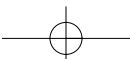
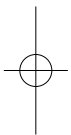
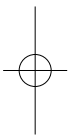




User Manual
Manual de utilización



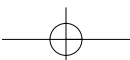
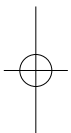
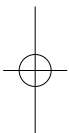
**USER MANUAL****5-41**

Table of Contents	6
Index	39

ENGLISH**MANUAL DE UTILIZACIÓN****43-81**

Sumario	44
Índice	79

ESPAÑOL



I. FOREWORD



Read this User Manual carefully before you start using your “*Compex®Sport*”.

The manufacturer strongly recommends careful reading of the “*Warnings and Cautions*” and “*Safety Guide*” Chapters of this User Manual.

You should use the www.plannerusa.bycompex.com web site to establish an appropriate training plan.

The www.startusa.bycompex.com web site helps you for your first steps with the device.

5

How to get help

To get assistance or answers to your questions, please contact:

Compex

Toll free: 1-866-8 COMPEX

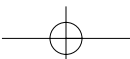
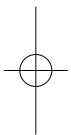
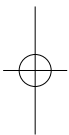
www.compex.us

II. TABLE OF CONTENTS

I.	FOREWORD	5
II.	TABLE OF CONTENTS	6-7
III.	WARNINGS AND CAUTIONS	9-11
	General Warnings	9
	Contraindications	10
	Warnings	10
	Precautions	11
	Adverse Reactions	11
IV.	SAFETY GUIDE	13-18
	Who Should not Use the "Compex® Sport"!	13
	What Should Never Be Done with the "Compex® Sport"!	14
	Where Never to Apply the Electrodes!	15
	Cautions with Electrodes!	17
V.	INDICATIONS FOR USE	19-24
	Intended Use	19
	How to Use the "Compex® Sport"	20
	<ul style="list-style-type: none"> • Choice of the Appropriate Muscle Work Program • Planning of Stimulation Sessions • Placement of the Electrodes • Setting of the Electrical Current Intensity 	
	Training Programs	22
	<ul style="list-style-type: none"> • Endurance Program • Resistance Program • Strength Program • Explosive Strength Program 	
	Special Programs	24
	<ul style="list-style-type: none"> • Potentiation (Warm-up) Program • Active Recovery Program 	
VI.	DESCRIPTION	25-26
	Parts	25
	Accessories	26



VII. OPERATING INSTRUCTIONS	27-33
Connections	27
Language, Contrast of the Display and Sound Volume Selection	28
Switching on	29
Selecting a Program	29
Personalizing the Program	30
During Operation	31
Recharging the "Compex® Sport"	32
VIII. TROUBLESHOOTING	34
Electrode Fault	34
Need for Recharging	34
IX. PRACTICAL INFORMATION	35-36
Warranty	35
Cleaning Your Unit	35
Storage Conditions	35
Disposal	35
Standards	36
Normalized Symbols	36
X. TECHNOLOGICAL INFORMATION	37-38
Output Waveform	37
Basic Unit Characteristics	37
Power Supply	37
Output Specifications	37
Description of Accessories	38
XI. INDEX	39



III. WARNINGS AND CAUTIONS

General Warnings

The “*Compex® Sport*” is intended for use on healthy muscles. It is to be used by adults only. **KEEP OUT OF THE REACH OF CHILDREN.**



Never use the “*Compex® Sport*” on:

- painful muscles
- atrophied muscles
- muscles with spasms
- muscles associated with a limb with a painful or afflicted joint

The “*Compex® Sport*” is not intended for adjunctive therapy in the treatment of medical diseases and conditions of any kind.

None of the “*Compex® Sport*” stimulation programs are designed for injured or disease afflicted muscles. Its use on such muscles is contraindicated. The work imposed on the muscles by the “*Compex® Sport*” programs is definitely not suitable for rehabilitation and physiotherapy.



Do not use the “*Compex® Sport*”:

- for muscle reeducation
- to prevent or retard disuse atrophy
- to prevent venous thrombosis
- to maintain or increase range of motion
- for muscle spasms
- for blood flow deficiencies

III. Warnings and Cautions



Contraindications

Do not use the “*Compex® Sport*” if you have one or more of the following medical conditions:

1. This device must not be used on persons with cardiac pacemakers, defibrillators, or other implanted metallic or electronic devices.
2. Cardiac demand pacemakers.
3. Epilepsy.
4. Following acute trauma or fracture.
5. Following recent surgical procedures.
6. Critical ischemia of lower limbs.
7. Abdominal or inguinal hernia.
8. Cancerous lesions.

Warnings

10

1. The long-term effects of prolonged use of electrical stimulation are unknown.
2. Stimulation should not be applied on the neck. Severe spasm of the muscles may occur and the contractions may be strong enough to close the airway or cause difficulty in breathing. Stimulation on the neck could also have adverse effects on the heart rhythm or blood pressure.
3. Electrodes used for electrical stimulation should not be applied across the chest because the introduction of electrical current into the chest may cause rhythm disturbances to the heart.
4. The effects of stimulation of the brain are unknown. Therefore, stimulation should not be applied across the head and electrodes should not be placed on opposite sides of the head.
5. Safety of powered muscle stimulators for use during pregnancy has not been established.
6. The “*Compex® Sport*” should not be used while driving, operating machinery, or during any activity in which involuntary muscle contractions may put the user at risk of injury.



III. Warnings and Cautions

ENGLISH

7. Caution should be used for patients with suspected or diagnosed heart problems.
8. Caution should be used when operating the device over the abdominal region during menstruation periods.
9. Caution should be used when applying the device over areas of the skin that lack normal sensation.
10. Stimulation should not be applied when in the bath or shower.
11. Do not use the device in a humid atmosphere (sauna, hydrotherapy, etc.).
12. Electrodes should be applied only to normal, intact, clean skin. Electrodes should not be applied over open wounds or over swollen, infected, or inflamed areas or skin eruptions (e.g., phlebitis, thrombophlebitis, varicose veins, etc.).
13. Electrodes should not be shared with other persons. Each person should have their own set of electrodes; otherwise, undesirable skin reactions may occur.
14. Self-adhesive electrodes should be replaced if they no longer stick firmly to the skin.

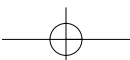
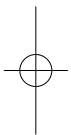
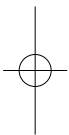
11

Precautions

1. Some persons may experience skin irritation or hypersensitivity due to the electrical stimulation or electrical conductive medium (gel).
2. This device should be kept out of the reach of children.
3. This device should be used only with the leads, electrodes, and accessories recommended for use by the manufacturer.

Adverse Reactions

1. Skin irritation and burns beneath the electrodes have been reported with the use of stimulation electrodes applied to the skin.
2. Headache and other painful sensations have been reported during or following the application of electrical stimulation applied to the head, face, and near the eyes.



IV. SAFETY GUIDE

Who Should not Use the “*Compex® Sport*”!

Check the following list of 15 questions:

Questions	Yes/No
1 Are you equipped with a cardiac pacemaker, defibrillator, or other implanted metallic or electronic device?	
2 Are you epileptic?	
3 Have you recently been victim of an acute trauma (less than 6 months)?	
4 Have you recently been subject to a surgical procedure (less than 6 months)?	
5 Do you have blood flow deficiency in your lower limbs?	
6 Do you have an abdominal or inguinal hernia?	
7 Do you suffer from cancer?	
8 Are you pregnant?	
9 Do you suffer from cardiac problems or diseases?	
10 Do you have painful or afflicted joints?	
11 Do you have muscle spasms?	
12 Do you have atrophied muscles?	
13 Do you have painful muscles?	
14 Do you need muscle reeducation?	
15 Do you have any joint showing a decrease in its range of motion?	

If you answer “*Yes*”, or “*Maybe*”, or “*I don’t know*” to one or more questions, do not use the device and contact Compex for more information.

Compex

Toll free: 1-866-8 COMPEX

www.compex.us

If you have 15 “*No*” answers, you can use the “*Compex® Sport*”.

IV. Safety Guide



What Should Never Be Done with the "Compex® Sport"!

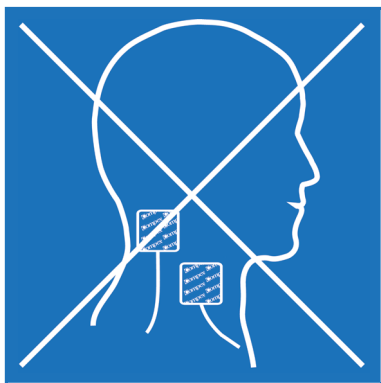
- Never use it while driving or operating machinery.
- Never use it in a humid atmosphere like a sauna, a bathroom or a swimming pool.
- Never use it in ways other than recommended in the "*Operating Instructions*" Chapter of this User Manual (see pages 27 to 33) and in the "Compex® Sport" CD-ROM.

Where Never to Apply the Electrodes!

- On the head or any area of the face.



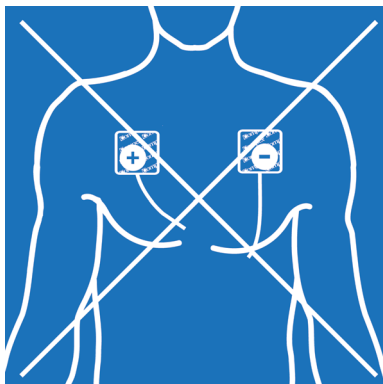
- On the neck or any area of the throat.



IV. Safety Guide



- On both sides of the thorax simultaneously (front and back sides, or lateral sides).



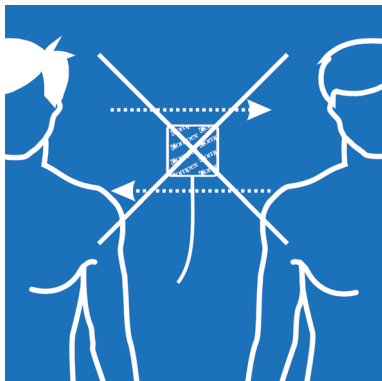
- On, or in the vicinity of skin lesions or eruptions of any kind.



- Over the abdominal region during menstruation periods.
- On skin areas lacking of normal sensation.

Cautions with Electrodes!

- Only use the electrodes supplied by Compex or Rehabicare. Other electrodes may present a risk of unsuitable electrical characteristics with your stimulator.
- Do not use the same electrodes on different people. Each user must have his or her own electrode set. Otherwise, skin reaction or cross contamination may occur.



- Do not use a set of electrodes for more than fifteen sessions.
- Do not plunge the electrodes into water.
- Do not apply a solvent of any kind onto the electrodes.
- Always stop the stimulator before removing or moving the electrodes.

IV. Safety Guide



- Wash skin thoroughly, and then dry it before applying the electrodes.



- Apply the whole surface of the electrodes firmly to the skin. Do not use electrodes that do not stick properly, i.e. that do not stick to the skin or that only partially stick to the skin.
- In case of skin redness under the electrodes after a stimulation session, do not start a new stimulation session in the same place if skin redness is still evident.

V. INDICATIONS FOR USE

Intended Use

The “*Compex® Sport*” is intended to stimulate healthy muscles in order to improve or facilitate muscle performance.

The “*Compex® Sport*” is not intended to be used in conjunction with therapy or treatment of medical diseases or medical conditions of any kind. None of the “*Compex® Sport*” training programs is designed for injured or ailing muscles and its use on such muscles is contraindicated.

The “*Compex® Sport*” electrical impulses allow the triggering of action potentials on motoneurons of motor nerves (excitations). These excitations of motoneurons are transmitted to the muscle fibers via the motor endplate where they generate mechanical muscle fiber responses that correspond to muscle work. Depending on the parameters of the electrical impulses (pulse frequency, duration of contraction, duration of rest, total session duration), different types of muscle work can be imposed on the stimulated muscles.

The various types of muscle work that the “*Compex® Sport*” can impose on the stimulated muscles are able to improve or facilitate muscle performance.

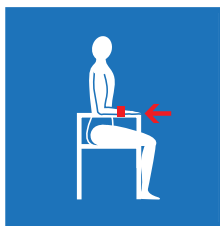
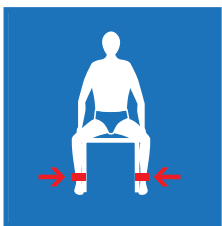
The “*Compex® Sport*” may therefore be considered a technique of muscle training.

V. Indications for Use



How to Use the “Compex® Sport”

Always stimulate muscles isometrically; this means that the extremities of the limb in which a muscle is being stimulated must be firmly secured (see pictograms below) to prevent the movement of the limb (resulting from muscle contraction).



In order to use the “Compex® Sport” safely and effectively, the following essential matters must be considered:

- 1) the choice of the appropriate muscle work program
- 2) the planning of stimulation sessions
- 3) the placement of the electrodes
- 4) the setting of the electrical current intensity

Choice of the Appropriate Muscle Work Program

The choice of a program determines the kind of work that is imposed on the stimulated muscles. Based on your knowledge about sport training, you can choose the program that is appropriate to your needs. Please go on the www.plannerusa.bycompex.com web site as it offers an advanced interactive way to establish an appropriate work program. With just a few answers to basic questions, the “Training Planner” section will determine which is the most appropriate program for you.



Planning of Stimulation Sessions

The Training Planner (www.plannerusa.bycompex.com) will determine the number of training sessions per week you should do and the number of weeks you should use a muscle training program.

Placement of the Electrodes

Depending on the sport you practice, the Training Planner (www.plannerusa.bycompex.com) will determine the muscles that should be stimulated. It also shows pictures with the correct placements of the electrodes for the muscles involved. You can also use the booklet provided for the positioning of the electrodes.

Setting of the Electrical Current Intensity

The intensity of the electrical current determines the number of working fibers in the stimulated muscle. With a lower current intensity, there are fewer working fibers. With a higher current intensity the number of working fibers is increased. To reach a significant percentage of working fibers, you should reach a minimum intensity of 30 mAmp. This threshold intensity can be reached within the first two sessions by progressively increasing the intensity during muscle contractions. Once this threshold is reached, continue to progressively increase the current intensity to make the stimulation more effective. Further details about the setting of the current intensity are given in the “*Practical Rules*” section of the the Training Planner (www.plannerusa.bycompex.com).

V. Indications for Use



Training Programs

The “Compex® Sport” provides four muscle stimulation training programs. They correspond to the type of muscle performance the athlete wishes to improve or maintain. These training programs are:

- **Endurance**
- **Resistance**
- **Strength**
- **Explosive Strength**

Each of these four training programs offers five different working levels that enable the amount of work to be gradually increased.

Endurance Program

The “Compex® Sport” Endurance program imposes an average medium working level on muscle fibers. This working level is maintained over a long period (45 minutes per session). The Endurance program particularly activates the aerobic metabolism of the fibers during the stimulation session. The purpose is to increase the time the muscle is able to maintain a medium level of working power or the average power level the muscle is able to maintain for extended periods of time. The program may be used in most physical preparations to establish or improve basic muscle endurance. It is designed to increase the average intensity of muscle effort that must be maintained over a long period. It is most appropriate for athletes engaged in endurance sports such as marathon, triathlon, cycling, etc.

Resistance Program

The “Compex® Sport” Resistance program imposes an average high power working level on muscle fibers. This working level is maintained over a short period (12 minutes per session). The Resistance program activates the anaerobic metabolism of muscle fibers during the stimulation session and induces the production of lactic acid. It is intended to increase the time the muscle is able to



maintain a high power working level (close to its maximum) or the average power working level the muscle is able to maintain for a short duration. It is designed for sporting activities, which are characterized by a need for intense (close to the maximum) efforts to be maintained or repeated to approach the limit of muscle exhaustion. Sports requiring this type of effort are, for example, the 400 and 800 meters, one-kilometer cycle races and 100 meters swimming. It is appropriate for many other sports based on duration, such as cycling, which makes repeated demands on muscle resistance.

Strength Program

The “*Compex® Sport*” Strength program imposes a high and instantaneous power working level on muscle fibers during tetanic contractions. These contractions are separated by long periods of rest. The result is an average medium power working level (+ 20 minutes). This program is intended to increase the maximum strength of muscle contraction, which is carried out isometrically or dynamically. It is specifically designed for sports characterized by a need for maximum but very brief strength contractions. Weight lifting is a typical sport of this kind. This program is also appropriate for any type of sports requiring a gain in strength on a specific muscle (cycling, short distance running, soccer, etc.).

Explosive Strength Program

The purpose of the “*Compex® Sport*” Explosive Strength program is to increase the speed with which maximum muscle strength can be supplied. It is designed to improve performance in sporting activities of very brief duration such as jumps, sprints and throwing. To ensure a progressive approach in the muscle stimulation training, you are strongly advised not to use this program without having previously worked through a cycle of sessions using the Strength program.

V. Indications for Use



Special Programs

The “*Compex® Sport*” also offers two special muscle training programs. Their objective is to prepare muscles for explosive motions or to facilitate recovery after active muscle training and competition:

- **Potentiation**
- **Active Recovery**

Potentiation (Warm-up) Program

The “*Compex® Sport*” Potentiation (Warm-up) program produces the physiological muscular phenomenon known as “Twitch potentiation”. A specific system of stimulation increases the amplitude and the speed of the elementary muscle twitch response of muscle fibers, more particularly of fast fibers. A potentiated muscle gains in velocity and reaches its maximum strength more easily and rapidly. This warming-up program is recommended before performing a sprint, a jump or a throw. Applied briefly just before the beginning of a competition, it offers immediate, well potentiated muscle fibers and an optimal level of performance to basketball, soccer or volleyball players.

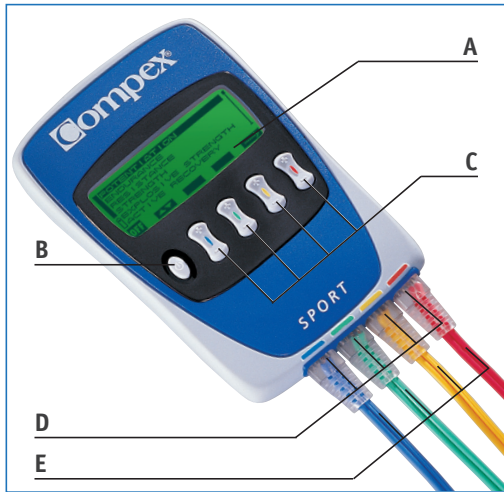
Active Recovery Program

The “*Compex® Sport*” Active Recovery cool-down program produces muscle twitches at a very low frequency. Those twitches act like a massage and induce an increase in blood flow. They are responsible for a faster reduction of the lactic acid blood level (much better than mere rest) and accelerate the exchanges between muscle fibers and blood. Consequently, the stimulated muscles recuperate better from fatigue and the athlete has a feeling of relaxation and muscle lightness. This type of cool-down program is recommended after hard training sessions and competitions. It is particularly useful after sports requiring long duration efforts, combining endurance and resistance (cycling, marathon, triathlon, mountain-bike, etc.). The same is applicable to sports that require shorter efforts (basketball, soccer, football).

VI. DESCRIPTION

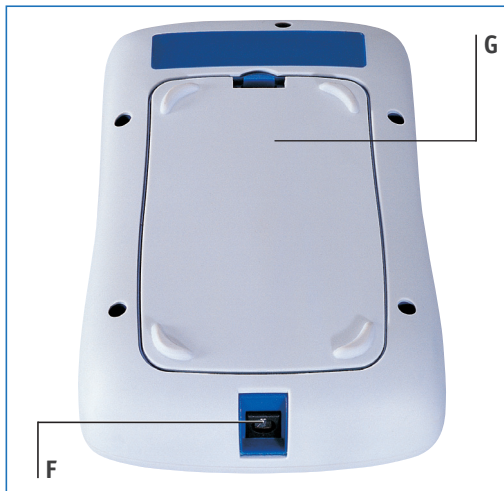
Parts

Figure 1 (Topside)



- A** LCD display
- B** "On/Off" switch (⏻)
- C** "+" / "-" keys of the 4 stimulation channels
- D** Four sockets for the 4 electrode cables
- E** Electrode cables
channel 1 = blue
channel 2 = green
channel 3 = yellow
channel 4 = red

Figure 2 (Underside)



- F** Socket for the battery charger
- G** Compartment for the rechargeable battery

VI. Description



Accessories

Figure 3



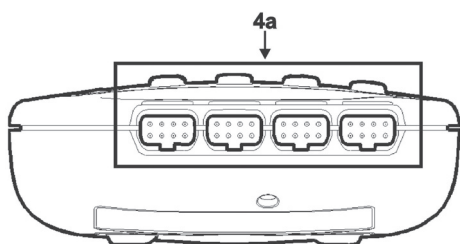
- H** "Compex® Sport"
stimulator
- I** Battery charger
- J** Set of electrode cables
(blue/green/yellow/red)
- K** Bags with electrodes
(small and large)
- L** User manual
- M** Booklet showing the
positions of the
electrodes
- N** Travel pouch

VII. OPERATING INSTRUCTIONS

Connections

The electrical pulses generated by the “*Compex® Sport*” are transmitted to the muscles through self-adhesive electrodes. The positioning of the electrodes is an essential factor in ensuring safe and effective training: **Pay particular attention to electrode placement instructions** (see booklet and CD-ROM showing the correct positions of the electrodes and the proper body positions). The “*Compex® Sport*” has four electrode cables. Each electrode cable must be connected to the stimulator, using the sockets on the base of the device. For easier handling and channel recognition, you are advised to follow the colors of the cables and sockets (blue, green, yellow, red).

Figure 4 (Front View)

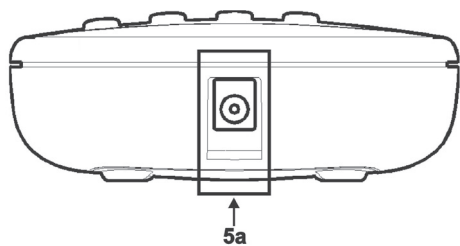


4a Sockets for the 4 electrode cables:

blue	=	channel 1
green	=	channel 2
yellow	=	channel 3
red	=	channel 4

27

Figure 5 (Rear View)



5a Socket for the battery charger.

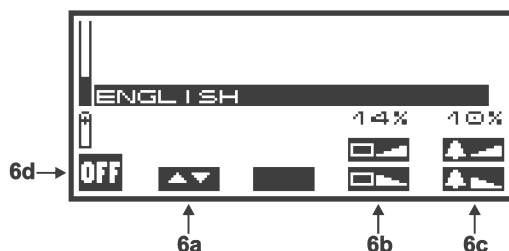
VII. Operating Instructions



Language, Contrast of the Display and Sound Volume Selection

Before using your “Compex® Sport”, you can select the language of your unit, adjust the display contrast and the sound volume. To do so, press the **“On/Off” switch**, which is located on the left of your unit (⊕), and hold it down for a few seconds to display the options screen.

Figure 6

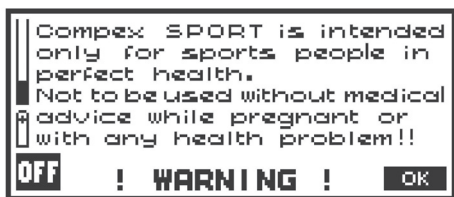


- 6a** To select the language of your choice, press the “+”/“–” key of channel 1 as many times as necessary until the required language is displayed.
- 6b** To set the contrast of the display, press the “+”/“–” key of channel 3 (“+” to increase the preferred percentage and “–” to reduce it).
- 6c** To set the sound volume, press the “+”/“–” key of channel 4 (“+” to increase the preferred percentage and “–” to reduce it).
- 6d** To confirm the selected parameters, press the “On/Off” switch. Your stimulator saves your options and switches itself off.

Switching on

To switch on your “Compex® Sport”, briefly press the “On/Off” switch. A sound signal precedes a **warning screen** that we recommend you read. Bear in mind that this device is neither a toy nor a gadget. If in doubt, refer to the “Safety Guide” listed on pages 13-18 of this manual.

Figure 7



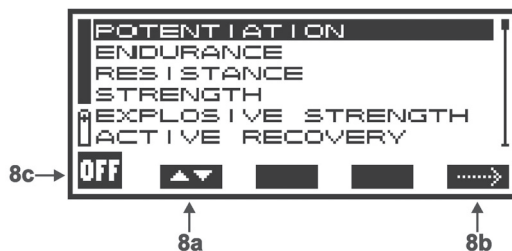
7a After reading the warning screen, press the “+”/“-” key of channel 4 (“OK”) to start a stimulation session.

Selecting a Program



CAUTION: The choice of program is a decisive factor. See the “Indications for Use” Chapter of this handbook (pages 19-24) and use the “Compex® Sport” CD-ROM to determine the most appropriate program for you.

Figure 8



8a To select the desired program, press the “+”/“-” key (to go up or down) of channel 1.

8b Press the “+”/“-” key of channel 4 to accept this program and to move to the next screen.

8c “OFF” function: The “On/Off” switch is a multi-function key (cf. Chapter IX, section “Normalized Symbols” at the end of this manual).

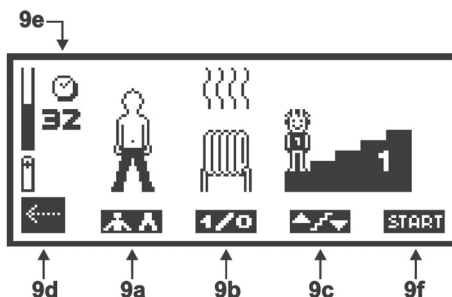
VII. Operating Instructions



Personalizing the Program

Before starting the session, you will have to personalize the program as follows:

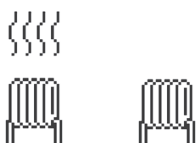
Figure 9



30



9a To stimulate the muscles of the **lower limbs** or of the **upper limbs and the trunk**, press the “+”/”-” key of channel 1.



9b To select or deselect a **warming-up sequence** at the beginning of the session (yes, hot air rises above the heater; no, the heater remains cold), press the “+”/”-” key of channel 2.



9c Depending on the program, to **select the level of muscle work**, press the “+”/”-” key of channel 3.

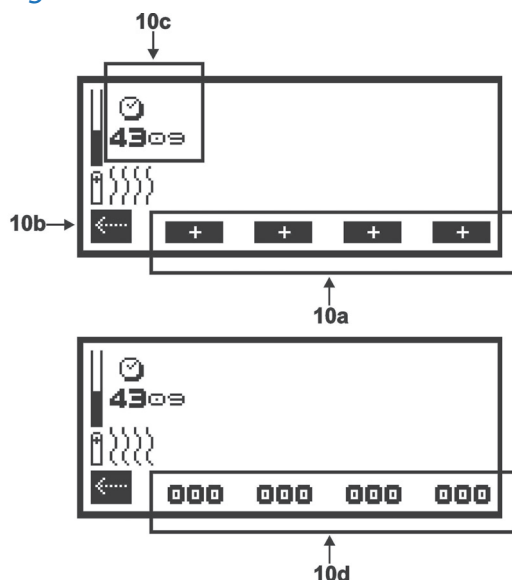
9d To return to preceding screen, press the “On/Off” switch.

9e Total time of the program in minutes.

9f To start the program, press the “+”/”-” key of channel 4 (“START”).

During Operation

Figure 10



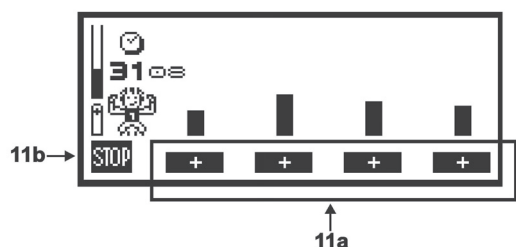
10a The "Compex® Sport" makes a "bleeping" sound and the "+" symbols of the 4 channels flash: when this occurs, **you should increase the current intensity.**

10b To return to preceding screen, press the "On/Off" switch.

10c Remaining time (in minutes and seconds) before the end of the session.

10d Channels 1, 2, 3, 4 are set to 0 milliampere: this means that **you have not yet adjusted the electric current levels.**

Figure 11



11a "Bleep" during the session: The operating current is a key element in the effectiveness of treatment. During a session, the stimulator automatically requests an increase in the

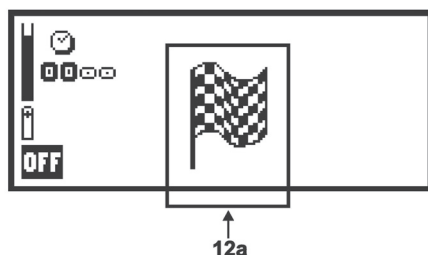
current level by flashing the "+" and "bleeping". If you are not ready to progress further, this message may be disregarded.

11b "STOP" function: You can interrupt the program at any time by pressing the "On/Off" switch ("STOP"). If you wish to restart the session, simply press one of the "+" keys. Caution: the program restarts at 80% of the currents set before the "STOP".

VII. Operating Instructions



Figure 12



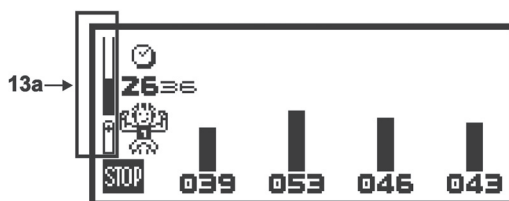
12a End of session: At the end of a muscle training session, you will hear music and a small flag will be displayed. You may then turn off the device by pressing the “On/Off” switch (“OFF”).

Recharging the “Compex® Sport”

32

The “Compex® Sport” runs on a rechargeable battery. The discharge time depends on the programs used and the operating levels of the electric current. The battery should last at least 6 hours before requiring a recharge.

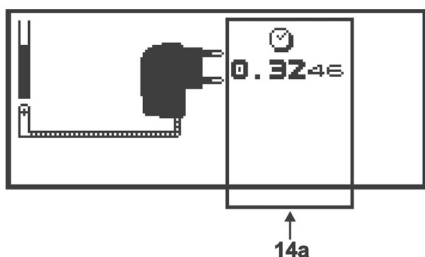
Figure 13



13a Charge level indicator: This column shows the charge level of the batteries. It works like a gas gauge. When you reach “reserve”, the small battery symbol flashes. Stop the training session and recharge your device. If the whole column flashes, it is essential to recharge the “Compex® Sport” immediately.

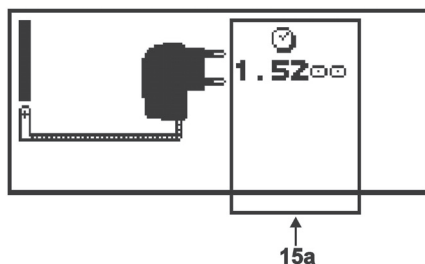
To recharge the “Compex® Sport”, disconnect the cables and the electrodes, plug the charger into an electric socket and connect the device to the charger. **Never use a charger different from the one provided with your “Compex® Sport”!**

Figure 14



14a The “Compex® Sport” has been charging for 32 minutes and 46 seconds. A full charge may take more than 1½ hours.

Figure 15

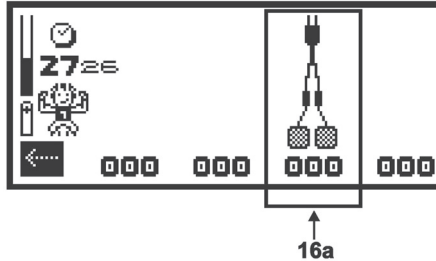


15a When charging is completed, **total charge duration** (here, **1 h 52**) **flashes**. The “Compex® Sport” switches off as soon as you disconnect the charger.

VIII. TROUBLESHOOTING

Electrode Fault

Figure 16



16a This diagram shows that the device has detected **an electrode fault on channel 3**. This may mean that:

- 1) there is no electrode connected to this channel;
- 2) the electrodes are defective or old and the contact is poor: in this case, try using new electrodes;
- 3) the electrode cable is defective: to check it, try using another electrode cable.

34

Need for Recharging

Figure 17



17a The small battery symbol flashes: The charge level of the batteries is getting low. Stop the training session and recharge the device.

17b The charge level indicator (column) flashes as well: The charge level of the batteries is very low. It is essential at this point to recharge the device before it stops working.

17c The "START" symbol is no longer visible: The charge level of the batteries is completely empty. You cannot use the device any longer; recharge it immediately.

IX. PRACTICAL INFORMATION

Warranty

The warranty starts at date of purchase. Its duration and requirements are specified in the warranty certificate.

Cleaning Your Unit

To clean your unit, use a soft cloth and an alcohol-based cleaning product, which does not contain solvents. Solvents could damage the plastic parts, especially the panel covering the screen of your *“Compex® Sport”*.

Storage Conditions

The *“Compex® Sport”* contains rechargeable batteries and so the storage conditions must not exceed the following figures:

Storage temperature:	from -20°C to 45°C, -4°F to 113°F
Max. relative humidity:	75%
Atmospheric pressure:	from 700 hPa to 1060 hPa

Disposal

For environmental protection the device, the battery and its accessories have to be disposed of properly.

Standards

The “Compex® Sport” is manufactured in conformity with quality standards ISO 9001, ISO 13845. According to IEC 60601-1, the “Compex® Sport” is a class II device unit with its own internal electric power, with type BF applied parts. It is in conformity with IEC 60601-1-2 requirements about electromagnetic compatibility and IEC 60601-1 about medical electrical devices.

To guarantee your safety, the design, manufacture and distribution of the “Compex® Sport” are in accordance with the requirements of the European directive 93/42/CEE.

Normalized Symbols

36



IMPORTANT: Under some conditions, the effective figure for the stimulation pulses can exceed 10 mA and 10 V. The information given in this handbook must be strictly observed.



The “Compex® Sport” is a class II device unit with its own internal electric power, with type BF applied sections.



The “On/Off” switch is a multi-function key.

Functions

Symbol N°

(According to IEC 878)

On/Off (2 positions, stable)	01-03
Waiting or preparation for part of the unit	01-06
Stop (switching off)	01-10

X. TECHNOLOGICAL INFORMATION

Output Waveform

Biphasic rectangular impulse with electrical mean equal zero (net zero DC).

Basic Unit Characteristics

Body:	plastic
Weight:	350 g, 12.25 ounces
Length:	142 mm, 5.6 inches
Width:	99 mm, 3.9 inches
Height:	36 mm, 1.4 inches

Power Supply

NIMH rechargeable battery (7,2 V \approx 1200 mA/h)

37

Output Specifications

Max. output current per channel:

100 mA, for a max. charge of 2200 ohms

Max. quantity of electricity per impulse: 40 microcoulombs

Impulse width: 200 or 400 microseconds (200 for upper limbs and 400 for lower limbs)

Max. rise time for a 100 mA impulse: 2 microseconds

Maximum impulse frequencies: 120 Hz

Channels: Four independent channels with the possibility to individually regulate the current for each one. They are isolated one from the other and galvanically grounded.

X. Technological Information



Description of Accessories

Battery charger for recharging the battery:

Type CP01011120U

Input 90-264 VAC / 47 to 63Hz / 0.25A max.

Four cables to link the four channels of the stimulator with the electrodes:

One blue cable, one green cable, one yellow cable,
one red cable

Self-adhesive electrodes:

4 small electrodes (5 x 5 cm, 2 x 2 inch)

4 large electrodes (5 x 10 cm, 2 x 4 inch)

XI. INDEX

A

Accessories, 26, 38
 Active Recovery, 24, 29
 Adverse Reactions, 11
 Assistance, 5, 13

B

Battery, 25, 32-34, 35, 37-38
 Charger, 25, 26, 33, 38
 Compartment, 25
 Symbol, 32, 34
 Body Positions, 20, 27

Booklet for the Positioning
 of the Electrodes, 26, 27

C

Cables (Electrode)
 Connection, 25, 27
 Defective, 34
 Description, 25, 26, 38
 Carrying Case, 26
 Cautions, 9-18
 Choice of a Program, 29
 Electrodes, 17-18
 CD-ROM (Training Planer), 5,
 14, 20, 21, 26, 27, 29
 Channel(s), 25, 27-31, 37, 38
 Charge, 32-33, 34
 Charger, 25, 26, 33, 38
 Check List (safety), 13
 Cleaning, 35
 Compartment for the
 Battery, 25

Connections
 Charger, 25, 33
 Electrodes, 25, 27, 34
 Contents (Table of), 6-7
 Contractions, 19-24
 Contraindications, 10
 Contrast, 28
 Current
 Intensity, 19, 21, 31, 32
 Output, 37
 Customer Service, 5, 13

D

Description
 Accessories, 26, 38
 Carrying Case, 26
 Unit, 25
 Discharge Time, 32
 Display (LCD), 25, 28, 35
 Disposal, 35
 Duration
 Contraction, 19
 Rest, 19
 Total Charge, 33
 Total Session, 19, 30

E

Electrode(s)
 Booklet for the Positioning
 of the Electrodes, 26,
 27
 Cables, 25, 26, 27, 33, 34,
 38
 Cautions, 17-18
 Connection, 25, 27, 34
 Description, 25, 26, 38
 Fault, 34

Illustration, 25, 26
No Application!, 10-11,
15-16
Placement, 10-11, 15-16,
21, 27
Warnings, 10-11, 15-16

Electrode Fault Screen, 34

Electrostimulation
 Impulses, 19, 27, 37
 Isometric, 20
 Muscle Contraction,
 19-24
 Planning, 5, 20-21
 Principles, 19
 Safety & Effectiveness,
 20-21, 27

End of Session Screen, 32

Endurance, 22, 29

Explosive Strength, 23, 29

F

Foreword, 5
 Front View, 27

H

Help, 5, 13

I

Illustrations
 Accessories, 26
 Battery Symbol, 32, 34
 Booklet for the Positioning
 of the Electrodes, 26,
 27
 Carrying Case, 26
 CD-ROM, 26

XI. Index



Charge Level Indicator,
 32-33, 34
 Charger, 25, 26, 33
 Compartment for the
 Battery, 25
 Electrode Cables, 25, 26
 Electrodes Fault Screen, 34
 Electrodes, 25, 26
 End of Session Screen, 32
 Front View, 27
 Isometric Stimulation, 20
 Keys ("+" / "-" / "-"), 25
 LCD Display, 25
 "OFF" Symbol, 28, 29, 32
 "OK" Symbol, 29
 "On/Off" Switch, 25
 Option Screen, 28
 Parts, 25
 Personalization Screen,
 30
 Rear View, 27
 Recharging Screens, 33
 Selection Screen, 29
 Sockets, 25, 27
 "START" Symbol, 30, 34
 "STOP" Symbol, 31, 32
 Stimulation Screens,
 31, 32
 Topside, 25
 Underside, 25
 Unit, 25
 User Manual, 26
 Warning Screen, 29

Impulse, 19, 27

Indicator (Charge Level),
 32, 34

Information (Technological),
 37-38

Intended Use, 19

Intensity (Current), 19, 21,
 31, 32

Irritation (Skin), 11

Isometric Stimulation, 20

K

Keys ("+" / "-" / "-"), 25, 28-31

L

Lactic Acid, 24

Language, 28

LCD Display, 25, 28, 35

Level(s)
 Charge, 32-33, 34
 Working, 19-21, 30-31

M

Medical Use (not
 Appropriate!), 9, 19

Muscles, 9, 19, 20-21, 22-24

N

Normalized Symbols, 36

O

"OFF" Symbol, 28, 29, 32

"OK" Symbol, 29

"On/Off" Switch, 25, 28, 29,
 30, 31, 32, 36

Option Screen, 29

Output, 37

P

Parameters (of Stimulation),
 19, 30

Parts, 25

Personalization, 30

Phone Number, 5, 13

Pictograms
 Isometric Stimulation, 20
 Warnings & Cautions, 15-18

Placement of the Electrodes,
 10-11, 15-16, 21, 27

Positions of the Body, 20, 27

Potentialization, 24, 29

Power Supply, 37

Precautions, 11

Program(s)
 Active Recovery, 24, 29
 Choice, 20, 29
 Cool-down, 24
 Discharge Time, 32
 Endurance, 22, 29
 Explosive Strength, 23, 29
 Intended Use, 19
 Parameters, 30
 Personalization, 30
 Potentialization, 24, 29
 Resistance, 22-23, 29
 Selection Screen, 29
 Special, 24
 Strength, 23, 29
 Training, 19, 22-23, 29
 Warming-up, 24

Pulse Frequency, 19, 37

R

Rear View, 27

Recharging, 32-33, 34

Remaining Time, 31

Resistance, 22-23, 29

Rise Time, 37



S

Safety (of Use), 19, 20

Safety Guide, 13-18

Screen(s)

Electrode Fault, 34

End of Session, 32

Option, 28

Personalization, 30

Recharging, 33

Selection, 29

Stimulation, 31-32

Warning, 29

Selection

Contrast, 28

Language, 28

Part of the Body, 30

Program, 20, 29

Screen, 29

Volume, 28

Work Level, 30

Warming-up Sequence, 30

Setting(s)

Contrast, 28

Current Intensity, 19, 21, 31

Language, 28

Parameters, 30

Sound Volume, 28

Signal, 29, 31, 32

Skin Irritation, 11

Sockets, 25, 27, 33

Sound

Signal, 29, 31, 32

Volume Setting, 28

Special Programs, 24

Standards, 35

"START" Symbol, 30, 34

Stimulation

Impulses, 19, 37

Isometric, 20

Muscle Contractions, 19, 22-24

Planning, 5, 20, 21

Principles, 19, 20-21

Programs, 22-24

Safety & Effectiveness, 20-21, 27

Screens, 31, 32

"STOP" Symbol, 31, 32

Storage Conditions, 35

Strength, 23, 29

Switch ("On/Off"), 25, 28, 29, 30, 31, 32, 36

Switching off, 32

Switching on, 29

Symbol(s)

Battery, 32, 34

Channels, 31

Normalized, 36

"OFF", 28, 29, 32

"OK", 29

"START", 30, 34

"STOP", 31, 32

T

Table of Contents, 6-7

Technological Information, 37-38

Time

Discharge, 32

Remaining, 31

Rise Time, 37

Topside, 25

Training Plan, 5, 20, 21

Training Planner (CD-ROM), 5, 14, 20, 21, 26, 27, 29

Training Programs, 19, 22-23, 29

Troubleshooting, 34

U

Underside, 25

V

View

Front, 27

Rear, 27

Topside, 25

Underside, 25

Volume Setting, 28

W

Warming-up

Program, 29

Sequence, 31

Warning Screen, 29

Warnings

& Cautions, 9-11

Contraindications, 10

Electrodes, 15-16

Foreword, 5

General, 5, 9, 10-11

Pictograms, 15-18

Safety Guide, 13-18

Warranty, 35

Working Levels, 19-21, 30-31