

Montageanleitung
Mounting Instructions
Instructions de montage
Istruzioni di montaggio
Instrucciones de montaje



Dialock Türterminal DTSH, DTSH FH (DE)
Dialock Door Terminal DTSH, DTSH FH (EN)
Dialock Terminal de Porte DTSH, DTSH FH (FR)
Dialock Terminale Porta DTSH, DTSH FH (IT)
Dialock Terminal de Puerta DTSH, DTSH FH (ES)



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English



English



Always follow the instructions in the "Start-up and maintenance" guide when starting up (assigning keys)!

Scope of delivery

- 1 External module
- 1 Internal module
- Small parts bag with profile cylinder cover (break-open seal)
- 1 Promaseal strip (DTSH FH only)

English



Fig. 1 Profile cylinder cover



Fig. 2 Promaseal strip

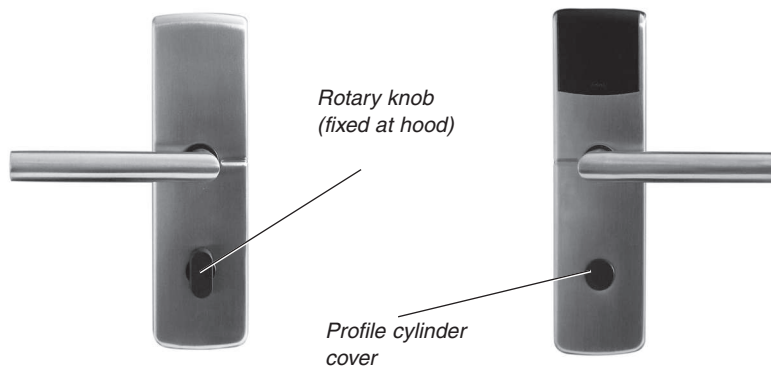





Fig. 3 Internal module

External module

Accessories (not included in the scope of delivery)

English

Accessories (not incl. in the scope of delivery)	Cat. No.
Black plastic spacer plate	917.90.492
Stainless steel spacer plate for DTSH FH	917.90.216
Profile cylinder cover (break-open seal), plastic, black	25 pieces 917.90.483
<u>Optional:</u> Stainless steel matt	917.90.480
Stainless steel polished	917.90.481
Brass polished	917.90.488
User key: Different models	
4 x 1.5 V batteries, size AA Mignon type E91 Energizer® Ultra+	910.54.980
Lever handle aperture part: Different models.	
 DTSH FH: Only supplied models may be used (see catalogue).	
Single profile cylinder: Length depends on door leaf thickness.	
 Single profile cylinder must be fitted with DTSH FH!	
Mortise lock: Different models	
 DTSH: Locks in accordance with DIN 18251. DTSH FH: Locks in accordance with DIN 18273.	

Accessories (not incl. in the scope of delivery)			Cat. No.
Mounting sets for DTSH			
No.	Door thickness	Consisting of	
1	37 – 47 mm	1 inner square spindle L=100mm	917.90.242
		4 countersunk head screws DIN 965 M4x30 für DTSH FH	917.90.121
2	47 – 57 mm	1 inner square spindle L=110mm	917.90.244
		4 countersunk head screws DIN 965 M4x40 for DTSH FH	917.90.122
3	57 – 67 mm	1 inner square spindle L=120mm	917.90.246
		4 countersunk head screws DIN 965 M4x50 for DTSH FH	917.90.124
4	67 – 77 mm	1 inner square spindle L=130mm	917.90.248
		4 countersunk head screws DIN 965 M4x60 for DTSH FH	917.90.126
5	77 – 87 mm	1 inner square spindle L=130mm	917.90.250
		4 countersunk head screws DIN 965 M4x70 for DTSH FH	917.90.128
6	87 – 97 mm	1 inner square spindle L=160mm	917.90.251
		4 countersunk head screws DIN 965 M4x80 for DTSH FH	917.90.130
7	97 – 107 mm	1 inner square spindle L=160mm	on request
		4 countersunk head screws DIN 965 M4x90 for DTSH FH	on request

DTSH Application areas

The Dialock DTSH door terminal is an electronic door fitting for use in hotels. It is mounted to internal doors with mortise locks in accordance with DIN 18 251* and can also be easily retrofitted to the door leaf. The use of a single profile cylinder is recommended for emergency openings.

* Mortise lock bolt-through fixing holes must be present (fig. 4, page 43)

English



Using the Dialock DTSH door terminal on fire resistant and smoke control doors invalidates the Fire Certificate of the doors!

Please contact your Häfele sales office if you intend to use the door terminal on fire resistant and smoke control doors.

DTSH FH application areas

Permission from the door manufacturer is required to install the DTSH FH. If the DTSH FH door terminal is installed without permission, the Fire Certificate for the fire resistant and smoke control door will be invalidated. The fitting must always be installed by trained personnel.

Features

- Robust metal housing
- Convenient and easy to use
- Automatic activation using the latest RF technology
- "Do not disturb" function using lock handle
- Battery operation using normal commercial batteries, size AA (Mignon)
- Infrared interface for easy configuration
- Easy to install
- Optional: Mechanical emergency opening is logged (appropriate mortise lock required)

Installation instructions



DTSH:
Do not mount to fire resistant and smoke control doors!
Please contact your Häfele sales office.

Installation requirement

The doors must be prepared for the use of DIN 18 251 locks (lock pocket and mortise lock).



The mortise lock must have the depicted Mortise lock bolt-through fixing holes for the fitting.

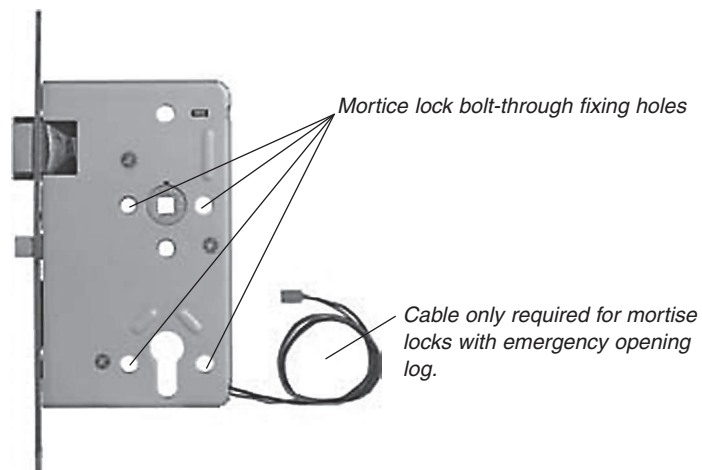


Fig. 4

The length of the following Diallock DTSH door terminal components depends on the thickness of the door leaf. They must therefore be selected accordingly.




- Mounting set consisting of: Fixing screws and inner square spindle (for scope of delivery see page 39).
- Single profile cylinder (not included in the scope of delivery).



The black plastic profile cylinder cover is also a break-open seal and must not be fitted until start-up has taken place.

Do not bring media (keys) into the reading area during installation if the batteries have been inserted!

Tools

Tools		Cat. No.
Locking ring pliers (for fitting locking ring to inner square spindle)		917.90.900
SW3 T-handle for grub screws of lever handle aperture part and removing the inner hood		006.32.013
DTSH DIN drilling jig		917.90.005
Router cutter for breakthrough to lock nut	Ø 25 mm	910.54.995
Router cutter with centring pin only needed for mortise lock with emergency opening logging)	 <p>Fig. 5</p>	Ø 32 mm 910.54.997
Stop for router cutter (only needed for mortise lock with emergency opening log)	 <p>Fig. 6</p>	32 mm 001.28.129
Drill bits (cable leadthrough)	 <p>Fig. 7</p>	13 mm 001.41.351
Drill (Fastening spots)		8 mm 001.41.248
Drill		
Cross slot screwdriver	size 2	006.28.382

Installation



Condensation that forms on cold components can damage the Dialock DTSH door terminal.

⇒ Please ensure that all components are at ambient temperature!

English

The way in which the fitting is mounted to wooden doors is described in the following.

Please adhere to the following procedure when installing the Dialock DTSH door terminal:

- | | |
|--|---------|
| A. Insert mortise lock | Page 47 |
| B. Drill holes for fixing screws and connecting cable | Page 48 |
| C. Remove mortise lock, clean and re-insert | Page 53 |
| D. Insert single profile cylinder | Page 54 |
| E. Adjust external module for right-pointed/left-pointed door handle | Page 56 |
| F. Secure inner square spindle | Page 57 |
| G. Mount external module of Dialock DTSH door terminal | Page 58 |
| H. Mount internal module | Page 60 |



With emergency opening log, protect connecting cable during the drilling procedure as shown in the illustration.

Fig. 8

A. Insert mortise lock



Risk of the cable being crushed by mortise lock with emergency opening log!

1. Insert mortise lock.



Fig. 9

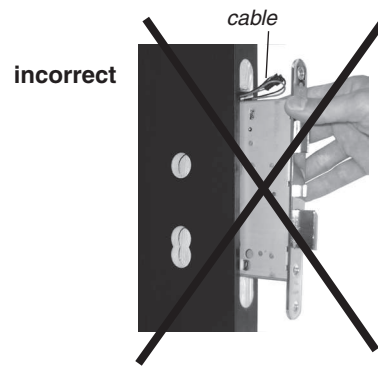


Fig. 10

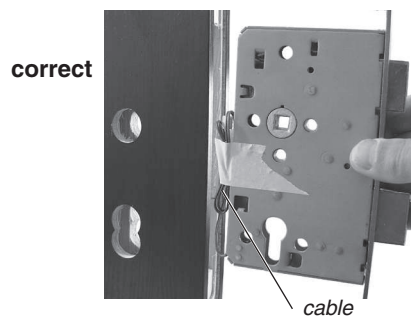


Fig. 11

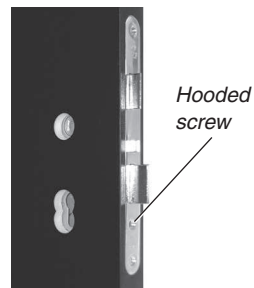


Fig. 12

2. Screw in the mortise lock.
With mortise lock with emergency opening log, the mortise lock connecting cable must be fixed in position as shown in fig. 11.
3. Check position of mortise lock using a locking cylinder. The locking cylinder must be easy to insert. If necessary, increase size of lock pocket or clear the locking cylinder access route.

English

B. Drill holes for fixing screws and connecting cable



In order to obtain a neat drill hole, the through holes should first be *part drilled* from one side of the door to the middle of the door leaf and then *drilled through* from the other side of the door.

Preparing for drilling

Without emergency opening log

English

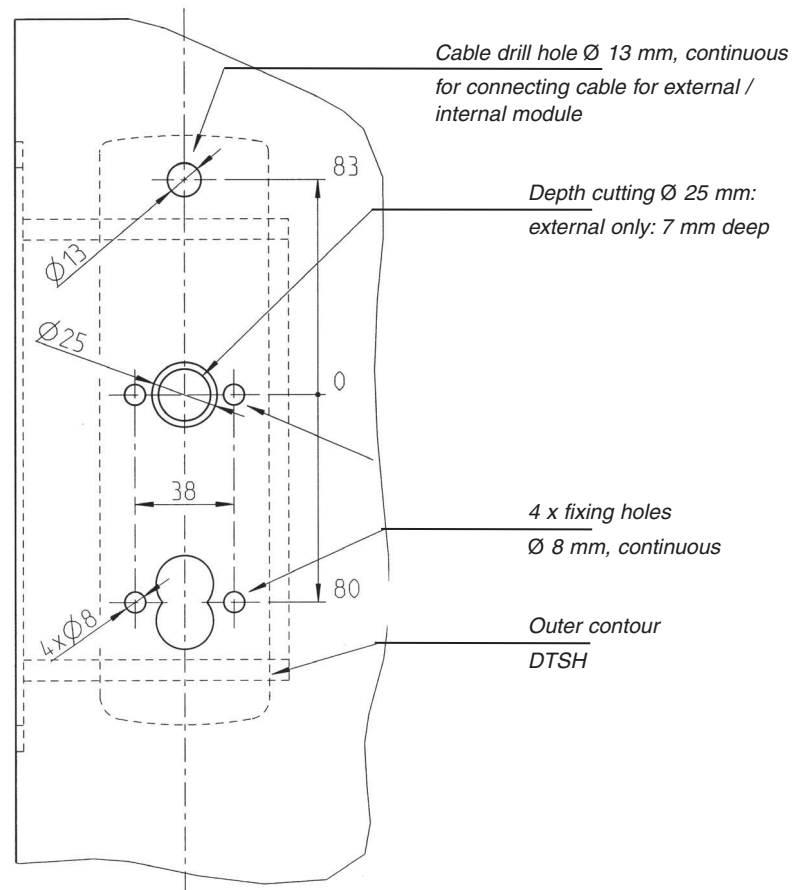


Fig. 13 Drilling pattern without emergency opening log

Only for emergency opening log

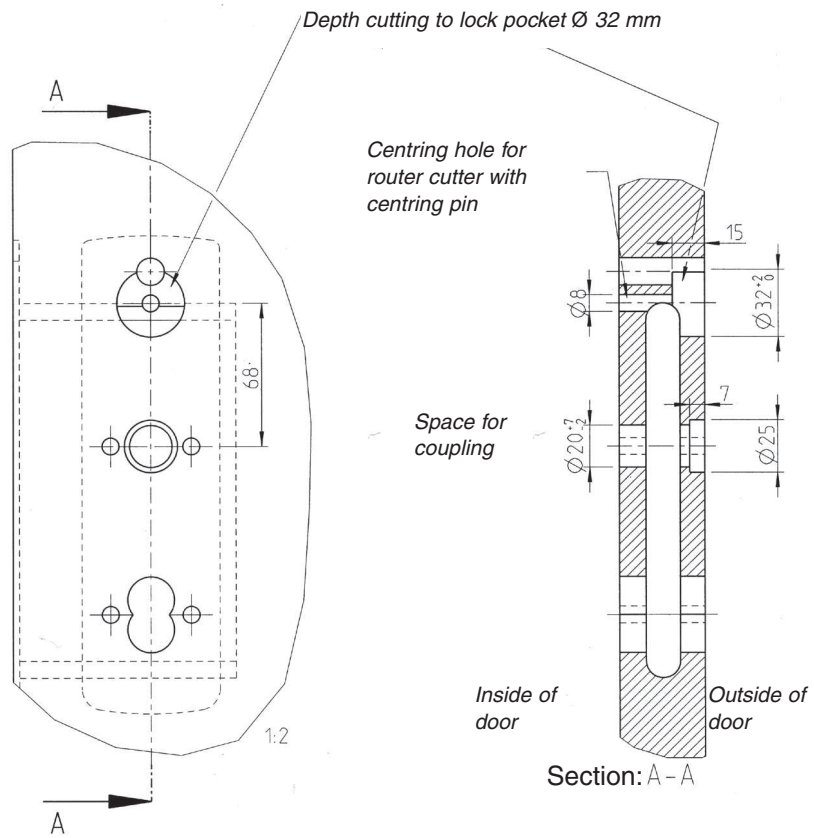


Fig. 14 Depth cutting only needed for emergency opening log

Fig. 15 Drilling pattern with emergency opening logging

English

Use drilling jig

The drilling jig consists of parts A, B and C. The drilling template must be prepared in combinations A-B and A-C depending on the drill hole.

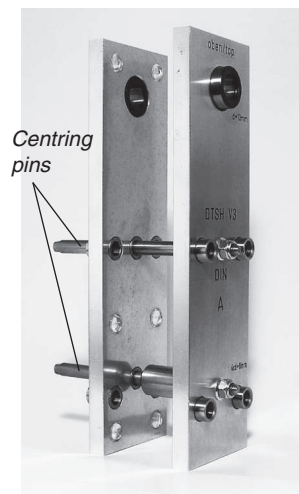


Fig. 16 Drilling jig parts A-B

1. Select drilling jig with part A-B and A-C for the individual drill holes:
2. Insert centring pins for drilling jig (part A) through the square spindle and cylinder apertures of the mortise lock. (Fig. 16)
3. Place drilling jig part B onto the centring pins from the other side of the door. Clamp drilling jig into position using a screw-clamp.



Fig. 17 Drilling jig parts A-C



Do not damage surface of door.

Drill holes on inside of door

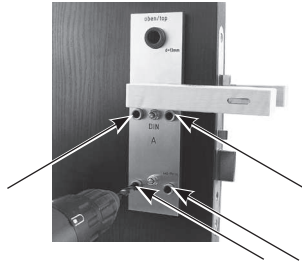


Fig. 18

Drill the fixing holes at both sides as far as the middle of the door leaf using the 8 mm drill bit.



Fig. 19

Drill 13 mm hole at both sides for cable connection.

English

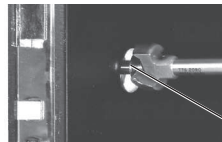


Fig. 20

25 mm router cutter
Spacer

Cut out the coupling area.

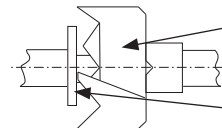


Fig. 21

25 mm router cutter
Spacer

Note:
Cutting only required on the outside.



Do not damage mortise lock with router cutter. Slide the spacer onto the journal of the router cutter to prevent damage. (Fig. 20, 21)

Only required with emergency opening log!

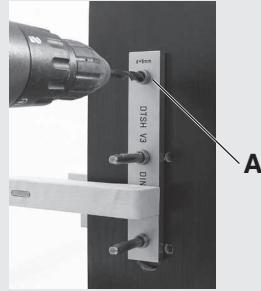


Fig. 22 Drilling jig parts A-C

Drill through to the middle of the door leaf from both sides using the 8 mm drill bit to connect the emergency opening log. (Centring hole for 32 mm router cutter)



This procedure can destroy the connecting cable for emergency opening log. The connecting cable must not be routed in the lock pocket at location A, fig. 22!



Remove mortise lock from lock pocket!



Fig. 23

Depth cutting as far as lock pocket. Page 49, fig. 15, section A-A.

C. Remove mortise lock, clean and re-insert



Fig. 24

Remove mortise lock.
Outside of door is already drilled and cut.



Before continuing, remove debris and clean lock pocket.

With emergency opening log, lead connecting cable into the inside of the lock pocket and out via the hole that has been cut.

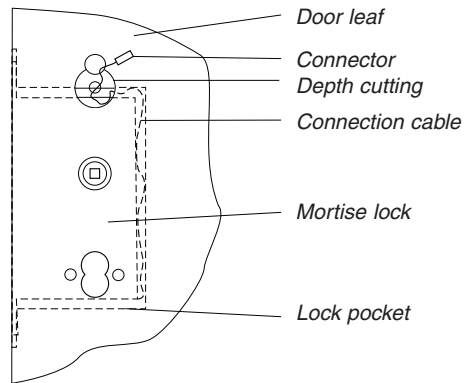


Fig. 25



**Pay attention to cable routing when inserting the connecting cable!
Do not crush cable! (Fig. 25)**

Insert mortise lock as described in "A. Insert mortise lock" on page 47.

D. Insert single profile cylinder



Failure to follow these instructions will destroy the single profile cylinder and the lock.

Do not use force.

Only use one single profile cylinder with the correct length!
(See fig. 26)

English

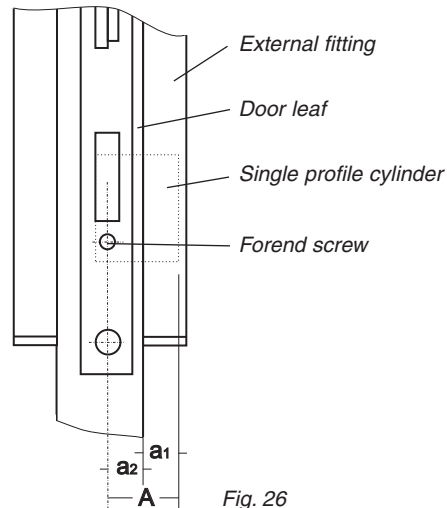


Fig. 26

Important when ordering:

$$A = a_1 + a_2$$

a_1 = inner fitting height:
Recess in fitting for single profile cylinder
at least 19 mm to a maximum of 24 mm.

a_2 = Distance between middle of forend screw and door leaf surface.



**The follower must be in the correct position!
Otherwise the switching mechanism will be damaged.**

The follower only needs to be adjusted with a mortise lock with emergency opening log.



Adjust follower of single profile cylinder as shown in the illustration on the right. The follower should always point in the direction of the door hinge.

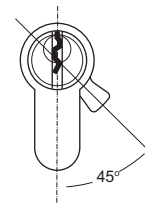


Fig. 27

English



The position of the single profile cylinder should be checked carefully before screwing in the forend screw (page 47, fig. 12).

The forend screw supplied with the single profile cylinder must be used with emergency opening log. The length of the forend screw should not exceed the backset + max. 10 mm, otherwise the emergency opening log sensor may be destroyed..

1. Slide single profile cylinder into door lock until forend screw can be screwed in from the edge of the door. Check whether the follower (locking lug) rotates smoothly when the key is turned. Otherwise correct the position of the single profile cylinder.
2. Tighten single profile cylinder with forend screw. Re-check whether the follower (locking lug) rotates smoothly when the key is turned. Otherwise correct the position of the single profile cylinder.



Fig. 28



Fig. 29



**The single profile cylinder is only used for emergency opening, not for locking.
Attempting to lock the door using force may damage the mortise lock!**

E. Adjust external module for right-pointed/left-pointed door handle



The Dialock DTSH FH door terminal is supplied already set up and must not be modified.

Place lever handle aperture part onto outer square spindle of external module so that the direction of movement matches the application.

English



Fig. 30
Right-pointed door handle,
zero position



Fig. 31
Left-pointed door handle leftside
zero position

1. Rotate outer square spindle with lever handle aperture part to upper stop position (zero position) and hold.
2. Gently knock pin (3 x 24) mm into the hole marked "R" or "L" with a hammer. Set stop limit by inserting pin into "R45" or "L45" hole.
3. Secure pins with stickers so that they do not fall out.

The spring of the lever handle aperture part is pre-tensioned.

F. Secure inner square spindle

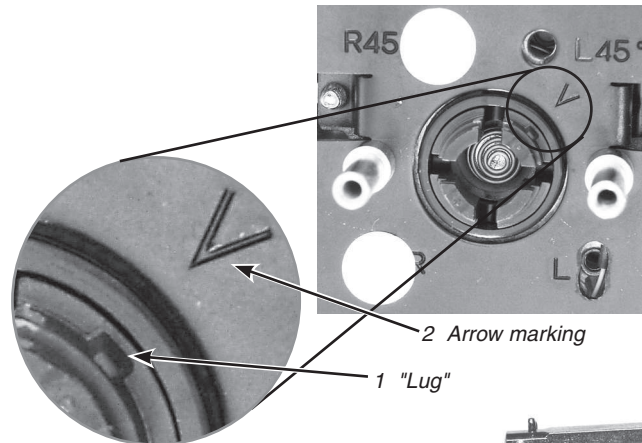


Fig. 32



Fig. 33 Inner square spindle with groove

1. Rotate marking (lug) (1) of coupling part in direction V (2).
2. Before inserting the inner square spindle into the coupling part, align it so that the groove of inner square spindle and the grub screw of the lever handle aperture part are pointing in the same direction.
3. Insert inner square spindle in inner coupling part so that the pins are sitting in the recesses in the coupling part.
4. Insert locking ring into groove in the inner coupling part with locking ring pliers. Ensure that the opening of the locking ring is not above any of the abovementioned inner square spindle pins. (Fig. 36)



Fig. 34

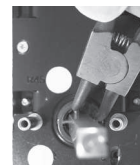


Fig. 35



Fig. 36

The inner square spindle is now installed.



After the inner square spindle has been installed in the external module, the marking (lug) of the coupling part must always be pointing in direction V. The inner square spindle must not be twisted when it is inserted in the door lock.

G. Mount external module of Diallock DTSH door terminal



Fig. 37

The following prerequisites must be complied with:

- Holes drilled as per drilling plan
- Door lock and locking cylinder inserted

If the distance between the surface of the door leaf (outer) and the lock case is less than 6 mm a spacer plate must be used, otherwise the external module will be touching the lock cover.



Always use a stainless steel spacer plate with DTSH FH - plastic is not allowed!

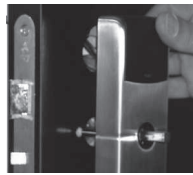


Fig. 38

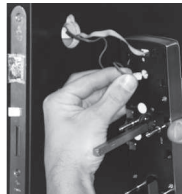


Fig. 39

1. Before putting on the external module, check whether the lug of the coupling part is pointing in direction V (see fig. 36, page 57).
2. Insert inner square spindle into lever follower (fig. 38) and lead connecting cable through top hole (13 mm). **It is imperative to pay attention to the cable routing!**
3. If a mortise lock with emergency opening log is being used, attach connecting cable to connector in external module and roll up connecting cable in the 32 mm recess.



Fig. 40



Do not trap cable!

4. Vertically align external module so that the guide pins of the external module engage in the holes.
5. Slide external module towards door leaf until it is lying flat against it. (Fig. 40)

If the external module does not lie flat against the door:

- ⇒ Check drill holes and remove wood debris if necessary.

The external module is now installed.

H. Mount internal module

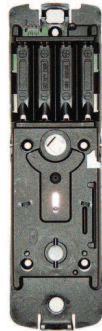


Fig. 41



Risk of crushing!
Pay attention to cable routing!

1. Line 13 mm DTSH FH cable hole with Promaseal strips, shorten to door leaf thickness and glue in parallel to cable.
2. Lead connector of connecting cable through opening in internal module fixing plate, fig. 42.
3. Place internal module fixing plate on inside of door leaf.
4. Loosely secure fixing plate using the four fixing screws.
5. Check vertical alignment at internal and external module and then tighten fixing screws.
6. Plug connector of connecting cable into socket above battery holder and roll up connecting cable as shown in fig. 43.
7. Insert battery into battery holder. Pay attention to correct polarity!



Fig. 42



Fig. 43



Fig. 44



Pay attention to position of "Do not disturb" rotary knob!
The rotary knob must be vertical during installation and the grooved side of the square spindle at the internal module must point in the direction of the forend.



Fig. 45

8. The direction of rotation of the "DND" lever can be set to right or left if required.

Fig. 44: Direction of rotation right/left without screw

Fig. 45: Direction of rotation left with screw position A

Fig. 46: Pivot direction right with screw position B

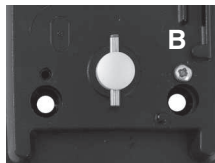


Fig. 46



Fig. 47

9. Remove hood of internal module. With long door handle pins, slide the hood onto the square spindle first.



Fig. 48

10. And tighten screw.



Always use the original grub screws in the provided small parts bag.

⇒ Remove other grub screws from lever handle aperture part if necessary.

Always use the provided lever handle with the DTSH FH.

The small parts bag for the FH version does not contain any grub screws. The screws of the lever handle are used in this case.



Fig. 49

11. Mount inner and outer lever handle to the relevant square spindle and tighten grub screws using Allen key (3 mm).

The internal and external modules are now installed

A mechanical check must be performed when assembly is complete.

Push the lever handle on the inside of the door to operate the mortise lock:

⇒ Pull back the latchbolt (escape function), or the latchbolt and deadbolt, depending on the type of mortise lock.

Push the lever handle on the outside:

The coupling is disconnected, i.e. the lever handle has no effect, but it must be automatically returned to the horizontal idle position via the return spring. If this is not the case, check the individual assembly steps



DTSH FH:

Have confirmation of installation signed by fitter as documentation for the customers's construction file.

Start-up

The Dialock DTSH door terminal is supplied in so-called "simple mode" for standalone operation (SA). This is the only operating mode that is described in these instructions. Details about the use of the DTSH in conjunction with software applications (Dialock HOTEL, PERSONNEL, hotel management systems etc.) can be found in the relevant documentation.



Prevent use of user keys by unauthorised persons.

Keep the programming and clearing keys in a safe place, since locking authorisations can be allocated to and withdrawn from a user key with these two keys.

The programming and clearing keys must be assigned as follows during initial start-up:



This step is only possible after switching on for the first time.

Perform the initial start-up quickly and without interruptions!

1. Have green programming key and red clearing key ready.
2. Present the green programming key to the control panel until the blue LED is permanently on. An acoustic signal will be heard.
3. Remove programming key: Red LED flashes.
4. Present red clearing key to the control panel whilst red LED is flashing.



If no red clearing key is presented to the control panel within 5 seconds, the procedure will be automatically interrupted.

The red clearing key must be presented to the control panel again to complete the initial start-up.

5. When the key has been trained successfully, the LED will be permanently blue and an acoustic signal will be heard. The Dialock DTSH door terminal then goes into normal operating mode.

If persistent errors occur:

- ⇒ Notify the service location.

Short instructions

Allocate locking authorisations to user key

1. Present green programming key to the control panel.
⇒ Blue LED flashes.
2. Present user key that has to be trained to the control panel for 5 seconds. The locking authorisations for the user key have been allocated when the blue LED flashes briefly.
3. Remove trained user key.
4. Present the next user key to be trained to the control panel within 5 seconds.

Withdraw locking authorisations from user key

1. Present red clearing key to the control panel.
⇒ Red LED flashes.
2. Present user key that has to be cleared to the control panel. When the red LED flashes briefly, the locking authorisations have been withdrawn. The Dialock DTSH door terminal then goes into normal operating mode.



If no more keys are presented to the control panel the DTSH goes into the normal operating mode.

Withdraw locking authorisations from all user keys

If a user key has been lost and you wish to cancel its locking authorisations, all user keys must first be deleted at the Dialock DTSH door terminal. Access rights must then be re-allocated to all user keys with locking authorisations.

1. Present red clearing key to the control panel.
⇒ Red LED flashes.
2. Present green programming key to the control panel.
⇒ Red LED flashes briefly.
3. Re-allocate access rights to all user keys that are still to have locking authorisations.

Operation

1. Present user key to the control panel - red LED flashes briefly. An acoustic signal will be heard. If the user key does not have locking authorisation the signal will be heard twice.
2. The blue LED flashes and the red LED goes off.
3. The Diallock DTSH door terminal is ready for opening for approx. 3 seconds. The door can be opened by pushing the lever handle.
4. If the LEDs do not change from red to blue:
 - ⇒ Present user key closer to control panel.
5. If the LEDs still do not change from red to blue:
 - ⇒ User key is not authorised

Battery change

If the battery charge is low, the red and blue LED flash alternately three times when the electronics are switched on.

⇒ A battery change is recommended.

The date and time are saved when the battery is removed, and reloaded again after new batteries have been inserted. The clock stops for the duration of the battery change.

⇒ Replace batteries quickly!

If the time needs to be accurate to the minute, the date and time can be corrected with the Diallock MDU (only of interest for operation with the personnel and hotel software!).

However, the user keys always retain their authorisation.



Smooth operation of the Diallock DTSH door terminal is only guaranteed, if weak batteries are replaced immediately. Always use high-quality batteries.



Do not throw batteries in the household waste!

⇒ Dispose of batteries in an environmentally friendly way, e.g. using a municipal collection point.

The following steps are required to change the batteries:

The batteries are located in the internal module of the Dialock DTSH door terminal.

1. Loosen the grub screw of lever handle aperture part at the inside of the door using an Allen key.
2. Pull lever handle aperture part from inner square spindle.
3. Loosen screw from underside of internal module.
4. Remove hood of internal module.
5. Remove old batteries.
6. Insert new batteries into battery holder as quickly as possible.
Ensure that the polarity is correct (see figure 43, page 60)!
7. Re-attach hood of internal module and tighten screw on underside of internal module.
8. Mount lever handle aperture part to inner square spindle and tighten grub screw using Allen key.

Emergency opening

1. Push in break-open seal (profile cylinder cover) with a small screwdriver and remove.
2. Open Dialock DTSH door terminal using an emergency opening key.
3. Insert new break-open seal.

English



The single profile cylinder is only used for opening, not for locking.

Attempting to lock the door using force may destroy the emergency opening log facility!



Fig. 50



FAQ

I've lost a user key and want to block it. What should I do?

If a user key has been lost and you wish to cancel its locking authorisations, all user keys must first be deleted at the Dialock DTSH door terminal. Access rights must then be re-allocated to all user keys with locking authorisation.

See under: "Withdraw locking authorisations from all user keys".

Maintenance and cleaning instructions

The DTSH is maintenance-free apart from having to change the batteries. No lubricants must be introduced into the DTSH. These could destroy sensitive components and cause the DTSH to fail.

Do not use scouring agents to clean the surface of the DTSH. If necessary, use a dry, soft cotton cloth or a soft cloth moistened with a mixture of water and washing up liquid or neutral cleaner. Do not use cleaning agents containing alcohol or other organic solvents or thinner under any circumstances.

English

Technical data

Dimensions	(26 x 65 x 227) mm ((L x W x H)
Power supply	4 x 1.5 V batteries, size AA Mignon type E91 Energizer® (Cat. No.: 910.54.980)
Temperature range	0 – 65°C
Humidity	0 – 90%, not condensed

Right reserved to make technical changes.