

CT-DECT Case (8)

Operating Instructions



Contents

1.	Technical safety instructions, environment protection, safety at work	3
2.	Description	6
2.1	Technical data	7
2.2	Technical description	8
3.	Operation	11
3.1	First commissioning	11
3.1.1	Recharging the NiMH rechargeable batteries.....	11
3.1.2	On-air subscription of the CT-DECT device (PP) to the CT-DECT Case (8) (FP).....	12
3.2	Commissioning.....	15
3.2.1	Connecting the CT-DECT Case (8) to the aircraft.....	15
3.2.2	Switching-on of CT-DECT Case (8) and CT-DECT device (PP)	15
3.3	Controls	16
3.4	Operating under special climatic conditions.....	17
4.	Maintenance and proper care	18
4.1	Visual inspection	18
4.2	Cleaning.....	18
4.3	Faults, causes, corrective actions.....	18
4.4	Storage	18
4.5	Transport and shipping	19
5.	Replacements to be made by the user	19
5.1	Replacing components	19
5.1.1	CT-DECT Case (8)	19

1. Technical safety instructions, environment protection, safety at work

Important Information for Users of the CT-DECT transceivers

The CT-DECT transceiver modul has been tested for electromagnetic compatibility and is compliant with the european DECT-Standard.

CT-DECT transceivers that are not intrinsically safe (explosion-protected) and therefore do not have any special hazardous duty marking must never be used in potentially explosive atmospheres. Unprotected CT-DECT transceivers can trigger explosions unintentionally in these areas.

CeoTronics does not assume any liability for damage to property and personal injuries of any kind that can arise through the above mentioned or any other incorrect use of the CT-DECT transceivers.

Important safety instructions



For the use of the device notice the national safety and accident prevention regulations and the following safety instructions shown in italics in this instruction manual.



- *Before using CeoTronics products read completely the appropriate operating instructions. If in doubt, ask our technical staff.*
- *If repair work of any kind needs to be done to CeoTronics products, arrange for it to be performed only by the company CeoTronics or by a specialized workshop that is authorized by CeoTronics. In all other cases our warranty and liability for the product shall lapse.*
- *Do not immerse the radio equipment into water.*
- *When using CeoTronics products that are equipped with connection leads ensure that the latter do not get caught up in operational machinery or wheels!*
- ***Radio equipment that are not intrinsically safe (explosion-proof) and therefore have no special explosion-proof designation must never be operated in potentially explosive environments (e.g. when refueling cars, aircraft etc.). Devices that are not explosion-proof can unintentionally trigger off explosions in such areas!***
- *Connect CeoTronics accessories to a device or disconnect them from a device only when the device is switched off.*



- ***If you are a cardiac pacemaker carrier, before operating a transmitter/receiver ask the manufacturer of your cardiac pacemaker for information about any impairment that might be caused due to high frequencies.***

- Before starting to operate the device in sensitive areas like e.g. aboard airplanes or in hospitals etc., please check first if it is permitted to use it in these environments.

For use aboard an airplane a Type Certificate (TC) or a Certificate of Nonobjection (CO) must be available. Should the communication equipment not be homologated, its use aboard an airplane is strictly prohibited as it could jeopardize the safety of the airplane. Never put electronic devices into operation aboard an airplane without obtaining prior approval from the cabin crew.

-
- *Do not leave the radio equipment products lying around loose in cars, e.g. on the parcel shelf. Stow these products in a suitable, safe place in the car so that they do not present a danger to you or to other occupants of the car, if emergency braking is effected.*
 - *When driving a car, do not use the radio because it may distract you from the other traffic.*
 - *Charge rechargeable batteries only with the appropriate suitable charger. Observe the voltage and current specifications. Never use the charger to recharge non-rechargeable batteries.*
 - *When handling rechargeable batteries comply with environmental protection regulations !*
 *Never attempt to open a rechargeable battery and never throw a rechargeable battery into fire. Expended (defective) rechargeable batteries are subject to compulsory regulated waste disposal. Do not put them in the household waste!*
 - *Ensure that a short-circuit (risk of fire or injury) is not created across rechargeable battery terminals or charging sockets by a short-out (bent-open paper clip, bunch of keys etc.). In such an event the warranty shall lapse. Transport any spare rechargeable batteries in an electrically non-conducting package in order to avoid short-circuiting the rechargeable batteries.*
 - *Keep the radio equipment and rechargeable batteries out of the reach of children and any other persons who are not familiar with the handling and operation thereof.*
 - *Safe operation requires clean devices. Ensure that the devices (microphones, connectors etc.) are clean and in good condition at all times.*
 - *The radio equipment may only be used for the specific application envisaged.*
 - *Should equipment, supplied by CeoTronics, be definitely put out of service you may return it to CeoTronics. We ensure recycling and/or disposal of outdated equipment in compliance with the applicable environment protection law.*

 - *Keep these operating instructions for later use.*

Important Notes for operation of the CT-DECT System in the USA

Please note that any changes or modifications not expressly approved by the party responsible for compliance will void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any 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.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment

generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- . Reorient or relocate the receiving antenna.
- . Increase the separation between the equipment and receiver.
- . Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- . Consult the dealer or an experienced radio/TV technician for help.

RFExposure mobil:

contains Transceiver Module with FCC ID L52CT-M5CEO1

P the maximum measured power output is 119,67mW (20,78 dBm),

G A0 the maximum antenna gain is 0 dBi = numeric gain 1.

Smax A0 the maximum permissible exposure is defined in 47 CFR 1.1310 with 1 mW/cm².

R A0 the distance of 20cm from the EUT's transmitting antenna where the exposure level reaches the maximum permitted level

is calculated using the general equation:

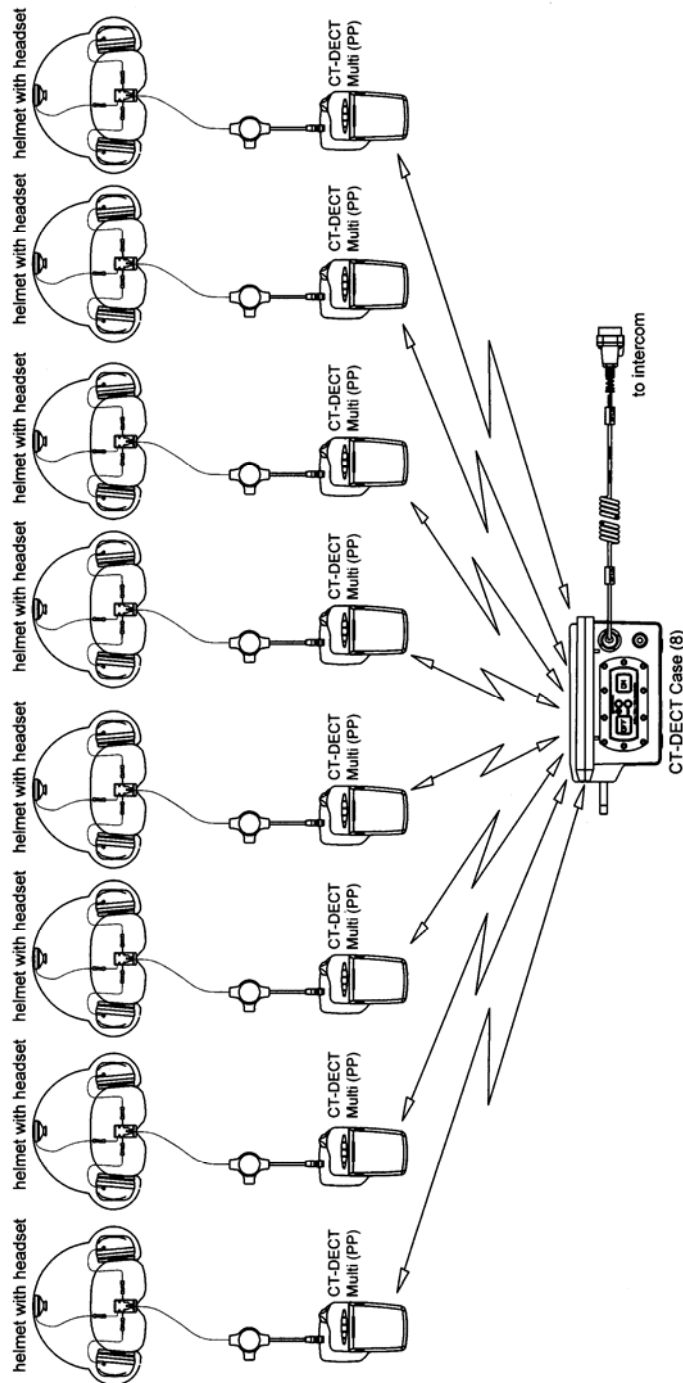
$$S = P \cdot G / 4R^2 \quad S_{max} = 0.024 \text{mW/cm}^2,$$

The internal antenna used for this mobile transmitter must provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

2. Description

The CT-DECT Case (8) is suitable for duplex communication over short distances between maximum 8 »mobile« users and the aircraft crew. Mobile users are using CT-DECT headsets (PP) or other headsets in conjunction with the CT-DECT Multi (PP). Communication between »mobile« users is wireless. The CT-DECT Case (8) is the central unit of the DECT system and includes the CT-DECT interface base (FP). The »mobile« users are subscribed to the CT-DECT Case with their devices (PP). With a special adapter cable it is possible to connect the CT-DECT Case (8) to the intercom system of the aircraft. The working range between the CT-DECT Case (8) and the devices (PP) subscribed to it depends on the local conditions. A high degree of tapping and interference protection is assured.

Figure 1 System overview / Example



2.1 Technical data

Unit is equipped with

- Interface for up to maximum 8 users
- Battery compartment for 3 AA-batteries
- Acoustic multilevel warning „Low-Battery“ in the subscribed headset
- Optical multilevel warning „Low-Battery“
- ON/OFF switch with optical status indication
- 2 buttons for subscription on the Interface
- 1 buttons for subscription outside at the case
- 9-pole connection socket
- Hinged handle
- 2 locking

Dimensions: 210 x 202 (grasp in hinged position) x 90 mm

Technical Data

	USA
Frequency band	1920 – 1930 MHz
Mode of Transmission	TDMA 24 Slots per frame
Channel spacing	1,728 MHz
Automatic channel selection	5 channels
Transmission range	≥200m (obstacle-free area) ≥75m (dependent on the local conditions)
Power supply	rechargeable batteries NiMH or AA-batteries
Operating time	approx. 8 hours (by 23°C) on use of the provided rechargeable batteries

to the CT-DECT Case (8) belong likewise:

Flag with label "Remove before Flight"

Signal color red with white letter

Dimensions: 500 mm x 75 mm

Material: Polyester 700g/m²

Attachment parts

Consisting of

- 2 x shackles

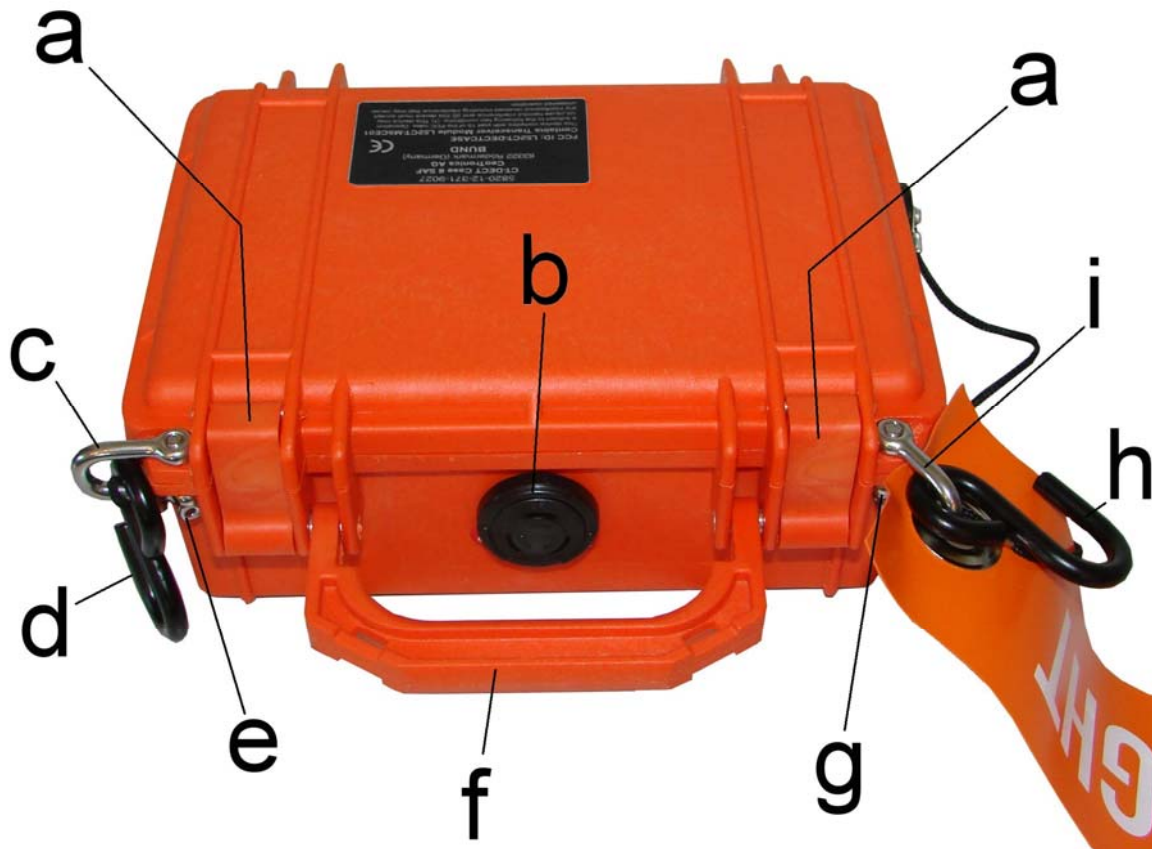
Material: FE/X (#4401)

- 2 x hooks

Material: Steel powder-coated RAL 9005 matt-finished

2.2 Technical description

Figure 2



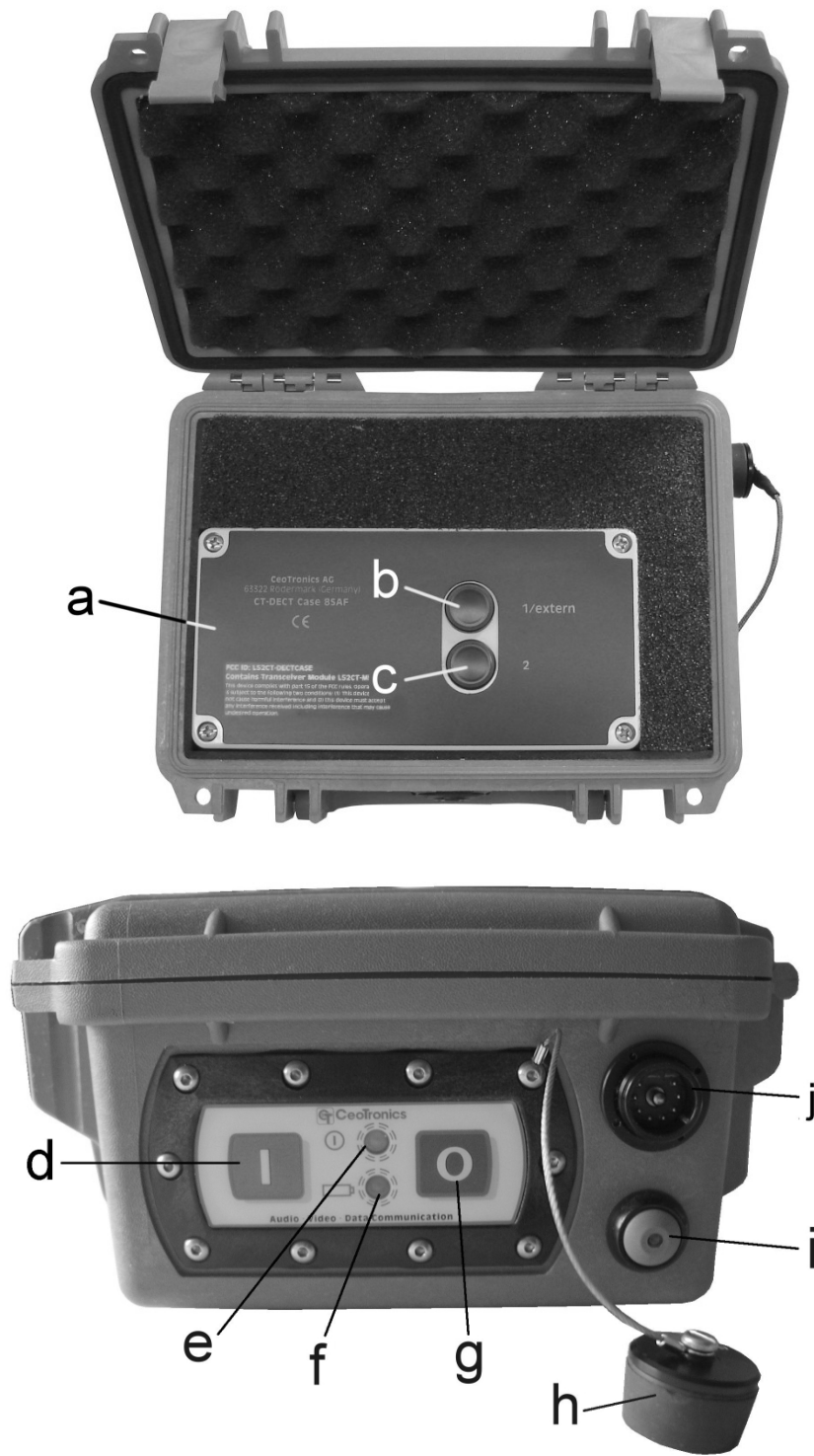
a	Latch to unlock and lock the case
b	Automatic purge valve for equalization after changes in atmospheric pressure
c	Shackle to hang up the hook (item »d«)
d	Hook to hang up the CT-DECT Case (8) at the aircraft
e	Screw for fastening the shackle (item »c«)
f	Hinged handle
g	Screw for fastening the shackle (item »i«)
h	Hook to hang up the CT-DECT Case (8) at the aircraft
i	Shackle to hang up the hook (item »h«) and the strap »REMOVE BEFORE FLIGHT«

Figure 3, Battery compartment



The battery compartment is located on the RH side of the case. The battery compartment is locked up with a screw cap, which itself is secured to the case with a retaining band. The rechargeable batteries are inserted into the compartment with the positive pole facing forward (see arrow).

Figure 4



a Interface CT-DECT Case (8)

b Push button »1/extern« for subscription of max. four CT-DECT Multi (Man-Pac) to the CT-DECT Interface. The push button »1/extern« has equal functional rights as the external button (item »i«) on the outside of the case

c Push button »2« for subscription of max. four CT-DECT Multi (Man-Pac) to the CT-DECT Interface.

d Green push button ON to switch on the device

e	Control lamp illuminates if the device is switched on	
f	Control lamp, batteries	
	green illuminates constant	UB > 3,6V
	green flashes	3,4V < UB ≤ 3,6V
	red flashes	UB ≤ 3,4V, approx. 30 minutes operating time
	LED OFF	UB ≤ 2,7V, no function
g	Red push button OFF to switch off the device	
h	Cap for the 9-pin plug (item »h«)	
l	External push button for subscription of max. four CT-DECT Multi (Man-Pac) to the CT-DECT Case (8). These four CT-DECT Multi (Man-Pac) can be subscribed by the external push button to the CT-DECT Case (8) without opening the case. The push button has equal functional rights as the internal button »1/extern« (item »b«) in the case	
j	9-pole plug for connection the CT-DECT Case (8) to a aircraft interface via an aircraft specific adapter cable	

➔ **PLEASE NOTE:**

When using the CT-DECT Case (8) via the aircraft-specific CT adapter cable, without connection to the aircraft's intercom system, the sealing cap should always be plugged onto the unused 9-pole connector (item »j«) to protect the jack against humidity and dirt.

3. Operation

3.1 First commissioning

At the beginning new NiMH rechargeable batteries do not deliver maximum power. Maximum power is achieved only after a few recharging cycles.

Before charging rechargeable NiMH batteries, they must be completely discharged about once a month. If this procedure is not followed, rechargeable batteries will not deliver anymore full power after only a short time. Each communication device uses 3 rechargeable batteries. If one or more rechargeable batteries are not fully charged, this will affect the reliability of the entire system. As it is not possible to determine which one of the rechargeable batteries is in poor condition, the complete set must be replaced. Proper care and handling helps controlling the number of rechargeable batteries in use. The life of rechargeable batteries may vary as a result of daily recharging, natural ageing, and varying operating conditions.

3.1.1 Recharging the NiMH rechargeable batteries

3.1.1.1 General

The rechargeable NiMH batteries in the device should only be charged with the charger supplied with the system. Otherwise the rechargeable batteries may be damaged. The charger is neither watertight nor dust-proof. Protect it against water, rain and dirt. The charger may only be used in rooms with normal relative air humidity and temperature. Do not cover up the charger.

Warning

- **Never use battery chargers to charge non-rechargeable batteries. Never open rechargeable batteries or throw them into fire. Do not open charger. The repair is permitted only by the manufacturer.**
- **Never charge a rechargeable battery in areas with an explosion risk – an explosion may result. Charge rechargeable batteries only inside buildings or similar environments where no dangerous concentrations of volatile vapors are present.**

The three NiMH batteries are in the battery compartment of the CT-DECT Case (8). For charging they have to be removed from the battery compartment.

- a. Switch off the device CT-DECT Case (8).
- b. Remove the cover from the battery compartment (Fig. 3).
- c. Take the three NiMH batteries out the battery compartment. Charge the rechargeable batteries with the charger.
- e. After charging: When inserting the charged NiMH batteries notice the polarity. Close the battery compartment.

3.1.2 On-air subscription of the CT-DECT device (PP) to the CT-DECT Case (8) (FP)

➔ **NOTES**

- *The on-air subscription is not part of the normal commissioning and operating procedure for the system. It must be performed again only in the case a CT-DECT device (PP) that isn't subscribed to the CT-DECT Case (8) has to be used in conjunction with the CT-DECT Case (8).*
- *CT-DECT devices (PP) can be subscribed to only one CT-DECT Case (8), never to two or more CT-DECT Case (8) units simultaneously.*

➔ **NOTES**

- *Two or more CT-DECT devices (PP) can never be simultaneously subscribed to the CT-DECT Case (8), they must always be subscribed one after the other.*

With two or more CT-DECT devices (PP) it is recommendable to subscribe all devices one after the other to the CT-DECT Case (8), because a device can be deleted (see 3.1.2.1 »Principle of subscription«).

- *Comply with the instruction step sequence.*
- *After subscription all new subscribed devices have to be switched off again.*

The on-air subscription procedure is performed on the CT-DECT Case (8) and the CT-DECT devices (PP) manually by means of operating elements. The CT-DECT Case (8) is the unit to which the maximum eight (8) CT-DECT devices (PP) of a system need to be subscribed to.

The CT-DECT Case (8) is equipped with two transceiver modules, the both subscription buttons (Fig. 3/b,c,i) and is able to control max. eight CT-DECT devices (PP). In each case max. four CT-DECT devices (PP) are allocated to one transceiver module. Every four CT-DECT devices (PP) are assigned in groups to the subscription buttons (figure 4/b, c). The function of the outside button (figure 4/i) is identical to that of the subscription button shown in figure 4/b.

3.1.2.1 Principle of subscription

Four CT-DECT devices (PP) can be assigned to each transceiver module in the CT-DECT Case (8). The four CT-DECT devices (PP) assigned to a transceiver module should always be subscribed in groups, but of course individually one by one.

Should a fifth CT-DECT device (PP) be subscribed to one and the same transceiver module, then the CT-DECT device (PP) subscribed first would be deleted from the transceiver module's memory (see example in figure 5).

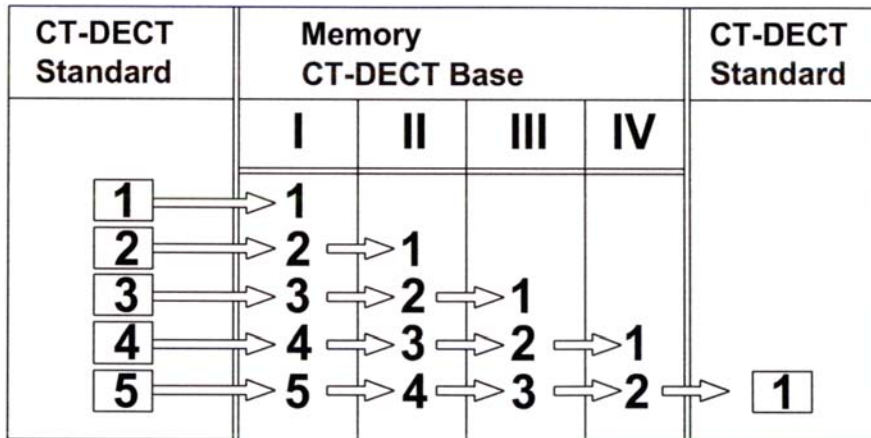
➔ **PLEASE NOTE:**

The subscription procedure for a group of maximum four CT-DECT units (PP) which are subscribed with the help of button "2" (figure 4/c) differs from the procedure when subscribing CT-DECT devices (PP) with the "1/external" buttons (figure 4/b, i). The subscription procedure can be performed while communicating without any need to switch off and open the CT-DECT Case (8).

The procedure, applicable for subscribing maximum four CT-DECT devices (PP) with button "2" (figure 4/c) is described in chapter 3.1.2.2 and for subscribing the other maximum four CT-DECT devices (PP) with the help of buttons "1/external" (figure 4/b, i) in chapter 3.1.2.3.

A CT-DECT device (PP) which has been deleted from the CT-DECT Case (8) memory cannot communicate anymore with the DECT system and needs to be re-subscribed to the base unit following the subscription instructions.

Fig. 5 Principle of subscription (example)



Timeout

If a subscription is not successfully completed within maximum 2 minutes since starting the process, a »timeout« occurs. The timeout is signalized by a sequence of 4 short low tones in the headset of the CT-DECT device (PP), repeating in 4-second intervals.

After a timeout all CT-DECT devices (PP) subscribed to a transceiver module need to be subscribed anew to the CT-DECT Case (8). In the event of only one CT-DECT unit (PP) the subscription of this single CT-DECT unit (PP) has to be repeated.

3.1.2.2 Example of subscribing a CT-DECT device (PP) with subscription button 2 (figure 4/c)

The following describes the procedure for subscribing a CT-DECT device (PP) to a CT-DECT Case (8) with the subscription button »2« (figure 4/c). The subscription of the remaining three CT-DECT devices (PP) (maximum four units) with button »2« is done likewise.

➔ PLEASE NOTE:

After successful subscription, all CT-DECT devices (PP) and the CT-DECT Case (8) must be switched off again before putting the DECT system into operation.

- Make sure all CT-DECT devices are switched off.
- Unscrew the two screws (figure 2/e, g) on the CT-DECT Case (8) and remove the two shackles (figure 2/c, i) from the case. Unlock the two latches (figure 2/a) and open the case.
- Leave the CT-DECT unit (PP) still switched off.
- Press the subscription button »2« (figure 4/c) inside the CT-DECT Case (8) and keep it depressed. Switch on the CT-DECT Case (8) with the green push-button (figure 4/d) while the subscription button is depressed and keep it depressed for at least another 5 seconds after switch-on. Then release the subscription button and continue directly with step »e« in order to avoid a »timeout«.
- Press the subscription button on the CT-DECT device (PP) and keep it depressed. Switch the CT-DECT device (PP) on while depressing the subscription button and keep it depressed for at least another 5 seconds since switch-on until you hear a descending 5-tone sequence in your headset. Then release the button.

The subscription process has been initiated and you hear in the headset of the CT-DECT unit (PP) about every 2 seconds an intermittent high beep. An ascending 5-tone sequence, which repeats in

4-second intervals, finally informs you that the subscription process has been completed successfully.

If, after maximum 2 minutes, the subscription process was not successful, this is signaled by a sequence of 4 short low tones, repeating in 4-second intervals.

In that case, switch off again the CT-DECT Case (8) and the CT-DECT device (PP) and repeat the entire subscription process.

- f. **After successful completion of the subscription process, switch off again the CT-DECT device (PP) and the CT-DECT Case (8) before commissioning the units (chapter 3.2.6).**

➔ **PLEASE NOTE:**

The subscription procedure described in chapter 3.1.2.3 while the communication system is operating applies only to the four CT-DECT devices (PP), which are being subscribed via the inside subscription button »1/external« (figure 4/b) or the one on outside of the case (figure 4/i).

3.1.2.3 Example of subscribing a CT-DECT device (PP) during operation

When subscribing maximum four CT-DECT devices (PP) to the CT-DECT Case (8) using the subscription button "1/external" (figure 4/b, i) the CT-DECT Case (8) must not necessarily be in switched-off condition. Subscription can be accomplished while the CT-DECT Case (8) is operating. This makes it possible that the maximum four users, who already subscribed their CT-DECT devices (PP) with the help of the subscription button 2, can continue to operate while additional CT-DECT devices (PP) are being subscribed to the CT-DECT Case (8) via the "1/external" subscription buttons (figure 4 b/i). The subscription process can be aborted at any time by simply pressing the external subscription button (figure 4/i) during the subscription process.

Both subscription buttons (figure 4/b, i) have equality of access. For a fast subscription when in operation, normally the external subscription button (figure 4/i) located on the outside of the case is used, so that the case does not need to be opened.

The following example describes the subscription process using the external subscription button (figure 4/i) located on the outside of the CT-DECT Case (8). Other CT-DECT devices (PP) (max. four) are subscribed likewise with this button (figure 4/i).

- a. Firstly, leave the CT-DECT device (PP) switched-off.
b. Press the external subscription button (figure 4/i) of the switched-on CT-DECT Case (8) and keep it depressed for at least 5 seconds. Then release it and continue directly with step »c« in order to avoid a »timeout« (see chapter 3.1.2.1).

The LED of the subscription button (figure 4/i) lights up. If a »timeout« occurs, the LED starts to flash.

- c. Press the subscription button of the CT-DECT device (PP) and keep it depressed. Switch the CT-DECT device (PP) on while depressing the subscription button and keep it depressed for at least another 5 seconds since switch-on until you hear a descending 5-tone sequence in your headset. Then release the button.

The subscription process is initiated and you hear in the headset of the CT-DECT device (PP) about every 2 seconds an intermittent high beep. An ascending 5-tone sequence, which repeats in 4-second intervals, finally informs you that the subscription process has been completed successfully.

After a successful subscription the LED of the subscription button (figure 4/i) on the CT-DECT device (PP) goes out.

If, after maximum 2 minutes, the subscription process was not successful, this is signaled by a sequence of 4 short low tones, repeating in 4-second intervals.

If the subscription process is not completed successfully, the LED of the subscription button (figure 4/i) starts flashing. In that case switch the CT-DECT device (PP) off again and repeat the entire process.

- d. **After successful completion of the subscription process, switch the CT-DECT device (PP) again off before commissioning the unit; the CT-DECT Case (8) must not be switched off.**

3.2 Commissioning

3.2.1 Connecting the CT-DECT Case (8) to the aircraft

The batteries of the CT-DECT Case (8) must be fully charged.

a. **Establishing the 9-pin plug-in connection at the CT-DECT Case (8)**

The 9-pole jack of the CT-adapter cable (figure 6) has a distortion protection.

Hold the case down with one hand. Put the jack onto the 9-pin connector of the CT-DECT Case (8) and turn it until it slides a little into the connector. With it, the correct plug-in position has been found.

Now push the jack into the connector until it engages audibly.

To disconnect the plug-in connection, hold the case down with one hand and pull the jack out of the connector.

b. Connect the CT-DECT Case (8) with the CT adapter cable to the intercom connector of the aircraft.

Figure 6, 9-pin plug-in connection at the CT-DECT Case (8)



➔ **PLEASE NOTE:**

During outdoor operations keep the CT-DECT Case (8) always closed!

⚠ CAUTION!

The CT-DECT Case (8) may be connected to an aircraft only with the flag "Remove before flight" attached.

3.2.2 Switching-on of CT-DECT Case (8) and CT-DECT device (PP)

Switch-on, establishing connection, adjusting the volume

➔ **PLEASE NOTE:**

Applies to CT-DECT devices (PP) which are subscribed to a CT-DECT Case (8)

- a. First switch on the CT-DECT Case (8) using the green push-button (figure 4/d). The CT-DECT Case (8) starts now an initialization process during which it may not be switched off. After initialization the pilot lamp (figure 4/e) lights up. If the pilot lamp (figure 4/f) flashes, the voltage of the batteries in the CT-DECT Case (8) is low and needs to be recharged.
- b. Switch on the CT-DECT devices (PP) you want to communicate with. After switch-on you will hear a high beep in the headset. After this, synchronization, i.e. the search process, starts between the CT-DECT Case (8) and the CT-DECT devices (PP), the duration of which may vary. While this process is under way, a high-low tone sequence will be heard every second in the headsets, indicating, that the CT-DECT devices (PP) are seeking their CT-DECT Case (8).

After successful synchronization - i.e. a CT-DECT device (PP) found its CT-DECT Case (8) - the high-low tone sequence falls silent and a high double beep is heard in the headset. CT-DECT Case (8) and CT-DECT device (PP) establish now automatically the connection between one another. As soon as the connection is established a final high beep will be heard in the headset. This indicates that the units are ready for duplex communication within the working range between CT-DECT device (PP) and base unit.

3.3 Controls

Duplex communication between »mobile« users

After switch-on of the CT-DECT Case (8) and the CT-DECT devices (PP) and successfully completed automatic establishment of connection (see chapter 3.2.6) the units are ready for duplex communication within the working range between CT-DECT devices (PP) and CT-DECT Case (8). Microphones and headsets are permanently switched on. Each user can speak in its headset microphone and hear in the earpiece of his headset the conversation of the other users. Adjust the communication volume with the volume control for your headset earpieces. Never adjust the volume higher than necessary for clear and proper communication.

Communication between »mobile« users and the aircraft intercom system

With the help of the PTT button on the headset, communication between »mobile« users and the crew of the aircraft is possible, while the PTT button is pressed.

Pressing the »COM ON/OFF« buttons on the CT-DECT devices (PP) once establishes communication between »mobile« users and the crew aboard the aircraft; pressing a second time cuts the communication off.

If the communication between »mobile« users and the aircraft crew is OFF, a high double beep sounds in the headset after pressing the buttons. Now, communication is switched on.

If the communication between »mobile« users and the aircraft crew is ON, a low double beep sounds in the headset after pressing the buttons. Now communication is cut off.

Only the »mobile« user establishing the intercom connection is connected with the crew of the aircraft and only he can terminate the connection.

3.4 Operating under special climatic conditions

The system is tested and approved for use within a working temperature range from -30°C up to +55°C. Exceptions apply to batteries and charging devices.

Rechargeable batteries

Very low or very high temperatures affect the life of rechargeable batteries.

Rechargeable batteries may only be used in the temperature range from 0°C to +50°C. At temperatures below 0°C we recommend the use of alkaline batteries.

As CT-DECT devices (PP) are used close to the body, temperatures below 0°C are rarely seen.

However, the CT-DECT Case stands (is suspended) in open air; therefore we recommend at very low temperatures the use alkaline batteries instead of rechargeable ones.

Mobile (plug-type) battery charger

Working temperature range: 0°C – 25°

4. Maintenance and proper care

4.1 Visual inspection

Inspect the system and particularly cables and connector assemblies regularly for signs of cracks, fissures, and deterioration.

4.2 Cleaning

After every use the entire system should be cleaned.

ATTENTION!

Pay attention that no humidity could penetrate into the device during cleaning. Do not use solvents (e.g. benzene, alcohol, etc.) for cleaning!

Remove loose dust with a soft brush. Clean the outside of components, if necessary, with an appropriate clean cloth, only lightly moistened with clear water, and then rub it down thoroughly. If heavily soiled, a few drops of rinsing agent may be added. Clean the connector pins with a commercial cleaning agent.

4.3 Faults, causes, corrective actions

Fault	Cause	Corrective action
CT-DECT Case (8), no LED lights up after switch-on	Rechargeable batteries are completely run down or defective	Recharge or replace rechargeable batteries
CT-DECT Case (8), life of rechargeable batteries is too short	Rechargeable batteries are defective	Replace rechargeable batteries
After switching the system on, automatic establishment of connection is not completed successfully	CT-DECT device (PP) is not subscribed to the CT-DECT Case (8)	Perform subscription procedure

4.4 Storage

The equipment can be stored at temperatures from -40°C up to +80°C. Exceptions apply to rechargeable batteries and battery chargers.

Rechargeable batteries

Store rechargeable batteries at:

- 20°C...50°C for 30 days maximum
- 20°C...40°C for 3 months maximum
- 20°C...30°C for 1 year maximum

Mobile (plug-type) battery charger

Storage temperature range: -25°C – +70°C

4.5 Transport and shipping

Use only the original packing for any transport purposes.

Transport only clean and dry systems. Prior to any transport remove **all** rechargeable batteries from **all** units.

5. Replacements to be made by the user

5.1 Replacing components

5.1.1 CT-DECT Case (8)

5.1.1.1 Replacing the warning flag

Unscrew the screw (figure 3/g) for removing the shackle. Remove the defective "Remove before Flight" flag and replace it by a new one. Fasten the screw again.

5.1.1.2 Replacing the cap for the 9-pole jack

The cap is delivered complete with steel cable and eye. Remove the key ring with steel cable from the case. Fasten the new cap with steel cable and key ring to the case.

5.1.1.3 Replacing the cap for the battery compartment

The cap is delivered complete with steel cable and eye. Remove the key ring with steel cable from the case. Fasten the new cap with steel cable and key ring to the case.

**Germany and
International Sales**

CeoTronics AG

Adam-Opel-Str. 6
63322 Rödermark
Tel. +49 6074 8751-0
Fax +49 6074 8751-676
E-Mail sales@ceotronics.com



USA/Canada/Mexico

CeoTronics, Inc.

300 Southport Circle, Suite 103
Virginia Beach, Virginia 23452
Tel. +1 757 549-6220
Fax +1 757 549-6240
E-Mail sales@ceotronicsusa.com

France

CeoTronics Sarl

Bât. Delta T
Z.A. du Tuboeuf
Allée des Pleus
77257 Brie Comte Robert Cédex
Tel. +33 1 60183300
Fax +33 1 60286060
E-Mail ventes@ceotronics.fr

Spain

CeoTronics S.L.

C/Ciudad de Frias 7 y 9
Nave 19
28021 Madrid
Tel. +34 91 4608250 51
Fax +34 91 4603193
E-Mail ventas@ceotronics.es

Switzerland

CeoTronics AG

Grundstr. 16
6343 Rotkreuz
Tel. +41 41 7905838
Fax +41 41 7905839
E-Mail info@ceotronics.ch

Poland

CeoTronics Sp. z o.o.

ul. Stonecza 15
91-491 Łódź (Polska)
Tel. +48 42 6553311
Fax +48 42 6552288
E-Mail biuro@ceotronics.pl

**Germany and
International Sales**

CT-Video GmbH

Gewerbegebiet Rothenschirmbach 9
06295 Lutherstadt Eisleben
Tel. +49 34776 6149-0
Fax +49 34776 6149-11
E-Mail ctv.info@ceotronics.com