VOTRONIC

Installation and Operating Manual

LCD Charge Control S-VCC Order No. 1248

Convenient, easily operable control and operating element, appropriate for **Charging Converters** of series **VCC**1212-30 … **VCC**1212-90 from model 2018, equipped with 6-pole. plug-type connection **female connector "Display"**.

It indicates the status of the charging converter, the current charging phase, the voltage of board and starter battery, as well as the instantaneous charging current. The current draw of the charging converter can be reduced/limited temporarily at the touch of a button.

The large, clearly arranged display is illuminated and offers excellent legibility with very low current consumption. Retrofit of the unit, also subsequently, is easily possible by means of the plug-and-play connection, and due to the compact design, it can be installed at almost any location.

The dimensions of the unit are perfectly adapted to the VOTRONIC modular system. The VOTRONIC modular system includes the tank display units (fresh and sewage water as well as feces), the LCD series (battery computer, voltmeter and thermometer), as well as the switch and fuse panels.

Please read these mounting instructions and the operating manual completely and attentively.
Particularly observe page 4 "Safety Regulations and Appropriate Application",
prior to starting connection and start-up.

Installation and Connection

The small mounting depth (approx. 22 mm) of the electronic system allows flush mounting into furniture boards to ensure, that an optimum installation place can always be chosen. Please use the delivered drilling jig, which has been designed to consider combination with further display panels.
If possible, the rear cutout opening should be covered with electrically nonconducting material to ensure efficient protection of the electronic system and full utilization of the storage space, which might be located behind.
The delivered control cable of 5 m length is used to connect the display unit to the VOTRONIC Charging Converter. The connection is executed ready to be plugged in, and the cable should be laid according to the safety instructions.

Now the unit is ready for operation.

If the length of the control cable is not sufficient for connection of the connection unit, the cable extension of 5 m length, order No. 2005, being available as accessory can be used. The total cable length is then 10 m.

The delivered control cable is specially designed and tested for this application. Faultless operation of the unit is only ensured, if the delivered control cable is used. Cables in similar execution might produce failures, which are not covered by the guarantee.

Initial Start-up

Connect the charging converter according to the manual, and it is ready for operation, make the plug-type connection between display and charging converter. Now, also the LCD Charge Control S-VCC is ready for operation.

Operation

Batt.II 3s

Key 1: Next page of display,
display of voltage starter battery (3 s).

Mode

Key 2: AC Power Limit

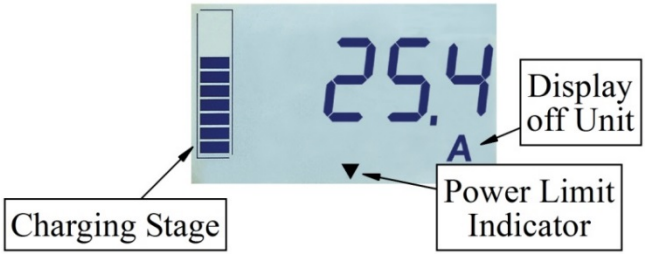
Back Light

Set 3s

Key 3: Illumination on/off.
Brightness Setting (3 s)

Adjustment of the background illumination

The background illumination can be adapted in steps of 10 % according to the requirements. The display must be set to Volt. Pressing the right key for 3 seconds activates the brightness setting of the background illumination. The brightness is changed by pressing the left key shortly. After a short moment, the setting will be saved automatically and the display returns to normal operation.



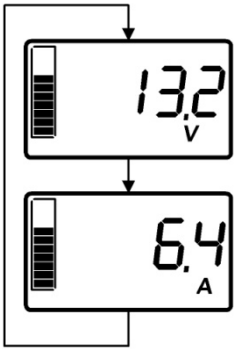
Activation, Deactivation

The charging converter supplies current to the LCD Charge Control S-VCC. The unit is optimized for extremely current saving operation and offers two operation modes.

Display with and without illumination: As soon as the LCD Charge Control S-VCC S is operated, the display illumination will be switched-on automatically and will remain activated for 3 minutes. If there is no operation during this time, the illumination will be switched-off automatically. The display continues showing the same data. The display illumination is reactivated by pressing any key.

Display

Use the key 1 to change to the next page of the measured and displayed values of the charging converter.



Voltage: The voltage rate (Volts "V") of the board battery is displayed.
The voltage of the starter battery is displayed, as long as the key 1 is pressed for at least 3 seconds.

Current: The instantaneous rate of the charging current (Amperes "A") of the charging converter is displayed.

Charging Phase: The current charging phase of the charging converter is displayed by means of segments at the left screen edge.

Operating State of the Charging Converter (Power Limit)

Depending on the type, the power limit function of the charging converter can be switched on temporarily. This will be indicated by the indicator "Limit" (at the lower display edge) and can be changed by means of the key "Mode". For further information concerning the limit function, refer to the manual of the corresponding charging converter.

General Information

Cleaning

We recommend to use a damp microfibre cloth with pure water or, if required, with water with a few soap. Take care that no liquid flows along the display screen or the edges of the front panel!

Never use solvents, aggressive household cleaners, and scratching or abrasive agents or objects to clean the front panel and particularly the display itself.

Technical Data

Nominal Voltage:	12 V
Current Draw:	3...30 mA, depending on illumination
LC Display with specific segments	
Representation Surface:	49 x 28 mm
Illumination:	White LED
Dimensions (mm):	80 x 85 x 24
Assembly Dimensions Opening Electronic System (mm):	approx. 66 x 72
Weight:	approx. 55 g

Notes:

Safety Regulations and Appropriate Application:

The remote display and control has been designed according to the valid safety regulations.

Appropriate application is restricted to:

1. Use together with a VOTRONIC Charging Converter of series VCC1212-30 … VCC1212-90 from model 2018, equipped with a 6-pole connector "Display".
2. Technically faultless condition.
3. Installation in a well-ventilated room, protected from rain, humidity, dust, aggressive battery gases, as well as in an environment being free from condensation water.
4. With a rear insulating cover of the display unit.

- Never use the unit in locations where the risk of gas or dust explosion exists!
- Open-air operation of the unit is not allowed.
- Cables are always to be laid in such a way that damage is excluded. Observe to fasten them tightly.
- Never lay 12 V (24 V) cables and 230 V mains supply cables into the same cable conduit (empty conduit).
- The unit is to be disconnected from any connection prior to execution of electrically welding or work on the electric system.
- If the user is not able to draw from the manual, which characteristic values are valid for a unit or which regulations are to be observed, a specialist is to be consulted.
- The user / buyer is responsible for the observation of construction and safety regulations of any kind.
- The unit is not equipped with parts, which can be replaced by the user.
- Non-observance may result in injury or material damage.
- Never use solvents or aggressive household cleaners for display cleaning!
- The warranty period is 36 months from the purchase date (against presentation of the sales slip or invoice).
- The warranty will be void in case of any inappropriate utilisation of the unit, if it is used beyond the technical specification, in case of improper operation or external intervention. We do not assume any liability for any damage resulting hereof. The liability exclusion is extended to any service being executed by third, which has not been ordered by us in writing. Service is to be effected exclusively by VOTRONIC D-36341Lauterbach.

Declaration of Conformity:

In accordance with the provisions of Directives 2014/35/EU, 2014/30/EU, 2009/19/EC, this product complies with the following standards or normative documents:
EN55014-1; EN55022 B; EN61000-6-1; EN61000-4-2; EN61000-4-3; EN61000-4-4; EN62368-1; EN50498.

Disposal of the product in the household waste is not allowed.

The product conforms to RoHS. It complies with the directive 2011/65/EU for Reduction of Hazardous Substances in electrical and electronic equipment.

Quality Management System
DIN EN ISO 9001

Delivery Scope

1 Pc. LCD Charge Control S-VCC
1 Pc. Control Cable, Length 5 m
4 Pcs. Fastening Screws
1 Pc. Operating Manual
1 Pc. Drilling Jig

Available Accessories

Control Cable Extension, 5m Length	Order No. 2005
Casing S for LCD Unit Series S	Order No. 2024

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