





# Installation and Maintenance

TT1000 TT3000 TT4000

Version 1.3

e-DATA GmbH

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# 1 Usage

The device may only be used under those conditions and for those purposes for which it has been designed.

# 1.1 Protection Class and Protection Type

The device conforms to the conditions of protection class IP30.

The device should only be run inside buildings.

# 1.2 Safety Measures

This device has been built according to the state-of-the-art and the recognized technical safety rules and has left our works in perfect condition. Improper handling and operation outside the specified conditions can result in dangers due to electrical current. This can endanger the lives of persons and damage the machine.

# 1.3 Before Commissioning

Check the device for visible damage during transportation or improper storage. Do not commission a damaged device!

The device may only be operated with AC voltage 110 to 240V AC 50 to 60Hz.

# 1.4 Operation

Do not subject the device to any mechanical stresses such as impacts, violent shaking or heavy loads. Impacts and shaking can damage the electronics.

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# 1.4.1 Installation and Service

**^** Caution

The device should only be opened by suitably trained technical personnel.

Before opening disconnect the device from the power source.

You should carry out repairs only in consultation with

e-DATA GmbH

# 1.5 CE Conformance

Safety requirements This device is manufactured according to the safety

requirements of EN 60950.

Interference resistance This device complies to the interference resistance criteria

according to EN 55024

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**Emitted interference** This terminal complies to the emitted interference criteria

according to:

EN 55022

EN 61000

Emitted interference EN 55022

**TT1000** EN 61000

CSA 60950 und FCC

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## 1.6 FCC

This equipment complies with Part 15 of the FCC rules. Any changes or modifications not expressly approved by the Manufacturer could void the user's authority to operate the equipment. This device complies with Part 15 of the FCC rules subject to thefollowing two conditions:

- 1. This device may not cause harmful interference
- 2. This device must accept all interference received, including interference that may cause undesired operation.

#### NOTE:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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# 2 Installation



# Danger of current shocks!

The device should only be opened by suitably trained technical personnel.

# 2.1 Parts included

- 1 device for Time & Attendance
- 1 wall mounting kit

# 2.2 Installation conditions

- Surface wall installation with hidden screws. The cables are fed on the back of the device under the plaster or as an alternative from the bottom of the device.
- Data lines to the higher or lower-level device are provided by the customer.
- If using the connection variant 2, i.e. connection cables from the back, please ensure, that the in-wall connector is located at the right position. See figure 5.3

The power supply is provided by the customer.

## Security advice



- To limit the input voltage of the device to overvoltage category II the customer provides an appropriate overvoltage protection unit!
- Also an appropriate, easily accessible separator for the power circuit is provided by the customer.
- The power supply provided by the customer must use solid conductors or a build-in power cable and a power outlet!
- Possibly national regulations apply.



Network connections are only allowed within the same building!

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Before mounting the device to the wall, please check the following pre-conditions:

#### Clearance

- $\sqrt{\phantom{0}}$  Enough clearance must be available for mounting the device (see casing dimensions in fig. 4.1).
- √ Make sure enough clearance is available for the cables that might be fed from the back.

# 2.3 Cable laying

#### **General hints**

Do not lay the data lines in parallel with cables that carry high voltage. If this cannot be avoided, lay the lines in closed steel tubes and keep a distance of 3 ft. for the protection from electromagnetic influences.

# 2.4 Device connection variants

#### **Connection variant 1**

For this variant a fix built-in power cable to be connected to a wall outlet is used. The connection cables for the device can be plugged in at the bottom side of the device.

#### TT3000 und TT4000

The connectors COM1 and COM3 can only be reached from beneath.

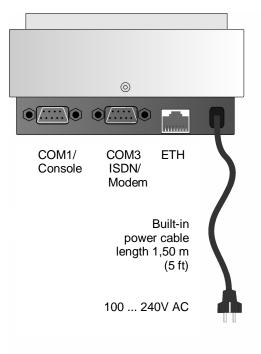


Figure 5.1 Connections TT3 bottom side

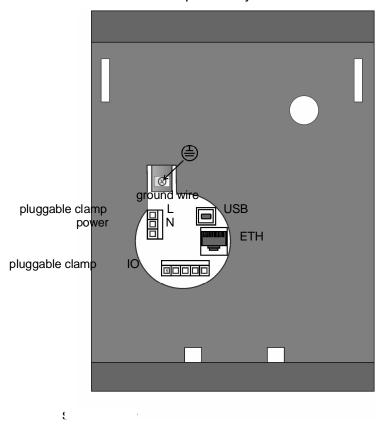
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# **Connection variant 2**

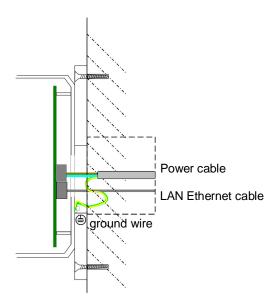
# TT3000 und TT4000

For this variant there is no preinstalled power cable. The connection cables including power can be plugged in from the back through a hole in the back plate.

The IO clamp can only be reached from the back.



#### Connections TT3000 / 4000 back side



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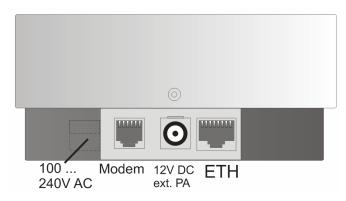
# Attention!

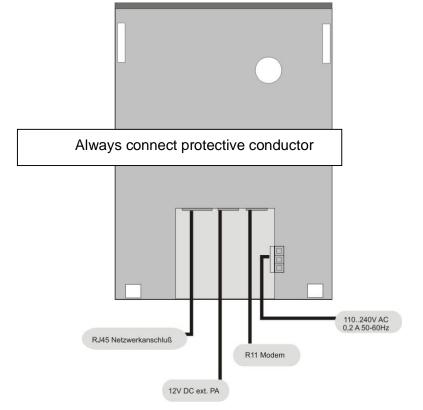
The ground wire is to be fixed to the metal housing with a screw-type clamp!

# Connection variant 3 TT1000

The connection cables including power can be plugged in from the bottom before final mounting.







Back side

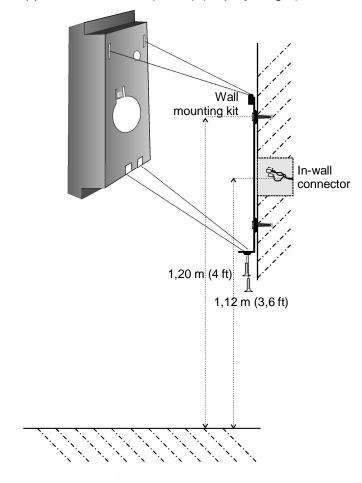


Always connect protective conductor

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# 2.5 Mounting and connecting the TT3 device

Attach the wall mounting kit with four countersunk screws (Ø max. 0.2 in (5mm)) to the wall. The recommended height of the upper holes is 4.0 ft (1.2 m) (display height).



Wall mounting

# **Mounting steps**

- 1. Mark drill holes by using the wall mounting kit as a template.
- 2. Drill four holes for the screws. If necessary use screw anchors.
- 3. Mount the wall mounting kit with four screws.

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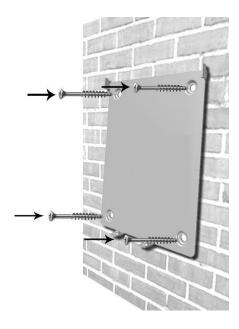


Figure. 5.3.1 Mounting the TT3 wall mounting kit

- If using the connection variant 2, i. e. connection cables from the back, connect the power cable and the Ethernet cable now. The ground wire is connected to the metal housing.
  - 4. Insert the terminal back plate slots into the wall mounting kit top hooks and lower.
  - 5. Attached the terminal back plate to the bottom of the wall mounting kit with 2 screws .

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Mounting the back plate

If using connection variant 1, i. e. *built-in power cable*, plug in the Ethernet and power cables now.

**Note** 

Devices with rechargeable batteries may be only partially loaded at the time of delivery. They provide full power only after an appropriate loading phase!

# 2.6 Shutdown mechanism

# Without battery

If the device is disconnected from the mains power supply "power off" is recognized. For a few seconds an internal emergency power source on the mainboard provides the device with power. A "power off" message is sent to the host CPU, which performs a shutdown as fast as possible. A shutdown execution message is sent to the mainboard, which is then switched off completely. Also if the device is removed from the wall without being disconnected from the power supply, a light barrier interrupt message is sent to the host CPU. Again the host CPU performs a fast shutdown und sends an execution message to the mainboard. But in this case the device will not be switched off completely, but stays in a HALT state (display shows "Halting device").

If in this state the power supply is disconnected, the device is switched off immediately.

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With rechargeable battery If mains "power off" is recognized, the device switches to battery operation. The new state is sent to the host CPU and (if the battery is loaded) nothing else happens.

> If in this state the device is removed from the wall, a light barrier interrupt message is sent to the host CPU. The host CPU performs a fast shutdown und sends an execution message to the mainboard. The mainboard turns off the battery, thus switching off the device.

Also if the device is removed from the wall without being disconnected from the mains power supply, a light barrier interrupt message is sent to the host CPU. Again the host CPU performs a fast shutdown und sends an execution message to the mainboard. But in this case the device will not be switched off completely, but stays in a HALT state (display shows "Halting device").

If in this state the mains power supply is disconnected, the device is switched off immediately (without using the battery).

# 2.6.1 Web-Interface for Administration

For accessing the webinterface of the terminal, please point your browser to the

http://terminal-ip-adress e.g http://192.168.0.100 of the terminal.

Choose your language and enter with the password "admin"

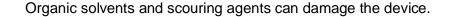


# Danger of current shocks!

Disconnect the device from the power source before opening!

# 2.7 Cleaning the device

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⇒ Clean the device with a moist, non-fluffing cloth.

# 2.8 Repairs

# Repairs may only be carried out by permission of Timelink International.

Repairs must be carried out professionally. Only original components may be used as spare parts.

# 2.9 Guarantee

The elements of guarantee are established by legal regulation.

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*e-DATA GmbH* does not accept any liability whatever for direct and indirect damage, especially loss of data, that result from the usage of the device, the software or the manual!

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