FältCom ECII™ Flex
Manual

Version: 3.2.4-B

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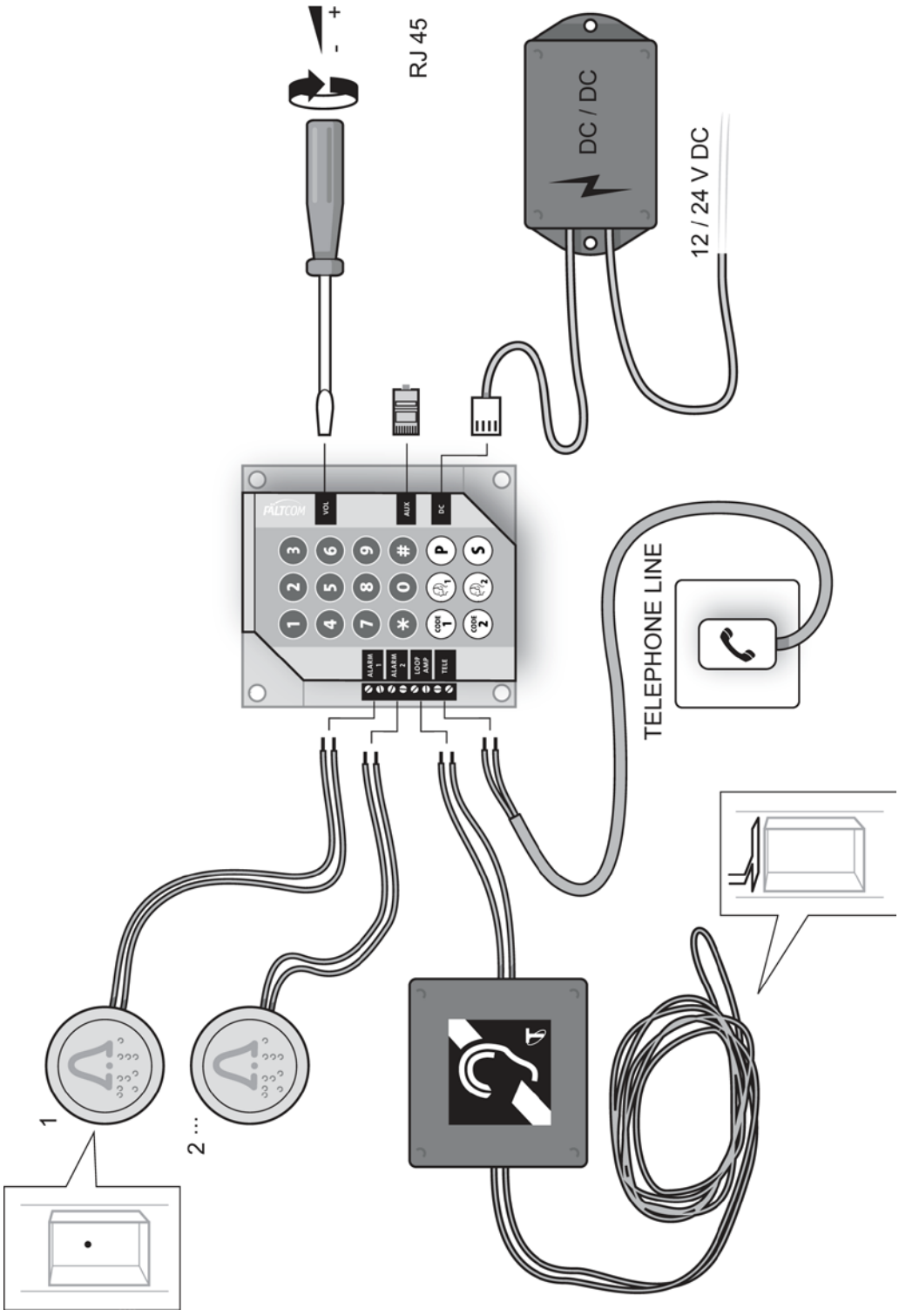
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RJ 45
DC / DC
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1 Notes

We would like to thank you for placing your confidence in Fält Communications AB (FältCom) and we are convinced that the choice of one of our security products will fulfil your expectations. In order to operate this FältCom ECII™ Flex correctly we would ask you to read this manual carefully prior to using it.

2 Copyright

3 Declaration of Conformity

We, Fält Communications AB, Vasagatan 23, S-90329 Umeå, Sweden hereby declare that this product, FältCom ECII® Flex 202187, conforms with the directives: R&TTE 1999/5/EC, EMC 2004/108/EC, LVD 2006/95/EC, WEEE 2002/96/EG and RoHS 2011/65/EG. The product complies with the following standards/norms: EMC: EN 12015(2004), EN 12016(2004), EN 50130-4(1995) and A1(1998) and A2(2003), EN 55022(2006) and A1(2007), EN 55024(1998) and A1(2001) and A2(2003), Lift Safety: EN 81-1/2, EN 81-28, EN 81-70 and RoHS: EN50581.

Umeå, Sweden, June 2014

Andreas Rönnkvist,

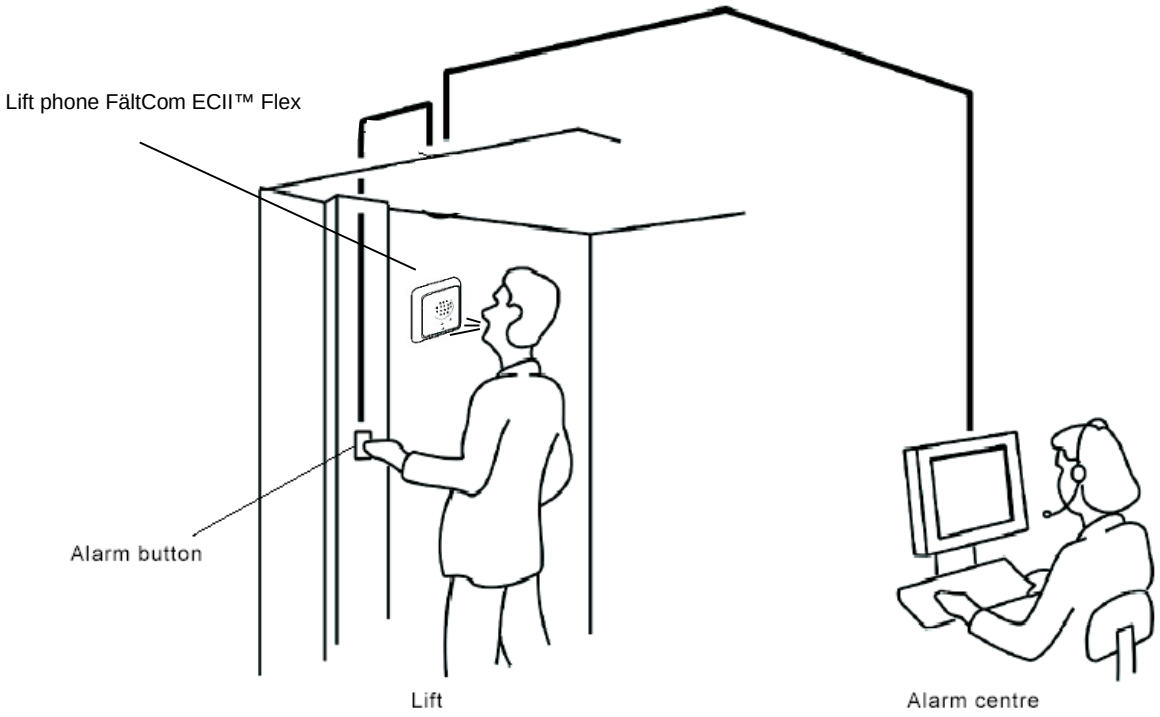
Product Manager

Fält Communications AB

4 Product description

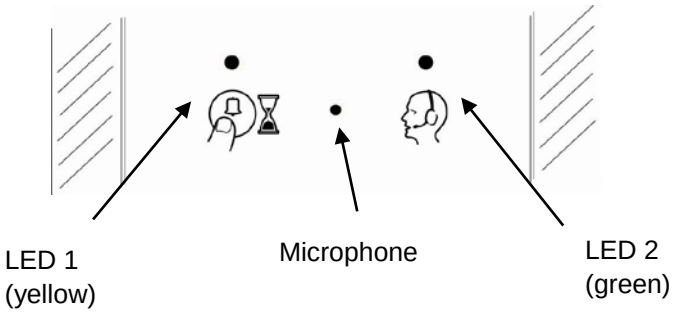
The FältCom ECII™ Flex is an alarm equipment for the PSTN network with built in duplex speech communication designed for installation in lifts.

When a lift passenger presses the button for alarm/emergency signal, the ECII™ Flex automatically calls up an alarm centre or some other predefined alarm receiver. Voice communication is established and the person in distress can talk to the staff at the alarm centre, from where help will be dispatched.



4.1 *Design and function*

The ECII™ Flex design facilitates mounting. Loudspeaker, microphone, all the electronics, the keys for programming and testing, as well as all connection points are integrated in one single unit. This gives quick and easy installation as well high reliability in operation. The ECII™ Flex speaker sound is easily adjusted with a trim potentiometer.

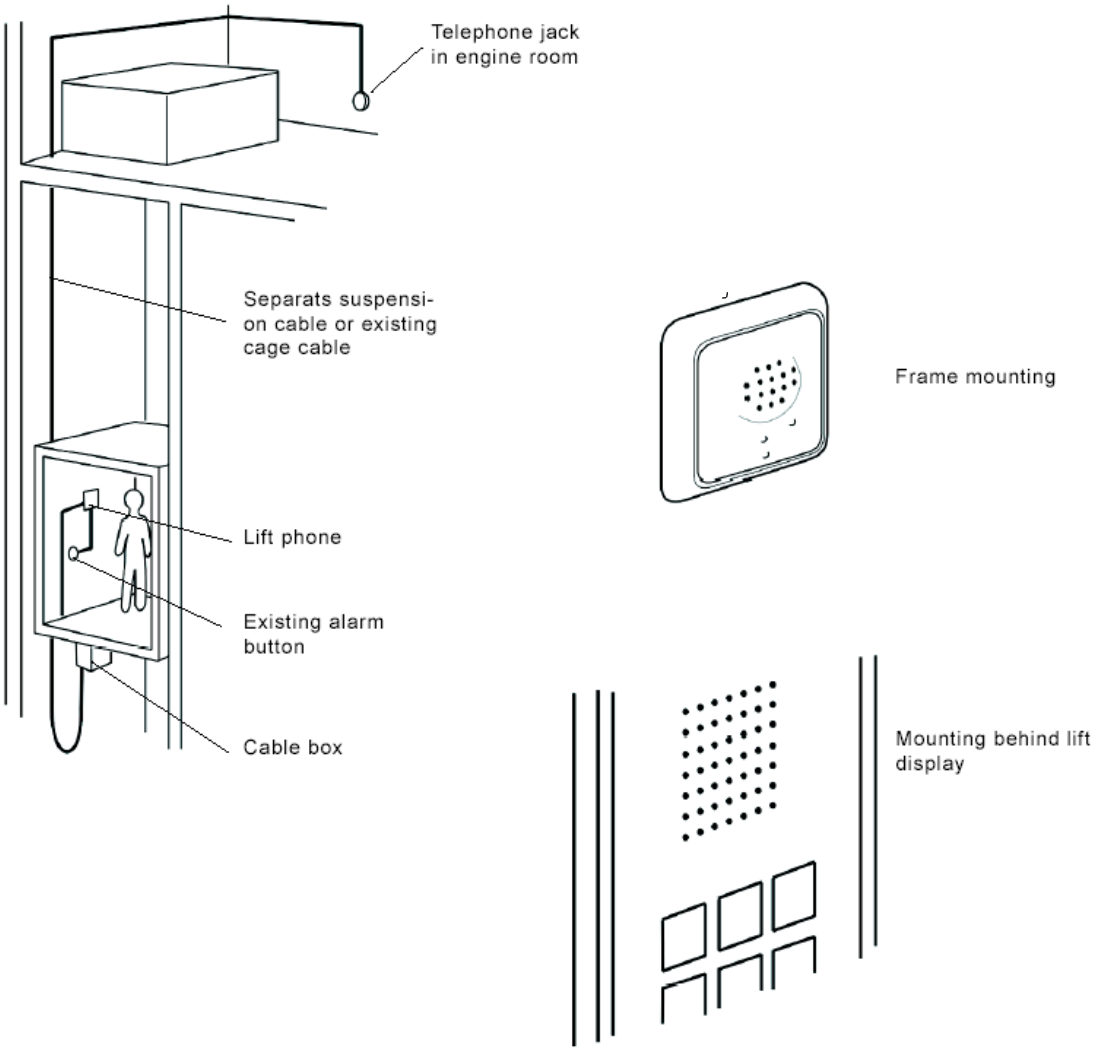


On the ECII™ Flex front plate, there are two pictograms and two single coloured LED (yellow and green), which are normally turned off. The left LED becomes yellow when an alarm call is in progress and the right LED becomes green when the alarm has been acknowledged by the receiver and a speech connection is established. The LED's are also used to indicate program-

ming mode. The LED's can be programmed to display other light sequences, see section *Programming* for more information.

The ECII™ Flex can be mounted behind the car operating panel (COP), on the panel with a small front plate and frame or with a larger front plate and frame with an integrated alarm button.

The connection of the ECII™ Flex requires a two-wire cable to the alarm button in the lift. A two-wire cable for connecting a standard analogue telephone line, use two unused wires in the existing car cable is available. It is very important that the cable is fastened properly. For the separate suspension cable there is a special mounting kit available, which includes the necessary mounting parts.



4.2 *Multiple ECII™ Flex connection*

The FältCom ECII™ Flex is designed to run on the existing telephone line power supply. Separate power supply is only required if several lift phones are connected to the same telephone line or if the line voltage is below 25 VDC. See more under section *Technical data*.

Several lift phones may be connected to the same telephone line. When one of the lift phones has established a connection, the other ones will not be able to use the line; a busy tone will instead be heard in the loudspeaker and the yellow LED will flash five times. When the line becomes free, the alarm call will be connected automatically.

Every ECII™ Flex requires a unique number on the line and the default number is 1. The number is used when calling in to the ECII™ Flex. The unit with number 1 will answer the call and

the others will listen in on the line and only pick up the line if that particular lift phone number is chosen. Connect the lift phones in parallel and place the lift phone with number 1 at the far end of the line. View section 6.13 for programming.

Installation of two or more FältCom ECII™ Flex on the same telephone line requires a separate power supply to the unit. The ECII™ Flex outlet labelled DC is then connected to the lift's existing emergency power supply via a special DC/DC converter. If no power supply is available a separate emergency power source with a built-in battery can be used. Both products are described in the product catalogue.

A total of nine ECII™ Flex may be connected using the same subscription. Check with the local telephone line operator how many devices they support on the line. Ordinary telephones, fax machines, modems or other types of alarm transmitters must not be connected to the same telephone line because of the risk of disturbing the ECII™ Flex.

4.3 *Programming and testing*

On the back of the ECII™ Flex, there is a keypad used for programming call numbers, function selection, and testing. All such settings are configured during the installation procedure and, normally, no subsequent changes are required. It is also possible to remotely program the lift phone using a standard phone or Windows-based software and a modem. Contact your local distributor for more information.

The ECII™ Flex is capable of calling 6 alarm receivers or standard telephones with tone selection.

The ECII™ Flex can be programmed to send a test alarm/routine call to a specific test alarm/routine call receiver at intervals of 1 – 30 days. This alarm tests the lift phone electronics and the telephone line itself. There is one primary and one secondary test receiver available.

The ECII™ Flex will answer an incoming call automatically after one ring signal. In this case, tones are heard in the receiver when the call is connected.

If an emergency power supply is connected, the ECII™ Flex can automatically send an alarm if the battery voltage is low and needs to be replaced. A special telephone number for the battery alarm can be programmed.

See section *Programming* for detailed programming instructions.

4.4 *Remote programming and monitoring*

Version 3 of the ECII™ Flex has improved remote programming and remote monitoring.

4.4.1 Trygga Hissen

Trygga Hissen is a remote monitoring service provided by FältCom. The ECII™ Flex and the GSM Gateway together with FältComs own device management server offers monitor service in terms of availability and alarm reception. Contact FältCom for more information.

4.4.2 Remote Programming SW

The Flex Programmer SW is available for remote programming of the ECII™ Flex settings. The Flex Programmer can be used locally using the 122246 Flex Programming Cable connected to a computer USB. Or remotely using a standard modem (recommended 102181 Modem available from FältCom).

In remote programming the Flex Programmer SW can be set to use either modem or DTMF communication. If the connection to the ECII™ Flex is PSTN (land line) the recommenced setting is modem, this setting will allow faster connection and will enable file download, e.g. speech files, to the unit. If the ECII™ Flex is connected on a GSM Gateway the recommended setting is DMTF. This setting has a lower data rate and will not allow file download but has a more stable connection. For more information please view the Flex Programmer manual.

4.4.3 Remote Programming mobile

The ECII™ Flex can be programmed by using an app provided by FältCom free of charge for Android or iPhone.

For Android, go to Google Play shop and search for “Flex Android”, download and install.

For iPhone, start the browser and enter the address: www.faltcom.se/flexconfig/index.html

Follow the steps in the app and view the help section for more information.

The app is write only, this means that the user can write and change the settings but not read and view the current settings in the ECII™ Flex. This is due to restrictions in Android and iOS not allowing DTMF reception in the application.

4.4.4 Alarm log

The ECII™ Flex will save the ten most recent emergency alarm calls in an alarm log. To retrieve and read the log use the Flex Programmer SW. The Flex Programmer will translate the data from the ECII™ Flex to time and date of the alarm. This means that if the ECII™ Flex is powered off the alarm time in the log will be incorrect.

5 Installation instructions

Only suitably qualified personnel may install the ECII™ Flex. Expertise, technical skill and correct equipment are required to ensure safe and efficient installation.

Mind your own safety when installing ECII™ Flex. You must never work in an open lift shaft without a safety harness. Be extremely careful and break current if you work close to a voltage of 230-400V, e.g. in the lift motor room. Never disconnect a cable before you have made sure that it is not live.

Start by selecting a suitable place for the ECII™ Flex. Usually you can find an easily accessible and yet well protected place behind the lift panel. Avoid installing ECII™ Flex in a corner or behind anything that may reflect the sound. Such installation might lead to acoustic feedback instability between the loudspeaker and the microphone. You must be able to access the existing suspension cable and the alarm button in the lift. Also keep in mind that you must be able to access the back of the lift phone in order to connect cables and program functions. Normally this is easier to do on the inside of the lift, before the lift phone is screw-mounted.

Make sure that you will avoid sawing or drilling through existing cabling when you make any holes!

5.1 *Frame mounting*

1. Mark and pre-drill the holes for the lift phone frame according to the enclosed drill template. Drill the holes for the cables to the alarm button and telephone connection according to the drill template.

2. Fasten the frame first and then the lift phone with the enclosed screws. Note! Make sure the cables have been connected and the lift phone has been programmed.

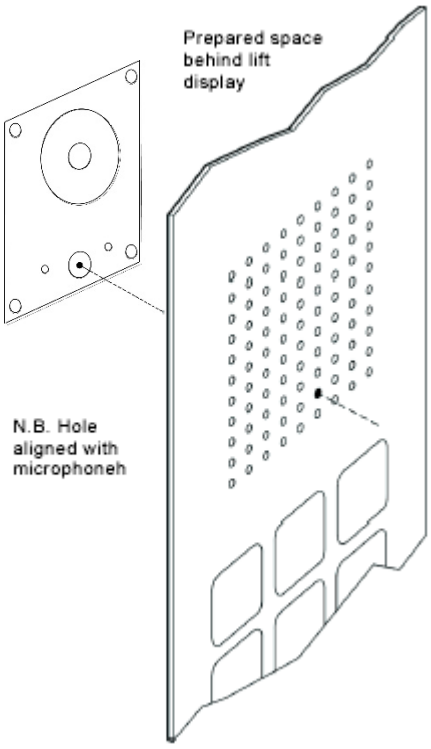
5.2 *Mounting behind the car operating panel*

This alternative is only possible if there is already a prepared space for a lift phone behind the button & display plate. The ECII™ Flex version “COP” is specially designed for this type of mounting.

Since the design of the panel may vary, we are not able to give exact mounting instructions here.

Keep in mind that the microphone hole must be aligned with a hole in the panel plate. It might become necessary to drill a new hole.

For the best sound quality the gasket on the ECII™ Flex micro-phone and speaker should press firmly to the panel plate.



5.3 *Connection to alarm button*

1. Route a two-wire cable (max 10 m) from the lift’s alarm button and connect the wires to the ECII™ Flex termi-nal block at ”ALARM1” or “ALARM2”.
2. Fasten the cable with cable ties or cable clips on the outside of the lift.

Note that the alarm button in the lift car is normally double-breaking, i.e. made for two separate connections, one of them usually connected to an alarm bell and the other one used for the ECII™ Flex. The connections must have 1500V isolation. If they are not, or if the existing alarm button only has one connection, the button must be replaced with another type or use a relay to isolate the connectors.

Please note that the ECII™ Flex has a special version called “ALBU”, with an integrated alarm button which can be used if there is no suitable alarm button available in the lift. That version has a double breaking alarm button where one part (NC) is used for the ECII™ Flex and the other part (NO) can be used for the alarm bell.

5.3.1 Alarm button function

Note that the alarm button may have a closing or breaking function. Breaking function is to be preferred because the alarm loop will be monitored. By default the ECII™ Flex will auto-detect the function of the alarm button 1 (from SW3.2.3), but the can be overridden by programming a setting. See section *Programming* for more information.

5.3.2 Separate alarm button(s)

If there is no alarm button in the lift car, a separate button must be installed. Note that in order to avoid misunderstandings, there should never be two alarm buttons in a lift car. It is possible to connect extra alarm buttons to the unit, for instance on top of the lift car where a repair man can be trapped.

5.3.3 Broken button detection

If the alarm button is continuously closed or open the ECII™ Flex will allow 15 emergency alarms. The ECII™ Flex will then send a technical alarm (alarm code 5) and restrict the emer-gency alarms to once every 8 minutes. This function is default activated but can be deactivated, please see the Programming section for more information.

5.4 *Connection to telephone line*

The lift phone must be connected to a standard analogue telephone line. Normally it can also be connected to an ISDN connection via a terminal adaptor. To minimize disturbance when more than one ECII™ Flex is connected to the same telephone line it is recommended that they are connected in parallel.

If the lift phone is connected to a standard telephone jack, the jack should be located in the lift motor room or some other room with no admittance to unauthorized persons. This is important to ensure the connection is not interrupted by mistake.

5.4.1 Connection to telephone switches and other devices

The ECII™ Flex can be connected to an extension in a telephone switch, provided that the connection is analogue. Digital switches usually have at least one analogue connection, since many alarms, faxes and modems require analogue communication. **When connecting to a telephone switch it must be verified that the switch also works in case of power failure.** The ECII™ Flex has a function, which enables it to dial a prefix, e.g. '0', and then wait two seconds for the dialling tone before proceeding with the alarm number. See section *Programming* for more information.

In some installations the telephone line might have an automatic dial or automatic connection. This means that the telephone switch automatically dials or connects to a pre-programmed number or extension. By programming the ECII™ Flex with a '*' the lift phone accepts that the telephone line manages to call up the pre-programmed number. Afterwards the ECII™ Flex uses the telephone line for the intended functions. For more information read section *Programming*.

By connecting the ECII™ Flex to a GSM Gateway that simulates an analogue telephone line the ECII™ Flex can easily send alarms via the GSM network. Contact your distributor for more information. For all alarm communication via the GSM network it is very important to establish that the communication system still works in case of power failure.

The ECII™ Flex can also be connected to a VoIP system; in this case a converter to an analogue line must be connected between the VoIP network and the ECII™ Flex. Sometimes adjustment of the equipment is needed to make sure that the length of the tones (DTMF) to and from the lift phone are not affected by the equipment. Contact your distributor for more information. It is very important to establish that the telephone line still works in case of power failure.

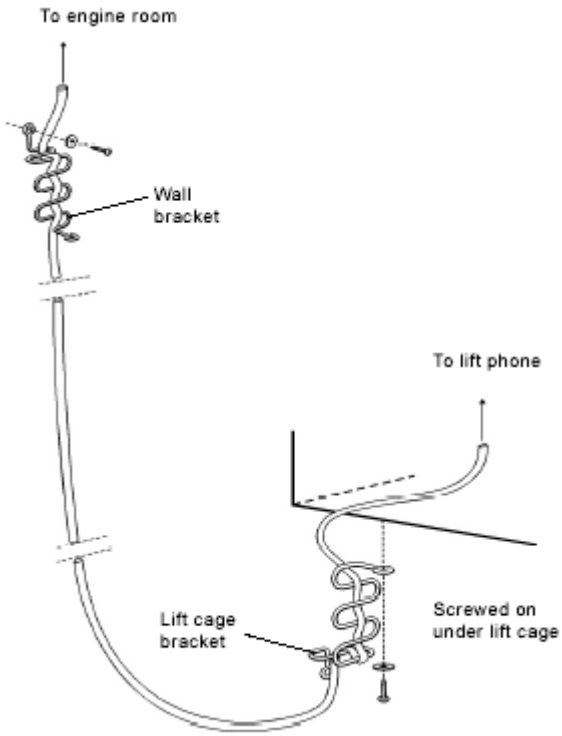
5.4.2 Connection with separate suspension cable

Normally, a separate suspension cable of a round cable or flat cable type is used between the ECII™ Flex and the telephone jack. A separate suspension cable usually gives better sound quality and less interference. The required length of cable and mounting kit can be ordered with the ECII™ Flex.

Note that the cable brackets included in the mounting kit must be used in order to guarantee the function. The combined wall and lift-car brackets comprise bracket, screw, washer and cable ties.

Check carefully that the cable will not be torn off, squeezed or chafed between the lift car and shaft wall.

5.4.3 Flat cable type



1. Check that the cable is long enough, allowing a margin, to reach the telephone jack.
2. Fasten the cable securely until it reaches the lift shaft wall.
3. Secure the cable with a wall bracket according to the figure on this page.
4. Fasten the lift-car bracket under the lift car with screws, and attach the cable to the bracket. Alternatively, the cable can be attached to a suitable beam on the lift car instead of the lift-car bracket.
5. Route the cable to the ECII™ Flex and connect the wires to the terminals labelled ”TELE”.
6. Fasten the cable with cable ties or cable clips on the outside of the lift near the lift phone.
7. Connect the two central wires in the enclosed modular connector to the suspension cable wire, and connect the modular connector to the telephone jack in the machine room. Mark the connection so that it will not be removed by mistake.

5.4.4 Connection via existing cable

Warning! Ensure that you will not come into contact with any live power cables.

Normally, the existing lift cable (usually a big flat conductor cable) goes to a car cable box, where you may find unused wires (if any) that can be used for the ECII™ Flex. It is important that the wires to be used are next to each other in the lift cable in order to minimize disturbances. In the event of bad sound quality a separate cable must be used.

1. Connect a two-wire cable from the unused pair in the car cable box and draw the cable to the terminal strip marked ”TELE”.
2. Fasten the cable with cable ties or cable clips on the outside of the lift near the ECII™ Flex.
3. Connect the suspension cable wire to the telephone jack in the machine room. Mark the connection so that it cannot be removed by mistake.

5.5 *Connection of voltage supply*

Note that separate voltage supply is only required if more than one ECII™ Flex is to be connected to the same telephone line, or if single-mounted to a line voltage below 25 VDC, usually an internal telephone switch (PABX).

The voltage supply must come from a source that will work even in case of a power failure, e.g. the lift’s emergency lighting system, and the converter must have 1500V isolation from ground; which is necessary in order to avoid disturbing the telecom station. The voltage supply to the ECII™ Flex should be 5 VDC and must not exceed 7 VDC. If no existing emergency power supply is available a separate emergency power source with a built-in battery can be used. Contact your local distributor for more information.

1. Connect a two-wire cable to the existing suspension cable wire for emergency lighting.

Measure to verify the correct voltage between the pins.

2. Connect the cable to the DC converter input.
3. Connect the DC converter to the lift phone outlet marked ”DC”.
4. Connect the DC converter on the outside of the lift and fasten the cable with cable ties or cable clips.

5.6 *Connection to loop amplifier*

To enable passengers with impaired hearing to communicate with the alarm centre a loop amplifier can be connected to the ECII™ Flex. Contact your local distributor for information about approved loop amplifiers that can be used with ECII™ Flex.

Connect the output marked “LOOP AMP” to the loop amplifier. The loop amplifier must work during power failure. Connect it to a power supply that is known to work during power failure.

5.7 *Connection of external pictogram*

It is possible to connect external lamps to indicate alarm status on the lift phone according to EN81:70 using the system component Pictogram Driver. It consists of a DC-converter and drive circuits for external lamps. It is connected to the output marked “DC”, to 12V emergency power and to the external lamps. Contact your distributor for more information.

5.8 *Connection to Intercom (art. 102153-01)*

For communication between the machine room and the ECII™ Flex use the ECII Intercom Unit (art. 102153-01). Mount the Intercom Unit in the machine room and connect the power and telephone line. Connect the ECII™ Flex in the lift car to the LIFT CAR output on the Intercom Unit. Please view the Intercom installation instruction for more information.

5.9 *Connection to additional Alarm buttons ALBU (art. 102142 and 252142)*

For additional alarm buttons on top and below the lift car use the Technician alarm button (art. 102142). Mount the ALBU on an appropriate location and connect it to the “ALARM 2” input on the ECII™ Flex. If using two Alarm Buttons they need to be connected in series; the Alarm Buttons are always Normally Closed.

To activate the “ALARM 2” input for the Alarm Button, program:

(P)(*)(0)(2)(1)(*)(1)(*)(0)(P)

5.10 *Connection to Speaker Unit (art. 142230)*

For additional microphone and speaker on top and below the lift car use the FältCom Flex Speaker Unit (art. 142230). Mount the Speaker Unit on an appropriate location and connect it to the ECII™ Flex AUX input using the Cat5 cable, use the IN connector on the Speaker Unit. Please note that the cable must be ordered separately depending on the required length of the cable. The alarm input on the ECII™ Flex is activate by default.

If using two Speaker Units; connect the second Cat5 cable from the OUT connector of Speaker Unit 1 to the IN connector on Speaker Unit 2.

To speak to the Speaker Unit first call in to the ECII™ Flex and establish a duplex conversation. Then press key ‘3’ to activate the sound in the Speaker Unit, press ‘3’ again to switch the sound back to the ECII™ Flex.

6 Programming

Programming of alarm numbers, alarm codes and various functions can be affected by using the keypad on the reverse of the ECII™ Flex, by calling the unit using a standard telephone or by using suitable Windows-based software. This section describes programming using the keypad and standard telephone. All programmed settings are stored in memory even if the ECII™ Flex is disconnected from the telephone line.

The keys on the keyboard have the following functions:

- **Programming** – Starts and ends all programming sequences.
- **Sequence receiver –** Used when programming more than 2 alarm receivers, receivers 3-6.
- **Alarm receiver 1 –** Phone number to alarm receiver 1.
- **Alarm receiver 2 –** Phone number to alarm receiver 2.
- **Alarm code 1 –** Used for alarm receiver 1, 3, 4, 5 and 6.
- **Alarm code 2 –** Used for alarm receiver 2.

The other keys have the same function as on a standard telephone.

6.1 *Configuration settings*

The ECII™ Flex can be programmed only after it has been set to programming mode. The telephone line must be supplied with current for the keys to be activated. Each time the keys are pressed in programming mode a short tone is heard and after each programming sequence there is a 4-tone for successful and a low 1-tone for unsuccessful programming.

In order for the ECII™ Flex to be programmed it has to be:

1) **Connected to the telephone line (analogue line, not ISDN)**
2) **Connected to the alarm button (Normally Closed or Normally Open), and**
3) **Set the device in programming mode.**

Programming can be initiated approximately 20 sec. after the ECII™ Flex has been connected to the telephone line. Upon completion of each programming sequence a 4-tone confirms that the ECII™ Flex has accepted the programming. If no button is pushed during a time

lapse of 30 sec. programming mode is automatically deactivated.

Important! The telephone number of Alarm Receiver 1 **must** be programmed to make an alarm. Alarm Code 1 is default '1' but **must** be programmed if the alarm is sent to an alarm central.

6.2 *Activation of programming mode*

6.2.1 First time used if unit is powerless

Remove the 8-pol connector and fasten the alarm button cords and telephone line cords. Press down (P) and fasten the screw connector. The ECII™ Flex will automatically go into programming mode. Once programming mode is entered this is confirmed by a tone in the loudspeaker. This can also be used if the ECII™ Flex in operation; remove the connector and wait 10 seconds for the unit to lose all power. Press down (P) and fasten the screw connector again.

6.2.2 Reprogramming ECII™ Flex

Press (P) and the alarm button simultaneously. Press for the same time as the selected time for the alarm button, the default setting is 5 seconds. Once programming mode is entered this is confirmed by a tone in the loudspeaker.

6.2.3 Call out from the ECII™ Flex

Once entered programming mode there is an option to call out a normal phone call from the ECII™ Flex using the key pad. When the dial tone is heard; enter the phone number to call out to a phone or press (P) to start programming the unit.

6.2.4 Reprogramming from phone

Call the telephone number to which the ECII™ Flex is connected and wait for the device to answer. The ECII™ Flex will first answer with a modem tone and then switch to a 3-tone message; please view section *Calls to a lift phone* for more information. Press #<ID>, default is 1. Wait for the 3-tone message, then program the PIN CODE. Default code is 1111.

From phone: # < PIN CODE> #

6.2.5 Indication and exit

The yellow and green LEDs will flash alternately when the ECII™ Flex is in programming mode. Programming mode is deactivated automatically after 30 seconds if no key is pressed. Note that some exchanges (mainly ISDN) sometimes disconnect the lift phone after a shorter time. All programming must then be done at a different location. Normal alarms are not affected by this.

You can also leave programming mode manually by pressing:

From keypad: (P) (#) (P)

From phone: ✳ 000 #

6.3 *Reset to factory settings*

This function will reset the ECII™ Flex to its default settings; clearing all programmed receivers, codes and settings; all but Alarm Code 1 which is default set to '1'.

Note: Reset to default setting will not erase speech messages. See section about speech messages for information on how to erase speech messages.

From keypad: (P) (✱) (9) (9) (0) (P)

From phone: ✳ 990 #

6.4 *Clear all active alarms*

This function will clear all active alarms on the ECII™ Flex. It will not remove receivers or codes, but it will make the ECII™ Flex stop calling out an alarm, without an acknowledgment of that alarm. Any new alarm input made after this will be handled normally.

From keypad: (P) (*) (9) (9) (2) (P)

From phone: ✳ 992 #

6.5 *Change of PIN code*

For entering programming mode remotely from a telephone a PIN code is needed. This is default "1111", but can be changed by the following:

From keypad: (P) (*) (9) (0) (0) (*) < old PIN> (*) < new PIN > (*) < new PIN> (P)

From phone: ✳ 900 ✳ < old PIN > ✳ < new PIN > ✳ < new PIN > #

6.6 *Alarm receivers and alarm codes*

Six different alarm receivers can be programmed. Alarm receivers 1 and 2 have separate alarm codes and receivers 3-6 use the alarm code for receiver 1. If alarm receiver 2 is programmed, but not alarm code 2; receiver 2 will use alarm code 1 when dialling.

If the alarm receiver is an alarm centre the centre will provide an alarm code. Program the alarm code to the correct alarm receiver number. If the alarm receiver is a standard telephone or a mobile choose your own alarm code. There must always be an alarm code programmed in order for the ECII™ Flex to call the receiver.

Note: Alarm Code 1 is default set to '1'.

1. If required, reset to factory settings:
   From keypad: (P)(*)(9)(9)(0)(P)
   From phone: ✳ 990 #
2. Enter phone number for Alarm Receiver 1:
   From keypad: (P)(Ph1) < Telephone number (max 20 digits) > (P)
   From phone: ✳ 001 ✳ < Telephone number (max 20 digits) > #
3. Enter Alarm Code for Receiver 1:
   From keypad: (P)(CODE 1) < Alarm Code 1 (max 10 digits) > (P)
   From phone: ✳ 091 ✳ < Alarm Code 1 (max 10 digits) > #
4. Enter phone number for Alarm Receiver 2:
   From keypad: (P)(Ph2) < Telephone number (max 20 digits) > (P)
   From phone: ✳ 002 ✳ < Telephone number (max 20 digits) > #
5. Enter Alarm Code for Receiver 2:
   From keypad: (P)(CODE 2) < Alarm code 2 (max 10 digits) > (P)
   From phone: ✳ 092 ✳ < Alarm Code 2 (max 10 digits) > #

For alarm receivers 3 to 6, use the keys:

From keypad: (S)(3)(S) (S)(4)(S) (S)(5)(S) (S)(6)(S) instead of (Ph2) under item 4 above.

From phone: ✳ < 003- 006 > ✳ < telephone number > #

Note: Do not forget to test the setting by sending a test receiver alarm.

If a telephone number is missing, an error tone will be heard in the loudspeaker when an

alarm is activated and the LED's on the front will flash alternately three times.

6.6.1 Dedicated receiver for Input 2 and Input 3

The alarm inputs 2 and 3 can be configured to have a dedicated receiver.

If the input 2 or 3 is programmed as an emergency alarm the ECII Flex will call the first attempt to INP2 or INP3 and the second attempt to the primary alarm receiver (AR1) then AR2 and so on.

INP2 (INP3)
AR1
AR2
S3 – S6
INP2 (INP3)
AR1
AR2
…

If the input 2 or 3 is programmed as a technical alarm the ECII Flex will make all ten attempts to the INP2 or 3 receiver. Information how to program the input as a technical alarm in section 6.7 below.

Enter phone number for Input 2:
From keypad: (P) < Telephone number (max 20 digits) > (P)
From phone: ✳ 0 ✳ < Telephone number (max 20 digits) > #

Enter phone number for Input 3:
From keypad: (P) < Telephone number (max 20 digits) > (P)
From phone: ✳ 0 ✳ < Telephone number (max 20 digits) > #

6.6.2 Prefix in a PABX switch board

If the ECII™ Flex is connected to a PABX that requires a prefix to get an external extension; program a star,(✱), after the prefix. E.g. if the prefix is 0 then program:

From keypad: (P)(1)(0)(✱) < Telephone number > (P)

From phone: ✳ 001 ✳ 0 ✳ < Telephone number > #

Each (✱) will give a 2 second pause; for longer pause use several (✱).

6.6.3 Star or hash in the phone number

If the Alarm receiver number contains a (✱) or a (#) press the (S) key before the star or hash.

From keypad: (P)(1)(0)(✱) < (S)(✱)(0) > (P) will give *0

From phone: Not available

6.7 *Alarm input setting*

All three alarm inputs of the ECII™ Flex can be configured. Alarm input 1 is designed for the alarm button in the car and can be configured to normally open or normally closed. Alarm input 2 and 3 (serial interface labelled "AUX") can be configured for normally open/closed push button and also if the alarm shall be defined as an emergency alarm, technical alarm or if the input signal shall be defined as a filtering signal for alarm input 1.

Examples of technical alarms are sum alarms from the lift controller or sensors from the lift car doors and more.

Note: If the alarm input is connected to the lift controller or other external devices the connection must be separated using a relay connection.

Setting of alarm input 1

By default the alarm input 1 is auto-detecting. When the ECII™ Flex is powered up or when setting default settings the unit will automatically set the alarm input 1 to the same function as the installed alarm button. The auto-detect setting can be overridden by programming N/O or N/C forcing the ECII™ Flex to use this setting.

If the ECII™ Flex version with integrated alarm button is used it is already connected to the lift phone alarm input. If the alarm button has normally open function the ECII™ Flex must be programmed accordingly:

Set normally open alarm button:

From keypad: (P)(*)(0)(2)(0)(P)

From phone: ∗ 020 #

Reset to normally closed alarm button:

From keypad: (P)(#)(0)(2)(0)(P)

From phone: # 020 #

Note: If alarm input 1 is filtered there is a 30 second override; meaning if the alarm button is pushed more than 30 seconds an emergency alarm will be sent even though the filter signal is active. This can also be used for accessing programming mode when using filtering.

Setting of alarm input 2

This input is of open/closed character and can be used for a filtering signal, technical alarm or a normal emergency alarm. It is configured as follows:

X is either
0 = Normally Open
1 = Normally Closed

Y is either
0 = Emergency alarm
1 = Technical alarm
2 = Filtering signal
3 = Use external microphone on input 2 trigger

Alarm input 2 is deactivated by default, function is activated by:

From keypad: (P)(*)(0)(2)(1)(*) < X > (*) < Y > (P)

From phone: ∗ 021 ∗ < X > ∗ < Y > #

Function is deactivated with:

From keypad: (P)(#)(0)(2)(1)(P)

From phone: # 021 #

Example: Program N/O and emergency alarm: (P)(*)(0)(2)(1)(*)(0)(*)(0)(P)

Program N/C and emergency alarm: (P)(*)(0)(2)(1)(*)(1)(*)(0)(P)

Program N/O and technical alarm: (P)(*)(0)(2)(1)(*)(0)(*)(1)(P)

Example: When alarm input 2 is configured as a filtering signal it will affect the functionality of

alarm input 1 as follows: If alarm input 2 is configured as X = 0 => N/O and Y = 2 => Filtering signal it will not be possible to initiate an alarm from alarm input 1 as long as an open signal is obtained in alarm input 2. The push button in alarm input 1 is filtered. When the signal in alarm input 2 changes to closed the alarm input 1 will be activated and alarm calls are possible. Please note that there is a 30 second override on the alarm input even though it is filtered.

Setting of alarm input 3 (AUX)

This input is of open/closed character and can be used for a filtering signal, technical alarm or an emergency alarm. It is configured as follows:

X is either 0 = Normally Open
1 = Normally Closed

Y is either 0 = Emergency alarm
1 = Technical alarm
2 = Filtering signal

Alarm input 3 is activated as N/O emergency alarm by default, and can be changed by:

From keypad: P ✱ 0 2 2 ✱ < X > ✱ < Y > P

From phone: ✱ 022 ✱ < X > ✱ < Y > #

Function is deactivated with:

From keypad: P # 0 2 2 P

From phone: # 022 #

Please view document Flex I/O description for information on what pins to use.

6.8 *Test of alarm reception*

After a finished installation FältCom highly recommends testing the programmed alarm receivers. When these sequences are programmed the ECII™ Flex calls the alarm receiver after leaving programming mode. Several test of alarm receiver can be programmed and the ECII™ Flex will call the receivers in the below priority order.

Testing Alarm Receiver 1 should always be performed by press the alarm button in the lift car to also verify the function of the alarm button.

Test of Alarm Receiver 1	From keypad:	P AR_1 # P
	From phone:	✱ 001 #
Test of Alarm Receiver 2	From keypad:	P AR_2 # P
	From phone:	✱ 002 #
Test of Sequence Receivers (alarm receiver) 3-6	From keypad:	P S < 3 - 6 > S # P
	From phone:	✱ 00 < 3–6 > #

Priority order for test of receiver

When setting a test of alarm receiver the test will be queued internally in the ECII™ Flex. When leaving programming mode the ECII™ Flex will start the test of alarm receivers and call in the following priority order:

1. Alarm Receiver 1
2. Alarm Receiver 2
3. Sequence Receiver 3
4. Sequence Receiver 4
5. Sequence Receiver 5
6. Sequence Receiver 6
7. Test alarm/Routine call receiver
8. Technical alarm receiver
9. Information alarm receiver

6.9 *Change of time delay for alarm button*

The delay time on the alarm button can be set to between 1 and 30 seconds. The default time is 5 seconds.

From keypad: (P)(*)(0)(5)(3)(*) < 1-30 > (P)

From phone: ✳ 053 ✳ < 1–30 > #

Note: The delay programmed is the time until the alarm is activated by the ECII™ Flex. It will take an additional two seconds before the alarm is called out because of the start-up time and latency in the PSTN.

6.10 *Connections to telephone line with automatic dial/ connection.*

If the ECII™ Flex is connected to a telephone line with automatic dial or automatic connection; where the telephone exchange directs the call without the user entering any keys, a pause must be added to prevent the ECII™ Flex from calling out. One (*) – symbol represents a pause of two seconds. There is no need to program any telephone number since the telephone exchange takes care of that.

From keypad: (P)(1)(*)(P)

From phone: ✳ 001 ✳ ✳ #

6.11 *Automatic test alarm/routine call*

This function calls a test alarm/routine call receiver to verify the connection between the ECII™ Flex and the alarm receiver. Automatic test alarm/routine call shall only be programmed if the ECII™ Flex is connected to an alarm central, the alarm central can verify that the incoming test alarms/routine calls are correct. A test alarm/routine call is silent; no tones are heard in the lift.

When the test alarm/routine call function is activated the first test alarm/routine call is sent 5 minutes after exiting programming mode and the following test alarm/routine call is sent 10 hours after the first. The third and following test alarm/routine call are sent every N x 24 hours where N is the test alarm/routine call interval in days. Note that the automatic test counter is reset every time an automatic test related parameter is changed and when the power is disconnected from the ECII™ Flex. If the ECII™ Flex has been out of power and the power returns it will send the next test alarm/routine call after 10 hours.

If a test alarm/routine call fails the next attempt is made after 10 minutes. In total 10 attempts are made. If a test alarm/routine call is received for instance in the third attempt the next test alarm/routine call will be sent N x 24 hours after the last successful attempt. This means that the ECII™ Flex automatically distributes the test alarms/routine calls to a time when the telephone line of the alarm receiver is normally available.

It is also possible to make the ECII™ Flex call out an additional test alarm/routine call after each main alarm. To do this, use alternative 1b instead of 1a.

Activation of test alarm/routine call

1 a. Select the required test interval: 1 to 30 days. (Use a number between 1 and 30.)

From keypad: (P)(✱)(0)(8)(0)(✱) <Days (1 – 30)> (P)

From phone: ✱ 080 ✱ < 1 – 30 > #

If the test alarm/routine call should go to the same receiver as AR1 and use the same code; no more programming is needed. If it will go to an individual number, continue to paragraph 2.

To disable test alarms/routine calls (leaves alarm receiver and code intact, but no test alarms/routine calls will be made until a new interval is programmed):

1 a. From keypad: (P)(#)(0)(8)(0)(P)

From phone: # 080 #

Activation of test alarm/routine call after main alarm

1 b. Select the required test interval: 1 to 30 days. (Use a number between 1 and 30.)

From keypad: (P)(✱)(0)(8)(2)(✱) <Days (1 – 30)> (P)

From phone: ✱ 082 ✱ < 1 – 30 > #

If the test alarm/routine call should go to the same receiver as AR1 and use the same code; no more programming is needed. If it will go to an individual number, continue to paragraph 2.

Disable:

1 b. From keypad: (P)(#)(0)(8)(2)(P)

From phone: # 082 #

Change number of call attempts

The number of call attempts are default 10 times, this can be changed to between 1 and 20 attempts.

From keypad: (P)(✱)(0)(8)(5)(✱) < 1 – 20 > (P)

From phone: ✱ 085 ✱ < 1 – 20 > #

Reset to 10 call attempts:

From keypad: (P)(#)(0)(8)(5)(0)(P)

From phone: # 085 #

Number for separate test alarm/routine call receiver

2. Enter the telephone number of the test alarm/routine call receiver:

From keypad: (P)(✱)(3)(0)(0)(✱) <Telephone number (max 20 digits)> (P)

From phone: ✱ 300 ✱ < telephone number (max 20 digits) > #

3. Enter alarm code for the test alarm/routine call:

From keypad: (P)(✱)(3)(0)(1)(✱) <Code (max 10 digits)> (P)

From phone: ✳ 301 ✳ < Code (max 10 digits) > #

4. To verify the test alarm/routine call function:

From keypad: (P)(✱)(3)(0)(0)(P)

From phone: ✳ 300 #

Please view section 6.9 for priority order on test of receiver.

To delete the test alarm/routine call receiver, test alarm/routine call interval and test alarm/routine call code:

From keypad: (P)(#)(3)(0)(0)(P)

From phone: # 300 #

Secondary test alarm/routine call receiver

From keypad: (P)(✱)(3)(0)(2)(✱) <Telephone number (max 20 digits)> (P)

From phone: ✳ 302 ✳ < telephone number (max 20 digits) > #

From keypad: (P)(✱)(3)(0)(3)(✱) <Code (max 10 digits)> (P)

From phone: ✳ 303 ✳ < Code (max 10 digits) > #

To verify the test alarm/routine call function:

From keypad: (P)(✱)(3)(0)(2)(P)

From phone: ✳ 302 #

To delete the test alarm/routine call receiver, test alarm/routine call interval and test alarm/routine call code:

From keypad: (P)(#)(3)(0)(2)(P)

From phone: # 302 #

6.12 *Incoming calls*

It is possible to call the ECII™ Flex and talk to the trapped person. If there is only one ECII™ Flex on the line the unit can be set to answer immediately without selecting unit number; please see section Single unit. If there are multiple units sharing the line each unit require a unique number; number 1 is the default setting but can be changed, the ECII™ Flex can also be blocked from receiving speech calls:

6.12.1 Multiple units on the line

1. For blocking the ECII™ Flex from incoming speech calls:

From keypad: (P)(#)(1)(4)(0)(P)

From phone: # 140 #

Note: It is always possible to call the ECII™ Flex and program it even though it is blocked for incoming speech calls. To prevent the ECII™ Flex from answering a call change the number of ringing signals before the unit answers to 30, see section *6.14* below.

2. For activation and allowance of incoming calls:

From keypad: (P)(*)(1)(4)(0)(*)(1)(P)

From phone: ✳ 140 ✳ < 1 – 9 > #

With two or more ECII™ Flex connected on the same telephone line, one of them is programmed as the master with number '1'. The others are coded with their individual number (2-9) by replacing the digit (1) with the corresponding digit. Example:

From keypad: (P)(*)(1)(4)(0)(*)(2)(P) for lift phone 2 in the chain.

From phone: ✳ 140 ✳ 2 #

It's important that there is always one unit with number '1'. The unit with number '1' will pick-up the phone and answer the incoming call.

For best sound quality all ECII™ Flex should be connected in parallel. The last ECII™ Flex in the series is given number '1'.

There can be nine ECII™ Flex connected on the same line. But the telephone exchange can have a limitation on how many devices are supported on one line; contact your local operator for information on how many devices they support on one line.

See also section *Calls to a lift phone* for more information on how to call in to the ECII™ Flex.

6.12.2 Single unit on the line

If the ECII™ Flex does not share the line with any other equipment the unit can be set to answer the call without requiring the selection of the number on the line; i.e. #1 or #2… This function will See section *Calls to a lift phone* for further information on call procedure. To activate this function:

From keypad: (P)(*)(1)(4)(2)(P)

From phone: ✳ 142 #

To go back to default settings program:

From keypad: (P)(*)(1)(4)(0)(*)(1)(P)

From phone: ✳ 140 ✳ < 1 > #

6.12.3 Active alarm mode

This alarm mode opens the ECII™ Flex for incoming calls for 6 hours after an alarm call has been triggered. After this time the lift phone will be closed for incoming calls until a new alarm is triggered.

To activate the Active alarm mode the following conditions must be fulfilled:

- Active alarm mode function is programmed
- A lift alarm has been called out

The active alarm mode is closed by pressing 5 on the receiving telephone or from the phone that has called to the ECII™ Flex.

Alarm mode function is activated with:

From keypad: (P)(*)(1)(4)(1)(P)

From phone: ✳ 141 #

Alarm mode function is deactivated with:

From keypad: (P)(#)(1)(4)(1)(P)

From phone: # 141 #

The active alarm mode is automatically disconnected after 6 hours, but will be extended with 6 hours if a new speech connecting alarm is made or if a call is made to the ECII™ Flex during this interval.

6.13 *Answering time for incoming calls*

The number of ringing signals before the ECII™ Flex answers incoming calls can be changed. Default is 1 ringing signal and can be changed up to 30. This is changed by:

From keypad: P * 0 5 0 * < 1-30 > P

From phone: ✳ 050 ✳ < 1-30 >

Note: Older FältCom ECII™ models have an answer time of '4' ringing signals before answering. If a ECII™ Flex is sharing the line with older lift phone the ringing signal answer time must be changed to '4' on the ECII™ Flex as well.

6.14 *Technical & Battery alarm receiver*

It is possible to send technical alarms from alarm input 2 and 3 and also battery alarms to a dedicated alarm receiver. This is activated by:

From keypad: P * 3 1 0 * <Telephone number (max 20 digits)> P

From phone: ✳ 310 ✳ < telephone number > #

Enter Alarm code (default Alarm Code 1):

From keypad: P * 3 1 1 * <Alarm code (max 10 digits)> P

From phone: ✳ 311 ✳ < Alarm code (max 10 digits) > #

Deactivate function:

From keypad: P # 3 1 0 P

From phone: # 310 #

Test of the alarm receiver:

From keypad: P * 3 1 0 P

From phone: ✳ 310 #

After exiting the programming mode, the ECII™ Flex will make a test call to the technical alarm receiver.

6.14.1 Battery alarm from Power Supply (art. 132001)

Battery back-up power is available using the Power Supply unit (art. 132001). The Power Supply will generate a battery alarm when the battery is bad. The ECII™ Flex will send the battery alarm to the receiver using alarm type 17d (CPC protocol specific). When the ECII™ Flex sends a battery alarm; change the battery in the Power Supply and push the "Reset" button. The ECII™ Flex will then send a battery reset alarm using alarm type 12d (CPC protocol specific). Battery alarm is default deactivated in the ECII™ Flex.

Activate battery and battery reset alarms from Power Supply:

From keypad: P * 3 3 0 P

From phone: ✳ 330 #

To return to default setting, disabling battery and battery reset alarms:

From keypad: P # 3 3 0 P

From phone: # 330 #

6.14.2 Battery alarm from a GSM Gateway (art. 202236)

Similar to 6.15.1 above the GSM Gateway (art. 202236) has battery back-up power in case of power failure in the building. When a battery alarm is generated in the GSM Gateway, it will signal this to the ECII™ Flex to detect. Please view the GSM Gateway manual for specifications. When the battery is replaced the ECII™ Flex will send a battery reset alarm after the new battery has been tested, the same alarm types will be used for battery and battery reset alarms as above. Battery alarm is default deactivated in the ECII™ Flex.

Activate battery and battery reset alarms from GSM Gateway:

From keypad: P * 3 4 0 P

From phone: * 340 #

To return to default setting, disabling battery and battery reset alarms from GSM Gateway:

From keypad: P # 3 4 0 P

From phone: # 340 #

6.15 *Simplified acknowledgement – 320*

Using this function it is possible to simplify the alarm reception procedure when using a standard telephone as an alarm receiver. When the function is active, all numeric buttons (0-9) on the phone will acknowledge the alarm and the * button disconnects the alarm call. Each time any of the buttons 0-9 is pressed on the telephone the disconnect time-out is reset to 180 seconds. Only duplex mode is available.

The function is activated with:

From keypad: P * 3 2 0 P

From phone: * 320 #

Return to default acknowledgment:

From keypad: P # 3 2 0 P

From phone: # 320 #

Note: If a speech message is used; press any key to stop the message.

6.16 *Disconnection of acknowledgement – 321*

It is possible to completely disconnect the acknowledgement function. This means that the ECII™ Flex will make **only one attempt** to reach the Alarm Receiver 1. **No further calls will be made, regardless of result, until the alarm button is pushed again.** Each time any of the buttons 0-9 is pressed on the telephone the disconnect time-out is reset to 180 seconds. Only duplex mode is available.

To disconnect the call simply hang up or press the * button to disconnect the alarm call. If the call is terminated by hanging up the phone the ECII™ Flex may stay connected on the line for up to 3 minutes from the start of the call. E.g. if the conversation lasted for 1 minute the ECII™ Flex may stay connected for an additional 2 minutes.

The function is activated with:

From keypad: P * 3 2 1 P

From phone: ✳ 321 #

Return to default acknowledgment:

From keypad: (P)(#)(3)(2)(1)(P)

From phone: # 321 #

Note: If a speech message is used; press any key to stop the message.

6.17 *Acknowledge on end – 323*

When the ECII™ Flex calls out an alarm duplex conversation is automatically connected. But if there is no answer and no tone (0-9) received the ECII™ Flex will disconnect and call next alarm receiver. If Alarm receiver 1 is busy, does not answer or an answering machine answers the call the ECII™ Flex will call Alarm Receiver 2 and so on. Each time any of the tones (0-9) is pressed by the receiver the disconnect time-out is reset to 180 seconds. Only duplex mode is available.

In order to acknowledge that the call has been received by an authorized person the receiver must either press a tone during the conversation (0-9) or use the ✳ button to disconnect the alarm call. The ✳ can be changed to any tone for disconnecting the call, use this if there are other brands of emergency phones that require a different disconnect command.

The function is activated with:

From keypad: (P)(✱)(3)(2)(3)(P)

From phone: ✳ 323 #

Return to default acknowledgment:

From keypad: (P)(#)(3)(2)(3)(P)

From phone: # 323 #

Changing the disconnect command tone is made by:

From keypad: (P)(✱)(3)(2)(3)(✱) <0-9, ✳, # > (P)

From phone: ✳ 323 ✳ < 0-9, ✳, # > #

Note: If a speech message is used; press any key to stop the message.

6.18 *Detection of busy alarm receiver*

Detection of busy tone is default activated. The ECII™ Flex will detect busy tone and pause between 100 – 800 ms. Should the tone and pause length be different then the default setting this can be adjusted by programming.

From keypad: (P)(✱)(7)(1)(0)(✱) <XXXX> (✱) <YYYY> (P)

where XXXX is tone and YYYY is pause. Steps in milliseconds 800-2500.

From phone: ✳ 710 ✳ < XXXX > ✳ < YYYY > #

where XXXX is tone and YYYY is pause. Steps in milliseconds 800-2500.

Activating the function and returning to default settings is made with:

From keypad: (P)(✱)(7)(1)(0)(P)

From phone: ✳ 710 #

The function is disconnected and return to default setting is made with:

From keypad: (P)(#)(7)(1)(0)(P)

From phone: # 710 #

6.19 *LED flashing sequence*

When the alarm button has been activated and an alarm is registered by the ECII™ Flex, the left LED on the ECII™ Flex is lit up in yellow. When the alarm is acknowledged the right LED is lit up in green and the yellow LED is turned off. This flashing sequence, together with the front pictograms complies with EN81:70.

There is an option to change to a flashing sequence which indicates a registered alarm with flashing green light and acknowledged alarm with fixed green light, similar to earlier FältCom ECII™ phones. This is done using the following programming sequence:

From keypad: (P)(#)(5)(1)(0)(P)

From phone: # 510 #

Return to the yellow/green flashing sequence by programming:

From keypad: (P)(*)(5)(1)(0)(P)

From phone: ✳ 510 #

6.20 *Programmable alarm types*

When sending an alarm to an alarm receiver using the CPC protocol the ECII™ Flex will be identified by the alarm code and alarm type. The alarm code specifies the location of the device and the alarm type specifies the type of alarm that is being sent. The alarms can be of different types but they all have the same alarm code. For the ECII™ Flex the default alarm types are:

Alarm input	**Alarm type (decimal)**
Input 1	10
Input 2	10
Input 3	10
Test alarm/routine call	26
Battery alarm	17
Battery reset alarm	12
End-of-alarm (magnet)	28
Info alarm	89
Technical alarm	5

Programmable alarm type alarm input 1

The normal alarm type 10 (0Ah) for emergency alarms may be mapped to another alarm type where **XX** represents an alarm type between 00 and 99. The alarm type is changed with the sequence:

From keypad: (P)(*)(6)(0)(0)(*) <**XX**> (P)

From phone: ✳ 600 ✳ <xx> #

To reset the alarm type to the default value, enter:

From keypad: (P)(#)(6)(0)(0)(P)

From phone: # 600 #

Programmable alarm type alarm input 2

Same functionality as for alarm input 1. Changed by:

From keypad: (P)(*)(6)(0)(1)(*) <**XX**> (P)

From phone: ∗ 601 ∗ <xx> #

To reset the alarm type to the default value, enter:

From keypad: (P)(#)(6)(0)(1)(P)

From phone: # 601 #

Programmable alarm type alarm input 3

Same functionality as for alarm input 1. Changed by:

From keypad: (P)(*)(6)(0)(2)(*) <**XX**> (P)

From phone: ∗ 602 ∗ <xx> #

To reset the alarm type to the default value, enter:

From keypad: (P)(#)(6)(0)(2)(P)

From phone: # 602 #

Note that ECII™ Flex always assumes that the programmed alarm type is speech-connecting by default, see section *Alarm input setting* for setting technical silent alarms.

6.21 *Info Alarm – logging of alarms*

Info Alarm will send a silent alarm after an emergency alarm using the alarm type 89d (59h). This alarm can be used to access a log in an alarm receiver if the lift call has been sent to a regular telephone. The Info alarm will use the specified Info Alarm code or if not programmed it will use the Alarm Code 1, then add the alarm type of the alarm input, e.g.:

Lift alarm call to number 123 456 using alarm code 789 and alarm type 10. The Info alarm receiver is programmed to call 654 321 but no code. After the lift alarm the Info alarm will then call receiver 654 321 using alarm code 78910 and alarm type 89.

The Info Alarm is activated by programming:

From keypad: (P)(*)(8)(0)(0)(*) <Telephone number (max 20 digits)> (P)

From phone: ∗ 800 ∗ < Telephone number (max 20 digits) > #

Enter Alarm code:

From keypad: (P)(*)(8)(0)(1)(*) <Alarm code (max 10 digits)> (P)

From phone: ∗ 801 ∗ < Alarm code (max 10 digits) > #

For deactivation of function:

From keypad: (P)(#)(8)(0)(0)(P)

From phone: # 800 #

For test of the alarm receiver program:

From keypad: (P)(*)(8)(0)(0)(P)

From phone: ✳ 800 #

Note: If the main alarm was never acknowledged, no Info Alarm will be sent out. Also, this function will not dial out an Info Alarm following battery alarms nor test alarms/routine calls or end-of-alarm.

6.22 *End-of-alarm*

To ensure that a trapped passenger is actually released from the lift there is a function which sends an end-of-alarm call with a specific alarm type to the alarm receiver. Alarm type is default 28.

This alarm is activated by the rescue service by pressing a magnet to the front of the ECII™ Flex after having released the trapped person. See drawing below for location of the magnetic switch. This is default deactivated. For activation or changing then alarm type:

For activation of magnetic switch:

From keypad: (P)(*)(6)(2)(0)(P)

From phone: ✳ 620 #

From keypad: (P)(#)(6)(2)(0)(P)

From phone: # 620 #

For activation of magnetic switch and setting a different alarm type:

From keypad: (P)(*)(6)(2)(0)(*) < alarm type > (P)

From phone: ✳ 620 ✳ < alarm type > #

It is also possible to specify that the magnetic switch should only be active for 6 hours after an emergency alarm. This function is activated using:

From keypad: (P)(*)(6)(2)(1)(P)

From phone: ✳ 621 #

The 6 hour open magnetic switch will use the default alarm type specified for the magnetic switch function. To program another alarm type for the 6 hour open magnetic switch, first use:

From keypad: (P)(*)(6)(2)(0)(*) < alarm type > (P)

From phone: ✳ 620 ✳ < alarm type > #

Then activate the 6 hour open magnetic switch by programming:

From keypad: (P)(*)(6)(2)(1)(P)

From phone: ✳ 621 #

The 6 hour open magnetic switch can be deactivated and alarm type reset, the magnetic switch will be turned off, use:

From keypad: (P)(#)(6)(2)(1)(P)

From phone: # 621 #

It is also possible to send an end-of-alarm using the keypad or a telephone. The call will be made after leaving programming mode. The alarm can be sent using:

From keypad: (P)(*)(6)(1)(0)(P)

From phone: ✳ 610 #

6.22.1 End-of-alarm receiver

End-of-alarms can be sent to a separate alarm receiver different from alarm receiver 1. If no specific alarm receiver is programmed for End-of-alarm the alarms are sent to Alarm receiver 1.

From keypad: (P)(*)(6)(4)(0)(*) <Telephone number (max 20 digits)> (P)

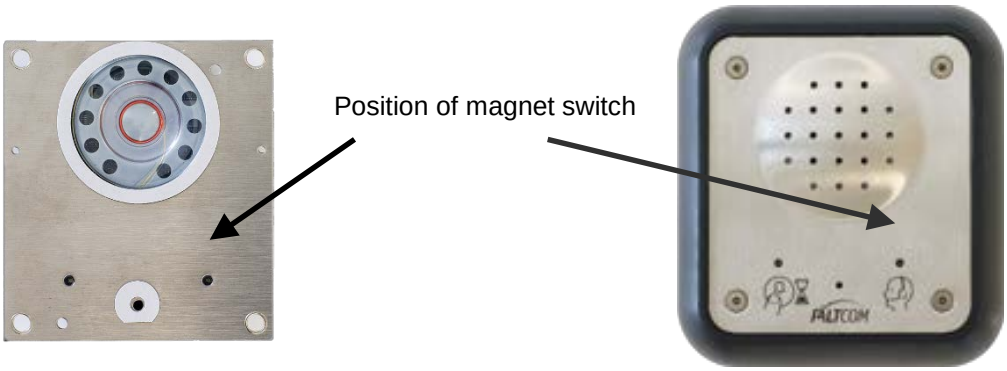
From phone: ✳ 640 <Telephone number (max 20 digits)> #

And to set a specific End-of-alarm code use

From keypad: (P)(*)(6)(4)(1)(*) <Code (max 10 digits)> (P)

From phone: ✳ 641 ✳ <Code (max 10 digits)> #

If no End-of-alarm code is specified the ECII™ Flex will use the Alarm code 1.



6.23 *Alarm protocol*

The CPC protocol is the default protocol used in ECII™ Flex. An alternative protocol P100 is also available. This is activated by programming:

From keypad: (P)(*)(0)(6)(0)(P)

From phone: ✳ 060 #

To return to the CPC protocol:

From keypad: (P)(*)(0)(6)(1)(P)

From phone: ✳ 061 #

6.23.1 Different protocols for different receivers

Each receiver can be configured to use a specific receiver, e.g. use CPC for the primary receiver and P100 for the secondary receiver.
To specify a P100 receiver:

From keypad: (P)(*)(0)(6)(0)(*) < Receiver > (P)

From phone: ✳ 060 ✳ < Receiver > #

To specify a CPC receiver:

From keypad: (P)(*)(0)(6)(1)(*) < Receiver > (P)

From phone: ✳ 061 ✳ < Receiver > #

Receiver:

1	Alarm Receiver 1
2	Alarm Receiver 2
3	Sequence Receiver 3
4	Sequence Receiver 4
5	Sequence Receiver 5
6	Sequence Receiver 6
7	Test alarm/Routine call receiver
8	Technical alarm receiver
9	Information alarm receiver

6.24 *Dial tone detection*

ECII™ Flex has a function which makes it possible to first wait for a dial tone before the call out sequence starts. In default mode the ECII™ Flex waits 3 seconds and then initiates the call. If dial tone detection is activated the ECII™ Flex will require a 425 Hz dial tone in order to initiate the call.

Dial tone detection is activated with:

From keypad: (P)(*)(0)(4)(0)(P)

From phone: ✳ 040 #

To deactivate the dial tone detection:

From keypad: (P)(#)(0)(4)(0)(P)

From phone: # 040 #

6.25 *Speech messages*

It is possible to record two different speech messages, one played in the loudspeaker of the ECII™ Flex to inform and calm the passengers in the lift and one played to the receiver to identify the originating location of the alarm call. Each message can be 16 seconds long.

Speech message 1; for the cabin

This message is activated and played one time in the lift when the alarm is activated.

Recording of message 1:

From keypad: (P)(*)(4)(1)(0)(*) < wait for tone; read message. Max 16 seconds > (P)

From phone: ✳ 410 ✳ < wait for tone; read message. Max 16 seconds > #

Listening to message 1:

From keypad: (P)(*)(4)(1)(0)(P)

From phone: ✳ 410 #

Deleting message 1:

From keypad: (P)(#)(4)(1)(0)(P)

From phone: # 410 #

Note: Resetting to default setting (P✳990P) will not clear the speech messages.

Speech message 2; for the alarm receiver

This message is played in the receiving telephone before the alarm call has been acknowledged by the alarm receiver. It is stopped by pressing any digit on the receiver telephone. For simplified and disconnected acknowledge the message 2 is only played once. The receiver can repeat the message 2 at any time during the call by pressing '1' on the telephone handset.

Recording of message 2:

From keypad: (P)(✱)(4)(2)(0)(✱) < wait for tone; read message. Max 16 seconds > (P)

From phone: ✳ 420 ✳ < wait for tone; read message. Max 16 seconds > #

Listening to message 2:

From keypad: (P)(✱)(4)(2)(0)(P)

From phone: ✳ 420 #

Deleting message 2:

From keypad: (P)(#)(4)(2)(0)(P)

From phone: # 420 #

Note: Resetting to default setting (P✳990P) will not clear the speech messages.

6.26 *Broken button detection*

If the alarm button is continuously closed or open the ECII™ Flex will allow 15 emergency alarms. The ECII™ Flex will then send a technical alarm (alarm code 5) and restrict the emergency alarms to once every 8 minutes. This function is default activated.

To deactivate the broken button detection:

From keypad: (P)(#)(3)(5)(0)(P)

From phone: # 350 #

The function is reactivated with:

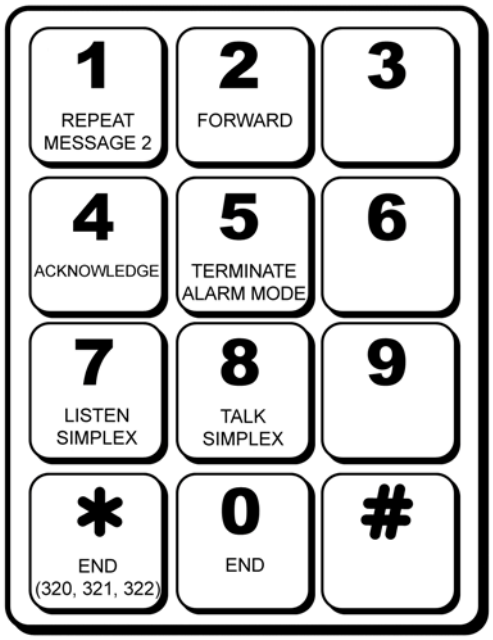
From keypad: (P)(✱)(3)(5)(0)(P)

From phone: ✳ 350 #

7 Alarm reception

All tone dialling telephones (units with the keys ✳ and #) can work as simple alarm receivers. The telephone keypad is used to control alarm reception and to acknowledge the alarm unless the need for acknowledgment has been deactivated.

The most important key to learn is 4, used to acknowledge the alarm and set up the call.



7.1 *Alarm call*

When answering an incoming alarm call, the ECII™ Flex will play message 2 if that has been programmed or play a 4-tone (”chirp”) for the receiver. The message or tone is played every 5 seconds until the alarm is acknowledged. If the alarm receiver has not answered within 60 seconds the ECII™ Flex will automatically disconnect and call the next alarm number. The ECII™ Flex waits 10 seconds before dialling the next alarm number.

7.2 *Acknowledging an alarm*

Acknowledge the alarm with **4, ACKNOWLEDGE**. A duplex voice communication call is then set up; as in a normal telephone call.

A call will be disconnected automatically three minutes after the last key pressing, i.e. three minutes after the call is acknowledged. With thirty seconds to disconnection, a warning tone will be heard. To prolong the call, press **4, ACKNOWLEDGE**.

If functions “Simplified acknowledge” (320) is used the alarm is acknowledged by pressing any digit on the telephone keypad. If “Disconnected acknowledge” (321 or 323) are used the alarm is acknowledged automatically upon connecting the call.

7.3 *Ending a call*

End the alarm call by pressing **0, END.** If the alarm is ended with time disconnection and the call is not acknowledged the ECII™ Flex will make a new alarm call to the next alarm receiver. Please note that this will only happen when alarms are sent to a standard telephone. When sending alarms to an automatic alarm centre no further calls will be made after the alarm has been acknowledged.

If functions “Simplified acknowledge” (320) or “Disconnected acknowledge” (321, 323) are used

the alarm is disconnected by pressing ∗**, END (320, 321, 323)**. No more calls will be made.

7.4 *Repeat Message 2*

If the receiver wants to hear the recorded message 2 once again press **1, REPEAT MESSAGE 2**. The message can be repeated at any time during the call.

7.5 *Forwarding a call*

If you want to forward the alarm to the next alarm receiver, press **2, FORWARD**. The alarm is then closed, and the ECII™ Flex will call the next programmed alarm receiver. Please note that the alarm call has to be acknowledged before forwarding the call.

7.6 *Termination of active alarm mode*

If the function active alarm mode is activated and the product is in active alarm mode, i.e. there has been an alarm and the ECII™ Flex is open for incoming calls, you can close the incoming calls window by pressing the key **5, TERMINATE ALARM MODE**. The call is automatically disconnected.

7.7 *Speech switching*

If the automatic speech switching is not satisfactory, you can change to manual speech switching **8, SIMPLEX TALK** and **7, SIMPLEX LISTEN**. Revert to automatic speech switching by pressing **4, ACKNOWLEDGE**.

7.8 *Calls to a lift phone*

7.8.1 Multiple units on the line

If answering function is activated, or if alarm mode function is programmed, and ECII™ Flex is in active alarm mode, it is possible make a call to the ECII™ Flex from a tone dialling phone or a mobile phone according to the following:

1. Dial the number to the lift phone.
2. After one ring signal the first ECII™ Flex answers and sends a modem (fax) tone. Wait for the modem tone to stop and listen for a 3-tone message.
3. Press # and number of the wanted lift phone (1-9). For instance #2 for ECII™ Flex 2 in the chain. Note that #1 must be pressed by the caller even if only one ECII™ Flex is mounted. The ECII™ Flex will reply with another 3-tone message indicating the correct device has answered the call.
4. Press 4 to activate voice connection.
5. Press 5 to terminate a possible active alarm mode. The call is then disconnected.
6. Press 7 to listen in simplex mode.
7. Press 8 to speak in simplex mode.
8. Press 3 to activate the speaker and microphone in the Speaker Unit (if connected).

   Press 3 again to go back to the ECII™ Flex speaker and microphone.
9. Press 0 or ∗ to disconnect the call.

7.8.2 Single unit on the line

If the function ∗142 has been programmed the ECII™ Flex will answer the call and go straight to conversation mode. The ECII™ Flex will behave differently depending on the acknowledgement settings:

For normal acknowledge (default setting) and ∗320 go through steps 4 – 8 above.

For acknowledgement functions ∗321 and ∗323 the ECII™ Flex will automatically go to duplex

conversation on incoming calls. End the call by hanging up or press ✳ on the receiver handset.

7.9 *Volume control*

Adjust the volume in the ECII™ Flex speaker by using a screw driver to turn the volume control. The control is located on one of the sides of the ECII™ Flex.

- To increase the volume; turn the control counter clockwise and
- To decrease the volume; turn the control clockwise.

The ECII™ Flex will set the volume automatically as the volume control is turned. The new volume will be used in all following calls.

Please note that previous versions of the ECII™ Flex have a different procedure for the volume control:

To change the volume during a call on older versions then SW 0.2.4:

- Turn the volume control
- Ask the receiver to press ‘4’ on the receiver handset
- The new volume is set in the ECII™ Flex

7.9.1 Remote volume control

The receiver is able to change the volume in the ECII™ Flex remotely during a call by pressing:

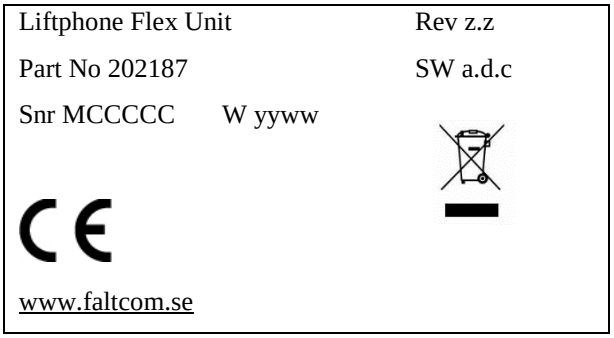
6-3 to increase the volume

6-9 to decrease the volume

The function requires that the alarm is acknowledged.

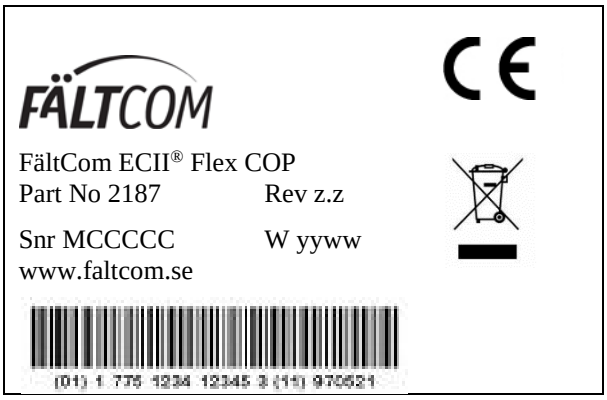
8 Product label

Following is a description of the ECII™ Flex product label.



The product label describes:
Part No 202187: Product part number (order number)
Snr MCCCCC: Serial number of the product.
Rev z.z: Hardware revision of the product.
W yyww: Production year and month.
SWa.b.c: Product Software version.

Label on the box.



The box label describes same information as above but has additionally the barcode:

EAN-128 indicating XXXXZZYYWWCCCCC

XXXX: Part number

ZZ: Hardware revision

YYMM: Production year and month

CCCCC: Serial number

9 Warranty

There is a 1-year warranty (12 months) from the date of delivery covering failure due to faults in materials or the manufacturing process.

Warranty does not include:

- Incorrect or careless usage
- Damage caused by thunderstorms or air pollution.
- Vandalism or intentional damage.
- Normal wear and tear.

Fält Communications AB reserves the right to determine if the product will be repaired or replaced. Warranty ceases to be valid if defects occur due to incorrect use, or other method of application, or context than specified in this manual.

ECII™ Flex should only be used in the context for which it is intended. All other forms of usage will be considered as being solely at the user's own risk. Only suitably qualified persons are permitted to install, program and start-up this product. Start-up is only allowed after the product has been properly installed. As a consequence Fält Communications AB declines all liability for possible defects, operational disturbance, accidents etc. caused by lack of knowledge or carelessness on the part of the user. The same principle is valid for all unauthorized changes made to the product.

Fält Communications AB reserves the right to make changes to the product for functional or commercial reasons. The company is not obliged to make immediate updates to reference manuals.

10 Updates

Visit our web site to access the latest updates regarding market information and technical documentation.

http://www.faltcom.se

11 Repair return procedure

Fält Communications AB only accepts returns which are accompanied by a completed Service Card, which can be found in the section *Service form.* This form can also be downloaded from our web site. If the product has been purchased from one of our distributors the buyer must first contact the distributor concerned for assistance.

All returns must be sent well packed with freight pre-paid to this address:

Fält Communications AB
c/o BL Elektronik AB, Service
Furuhedsvägen 29D
SE-952 31 KALIX, Sweden

Repaired products are sent back to customers as a regular post parcel with freight paid on the assumption that the product is covered by warranty. If the investigation shows that the returned product has no defects the customer is charged a service fee and freight. The customer can ask for a quotation for repair of product not covered by warranty.

11.1 *Service form*

Service/Return Form
Lift Phones

Used for all types of Emergency lift phones and system components.

When returning equipment, place this document well visible on the outer box. Before returning faulty equipment please check with your local support team for 1st line support.	**Service/Return address:** **Fält Communications AB** **c/o BL Elektronik AB** **Furuhedsvägen 1** **SE-952 31 KALIX, Sweden**

Your reference No.:

Requested action: ☐ Repair and return equipment to the delivery address below
☐ Return equipment to Fält Communications

Your delivery address	**Your invoice address**
Company name	☐ Same as the delivery address
Address	Other:
Zip code/City	
Country	
Contact person	
E-mail	
Telephone/Mobile	

Product information	***The lift phone was connected to/via:***
No. of units:	☐ Intercom
Article No.	☐ GSM Gateway
Serial No.	☐ Filter Unit
Other components	☐ Loop amplifier
	☐ DC/DC-converter
☐ I have attatched a separate document listing the number of units, serial numbers and fault description.	☐ Emergency power supply
	☐ A telephone switch
	☐ -----

The problem was discovered:	***Fault description:***
☐ When mounting	☐ One way communication
☐ After an operation time of about weeks	☐ Lift phone cannot be programmed
The lift phone:	☐ Lift phone does not make an alarm call
☐ Was single mounted	☐ Disturbances during voice communication
☐ Shared telephone line with number of other lift phones	☐ Lift phone make alarm calls all the time
	☐ Battery alarm
	☐ Package or transportation damages
	☐ -----

Miscellaneous information:

2009-04-17 v.2.1

Support telephone	Telefax	E-mail support	Web site
+46 (0)90 183927	+46 (0)90 183929	support.liftphones@faltcom.se	www.faltcom.se

12 Technical data

Supply voltage:	Telephone line
(Single mounted)	If line voltage is higher than 25 VDC no external power is needed. If line voltage is between 25 VDC and 20 VDC an external power supply is required.
Supply voltage:	4.5 VDC, 1500V isolation DC converter.
(2-9 units on the same line)	If several lift phones are connected to the same telephone line an external power supply is always required for each unit.
Current consumption:	At rest: 25-45 uA Nominal: 12-60 mA Ext. power supply: 4-16 mA
Indications:	Yellow and green LED during alarm Sound and light indication when programming
Test alarm/routine call:	1 time/day up to once every 30 days (selectable on/off)
Alarm receiver types:	Contact your local distributor for information about alarm centres that can handle the CPC or P100 protocols. All tone selection telephones, including mobile phones, can also be used as alarm receivers
Protocol:	CPC P100
Speech exchange:	Duplex or simplex
Signalling:	DTMF
Calling:	Tone selection
Incoming calls:	Automatic (selectable on/off)
Casing:	Stainless sheet steel 1.5 mm. Vandal proof.
Dimensions HxWxD:	100 x 90 x 19 mm (behind COP) 140 x 127 x 25 mm (with frame) 195 x 127 x 25 mm (with frame and alarm button)
Weight:	187 gram (behind COP) 235 gram (with frame) 310 gram (with frame and alarm button)

13 Contact information

Fält Communications AB
Vasagatan 23
SE-903 29 UMEÅ, Sweden

Support: + 46 (0)90 18 39 27
E-mail: support.liftphones@faltcom.se
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Fax: + 46 (0)90 18 39 29
Homepage: http://www.faltcom.se

Service address:
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SE-952 31 KALIX, Sweden