

Smart Electric Rehabilitation Aid

GOS CARE SERA

- + PRODUCT INTRODUCTION
- + USER MANUAL



GOS CARE SERA

Functional Electrical Stimulation, FES

FES is a device that helps muscles function by giving an appropriate amount of electrical stimulation on paralyzed muscles.

GOS CARE



Certification & Registration status

GOS has recognized technology and is committed to developing new technologies.



10-2122413 (KR)



10-1438006 (KR)



10-2139865 (KR)



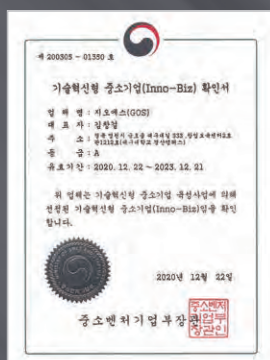
30-1012032 (KR)



30-1041559 (KR)



30-1051274 (KR)



Certificate of
Inno-Biz



Certificate of GMP



Certificate of Technical
Construction File



Certificate of Free Sales
No. of product-license: 20-4886
(Sep.24.2020)

IN GOD, SUFFERING IS LOST. GOD'S CARE, GOD'S LOVE

“ We want the hard and tired to free from pain with God's love. ”

CEO Message

GOS does practical research for practical help to disabled and elderly people.

In addition, the development of new technologies is contributing to protecting users' health and improving quality of life by applying them to quality medical devices and rehabilitation.

All members of GOS are working hard to provide the best products based on customer needs in order to flexibly respond to the rapidly changing medical device and auxiliary device market environment.

All employees of GOS are constantly trying to create a good, proud of company. In addition, we will work hard with our talents to help users relieve their pain.

Please remember GOS. Believing in God's guidance, we will develop and commercialize various devices to free the tired from pain through God's love and deliver God's love to the world.

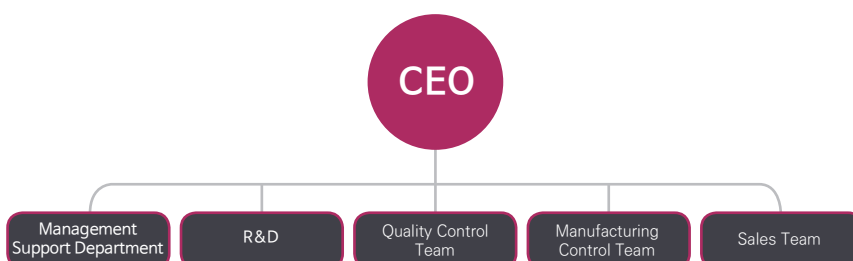


CEO, Kim Chang Geol

- (2017.11.~) CEO of GOS
- Director of RESKO(Rehabilitation Engineering & Assistive Technology Society of Korea)
- Director of KAATP(Korea association of assistive technology professionals)
- Adjunct Professor of Daegu Univ.
- (2017.01.~2018.01.) Senior researcher of annex research institute at INSUNG Medical
- (2016.02.~2016.12.) Director of research at central research institute of DAERYU
- (2015.03.~2016.02.) Assistant Professor Daegu Future College
- (2012.03.~2015.02.) Research Professor at The Research Institute for Special Education & Rehabilitation Science
- Degree in Rehabilitation Engineering at Daegu Univ., Bachelor's, Master's and Doctor's degree



ORGANIZATION



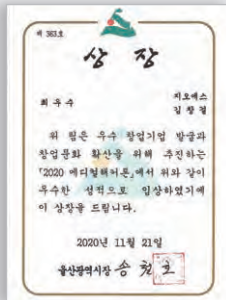
HISTORY

- 2017** Established on Nov.15
Planning of Initial Item
- 2018** Established of depart of R&D
Certificated of Venture Business
Applicated Two patent, transferred technology
Awarded of 2018 Digital Innovation
Participated in GITEX(Dubai, 2018)
Presented thesis(RESKO)
Consulted for Medical Device Certification
- 2019** Authorized Medical Device
Manufacturing Certificate of Free Sales
for GOSCARE POLAR58
- 2020** Registered Two patent
Certificated of GMP(Class 2 Medical Devices)
Establishment of an associate research institute
Medical Device Grade 2 Item Permission
(GOSCARE SERA) No. of product License 20-4886
Certificated of Inno-Biz

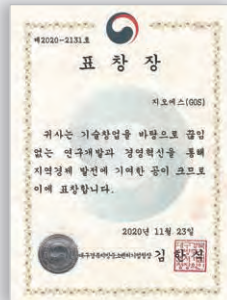
AWARDS



Commendation from
Gyeongsangbuk-do Governor



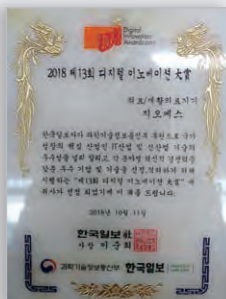
the grand prize of 2020
Medical Hackathon



Commendation from Ministry of
Supporting Micro Enterprises and
Startups(Daegu, Gyeongsangbuk-do)



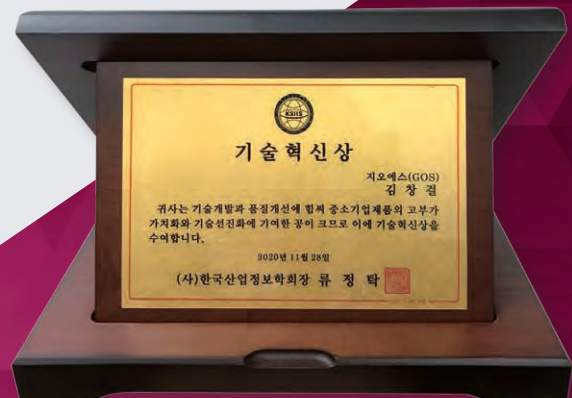
Grand prize from KCGA



Award from 13th Digital Innovation



Award of Technology
Innovation from Korea Society
of Industrial Information
Systems



GOS CARE SERA

[No. of product-license: 20-4886(Sep.24.2020)]

It is a functional electrical stimulator (FES) that is responsible for damage to the central nervous system. A machine that assists and controls patients who are walking with foot drop.



Product Specifications

- Pulse width : 100 ~ 500 μ s (\pm 10%)
- Output Frequency : 1 ~ 120Hz (\pm 10%)
- Voltage pulse amplitude : 0 ~ 80 (\pm 10%)
- Maximum Output : 0 ~ 80mA (\pm 10%)
- Output waveform : Square wave
- Rated voltage : 8.4V
- Power consumption : 1.8VA or less
- Operating Method
 - Auto mode: The foot sensor is not connected.
 - Walking mode: The foot sensor is connected.
 - Detail Settings: the intensity of the stimulus, alarm etc..



Main Body



Foot Sensor

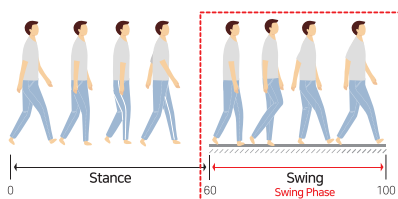


Electrode(Pad)

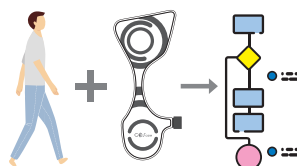
Intended Use

- Prevent foot drop and walk training for hemiplegic patients due to stroke.
- Maintaining and increasing the range of motion of the patient with central nervous system injury and training for gait function.

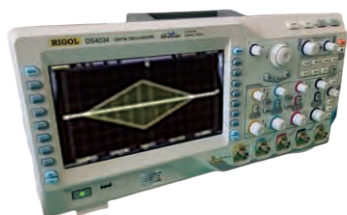
Product features of GOSCAR SERA



Three-stage customized walking stimulation according to pedestrian pattern.



Walking analysis using a 3-Point Foot pressure distribution sensor



Securing source technology that enables smooth stimulus output



Select a design that is easy to wear for patients with hemiplegia



Three modes

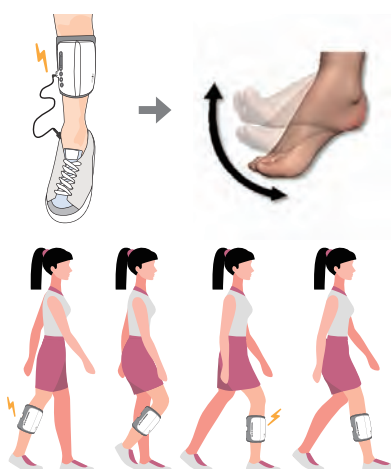
SERA has three modes and can be used as needed by the user

Auto mode



- It provides electrical stimulation to help you automatically exercise your ankle joint.
- It helps maintain and increase the range of ankle joint, training of walking.

Walking mode



- This prevents the user's foot drop and helps with walking training.

Detailed settings

pulse width
300 μ s

On time
4초

frequency
80Hz

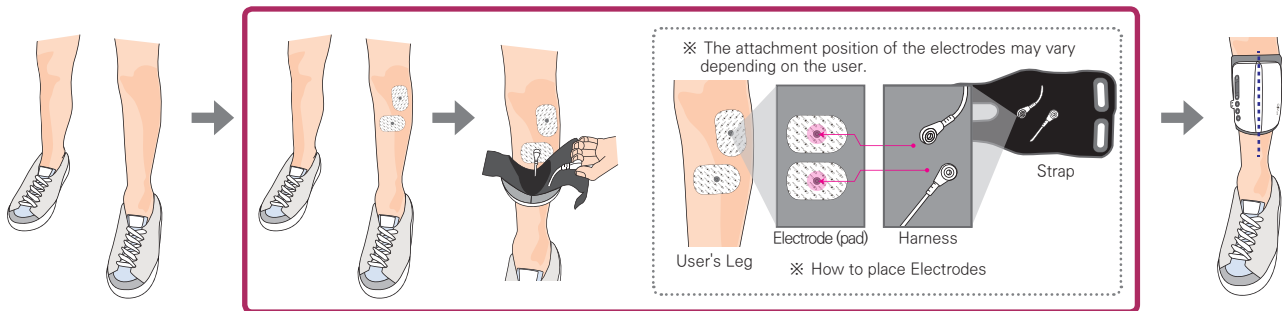
- It can be changed the instrument's detailed settings(Intensity of the stimulus, Frequency, Pulse width, Time of stimulus output, etc).

How to use GOSCAR SERA

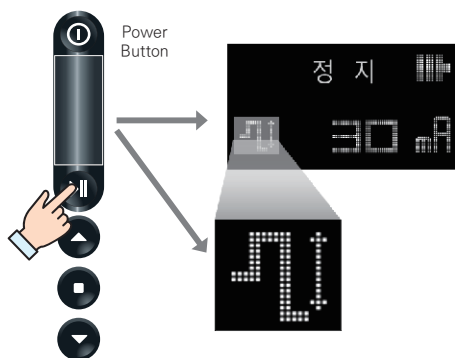
Auto mode

When using auto mode, the user can use it while lying down or sitting on a chair.

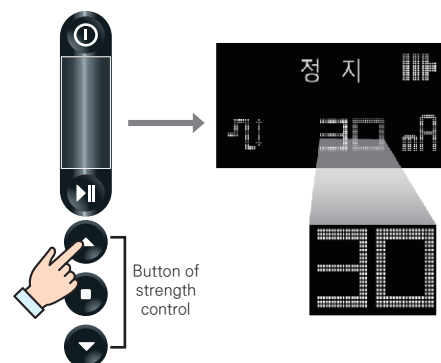
01 Attach the electrode (pad)



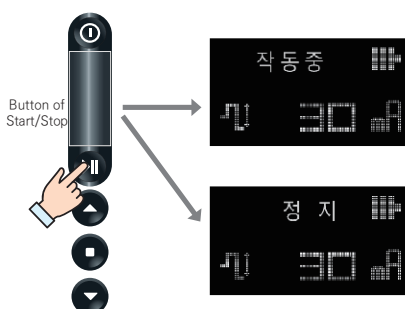
02 Power ON



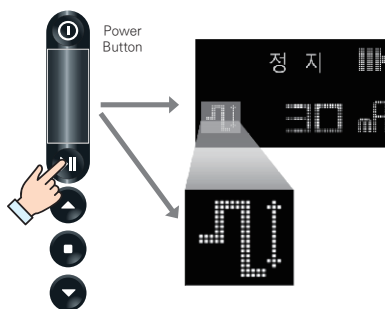
03 Control intensity of stimulus



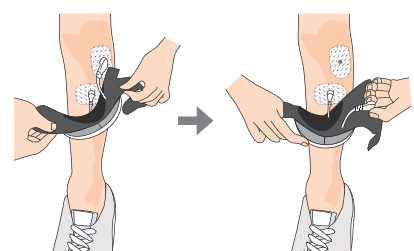
04 Operate the Device



05 Power OFF



06 Remove the device

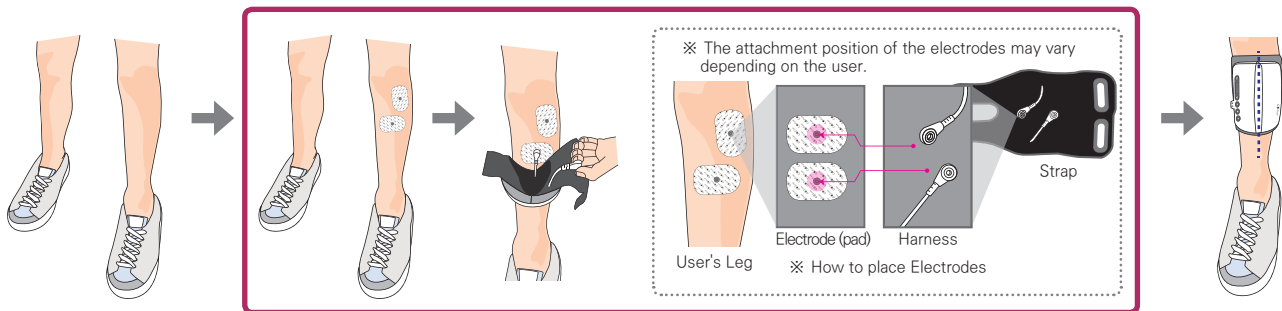


How to use GOSCAR SERA

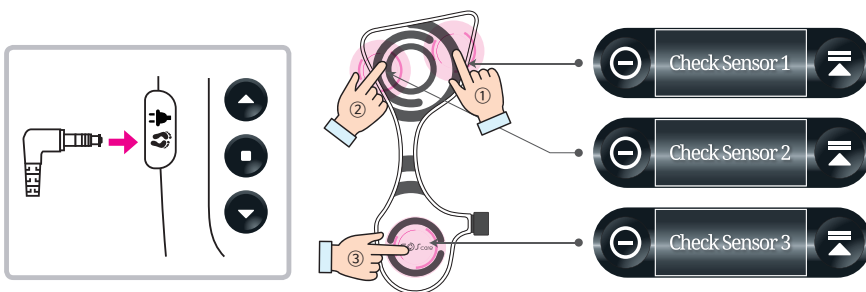
Walking mode

It is suitable for users who want to combine active exercise with electrical stimulation.

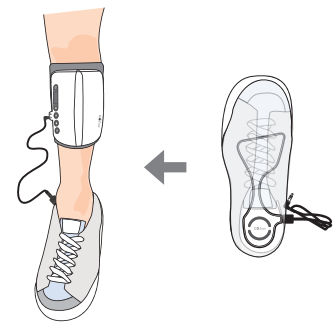
01 Attach the electrode (pad) and wear the device



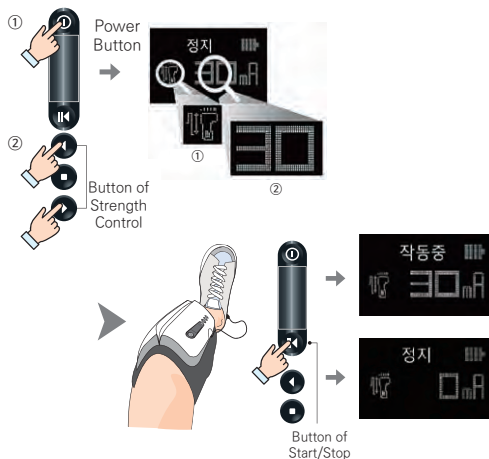
02 Connecting and verifying the foot sensor



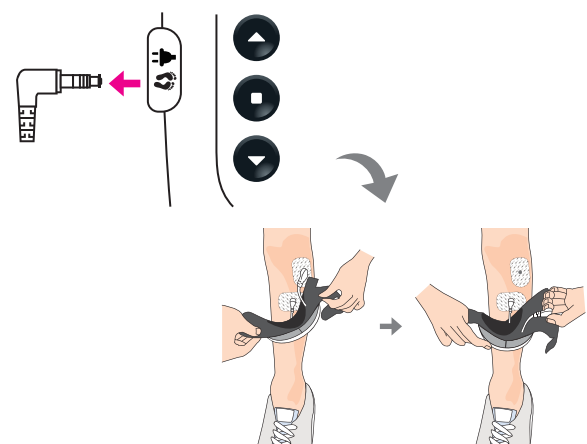
03 Wear the shoe



04 Setting intensity of stimulus



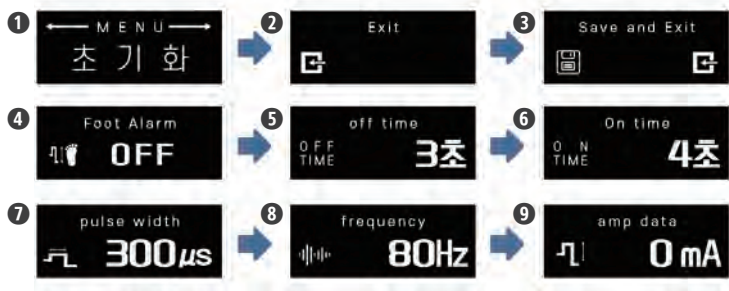
05 Remove foot sensor and the device



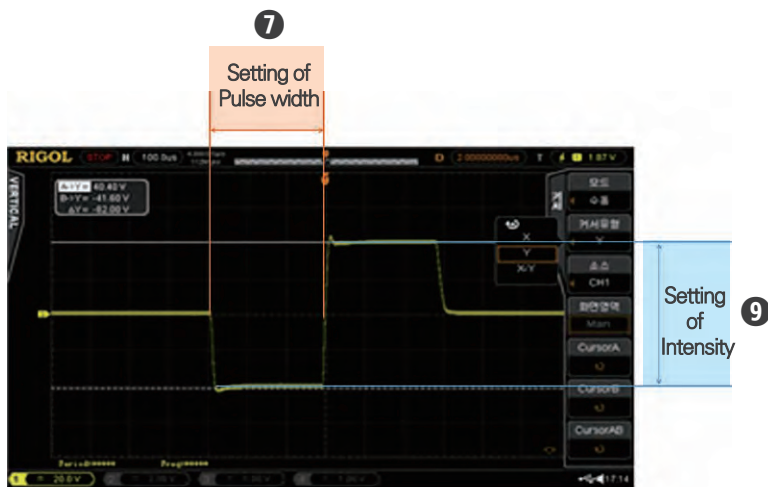
How to use GOSCAR SERA

Detail Settings

You can change the instrument's detailed settings(Intensity of the stimulus, Frequency, Pulse width, Time of stimulus output, etc).



- ① Set all values to the first product shipped.
- ② Exit from [Detail Settings]
- ③ Save your changes and exit
- ④ Sound on/off of Foot sensor
- ⑤ Set the time for no stimulus
- ⑥ Set the time for stimulus
- ⑦ Set the length of the stimulus
- ⑧ Set Number of times stimulated for 1 second
- ⑨ set the intensity of stimulus



SERA-R



SERA-L



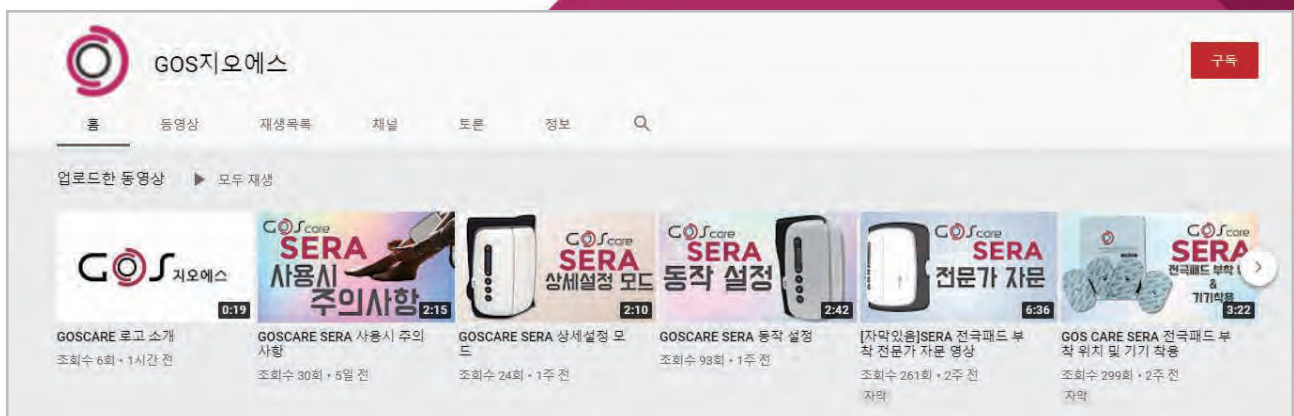
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GOS CARE

For more information, search 'GOS CARE' on YouTube.



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GOS CARE **SERA**



GOS 지오에스 www.goscare.co.kr

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