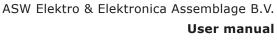


IGC PREMIUM+ USER MANUAL



IGCP-0002 R01





ASW Elektro & Elektronica Assemblage BV
Karperweg 32
4941 SL Raamsdonksveer
The Netherlands

Tel. +31 (0)162 571 220 E-mail: verkoop@asw-online.nl





INTRODUCTION MANUAL

The purpose of this manual is to inform the user of IGC Premium (+) about the operation of the product and its functions.

You are advised to read this manual carefully before using the grounding verification unit. Store this manual carefully with the unit. You are advised to use only the working method prescribed by the manufacturer.

Owing to the risk of malfunction, the grounding verification unit may only be installed by persons who have read the operating instructions and received practical training in installing the product.



ABOUT THIS MANUAL

Introduction

This manual describes the procedures and actions required for installing and operating the grounding verification unit.

Target group

This manual is intended for installers of the grounding verification unit and those involved in work relating to the grounding verification unit.

Urgent advice

Read this manual carefully before starting any work on and with the grounding verification unit.

Subjects in this manual

This manual contains all the information required to work safely and optimally with the grounding verification unit.

Supplements to this manual

Any supplements to this manual provided by the supplier of your grounding verification unit should be inserted in the manual.

Trademarks

All trademarks mentioned in this manual are registered trademarks of ASW B.V. Claims by third parties and/or any other claims based on information provided by ASW B.V. will not be accepted.

Liability for application/use

ASW B.V. and its resellers do not accept any third-party claims resulting from improper use of products mentioned in this technical manual. In accordance with the General Terms and Conditions ASW B.V. filed with the Chamber of Commerce for Tilburg, Netherlands.

Statutory regulations

The information contained in this manual is generally applicable to safety on, at and around the grounding verification unit. The final safety instruction must also comply with the legal regulations and rules applicable at the location where the grounding verification unit is used. ASW B.V. does not accept any third-party claims caused by non-compliance with these local (statutory) regulations and rules.

Implementation

ASW B.V. accepts no responsibility for the implementation of the safety instructions as described in this manual.

Copyright © ASW elektro & elektronica assemblage BV

All information in this manual is the property of ASW B.V. and may not be used (other than for the installation of the IGC Premium(+) unit and the associated print), photocopied, duplicated, translated or provided to third parties without the prior written consent of ASW B.V.

ASW B.V. reserves the right to change the information in this user manual without prior notice.





Although the utmost care has been taken to produce a correct and complete description of the operating and safety instructions for the grounding verification unit, ASW B.V. accepts no liability whatsoever for damage and/or consequential loss arising as a result of any errors and/or deficiencies in this user manual.

Deficiencies

However, if you encounter any deficiencies in this user manual, please bring them to our attention. This will help us to optimise the documentation.

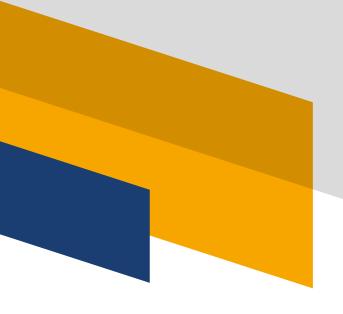
Questions or remarks

If you have any questions or comments regarding certain subjects related to the use of the grounding verification unit and/or module, please contact ASW B.V.



CONTENTS

ABOUT THIS MANUAL	04
CONTENTS	07
PRODUCT INTRODUCTION	08
FUNCTION AND OPERATION	09
HOW TO USE?	10
OPERATION	12
DISPLAY INFORMATION	13
ALARM NOTIFICATIONS	15



PRODUCT INTRODUCTION

About IGC Premium

IGC Premium is a completely new grounding verification system. It has been specially developed for the mobile sector and more than complies with the new SIR guidelines, which state, amongst other things, that annual maintenance and reporting are important. In addition, the system meets the requirements for the primary process; measurement of the leakage resistance and the clamp contact.

The IGC Premium is a Category 3 device according to the Directive 94/9/EC concerning devices intended for use in potentially explosive atmospheres.

Safety first!

IGC Premium(+) checks, monitors and registers the grounding of the vehicle. This allows the static electricity generated to dissipate in a controlled manner.

New 2 wire system

The new and innovative IGC Premium (+) automatically performs multiple control measurements that together guarantee the correct grounding verification. The clamp measures the leakage resistance and clamp contact resistance via the 2 wire system.

The future of safe working

IGC Premium (+) offers not only the primary functions, but also support programs that guarantee installation, maintenance and trip history.

The design of this system does further than the SIR guidelines and is therefore prepared for the future.

Easy to use

The user can read the status of the IGC at a glance from the diagnosis screen. The service menu guides the user effortlessly through all the necessary installation steps, which are necessary for the controlled discharge of static electricity.

FUNCTION

With the IGC Premium (+), unsafe work situations due to static electricity, in particular the status until discharge of this static electricity, are detected at pressure vacuum and high pressure processes. Examples of applications include high-pressure, vacuum, chemical engineering and sewer cleaning, transport of dry materials, road surface cleaning, etc.

IGC Premium (+) is a grounding verification product with constant monitoring, developed by ASW.

This new generation grounding verification automatically performs multiple verification measurements which together guarantee the correct grounding verification.

IGC Premium (+) is a grounding verification product that uses process software to digitally store the (electrical) characteristics of vehicles. This creates an extremely reliable measuring cycle, which enables grounding verification by means of fixed and mobile set-ups.

OPERATION

The IGC Premium (+) grounding verification unit analyses and checks during the loading of products whether the grounding dissipation value is sufficient for good dissipation of possible accumulated static electricity.



Unit check



Tank check



Chassis check



Grounding check



Clamp check

A green checkmark appears, indicating that the grounding box has 'control' of the grounding and that the static electricity can dissipate.





HOW TO USE IT?

Purpose of grounding

The purpose of grounding the vehicle with the IGC Premium (+) grounding point verification unit is:

- dissipation of static electricity
- keeping the loading or unloading point and the vehicle under the same voltage during loading and unloading

BEFORE THE SHIPPER STARTS LOADING OR UNLOADING, THE FIRST ACTION IS TO **GROUND THE VEHICLE!**

Grounding control is mandantory

The grounding MUST be checked with a grounding control! Use a certified grounding point (prescribed and approved by the client) for this purpose.

If grounding cannot be established or is not sufficient, the work may not be started.

When the clamp is attached to an unsuitable grounding point such as another vehicle or trailer, this results in an erroneous measurement and the IGC Premium (+) gives an error message. When looping through to another vehicle, the system may indicate a good grounding when this is not the case. This is NOT allowed!



Check also during work

IGC Premium (+) continuously monitors during the loading process. It is recommended to monitor the screen during loading or unloading to ensure continuous connection to the grounding point.

On completion of work

When the loading process has been completed, the last action to be taken is to swithc off the IGC Premium (+) unit and disconnect the wagon from the grounding point.

THE UNIT ONLY FUNCTIONS IN **COMBINATION WITH THE VEHICLE ON** WHICH IT IS INSTALLED!

The unit ensures that you are sure that the vehicle is properly grounded in relation to the static electricity generated during loading and unloading.

ATTENTION!

When loading and unloading dry substances, powders, granulates and plastics, high static charges can occur. Sometimes even resulting in an explosion!

OPERATION

1. Attach the clamp

Roll the cable off the reel and attach the clamp (located in the reel holder) to a certified grounding point.

2. Switch on IGC Premium (+)

When the unit is switched on (turn the On/Off switch clockwise) the unit will automatically run the start-up procedure.

3. Run controle procedure

- unit check
- tank check
- chassis check
- grounding check
- clamp check

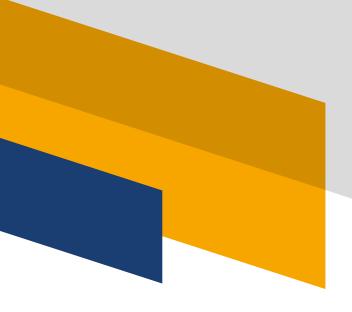
Grounding ok

When all steps have been completed, the screen displays a green checkmark to show that the grounding is adequate.

The unit will continuously monitor the connection (clamp check) during loading or unloading.

The entire start-up procedure takes about 10-20 seconds and assures the user (visibly) of a properly functioning grounding verification system!

ATTACH CLAMP Attach the clamp (in reel holder) to a certified grounding point. SWITCH ON IGC PREMIUM (+) Turn the On/Off switch, the unit will start up automatically. CONTROLE PROCEDURE The unit automatically runs the control procedure and starts the grounding point measurement. GROUNDING CONTROL READY The steps taken are shown on the screen. A green checkmark means that the grounding is OK. The signal light on the vehicle is green!



DISPLAY INFORMATION

Turn On/Off switch



Startup screen appears

Automatic startup procedure starts



Unit check (always active)



Tank check (may be disabled)



3. Chassis check (may be disabled)



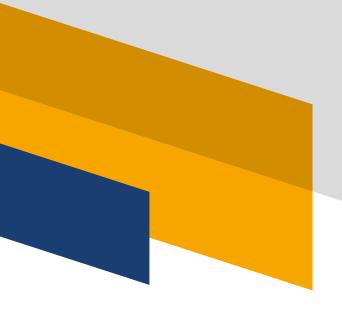
4. Grounding check (primairy measurement)



Clamp check (primairy measurement)



6. Controle completed - grounding OK!



MEANING OF ICONS

Grounding

After going through the complete procedure, the status of the IGC Premium (+): grounding OK, then this is displayed with a green checkmark on the screen.



This means that loading can be safely started. During loading, the grounding point is continuously monitored and the status of the grounding point is shown on the screen.



When the above icon appears on the screen, this means that this function is not present on the vehicle. The status remains neutral (switched off).

Grounding not OK

If the system gives an error message by showing a red cross at grounding, the grounding is not OK!



A red cross may appear at any of the components during the procedure.





ALARM NOTIFICATIONS



Overview of possible notifications (red cross) and how to act:

Unit check

Contact supplier, the IGC Premium (+) works outside the required specification or may be defective.

Tank check

The connection between body and chassis is not adequate, check the grounding connection between body (tank) and chassis.

Chassis check

The clamp makes direct contact with the vehicle. Attach clamp to grounding point.

Grounding check

If the value of the measurement changes due to the user attaching the grounding clamp elsewhere, disconnecting it from the vehicle or otherwise, the IGC Premium (+) will automatically perform a new control measurement.

Clamp check

Clamp is not properly (completely) attached to the certified ground point. Attention! Both terminal bits must make contact with the grounding point.

Reset alarm notification

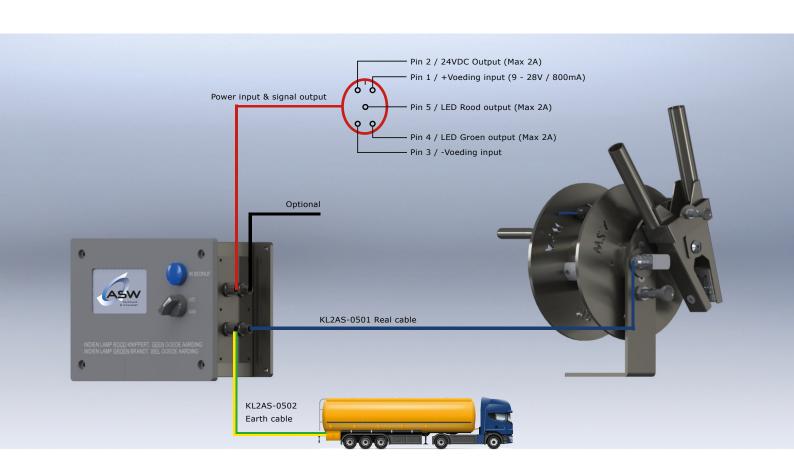
If the value of the measurement changes due to the user attaching the grounding clamp elsewhere, disconnecting it from the vehicle or otherwise, the IGC Premium (+) will automatically perform a new control measurement.

Only when the grounding meets ALL set values will a green checkmark appear. Without good grounding, we strongly advise you not to start loading.





CONNECTION SPECIFICATION





- ASW Elektro & Elektronica Assemblage BV (Rarperweg 32, 4941 SL Raamsdonksveer The Netherlands
- (4) +31 (0)162 571 220
- verkoop@asw-online.nl www.igc-premium.nl

This manual has been drawn up with the greatest care. If, nevertheless, items have been incorrectly stated, items are missing or unclear, please report this to the manufacturer.