

LOW VOLTAGE STIMULATOR 2005 INSTRUCTIONS

SAFETY

STIMULATION UNITS PRODUCE SHORT PULSES OF 30 VOLTS OR 90 VOLTS DURING USE. THESE PULSES ARE CAPABLE OF CAUSING ELECTRICAL SHOCK. OPERATORS MUST BE MADE AWARE OF THIS AND TAUGHT TO USE THE EQUIPMENT SAFELY. PROPER PROCEDURE MUST BE FOLLOWED AT ALL TIMES.

- 1 ENSURE UNIT IS STOPPED (RED LIGHT ON)**
- 2 CONNECT CABLE/S TO CARCASS**
- 3 ENSURE NO ONE IS TOUCHING CABLES OR CARCASS - PRESS RED BUTTON**
- 4 DURING STIMULATION (RED FLASHING) ENSURE NO ONE TOUCHES CABLES OR CARCASS**
- 5 ONLY WHEN STIMULATION CEASES (RED LAMP ON) REMOVE CABLE/S**

IT IS THE ABATTIORS RESPONSIBILITY TO SATISFY THEMSELVES THAT THE EQUIPMENT AND ITS USE MEETS THEIR TECHNICAL, OPERATIONAL AND SAFETY REQUIREMENTS.

Checklist

- 1 Stimulator Unit
- 1 Complete Cable Assembly
- 1 Spare Connector
- 1 Spare Clip (Black)

Installation

The unit is supplied set for 240 volt 50 Hz mains supply. For 120 volt operation move links JP1, JP2, JP3, JP4 to the 120V position. **PLEASE NOTE SOME MODELS SUPPLIES ARE 240 VOLT ONLY**
For safety it is recommended that the supply should be via a mains isolation switch.

IN ALL SITUATIONS WHERE THE FRONT COVER IS BE REMOVED, ENSURE THAT THE MAINS SUPPLY HAS BEEN ISOLATED FOR AT LEAST 5 MINUTES BEFORE REMOVING LID. THIS ALLOWS TIME FOR INTERNAL STORAGE ELEMENTS TO DISCHARGE AND THE INTERNAL LED IS EXTINGUISHED.

To wall mount the unit, remove the front cover. The unit may now be fixed to the wall using the same channels used by the lid fixings.

IMPORTANT - DO NOT INSTALL UNIT ON ITS BACK WITH BUTTON UPRIGHT

The unit is sealed to IP67, however care should be taken to avoid direct contact with water and spray. Although the unit has in-built short circuit protection, care should be taken to avoid the output clips accidentally touching together or any other metal objects.

Operation

The unit can be used in two different configurations.

Normal Method (as supplied)

THIS METHOD ONLY WORKS IF THERE IS GOOD ELECTRICAL CONNECTION BETWEEN THE GAMBRELS AND THE MAINS EARTH.

Ensure jumper JP7 is in place.

Connect the cable with red clip to the right hand outlet on the bottom of the unit. The left hand outlet is not used in this configuration.

Ensure the Red Button is lit and NOT flashing.

After sticking connect the red clip onto the nose of the carcass and press the RED BUTTON. The red button will flash slowly indicating that the unit is outputting. Stimulation of the carcass should be evident. Once the preset stimulation period has elapsed, the red lamp will stop flashing and will illuminate constantly to indicate the stimulation has finished.

Stimulation can be stopped at any time by pressing the RED BUTTON.

Isolated Earth Method

Connect a cable of suitable length to the supplied spare connector and black clip. Connect this cable to the left hand outlet on the bottom of the unit.

Connect the cable with the red clip to the right hand outlet on the bottom of the unit.

Ensure jumper JP7 is removed

Ensure the Red Button is lit and NOT flashing.

After sticking connect the red clip onto the nose of the carcass and the black clip onto a REAR leg and press the RED BUTTON.

The red button will flash slowly indicating that the unit is outputting. Stimulation of the carcass should be evident.

Once the preset stimulation period has elapsed, the red lamp will stop flashing and will illuminate constantly to indicate the stimulation has finished.

Stimulation can be stopped at any time by pressing the RED BUTTON.

Overcurrent Protection

The unit is fully protected against overcurrent situations such as the red clip accidentally shorting while active. Should this situation arise the stimulator output will cut off immediately and the RED LAMP WILL FLASH AT A FAST RATE.

Should this happen remove the condition causing the fault. Stimulation can be re-started as usual by pressing the RED BUTTON.

Adjustments

The unit is supplied as standard set for :

230 volt 50 Hz mains supply
90 volt stimulation output
32 second stimulation period

The stimulation voltage can be changed to 30 volts by moving jumpers JP5 and JP6 to the 30V position on the PCB inside the unit. (see table)

ENSURE THIS IS DONE CORRECTLY OTHERWISE THE UNIT MAY BE PERMANENTLY DAMAGED.

The stimulation time can be changed by altering the setting of the switches on SW1 on the PCB inside the unit.

The stimulation time is simply the addition of the time value of each of the switches that are set to the ON position.

as supplied

SW1 = 1 second	off
SW2 = 2 seconds	off
SW3 = 4 seconds	off
SW4 = 8 seconds	off
SW5 = 16 seconds	off
SW6 = 32 seconds	on

The combination of switches allows for 63 settings of stimulation time to be set from 1 second to 63 seconds. For example if only 30 seconds was required then SW2,SW3,SW4,SW5 would be on = 2+4+8+16 = 30 seconds.

*****CAUTION*****

HIGH VOLTAGES EXIST WITHIN THE UNIT EVEN WHEN ISOLATED FROM THE MAINS SUPPLY DUE TO STORED CHARGE.

BEFORE OPENING THE UNIT, ISOLATE THE MAIN SUPPLY AND WAIT 5 MINUTES.

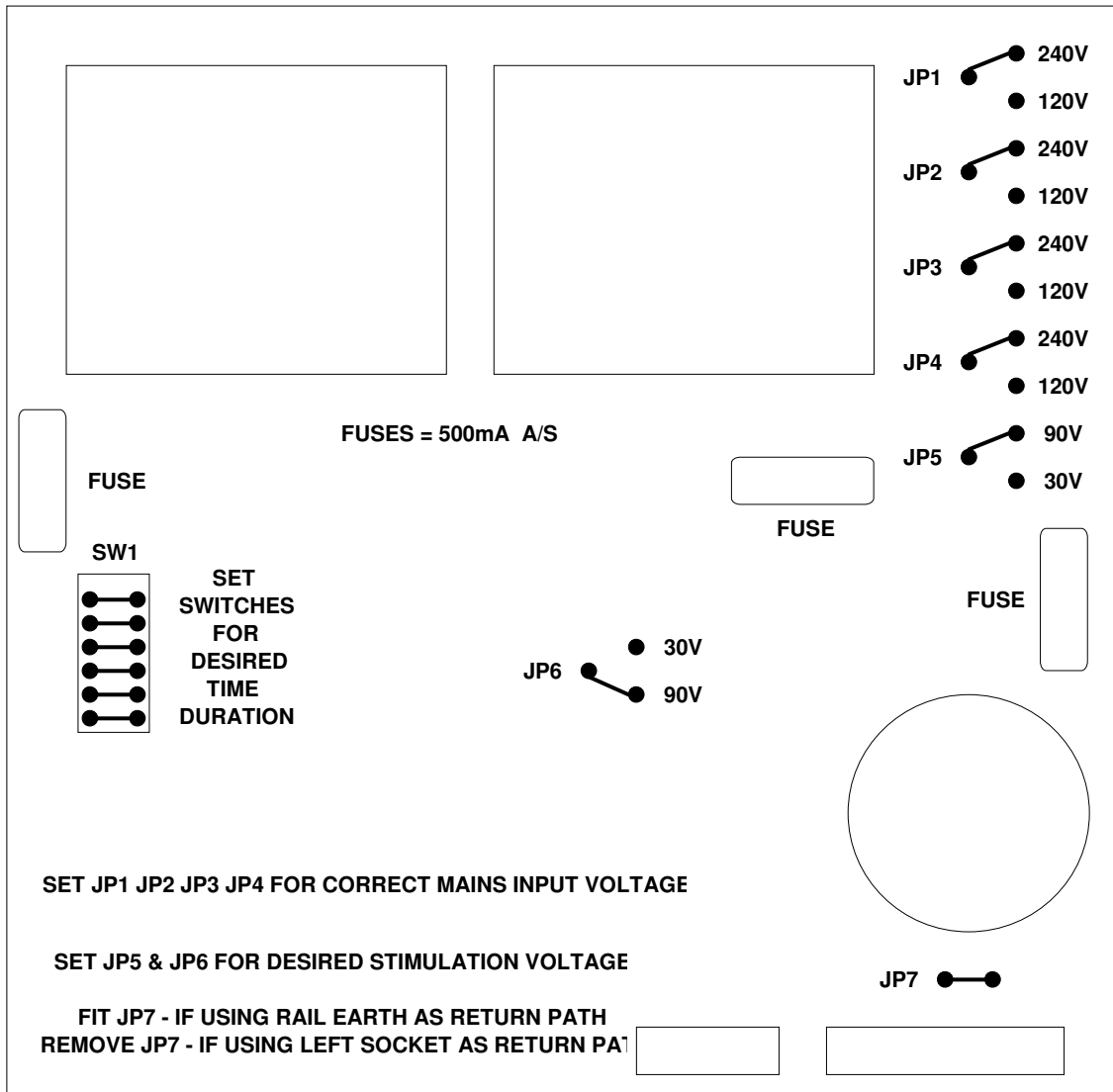
TROUBLESHOOTING

There are three 500mA antisurge fuses on the PCB inside the unit.

Normally the only problems that are encountered are due to no or very low stimulation. This is normally due to defective cables and/or clips. To check remove the cables from the unit and check for continuity using a meter.

If the normal connection method has been implemented (JP7 fitted) then low or no stimulation problems can be caused by a bad electrical connection to earth via the rail and trolley. This can be checked by using a meter between the earth connection to the stimulator unit and the gambrel. There should be a very low resistance. If this is not the case, connect the spare connector and black clip with a suitable length of cable and use this to connect between the left hand socket on the bottom of the unit and the gambrel.

LOCATION OF JUMPERS & FUSES



PLEASE NOTE SOME MODELS SUPPLIES ARE 240 VOLT ONLY AND THEREFORE JUMPERS JP1/2/3/4 ARE NOT FITTED.

LAMP INDICATIONS

LAMP STATUS	STIMULATION OUTPUT	SYSTEM STATUS
RED ON	OFF	STOPPED & O.K.
RED FLASHING SLOW	ON	STIMULATING O.K.
RED FLASHING FAST	OFF	SHORT CIRCUIT ERROR
RED NOT LIT	OFF	FUSE OR NO POWER