

CT-DECT GateCom Compact (USA)

Operating Instructions



Important Information for Users of the CT-DECT transceivers

The CT-DECT transceiver „ CT-DECT GateCom Compact “ has been tested for electromagnetic compatibility and is compliant with the european DECT-Standard.

When using CT-DECT transceivers for special tasks, e.g. during bomb disposal, it is the sole responsibility of the user to test and decide whether the CT-DECT transceivers can be operated without any danger.

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 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.**

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

Body-worn operation has been tested and meets the FCC RF exposure guidelines when used with the Applicants accessories supplied or designated for this product as listed in the filing. Use of other accessories may not ensure compliance with FCC RF exposure guidelines. The SAR values are measured and keeps the limit values.

1. 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 store CeoTronics products outside or in damp ambient conditions. At all times keep them clean, dry and at normal air humidity. CeoTronics products must not be stored in areas with a temperature of over +80° C (+176° F), e.g. in the summertime on the parcel shelf of a car. If not stated otherwise, the following temperature ranges are allowed for CeoTronics products: -10 to +55° C (+14 to +131° F) for operation, -40 to +80° C (-40 to +176° F) for storage.*
- *Do not immerse a CeoTronics product into water, if it is not expressly specified for this purpose.*
- *When using CeoTronics products that are equipped with connection leads ensure that the latter do not get caught up in operational machinery or wheels!*
- *Headset muffs with a high degree of passive noise attenuation are used for CeoTronics headsets with headset muffs. If not stated otherwise, it is our experience that the passive noise attenuation of the headset muffs is reduced by approx. 3 dB due to the electronics that are integrated into the headset muffs. As a rule no empirical values are available for non-standard products.*

Information to noise attenuation values, which result from representative measurements of a named place, are to be regarded as orientation values, which cannot be guaranteed, if no "Type Examination Certificate" is present.

Note that it acts with electronic communication systems of CeoTronics, not around "Personal Protective Equipment" in the sense of the "PPE Directive 89/686/EEC", if not differently indicated.



At very high noise levels that exceed the passive protective effect of the headset muffs we recommend that ear plugs be worn as an additional measure. If in doubt, ask your safety officer or company doctor. The best noise attenuation exists only if the muff padding is in perfect condition. This should be replaced at the latest after every 6 months of use.

- *In the case of headsets with headset muffs that protect against harmful ambient noise and that are not equipped with additional electronics for level-limited ambient sound reception, take heed that the audibility of warning signals, warning calls etc. is also impaired!*
- *CeoTronics products 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 refuelling 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.*



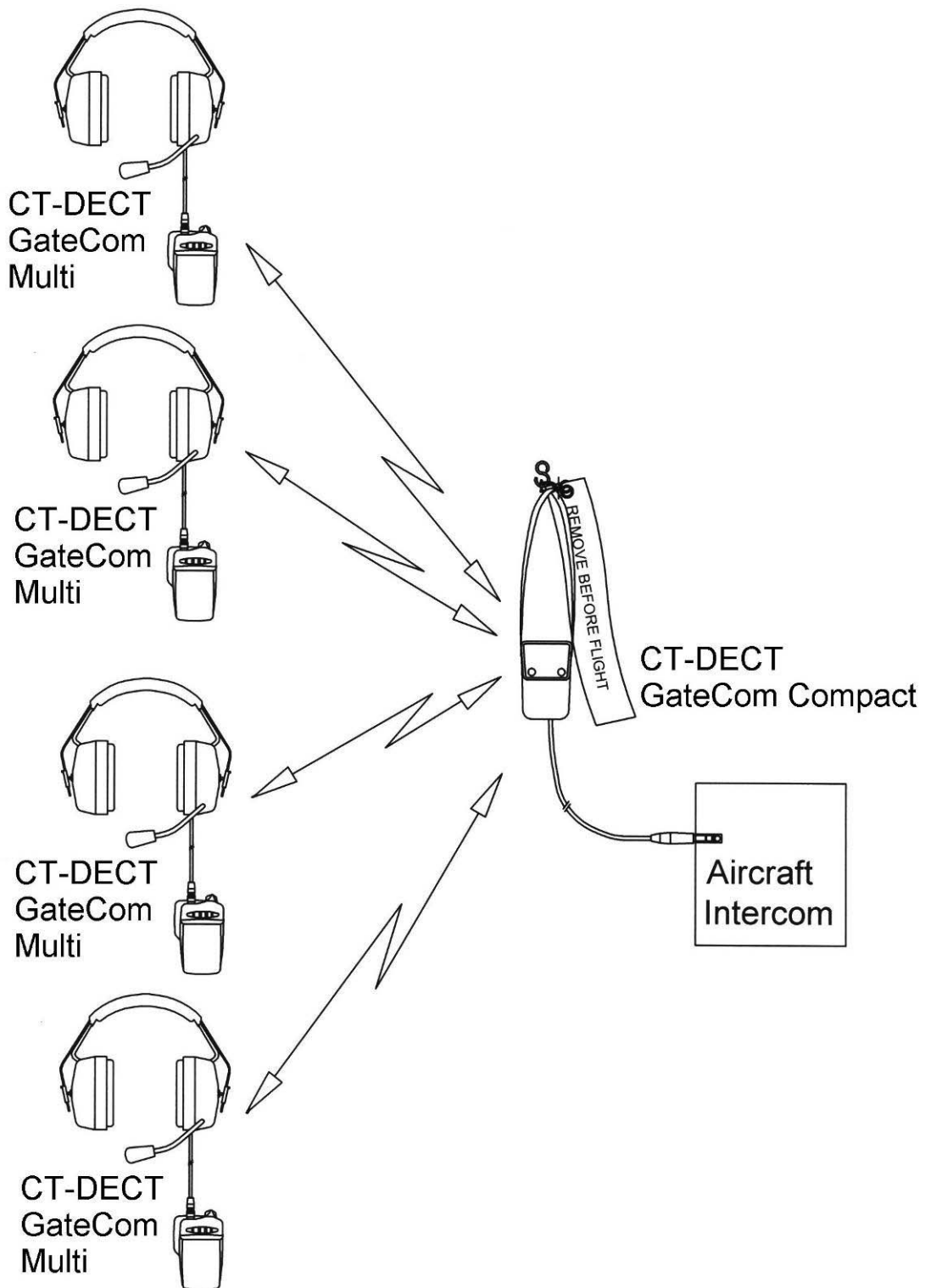
- *For safety reasons reception volumes in excess of 85 dB(A) are possible with a whole series of CeoTronics products. However, these can be regulated by the user. After switching on the communication system, set the reception volume to approx. 1/2 the available loudness volume and then test the audible volume, e.g. by opening the squelch on the radio set.*

Do not set the volume any higher than is necessary. A very high volume setting can lead to damaged hearing, particularly if it is continuous. For high volumes or noise levels wear additional ear plugs. If in doubt, ask your safety officer or company doctor.

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- *When on board an airplane always keep a transmitter/receiver switched off. Operation of the transmitter/receiver could affect the safety of the airplane and it is therefore prohibited. Never operate electronic devices on board an airplane without the express approval of an authorized member of the cabin crew.*
 - *Do not leave CeoTronics 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. Never use a CeoTronics product (headset, insert earphone, induction receiver etc.) that will impair your hearing.*
 - *Transmit only when it is necessary. Unnecessarily occupying a channel can prevent the transmission of vitally important information.*
 - *Charge rechargeable batteries only with the appropriate suitable CeoTronics charger. Observe the voltage and current specifications, including those on the mains face (e.g. 230 V AC or 115 V AC). 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 CeoTronics products and rechargeable batteries out of the reach of children and any other persons who are not familiar with the handling and operation thereof.*
 - *Packaging materials, e.g. filling materials and plastic bags are not toys and have to be kept out of the reach of children. There is a risk of children ingesting them and choking!*
 - *Safe operation requires clean devices. Ensure that the devices (microphones, connectors etc.) are clean and in good condition at all times.*
 -  *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.*
 - ***The CT-DECT GateCom Compact must always be removed the intercom communication is completed. The warning flag "Remove before flight" must never be removed from the CT-DECT GateCom Compact.***

2. System Overview

Fig. 1 Example of an configuration



2.1 General Description

This operating instructions describe the device CT-DECT GateCom Compact.

The CT-DECT GateCom Compact is part of a communication system for aircraft ramp handling.

It makes communication possible between the ground personnel outside of the airplane and the flight crew. The CT-DECT GateCom is connected outside at the airplane at the interface of the airplane Intercom. At the CT-DECT GateCom Compact can do max. 4 CT-DECT GateCom devices to be subscribed.

The communication between the CT-DECT GateCom Compact and the subscribed devices is wireless. The CT-DECT GateCom Compact is the base device and the subscribed devices are the standard devices.

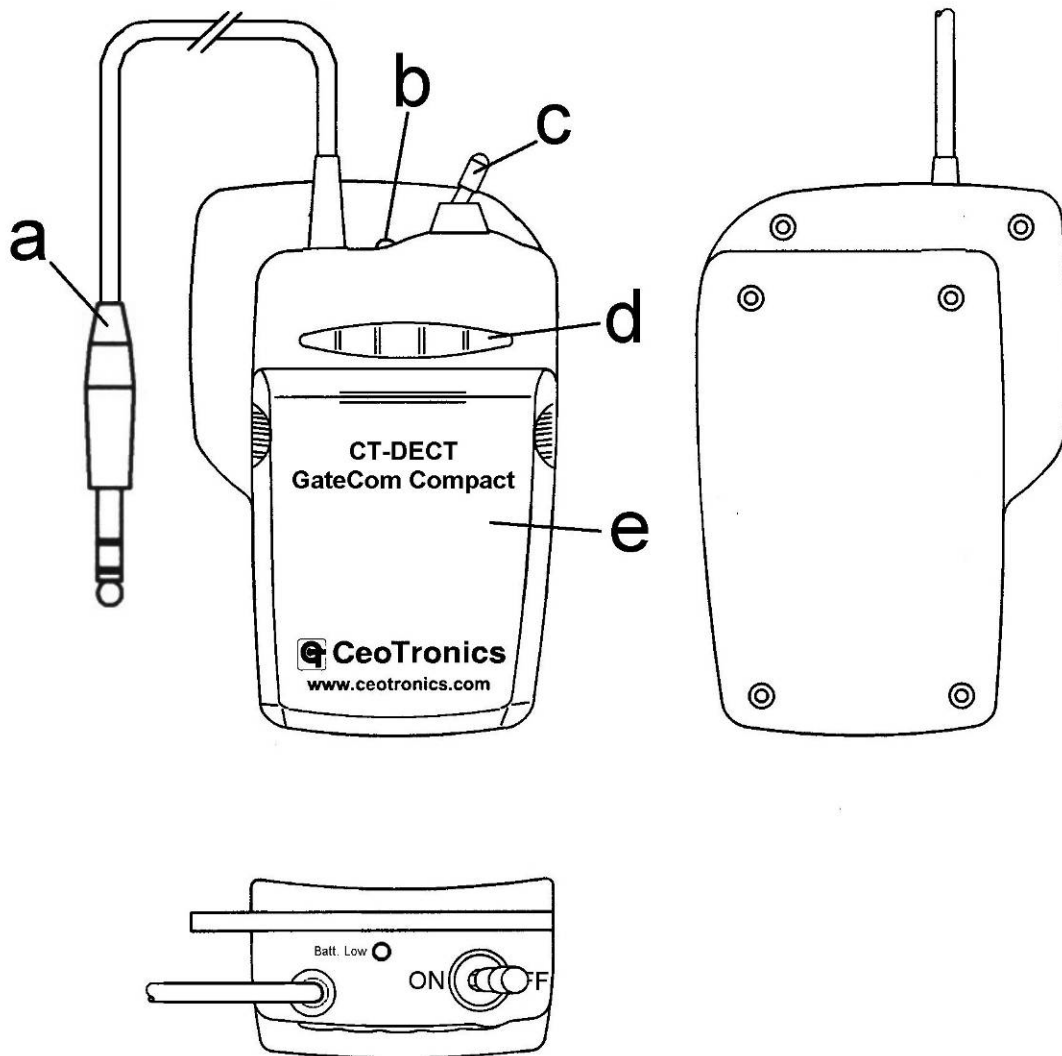
The transmission range between the base device and the allocated devices standard depends on the local circumstances. If reached the range limit, the user of the headset was informed by an acoustic signal. The CT GateCom Compact is placed in a durable carrying bag.

Notice for the device standard the special operating instructions.

2.2 Overview

- Durable plastic housing
- Durable carrying bag with shoulder strap, warning flag and fastening
- Connection cable with phone plug
- LED for battery charge state
- ON-/OFF Switch
- Red pushbutton bank
- Dimensions 116 x 75 x 43 mm without carrying bag

Fig. 2 Operating -and Connection elements



- a Connection Cable with 6,35mm phone plug for connect to the aircraft interface
- b LED for displaying the state of battery charge
- c ON-/Off-Switch with interlock. For unlocking toggle switch pull and then switch to position OFF or ON
- d Red pushbutton bank
Microphone ON/OFF - One of the pushbuttons at the pushbutton bank has to be pressed to switch off the duplex communication between the mobile users with the standard device outside and the aircraft crew. The aircraft crew can hear nothing from the outside. The mobile users can receive from the aircraft crew. The mobile users can receive however from the aircraft crew.
All pushbutton of the pushbutton bank can be used for subscription of the standard devices (see section 8)
- e Removable cover for the battery compartment

2.3 Power supply and operating time

Power for the device is supplied either by three rechargeable NiMH batteries 1.2 V type Mignon AA or by 3 alkaline batteries 1.5 V type Mignon AA in the battery compartment. With fully charged rechargeable NiMH batteries 1.2 V/2300 mAh the operating time for continuous operation is approx. 15 hours. For charging, the batteries have to be removed from the device.

2.4 Carrying bag with shoulder strap, warning flag and fastening

The weatherproof carrying bag (titel page), equipped with the CT-DECT GateCom Compact, can be attached with shoulder strap, shackle and clamp at the aircraft, e.g. at the flap of the aircraft intercom. The warning flag must be fastened to the shoulder strap always.

→ Note

Keep the carrying bag closed when in use in free.

3. Commissioning and operation

3.1 CT-DECT GateCom Compact connect and switch on

- a Secure that the batteries in the CT-DECT GateCom Compact are completely loaded.
- b Attach the carrying bag to a suitable place near the aircraft intercom connector by means of the shoulder strap or by means of a hook.
Make sure that the warning flag is fastened to the carrying bag.
- c Open the carrying bag with the two snap fastener.
- d Switch on the device with the toggle switch (Fig. 2/c). Pull for this the toggle up and switch to position "ON".

3.2 Automatic connection setup, duplex communication.

A high beep tone is audible in the communication sets of the subscribed standard devices after switching on. Subsequently the synchronization process between the base device (CT-DECT GateCom Compact) and the standard devices (subscribed devices) begins, i.e. the standard devices seek the base device. The time a synchronization procedure can last is varying. During this time a high/deep tone sequence is audible in one-second intervals in the communication sets of the standard devices.

The high/deep tone sequence signals that the standard devices seek the base device. After completion of synchronization – i.e. the standard device has found its base device – the high/deep tone sequence isn't audible any longer, and in the communication set of the standard device a high double beep tone sounds. Subsequently the connection setup between the base device and the standard device is effected automatically. The completed connection setup is finally signaled by a high beep tone in the communication set of the standard device. The devices are now ready for duplex communication within the range between the standard device and its base device.

3.3 Exceeding the range limit

In the case the range limit is crossed the connection between the standard device and the base device will be released and a high/deep tone sequence with time intervals of 1 second is audible. After the devices are back again within the reception area the connection setup will be effected automatically and the high/deep tone sequence isn't audible any longer.

3.4 Undervoltage warning

The CT-DECT GateCom Compact is equipped with a display for battery charge state (Fig. 1/b).

The display shows three different states.

- | | |
|-------------------|---|
| LED shines green | – rechargeable batteries are completely loaded |
| LED flashes green | – rechargeable batteries not completely loaded Akkus but still operational |
| LED flashes red | – rechargeable batteries are empty, operability is given only a few minutes |

3.5 End of operation

Switch off the device with the on/off switch. This guarantees a longer usage from the rechargeable batteries or batteries.

4. Safekeeping – storage

After use, keep the cleaned devices in a clean and dry place at normal room temperature and at normal relative air humidity.

5. Recharging the rechargeable batteries

5.1 General

The CT-DECT GateCom Compact can be supplied either by three rechargeable NiMH batteries 1.2 V type Mignon AA or by 3 alkaline batteries 1.5 V type Mignon AA.

The rechargeable NiMH batteries 1.2 V type Mignon AA 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.**



- **Used (defective) rechargeable batteries are subject to special waste disposal. Do not put them in the household refuse!**
- **Never charge a rechargeable battery in areas with an explosion risk – an explosion may result. Charge rechargeable batteries only within a building or similar environment that does not contain dangerous concentrations of volatile vapors.**

5.2 Replacement of the rechargeable batteries

The three NiMH batteries 1.2 V type Mignon AA are in the battery compartment of the device. For charging they have to be removed from the battery compartment.

- Switch off the device.
- Press on the two ribbed spots on the cover of the battery compartment, as shown in Fig. 3, and remove the cover from the battery compartment (Fig. 4).
- Take the three NiMH batteries 1.2 V out the battery compartment.
- Charge the rechargeable batteries only with the charger supplied with the system. For the charger notice the special CeoTronics operating instructions.
- After charging: When inserting the charged NiMH batteries notice the polarity. Hang up the battery compartment cover with the two hooks into the two openings down at the battery compartment (Fig. 4). Touch the battery compartment cover with a little pressure at the two ribbed spots and press it against the battery compartment until it engages.

Attention

Rechargeable batteries are subject to special waste disposal. Do not put them in the household refuse! Consider the details on the rechargeable batteries.

Figure 3



Figure 4



6. Maintenance

6.1 Visual inspection

Examine the devices and in particular the cables and connectors regularly for signs of fractures, cracks and wear. Send defective devices to CeoTronics for repair.

6.2 Cleaning

CAUTION

When cleaning ensure that no moisture penetrates inside the device. Do not use any solvents (e.g. benzine, alcohol, etc.) for cleaning purposes!

Remove any loose dust with a soft brush. Clean, if necessary, the outside with a suitable clean cloth that has been slightly moistened with clear water, and rub the parts dry afterwards. If heavily soiled, some dishwashing liquid can be used in addition.

Clean the contacts of connectors with a commonly available contact cleaning agent.

7. Accessories and expendable items

Designation and description	Part No.
CT Quick charger for 4 NiMH rechargeable batteries 1.2 V type Mignon AA For a mains voltage of 100...240 V 50/60 Hz	40 06 527
3 pieces NiMH rechargeable batteries 1.2 V/2300 mAh type Mignon AA shrink-wrapped in foil	40 06 531

8. On-air subscription of the standard devices to the CT- GateCom Compact

For on-air subscription at a DECT device always the on/off switch and the subscription button(s) are used.

Every time notice the special CeoTronics operating instructions for the other CT-DECT device.

8.1 General

➔ NOTE

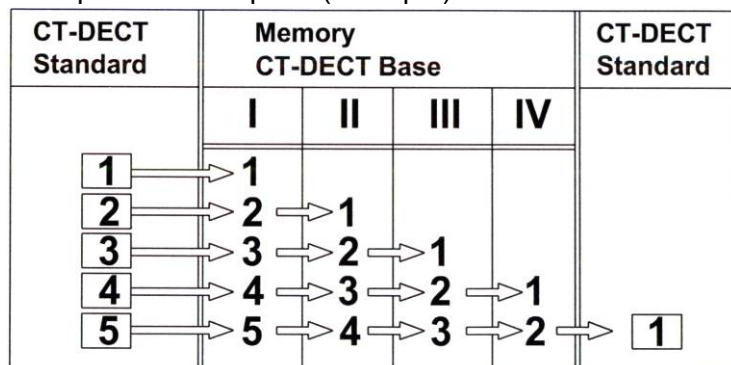
The on-air subscription is a procedure which has to be performed once only by the factory. It must be performed again only in the case a Multi that isn't subscribed to the system has to be used within the system.

8.1.1 Principle of subscription

Each device is equipped with a DECT module and has its own identification number. First of all an allocation must always take place between the base device (CT-GateCom Compact) and the maximum of four standard devices. This subscription procedure, which has to be performed once only, is performed on the base device and the maximum of four standard devices manually by means of a procedure carried out by the operator.

If a fifth standard device would be subscribed to the base device, the standard device that was subscribed in first would be deleted from the data memory of the base device. See the following example.

Principle of subscription (example)



A standard device that is deleted from the data memory of the base device cannot communicate any longer with the CT-DECT system. In this case the standard device has to be subscribed again to the base device according to the subscription procedure.

Once the subscription procedure has been successfully concluded, the identity of the communication participants is stored in the data memory of the device. The standard device stores one base device. The base device stores the last four successful subscribed standard devices.

Time Out

If no successful subscription between a standard device and the base device was achieved after maximally 2 minutes, a »Time Out« occurs. The »Time Out« is signaled by a tone sequence of 4 short deep tones in the communication headset of the Standard device, which repeats itself every 4 seconds. After a »Time Out« all necessary standard devices have to be subscribed again to the base device.

➔ Note

- *Two or more standard devices can never be simultaneously subscribed to the base device, they must always be subscribed one after the other. With two or more standard devices it is recommendable to subscribe all standard devices one after the other to the base device, because a standard device can be deleted (see »Principle of subscription«).*
- *A standard device can only be subscribed in one base device at the same time, never in two or more base devices.*
- *Comply with the instruction step sequence.*
- *After subscription the devices have to be switched off again.*

8.2 On-air subscription

In the following by way of an example the subscription of a CT-DECT GateCom Multi to the CT-DECT GateCom Compact is described. The subscription of a second and perhaps a third and fourth CT-DECT GateCom Multi to the CT-DECT GateCom Compact is analogous.

- a. Make sure that all CT-DECT devices are switched off.
- b. On the CT-DECT GateCom Compact press at least one of the five pushbuttons in the pushbutton bank (Fig. 2/d) and keep the pushbutton pressed. While you keep the pushbutton pressed switch on the CT-DECT GateCom Compact with the on/off switch (Fig. 2/c) and after switching on keep the pushbutton still pressed for at least 5 seconds. Then release the pushbutton. Immediately carry out step »c«, otherwise a »Time Out« may occur.
- c. On the CT-DECT GateCom Multi press the subscription button and keep the pushbutton pressed. While you keep the pushbutton pressed switch on the CT-DECT GateCom Multi with the on/off switch and after switching on keep the pushbutton still pressed for at least 5 seconds until a decreasing 5-tone sequence is audible in the communication set. Then release the pushbutton. The on-air subscription is started and in the communication set of the CT-DECT GateCom Multi a short high beep tone is audible periodically every 2 seconds. An increasing 5-tone sequence, which repeats itself every 4 seconds, signalizes that the subscription has been successful completed. If no successful subscription was achieved after maximally 2 minutes, then this is signalized by a tone sequence of 4 short deep tones, which repeats itself every 4 seconds. In this case switch off the both devices and restart the on-air subscription procedure again.
- d. **After the on-air subscription switch off both devices.**

Notes

Notes

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Internationaler Vertrieb**

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