ADVANCED RECOVERY FOR ATHLETES

ACTIN ONE

MANUAL DO USUÁRIO
USER MANUAL

instructions for use

Product:

ACTIN ONE ELECTROSTIMULATOR

Model: Actin One

Responsible for Warranty

Green Fit Recovery, lda.
Avenida Engenheiro Duarte Pacheco, Torre 2, 8 andar,
Sala 10, Zip Code: 1070-102, city Lisboa, Portugal;
ID number: 518 096 700;
Resp. Técnico: Rodrigo Santana / CRN-4 6100817

For greater security:
Read and understand all instructions contained in these "Instructions for Use" before installing or operating the product.
This manual must be read by all product operators.
In order to maintain the maximum level of safety, users must use the equipment following the indications and limits of use contained in this manual.
AVA disclaims all liability in cases of use other than that described in this manual.

INTRODUCTION

Dear customer, congratulations!

You have just purchased a product developed and produced with high technological and quality standards. Before using the equipment, we urge you to carefully read the instructions and information contained in this manual, to make the most of its features and functions, as well as to use it with greater safety and efficiency, both for the operator and the user.

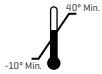
If you have any questions, suggestions or complaints, please contact us. AVA has a team of highly qualified and trained professionals, as well as being at the forefront of technological solutions and project development, and is able to provide all the information you need.

We hope to meet all your expectations with your new purchase. We thank you for your preference and trust in choosing our product.

Best regards,
AVA - Advanced Recovery For Athletes.

SYMBOLISM USED

Symbols, graphics and conventions that can be found in these Instructions for Use, on the product and on its packaging.

SYMBOL	DESCRIPT
	Standard attention symbol.
	Please refer to the documents accompanying the product.
IPXO	Equipment without protection against harmful water ingress
	Need for protection against humidity and any other type of liquid that may contaminate the product, during transportation and storage.
	Take care during transport and storage (fragile).
	Transport and storage positioning symbol (upward facing)
	Temperature limit symbol for storage and transportation. [-10 to 50 °C]
	Pressure limit symbol for storage and transport. [80 kPa to 102 kPa]
	Relative humidity limit symbol for storage and transportation. [30% to 90%]
	Symbol indicating maximum load permitted on a package (transport and storage).
	Date of manSymbol for the maximum number of identical packages that can be stacked on top of each other (transport and storage).
	Manufacturer identification
	Date of manufacture

SYMBOL	DESCRIPT
SN	Serial Number
~	Alternating current
⎓	Direct current

1 - PRODUCT IDENTIFICATION

Trade Name: Eletroestimulador Actin One
Model: Actin One
EMS Massager

1.2- PRODUCT DESCRIPTION

The ACTIN ONE electrostimulator is a microcontrolled electrostimulation device that uses low-intensity electrical currents through electrodes placed on the skin for applications recommended by this technique. This model has 4 current output channels with independent current amplitude adjustments.

To facilitate use, this device is supplied with
several pre-configured Usage Modes, i.e., for each Usage Mode there is a pre-configured pulse with a specific frequency and pulse duration. Once the Usage Mode has been selected, it is possible to adjust the Output Current Amplitude (RMS) in each channel independently, as well as adjust the time.

1.3 - OPERATING PRINCIPLE

The ACTIN ONE Electrostimulator works by using low-intensity electrical currents to stimulate the body's muscles. This device is designed to send controlled electrical impulses to specific locations, resulting in muscle contraction.

The ACTIN ONE Electrostimulator has electrodes that are placed on the skin in areas close to the muscles that you want to stimulate.

The output current is determined by a power pulse, which is the result of the pulse frequency, pulse duration and output current amplitude.
The ACTIN ONE Electrostimulator comes pre-configured with several combinations of pulse frequency and duration, and allows you to adjust the amplitude of the output current individually (each channel can have a different amplitude).

1.4 - ACCOMPANYING PARTS AND ACCESSORIES

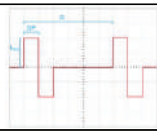
ITEM	DESCRIPTION	AMOUNT	IMAGE
01	Carrying Case	01	
02	Main Unit	01	
03	Electrode cable	04	
04	Self-adhesive electrode (size 01)	04	
05	Self-adhesive electrode (size 02)	04	
06	Power supply 9.5 vdc x 0.8	01	
07	Battery 7.4v - Li-Ion	01	
08	Instructions for use (User Manual)	01	

1.5- SPECIFICATIONS AND TECHNICAL CHARACTERISTICS

PRODUCT SPECIFICATIONS AND FEATURES	
Degree of protection against harmful penetration of water or particulate matter	IPX0 Protection Rating
Sterilization method	Not applied
Suitability for use in an OXYGEN-RICH ENVIRONMENT	Not suitable
Mode of operation	Continuous Operation
Classification regarding use in the presence of anesthetic mixture	Not to be used in the presence of flammable anaesthetic mixtures with air or nitrous oxide. Not suitable (Non-AP / Non-APG)
Useful life	5 years
Mobility	STATIONARY Equipment Note: once the equipment is installed and put into service (in operation), it is not intended to be moved from one place to another while in operation, therefore, this equipment is not considered (classified) as “portable”

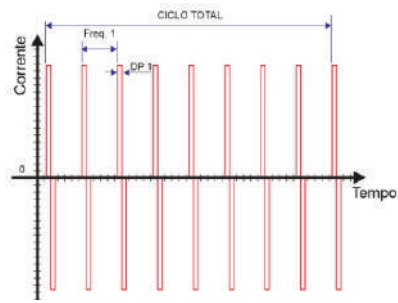
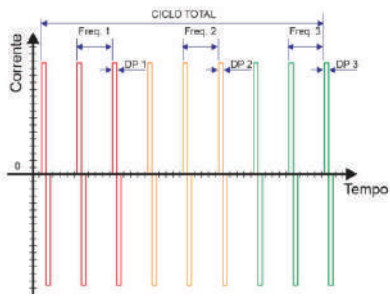
ELECTRICAL CHARACTERISTICS	
power supply frequency	100-200 Vac (voltage range)
supply voltage	50/60 Hz
Insulation medium of the electrical supply network	Disconnect the power plug from the electrical network
Power supply	Power Supply Output: 9.5 VDC x 0.8A
Maximum Input Power	15A
Battery (internal)	- Nominal voltage: 7.4V - Type: Li-Ion - Nominal capacity: 2,400mAh - Nominal power: 19.5Wh
Battery mode operating autonomy	Approximately 5 hours
Charging time for full charge	4 hours approximately Note: from a fully discharged condition

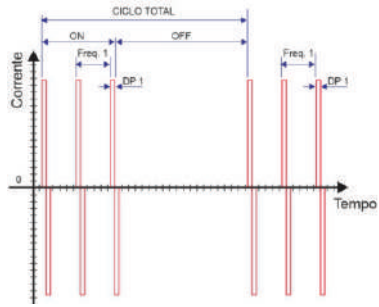
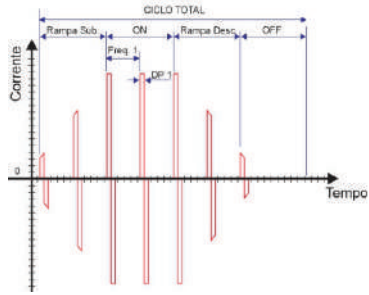
PHYSICAL CHARACTERISTICS OF THE PRODUCT	
Net Weight	- Main Unit.....0.400Kg - Accessories/Case...0,800Kg - Grand Total.....1,200Kg
Product Dimensions	- Main Unit: 16cm x 10cm x 3,5cm - Electrode Cable: length of 150cm (end to end) - Self-adhesive Electrode type 01: 5cm x 5cm - Self-adhesive Electrode type 02: 6cm x 9cm

CHARACTERISTICS OF THE ELECTROSTIMULATOR	
Number of Output Channels	04 channels (independent amplitude adjustment)
Electrode Type	Electrode Size 01 - with an area of 25cm² (5cm x 5cm) Electrode Size 02 - with an area of 25cm² 54cm² (6cm x 9cm)
Output Waveform	Rectangular biphasic Asymmetric balanced 
Pulse Repetition Frequency	FR = 1Hz a 500Hz ± 10% (depending on the method)
Pulse Duration	DP = 50µs a 2.000µs ± 10% (depending of the method)
Current Density (maximum)	DC RMS = 0.45mA/cm2 ± 10% (Self-adhesive electrode 5 x 5cm) DC RMS = 0.21mA/cm2 ± 10% (Self-adhesive electrode 6 x 9cm)
Output Current Intensity (Peak) provided by the device	I PEAK = 140 mA ± 20% (at 1000 ohms load)
Output Current Amplitude (RMS)	I RMS = 0 to 11.2 mA RMS ± 20% (with 1000 ohm load) Note: not all modes allow operation with an RMS Amplitude of 11.2 mA RMS. See the maximum RMS Amplitude value for each mode in the Pulse Characteristics x Modes table.
Maximum RMS current supplied by the device (IRMS)	I RMS = 11.2 mA RMS ± 20% (with 1000 ohm load)
Amplitude Adjustment	75 steps (0 to 75), starting at 0 mA.
Effect of load impedance on output current parameters	Reducing the load impedance increases the Output Current Amplitude (RMS output current)

Exit Indicator	Indicator that it is possible to provide an output of more than 140 mA or 10 V, or pulses containing an energy exceeding 10 mJ per pulse, into a load resistance of 1,000 Ohms. Note: indicator also used for "pause"
Operating time adjustment	- Working range: 1 to 99 minutes ± 20% - Resolution (adjustment): 1 minute

TYPES OF PULSE - FREQUENCY X PULSE DURATION X RAMP UP X ON X RAMP DOWN X OFF X TOTAL CYCLE

CONTINUOUS Frequency Quantity: 01 Pulse Duration Quantity: 01 Up Ramp: not applied ON Time (stimulation): continuous Down Ramp: not applied OFF Time (pause): not applied Total Cycle = On Time	
PWM (Pulse Width Modulation) Frequency Quantity: Multiple Pulse Duration Quantity: Multiple Up Ramp: not applied ON (stimulation): continuous Down Ramp: not applied OFF Time (pause): not applied Total Cycle = ON Time	

BURST Frequency Quantity: 01 Pulse Duration Quantity: 01 Upward Ramp: not applied ON Time (stimulation): YES Downward Ramp: not applied OFF Time (pause): YES Total Cycle = ON Time + OFF Time	
COMBINED Frequency Quantity: 01 Pulse Duration Quantity: 01 Up Ramp: YES ON Time (stimulation): YES Down Ramp: YES OFF Time (pause): YES Total Cycle = Up Ramp Time + ON Time + Down Ramp Time + OFF Time	

2 - TABLE OF PULSE CHARACTERISTICS X APPLICATION MODES

ACUPUNCTURE MODE		
NAME	**PARAMETERS**	**OFF TIME**
Headache	Continuous output mode 80Hz/100us	Not applied
Cellulite	Continuous output mode 100Hz/100us	Not applied
Acute Pain	PWM mode 50us-75us-50us/1hz-5hz-1hz / Modulation period 14s	Not applied
Chronic Pain	PWM mode 50us-60us-50us/8hz-15hz-8hz / Modulation period 14s	Not applied
Neuropathic Pain	Continuous output mode 800Hz/100us	Not applied
Muscle Spasms	Continuous output mode 200Hz/100us	Not applied
Localized Fat	Continuous output mode 100Hz/100us	Not applied
Hypertension	Continuous output mode 2Hz/75us	Not applied
Low Back Pain	Continuous output mode 2Hz/100us	Not applied
Facial Paralysis	Continuous output mode 8Hz/100us	Not applied
Trigger Points	Continuous output mode 200Hz/100us	Not applied
Facial Rejuvenation Sedation	Continuous output mode 100Hz/80us	Not applied
Facial Rejuvenation	Frequency increasing and decreasing output mode 1Hz-30Hz-1Hz / 50us-75us-50us / period 14s	Not applied
Toning	Frequency increasing and decreasing output mode 1Hz-30Hz-1Hz / 50us-100us-50us / period 14s	Not applied

PAIN MODE		
NAME	**PARAMETERS**	**OFF TIME**
Acute Shin Splints	Continuous output mode 5Hz/500us	Not applied
Chronic Shin Splints	Frequency increasing and decreasing output mode 2 Hz-30Hz-2 Hz/500us	Not applied
Cervicalgia (Neck Pain)	Continuous output mode 2Hz/500us	Not applied
Sciatica	Continuous output mode 2Hz/500us	Not applied
Menstrual Cramps / Dysmenorrhea	Continuous output mode 100Hz/400us	Not applied
Chronic	Frequency increasing and decreasing output mode 2 Hz-100Hz-2 Hz/500us	Not applied
Patellofemoral Dysfunction	Continuous output mode 100Hz/500us	Not applied
Acute Ankle Sprain	Continuous output mode 8Hz/500us	Not applied
Chronic Ankle Sprain	Continuous output mode 100Hz/500us	Not applied
Acute Epicondylitis	Continuous output mode 8Hz/500us	Not applied
Chronic Epicondylitis	Continuous output mode 100Hz/500us	Not applied
Spasticity	Continuous output mode 100Hz/500us	Not applied
Low Back Pain	Continuous output mode 2Hz/500us	Not applied
Diabetic Neuropathy	Continuous output mode 10Hz/500us	Not applied
Neuropathic	Continuous output mode 10Hz/500us	Not applied
Neuropathic Amputation	Continuous output mode 10Hz/500us	Not applied
Neuropathic in Upper Limbs	Continuous output mode 10Hz/500us	Not applied
Neuropathic - Spinal Cord Injury	Continuous output mode 10Hz/500us	Not applied
Nociceptive - Spinal Cord Injury	Continuous output mode 5Hz/500us	Not applied
Chronic Shoulder Pain	Continuous output mode 100Hz/500us	Not applied
Post-Stroke Painful Shoulder	Continuous output mode 100Hz/500us	Not applied
Cancer	Continuous output mode 100Hz/200us	Not applied
Knee and Hip Osteoarthritis	Continuous output mode 100Hz/500us	Not applied
Chronic Pelvic Pain	Continuous output mode 10Hz/500us	Not applied
Trigger Points	Continuous output mode 2Hz/500us	Not applied
Immediate Post-Surgery	Continuous output mode 80Hz/500us	Not applied
Late Post-Surgery	Continuous output mode 5Hz/500us	Not applied
Post Bone Fracture	Continuous output mode 8Hz/500us	Not applied
Carpal Tunnel Syndrome	Continuous output mode 10Hz/500us	Not applied
Rotator Cuff Tendinopathy	Continuous output mode 5Hz/500us	Not applied
Rotator Cuff Tendinopathy	Continuous output mode 100Hz/500us	Not applied

SPORT MODE		
NAME	**PARAMETERS**	**OFF TIME**
Blood Flow to Upper Limbs (MMSS)	Continuous output mode 4Hz/800us	Not applied
Pre-Workout Warm-up for Lower Limbs (MMII)	Continuous output mode 3Hz/1000us	Not applied
Pre-Workout Warm-up for Upper Limbs (MMSS)	Continuous output mode 5Hz/1000us	Not applied
Muscle Relaxation	Frequency declination output mode 10Hz-8Hz-6Hz-4Hz-2Hz /800us / Declination period 180s	Not applied
Explosive Strength of Lower Limbs (MMII)	Rise 1s Flat top 15s Fall 1s Rest 30s 60Hz/1000us	3Hz/50us
Muscle Strength - Advanced Phase	Rise 3s Flat top 15s Fall 1s Rest 15s 60Hz/1000us	3Hz/50us
Muscle Strength - Initial Phase	Rise 3s Flat top 10s Fall 1s Rest 15s 60Hz/1000us	3Hz/50us
Muscle Strength - Intermediate Phase	Rise 3s Flat top 12s Fall 1s Rest 12s 60Hz/1000us	3Hz/50us
Isometry of Lower Limbs (MMII)	Rise 4s Flat top 15s Fall 2s Rest 15s 40Hz/1000us	3Hz/50us
Isometry of Upper Limbs (MMSS)	Rise 4s Flat top 12s Fall 2s Rest 12s 50Hz/1000us	3Hz/50us
Functional Recovery Post-Surgery	Rise 3s Flat top 8s Fall 1s Rest 8s 50Hz/1000us	3Hz/50us
Abdominal Toning	Rise 3s Flat top 8s Fall 1s Rest 12s 40Hz/1000us	3Hz/50us
Lower Limb (MMII) Toning	Rise 3s Flat top 10s Fall 1s Rest 10s 40Hz/1000us	3Hz/50us
Upper Limb (MMSS) Toning	Rise 3s Flat top 10s Fall 1s Rest 10s 50Hz/1000us	3Hz/50us

AESTHETIC AND FITNESS MODE		
NAME	**PARAMETERS**	**OFF TIME**
Post-Mammoplasty Drainage	Continuous output mode 8Hz/500us	Not applied
Postpartum Drainage	Continuous output mode 10Hz/500us	Not applied
Toning Abdominal Massage	PWM mode 50us--500us--50us/100 Hz / Modulation period 10s	Not applied
Toning Massage for Lower Limbs (MMII)	PWM mode 100us-500us-100us /100 Hz/ Modulation period 15s	Not applied
Toning Massage for Upper Limbs (MMSS)	PWM mode 100us-500us-100us /80 Hz/ Modulation period 10s	Not applied
Pre-Workout Muscle Preparation for Spine	Burst mode 120Hz/500us 0.05S burst 0.161S intermittent	Not applied
Pre-Workout Muscle Preparation for Lower Limbs (MMII)	Burst mode 100Hz/500us 0.05S burst 0.161S intermittent	Not applied
Pre-Workout Muscle Preparation for Upper Limbs (MMSS)	Burst mode 80Hz/500us 0.05S burst 0.161S intermittent	Not applied
Active Muscle Recovery Post-Abdominoplasty	Frequency declination output mode 10Hz-9Hz-8Hz-7Hz-6Hz -5Hz-4Hz-3Hz-2Hz-1Hz/500us / Declination period 120s	Not applied
Active Muscle Recovery Post-Pregnancy	Frequency declination output mode 10Hz-9Hz-8Hz-7Hz-6Hz -5Hz-4Hz-3Hz-2Hz-1Hz/500us / Declination period 120s	Not applied
Passive Muscle Recovery Post-Abdominoplasty	Frequency declination output mode 12Hz-9Hz -6Hz-3Hz-1Hz/500us/Declination period 240s	Not applied
Passive Muscle Recovery Post-Pregnancy	Frequency declination output mode 12Hz-9Hz -6Hz-3Hz-1Hz/500us/Declination period 240s	Not applied
Passive Muscle Recovery Post-Liposculpture	Frequency declination output mode 12Hz-9Hz -6Hz-3Hz-1Hz/500us/Declination period 240s	Not applied
Post-Workout Muscle Recovery for Spine	Burst mode 120Hz/500us 0.05S burst 0.45S intermittent	Not applied
Post-Workout Muscle Recovery for Lower Limbs (MMII)	Burst mode 100Hz/500us 0.05S burst 0.45S intermittent	Not applied
Post-Workout Muscle Recovery for Upper Limbs (MMSS)	Burst mode 80Hz/500us 0.05S burst 0.45S intermittent	Not applied
Post-Surgery Tissue Recovery	MENS - Continuous output mode 100Hz/2000us / 300uA	Not applied
Post-Peeling Tissue Recovery	MENS - Continuous output mode 1Hz/5000us / 100uA	Not applied
Post-Burn Tissue Recovery	MENS - Continuous output mode 100Hz/2000us / 300uA	Not applied
Rejuvenation (Bio-stimulation)	MENS - Continuous output mode 100Hz/5000us / 50uA	Not applied
Rejuvenation (Normalization)	MENS - Continuous output mode 100Hz/2000us / 500uA	Not applied
Rejuvenation (Nutrition)	MENS - Continuous output mode 100Hz/1000us/100uA	Not applied
Aerobic Training for Spine	Rise 2s Flat top 8s Fall 2s Rest 12s 60Hz/500us	3Hz/50us
Aerobic Training for Lower Limbs (MMII)	Rise 2s Flat top 8s Fall 2s Rest 12s 50Hz/500us	3Hz/50us
Aerobic Training for Upper Limbs (MMSS)	Rise 2s Flat top 8s Fall 2s Rest 12s 60Hz/500us	3Hz/50us

REHABILITATION MODE		
NAME	**PARAMETERS**	**OFF TIME**
Spasticity Control	Rise 3s Flat top 6s Fall 1s Rest 3s 50Hz/500us	3Hz/50us
Trophic Awakening	Pulse width burst mode 60Hz/100us 60Hz/ 500us interval 2s, period 2s	Não existe
Abdominal Electrical Stimulation	Rise 4s Flat top 8s Fall 2s Rest 12s 40Hz/500us	3Hz/50us
Biceps/Triceps Electrical Stimulation	Rise 2s Flat top 6s Fall 1s Rest 12s 60Hz/500us	3Hz/50us
Thigh and/or Leg Electrical Stimulation	Rise 2s Flat top 8s Fall 2s Rest 16s 50Hz/550us	3Hz/50us
Deltoid Electrical Stimulation	Rise 2s Flat top 6s Fall 1s Rest 10s 50Hz/500us	3Hz/50us
Wrist Flexion/Extension Electrical Stimulation	Rise 4s Flat top 8s Fall 2s Rest 12s 50Hz/500us	3Hz/50us
Gluteal Electrical Stimulation	Rise 2s Flat top 6s Fall 1s Rest 12s 50Hz/500us	3Hz/50us
Latissimus Dorsi Electrical Stimulation	Rise 4s Flat top 8s Fall 2s Rest 16s 50Hz/500us	3Hz/50us
Pectoral Electrical Stimulation	Rise 4s Flat top 10s Fall 2s Rest 10s 45Hz/200us	3Hz/50us
Trapezius Electrical Stimulation	Rise 4s Flat top 6s Fall 2s Rest 12s 50Hz/500us	3Hz/50us
ACL - Chronic Phase	Rise 3s Flat top 15s Fall 01s Rest 15s 40Hz/350us	3Hz/50us
ACL - Initial Phase	Rise 3s Flat top 5s Fall 3s Rest 15s 40Hz/500us	3Hz/50us
ACL - Intermediate Phase	Rise 3s Flat top 10s Fall 1s Rest 15s 40Hz/500us	3Hz/50us
Post-Surgery Spine - Advanced Phase	Rise 2s Flat top 10s Fall 1s Rest 10s 60Hz/200us	3Hz/50us
Post-Surgery Spine - nitial Phase	Rise 3s Flat top 6s Fall 3s Rest 15s 40Hz/500us	3Hz/50us
Post-Surgery Lower Limbs (LL) - Advanced Phase	Rise 3s Flat top 8s Fall 1s Rest 15s 60Hz/500us	3Hz/50us
Post-Surgery Spine - Intermediate Phase	Rise 2s Flat top 10s Fall 1s Rest 10s 50Hz/500us	3Hz/50us
Post-Surgery Lower Limbs (LL) - Initial Phase	Rise 3s Flat top 5s Fall 3s Rest 15s 50Hz/500us	3Hz/50us
Post-Surgery Lower Limbs (LL) - Intermediate Phase	Rise 3s Flat top 8s Fall 1s Rest 15s 50Hz/500us	3Hz/50us
Post-Surgery Upper Limbs (UL) - Advanced Phase	Rise 2s Flat top 10s Fall 1s Rest 10s 60Hz/500us	3Hz/50us
Post-Surgery Upper Limbs (UL) - Initial Phase	Rise 3s Flat top 6s Fall 3s Rest 15s 40Hz/500us	3Hz/50us
Post-Surgery Upper Limbs (UL) - Intermediate Phase	Rise 3s Flat top 8s Fall 1s Rest 15s 60Hz/500us	3Hz/50us
Deep Vein Thrombosis Prevention	1° moment - Burst mode 100Hz/450us 0.02S burst 0.18S intermittent/period 120s 2° moment Rise 2s Flat top 8s Fall 2s Rest 8s 50Hz/500us / period 1560s 3° moment Burst mode 100Hz/500us 0.02S burst 0.18S intermittent/period 120	Not applied
Diastasis reduction	Rise 4s Flat top 8s Fall 2s Rest 20s 50Hz/500us	3Hz/50us

RECOVERY MODE		
NAME	**PARAMETERS**	**OFF TIME**
Lymphatic drainage LL	Continuous output mode 10Hz/ 650us	Not applied
Lymphatic drainage UL	Continuous output mode 10Hz/500us	Not applied
Lymphatic drainage trunk	Continuous output mode 10Hz / 600us	Not applied
Relaxing massage spine	Burst mode 50Hz/600us 0.05S burst 0.45S intermittent	Not applied
Relaxing massage LL	Burst mode 35Hz/700us 0.05S burst 0.45S intermittent	Not applied
Relaxing massage UL	Burst mode 30Hz/700us 0.05S burst 0.45S intermittent	Not applied
Toning massage spine	Burst mode 25Hz/600us 0.005S burst 0.0093S intermittent	Not applied
Toning massage LL	Burst mode 30Hz/750us 0.005S burst 0.0093S intermittent	Not applied
Toning massage UL	Burst mode 25Hz/800us 0.005S burst 0.0093S intermittent	Not applied
Micromassage and oxygenation	Frequency increasing and decreasing output mode 2 Hz-30Hz-2 Hz / 600us / period 14s	Not applied
Passive muscle recovery spine	Frequency declination output mode 10Hz-8Hz-6Hz-4Hz-2Hz / 700us / Declination period 180s	Not applied
Passive muscle recovery LL	Frequency declination output mode 10Hz-8Hz-6Hz-4Hz-2Hz / 550us / Declination period 180s	Not applied
Passive muscle recovery UL	Frequency declination output mode 10Hz-9Hz-8Hz-7Hz-6Hz- 5Hz-4Hz-3Hz-2Hz/600us / Declination period 120s	Not applied
Post-workout recovery spine	Frequency declination output mode 10Hz-9Hz-8Hz-7Hz-6Hz- 5Hz-4Hz-3Hz-2Hz/800us / Declination period 120s	Not applied
Post-workout recovery LL	Frequency declination output mode 10Hz-9Hz-8Hz-7Hz-6Hz- 5Hz-4Hz-3Hz-2Hz/800us / Declination period 120s	Not applied
Post-workout recovery UL	Frequency declination output mode 10Hz-9Hz-8Hz-7Hz-6Hz- 5Hz-4Hz-3Hz-2Hz/1000us / Declination period 120s	Not applied

TISSUE REPAIR MODE		
NAME	**PARAMETERS**	**OFF TIME**
Wound healing	MENS - Continuous output mode 160Hz/2000us / 700uA	Not applied
Muscle contusion	MENS - Continuous output mode 500Hz/1000us / 800uA	Not applied
Acute joint edema	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz / 1000us / 500uA	Not applied
Knee arthritis edema	MENS - Continuous output mode 160Hz/2000us / 500uA	Not applied
Shoulder sprain	MENS - Continuous output mode 160Hz/2000us / 500uA	Not applied
Ankle sprain	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz/1000us / 500uA	Not applied
Acute phase epicondylitis	MENS - Continuous output mode 256Hz/1000us / 400uA	Not applied
Chronic phase epicondylitis	MENS - Continuous output mode 256Hz/1000us / 700uA	Not applied
Cervical spondylosis	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz/1000us / 800uA	Not applied
Rotator cuff inflammation	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz / 1000us/500uA	Not applied
Sciatic nerve inflammation	MENS - Continuous output mode 256Hz/1000us / 500uA	Not applied
Tendon inflammation	MENS - Frequency increasing and decreasing output mode 50 Hz--500Hz--50 Hz / 1000us / 800uA	Not applied
Achilles tendon inflammation	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz/1000us / 700uA	Not applied
Patellar tendon inflammation	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz/1000us/800uA	Not applied
Carpal tunnel inflammation	MENS - Continuous output mode 256Hz/1000us / 500uA	Not applied
Brachial neuralgia	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz/1000us / 800uA	Not applied
Torticollis	Burst mode 100Hz/250us 0.05S burst 0.05S intermittent	Not applied
Pressure ulcers	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz/500us/400uA	Not applied
Diabetic ulcers	MENS - Frequency increasing and decreasing output mode 50 Hz-500Hz-50 Hz/1000us / 700uA	Not applied

1.5 – OPTIONALS, CONSUMABLES AND SUPPORT MATERIALS

OPTIONAL: Not applicable
CONSUMABLES: Not applicable
SUPPORT MATERIALS: Instructions for Use

3 - CONTROL PANEL AND ITS FUNCTIONALITIES

KEYBOARD	
	Turns the equipment on and off / Selects (confirms) Menu item Note: the equipment remains in standby mode when turned off
	Moves between Menu options (goes up) Note: if "TIME" is selected, the programmed time increases
	Moves between Menu options (down) Note: if "TIME" is selected, it decreases the programmed time
	Returns the previous Menu screen
	Amplitude Adjustment (increases) - Minimum: 00 / Maximum: 75
	Amplitude Adjustment (decreases) - Minimum: 00 / Maximum: 75

INDICATOR	FUNCTION / MENU ADJUSTMENT
PLAY	Starts the current output at the electrodes
PAUSE	Pause the current output at the electrodes
STOP	stops the current output at the electrodes. Note: Resetting Time and Amplitude values
SEE ELECTRODE POSITION	Displays the image of the electrode position. Note: not available for this equipment model
TIME: 30:00	Displays the remaining session time
000A	Displays the adjusted Amplitude value Minimum: 00 / Maximum: 75
	Displays the battery charge level

4 - SPECIAL CONDITIONS FOR STORAGE, CONSERVATION AND HANDLING OF THE PRODUCT:

STORAGE:
- Store the product in its original packaging, protected from humidity and any other type of liquid that may contaminate it, away from direct sunlight, in a clean place.
- Store at a temperature between 0°C and +40°C, relative humidity between 30% and 90% (non-condensing) and atmospheric pressure between 80kPa and 102kPa.

TRANSPORTATION:
- Transport the product in its original packaging, protected from humidity and any other type of liquid that may contaminate it, away from direct sunlight.
- During transportation, avoid vibrations and impacts to the equipment. Do not drop it on the floor. -Transport at a temperature between 0°C and +40°C, relative humidity between 30% and 90% (non-condensing) and atmospheric pressure between 80kPa and 102kPa.

CONSERVATION AND HANDLING
- After installation, keep the equipment in a clean place, away from dust, protected from rain and direct sunlight.
- Use at temperatures between 0°C and +40°C and relative humidity between 30% and 90% (non-condensing) and atmospheric pressure between 80kPa and 102kPa.

5 - SYSTEM OPERATION

TO OPERATE THE SYSTEM, YOU WILL NEED:
- Main Unit
- Power Supply 9.5 VDC x 0.8A (for operation connected to the electrical power grid)
- Electrode Cable.
- Self-Adhesive Electrode
- Battery 7.4 V - Li-Ion (for operation connected to the electrical power grid and in batteryonly mode)

OBSERVATIONS

- To ensure proper performance, the Main Unit should be placed on a stable surface (such as the floor or a table) during use.
- Before use, check the battery level in the Main Unit. If the Main Unit does not turn on, the battery may be discharged. In this case, before using, connect the 9.5 VDC x 0.8 A Power Supply to the Main Unit and use the mains power supply.
- A feeling of well-being is essential throughout use. If you feel any pain or discomfort, stop using the device immediately or readjust the Output Current Amplitude parameters. If you feel any discomfort during the session, it is recommended to reduce the Output Current Amplitude using the adjustment key on the Main Unit or turn off the equipment.

CAREFUL

-Do not remove the electrodes when the Main Unit is in operation.
-After using the Self-Adhesive Electrodes, return them to the packaging.

CAREFUL

- The equipment cannot operate without the 7.4 V - Li-Ion Battery, even if it is connected to the 9.5 VDC x 0.8A Power Supply and must be placed on a stable surface (such as the floor or a table) during use.

5.1 - PRIMARY OPERATION FUNCTIONS

STAGE	DESCRIPTION
Preparation	Connect the Power Supply to the mains. Connect the Power Supply to the Main Unit (power input). Connect the Electrode Cables to the Main Unit. Connect the two plugs of the SelfAdhesive Electrodes to the Electrode Cables. Remove the Self-Adhesive Electrodes from their original packaging. Remove the Self-Adhesive Electrodes from their seat and place them on the skin. Position the user comfortably.
Turning on the Equipment	Press the key for a few seconds, for the equipment to turn on
Select mode	Press the key to move down through the MODE options. Press thekey to move up through the MODE options. After selecting, press the key to confirm.
Select type	Press the key to move down through the options. Press the key to move up through the options. After selecting, press the key to confirm. Press the key to return to the previous menu, if necessary.
Time adjustment	Press the key until the option Press the key to confirm. Press the key to decrease the TIME. Press the key to increase the TIME. Press the key After selection, to confirm Press the key to return to the Previous Menu, if necessary
Adjusting the output current amplitude	Press the key to increase the Output Current Amplitude. Press the key to decrease the Current Amplitude **Note**: Amplitude adjustment must be made for each channel. The adjusted value will be displayed on the screen. Note: Slowly increase the Output Current Amplitude

STAGE	DESCRIPTION
START OPERATION	Press the key ▼ to the option ▶ PLAY to start operation. Press the key ⏻ to confirm. Note: When the time reaches <00:00>, operation is automatically stopped and the output current amplitude of each channel is reset (zeroed).
Pause OPERATION	Press the key ▼ to the option ⏸ PAUSE to pause operation. Press the key ⏻ to confirm. Note:during the "pause" the time count is interrupted and the output current amplitudes are maintained as they were configured.
Stop OPERATION	Press the key ▼ to the option ⏹ STOP to stop operation. Press the key ⏻ to confirm. Note: when pressing the stop key, the time count is reset (returns to the time value initially set) and the output current amplitudes are reset (zeroed).
Turn OFF the Equipment	Press the key ⏻ for a few seconds, for the equipment to turn
AUTO POWER	If the equipment is not in operating mode, that is, if the equipment does not have ▶ PLAY activated, after 5 minutes the equipment will automatically turn off
Finalization	· Remove the Self-Adhesive Electrodes from the user. · Disconnect the Self-Adhesive Electrodes from the Electrode Cables. · Disconnect the Power Supply from the electrical power grid. · Disconnect the Power Supply from the Main Unit. · Clean and disinfect all parts. · Store the equipment and its accessories in the Case.

5.2 - OPERATION MODES

Operation Description:
There are 4 independent current output channels. The current output is determined by an energy pulse, which is the result of the pulse frequency, pulse duration and current amplitude. For each Mode there is a pre-configured pulse, that is, a pulse with a certain frequency and a certain duration.

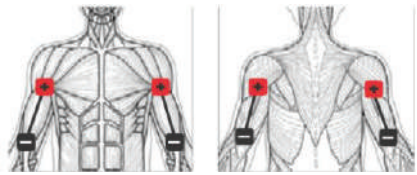
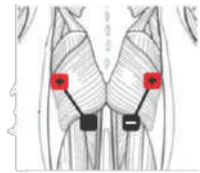
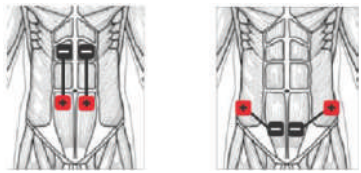
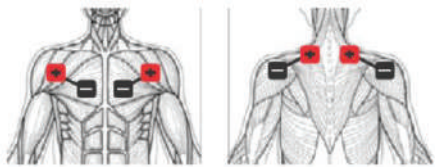
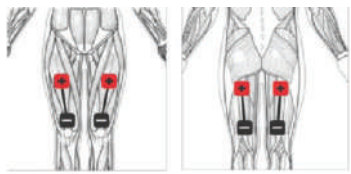
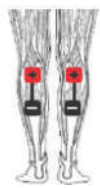
Note: The "maximum" Current Amplitude (RMS) is a direct result of the frequency and duration of each pulse. For each Mode, it is possible to adjust the Output Current Amplitude (RMS) of each channel, and adjust the Time. The time adjustment is from 01 to 99 minutes. The Output Current Amplitude (RMS) adjustment has a scale of 0 to 75, with the "75" level being equivalent to the maximum value for that specific mode.

Atenttion: Slowly increase the Output Current Amplitude level.

Recommendations on the size and type of electrodes to be used
Recommended type: self-adhesive type
Recommended size:
Electrode Size 01 - with an area of 25 cm2 (5 cm x 5 cm)
Electrode Size 02 with an area of 54 cm2 (6 cm x 9 cm)

Recommended use:
Place the electrodes on either side of the painful area, not directly over the pain.
Place the electrodes at least 2.5 cm apart.
YOU MUST USE BOTH ELECTRODES at the same time.
Do not overlap the electrodes or place one on top of the other.
Do not apply sprays, lotions or creams to the skin or electrodes.
Do not share electrodes.

6 - APPLICATION METHOD

TYPE	TYPE FUNCTION / KEYBOARD ADJUSTMENT
Arms	
Buttocks	
Stomach and Hips	
Chest and Shoulders	
Legs and Thighs	
Calf	

7 - WARNINGS AND PRECAUTIONS

This item contains a list of recommendations (warnings and precautions) for the safe use of this equipment.

SPECIAL RECOMMENDATIONS FOR USE WITH ELECTROSTIMULATOR.

- We recommend that a user with an implanted electronic device (such as a cardiac pacemaker) should not undergo stimulation unless a specialist medical opinion has been obtained beforehand.
- The maximum output values available from the electrodes recommended by AVA for use with the STIMULATOR is 11.2 mA RMS.
- Any electrodes that have current densities exceeding 2 mA/cm2 (RMS) may require special attention from the OPERATOR. Note: the smaller the electrode area, the higher the current density (mA/cm2).
- Stimulation should not be applied along or across the head, directly over the eyes, covering the mouth, in front of the neck (especially in the carotid sinus), or from electrodes located on the chest and upper back or across the heart.

CONTRAINDICATIONS FOR USE OF THE EQUIPMENT:

- Types of people who are contraindicated for the use of an electrostimulator:
- Pacemaker or other implanted electronic device: The use of electrostimulators may interfere with the functioning of implanted electronic devices, such as pacemakers or cardiac defibrillators.
- Pregnancy: The use of electrostimulation during pregnancy may not be safe and shouldbe avoided without medical advice. Epilepsy or history of seizures: Electrical stimulation may trigger seizures in individuals with epilepsy or a history of seizures.

- Deep vein thrombosis (DVT) or coagulation disorders: Applying electrical stimulation to areas affected by DVT or coagulation disorders may increase the risk of complications.
- Cancer or tumors: In certain cases, electrical stimulation may not be recommended for people with cancer or tumors, especially in the region where the cancer is present.
- Advanced neuromuscular diseases: In some advanced neuromuscular diseases, the use of electrical stimulators may not be effective or safe.
- Sensitivity or allergy to electrodes: Some people may have allergic reactions or sensitivity to the materials of the electrodes used in electrical stimulation devices.
- Areas with damaged or irritated skin: It is not recommended to apply stimulation to areas with damaged, irritated skin or rashes.
- Children or newborns: This device has not been evaluated for pediatric use.

REGIONS OF THE BODY CONTRAINDICATED FOR THE USE OF A NEUROMUSCULAR ELECTROSTIMULATOR.

- Cardiac area: Electrostimulation should not be applied to the heart or the region close to it.
- Neck and head: Electrostimulation should not be applied to the neck or head, especially to the carotid artery and sensitive areas.
- Eyes and ocular region. Stimulation should not be applied to the eyes or near the ocular area.
- On open wounds or lesions: The electrostimulator should not be used on areas of the body with open wounds, cuts or unhealed lesions.
- Irritated or inflamed skin: Avoid applying the electrostimulator to areas of the skin with irritation, rashes or inflammation.
- Abdominal region during pregnancy: During pregnancy, electrostimulation should not be applied to the abdominal region, unless expressly authorized by a health professional.
- Genital region.
- On the calves of both legs at the same time: This may cause cardiac disturbances.
- On the soles of both feet at the same time: This can cause heart problems. Over the
- breasts.

WARNINGS AND/OR PRECAUTIONS ABOUT ELECTRICAL CARE

- Check the indication of the equipment's power supply voltage range. Do not use it outside the specified range.
- The ACTIN ONE Electrostimulator cannot operate (work) without the Battery, even if the Power Supply is connected to the electrical network.
- Do not use extensions or adapter plugs to connect the equipment. This procedure is often the cause of interference and equipment malfunction.
- Do not use a Power Supply other than the one provided by AVA. The use of other Power
- Supplies may result in electric shock and will void the ACTIN ONE Electrostimulator warranty.
- To avoid electric shock, product malfunction or damage, never operate the system with the Power Supply or Electrode Cable damaged, or other mechanical damage, or if the Main Unit is not fully operational.
- Do not bend or twist the power supply to avoid fire or electric shock. NEVER let water spill on the main unit, or place the product in water or in a humid environment. To do so, take the following precautions:

Note: Potential damage from water entering the cabinet (internal part where the electronic circuits are located): Risk of internal short circuit resulting in::

- Flames from the cabinet, as well as the emission of hazardous substances resulting from the flame;
- Deformation of the cabinet due to the flame;
- Heating of the cabinet due to the flame, causing the parts that are or may be touched to reach temperatures that exceed the permitted values and consequently may result in burns;
- Loss of electrical insulation, causing voltage (electrical energy) in the accessible parts and consequently electric shock with the possibility of burns.

Warning: To avoid RISKS of loss or degradation of performance, as well as safety, use only original spare parts (manufactured and supplied by AVA).

MEANS OF ELECTRICALLY ISOLATING EQUIPMENT CIRCUITS FROM THE POWER SUPPLY MAINS

To electrically isolate the Equipment circuits from the Power Supply Network, remove the Power Supply from the power outlet.

Atenttion: Do not position the ACTIN ONE Electrostimulator in a way that makes it difficult to disconnect the Power Supply from the power outlet. Keep the Main Unit at least 50 cm from the power outlet.

USER WARNINGS AND PRECAUTIONS

- When using the ACTIN ONE Electrostimulator, care should be taken to maintain a lying/sitting position and be as relaxed as possible.
- Do not use the same Self-Adhesive Electrode on different people, to avoid crossinfection.
- If you feel pain or discomfort while using the ACTIN ONE Electrostimulator system, you should first reduce the current intensity selected through the Control Panel (Main Unit).
- If the discomfort persists, turn off the equipment.
- Do not remove the Self-Adhesive Electrode while the Main Unit is in operation.
- Always turn off the equipment before removing the Self-Adhesive Electrode.

WARNINGS AND PRECAUTIONS ON USE OF THE EQUIPMENT

- Operators must read this User Manual in its entirety before using the device.
- To avoid potential damage to your product, do not use Electrode Cables from another manufacturer with the ACTIN ONE Electrostimulator system.
- Monitor the arrangement of the Power Supply and Electrode Cable during use to avoid accidents.
- Always check that the equipment in general is in good condition. If the Main Unit, Electrode Cables, Power Supply and Self-Adhesive Electrodes are in perfect condition.
- It is forbidden to introduce sharp metal objects such as paper clips, staplers, needles or food into the equipment.

WARNINGS AND/OR PRECAUTIONS FOR USERS/OPERATORS:

- It is essential that all equipment operators read this User Manual carefully to ensure correct use/handling, avoiding possible damage to users or the equipment itself.
- Monitor to ensure that the programmed parameters are being executed correctly;
- Operators must keep this manual in an easily accessible location for quick reference by the operator himself or by technical personnel authorized for maintenance;
- The operator must always be alert, in accordance with the manual, and take the necessary protective measures.
- Position the equipment in a way that avoids injuries, taking care not to trip over the Power Supply cord and the system's Electrode Cables.
- Provide a distance of at least 5 cm around the equipment to allow air circulation and heat dissipation.

ENVIRONMENTAL WARNINGS AND PRECAUTIONS:

- Always turn off the system and disconnect the power supply from its electrical outlet during protocol breaks.
- Keep flammable and explosive liquids and gases (including alcohol, ether, nitrous oxide and oxygen) away from the equipment. The equipment should not be used in locations with flammable gases and liquids.
- The use of anesthetics or flammable gases such as nitrous oxide (N2O) and oxygen should be avoided. Adhesive solvents and flammable solutions used for cleaning and disinfection should be evaporated before the equipment is used. Also be aware of the danger of combustion of endogenous gases.

WARNINGS AND/OR PRECAUTIONS DURING USE

- Always turn off the system and unplug the Power Supply from its electrical outlet whennot in use to avoid the risk of electric shock.
- Keep the system, including the Power Supply and Electrode Cables, away from children and pets to avoid possible accidents (strangulation).

WARNINGS AND PRECAUTIONS DURING TRANSPORTATION AND STORAGE

- Do not leave the Main Unit in direct sunlight. UV light may damage or discolor the Main Unit.
- Store the Main Unit in its Carrying Case or other safe place.
- It is recommended that you store it in low places to avoid drops that may damage the equipment.
- To maintain the accuracy of the internal components, when transporting, installing or operating, avoid impacts, bumps and damage from rain or excessive heat.
- Make sure that excessive pressure is not exerted on the device when it is being transported so as not to damage its components.
- Do not place the equipment near sources of water or moisture.
- Store the equipment and various accessories in a closed, clean and dry place to avoid direct exposure to moisture, dust and sunlight. When you do not use the device for a long time, it is recommended to place it inside the Carrying Case.
- We recommend that you use the Carrying Case to transport the device. Your equipment must be protected from any overturning, falling, violent impact, vibration, strong sunlight, rain or snow water during travel. Avoid mixing with flammable, explosive and corrosive substances as specified in this manual.

WARNING DURING CORRECTIVE MAINTENANCE

- While the equipment is in use, no part of the equipment may be repaired or maintained.
- During maintenance procedures, a warning must be placed next to the equipment prohibiting its use.
- To avoid the risk of electric shock, do not remove any component of the equipment.
- Only technicians authorized by AVA may have access to the internal components of the equipment. Do not attempt to perform maintenance or repair work on the equipment. All work must be carried out exclusively by AVA technicians or technicians trained and authorized by AVA. No modifications to this equipment are permitted. The internal battery may be replaced by the user. The battery to be replaced must be an original battery supplied by AVA, otherwise a dangerous situation (such as excessive temperatures, fire or explosion) may result. Warning during Preventive Maintenance Periodically perform the scheduled preventive maintenance to ensure the operation and safety of the equipment.

- Periodically check the general condition of the battery (charging capacity and charge maintenance) and if it is not charging normally or is discharging quickly, replace it.
- If the equipment is likely to not be used for some time, to avoid battery leakage inside the compartment, remove the battery from the equipment.

WARNINGS AND PRECAUTIONS DURING CLEANING AND DISINFECTING EQUIPMENT

- Do not clean/disinfect the device while it is turned on and/or connected to the power supply. Turn off the device before cleaning/disinfecting.
- Do not use oil, benzene, alcohol, gasoline or other chemicals to clean the device, whether on the Main Unit, rubber or plastic parts. This will damage the plastics and void the warranty.
- Do not use abrasive materials to clean the Main Unit or other parts. This will damage the plastics and rubbers. The Main Unit is not a waterproof device.
- Do not apply a direct current of any liquid. Do not immerse or allow any liquid to accumulate on the surface of the front panel and display.
- Do not wash the device.
- Do not tumble dry. All accessories must be cleaned before storage to ensure that no failure occurs during the next use.

8 - USAGE SPECIFICATIONS

INTENDED USE INDICATION	
Indication	The purpose of an electrostimulator is to apply controlled electrical stimuli to specific muscles in the body to cause muscle contractions. These devices are used in a variety of contexts. Electrostimulators are designed to help strengthen muscles, relieve pain, improve blood circulation, and increase flexibility. They can be used by athletes looking to improve their performance, or even by people who want to complement conventional physical training. Electrostimulators work by sending electrical pulses through electrodes placed on the skin, directly over the muscles or points of interest. This causes the muscles to contract, producing the benefits mentioned.

INTENDED USER POPULATION	
REFERENCE	**FEATURES**
Age	From adolescence onwards
Weight	Not relevant
Nationality	Multiple
State	Mentally capable. Not agitated

Contraindication (type of user)	Type of people who are contraindicated for the use of an electrostimulator: **Pacemaker or other implanted electronic device:** The use of electrostimulators may interfere with the functioning of implanted electronic devices, such as pacemakers or cardiac defibrillators. **Pregnancy:** The use of electrostimulation during pregnancy may not be safe and should be avoided without medical advice. **Epilepsy or history of seizures:** : Electrostimulation may trigger seizures in individuals with epilepsy or a history of seizures. **Deep vein thrombosis (DVT) or coagulation disorders:**The application of electrostimulation on areas affected by DVT or coagulation disorders may increase the risk of complications. **Cancer or tumors:** In certain cases, electrical stimulation may not be recommended for people with cancer or tumors, especially in the region where the cancer is present. **Advanced neuromuscular diseases:** Em algumas doenças neuromusculares avançadas, o uso de eletroestimuladores pode não ser eficaz ou seguro. **Sensitivity or allergy to electrodes:** Some people may have allergic reactions or sensitivity to the materials of the electrodes used in electrical stimulation devices. **Areas with damaged or irritated skin:** It is not recommended to apply stimulation to areas with damaged, irritated skin or rashes.

Contra Indicação (região do corpo)	Areas of the body that are contraindicated for the use of an electrostimulator: **Cardiac area:** : Electrostimulation should not be applied to the heart or the region close to it. **Neck and head:** Electrostimulation should not be applied to the neck or head, especially to the carotid artery and sensitive areas. **Eyes and ocular region:** Stimulation should not be applied to the eyes or near the ocular area. **On open wounds or lesions:** The electrostimulator should not be used on areas of the body with open wounds, cuts or unhealed lesions. **Irritated or inflamed skin:** : Avoid applying the electrostimulator to areas of the skin with irritation, rashes or inflammation. **Abdominal region during pregnancy:** During pregnancy, electrostimulation should not be applied to the abdominal region, unless expressly authorized by a healthcare professional. Genital area **On the calves of both legs at the same time:** This can cause heart problems. **On the soles of both feet at the same time:** This can cause heart problems. **On the breasts**
PART OF THE BODY WHERE THE EQUIPMENT INTERACTS	
Part of the body where the equipment interacts	The most common parts of the body that an electrostimulator can interact with are: **Abdominal muscles:** These can be targeted with electrostimulation to help strengthen and tone them **Back muscles:** : Electrical stimulation can be used to relieve pain, improve posture, or strengthen these muscles. **Leg muscles:** The legs and thighs are often targeted for Interaction, especially in cases of rehabilitation or physical conditioning. **Arm muscles:** Biceps, triceps, and other arm muscles can also be stimulated using the device. **Glutes:** For toning or rehabilitation purposes. Shoulders and neck: These can be targeted with electrostimulation to help relieve tension and improve circulation. **Shoulders and neck: Can be targeted for electrical stimulation to help relieve tension and improve circulation.**

CONDITIONS		
Usage Environment	General	Common usage environments include: - Sports Training Centers: Electrostimulators are used to complement conventional sports training, helping athletes improve performance, muscle power and accelerate post-workout recovery.

	Gyms and Fitness Centers: Some gyms offer training sessions with electrostimulation, known as "electrofitness" or "EMS training". In this context, electrostimulators are used to optimize exercises and increase training effectiveness.
Visibility conditions	Ambient luminance range: minimum 60lux
Physical	- Electrical requirements: Single-phase 100-240 Vac, 50/60Hz; - Ambient temperature at system runtime: 0°~40° and equipment protected from direct sunlight; - Relative humidity: between 30% and 90% (non-condensing) - Atmospheric pressure range: 80kPa to 102kPa. - Ambient sound pressure level: none
Frequency of use	For strength and conditioning training, frequency of use can vary from 1 to 3 times per week, depending on the individualized training program.
Mobility	Stationary health product to be used by the user at rest, sitting or lying down. Note: once the equipment is installed and put into service (in operation), it is not intended to be moved from one place to another, therefore, this equipment is not considered (classified) as "portable".
PHYSICAL PRINCIPLE AND FUNDAMENTALS OF PRODUCT TECHNOLOGY, APPLIED TO ITS OPERATION AND ACTION	
Operating principle	The ACTIN ONE Electrostimulator works by using low-intensity electrical currents to stimulate the body's muscles. This device is designed to send controlled electrical impulses to specific locations, resulting in muscle contraction.

	The ACTIN ONE Electrostimulator has electrodes that are placed on the skin in areas close to the muscles to be stimulated. The output current is determined by an energy pulse, which is the result of the pulse frequency, pulse duration and amplitude of the output current. The ACTIN ONE Electrostimulator comes pre-configured with several combinations of pulse frequency and duration, and allows you to adjust the amplitude of the output current individually (each channel can have a different amplitude).
FREQUENTLY USED FUNCTIONS	
Frequently used functions	- Remove all parts (device and its accessories) from the Case - Connect the Power Supply to the mains and to the Main Unit. - Connect the Electrode Cables to the Self-Adhesive Electrodes and to - the Main Unit. - Place the Self-Adhesive Electrodes on the user. - Press the control keys (select the application mode, adjust amplitude - and time). - Clean the device and accessories. - Disassemble the accessories from the Main Unit. - Place all parts in the Case. - Transport.
SIDE EFFECTS	
Adverse reactions:	- You may experience pain or discomfort

9 - INSTALLATION AND CONNECTION TO OTHER PRODUCTS

9.1 - CONNECTION TO OTHER PRODUCTS

ACTIN ONE is not intended or intended for direct connection to other equipment.

9.2 - PRODUCT INSTALLATION

Before installing the equipment, carefully read the instructions contained in this manual, as the unpacking, assembly, configuration parameters and installation of the system are the responsibility of the operator/user.

The use of any part, accessory or material not specified or provided for in these Instructions for Use is the sole responsibility of the user.

To install the equipment, familiarize yourself with the items and follow the instructions:

1-Remove the equipment from the transport box.

2-Remove the parts from the Case.

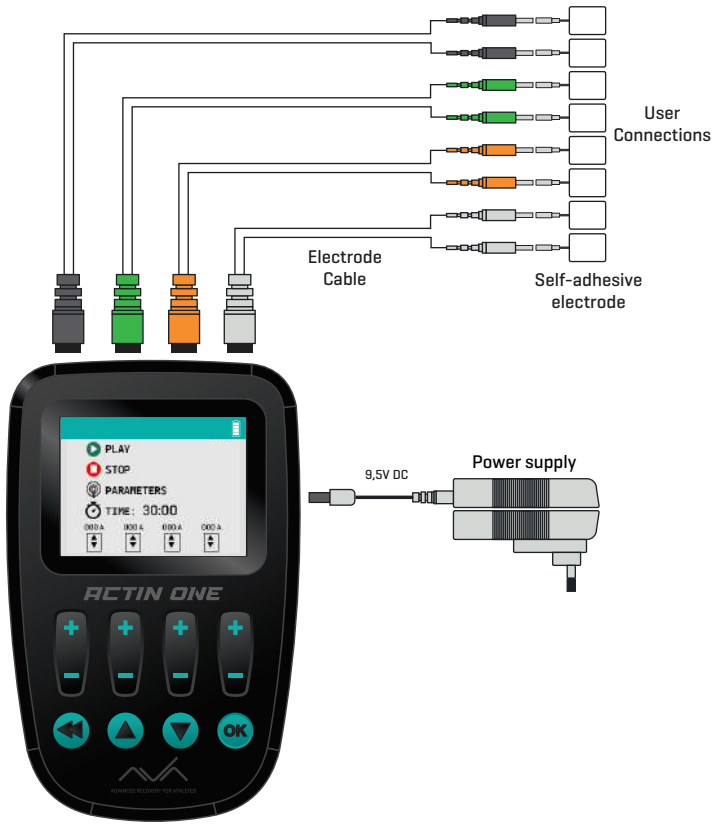
3-Clean and disinfect the entire equipment (Main Unit, Power Supply and Electrode Cable).

4-Connect the Power Supply to the Main Unit.

5-Connect the Electrode Cables to the Main Unit.

6-Connect the Self-Adhesive Electrodes to the Electrode Cables.

7-Make the electrical connection, as provided in item "6.3 - Electrical Connection".



9.3 - ELECTRICAL CONNECTION

9.3.1 – BATTERY OPERATION

If you prefer to use the system disconnected from the power grid, the equipment must have a sufficient battery charge

Attention: Periodically check the general condition of the battery (charging capacity and charge maintenance). If it is not charging normally or is discharging quickly, replace it. If the equipment is not likely to be used for some time, to avoid battery leakage inside the compartment, remove it from the equipment.

Charging the battery

To charge the battery, connect it as per item 6.3.2 until the battery is charged. See the charge level indicator on the Main Unit panel. After connecting the Main Unit to the power grid (item 6.3.2), the battery charge indicator on the Main Unit will start flashing from the level at which the battery is being charged. For the battery to reach full charge, from a completely discharged condition, the required charging time will be 4 hours. With the battery fully charged, you can use the equipment disconnected from the power grid for at least 5 hours.

9.3.2 – OPERATION CONNECTED TO THE ELECTRICITY GRID

Only the equipment's Power Supply must be connected to the mains.
Connect the Power Supply to the mains. Then connect the Power Supply to the Main Unit.

Attention:

- A power outlet in good condition is essential for the safe operation of the equipment.
- The Equipment, even when connected to the mains, must have the Battery in its compartment. In other words, the equipment cannot operate without the Battery.

10 - MAINTENANCE AND SERVICES

10.1 - CORRECTIVE MAINTENANCE

When equipment failures occur during use, the user can resolve simple failures by following the instructions below and contained in the user manual. If the problem is not resolved, request support from SAC – Customer Service to inquire about the problem.

PROBLEM	SOLUTION
Display Problems in Control Panel	Check if the Power Supply is properly connected to the electrical network. Check if the Battery is installed in its compartment. Check if the Power Supply plug is connected to the Main Unit. Turn off the Power Supply and turn the equipment on again after 2 minutes. Press the ⏻ key on the equipment for at least 5 seconds to turn it on.
Current output failure	Check if the equipment is plugged into the electrical power supply. Check if the Battery is installed in its compartment. Check if ▶ PLAY is displayed on the screen. If yes, press the key to confirm. For current output, the display should show ⏸ PAUSE. Check the Electrodes Cables to ensure they are properly connected to the Main Unit. Check if the Self-Adhesive Electrode is properly attached to the user's skin. Ensure the two Self-Adhesive Electrodes (for each channel) are not too far apart. Check if the Output Current Amplitude for the channel with the Self-Adhesive Electrode is not set to 000A If it shows "000", increase the Output Current Amplitude for the active channel.
Low battery	Check if the Power Supply is connected to the Main Unit. If disconnected, use the electrical power supply to charge the internal battery. If the battery no longer holds a charge or loses its charging capacity, replace the battery. Note: The internal battery replacement can be done by the user.

10.2 - PREVENTIVE MAINTENANCE AND CONSERVATION (BASIC SAFETY MAINTENANCE)

OThe user is responsible for the following maintenance and conservation activities:
- External cleaning/disinfection of the equipment.
- General condition of the battery (charging capacity and charge retention).
- General checks as outlined in this section of the Manual.
- Battery replacement.

Battery Replacement

Remove the back cover of the Main Unit.
Disconnect the battery plug.
Remove the battery from its compartment.
Replace the battery with a new one, as per the technical specifications.
Reconnect the battery plug to the Main Unit.
Close the battery compartment cover.
Plug the Power Supply into the electrical power network and the Main Unit. Allow it to charge until fully charged.

Visible Damage

Regularly inspect the equipment and accessories (before each use).
Check for cracks, damage, deformations, or poor connections between the Main Unit and the accessories. If any issues are identified, contact an Authorized Service Center.

Storage and Instructions After Use

If you intend to store the equipment after use, disconnect the parts, ensuring correct disconnection by gently pulling the components apart. Proceed with cleaning the parts.
Store the Main Unit and its accessories in the carrying case that comes with the product.

A The Authorized Service Center is responsible for the following activities:

- General operational review (electrical circuit check).
- Output Current verification (Calibration).
- Any repairs to the internal parts of the equipment (except the battery).

Preventive maintenance for this equipment should be carried out according to the tables below:

DESCRIPTION	PROBLEM
General Operational Review (Electrical/Electronic Circuit)	Annual
Output Current Calibration for Each Channel	Annual

Authorized Service Center
Contact the manufacturer for the nearest Authorized Service Center recommendation.

Green Fit Recovery
Avenida Engenheiro Duarte Pacheco, Torre 2, 8th floor, Room 10, Zip Code: 1070-102, Lisbon, Portugal.
ID number: 518 096 700.
Technical Responsible: Rodrigo Santana / CRN-4 6100817.

To avoid risks of performance loss or degradation, as well as safety concerns, use only original replacement parts (manufactured and supplied by AVA).
The use of any parts, accessories, or materials not specified or outlined in these User Instructions is the sole responsibility of the user.

Circuit Diagrams, Component List, etc.
AVA will make available, upon request, circuit diagrams, component lists, descriptions, calibration instructions, or other information that will assist Service Personnel (Authorized Service Center) in repairing those parts of the equipment that AVA designates as repairable by Service Personnel (Authorized Service Center).

Equipment Labeling
All labels are available for product re-labeling and may be provided by AVA, if necessary for the technical maintenance of the equipment.

10.3 - PRODUCT LIFESPAN:

The complete equipment lifespan is five years.
At the end of the equipment's effective lifespan, check if the device functions normally before use. If there is any wear or unusual noise, contact the Authorized Service Center or discontinue use.

11 - EQUIPMENT CLEANING AND SANITIZATION

Attention:
- Routine or regular cleaning should be done before the first use and after each session.
- Before starting the sanitization and cleaning process, ensure that the Power Supply is disconnected from the electrical network.
- Never allow any liquid to enter the interior of the equipment, as this could cause damage and present risks of electric shock and accidents.
- Never use solvents on any part of the equipment.
- Before storing the equipment in the carrying case, ensure that each item is completely dry.

Procedure for Cleaning the Main Unit:
- Apply the selected cleaning product to a soft cloth and wipe all surfaces of the Main Unit.
- For external cleaning of the equipment, use water and mild detergent or enzymatic cleaner, removing excess water with a clean cloth.
- Follow the manufacturer's instructions and precautions for the cleaning agent you choose.
- Optionally, it can be sanitized using a cloth with a mixture of isopropyl alcohol and water.

Procedure for Cleaning the Power Supply and Electrode Cable:
- Always turn off the system and disconnect the Power Supply from your electrical outlet during the protocol interval.
- For external cleaning of the Power Supply and Electrode Cable, use water and mild detergent or enzymatic cleaner, removing excess water with a clean cloth.
- Follow the manufacturer's instructions and precautions for the cleaning agent you choose.
- Optionally, it can be sanitized using a cloth with a mixture of isopropyl alcohol and water.

Procedure for Cleaning Self-Adhesive Electrodes:
- Manually wash the Self-Adhesive Electrodes with cold water using a mild detergent or antibacterial soap. Do not use fabric softener or bleach.
- Hang to air dry. Do not use a tumble dryer.
- Only clean the back (the non-adhesive side) and the connector area.
- Do not clean the adhesive side (the part that contacts the skin). If necessary, replace the Self-Adhesive Electrode with a new one.

12 - PRECAUTIONS IN CASE OF PRODUCT MALFUNCTION

CIf the equipment exhibits abnormal heating or any other irregularity, check if the issue is related to any of the items listed in section 7.3. If the problem cannot be resolved, contact the authorized service center.
In this case, turn off the equipment, unplug the power supply, identify and segregate the equipment.
Request service from the authorized service center by contacting AVA customer support or emailing sac@ava.cr7.com.

13 – PRODUCT DISPOSAL

The following risks are identified in relation to the disposal of the equipment, accessories, disposable products, waste, etc., at the end of their useful lives:

- Environmental contamination;
- Improper reuse or use after the end of the product's useful life, leading to malfunction of the equipment and accessories, potentially causing harm to the user.
- To avoid environmental contamination or misuse of the product, it must be rendered unusable at the end of its useful life in the following ways:
- Segregated, packaged, and identified;
- Disposed of according to the requirements of RDC No. 222, dated March 28, 2018, and other applicable federal, state, and municipal legislation;
- Disposed of through a specialized company; or
- Sent at the customer's expense and risk to AVA's factory for proper disposal in a safe manner.

Note 1: For more information on proper disposal, contact local or national legislative and environmental authorities.
Note 2: The equipment and/or its parts must be sent in clean and sanitary conditions.
Note 3: Failure to observe these conditions relieves AVA of responsibility for any potential environmental or personal impact.

15 – Warranty Terms

AVA grants a warranty for this product for a period of 1 year, provided it has been installed and used according to the instructions in the User Manual and intended exclusively for the purpose it was designed for.

1. The warranty is valid for the period specified above, starting from the date of acquisition by the first buyer/consumer.
2. During the specified period, the warranty fully covers labor and parts for repairing defects duly confirmed as manufacturing defects. Only an authorized AVA Service Technician is qualified to repair defects covered by the warranty, upon presentation of the original sales invoice from the first buyer/consumer.
3. The consumer has a period of 90 days to report visible defects or irregularities that are easily noticeable on the product, such as external parts and any other components accessible to the user. Parts subject to natural wear, aesthetic parts, and general accessories have a warranty limited to the statutory period of 90 days.

THE WARRANTY BECOMES VOID IF

a] The installation or use of the product is not in accordance with the recommendations in the User Manual;

b] The product is damaged due to accident, fall, natural causes, misuse, or alterations and repairs made by unauthorized persons. For safety, it is recommended to disconnect the product from the power source when not in use for an extended period;

c] The sales invoice and/or the product's serial number is altered, scratched, or damaged;

d] The defects or unsatisfactory performance are caused by the use of accessories not in accordance with AVA's technical specifications or official standards, by using an improper electrical network, or one subject to excessive fluctuations.

THE WARRANTY DOES NOT COVER:

a) Transportation and removal of products for repair/installation. If the consumer wishes to be served at the installation location of the product, it will be at the discretion of the AVA Technical Assistance Service whether or not to charge a visit fee. The customer should inquire about this in advance when requesting the service; b) Service to the consumer, whether free or paid, in cities that do not have an AVA Technical Assistance Service. In such cases, transportation expenses and risks for sending and returning the product to the Service are entirely the responsibility of the consumer; c) Transportation and removal of products that are installed in hazardous locations to the AVA Technical Assistance Service; d) Elimination of external interferences affecting the product's performance; e) Installation services, external adjustments, and cleaning, as these instructions are provided in the User Manual.

Considerations:

AVA is obligated, under the terms of this certificate, to repair only products with proven manufacturing defects, exempting itself from any responsibilities and obligations not explicitly stated. AVA does not grant any form or type of warranty for products that are not accompanied by the consumer's sales invoice or for products where the sales invoice has been incorrectly filled out.

ADVANCED RECOVERY FOR ATHLETES

Informações | Informations

AVA - BRASIL

AVA - PORTUGAL

MADE IN CHINA

Modelo: Actin One
Green Fit Recovery, lda.
Avenida Engenheiro Duarte Pacheco, Torre 2, 8 andar,
Sala 10, Zip Code: 1070-102, city Lisboa, Portugal;
ID number: 518 096 700;
Resp. Técnico: Rodrigo Santana