

2B™ User Manual



Advanced Dual Channel Electro Stimulation Control Unit

Issue 2.6 March 2017
Firmware issue 2.105

Index

INDEX	2
CERTIFICATE OF CONFORMITY	4
US Regulatory Wireless Notice	4
European Union Notice	4
COPYRIGHT NOTICE	4
WELCOME	5
Key Features	5
Power and Control	5
QUICK START	6
HOW TO PLAY	8
Contacts	8
Surface Electrodes	8
Connection Cables	8
Electrode Positioning	8
Do's and Don'ts	8
FITTING A BATTERY	9
EXTERNAL POWER SUPPLY	9
USER CONTROLS	10
Overview	10
Channel Level Controls	11
Joining Controls (A+B Mode)	11
Select Button	11
Adjust Control	11
Displays	11
Adjusting Contrast	11
INPUTS AND OUTPUTS	12
Outputs	12
Inputs	12
MODES	13
Selecting a Mode	13
SYSTEM MODES	14
Backlight Control	14
Battery Level	14
Power Selection	14
Factory Reset	15
Commander	15
System Info	15
PROGRAM MODES	16
Pulse Mode	16
Continuous Mode	16
A & B Split Modes	16
Wave Mode	17
Waterfall Mode	17
Squeeze Mode	17
Milk Mode	17
Throb Mode	18
Thrust Mode	18
Random Mode	18
Step Mode	18
Training Mode	19
Tickle Mode	19
AUDIO	20
Stereo Input	20
Microphone	20

DIGITAL LINK	21
Bootloader	21
GETTING MORE	21
ACCESSORIES	21
ADDITIONAL NOTES	22
Storage	22
Cleaning	22
QUICK GUIDE TO MODES	23
SPECIFICATIONS	24
PROBLEMS?	25

Certificate of Conformity

US Regulatory Wireless Notice

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The FCC requires the user to be notified that any changes or modifications made to the device that are not expressly approved by E-Stim Systems Ltd may void the users authority to operate the equipment.

European Union Notice

Products bearing the CE marking comply with the EMC Directive (89/336/EEC), and the Low voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European norms (in parentheses are the equivalent international standards and regulations.)

EN 55022 (CISPR 22) – Electromagnetic Interference, EN 55024 (IEC61000-4-2,3,4,5,6,8,11) – Electromagnetic Immunity, and EN 60950 (IEC 60950) – Product Safety.

This device may be used in all European Union Countries.

Type BF outputs

Copyright Notice

All images and text within this manual are ©E-Stim Systems Ltd 2007-2017

EBox™, EBox 2B™, 2B™, Uplink™, Commander2™ and derivative terms are trademarks of E-Stim Systems Ltd.

All rights reserved. E & OE.

Welcome

Congratulations on purchasing an E-Stim Systems Series 2B™. Given sufficient care your 2B™ unit should give you many years of erotic electro-stimulated pleasure. Before starting always read the instructions and ensure you are completely familiar with all of the controls and the safety warnings prior to use.

We have tried to make the control system simple and easy to use, without compromising on the features available. You should find something for everyone, and if you don't then let us know.

Key Features

<ul style="list-style-type: none">• Dual isolated channels with independent controls.• Clear and simple control system.• 2 Main power settings.• Adjustable response stereo line-in sampling system.• Upgradeable and controllable via optional digital link interface.• Lifetime Guarantee.	<ul style="list-style-type: none">• Backlit LCD screen.• Multiple programs with Triphase options.• Built in microphone & Stereo Audio Input.• Battery and mains power options.• Lightweight and portable.• Safe isolated biphasic outputs.
---	---

Power and Control

As well as offering all the interesting modes like pulse, tickle and squeeze, the 2B will run in two different power levels. 'L' (for LOW power) is the default setting and is ideal for those people who are just starting out on their E-Stim experience, whilst the 'H' high power setting takes the 2B unit into a whole new realm of serious power output. For more details on the power system see page 14.

The 2B can also be operated from the mains via an optional DC/Mains adaptor. This is a high quality switched mode device that is designed to provide the 2B with exactly what it needs in terms of power. We recommend you DO NOT attempt to use other power supplies, as they are designed for this unit. Doing so may invalidate your guarantee.

SAFETY WARNING

(DO NOT CONNECT THE E-Stim Systems EBox™ 2B UNIT OR ANY ELECTRICAL DEVICE TO ANY LOCATION ABOVE THE WAIST (ACROSS THE ARMS COUNTS AS ABOVE THE WAIST!), BUT ESPECIALLY DO NOT CONNECT ACROSS THE HEART, CHEST, NECK OR HEAD. DO NOT USE IF FITTED WITH A PACEMAKER OR ARE PREGNANT. REMEMBER YOU USE THIS DEVICE AT YOUR OWN RISK. YOU MUST READ AND UNDERSTAND THE USER MANUAL AND ALL OTHER INSTRUCTIONS BEFORE ATTEMPTING OPERATION.

Quick start

The 2B unit is an advanced multiple program E-Stim unit designed to be used by beginners and advanced users alike. It has advanced safety features as well as an extensive control system and easy to use controls. We strongly recommend you read the manual from cover to cover, but we have a quick start guide to help you with your first explorations.

Once you have fitted the battery (page 8), find the on-off slide switch and turn the unit on. Make sure you have nothing else attached to the unit.

The LCD should light up, and text appears. If the LCD illuminates, but no text appears then you may need to adjust the contrast. (page 11). Once your 2B has started up you should see a display similar to

```
P u l s e           5 0 : 5 0
A : O F F         L   B : O F F
```

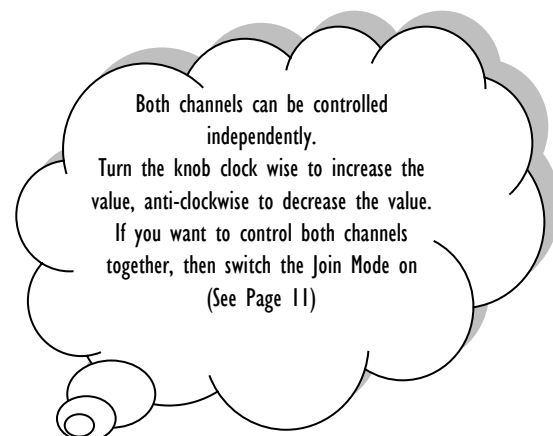
This shows the unit is in **Pulse mode**, with both outputs set to **OFF**, output power is set to **low**, and the pulse rate and pulse feel are both set to 50. If you see something different it may be because your 2B has 'remembered' previous settings. To get a 2B back to 'normal' settings you may need to perform a Factory Reset (Page 15).

With no cables or electrodes connected, turn the knob marked 'Channel A level' (the knob on the left) clockwise. You should notice the blue channel A LED (top right), start to flash and the display changes to

```
P u l s e           5 0 : 5 0
A : 3 3 %         L   B : O F F
```

The actual value shown is dependent on how much you turn the Channel A knob. Now adjust the knob marked 'Channel B level' (the knob on the right) clockwise. You should now notice the channel B led (bottom right), start to flash and the display changes to

```
P u l s e           5 0 : 5 0
A : 3 3 %         L   B : 2 7 %
```



You have now successfully adjusted the channels output level. Again the actual value is dependent on how much you turn the Channel knob.

Now turn the Adjust knob (the centre knob) and you will notice the value on the top line of the screen change, as well as the rate the LEDs are flashing.

```
P u l s e           3 0 : 5 0
A : 3 3 %         L   B : 2 7 %
```

Now press and hold the select button, and **at the same time** turn the Adjust knob (the centre knob) and you will notice the second value on the top line of the screen change, this is the pulse feel setting.

```
P u l s e           3 0 : 6 3
A : 3 3 %         L   B : 2 7 %
```

Not all modes use both the options to change adjustments, it will depend on the mode selected. If the ':' is not displayed, then the select+adjust option is not available.

How do you select a mode? Simple press the SELECT button twice (a 'double' press') and the display should change to



1 P u l s e
U s e A D J U S T t o c h

with a scrolling message. Use the adjust knob to cycle through the available modes and then press the select button to choose the mode. For more details on the available modes see page 13.

Now for the fun part.

Turn the unit off and connect a suitable electrode via the output connectors. (Page 12) Connect an electrode to a suitable section of the body.

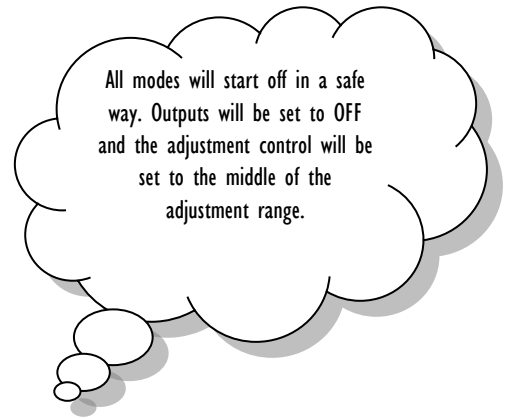
(DO NOT CONNECT THE 2B UNIT OR ANY ELECTRICAL DEVICE TO ANY LOCATION ABOVE THE WAIST (ACROSS THE ARMS COUNTS AS ABOVE THE WAIST!), BUT ESPECIALLY DO NOT CONNECT ACROSS THE HEART, CHEST, NECK OR HEAD. DO NOT USE IF FITTED WITH A PACEMAKER OR ARE PREGNANT. REMEMBER YOU USE THIS DEVICE AT YOUR OWN RISK.

Turn the unit on and slowly turn the output level control up. You should start to feel a slight tingling sensation from the electrode site.

Not powerful enough? The 2B operates in two modes LOW Power and High Power. See page 14 for details on how to switch your 2B box to the high power level. And if you want even more power, then connect our external power supply unit.

Experiment! Only with experience will you get the most out of your 2B. You will find that different modes and levels will give different sensations.

Always bear in mind the safety warnings.



SAFETY WARNING
(DO NOT CONNECT THE 2B POWER UNIT OR ANY ELECTRICAL DEVICE TO ANY LOCATION ABOVE THE WAIST (ACROSS THE ARMS COUNTS AS ABOVE THE WAIST!), BUT ESPECIALLY DO NOT CONNECT ACROSS THE HEART, CHEST, NECK OR HEAD. DO NOT USE IF FITTED WITH A PACEMAKER OR ARE PREGNANT. REMEMBER YOU USE THIS DEVICE AT YOUR OWN RISK. YOU MUST READ AND UNDERSTAND THE USER MANUAL AND ALL OTHER INSTRUCTIONS BEFORE ATTEMPTING OPERATION.

How to play

Contacts

Electroplay needs at least **two** points of contact in order for it to work. This pack is supplied with two sets of monopole electrodes (2 sets of pads), So you will need a minimum of two pads connected at the same time to the same channel for everything to work, unless of course you purchase additional electrodes.



Surface Electrodes

Inside the 2B pack you will find 4 re-usable self-adhesive electro pads. These are used in pairs and stick to the surface of the skin. When you have finished using them they should be returned to the plastic carrier sheet for protection.

Connection Cables

A connection cable has two coloured plugs on one end, and a jack plug on the other. Each of the two coloured pin plugs insert into one socket on a pad. 2 2mm/TENS cables are supplied with the 2B pack.

The jack plug then plugs into one of the outer sockets on the power box. Do not connect or disconnect any electrode while the power box is switched on, or you may receive an inadvertent electric shock.

To remove a connection plug gently twist the body of the plug as you pull. Do not pull the cable.

Electrode Positioning

Self-adhesive electro pads work well on inner thighs, bottom cheeks, even the penis – the choice is yours. The closer the pads are together, the more intense the sensation, but make sure the pads do not touch each other.

You may feel more sensation in one location than the other. This is the nature of e-stim and is normal - Just try moving things around and experiment with positions to find what works for you.

Do's and Don'ts

DO NOT CONNECT ABOVE THE WAIST (ACROSS THE ARMS COUNTS AS ABOVE THE WAIST!), BUT ESPECIALLY DO NOT CONNECT ACROSS THE HEART, CHEST, NECK OR HEAD. DO NOT USE IF FITTED WITH A PACEMAKER OR ARE PREGNANT. REMEMBER YOU USE THIS DEVICE AT YOUR OWN RISK.

If your subject experiences any pain or discomfort then stop using immediately. Any E-Stim device is potentially capable of causing burning when used on sensitive and or small contact areas at high output levels.



DO NOT SHORT CIRCUIT the output. Doing so may damage the unit.



DO NOT attempt to open the power box. High voltages are present during use and may still exist when the unit is switched off. There are no user serviceable parts inside and opening the power box will invalidate your lifetime guarantee.

Fitting a battery

The 2B is powered by a single 9V battery. Unlike some other units it is also possible to use rechargeable batteries in the 2B control unit. We do NOT recommend the use of Zinc Carbon batteries with your 2B control unit.



- Ensure the unit is switched off, and any electrodes are disconnected.
- Turn the unit over and using a small screwdriver or a fingernail inserted into the battery compartment slot, gently prise the battery compartment cover out.

• Remove the old battery (if fitted) and replace with a fresh Alkaline PP3. The battery connector is polarized so it should not be possible to connect the battery incorrectly, but ensure the polarity is correct before attempting connection.



- Place the battery into the unit and replace the battery compartment cover. The cover is fitted with two tabs which insert into the lower half of the case first, and then the top half of the cover will clip into position.



- Turn the unit over. The unit is now ready for operation.
- Please note we do NOT recommend the use of zinc carbon batteries due to their general poor performance.

In the event the EBox™ 2B unit is not being used for a period of time, remove the battery to avoid any potential damage from battery leakage.



In the event the 2B unit is not being used for a period of time, remove the battery to avoid any potential damage from battery leakage.

External Power Supply

It is possible to use an external power supply with the 2B, but because of the isolation and safety issues when connecting to the mains we only recommend you use an E-Stim Systems supplied power supply. The plug socket is beside the on off switch.

Always ensure that when you connect the external power unit, the 2B is switched off.

Insert the plug into the socket, switch the mains power on, then switch the 2B on. The display should light up as if batteries were fitted and the battery symbol replaced by a power supply symbol. '⚡'.

If you are planning to use the power supply for a longer period, we suggest you remove the battery.

User Controls

Overview



The 2B unit has five user controls. Each control allows the user to adjust a particular aspect of the output. It is the operation of the controls in combination that will allow the user to provide an effective electro-stimulation session.

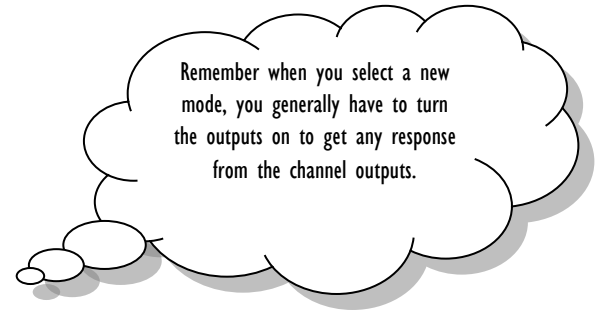
The controls are (from left to right)

- Channel A Level
- Select Button
- Adjust Control
- Channel B Level

There is also a power slide switch (on the bottom side of the unit) and an LCD contrast control (accessed from the rear of the unit.)

Channel Level Controls

The channel level controls adjust the absolute level of the output of the relevant channel. Each Channel control value is displayed on the LCD screen, with values from OFF (0) to MAX (100%). OFF is zero output, MAX is full output. The output levels automatically drop to OFF when selecting a mode, and will always start off at OFF (0%) when selecting a new mode.



Joining Controls (A+B Mode)

When you first switch your 2B unit on, both the Channel A and Channel B controls are independent. However if you select the join mode (A+B) then the two controls become linked, giving you effectively one handed operation.

When you turn the Channel A control up, the Channel B value will also rise, if you turn it down, the Channel B channel will reduce as well. If you adjust the Channel B control when the join mode is active, then you can adjust the relative levels of each channel. To cancel the channel link, simply deselect the mode, turn the 2B unit off, or select the factory reset option.



When the channels are linked a small '=' sign appears on the bottom row of the LCD screen. (The '=' indicates this unit is connected to the power supply).

Select Button

The select button is used in conjunction with the Adjust control, to change and adjust the settings in all the various modes, including changing and selecting the modes themselves. The select button responds to a light press, there is no need to press too hard.

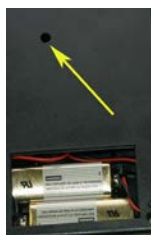
Adjust Control

The adjust control is used in conjunction with the select button, to change and adjust the settings in all the various modes, including changing the modes themselves.

Displays

The 2B has 3 display elements, the bright backlight LCD display, giving the user details of all of the functions of the 2B, from control settings to helpful messages. The backlight can be switched on and off (see page 14), and the contrast adjusted (see below)

The two blue LEDs on the right hand side of the unit illuminate in proportion to the intensity of the relevant output.



Adjusting Contrast

To change the contrast of the LCD, turn the unit over, and with a small insulated screwdriver insert into the hole in the rear of the unit and gently adjust the screw inside.

Inputs and Outputs



Outputs

Connection to any electrode is via two 3.5mm mono jack sockets. Ensure the 2B is switched off before inserting or removing the connector to eliminate the possibility of either inadvertent electric shocks or short circuits occurring. When removing the connectors. Grip the shaft of the connector, not the wire and gently pull.

Connections to your E-Stim 2B use industry standard 3.5mm mono jack plugs, compatible with a number of other manufacturers control units and electrodes.

Inputs

Connection to audio devices and the digital link is via the centre 3.5mm stereo jack socket. Ensure the 2B is switched off before inserting or removing the connector to eliminate the possibility of short circuits occurring. When removing the connectors. Grip the shaft of the connector, not the wire and gently pull.



Ensure that audio devices or the digital link are only connected to the centre jack socket. Connecting to either of the output jack sockets will destroy your audio unit. The audio input is designed to operate with low level headphone style outputs. It is not possible to operate the Digital Link at the same time as the Audio Input. The Digital link cable despite appearances is NOT a standard USB cable. DO NOT attempt to attach any other USB cable to the 2B digital link input, you will destroy your 2B and invalidate your guarantee.

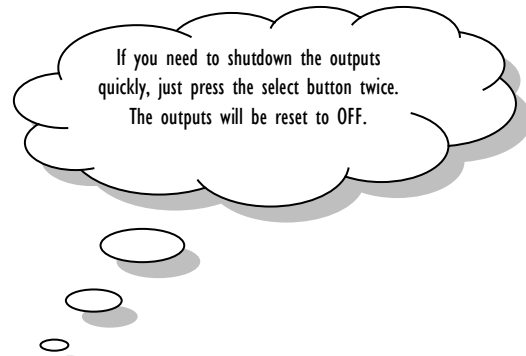
DO NOT attempt to connect an output to an input. It will destroy your 2B unit, and possibly the item you connect to.

Modes

The 2B has two sets of modes. Program modes offer variations on output and are of most interest to the user. System Modes control the general operation of the 2B.

Selecting a Mode

The 2B has a very simple method of selecting a mode. Simply double press the SELECT button, to place the 2B into mode select and then twist the ADJUST knob to change mode up and down. When the 2B is in mode select the outputs are automatically disabled.

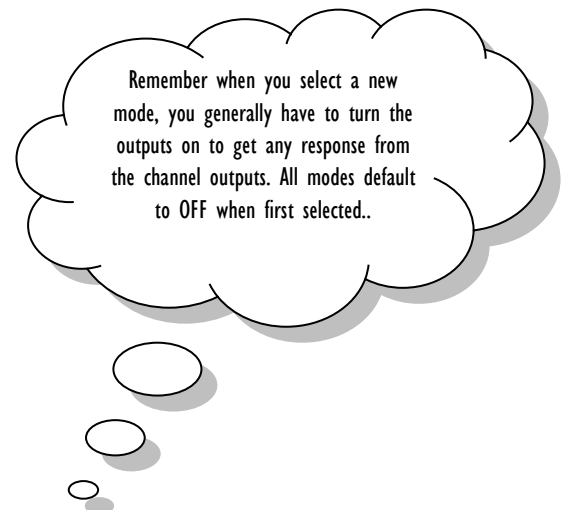


```
1 Pulse
Use ADJUST to ch
```

In addition the mode select screen also gives you advice on how to do this via a scrolling message.

Use the ADJUST control to cycle through the available modes. Once you have found the mode you want press the SELECT button to activate. The modes are

1. Pulse
2. Bounce
3. Continuous
4. A Split
5. B Split
6. Wave
7. Waterfall
8. Squeeze
9. Milk
10. Throb
11. Thrust
12. Random
13. Step
14. Training
15. Microphone
16. Stereo
17. Tickle



The following are system modes and as such, they are used to change and view the system options of the 2B.

18. Power Level
19. AB Join
20. Backlight
21. Factory Reset
22. Commander

System Modes

The system modes allow you to control and view the options of your 2B. Whenever you select a system mode, the 2B will always return you to the default pulse mode.

Backlight Control



```
B a c k l i g h t : A u t o
A : O F F           B : O F F
```

The E-Stim Systems 2B display has an illumination option, called the backlight. It runs in 3 different modes.

- Off** The backlight is off all the time, apart from when the unit is first switched on.
- On** The backlight is on all the time.
- Auto** The backlight is turned on whenever mode select is entered, and turns off approx 7 seconds after exit. This is the default mode.

Press the Select button to select and return to the default pulse mode. The status of the backlight is retained when the unit is switched off.

Battery Level

The battery level indicator shows the current level of the battery. There are 3 battery level symbols, indicating FULL, 2/3 full, 1/3 full and empty. As the 2B uses a 9V battery, a brand new battery should show full, however the unit will continue to operate with 'flat' batteries with a reduced output. If your 2B starts to reset itself when higher power levels are selected, then this is a sign the battery needs replacing.

The battery level display will update whenever a control is adjusted.

Because of the variations in battery manufacturing technology, a brand new battery may not necessarily display a full battery symbol.

For details on changing the batteries see page 8.

Power Selection

The 2B is capable of operating in two different power levels, indicated by a 'L' or 'H' in the display (centre bottom line). To change the power mode, select the power mode, and then using the ADJUST control rotate to select either LOW or HIGH. Press the SELECT button to choose. The 2B will then return to the default pulse mode.



```
P o w e r   L e v e l : L O W
A : O F F           B : O F F
```

Once you have selected the power level, the 2B will stay in the same power setting until either you select the other power mode, or the unit is switched off.

The currently selected power mode is displayed on all program screens as a 'L' or 'H'.

Factory Reset

A number of settings are retained when your 2B unit is switched off. To clear these settings select the factory reset option.

Commander



The image shows a digital display with a dark blue background and white text. The text is arranged in two lines. The first line reads "Pulse 50:50". The second line reads "A:OFF → L █ B:OFF". The "→" symbol is a small arrow pointing to the right, and the "█" symbol is a small square.

Commander™ is our PC/Mac control system for the 2B. in conjunction with our Digital link interface you can control the functions of the 2B directly from your PC. For more details of Commander visit <http://www.e-stim.co.uk/commander/>. If Commander is active then you should see a small arrow '→' on the screen. To switch Commander on and off, simply select Commander mode and use the adjust knob to select ON or OFF.

If Commander is switched on, and you switch your 2B off, Commander will still be active when the 2B is switched on again.

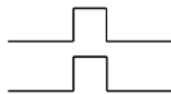
System Info

When you first turn your 2B unit on it will perform a self test/start up routine.

Program Modes

The 2B offers a number of program modes. Each mode is designed to offer something different, but all are controlled by the rotary controls on the front panel.

Pulse Mode



```
P U l s e      5 0 : 8 0
A : M A X      L      B : O F F
```

In pulse mode both of the outputs pulse on and off together. The adjustment control allows the user to adjust the pulse rate (how quickly they pulse on and off) and is adjustable from 2 to 100. Higher numbers indicate a faster pulse rate. The second value on the display, is the pulse feel, this allows you to adjust the sensation of each individual pulse, from soft to spiky, with values from 1 to 100.

Bounce Mode



```
B o u n c e    5 0 : 7 3
A : M A X      L      B : O F F
```

Bounce mode is so named because the outputs 'bounce' from channel to channel. The outputs pulse alternately. The adjustment control allows the user to adjust the pulse rate from 2 to 100. Higher numbers indicate a faster pulse rate. As with the pulse mode the second value on the display, is the pulse feel, this allows you to adjust the sensation of each individual pulse, from soft to spiky, with values from 1 to 100. Channel A is on when channel B is off and visa versa.

Continuous Mode



```
C o n t i n u o u s  1 8
A : M A X      L      B : O F F
```

Both of the outputs are on continuously. The ADJUST control adjusts the feel of the output, this allows you to adjust the sensation of each individual pulse, from soft to spiky, with values from 2 to 100.

A & B Split Modes



```
A S P l i t     5 0 : 6 6
A : 7 8 %      L      B : 7 3 %
```

The outputs are split between Pulse and Continuous. In A split mode Channel A output is pulsed, Channel B is continuous. In B Split mode Channel B is pulsed and channel A is continuous. The adjustment control allows the user to adjust the pulse rate from 2 to 100, with low numbers indicating a slow pulse. The second value, is the pulse feel, that allows you to adjust the sensation of each individual, from soft to spiky, with values from 1 to 100.

Wave Mode

```
Wave 99:50  
A:MAX L B:10%
```

The output level increases from 0% to the selected limit and then drops back to 0%. The adjustment control controls how fast the level goes up or down, with values from 2 to 100. The second value, is the pulse feel, that allows you to adjust the sensation of the pulse stream, from soft to spiky, with values from 1 to 100. With different values for the left and right channels levels, it is possible to adjust the synchronicity of the outputs, with one channel rising and dropping faster than the other.

Waterfall Mode

```
Waterfall 88:53  
A:MAX L B:87%
```

The output level increases from 0% to the selected limit but instead of dropping straight back to zero, the outputs slowly decrease to 0% before increasing again. The adjustment control controls how fast the level goes up or down with values from 2 to 100. The second value, is the pulse feel, that allows you to adjust the sensation of the pulse stream, from soft to spiky, with values from 1 to 100. With different values for the left and right channels levels, it is possible to adjust the synchronicity of the outputs, with one channel rising and dropping faster than the other.

Squeeze Mode

```
Squeeze 88:66  
A:MAX L B:87%
```

The pulse rate increases and then drops to nearly continuous producing a synchronised 'squeeze' sensation. Both Channel A and Channel B pulse at the same rate. The adjustment control controls how fast the pulse rate goes up or down with values from 10 to 100. The second value, is the pulse feel, that allows you to adjust the sensation of each individual pulse, from soft to spiky, with values from 1 to 100.

Milk Mode

```
Milk 87:63  
A:MAX L B:67%
```

The pulse rate increases and then drops to 0 (continuous). This is similar to Squeeze, but channels A and B alternate. The adjustment control controls how fast the pulse rate goes up or down. The adjustment control controls how fast the pulse rate goes up or down with values from 10 to 100. The second value, is the pulse feel, that allows you to adjust the sensation of each individual pulse, from soft to spiky, with values from 1 to 100.

Throb Mode

```
T h r o b           6 6  
A : 1 0 0 %   L   B : 1 0 0 %
```

A continuous mode with the pulse feel cycling between 10 and the adjustment value. Nice and relaxing. Adjustments values are between 10 and 100.

Thrust Mode

```
T h r u s t         6 6  
A : 7 8 %   L   B : 1 0 %
```

Similar to Throb, Thrust is a continuous mode. with the pulse feel cycling between 10 and the adjustment value and then back to 0. Adjustments values are between 10 and 100.

Random Mode

```
R a n d o m        7 8 : 5 0  
A : 6 7 %   L   B : M A X
```

The random mode is designed to produce a random pulse output. The adjustment control allows the user to adjust the 'randomness' of the pulse range, from 2 to 100. Lower numbers give a much faster random pulse stream. The second value, is the pulse feel, that allows you to adjust the sensation of each individual pulse, from soft to spiky.

Step Mode

```
S t e p            3 4 : 5 0  
A : 1 0 %   L   B : 7 9 %
```

Step mode is designed to step the output up in individual steps, allowing the subject to get used to the current level, before the output is stepped up to the next level.

The output steps between 0 and the current Channel level with a delay between step controlled by the Adjust Control, from 2 to 100. The second value, is the pulse feel, that allows you to adjust the sensation of the pulse stream, from soft to spiky. Each step is set to 1%.

Lower values, give a faster step.

Because of the delay of the programmed step, any changes in output level, will only occur at the next step change.

Training Mode

```
T r a i n i n g      3 4 : 5 0  
A : 1 0 %          L   B : 7 9 %
```

The training mode is similar to the Step Mode (page 18), but the steps are much bigger, requiring the subject to learn to 'enjoy' each step before the output is stepped up to the next level.

The output steps between 0 and the current Channel level. Each step is 1/12 of the total Channel level or 1% if the channel level is set to 12% or lower, so if Channel A is set to 48%, the steps will be 4%, 8%, 12% up to 48%, and then dropping to zero. The Adjust value allows you to adjust the delay between level changes, from 2 to 100. The second value, is the pulse feel, that allows you to adjust the sensation of the pulse stream, from soft to spiky.

Lower values, give a faster step.

Because of the delay of the programmed step, any changes in output level, will only occur at the next step change.

Tickle Mode

```
T i c k l e          5 0  
A : 1 0 %          L   B : 1 0 %
```

A continuous mode, that is only active when the adjustment knob is being turned, giving an effect similar to being tickled...hence the name. This is Not a high intensity mode, but is designed for sensation play.

Turn the adjustment knob faster for a more pronounced tickle. Note the output is only active then the level controls are set above 0%.

Tickle mode is not accessible from Commander.

Audio

As well as the program modes the 2B offers 2 unique audio driven modes. Unlike other systems on the market, the 2B is designed to use normal audio sources, digitally filtering the input to produce a safe E-Stim sensation. The stereo mode allows true stereo stimulating, with the left and right inputs used to drive the dual isolated outputs, whilst the microphone drives both channels (it's a mono source for the technically minded).

The Audio modes were mainly designed for use with complex audio sources, i.e. music. Using single tones such from tone generators will result in a less predictable experience.

The audio modes are not currently accessible from Commander.

Stereo Input



The stereo input allows you to use the line in input to stimulate the outputs, from a source such as a CD/MP3 players. The left audio channel activates the A output channel, the level indicated by the **A**: and the left hand bar graph, whilst the B channel level is indicated by the **B**: and the right hand bar graph the right audio channel activates the B output channel. The bargraph display indicates the relative input level of each channel.

The A and B controls control the percentage of the audio drive that is passed through to the outputs.

The adjust control allows you to change the speed of the response of the stereo system, indicated by the third value. A low value gives a quick sharp response, a higher values gives a smoother response.

You should aim for maximum movement in the bar graph. If the bar graphs are 'full' you should reduce the output volume of the device you are driving the 2B with, if there appears to be no bar graph then turn the volume control up.

Microphone



Uses the internal microphone to stimulate the outputs. As the internal microphone is a mono source, both the outputs are stimulated together. The stereo bargraph display indicates the relative input level. The A and B controls control the percentage of the input from the microphone that is passed through to the outputs,

The built in microphone has no external connections, and is sensitive enough to pickup a conversation from several feet away. The placement of the microphone is close to the channel A control knob.

The Adjustment knob allows you to adjust the feel of the output.

In order to exit from the microphone mode press the select button, or turn the unit off.

Digital Link

The 2B has been designed to connect to a PC or a Mac via an optional digital link Interface for both control and firmware updates. For more details of this optional system please visit our website.

For details of the free Commander™ software visit

<http://www.e-stim.co.uk/commander/>

Bootloader



Your 2B has the new bootloader system installed, allowing you to upgrade your 2B to the latest firmware by connecting to a PC or Mac running our UpLink2™ software. For more details visit <http://www.e-stim.co.uk/uplink/>.

Check which version of firmware (the version of firmware your 2B is running is normally displayed as part of the start-up process), before you attempt to update your 2B. Do NOT attempt to install an older version firmware - attempting to do so may 'brick' your 2B and require a return to our workshops for an upgrade.

We also offer a paid for 'chip' replacement service and a return to our workshops options for upgrades. Firmware upgrades are not included as part of your lifetime guarantee.

Getting More

If you want to find out how to get the best out of your 2B, we have a dedicated E-Stim Systems Forum at <http://www.e-stim.net> Share your ideas with other 2B users.

Accessories

The 2B is normally supplied with two 1.5M connection cables fitted with two 3.5 mm plugs on one end and two colour coded 2mm plugs on the other, as well as a 3.5mm Stereo connection cable suitable for connection to battery powered audio devices.

Other accessories are available. For more information visit our website and our online store at

UK and European Users <http://www.e-stim.co.uk>,

or for the rest of the World <https://www.e-stimsystems.com>

We can also be found on



<http://twitter.com/estimsystems> and



<http://www.facebook.com/estimuk>

Additional Notes

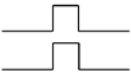
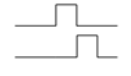





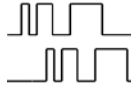
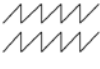

Storage

In the event that the 2B™ unit is not going to be used for a period of time always remove the battery to avoid any possibility of damage being caused by battery leakage.

Cleaning

Do NOT use solvents to clean your 2B™. A gentle wipe with a soft cloth should be sufficient. It is not possible to sterilise the control unit.

Quick Guide to Modes

Mode	Diagram	Adjustment	Select+Adjustment	Notes
Pulse		Pulse speed	Pulse Feel	Both channels pulse on and off
Bounce		Pulse speed	Pulse Feel	Channels pulse alternately.
Continuous		Pulse Feel	n/a	Channels are on continuously
A Split B Split		Pulse speed	Pulse Feel	The Split channel pulse, the other channel is on continuously
Wave			Speed of increase	The output level increases to the set limit and then drops to zero before repeating.
Waterfall			Speed of increase /decrease	The output level increases to the set limit and then decreases to zero before repeating.
Squeeze			Pulse speed	The pulse rate increased and then drops to slow.
Milk			Pulse speed	The pulse rate increased and then drops to slow. Channel B is off when Channel A is on and visa versa.
Throb		Range of Throb	n/a	Continuous mode with variable feel, rising from low to adjustment value and then dropping back to low.
Thrust		Range of Thrust	n/a	Continuous mode with variable feel, rising from low to adjustment value and then decreasing back to low.
Tickle		"Tickle"	n/a	Outputs pulse when adjust knob is turned.
Random		Amount of Randomness	Pulse Feel	Random pulsed output.
Step		Step Range	Pulse Feel	Stepped output
Training		Jump Range	Pulse Feel	Output jumps by level.

Specifications

Device	Class IV. Dual channel microprocessor controlled electro stimulation unit.
Channels/ Outputs	Dual Isolated Channels. (Type BF)
Display	Backlight 16 Character, 2 line LCD and Dual Light Emitting Diodes indicating Channel Activity.
Program Modes	15
Audio Modes	2
Systems Modes	5
Controls	Indented Digital Rotary Encoders controlling individual channel level, Mode selection and adjustment, switch selection of power on/off
Output Waveform	Biphasic AC
Audio Inputs	Stereo 33K Ω
Power Supply	1 off Standard 9 Volt Alkaline (PP3) or Optional E-Stim Systems Power Supply
Battery Life	Variable dependent on load.
Dimensions (approx.)	145mm x 80mm x 50mm
Weight (with battery)	400g
Supplied Accessories	2 off 3.5mm to 2mm/TENS output cables, 1 off 3.5mm Stereo link audio cable 4 off Self Adhesive Gel Pads, 1 off user guide. 1 off guarantee registration card

Problems?

If the output feels lower than normal, then replace the battery.

If there is no output, and you have replaced the battery with a known good battery, then suspect the connecting wires.

If things still don't appear to be working then email us at info@e-stim.co.uk stating the serial number and the problem you have encountered.



There are no user serviceable parts inside and breaking of any seals will invalidate your guarantee. All power units are guaranteed (parts and labour) against failure caused by manufacturing defects or failure during normal use for the lifetime of the unit.

Do not return the unit for repair without contact us for a returns number before you dispatch.

For more details regarding our lifetime guarantee, product registration and our full range of e-stim products, then visit our website at

<http://www.e-stim.co.uk> (UK/EU customers)

or our worldwide site at <https://www.e-stimsystems.com>.

Our lifetime guarantee does not affect your statutory rights.

SAFETY WARNING

(DO NOT CONNECT THE E-Stim Systems 2B UNIT OR ANY ELECTRICAL DEVICE TO ANY LOCATION ABOVE THE WAIST (ACROSS THE ARMS COUNTS AS ABOVE THE WAIST!), BUT ESPECIALLY DO NOT CONNECT ACROSS THE HEART, CHEST, NECK OR HEAD. DO NOT USE IF FITTED WITH A PACEMAKER OR ARE PREGNANT. REMEMBER YOU USE THIS DEVICE AT YOUR OWN RISK. YOU MUST READ AND UNDERSTAND THE USER MANUAL AND ALL OTHER INSTRUCTIONS BEFORE ATTEMPTING OPERATION.