

STRYDE



INITIALISATION DEVICE CHARGER INSTRUCTIONS FOR USE

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1. Safety Information

The following general safety precautions must be observed during all phases of operation of this product.

WARNING

Do not use the device if it appears damaged or defective
Do not perform any unauthorized modification or change to the device
Do not expose to excessive heat or flames

CAUTION

Dropping the device and other mechanical abuse may cause damage to the electronics and mechanical parts
The device shall only be serviced by trained personnel who are familiar with the STRYDE system.

Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture, and intended use of the product. STRYDE assumes no liability for the customer's failure to comply with these requirements.

For further information on safety, please refer to the STRYDE Operation Support Product File.

2. Certifications

This product is designed for use in compliance with, and is certified according to, the following certification rules:

FCC Part 18.305

FCC Part 15.209

General Requirements for Intentional Radiators

ETSI EN 303 417 V1.1.1 (2017-09)

ETSI EN 303 446-1:V1.2.0 (draft – 2019-03)

FCC KDB 680106 D01 RF Exposure Wireless Charging Apps v02

FCC Part 1.1310 Radiofrequency radiation exposure limits

EN 301 489-01:V2.2.0

EN 301 489-03:V2.1.1

EN 303 446-1:V1.2.0 (draft)

EN 61000-6-2:2005

EN 61000-6-3:2007 + A1:2011

IEC 61010-1:2010, AMD1:2016

3. Introduction

This manual describes the necessary safety precautions and gives a brief overview of the functionality of the Initialisation Device Charger, also referred to as the Charger Carrier. The STRYDE system is a seismic acquisition system for professional use, and the Charger Carrier is used to recharge the batteries of the Initialisation Device in this system. For operation and detailed description of the entire system, please refer to the STRYDE Operation Support Product File.

4. Product Overview

The Initialisation Device Charger is a charging device that is used to charge up to 45 Initialisation Devices simultaneously. The charger can either be rack mounted using custom mounting hardware; or placed on a suitable workbench (for example in the tech shop). It is a standalone unit that needs to be connected to a single-phase mains supply. Up to 45 Initialisation Devices can be placed into the charging slots and the lid is attached. Once powered, the charging process is started automatically by communication between the charger and Initialisation Device (via the Qi charging standard.) The rate of charge is regulated by an Integrated Circuit on the Initialisation Device and will automatically cease once the battery charge reaches a pre-determined level. The Initialisation Device also provides feedback on the charging state using LED indicators.

The Initialisation Devices Chargers are not available for consumers to purchase and are only sold to limited number of industrial customers who will have to sign confidentiality agreements before gaining access to the product and documents.

5. Technical Specifications

Dimensions (height, width, depth)	221mm, 542mm, 595mm
Weight	<20kg
Operating temperature	0 to 60°C
Power supply input	100-240VAC, 6A, 50/60Hz
Power supply output	24VDC, 25A
Charging positions	45

6. Operation

Operation of the Initialisation Device Charger shall be carried out by trained personnel that are familiar with the STRYDE system.

Typically, the Initialisation Device Charger (Initialisation Device Charger) will be placed on a bench within the tech shop (or another clean area with working HVAC) at the local operations hub for the duration of the deployment. The Initialisation Device Charger will be used to

Initialisation Device Charger

Instructions for Use

charge the Initialisation Devices used by the crews during deployment and retrieval of the seismic Nodes. Initialisation Devices shall be inspected for damage before charging, damaged units shall be decommissioned when returned to the local operations hub. Initialisation Devices should be clean and dry before charging with the Initialisation Device Charger.

The Initialisation Device Charger shall be powered by a single-phase mains supply which powers the internal AC/DC power supply. The lid of the Initialisation Device Charger should be lifted by the operator, up to 45 Initialisation Devices can be charged simultaneously by locating them in the charging holes and closing the lid. Each Initialisation Device has a battery management circuit that is used to start, stop, and regulate the charging rate. In addition, there is a mechanical switch that can be used to switch the Initialisation Device Charger on and off. The operator may briefly remove the lid to check the led indicator on the Initialisation Devices: **slow blink red** means the unit is charging; a **solid green** means the unit is charged; an **occasional fast blink red** LED mean the unit is fully charged and has entered low power sleep mode. The charging time will take no more than 4 hours.

Charging shall be done away from flammable materials, and a fire extinguisher shall be within reach for emergency use.

7. Installation

The Initialisation Device Charger shall be installed on a bench by trained personnel that are familiar with the STRYDE system.

8. Storage and Maintenance

During deployment, the Initialisation Device Charger shall be stored on a bench in a clean air-conditioned area, with the lid fitted to prevent the ingress of dust and dirt in the charging holes.

When placed in a cardboard box for shipping the unit shall be protected with suitable packaging material.

Regular maintenance of the Initialisation Device Charger in storage is not necessary.

9. Transportation

The Initialisation Device Charger shall be packed in a suitable box with protective packing material to prevent damage in transit.

10. Faults and repair


Fault finding and repairs to the Initialisation Device Charger shall only be performed by authorized service personnel who are familiar with the STRYDE system.

11. End of Life

This product shall be safely disposed of as electronic waste. The owner of the system is responsible for disposal in accordance with local laws and regulations at the time it is disposed of. The unit contains recyclable materials and they should be recycled where facilities are available. Ultimate disposal of this product should be handled according to all national laws and official regulations. For detailed instructions for end of life disassembly, please refer to the STRYDE Operation Support Product File.

Recycling of materials helps to conserving natural resources. By proper waste handling of this product the user ensures it has no negative consequences for the environment and human health, which could otherwise be caused if this product is disposed of as general waste.




12. Safety Symbols

	Caution, risk of danger (refer to this manual for specific Warning or Caution information)
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WARNING	A WARNING notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in personal injury or death. Do not proceed beyond a WARNING notice until the indicated conditions are fully understood and met.
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CAUTION	A CAUTION notice denotes a hazard. It calls attention to an operating procedure, practice, or the like that, if not correctly performed or adhered to, could result in damage to the product or loss of important data. Do not proceed beyond a CAUTION notice until the indicated conditions are fully understood and met.
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13. Regulatory Markings

	The CE mark is a registered trademark of the European Community. This CE mark shows that the product complies with all the relevant European Legal Directives.
ICES/NMB-003(B)	This product complies with the Canadian ICES-003(B). Cet appareil est conformer a la norme NMB-003(B) du Canada.
	This product is tested and certified by Nemko and complies with IEC/EN 61010-1, UL 61010-1 and CSA C22.2 No. 61010-1
	This product complies with the WEEE Directive (2012/19/EU) marking requirement. This product label indicates that you must not discard this electrical or electronic product in general waste.

14. Compliance Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult STRYDE for help

Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

15. IC (Canadian Industry) Notice

This Class B digital apparatus complies with Canadian ICES-003.

Operation is subject to the following two conditions: 1) this device may not cause interference, and 2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.