly.

Explanation of Symbols on Unit

Equipment providing a particular degree of protection against electric shock particularly regarding allowable leakage currents having an F type (floating) applied part.

Warning – refer to accompanying documents i.e. these instructions.

Denotes a product which must be disposed of safely.

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About EMS

EMS stands for Electronic Muscle Stimulation. This treatment consists of delivering electrical impulses through the skin into the nerve fibres and muscles that lie beneath. Skin contact is made via surface electrodes placed on the body. The EMS unit will then stimulate the muscles to contract and relax.

NOTE

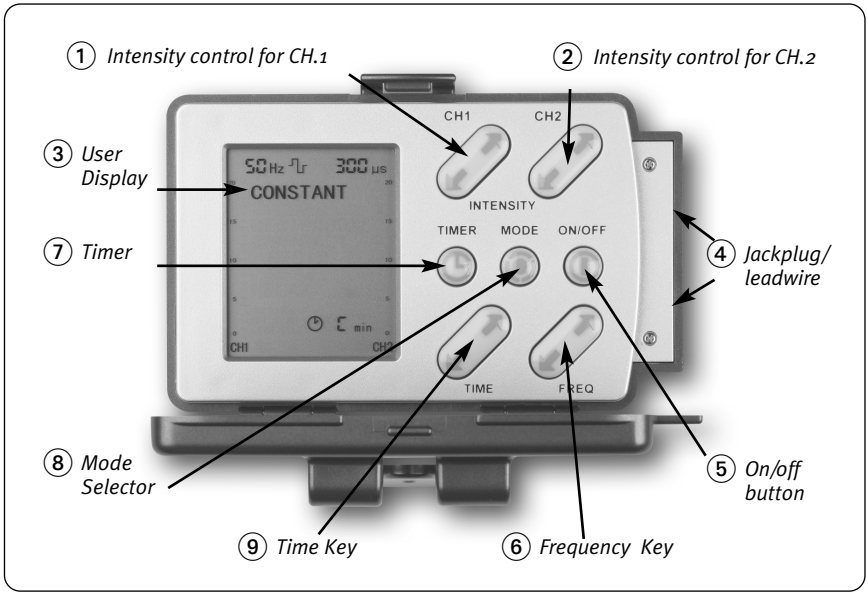
Before using EMS, if you have any questions about a particular condition or if problems arise, please seek advice from your physician or therapist.

What can be EMS be used for?

Toning and strengthening all muscle groups for athletic training, bodybuilding and sports injuries, after pregnancy, weight loss, cosmetic purposes, chronic back pain and incontinence.

EMS can also be used to tone specific muscle groups after immobilisation of fractures and soft tissue injuries.

The Profile EMS Controls



Controls and Display Symbols.

Controls and Display Symbols.

1. ***CH1 INTENSITY key*** *– press the 'CH1 INTENSITY' key, (up arrow) to increase or (down arrow) to decrease the intensity.*

2. ***CH2 INTENSITY key*** *– press the 'CH2 INTENSITY' key (up arrow) to increase or (down arrow) to decrease the intensity.*

3. ***USER DISPLAY*** *This is the LCD display which keeps you informed about the modes and settings you are using.*

4. ***JACK PLUG sockets.*** *This is where the leadwires are connected to the unit.*

5. ***ON/OFF key*** *– press the 'ON/OFF' key to turn the unit on and off. The output intensity in both channels starts at zero when the unit is switched on.*

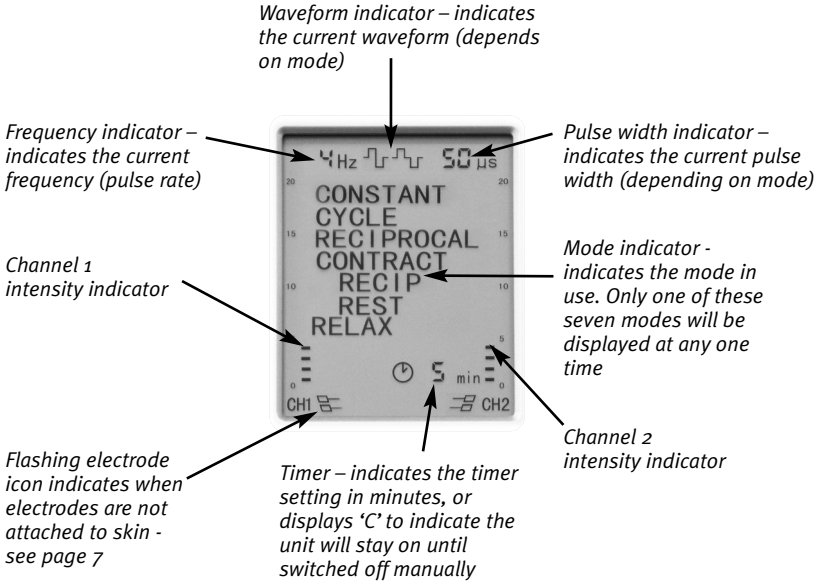
6. ***FREQUENCY key*** *– press the 'FREQ' key to increase or decrease the frequency, otherwise known as pulse rate (up arrow) to increase or (down arrow) to decrease frequency.*

7. ***TIMER*** *button, enables the Profile EMS to switch off automatically, if required. To adjust the time you wish your treatment to last, press either the up arrow or down arrow on the Time key. Once you have the correct time, press the Timer key again to confirm.*

8. ***MODE*** *– press the 'MODE' key to change the operating mode. After changing mode the intensity will automatically drop to zero to ensure comfort and safety.*

9. ***TIME key*** *– press the 'TIME' (+) and (-) keys after pressing the 'TIMER' key to select the desired setting. See 7 above.*

Display Symbols and their Meaning



Additional features of the Profile EMS

Memory
When the unit is switched off it will remember its previous settings. These will be restored when the unit is next switched on.

Factory Default
The unit initially powers up in Constant Mode and when the batteries are replaced.

Automatic Power Off
The unit will switch off automatically if the intensity on both channels is at zero and the unit has not been used for approximately 5 minutes.

Load Detector
When there is no contact between the device and human skin, it is only possible to increase the intensity output to level 2. Should this happen, the flashing electrode icon will appear on the LCD display.

Low Battery Detection
When the batteries fall below 2.2v 0.2v a flashing battery icon will appear on the display.

Setting Up Your Profile EMS

Check the following contents:

1 x Profile EMS unit

1 x pack of self adhesive electrodes

2 x leadwires

4 x AA batteries

1 x An Easy Guide to EMS (UK only)

The Assembly Stage

a) The battery compartment is found on the front of the unit and is marked by a ribbed triangle. Open by gently pressing on the ribbed section with the thumb.

b) Insert batteries, ensuring the positive (+) and negative (-) terminals are in the correct position as marked in the battery compartment. Replace battery cover.

c) With the unit switched off, insert the leadwire pin ends into the electrodes and the Jack plug ends into sockets found on the side of the unit. See diagram on page 4.

Instructions For Use

1. *Turn on your Profile EMS by means of the ON/OFF button. The unit starts in the Constant Mode initially.*

2. *Choose the mode you wish to use by pressing the mode button until the mode you require shows on the LCD screen. Details of the functions of each mode are set out later in this booklet.*

3. *Slowly increase the intensity using the intensity controls. See diagram on page 4.*

4. *If you stimulate for a number of hours, it is advisable to check that your electrodes have not become too dry as this could cause minor skin irritation. If this happens, dampen them slightly.*

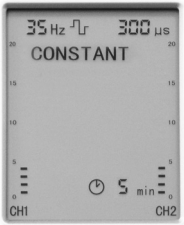
5. *When you have finished stimulating, turn off the unit by means of the ON/OFF button.*

6. *Ensure that the unit is switched off before removing the leads. Do not pull the leadwires. Remove leads by holding the jack plugs between the forefinger and thumb.*

The Operation Modes -

The 'MODE' key is used to select the operating mode. As a safety feature, after any mode change the intensity will drop to zero. There are seven modes available on the Body Clock Profile EMS and in all modes intensity is adjustable by means the CH1 and CH2 keys.

Constant Mode

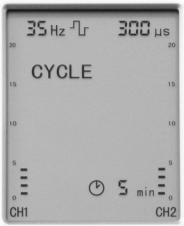


- *In Constant Mode there is continuous output. Frequency can be adjusted between 1 and 80Hz using the 'FREQ' key, and intensity can be adjusted using the 'CH1' and 'CH2' keys.*

- *To automatically switch the unit off after 5 to 50 minutes (in 5 minute intervals), or for the unit to remain on until switched off manually ('C' setting), press the 'TIMER' button. Depending on the unit's previous setting you will either see a flashing time to the right of the clock icon at the bottom of the LCD or a flashing 'C'. By means of the 'TIME' key you can select the required duration of treatment. If you select 'C', treatment will continue until you turn the unit off manually. To confirm your selection, press the 'TIMER' button again and the number (or 'C') will stop flashing.*

- *Please note that it is not possible to adjust the intensity while you are setting the timer, i.e. while the time (or 'C') is flashing.*

Cycle Mode



- *In Cycle Mode, both channels are on and off in regular cycles.*
- *Frequency can be adjusted between 1 and 80Hz using the 'FREQ' key, and intensity can be adjusted using the 'CH1' and 'CH2' keys.*
- *The 'TIMER' button and the 'TIME' key are operated as follows:-*
- *Press the 'TIMER' button and the on time will be displayed with the number of seconds flashing. Adjust the on time using the 'TIME' key.*
- *Press the 'TIMER' button to confirm your selection and the off time will now be displayed, again with the number of seconds flashing. Adjust the off time using the TIME key. Confirm your selection using the 'TIMER' button.*
- *You can now use the 'TIME' key to set the timer to automatically switch the unit off after 5 to 40 minutes (in 5 minute intervals), or to stay on until switched off manually ('C' setting) in exactly the same way as for the Constant Mode described on page 10.*

Reciprocal Mode

- *This mode is similar to the Cycle Mode (described on previous page).*
- *The difference is that in Reciprocal Mode the two channels are switched on and off alternately (i.e. when Channel 1 is on, Channel 2 if off and vice-versa).*
  The TIMER and TIME functions operate in exactly the same way as for the Cycle Mode.

Contraction Mode

- *The Contraction Mode makes muscles gradually contract and relax.*
- *To set the length of the contractions press the 'TIMER' button. The ON time will flash.*
- *Set the ON time using the 'TIME' key and confirm your selection by pressing the 'TIMER' button. There is no OFF time in the contraction mode.*
- *You can now use the 'TIME' key to set the timer to turn the unit off automatically, in the same way as for the Cycle Mode (see page 11).*

Contraction Reciprocal Mode

- *This mode is similar to the Contraction Mode (page 12). The only difference is that in Contraction Reciprocal mode the two channels are on and off alternately (i.e. when Channel 1 is on, Channel 2 if off and vice-versa).*

Contraction Rest Mode

- *This mode is also similar to the Contraction Mode (page 12). The difference is that in this mode, there is a rest period after each contraction.*
- *To set the length of the contractions press the 'TIMER' button. The ON time will now be flashing.*
- *Set the on time using the 'TIME' key and confirm your selection by pressing the 'TIMER' button.*
- *The flashing rest time option is now set using the 'TIME' key, and confirmed using the 'TIMER' button.*
- *You can now set the timer to switch the unit off automatically, or set it to 'C' so that it remains on until manually switched off as before.*

Relaxation Mode

- *Use this mode to relax muscles.*
- *The frequency can be adjusted using the 'FREQ' key.*
- *Both channels are permanently on in this mode, so there are no ON or OFF times to set.*
- *The timer can be set to turn the unit off automatically, or set to remain on until switched off manually, as above.*

Device Failures

- *Please do not attempt to repair damaged devices yourself.*
- *In case of further enquiries, always state the model of your device: i.e. 'Profile EMS.'*
- *Body Clock Profile EMS units should be repaired by qualified technical personnel.*
- *Body Clock Profile EMS units are guaranteed for a period of 5 years against manufacturer's defects excluding (leadwires and electrodes).*
  Note: the guarantee is null and void if any attempt is made to open the unit by unauthorised personnel.
- *In the event of a fault please contact the supplier (address found on the invoice or delivery note)*

or

Body Clock Health Care,
108 George Lane,
South Woodford E18 1AD.
Tel: (+44) (0) 20 8532 9595
Fax: (+44) (0) 20 8532 9551
email: sales@bodyclock.net.

Maintenance and Care

- *Change the batteries regularly.*
- *The unit must be switched off when changing the batteries.*
- *The unit and lead wires may be wiped clean by using a very slightly dampened cloth. Mild soap may be used but DO NOT apply solvents.*
- *Never immerse the stimulator in water.*

General Precautions

- *Do not yank or twist the leadwires. Treat them gently for long life. They are made from fine wire to be flexible and lightweight.*
- *Do not place your Body Clock Profile EMS close to any source of excess heat.*
- *Do not operate your unit in the presence of flammable gases.*
- *Do not attempt to open the Body Clock Profile EMS unit.*
- *Do not use battery or power sources other than those specified.*
- *Do not drop this unit onto a hard surface.*

Checking System Performance

- *If your unit does not appear to be operating properly, try changing the battery. Replacing the battery can eliminate most problems.*
- *Check that the leadwires are properly connected to the unit.*
- *Check the electrodes are firmly attached to the leadwire pins.*
- *Make sure that the leadwires are not damaged or broken.*

Contraindications and Precautions

- *Powered muscle stimulators should not be used by patients with demand type cardiac pacemakers.*
- *Powered muscle stimulators should not be used during pregnancy.*
- *Powered muscle stimulators should not be used until 12 weeks after childbirth.*
- *Do not use this unit while operating machinery or while driving.*
- *Stimulation should not be applied over the carotid nerves, the neck or mouth, transthoracically or transcerebrally.*
- *Stimulation should not be applied over swollen, infected or inflamed areas of skin or over or in proximity to cancerous lesions.*
- *Caution should be used for patients with suspected or diagnosed heart problems, or epilepsy.*
- *Caution should be used where there is a tendency to haemorrhage following acute trauma or fracture, following recent surgical procedures when muscle contraction could disrupt the healing process, over the menstruating uterus, over areas of skin which lack normal sensation.*
- *Some patients may experience mild skin irritation due at the site of the electrodes. This can sometimes be reduced by using alternative electrodes and/or repositioning them.*
- *Electrode placement and stimulation settings should be based on the guidance of the prescribing practitioner.*

Technical Data

Modes

- *8 seven segment digits and around 97 segments*
- *Seven modes*

Constant

Waveform: Symmetrical Biphasic
Frequency changes between 1 and 80Hz
Fixed pulse width 300us

Cycle

Waveform: Symmetrical Biphasic
Frequency changes between 1 and 80Hz
Fixed pulse width 300us

Reciprocal

Waveform: Symmetrical Biphasic
Frequency changes between 1 and 80Hz
Fixed pulse width 300us
When Channel 1 is on, Channel 2 is off, or Reverse

Contraction

Waveform: Symmetrical Biphasic
Pulse widths increase from 40us to 400us then starts again from 40us, Frequency increases from 80Hz to 120Hz the start again from 80Hz within the preset time period.

Contraction Reciprocal

Waveform: Symmetrical Biphasic
Pulse width increases from 40us to 400us then starts again from 40us, Frequencies increase from 80Hz to 120Hz then start again from 80Hz within the preset time period. When Channel 1 is on, Channel 2 is off, or Reverse

Contraction +Rest

Waveform: Symmetrical Biphasic
Pulse widths increase from 40us to 400us then starts again from 40us, Frequency increases from 80Hz to 120Hz then starts again from 80Hz within the preset time period.

Relaxation

Waveform: Monophasic Bipolar
Frequency changes between 1 and 10Hz
Fixed pulse width 50us

	Pulse Frequency (Hz)	*Pulse Width (£gs)*	*Max pk-pk output*
CONSTANT	*1 – 80*	*300*	*95V*
CYCLE	*1 – 80*	*300*	*95V*
RECIPROCAL	*1 – 80*	*300*	*95V*
CONTRACT	*80 – 120*	*40 – 400*	*95V(at 400us) /140V(at 10us)*
CONTRACT RECIP	*80 – 120*	*40 – 400*	*95V(at 400us) /140V(at 10us)*
CONTRACT REST	*80 – 120*	*40 – 400*	*95V(at 400us) /140V(at 10us)*
RELAX	*1 – 10*	*50*	*135V*
	28 selectable frequencies:		
	1, 2, 3, 4, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50,		
	55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 105, 110, 115, 120		
Timer	*Count down timer has 11 selectable settings*		
	Continuous, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50minutes		
Automatic Power Off	*5 Minutes*		
Output Channel	*Dual Channel*		
Output Voltage	*0 – 95V in max pulse width with 20 adjustable steps (500£[load, peak to peak)*		
Output Intensity	*0 – 190mA in max pulse width with 20 adjustable steps (500£[load, peak to peak)*		
	Intensity level drops back to 0 after mode changes		
Output Waveform	*Symmetrical Biphasic and Monophasic Bipolar*		
Output Jacks	*CE Touch-proof jacks*		
Load Detector	*Contact detection between the device and human skin*		
Battery	*2 ° - 1.5V AA Battery (Type LR6)*		
Battery Low Detect	*2.2V°”0.2V*		

ISO 9001: 2000 ISO 13485:2003

EC DIRECTIVE 93/42/EEC Annex V

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