Classic 4

User's Manual

English version 2.1

2009-10

Please read this document first before operate the unit.

Classic 4

Combination of

Electro-acupuncture

TENS/EMS

Contents

Important Safety Instructions

- Do read this instruction manual first to ensure proper operation.

- Do keep this manual in a safe place for future reference.

- Do not drop this device, and keep it away from water or other fluids.

- Never use the Classic 4 when it is not functioning properly or when it is damaged.

Requirements

Before using the Classic 4 with patients you should have received some training in EA and/or TENS/EMS, know how to set up and use equipment correctly, and feel competent in its use. You should also have familiarised yourself with the Classic 4 and this instruction manual.

Your equipment should be thoroughly and regularly checked (at least once each year) to ensure it is performing correctly, and if a device-related adverse incident occurs, you should report this immediately to HMD Europe Ltd.

Finally, ensure that the practice of EA and/or TENS/EMS is covered in your current malpractice and public/products liability insurance policy. If not, you must check with your insurers that additional cover can be provided for these as adjunctive therapy under your policy.

Safety Warning

This equipment may be affected by electro-magnetic interference. Also the Classic 4 may affect other electrical equipment in the close vicinity. If such effects are suspected either switch off the offending equipment or increase the distance between the affected equipment and that suspected of causing the interference. The devise may be sensitive to static discharge, to avoid risks or damage to the unit, do connect to patient before turn on.

Intended Purpose

The Classic 4 stimulator is intended to be used by professionals in the disciplines of Physiotherapy, Acupuncture, Sports Medicine or related. The device is used for electrical stimulation in a TENS /EMS (transcutaneous nerve and muscle electro-stimulation) or electro-acupuncture protocol, in conjunction with usage of electrodes or acupuncture needles.

There could be scope for its use by patients after having been instructed by their practitioner / doctor, who should be satisfied of the appropriateness of this decision.

Indications

Indications for EA

In general, EA can be used for any condition for which acupuncture is indicated, especially when manual stimulation has not brought a response or when stronger stimulation (reduction) is appropriate.

For example, it has been used to reduce pain, help repair nerve damage, decrease inflammation, retard muscle atrophy, relax or strengthen muscle in cases of paralysis, improve microcirculation and tissue repair, and aid relaxation and drug withdrawal.

Indications for TENS

TENS is used for the symptomatic management of acute and non-malignant chronic pain. It has also been used for cancer pain in palliative care, and for nausea.

Contra-Indications

Electro-Stimulation Therapy, TENS/EMS or Electro-Acupuncture should not be used by anyone with a cardiac pacemaker. It should not be used in pregnancy or by people with serious disease unless it is part of an intended treatment protocol.

Contraindications to EA and TENS
a brief checklist

- Undiagnosed pain

- Cancer

- Epilepsy

- Pregnancy

- Patient fitted with a pacemaker or other implanted electronic device

- All patients should be advised NOT to use TENS while driving or operating hazardous equipment

Where not to stimulate

- Over the front of the neck or the carotid sinus (at the side of the neck)

- So that current flows through the brain or heart

- Where there are skin conditions such as eczema

- Where there is abnormal skin (or muscle) sensation. In this case, electrodes (or needles) should be positioned elsewhere to ensure effective stimulation

- At contraindicated acupuncture points.

- When using the Classic 4 for EA, ensure that you do not apply currents of more than 20 mA, and that you use the 'B' (biphasic) and not the 'M' (monophasic) waveform. Never attempt to use a device designed solely for TENS for EA.

- Please refer to your prior training notes for details. If in doubt, do not treat in these circumstances, and always liase with a patient's medical practitioner or consultant.

Parameters to use

For low-frequency, 'acupuncture like' stimulation (ALS, 2-10 Hz), it is generally thought that amplitude should be strong, but not painful. For high-frequency, 'TENS-like' stimulation (TLS, 80-175 Hz), stimulation should be definitely feel able, but not uncomfortable.

There is some agreement in the literature that ALS is more appropriate for chronic pain and flaccid paralysis, with TLS more often recommended for acute pain and spasticity.

However, individuals vary in their response to electrical stimulation. Sometimes it is a matter of trial and error to find which particular combination of parameters is most effective for a particular patient. Adjusting the pulse duration may improve results in some circumstances, as may the use of 'dense-disperse' stimulation (alternating low and high frequencies), or simultaneous application of different parameter combinations at different locations. The Classic 4 gives much scope for exploring such variation. For more details, see the references below.

Where to position needles and surface electrodes

EA: Points may be selected from local (*ashi* or trigger) and distal points, *huatuojiaji* and auricular points, and also from most of the points that you would normally use as an acupuncturist for systemic or syndrome-based treatment.

TENS: Useful illustrations of electrode placements can be found at www.harmonymedical.co.uk

- Note that TLS is more effective when used locally or in an area segmentally related to where the condition is focused, but that ALS may be effective when applied elsewhere as well.

Features (1)

- Versatile electro-therapy for treatment of a wide spectrum of TCM patterns or physical conditions.

- The facility to use different output parameters within the same treatment session.

- The ability to use concurrently as an electro acupuncture stimulator and a TENS/EMS unit.

Features (2)

- 3 Output Modes (Single, Paired, Sync)
- 4 Output Channels
- 24 pre-set frequency settings
- 0.5 Hz – 200 Hz
- 20mA capped, can be raised to maximum of 60mA output current
- 28 pre-set programmes
- 8 user-defined programmes

Unit Layout
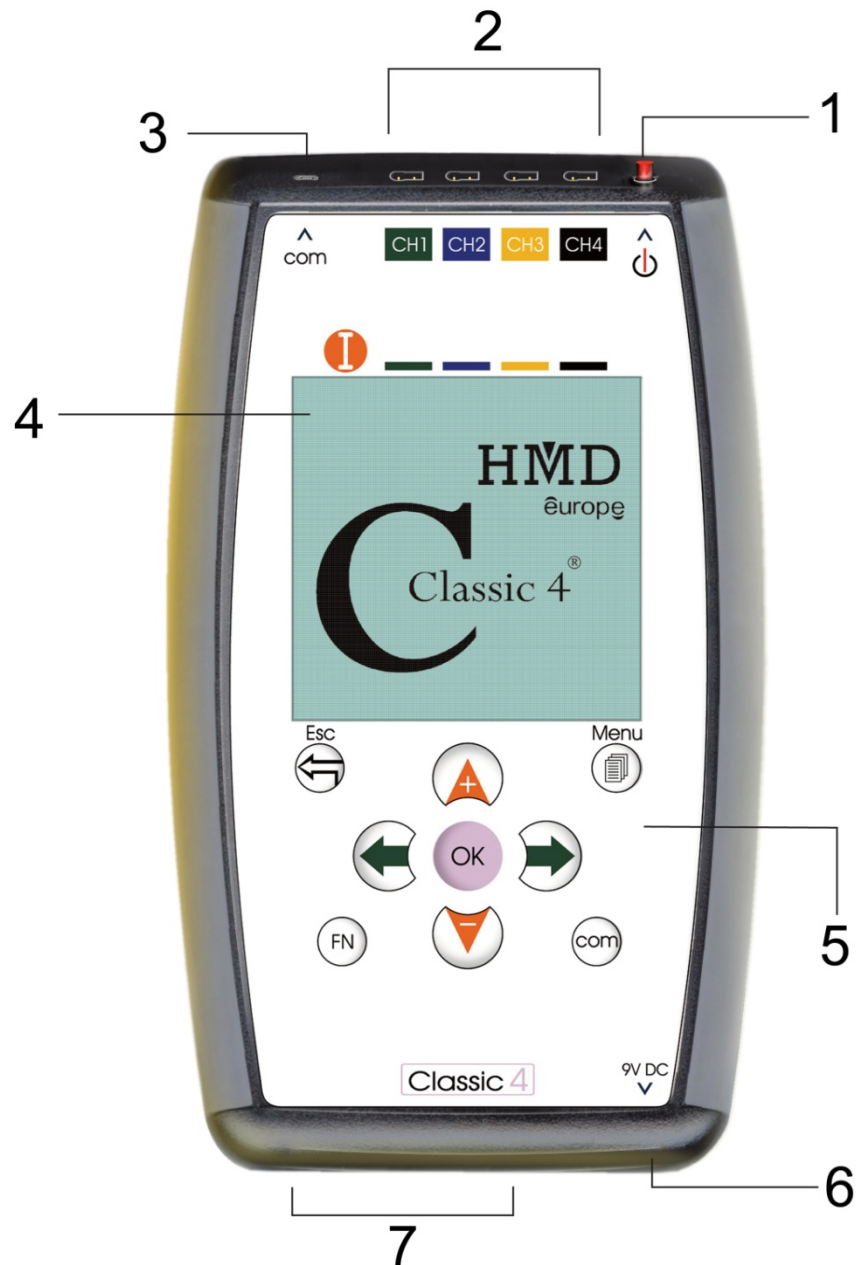
1. On/Off switch

2. Output channel sockets

3. Communication port

4. Screen

5. Control keys

6. Adaptor socket

7. Battery compartment

Screen Layout (1)

	1 ⚡	2	3	4
I mA	8.2 ◆	0.0	0.0	0.0
🕐 min	10	5	15	20
f_1 Hz	10	2	80	200
p_1 µs	128	256	192	64
t_1 s	3.0	3.0	2.0	2.0
f_2 Hz	10	3	2	150
p_2 µs	128	256	192	64
t_2 s	0.0	2.0	3.0	1.0

f1-f2	⎍	⋀	⎍	⋀
M/B	⊓⊔⊓	⊓⊔⊓	⊓⊓	⊓⊓

- The screen of Classic 4 is divided into a table with 5 columns and 11 rows.

- Each entry in the 1st column shows what parameters are used for that row in the other four columns of the table

- The top row shows the number of channel

Screen Layout (2)
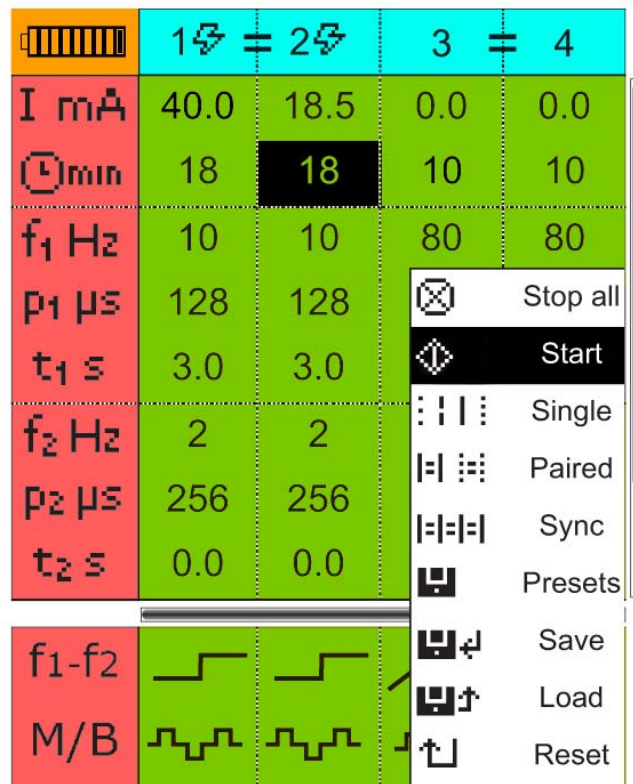
- Number of output channel
- Electrical parameters
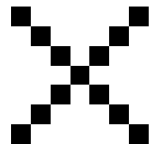- Low Battery Indicator
- Working area
- Pop-up menu
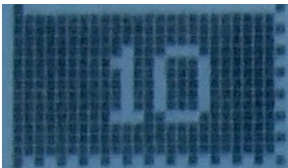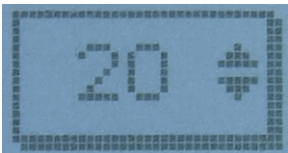
Control Keys (1)

Esc	Esc Key. Cancel action or selection, go back to previous action.
Menu	Menu Key. Choose from a list of actions. The main Menu includes Start/Stop options, selection of output Modes, Load and Save programmes, and Reset.
OK	OK key. To CONFIRM and accept selected / changed value.
Up	Up Key. Press to move the cursor Up or Click to INCREASE value inside and Active Cell. (Note: keep this key pressed for rapid increase)
Down	Down Key. Press to move the cursor Down or Click to DECREASE value inside and Active Cell. (Note: keep this key pressed for rapid increase)

Control Keys (2)

|	
←	Left Key. Move LEFT to previous channel from current cursor position.
→	Right Key. Move RIGHT to next channel from current cursor position.
FN	FN Key. Function key can be used in combination with other Control Keys for rapid action.
com	COM Key. Com key can be used in combination with other Control Keys for external communication and applications. (Note. The function of this key is currently under development and is not available to the user at this version.)

Channel and Cursor

|		
	Channel is Active	When Channel Active sign is turned ON, it indicates the channel is ready for treatment use.
	Active in High Current	When an active channel is operated beyond 20mA, the icon is changed from hollow to a solid lighting symbol.
	Channel is Faulty	When Channel Faulty sign is turned ON, the output amplitude of that channel is automatically shut down.
	Cursor Cell	The highlighted Cell is the current position of your cursor.
	Active Cell	An Active Cell is indicated with an Up/Down arrow sign inside the cell. You can change the value in the cell by using the **Up / Down Control Keys**.

Select Output Channel

- The output sockets are located at the top of your unit. When the unit is turned on, the screen presents a table with 5 columns. The left column lists all available parameters. The remaining 4 columns, with headings numbered 1 to 4, correspond to output channel sockets 1 to 4.

- When the cursor is within the chosen Channel (column), press the **Menu Key** to apply an option or to activate the output channel with the **Start** command.
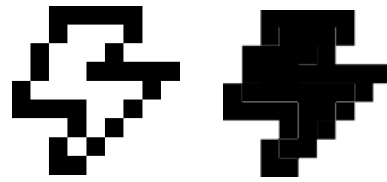
Activated Channel

When the **Start key** is selected, the activated channel(s) will be identified by a small lightning icon next to the channel number(s) and the treatment time count will start counting down. Each channel is capped at 20mA for safety operation in electroacupuncture. To operate a channel beyond 20mA, press the **FN key** when the intensity reaches 20mA, the lightning icon is changed from hollow to solid.
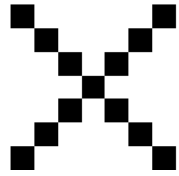
Faulty Channel

- When the X sign appears next to a channel accompanied by a sound (bleep) this indicates that there is an error on the channel.

- The output of that channel is automatically cut off.

- Read the "Trouble shooting" section of this manual to rectify problem.

The Main Menu

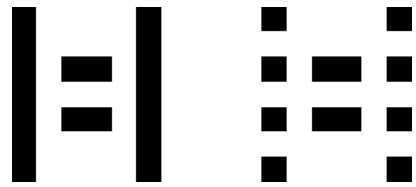|	1 ⚡	2	3	4
I mA	5.5	**0.0**	⊠	Stop all
⏱ min	10	5	◆	**Start**
f_1 Hz	10	2	∶||∶	Single
p_1 μs	128	256	|=| ∷	Paired
t_1 s	3.0	3.0	|=|=|	Sync
			💾	Presets
f_2 Hz	10	3	💾↵	Save
p_2 μs	128	256	💾↥	Load
t_2 s	0.0	2.0	↴	Reset

- When the **Menu Key** is pressed, the Main Menu appears if the cursor is on a channel that is not activated.

- The Main Menu presents all the options for operating your device.

- Use the **Up/Down keys** to scroll to desire option, press the **OK key** to confirm.
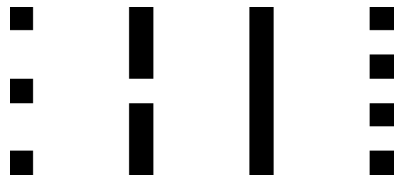
Single Mode

	1	2	3	4
I mA	8.2 ⬍	0.0	0.0	0.0
⏱min	10	5	15	20
f_1 Hz	10	2	80	200
p_1 μs	128	256	192	64
t_1 s	3.0	3.0	2.0	2.0
f_2 Hz	10	3	2	150
p_2 μs	128	256	192	64
t_2 s	0.0	2.0	3.0	1.0

	1	2	3	4
f1-f2	⌐	∧	⌐	∧
M/B	⊓⊔⊓	⊓⊔⊓	⊓⊓	⊓⊓

- Selecting this option allows you to set any parameter for any for a single channel independently of those chosen for the other three. With the cursor on the chosen channel, it can be activated by selecting the **Start** option.

- Note: no connecting bars between the channel numbers.

Paired Mode

	1 ⚡ ≑ 2 ⚡		3 ≑ 4	
I mA	40.0	18.5	0.0	0.0
🕐 min	18	18	**10**	10
f_1 Hz	10	10	80	80
p_1 µs	128	128	128	128
t_1 s	3.0	3.0	1.0	1.0
f_2 Hz	2	2	10	10
p_2 µs	256	256	128	128
t_2 s	0.0	0.0	0.5	0.5
f_1-f_2	⎍	⎍	⋀	⋀
M/B	⊓⊔⊓	⊓⊔⊓	⊓⊓	⊓⊓

- Selecting this option will set the parameters for channels 1 and 2 as a pair, and those for channels 3 and 4 as a second pair.

- In this mode, the parameters set for either member of a pair of channels will automatically be copied to the other one (except for the Timer duration, and amplitude once the channels have been started). The pulses from the two paired channels will be synchronised.

|=|=|=| Sync Mode

	1⚡	2	3⚡	4⚡
I mA	2.0 ⬍	0.0	60.0	1.0
🕐min	10	5	40	30
f₁ Hz	10	10	10	10
p₁ μs	128	128	128	128
t₁ s	3.0	3.0	3.0	3.0
f₂ Hz	10	10	10	10
p₂ μs	128	128	128	128
t₂ s	0.0	0.0	0.0	0.0
f1-f2	⎍	⎍	⎍	⎍
M/B	⊓⊔⊓	⊓⊔⊓	⊓⊔⊓	⊓⊔⊓

- Selecting this option will set channels 1, 2, 3 and 4 to run in synchrony.

- In this mode, the parameters set for channel #1 will be automatically be copied to the other three (except for the Timer duration, and amplitude once the channels have been started). The pulses from the four channels will be synchronised.

- Sync Mode is the factory pre-set default.

Start

	1 ⚡	2	3	4
I mA	5.5	**0.0**	⊗ Stop all	
⏱min	10	5	◈ Start	
f₁ Hz	10	2	⋮	⋮ Single	
p₁ μs	128	256	⊧ ⋮⊧ Paired	
t₁ s	3.0	3.0	⊧⊧⊧ Sync	
f₂ Hz	10	3	💾 Presets	
p₂ μs	128	256	💾↵ Save	
t₂ s	0.0	2.0	💾↥ Load	
			↱ Reset	

Start – to start the selected channel after locating the cursor on its column. The activated channel(s) will be identified by a small lightning icon next to the channel number(s) and the treatment time count will start counting down.

Stop/Stop All Menu

	1 ⚡ = 2 ⚡		3 = 4	
I mA	40.0	18.5	0.0	0.0
⏱min	18	**18**	10	10
f₁ Hz	10	10	80	80
p₁ µs	128	128	✕ Stop	
t₁ s	3.0	3.0	⊠ Stop All	
f₂ Hz	2	2	10	10
p₂ µs	256	256	128	128
t₂ s	0.0	0.0	0.5	0.5
f1-f2	⌐_⌐	⌐_⌐	⋀	⋀
M/B	⊓⊔⊓	⊓⊔⊓	⊓⊓	⊓⊓

- When the **Menu Key** is pressed, and the cursor is on a channel that is activated, the Stop/Stop All menu appears on-screen.

- Use the **Up/Down keys** to scroll options, and press the **OK key** to confirm.

Stop – to stop output to the selected channel.

Stop All – to stop output to all active channels

Reset parameters

Reset Values - when this option is highlighted and the **OK key** is pressed, the parameters will be reset to the values previous installed for the selected Channel.

Parameters (1)

I mA	Output current amplitude in mA
⧗min	Treatment duration timer (0 – 90 minutes)
f₁ Hz	Repetition frequency of 1st set of pulses
P₁ μs	Width of 1st set of pulses in microseconds
t₁ s	Burst duration for 1st set of pulses in seconds

Parameters (2)

f_2 Hz	Repetition frequency of 2nd set of pulses
p_2 μs	Width of 2nd set of pulses in microseconds
t_2 s	Burst duration for 2nd set of pulses in seconds
f_1-f_2	The types of change from 1st pulses to 2nd pulses. Ramped or Step.
M/B	Waveform: symmetrical biphasic or monophasic

Ⅰ **Set the Parameters**

The Classic 4 is a versatile and powerful stimulator. You can set the frequency, pulse waveform, pulse duration, and timing of each set of pulses and channel according to your clinical needs. You can fine-tune and modify your settings rapidly in various ways. The basic methods are:

• Load preset parameters

• Load saved parameters

• Set your own parameters

Ⓘ Set your own parameters (1)

The parameters f1 (frequency #1), p1 (pulse width #1) and t1 (duration of 'on' time #1) refer to an interval of duration t1 during which pulses are emitted at a repetition frequency f1 and with a pulse width p1.

The parameters f2 (frequency #2), p2 (pulse width #1) and t2 (duration of 'on' time #2) refer to an interval of duration t2 during which pulses are issued at a repetition frequency f2 and with a pulse width p2.

At the end of time t1, the characteristics of the pulses (f1, p1, t1) will change to those of the second set of pulses (f2, p2, t2). Subsequently, at the end of this second interval (t2) the parameters will revert to those of the first set for the duration of t1, and so on.

Ⓘ **Set your own parameters** (2)

If t2 is set to zero, the pulses will run continuously with the settings for the first set of pulses (f1, p1, t1).

To change any of these parameters, position the cursor on the desired one, and then press the **OK key**. A small window will open and the value inside the window can be changed up or down by pressing the **Up key** or the **Down key**. A quick press will change the value to the next one, whereas keeping the button pressed will scan through the available values.

List of Presets (1)

Presets Name	f1 Hz	p1 us	t1s	f2 Hz	p2 us	t2s	f1-f2	M/B
2 Hz C	2	256	3	2	256	0	Stepped	Bipolar
5 Hz C	5	256	3	5	256	0	Stepped	Bipolar
10 Hz C (Default)	10	128	3	10	128	0	Stepped	Bipolar
10 Hz Short pulse	10	64	3	10	64	0	Stepped	Bipolar
80 Hz C (Gate Control)	80	128	3	80	128	0	Stepped	Bipolar
100 Hz C	100	128	3	100	128	0	Stepped	Bipolar
150 Hz C	150	64	3	150	64	0	Stepped	Bipolar
0.5/1 Hz (Min setting)	0.5	64	3	1	64	3	Stepped	Bipolar
0.5/10 Hz (Unequal pulses)	10	192	5	0.5	256	3	Ramping	Bipolar
0.5/80 Hz Equal pulses	0.5	128	6	80	128	6	Stepped	Bipolar
2/15 Hz (Equal pulses)	15	192	3	2	192	3	Stepped	Bipolar
2/80 Hz (Equal pulses)	2	192	3	80	192	3	Stepped	Bipolar
2/80 Hz (Short pulse)	2	64	3	80	64	3	Ramping	Bipolar
2/100 Hz (Unequal pulses)	100	128	3	2	192	3	Stepped	Bipolar

List of Presets (2)

Presets Name	f1 Hz	p1 us	t1s	f2 Hz	p2 us	t2s	f1-f2	M/B
60/80 Hz Stepped	60	64	10	80	64	10	Stepped	Bipolar
2 Hz (Pulse Modulated)	2	256	2	2	64	2	Stepped	Bipolar
80 Hz (Pulse modulated)	80	192	2	80	64	2	Stepped	Bipolar
20 Hz Burst	20	192	5	20	0	3	Ramping	Bipolar
100 Hz (Burst)	100	128	3	100	0	3	Stepped	Bipolar
10 Hz short pulse (R)	10	64	3	10	64	0	Ramping	Bipolar
200 Hz C (R)	200	64	2	200	64	0	Ramping	Bipolar
0.5/10 Hz (R)	0.5	256	3	10	192	5	Ramping	Bipolar
2/80 Hz (R)	80	64	3	2	192	3	Ramping	Bipolar
60/80 Hz (R)	60	64	10	80	64	10	Ramping	Bipolar
80 Hz (Pulse Ramp)	80	192	3	80	64	3	Ramping	Bipolar
50 Hz Burst (R)	50	128	4	50	0	6	Stepped	Bipolar
80 Hz Long Burst (R)	80	64	6	80	0	2	Ramping	Bipolar
200 Hz short burst (R)	200	64	2	200	0	1	Ramping	Bipolar

Load Presets

f_1 Hz	3	10
P_1 µs	64	128
t_1 s	30	3.0
f_2 Hz	18	10
p_2 µs	64	128
t_2 s	30	0.0
$f_1\,f_2$		
M/B		

Preset

10 Hz C (Default)

1. Select the channel(s), press the **Menu key**, move the **Up/Down keys** to select **Preset**.

2. This option will lead to a new screen opens, as shown to the left. Use the **Up/Down keys** to scroll through the list of presets. The preset parameters are shown in the right column. Press the **OK key** on the desired set.

3. This will load the relevant parameters and copy them over into your selected channel(s) in the left column.
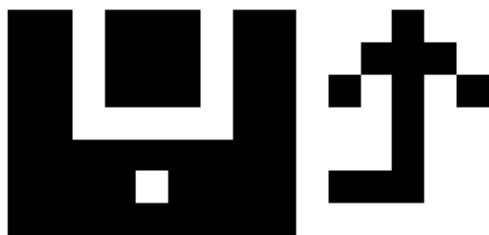
Load Your Favourite

1. Select the channel where you want your favourite to be loaded.

2. Press the **Menu key**, move the **Up/Down keys** to select **Load**. A new window opens, as shown in the left.

3. Use **Up/Down keys** to flick through your saved favourite as in User P1 to P8, click **OK key** to confirm.

4. The left column shows values of your existing channel, the right column shows the stored values.

Save Your Favourite
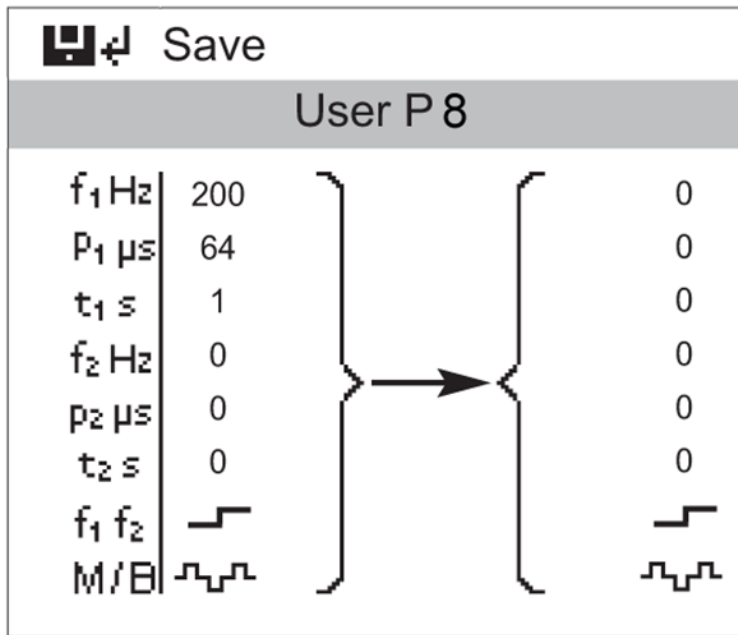
1. This option will lead to a second screen as shown on the left. Eight User slots are available.

2. Use the **Up/Down keys** to select which slot you want to save your parameters. Existing parameters in the slot will be over-written with your new values.

3. The values saved are taken from the single chosen channel only.

Starting the Treatment

Preparation

- Prepare your patient for treatment – keep your patient calm and relaxed.

- Switch ON the Classic 4 stimulator. Check that the screen lights up showing all channels and the low battery indicator is not on.

- Switch OFF the Classic 4.

- Insert output cables in channel sockets.

- Connect output cable(s) to your patient.

- Turn ON the Classic 4 again. The unit is ready to use.

Instruction for use with acupuncture needles

1. Determine the Output mode for your unit.

2. Populate parameters for each channel you want to use.

3. Set the treatment timer for each output channel.

4. Connect output wires to needles/electrodes.

5. Move cursor to highlight the channel you want to begin, press **Menu key**, use **Up/Down keys** to highlight **Start** option, press the **OK key**. The channel is now active.

6. An Active cell opens. Use the **Up/Down keys** to increase the intensity as appropriate, pressing the **OK key** to lock the current intensity.

7. Repeat steps 5 to 6 for the other channels you wish to use. The treatment timer counts down automatically once the channel is set to **Start**, and turns the channel off at this point when it reaches zero. An audio sound is also emitted.

Making adjustments during treatment

1) To adjust the current intensity, go to that channel, press the **OK key** so that the cell is **Active**, use the **Up/Down keys** to make your adjustment, and confirm with **OK key** again.

2) To increase/decrease duration of the treatment session, move the cursor to where the channel and treatment timer (row) meet, press the **OK key** so that the cell is **Active**, use the **Up/Down keys** to increase/decrease the timer setting, and press the **OK key** again to confirm.

3) Each channel is capped at 20mA for safety in electroacupuncture, to increase beyond 20mA, press the **FN key,** and use the **Up key** to increase, and confirm with **OK key** again.

• For safety and the patient's comfort, in both Sync and Paired Output modes only the output current intensity and treatment timer are adjustable during a treatment session without resetting the channel. In the more advanced Single Output mode, you can make adjustments to all parameters. However, there will be a timed delay before these changes take place.

Stop and Resume a Treatment

- To stop or pause a channel or pair of channels, move your cursor to the channel you wish to pause or stop, press the **Menu key** to open the **Stop sub-menu**, select **Stop** to stop the highlight channel, or **Stop All** channels. This sets the current of selected channel gently to zero, and the treatment timer is set to pause. .

- To resume treatment, press the **Menu key**, select **Start** and adjust the output current again.

Treatment Completed

- When a treatment session is completed, turn off the power.

- Disconnect cables from acupuncture needles or electrodes. Then remove plugs from output sockets.

After Treatment

- Replace battery if the Low Battery sign appears during a treatment session.

- Remove the battery from the battery compartment if the unit is not required for more than a few days.

- Remove the AC/DC adaptor if an external adaptor has been used.

Storage and Transportation

- Store unit in a dry location free from dust and contamination, where the temperature remains constant and within the range of 16ºC to 40ºC (61ºF to 104ºF), humidity between 15% and 95%.

- Do not drop or mishandle. During transportation, always secure the unit in its original case or in a protective container.

Care and Maintenance

- Maintenance of the stimulator is limited to periodically wiping clean the unit using a clean, soft, damp cloth with mild soap solution or water. Using other cleaning solutions may damage the unit.

- DO NOT IMMERSE STIMULATOR IN ANY CLEANING SOLUTION.

- The output leads should be wiped clean with a cloth dampened with mild soap solution and then wiped dry.

- The unit can be used life-long, unless it develops a malfunction. It does not have a limited shelf life or a restricted 'use by' date. To have your unit serviced or repaired contact an authorized dealer.

Trouble shooting (1)

- If an X sign flashes in the display on a channel, accompanied by an audio sound (beep), the channel is automatically shut down. This may indicate that the channel has been short-circuited, or a cable is disconnected or broken.

- If the X sign appears, please investigate the cause(s) of the problem before the channel is re-activated.

Trouble shooting (2)

- When your unit does not respond to any action with your key pads and your screen freezes, turn off the unit by switching off the power. Remove all cables from your unit before turning it on again. Check that the unit operates correctly before re-connecting the cables. Start your treatment again.

Trouble shooting (3)

- Check and replace battery if the screen does not turn on after the unit is switched on.

- If the problem still cannot be resolved, the unit should be returned for repair. Do not attempt to repair the unit yourself, but return it to your local authorized dealer, or contact the manufacturer for repair or service.

Technical Specifications

Frequencies: in Hz.

0.5, 1, 1.5, 2, 2.5, 3, 5, 7, 8, 10

15, 18, 20, 25, 30, 40, 50, 60, 80

100, 125, 150, 175, 200

Pulse duration: 0, 64, 128, 192, 256μs

Timer (t1 / t2): in second:

0, 1, 2, 3, 5, 10, 30, 60, 120, 240, 600, 900

Waveform:

Biphasic symmetrical alternating rectangular pulses (charge balanced),

Monophasic rectangular pulses

Output modes:

Constant, Modulated, Burst, Ramped and User-defined programmes

Size: 145x88x20mm

Power: 1x9V battery/external adaptor

Weight: 260 grams

(including battery)

Output channels: 4 channels

Timer: 5-90 minutes

Low Battery Indicator

The low battery indicator will begin to flash when the battery becomes low. You may continue to use the unit for your current treatment session and replace the battery for your next session. When the low battery indicator flashes with ONE bar showing, please do not start your treatment session, but replace with a new battery immediately.

Battery

Switch off the unit.

To change a battery, push open the battery compartment at the back of the unit.

Remove the used battery from the battery compartment.

Insert a new battery according to the diagram. The device is protected from damage if the battery is inserted incorrectly, but the device may not function correctly.

Always check the polarity.

9V DC AC/DC Adaptor

- Only use an AC/DC adaptor which is supplied or approved by the manufacturer. The adoptor must suitable for medical devices with the Maximum output 10 VA.

- Switch off your Classic 4 and disconnect any connected channel.

- Switch off the power supply of your AC/DC adaptor before connecting the plug into Classic 4's AC/DC socket.

- Turn on the power supply first, before switching on your Classic 4.

- An adaptor is only supplied as an optional item.

Communication Port

- DONOT remove the protective cap from the Communication Port.

- DO NOT connect to the Communication Port.

- In the current version of Classic 4, the Communication Port is used by the manufacturer for programming and diagnostic of the device, and is not designed to be used by users.

- The communication port will become available for users as add-on devices and applications are developed.

Standards

Classic 4 Stimulator - complies with:

93/42/EEC

EN60601-1:2008
EN60601-1-2: 2007

Main Unit and Accessories

- Main treatment unit   1 pc   Art No. MA304
- Connecting cable to electrode   4 pcs   Art No. MB113
  (in four colour - GBYB)
- Alligator clips to 2 pin jacks electrode cords
                                      4 pcs   Art No. MB160A
- User's Manual (CD)   1 pc   Art No. MA3042
- PP3 9 Volts battery   1 pc   Art No. MB902

Optional Accessories

- Carrying Case   Art No. MB1084
- AC/DC adaptor   Art No. MB1086
- Grip-type connector to 2mm pin   Art No. MB120
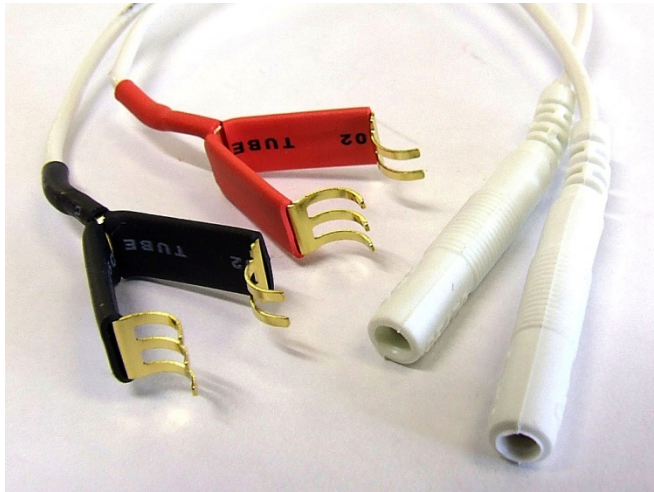
Explanation of Symbols

$C \in_{0120}$	CE mark of conformity. The device confirms with the Essential Requirements for Medical Devices Directive 93/42/EEC as supervised by SGS United Kingdom Limited, Notified Body Number 0120
	The manufacturer of the medical device
	Attention! Consult accompanying documents.
	TYPE BF APPLIED PART
	The device is manufactured in the year shown next to the Symbol
	Contains electronic parts subject to local / national disposal / recycle requirements.
IP30	Specification for degrees of protection provided by enclosures (IP code) according to EN 60529

Warranty

This Classic 4 electrical stimulator is warranted to the initial purchaser against any defects in material and workmanship for a period of twelve months from the date of purchase. If the stimulator is found to be defective within the warranty period, it will be repaired or replaced if returned prepaid to an authorized dealer. This warranty does not cover damage caused by rental, misuse, negligence, accidents and abuse, or alteration or modification of the unit. No liability is held in either tort or contract for any loss or damage, direct, consequential, or incidental arising out of the use, misuse or inability to use this product.

Declaration of Conformity

HMD Europe Limited declares that the medical device describes as Classic 4 has been classified as Class IIa and is in conformity with the essential requirements and provisions of Council Directive 93/42/EEC and in conformity with the national standard transposing harmonised standard EN60601-1:2008, EN60601- 1-2:2007 and is subject to the procedures set out in Annex V of Directive 93/42/EEC under the supervision of Notified Body Number 0120, SGS United Kingdom Ltd

London, 6 October 2009.

P.Choy

Director

on behalf of HMD Europe Limited

$C\,E\,0120$

Manufacturer

H M D Europe Ltd

629 High Road Leytonstone

London E11 4PA, UK

Tel: +44 (0)20 8558 8205

http://www.hmd-europe.com

Please record this information and keep this User's Manual in a safe place for future reference

Serial No: _____

(located on the back of the device.)

Date Purchased: _____

Dealer Stamp:

Resources

The following books provide further information:

- Johnson MI (2008). Transcutaneous electrical nerve stimulation (TENS). In Watson T (Ed.), *Electrotherapy: Evidence-based practice* (pp. 253-296). Edinburgh: Churchill Livingstone

- Mayor DF (Ed.). (2007). *Electroacupuncture: A practical manual and resource*. Edinburgh: Churchill Livingstone.

- For training in the use of EA or TENS, contact your own professional organisation. If you are an acupuncture practitioner in the UK, the Acupuncture Association of Chartered Physiotherapists (AACP) and British Medical Acupuncture Society (BMAS) run courses on EA. For British Acupuncture Council (BAcC) members or other qualified acupuncturists, courses can be arranged with David Mayor.

Useful websites:

www.electroacupunctureknowledge.com (for information on EA studies)

www.electrotherapy.org (for general information on TENS and electrotherapy)

www.tens4u.co.uk (for illustrations of electrode placement)

www.harmonymedical.co.uk (for supply of medical devices, accessories and general reference)

www.aacp.uk.com (for the AACP)

www.acupuncture.org.uk (for the BAcC)

www.medical-acupuncture.co.uk (for the BMAS)

www.welwynacupuncture.co.uk (for David Mayor)