G.LAB®

DUAL CHANNEL TENS INSTRUCTION MANUAL

MODEL No.: PR0100



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Version: 1

INTRODUCTION

Thank you for purchasing the G.LAB PR0100 TENS.

In order to use the device safely, please read the whole manual

carefully before using the device for the first time.

Keep this instruction manual in a convenient place, or store with the device for future reference.

Transcutaneous Electrical Nerve Stimulation (TENS) is a noninvasive, drug-free method of controlling pain. TENS uses tiny electrical impulses sent through the skin to the nerves to modify pain perception. TENS does not cure any physiological problem. It only helps control the pain. TENS does not work for everyone. However, in most patients, it is effective in reducing or eliminating the pain, allowing for a return to normal activity. TENS is now regularly recommended by doctors, physiotherapists and pharmacists throughout the world.

The G_LAB PR0100 TENS is a two output channel TENS machine and is highly effective in relieving pain which designed to be used for temporary relief of pain associated with sore and aching muscles in the shoulder, waist, back, neck, upper extremities (arm), and lower extremities (leg) due to strain from exercise or normal household work activities.

Scientific theory suggests that electrical stimulation therapy may work in several ways:

The gentle electrical pulses move through the skin to nearby nerves to block the pain message from the source of pain from ever reaching the brain.

The gentle electrical pulses increase the production of endorphins, the body's natural pain killer.

Indications for use

Relief of pain associated with sore or aching muscles of the lower back, arms, or legs due to strain from exercise or normal household and work activities.

SYMBOLS

The following symbols are used in this instruction manual, or appear on the device, accessories and packaging. To assure correct use of the device, basic safety measures should always be followed including the warnings and cautions listed in this instruction manual.

Symbols	Function / Meaning
8	Please read the manual carefully before using the device.
Ť	Please keep device away from sprays of water or rain.
SN	Serial Number
Ŕ	Device with this symbol is an IEC/EN60601-1 type BF equipment. It provides a high degree of protection against electric shock. The device is intended for continuous use with no degree of protection against water penetration.
X	Disposal of the appliance Legislation requires that all electrical and electronic equipment must be collected for reuse and recycling. Electrical and electronic equipment marked with the symbol indicating separate collection of such equipment must be returned to a municipal waster collection point at the end of its service lifetime.
A	WARNING / ATTENTION Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

IMPORTANT NOTES

Contraindication

Do not use this device if you have:

- Internally transplanted electronic medical devices, such as cardiac pacemaker
- Implanted equipment such as defibrillator, or other implanted metallic or electronic device
- Electronic life-support equipment such as respirators. Such use could cause electric shock, burns, electrical interference, or death.

Adverse reactions

- You may experience skin irritation and burns beneath the stimulation electrodes applied to your skin.
- You should stop using the device and should consult with your physician if you experience adverse reactions from the device.

Precaution

- . Do not use on these individuals:
- Pregnant women, or woman who is menstruating, because the safety of electrical stimulation during pregnancy or menstruating has not been established
- Children or infants, because the device has not been evaluated for pediatric use
- Persons who is not capable of expressing their thoughts or intentions
- TENS cannot replace pain medications and other pain management therapies;
- TENS devices do not cure disease or injuries.
- The effectiveness of TENS is highly dependent upon patient selection by a practitioner qualified in the management of pain patients;
- The long-term effects of electrical stimulation on patients are unknown;

- You may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium (gel) on the electrodes;
- If you have suspected or diagnosed heart disease or epilepsy, you should follow precautions recommended by your physician;
- Use caution if you have a tendency to bleed internally, such as following an injury or fracture;
- Consult with your physician prior to using the device after a recent surgical procedure, because stimulation may disrupt the healing process;
- Use caution if stimulation is applied over areas of skin that lack normal sensation.
- Use this device only with the leads, electrodes, and accessories recommended by the manufacturer
- Do not leave the electrodes attached to the skin after treatment. Use caution if you have a tendency to bleed internally, such as following an injury or fracture.

Consult with your physician prior to using the device after a recent surgical procedure, because stimulation may disrupt the healing process

IMPORTANT NOTES

A Warning

- Consult with the patient's physician before using this device, because the device may cause lethal rhythm disturbances to the heart in susceptible individuals;
- Take adequate precautions before using this device on patients who may suffer from heart diseases. For these patients, clinical data is not sufficient to prove the safety of the use of device.
- If you are in the care of a physician, consult with your physician before using this device;
- If you have had medical or physical treatment for your pain, consult with your physician before using this device;
- If your pain does not improve, becomes more than mild, or continues for more than five days, stop using the device and consult with your physician;
- Do not apply stimulation over your neck because this could cause severe muscle spasms resulting in closure of the airway, difficulty in breathing, or adverse effects on heart rhythm or blood pressure;
- Do not apply the stimulation across your head or any area of the face, throat and your chest, because the introduction of electrical current into the head, throat, or chest may cause rhythm disturbances, which could be lethal;
- Do not apply stimulation over open wounds or rashes, or over swollen, red, infected, or inflamed areas or skin eruptions (e.g., phlebitis, thrombophlebitis, varicose veins);
- Do not place the electrodes near the wounds, dermatitis and abrasions.
- Do not apply stimulation over, or in proximity to, cancerous lesions;
- Do not apply stimulation in the presence of electronic monitoring equipment (e.g., cardiac monitors, ECG alarms), which may not operate properly when the electrical stimulation device is in use;

- Apply stimulation to normal, intact, healthy, clean, dry skin (of adult patients). Do not use this device in places with high humidity such as bathrooms or while taking a bath or shower, because it may otherwise disrupt the healing process
- . Do not apply stimulation while the patient is sleeping
- Do not apply stimulation while the patient is driving, operating machinery, or during any activity in which electrical stimulation can put the patient at risk of injury.
- Simultaneous connection of a patient to a high frequency surgical medical equipment may result in burns at the site of the stimulator electrodes and possible damage to the stimulator.
- · Operator cannot touch the batteries and patient simultaneously.
- Avoid the use of this device in post-operative recovery rooms when the patient is on a heart monitor. Other electronic monitoring equipment such as EKG monitors and EKG alarms may not operate properly when this device is in use.
- Do not allow any metal objects such as belt buckle, necklace, etc. to come into contact with the electrodes during treatment.
- Keep this device away from sources of high magnetic fields such as cellular phones, TVs, microwave ovens and hi-fi speakers. Magnetic Fields may affect the functions of the device and the LCD.
- Not suitable for the skin condition is too dry and lack normal sensation.
- Do not place the electrodes near the heart, on the neck, on the head, around the mouth or on diseased skin.
- . Do not remove the lead wires and electrode during treatment.
- If the device is not functioning properly or you feel discomfort, immediately stop using the device.
- Do not use for any other purpose except as described in this manual.
- Do not insert the electrode plug into any place other than the jack on the device.

IMPORTANT NOTES

A Warning

- Do not mix alkaline and manganese batteries, as this will shorten the battery life.
- . Do not pull on the electrode cord during treatment.
- Do not use the device while wearing electronic devices such as watches as this may damage the device.
- Do not use near a cell phone as this may cause the device to malfunction.
- Do not bend or pull the end of the cord.
- . When removing the cord from the device, hold the plug and pull.
- · Replace the cord when broken or damaged.
- The size, shape and type of electrodes may affect the safety and effectiveness of electrical stimulation.
- The electrical performance characteristics of the electrodes may affect the safety and effectiveness of electrical stimulation.
- Using electrodes that are too small or incorrectly applied, could result in discomfort or skin burns.
- Dispose of the device, batteries, and components according to applicable legal regulations. Unlawful disposal may cause environmental pollution.
- Ensure the working environment is good enough luminosity to read the manual and control the device.
- . The electrode may be re-used by the same patient.
- . For hygiene reason, DON'T SHARE the electrodes with others.
- Special supervision is advised while using the device with childen.
- . Don't allow to touch the intensity Up Key during treatment.

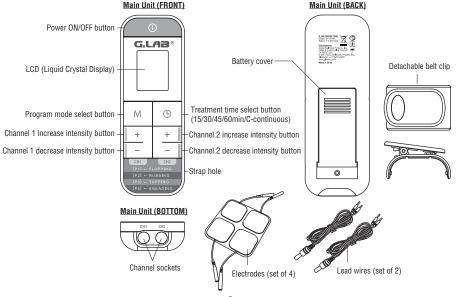
Important information regarding Electro Magnectic Compatibility (EMC)

This product needs special precautions regarding EMC and needs to be installed and put into service according to the following EMC information.

Wireless communications equipment such as wireless home network devices, mobile phones, cordless telephones and their base stations, walkie-talkies can affect this equipment and should be kept at least a distance d = 3,3m away from from the equipment. (Note. As indicated in Table 6 of IEC 60601 - 1 - 2:2007 for ME EQUIPMENT, a typical cell phone with a maximum output power of 2W yields d = 3,3 m at an IMMUNITY LEVEL of 3V/m)

For technical information or inquiries on the product, contact the distributor.

DEVICE DESCRIPTION



DEVICE DESCRIPTION

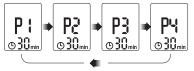
Operation Key

Power ON/OFF button

Press (1) to turn the unit on. There will be no feeling at this time because the intensity always starts at zero. Press this button again to switch the unit off.

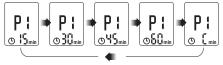
Program mode select button

Press M key to change the operation mode. During any mode change, the intensity will drop back to zero.



Treatment time select button

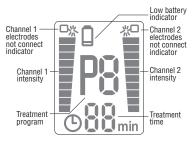
Press 🕑 key to select the treatment time. The device offers 15 / 30 / 45 / 60 minutes or continuous treatment sessions to choose.



Intensity increase / decrease button

Press + key to increase intensity. Press - key to decrease intensity. The selected level of intensity is indicated on the LCD screen by means of black bars at the bottom of the screen.

Information on the Display :



Treatment time

Each mode is preset 30 min treatment time.

Electrodes not connect indicator

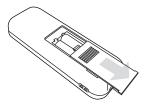
If the electrodes are not placed firmly on your skin, or the lead wire pin is not firmly inserted to the electrode connector, the output intensity level can only be increased to level 2, and further increment of the output thereafter would cause it drop back to 0 immedicately. The \mathcal{K} D icon of corresponding channel will display for indication.

Auto power off

The device would be automatically shut down when the ouput level is kept at zero for 5 minutes continuously.

BATTERY INSTALLATION

- 1. Remove the battery cover on the back of the device.
- 2. Remove the used batteries and insert new batteries.
 - Use 2 x 1.5V AAA batteries.
 - Make sure the battery polarities (+) and (-) match the markings in the device when inserting batteries.
- 3. Reinstall the battery cover.



Battery Level Indicator

When battery level is getting low, **(**) symbol will appear on the display. Replace all used batteries with new batteries.

NOTE:

- Remove the batteries if the device is not in use for long periods of time.
- . Do not mix old and new batteries or different types of batteries.
- · Remove exhausted batteries from the unit.

WARNING:

- In case battery fluid leaks, do not touch the battery fluid, Avoid skin contact (e.g. put on protective gloves) and clean the battery compartment with dry cloth.
- Batteries may cause a choking hazard to children. Keep batteries out of the reach of children.
- · Dispose the used batteries safely according to local regulations.

OPERATING INSTRUCTION

The G_LAB PRO100 TENS is your personal Transcutaneous Electrical. Nerve Stimulator, allowing for the options of two or four electrodes, which is hand-held & internally powered & intended to be operated by patient with hand supported. The lead wires insert into Channel 1 and Channel 2 and each wire connects to two electrodes. The stimulation pulses are transferred from the device through the lead wire to the electrodes. The intensity of each pair of electrodes is adjustable on the device.

1. Insert battery

Slide battery cover off by gently pressing on the ribbed area with your thumb. Insert batteries, ensure polarity are correct as marked inside the battery compartment. Put back battery cover.

2. Connect the lead wire pins into the electrodes.

To connect the lead wire pins to the electrodes, simply insert the pins into the two electrode connectors.

To remove the pins from the electrodes, simply pull the pins out of the connectors.

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4. Electrode placement

Place the electrodes on your clean, dry and healthy skin, near or surrounding the pain at least 2 inches apart, and do not let the electrodes touch each other, and be sure there is a linear path between the electrodes. For best results, before beginning treatment, please refer the the electrode placement guides on next 2 pages which showing the locations for placing the positive (+) electrodes and negative (-) electrodes at the common areas of the body where to be treated. It is important to consult your doctor/medical adviser for the placement of electrodes.

NOTE:

- There is a safety feature that the intensity controls will only work if the lead wires are connected with electrodes (Applied part) attached to the skin.
- When using self-adhesive electrodes, ensure your skin is free from oil, talc, etc. Check the electrodes have not dried out. If this happens, dampen slightly. If electrodes dry out this can cause minor skin irritation.

3. Connect lead wires to device

The device operates with one or two sets of electrodes. When using one set, plug lead wire into Channel 1 socket on the bottom of the device. Use Channel 2 to operate the second set. Both channels may be used simultaneously.

2 ELECTRODE PLACEMENT GUIDE



Cervical Pain / Neck Pain Attach both electrodes on the neck. (Do not place on the carotid artery or throat.)



Shoulder Pain Attach one electrode in front and one in back of the muscle.



Flhow Pain Attach both electrodes on either side of the ioint with pain.



Lumbar Pain / Lower Back Pain

Attach both electrodes on the lower back with the backbone in the center. Do not place on the backbone or spine.



Carpal Tunnel / Hand Pain Attach both electrodes on the hand where you feel pain.



Foot Pain / Ankle Pain Attach electrodes per the illustration. Do not place electrodes simultaneously to the soles

of both feet. Treat one at a time.



Hip Pain Attach both electrodes on either side of the region where you feel pain.



Knee Pain / Joint Pain Attach both electrodes above the knee or

above and below the joint with pain.

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4 ELECTRODE PLACEMENT GUIDE



Cervical Pain / Neck Pain Attach both sets of electrodes on the neck. (Do not place on the carotid artery or throat.)



Shoulder Pain

Attach one set of electrode in front and one set of electrode in back of the muscle.



Elbow Pain Attach both sets of electrodes on either side of the joint with pain.



Carpal Tunnel / Hand Pain Attach both sets of electrodes on the hand where you feel pain.



Foot Pain / Ankle Pain

Attach electrodes per the illustration. Do not place electrodes simultaneously to the soles of both feet. Treat one at a time.



Lumbar Pain / Lower Back Pain

Attach both sets of electrodes on the lower back with the backbone in the center. Do not place on the backbone or spine.



Hip Pain

Attach both sets of electrodes on either side of the region where you feel pain.



Knee Pain / Joint Pain Attach both sets of electrodes above the

knee or above and below the joint with pain.

OPERATING INSTRUCTION

5. Start simulation

- Press ① button to turn on the device.
- Press <u>M</u> button to select the program you wish to use. During any mode change, the intensity will drop back to zero. There are 4 programs to chosen.
- Press 💿 button cycle to select the treatment time. The device offer 15 / 30 / 45 / 60 minutes or continuous treatment sessions to choose.
- Press 🛨 or 🔄 button to adjust the output intensity of each channel. The device will start to work.





treatment time

Select the program

Adjust the intensity

NOTE:

- The device will be operated in the same program when it is turn on the next time. The memory of last treatment program will be kept even battery is removed.
- Varying the modes helps avoid or delay your body becoming used to any particular setting. Your doctor / medical adviser will be pleased to assist you with electrode positions and settings. Continue stimulating for as long as necessary but preferably for no less than 30 minutes unless you experience discomfort.
- Some people achieve pain relief after a short period, while others may require for longer.
- When you have finished stimulating, turn the device off by pressing the ON/OFF button.
- Ensure that the device is switched off before removing the leads. Do not pull the wires. Remove leads by holding the jack plug between the forefinger and thumb.

CAUTION:

- If the stimulation levels are uncomfortable or become uncomfortable, reduce the stimulation intensity to a comfortable level and contact your medical practitioner if problems persist.
- If your pain does not improve and you become sore from over-use, refrain from treating those areas for two days. If this issue reoccurs, reduce the treatment time and intensity settings for future treatment.
- If you feel pain, dizziness, discomfort or nausea, call your physician or medical practitioner.
- Caution should be used when working with maximum intensities, (i.e., always at the limit of what you can support.) Do not exceed your comfort level.

MAINTENANCE AND CARE

- The life of electrodes depends on the frequency and time of usage as well as storage conditions. You may wash the electrodes when the adhesive surface becomes dirty and/or the electrodes are difficult to attach. Dry the electrodes and let the adhesive surface air-dry completely (do not wipe with a tissue paper or cloth). But the electrodes with no adherence must be replaced.
- The device requires neither routine maintenance nor calibration. When needed, clean the device after use with a soft, slightly moistened cloth. Wipe gently.
- . Change the battery regularly.
- Remove the battery if the unit is not to be used for a long period of time.
- Avoid damaging the device by dropping it or using it rudely.
- . Do not immerse the device in any cleaning solution or water.
- To purchase additional electrodes if needed. Please kindly contact the distributor.

TROUBLESHOOTING

Problem	Solution	
The device cannot power on	Change new batteries Check the batteries are installed correctly	
LCD display is blurred	Battery low, change new batteries	
The device cannot increase intensity	Check the lead wire is connected to the device properly Change new electrodes if they lose stickiness	
The device output is weak	Check the electrodes are placed properly Change new electrodes if it lose stickiness Battery low, change new batteries	
The device suddenly no output	Check the lead wires and electrodes are connected properly	

Device failures

- Do not repair damaged devices yourselves.
 Only the manufacturer is entitled to repair the device.
 In the event of a fault, please contact the dealer or supplier for assistance.

Warranty

Warranty is void if this device is under any of following cases: • Device is repaired or modified by any person other than the

- Device is subjected to misuse, abuse, neglect, damage in transit,
- accident or negligence.
 No or unreadable serial number.

TECHNICAL SPECIFICATION

Model No.	PR0100				
Display	LCD Display	LCD Display			
Operation Mode	4 programs	4 programs			
	Pulse Frequency (Hz)	Pulse width (µs)	Pulses per burst		
1	45.27	180	3		
2	54	100	67		
3	44	180	127		
4	90.91	100	255		
Memory	Memorize latest program in no	Memorize latest program in non-volatile memory			
Auto Power Off	5 Minutes	5 Minutes			
Output Channel	Two Channels	Two Channels			
Output Voltage	± 70V adjustable in 14 steps (5	\pm 70V adjustable in 14 steps (500 Ω load, zero to peak) with 10% tolerance			
Output Intensity	0 - 140mA adjustable in 14 ste	0 - 140mA adjustable in 14 steps (500Ω load)			
Output Waveform	Symmetrical multi-phase bipola	Symmetrical multi-phase bipolar rectangular			
Output Jacks	CE Touch-proof jacks	CE Touch-proof jacks			
Load Detector	Contact detection between the	Contact detection between the device and human skin			
	(This feature is activated from I	(This feature is activated from Level 2 and up)			
Power Source	2 x 1.5V AAA batteries (Type LF	2 x 1.5V AAA batteries (Type LR03)			
Battery Low Detect	2.2V ± 0.2V	2.2V ± 0.2V			
Tolerances	All output parameters are subje	All output parameters are subjected to a ± 20% tolerance unless other specified			
Operating Environment	Temperature 0-40°C / Air humi	Temperature 0-40°C / Air humidity 30-75% / Air pressure 700hPa-1060hPa			
Storage & Transport Environment	Temperature 0-40°C / Air humi	Temperature 0-40°C / Air humidity 30-90% / Air pressure 700hPa-1060hPa			
Expected Service Life	Device - Approx. 5 years*	Device - Approx. 5 years*			
	Lead wire - Approx. 2 years*	Lead wire - Approx. 2 years*			
	Electrodes - Approx. 30 times*				
Accessories	ccessories Electrodes x 4 (size: 40 x 40mm) ; lead wire x 2 ; detachable belt clip x 1 ; ba				
	instruction manual ; quick start	guide ; electrode placeme	nt guide		

* The actual life time depends on frequency of use, skin condition, handling, storage condition, etc.

G.LAB[®] 1-YEAR LIMITED WARRANTY

Thank you for your recent purchase of the G.LAB® PR0100 TENS. It is our goal to provide you with a high quality product that will meet and exceed your expectations.

G.LAB warrants this product, excluding batteries, lead wire, electrodes and accessories, to be free from defects in materials and workmanship for a period of one (1) years from the original date of purchase at retail. We will replace any defective product that is covered by the above warranty at no cost.

This warranty does not apply to damage resulting from normal wear, misuse and/or not used in accordance with the instructions in the user manual.

G.LAB limits all implied warranties (including, but not limited to fitness and merchantability) to one (1) years from the original date of purchase at retail.

This warranty extends only to the original retail purchaser, and is not transferable.

G.LAB's sole liability from this warranty is limited to replacement of defective product. Under no circumstances shall G.LAB be held liable for death or injuries to persons, damage to property, loss of use or any other special, incidental, contingent or consequential damages, indirect costs or expenses arising from the use of G.LAB products. Replacement products under this warranty are warrantied only for the remainder of the original warranty period.

To obtain warranty service, please contact Aceso Healthcare Products Customer Service by sending email to cs@ulab-usa.com.

When sending defective product for warranty service, please enclose the Proof of Purchase, a paper with your name, address, phone number, and description of the specific problem. Pack the product carefully to prevent damage in transit.

FOR CUSTOMER SERVICE Email: cs@glab-usa.com Call: 1-510-771-7883 Visit: www.glab-usa.com

Distributor: Aceso Healthcare Products, Inc.



Symbol for the marking of electrical and electronics devices according to Directive 2002/96/EC. The device, accessories and the packaging have to be disposed of waste correctly at the end of the usage. Please follow Local Ordinances or Regulations for disposal.



P/N: 83-P0100-CEN00A-R MADE IN CHINA