

***DIGIVOTE® III***

**TK50-DVIII Storage / Charging case**



**Operating instructions**  
Rev 1.2

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E-Mail: sales@braehler.com

You will find further information about our products on the Internet at:

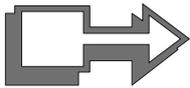
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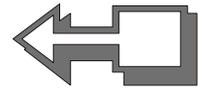


## CAUTION

DANGER OF ELECTRIC SHOCK  
DO NOT OPEN DEVICES!

Do not open housing with mains cable connected.

Maintenance operations may only be done by  
qualified personnel.



Our equipment and installations have been built and tested according to the latest state of the art. In general conditions they do not require any special maintenance.

However, please be aware of the following:

- ☑ **Positioning** - secure and stable position of the equipment
- ☑ **Ventilation** - operate equipment with proper ventilation. Avoid heat sources such as heating radiators etc.
- ☑ **Mains connection** – pass all power cables so that they will not be damaged
- ☑ **Cable connections** - avoid trip-traps
- ☑ **Liquids** - avoid penetration of liquids into the housing
- ☑ **Power sockets** - operate equipment only with power sockets that are connected to ground according to the relevant specifications and regulations

*Warning: Never expose equipment to rain or humidity*

Rough handling of the equipment, such as strong shocks or vibrations, may result in damages. Inappropriate handling and storage, which does not conform to the operating instructions, may also lead to equipment damages.



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## About this manual

### Symbols

The meaning of the symbols and fonts used in this manual:



Indicates an important note, if not minded, the functionality of the unit, the security of your data, or your health are put at risk.



Supplementary information, remarks, and tips follow this symbol.



Text which follows this symbol describes activities that must be performed in the order shown.

Texts in **bolded** letters require your special attention.

## Important remarks

### For customers in the EU and in the USA

The equipment is complying with the standards of the CE regulations. These standards are specified to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The equipment can radiate radio frequency energy and if not installed and used according to the user manual it may cause harmful interference to radio communications. Any changes or modifications which are not explicit approved in this manual could void your authority to operate this equipment.

***The equipment must be connected to ground!***

## Safety

Check that the operating voltage of the unit is identical with the voltage of your local power supply. If a voltage conversion is required, consult your BRÄHLER ICS dealer or qualified staff.

Should any liquid or solid object fall into the housing, unplug the unit and let it check by qualified staff before further operations. Unplug the unit from the power outlet or set the mains power switch to OFF if it's not used for several days. To disconnect the cord, pull it out holding the plug. Never pull the cord itself.

## Installation

Allow proper air circulation to prevent internal heat accumulation. Do not place the unit on a surface that may block the ventilation holes.

Do not install the unit in a location near heat sources or in a place exposed to direct sunlight, excessive dust, humidity, mechanical vibration or shock.

Do not install the unit when it is changed from cold outside to warm inside. In this case wait approx. 1 hour until temperature is even-tempered.

After loading over several hours (e.g. over night) the devices can get very warm.

## Cleaning

To keep the housing in its original condition, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use organic solvents such as thinners or abrasive cleaners as these will damage the cabinet.

## Repacking

If possible save the original shipping carton and packing material; they will become useful if you ever have to ship the unit. In this case please keep the manual and the unit together. For maximum protection, re-pack the unit as originally packed by the factory.

If not supplied with the equipment, a complete transport and storage box system is available from BRÄHLER ICS. We recommend using this system for long-term protection and care.

## General

Please keep this manual together with the storage case TK50-DVIII. If you pass on the unit to other parties, please include this manual.



Please read the manual carefully, taking special care when you see this symbol as it indicates important information!



When first charging new devices smells can arise. Pay attention therefore to sufficient ventilation.



The batteries and the devices are very warm with quick charging. Therefore, during charging with the TK50-DVIII you will take care that the room temperature is less than 25 degrees.



This product is conforming to the rules of the following European directive:  
89/336/EWG

Council directive to the alignment of the rules of rights of all member states about the electromagnetic compatibility, modified through RL 91/263/EWG, 92/31/EWG and 93/68/EWG of the council. Further information is available on request.



The warranty will expire, if you cause defectives by inappropriate use or handling of the unit.

## Introduction

Congratulations on buying the TK50-DVIII storage and charging tray from BRÄHLER ICS!



The TK50-DVIII Transportation case is designed for the storage and transport of DIGIVOTE® III voting units VD30.

The case comprises 52 (two as a spare) storage trays. There is no need for a test tray to check the charging level, as the charging control and charging level is a feature of the VD30 handheld.

Each handheld has two charging pins which come into contact with the charging set's respective contact points when a receiver/handheld is placed into one of the case's charging trays. After the receivers have been in use for a whole day, it is recommended that they are recharged overnight (for approx. 14 hours). A longer charging time will not harm the rechargeable batteries.

All the charging trays and voting units are serially numbered.

This makes it possible to keep tabs on the distribution and return of the receivers/voting units. It is also a means of ensuring that all units that have been used are recharged regularly even at very big events.

The storage tray is set into a robust case with a detachable lid. The case is designed to be secured by a padlock and fitted with a sturdy fold-away handle for lifting and carrying purpose.

**Contents of basic delivery**

- TK50-DVIII storage tray
- This manual

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**DIGIVOTE® III system components**

The TK50-DVIII storage tray operates as a single component in a wide system; a complete DIGIVOTE® voting system also may contain the following components:

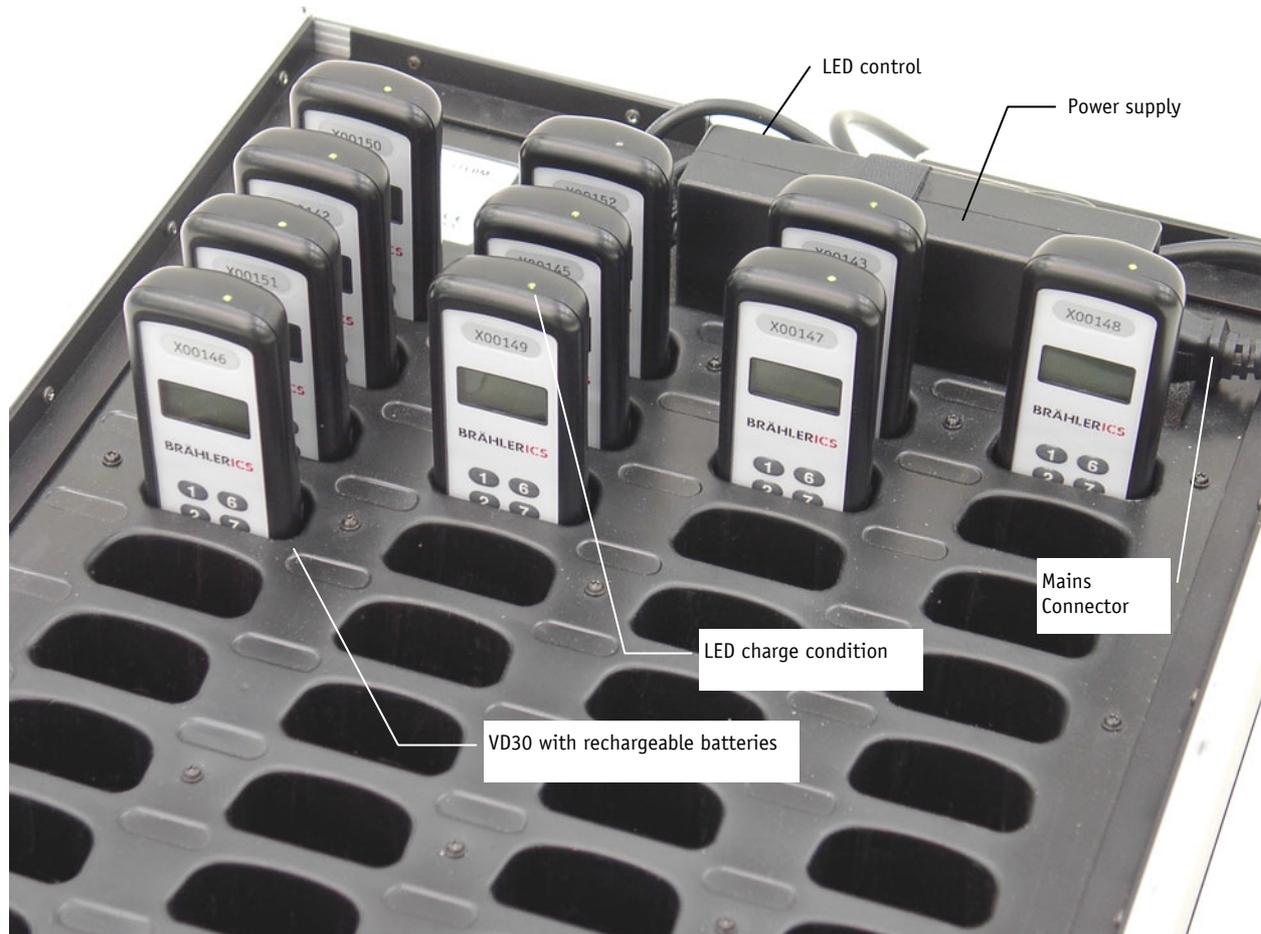
**Wireless voting keypad** VD30 (to participate in voting)

**Transponder** TR30 (controller for voting data)

## Operating controls

### View

The TK50-DVIII for VD30 voting units are always equipped with recharging batteries, just plug in the additional power supply to mains power. The TK50-DVIII is ready for use. A control LED shows this operating condition.



LED Charge condition (green):

**Off:** Voting unit VD30 is not inserted in the tray or not in contact. Probably the charging case is not online.

**Slowly blinking LED:** charging process (Quick charging)

**On:** charged (trickle charging active)

**Fast blinking LED:** failure (e.g. no recharging batteries in VD30, recharging batteries faulty)



**In no case** it is allowed to charge VD30 voting units with disposable batteries!

## Technical data

This product complies with international standards **IEC914** and **IEC61603-3**

### TK50 Transportation Case

- Lockable transport case
- Removable lid
- Sturdy fold-away handle
- 50 (52) storage trays
- Dimensions (W x D x H): (640 x 410 x 220) mm
- Weight without receivers: 11.5kg (approx.)
- External Power Supply  
AC: 100 - 240V, 47 - 63Hz CSA/UL approved AC -  
Inlet IEC320/C14 „short cut protected“ 12VDC / 8.3A / 100W
- Internal power supply plug
- Mains cable fitted with Euro plug 1.5m
- Dimensions of power supply tray (W x D x H): (132 x 58 x 30) mm

## Operation

### Starting the charging procedure

Before starting up the system please check the local supply voltage. It has to match to the switching power supply (100 to 240VAC).

Connect the power supply to the mains voltage. The green LED light up for proper working.



We recommend the following procedure for a long life of recharging batteries:

Avoid charging more than 48 hours to save the rechargeable batteries and to minimize the "memory effect".

After a storage period of 1 to 2 month, we recommend charging cycles of 24 hours all 2 weeks.

The optimum storage temperature is between 10° to 30°C. An ambient temperature above 50° C will reduce durability and capacity of the rechargeable batteries during storage and charging.

After transport from colder to warmer ambiance please wait about one hour before charging. This is necessary for acclimatization on ambient temperature.

A long period of charging about weeks/month does not result in overloading, but has to be avoided in regard of memory effect and sensitivity of temperature.

## Trouble shooting

| Error description  | Error cause   | Error solution  |
|--|---|---|
| Switching on the system produces no POWER ON condition (green LED does not light up)   | <p>The mains cable connector is not properly connected to the corresponding socket of the unit</p> <p>Connection cable possibly defective</p> | <p>Check if there is no connection to the mains power</p> <p>Replace a new mains cable</p>  |
| Although mains power is plugged in (LED on) the receivers/voting units are not charged | Secondary voltage of power supply has no connection to the trays (DC plug)  | Check the connector (DC plug) of the power supply output. The plug must be firmly connected |

## Warranty

BRÄHLER ICS allows for the DIGIVOTE® products a warranty period of 24 months, from date of delivery, for faulty materials and/or manufacturing faults. The warranty does not include rechargeable or disposable batteries, misuse, negligence, breakage, wrong installation, use outside the existing rules and any unauthorised modifications.

BRÄHLER ICS rejects any guarantee, if the safety label with the serial number is removed.

BRÄHLER ICS declares itself to agree to exchange or repair defective components due to faulty materials or manufacturing, dependent on following procedure:

- 1) The client declares that the fault is not due to empty, discharged, wrongly inserted, or faulty batteries.
- 2) Before sending the faulty product back to the company, please obtain an RMA (Return Material Authorisation) number. An RMA can be obtained by contacting us at the details below

Phone +49 (0) 2244 930 0  
or email: [sales@braehler.com](mailto:sales@braehler.com)

- 3) You may send the defective product free of charge to (refer to the service form):

BRÄHLER ICS Konferenztechnik  
International Congress Service AG  
Auf der Alten Burg 6  
53639 Königswinter  
Germany

- 4) Should it turn out that the fault was caused through inattentiveness or inappropriate use, the service and shipping charges will be added to the clients account.



## Service form

Material return shipments for repair-, service-, or guaranty purposes please send to:  
BRÄHLER ICS Konferenztechnik AG, Auf der Alten Burg 6, D-53639 Königswinter, Germany  
Phone +49 (0)2244 930-100, Fax +49 (0)2244 930-450

Dear customer,

Please ask our sales staff for the **RMA number** (*Return of Material Authorization*).

**Without RMA number a treatment is not possible!**

Please always include this service form, fully completed, with any complaint or repair wish you may have. Please note that only returns with the proper and complete paperwork can be dealt within time.

**A detailed fault description will reduce costs and period of repair.**

Please contact us before you return equipment in order to find the most efficient way of sending.

**RMA number:** \_\_\_\_\_

Article description: \_\_\_\_\_ Serial no.: \_\_\_\_\_ Code: \_\_\_\_\_

Delivery note no.: \_\_\_\_\_ Invoice no.: \_\_\_\_\_

Reason for return/Fault description:

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Company: \_\_\_\_\_

Contact person: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

Notes/Comments:

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Transport damages have to be reported immediately to the responsible forwarding agent.

### Remarks for Non-EU customers:

Please add to each return a delivery note or a proforma invoice, addressed to Brähler ICS AG, Königswinter, with following statements:

- Reason for return (repair or credit note)
- Exact declaration of the goods, exact no. of pieces, article no. / model, serial no.
- Price which was invoiced by us, better our invoice no. with date

Return shipments from Non-EU countries have to be sent **either by air freight** to Cologne airport, to the attention of:

Calenberg Oversea Logistics, Mrs. Taxacher, Welser Str. 8, 51449 Köln, Tel: +49 2203 3592-838

### or by the following courier services:

DHL Express, Federal Express, TNT Worldwide Express, UPS Express

Please do not use any other courier service, because only the four companies mentioned above perform return shipments.

To enable quick and cost efficient customs clearance, kindly take care that the airway bill mentions

a) 'return for repair' as well as

b) the customs tariff code number of the goods (which will be advised by us together with the return of material authorization number)

Any expenses (duties and taxes) incurred by deviant handling will be charged to the sender.



## Contact information

### Head office

#### Germany

Brähler ICS Konferenztechnik  
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Wahlfelder Mühle 3  
53639 Königswinter, Germany

P.O. Box 3264  
53627 Königswinter, Germany  
T +49 (0) 2244 930-0  
F +49 (0) 2244 930-450  
[www.braehler.com](http://www.braehler.com)

### Rental service

Wahlfelder Mühle 3  
53639 Königswinter, Germany  
T +49 (0) 2244 930-200  
F +49 (0) 2244 930-430  
E [rental@braehler.com](mailto:rental@braehler.com)

### Sales

Auf der Alten Burg 6  
53639 Königswinter, Germany  
T +49 (0) 2244 930-0  
F +49 (0) 2244 930-450  
E [sales@braehler.com](mailto:sales@braehler.com)

For your nearest representative in 85 countries, please contact our sales department:

T +49 (0) 2244 930-0  
F +49 (0) 2244 930-450  
E [sales@braehler.com](mailto:sales@braehler.com)

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