Service & Maintenance Manual

IR44CF-II

Version 2006

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1 Introduction

1.1 IR44CF II Interface Block Diagram

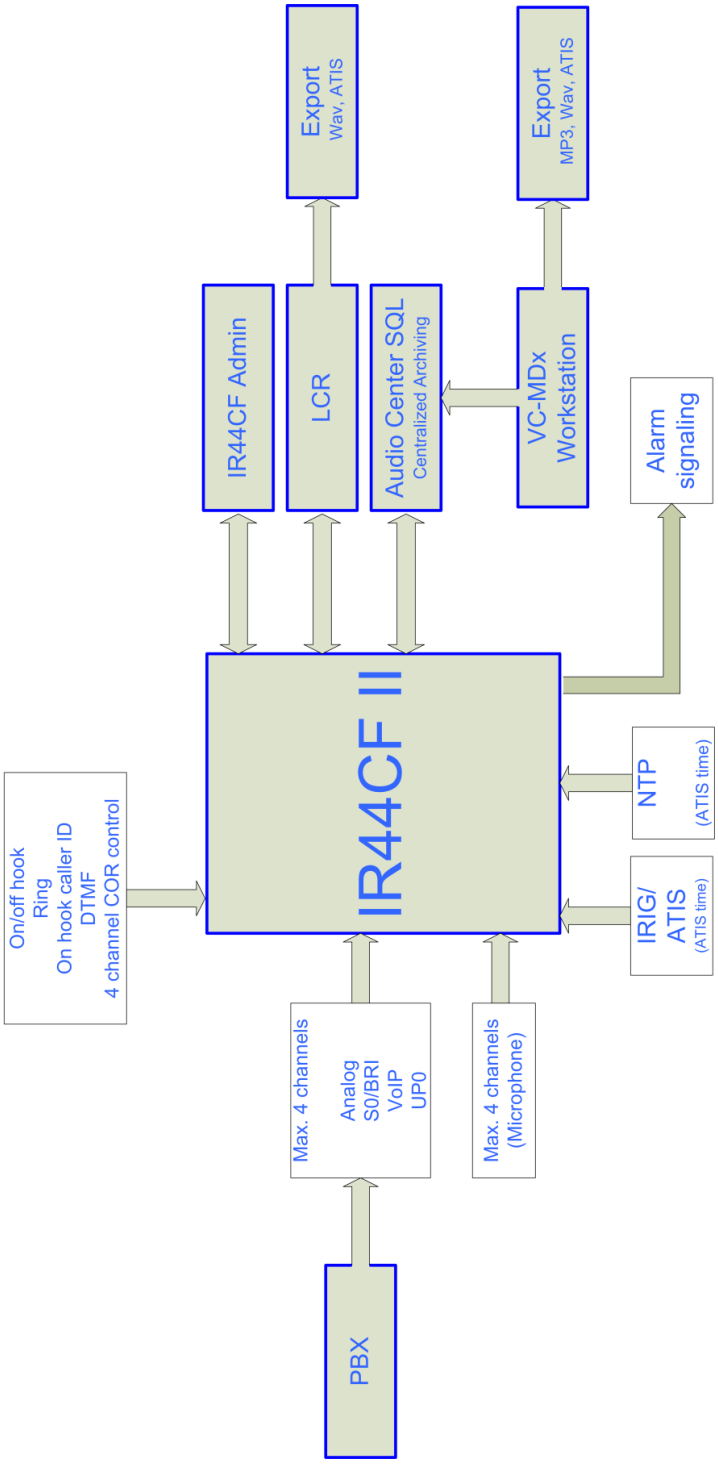

Figure 1, IR44CF II – Block diagram

1.2 Identification label

TIP: The last 5 digits of the serial number (SN) are required to build the unique hardware address (MAC) of the IR44CF II. The input of these digits may be requested by the IR44CF II after a software upgrade.

The identification label of the IR44CF II is located at the rear panel of the system.

Figure 2, IR44CF II – Identification label

1.3 Software version

The software version is displayed after switching on the IR44CF II.

ATIS-IR44CF
Vxx.xx
08/02/29
Initializing 4 ch...

Tab. 1, IR44CF II display – Software version

2 General Safety Instructions

Read these Safety Instructions carefully before you repair, maintain or modify your IR44CF.

This product may only be operated by fully trained staff which has read and understood these instructions completely.

2.1 Danger

Repair and maintenance duties may only be performed by experienced staff (qualified electrical employee according to IEC 364 and DIN VDE 105 part 1). Operation of this device may only be performed by a fully trained person who has read and understood this manual completely.

Read this manual thoroughly before putting the device into operation. Please observe all the rules and regulations.

2.2 Caution

Electrical voltage is latent within this device. Unplug the power supply before opening the housing, to avoid injuries.

No warranty on hardware damage or loss of data! Every modification on this system which is not done by VOICECOLLECT GMBH results in loosing warranty by VOICECOLLECT GMBH. Consult our technical customer service before and modify nothing on the system without instruction of VOICECOLLECT GMBH!

Risk of destruction! Before connecting the power supply, please check whether the available and the required mains voltage are the same.

System failure or loss of data because of additional Software! Every access, from additional software to the device (e. g. monitoring software, evaluation or playback software) which is not tested and certified by VOICECOLLECT GMBH, results in loosing warranty.

Maintenance and repair work may only be performed by the VOICECOLLECT GMBH customer service or authorized companies. In all other cases, the manufacturer warranty becomes void.

Save the system settings once the system is configured for work.

Repair: Always work on an antistatic, grounded base and wear an antistatic, grounded armband because of the danger of damage by static electricity charge.

3 Hardware

This chapter describes how to replace IR44CF II parts in the case that replacement is needed.

3.1 Replacement Parts

Please contact VoiceCollect GmbH to receive latest information about availability of replacement parts.

3.2 Assembling / Disassembling the Front Panel Components

ATTENTION: Damage of electronic parts due to static electricity charge!

- Always work on antistatic, grounded base!
- Always wear an antistatic, grounded wristband
- No warranty on hardware damage or loss of data!
- Every modification on this system which is not done by VOICECOLLECT GMBH results in loosing warranty by VOICECOLLECT GMBH
- Consult our technical customer service before and modify **nothing** on the system without instruction of VOICECOLLECT GMBH

PREREQUISITE: While in the IR44CF II make sure you are aware of Electro Static Discharge (ESD), your IR44CF II power is disconnected, and that you are properly grounding yourself.

TIP: Mark all connection cables to enable a proper allocation when assembling

This chapter describes the replacement of the IR44CF II front panel as a complete assembly group as well as the replacement of single IR44CF II front panel components.

3.2.1 Preparation

Before any work on the IR44CF II device:

⇨ Disconnect all connections to the device.

⇨ Put the system on an antistatic, grounded base.

⇨ Put on an antistatic, grounded wristband.

⇨ Open the top cover as described in chapter “Removing / mounting the top cover”

3.2.2 Removing / mounting the top cover

Remove the top cover as follows:

⇨ Unfasten the four top cover screws and detach the top cover.

⇨ Remove the power plug of the AC/DC adaptor from the IR44CF II rear panel.

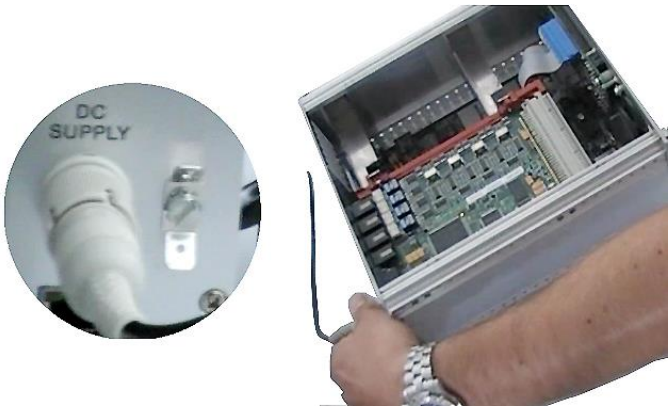

Figure 3, IR44CF II – Remove AC adaptor

⇨ Follow the steps described in the next chapters as needed.

Mount the top cover as follows:

⇨ Attach the top cover to the IR44CF II frame.

⇨ Fasten the four top cover screws.

3.2.3 Disassembling / assembling the complete front panel

ATTENTION:

- Components can be destroyed if the two flat cables between the front panel and the motherboard will be mismatched
- Remember which flat cable belongs to which connector of the mainboard

The front panel must be removed in order to replace the components mounted on the front panel.

Remove the complete front panel as follows:

⇨ Unfasten the four front panel screws.

⇨ Remove the front panel carefully to the side. The front panel is still connected to the mainboard with two flat cables:
- cable from display backplane to mainboard (P5)
- cable from keyboard backplane to mainboard (P6)

⇨ Take off the two flat cables between the front panel and the mainboard.

Figure 4, IR44CF II – Remove front panel

⇨ Put the front panel aside safely.

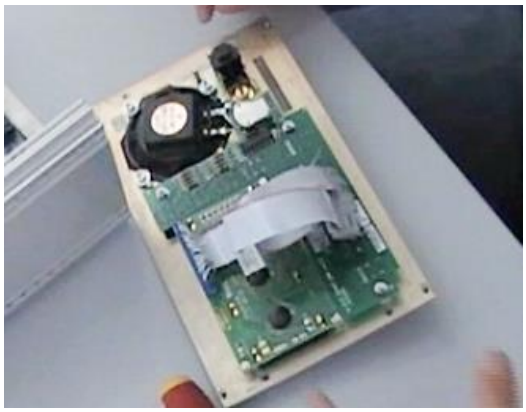

Figure 5, IR44CF II – Front panel removed

⇨ Replace defective parts of the front panel as needed. See chapter: “Assembling / disassembling front panel components”

Assembly the front panel as follows:

⇨ Attach the two flat cables between the front panel and the mainboard:
- cable from display backplane to mainboard (P5)
- cable from keyboard backplane to mainboard (P6)

⇨ Attach the front panel to the IR44CF II frame.

⇨ Fasten the four front panel screws.

3.2.4 Assembling / disassembling front panel components

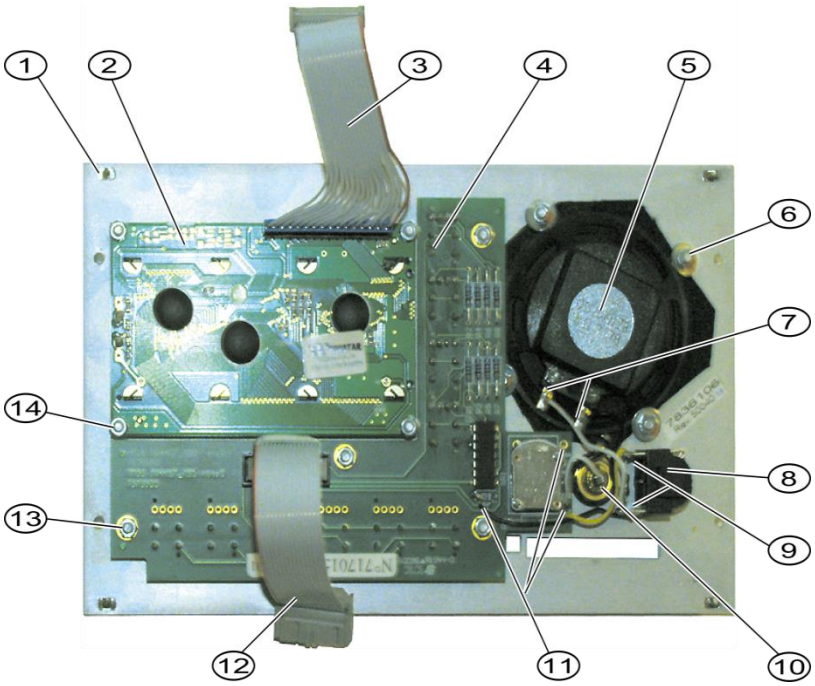

Figure 6, IR44CF II – Front panel components

	Description
	Front panel plate without accessories (different models, please contact VoiceCollect customer service)
	LCD backplane, PN 7344009
	Flat cable from display backplane to mainboard (P5), PN 7151074
	Keyboard backplane, PN 7170150
	Loudspeaker, PN 20203
	4 × mounting screw nuts for loudspeaker
	2 × soldering points for loudspeaker cables
	Headphones output, PN 30442
	3 × soldering points for phones connector mounting
	Recording output jack (cinch); PN 7304002 including 2 × soldering points
	4 × soldering points for keyboard backplane mounting
	Flat cable from keyboard backplane to mainboard (P6) , PN 7151075
	4 × mounting screw nuts for keyboard backplane
	4 × mounting screw nuts for LCD backplane

Tab. 2, IR44CF II – Front panel components

3.2.5 Disassembling / assembling front panel plate completely

Disassembly the front panel plate as follows:

⇨ Turn the front panel to the front side.

⇨ Lever out the snapped-in plastic cap (23) from the volume control regulator knob using a screwdriver.

⇨ Remove the central mounting screw (22) of the volume control regulator knob including washer.

⇨ Take-off the volume control regulator knob (21) from the shaft.

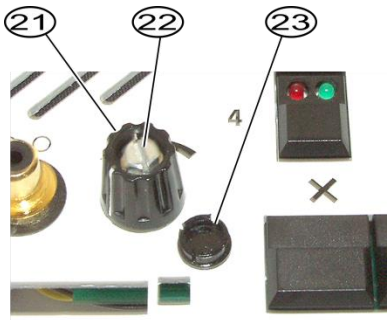

Figure 7, IR44CF II – Volume control regulator knob

Pos	Description
	Volume control regulator knob
	Central mounting screw and washer
	Plastic cap

Tab. 3, IR44CF II – Volume control regulator knob

⇨ Remove the hex nut from the front of the headphones output jack (8).

Figure 8, IR44CF II – Headphones output socket mounting nut

⇨ Turn the front panel to the inner side.

⇨ Desolder the two connection cables of the recording output jack (10). Take note on which soldering point belongs to which cable.

⇨ Remove the following mounting screw nuts including washers:
- 4 × screw nuts (14) for the LCD backplane

- 4 × screw nuts (13) for the keyboard backplane
- 4 × screw nuts (6) for the loudspeaker

⇨ Detach the following component carefully altogether from the front panel including the cable connections between the components, then put them aside safely:
- LCD backplane (2)
- Keyboard backplane (4)
- Loudspeaker (5)
- Headphones output jack (8)

⇨ Remove the hex nut from the rear of the playback output jack (8).

⇨ Detach the playback output jack.

Assembly the front panel plate as follows:

⇨ Turn the front panel plate to the inner side.

⇨ Plug the playback output jack from the front side into the front panel plate.

⇨ Mount the playback output jack with the hex nut.

⇨ Attach the following component carefully altogether to the front panel including the cable connections between the components:
- LCD backplane (2)
- Keyboard backplane (4)
- Loudspeaker (5)
- Headphones output jack (8)

⇨ Fix the following mounting screw nuts including washers:
- 4 × screw nuts (14) for the LCD backplane
- 4 × screw nuts (13) for the keyboard backplane
- 4 × screw nuts (6) for the loudspeaker

⇨ Solder the two connection cables of the recording output jack (10).

⇨ Turn the front panel to the front side.

⇨ Fix the headphones output jack (8) with the appropriate hex nut.

⇨ Slide the volume control regulator knob (21) to the shaft.

⇨ Fix the central mounting screw (22) of the volume control regulator knob including washer.

⇨ Snap the plastic cap (23) into the volume control regulator knob.

☺ *The front panel plate is completely assembled.*

3.2.6 Disassembling / assembling display

***TIP**:*

- Remember the position of the latch when removing and plugging the LCD flat cable

Disassembly the display as follows:

⇨ Identify the LCD backplane, the LCD flat cable and the mounting screw nuts. See pos. 2, 3 and 14 in figure “IR44CF II – Front panel components”on page 9.

⇨ Remove the four mounting screw nuts including washers.

⇨ Pick up the LCD backplane and put it aside safely.

☺ *The display is disassembled.*

Mount the display as follows:

⇨ Place the LCD backplane onto the four threaded bars for the display.

⇨ Fix the LCD backplane with four nuts including washers.

☺ *The display is mounted.*

3.2.7 Disassembling / assembling keyboard

***TIP**:*

- Remember the position of the latch when removing and plugging the keyboard flat cable

The keyboard backplane has to be replaced, for example, in the following cases:

- Defective key
- Defective key LED
- Defective volume control regulator

Disassembly the keyboard as follows: Turn the front panel to the front side.

⇨ Lever out the snapped-in plastic cap (23) from the volume control regulator knob using a screwdriver.

⇨ Remove the central mounting screw (22) of the volume control regulator knob including washer.

⇨ Take-off the volume control regulator knob (21) from the shaft.

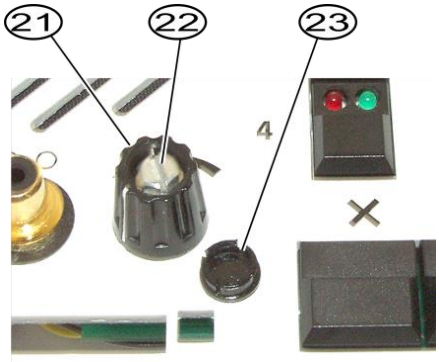

Figure 9, IR44CF II – Volume control regulator knob

	Description
	Volume control regulator knob
	Central mounting screw and washer
	Plastic cap

Tab. 4, IR44CF II – Volume control regulator knob

⇨ Turn the front panel to the inner side.

⇨ Identify the keyboard backplane, the keyboard flat cable, the soldering points and the mounting screw nuts. See pos. 4, 11, 12 and 13 in figure “IR44CF II – Front panel components”.

⇨ Remove the four mounting screw nuts including washers.

⇨ Desolder the cables from the four soldering points for the keyboard backplane mounting (11). Take note on which soldering point belongs to which cable.

⇨ Pick up the keyboard backplane carefully and put it aside safely.

☺ *The keyboard is disassembled.*

Mount the keyboard as follows:

⇨ Place the keyboard backplane onto the four threaded bars for the keyboard.

⇨ Fix the keyboard backplane with four nuts including washers.

⇨ Solder the four previously desoldered cables to the soldering points (11).

☺ *The keyboard is mounted.*

3.2.8 Removing / mounting loudspeaker

Disassembly the loudspeaker as follows:

⇨ Identify the loudspeaker, the mounting screw nuts and the soldering points. See pos. 5, 6 and 7 in figure “IR44CF II – Front panel components”on page 9.

⇨ Remove the 4 mounting screw nuts including washers.

⇨ Desolder the cables from the two soldering points for the loudspeaker cables (7). Take note on which soldering point belongs to which cable.

⇨ Pick up the loudspeaker carefully and put it aside safely.

☺ *The loudspeaker is disassembled.*

Mount the loudspeaker as follows:

⇨ Place the loudspeaker inside the four threaded bars for the loudspeaker mounting.

⇨ Fix the loudspeaker with four nuts including washers. The washers for the loudspeaker are broader than the standard washers.

⇨ Solder the two previously desoldered cables to the soldering points (7).

☺ *The loudspeaker is mounted.*

3.2.9 Removing / mounting headphones output

Disassembly the headphones output as follows:

⇨ Identify the headphones output jack and the soldering points. See pos. 8 and 9 in figure “IR44CF II – Front panel components”on page 9.

⇨ Turn the front panel to the front side.

⇨ Remove the hex nut from the front of the headphones output jack (8).

Figure 10, IR44CF II – Headphones output socket mounting nut

⇨ Turn the front panel to the inner side.

⇨ Desolder the cables from the three soldering points for the headphones output jack (9). Take note on which soldering point belongs to which cable.

⇨ Pick up the headphones output jack carefully and put it aside safely.

☺ *The headphones output jack is disassembled.*

Mount the headphones output as follows:

⇨ Place the headphones output jack from the inner side into the hole for the headphones output.

⇨ Fix the headphones output jack from the front side with the appropriate hex nut.

⇨ Solder the three previously desoldered cables to the soldering points (9)

☺ *The headphones output is mounted.*

3.2.10 Removing / mounting recording output

Disassembly the recording output as follows:

⇨ Identify the recording output jack and the soldering points. See pos. 10 in figure “IR44CF II – Front panel components” on page 9.

⇨ Desolder the two connection cables of the recording output jack. Take note on which soldering point belongs to which cable.

⇨ Remove the hex nut from the rear of the playback output jack.

⇨ Pick up the recording output jack carefully and put it aside safely.

☺ *The recording output jack is disassembled.*

Mount the recording output as follows:

⇨ Place the recording output jack from the front side into the hole for the recording output.

⇨ Fix the recording output jack from the inner side with the appropriate hex nut.

⇨ Solder the two previously desoldered cables to the soldering points (10).

☺ *The recording output jack output is mounted.*

3.3 Assembling / Disassembling the IR44CF II Boards

ATTENTION:

- If the power connector is connected incorrectly the mainboard will be destroyed when the IR44CF II is switched on
- During reassembling, make sure the latch of the power connector fits correctly to the mainboard's power plug.
- If the ground cable coming from the rear panel is not connected to the mainboard, the mainboard can be destroyed
- During reassembling, make sure the ground cable is fixed correctly to the specified threaded bar of the mainboard.

PREREQUISITE:

- While in the IR44CF II make sure you are aware of Electro Static Discharge (ESD), your IR44CF II power is disconnected, and that you are properly grounding yourself.

TIP:

- The complete mainboard must be replaced if the external CF card adapter is defective (e. g. locking lever broken).
- Mark all connection cables to enable a proper allocation when assembling!

This chapter describes the replacement of the IR44CF II motherboard as well as the replacement of single add-on cards.

3.3.1 Preparation

Before any work on the IR44CF II device:

⇨ Disconnect all connections to the device.

⇨ Put the system on an antistatic, grounded base.

⇨ Put on an antistatic, grounded wristband.

⇨ Open the top cover as described "Removing / mounting the top cover".

3.3.2 Removing / mounting the rear panel

The rear panel must be removed in order to replace the mainboard.

Figure 11, IR44CF II – Rear panel

	Description
	Rear panel
	4 × mounting screw
	Top cover
	Cover clip for optional UP board connector
	External ground point
	DC power connector
	RJ input connectors from optional add-on board

Tab. 5, IR44CF II – Rear panel

Remove the rear panel as follows:

⇨ Unfasten the 4 rear panel screws (2). The rear panel is still connected to the mainboard with the following components:
- ground cable (10)
- power connector (J2, pos. 9)

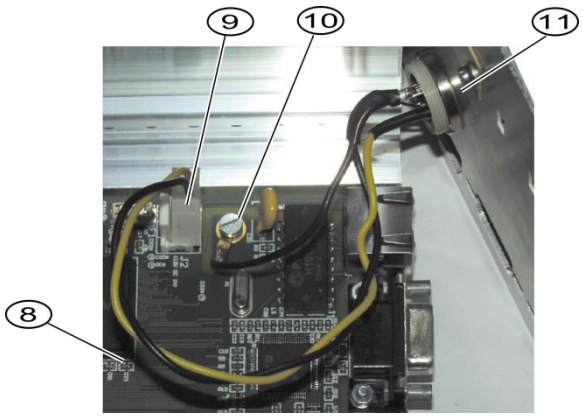

Figure 12, IR44CF II – Unmounting rear panel connections

	Description
	Mainboard
	Power connector (J2)
	Ground cable mounting screw at mainboard including tooth lock washer, internal ground point
	DC power connector, rear panel

Tab. 6, IR44CF II – Unmounting rear panel connections

⇨ Unscrew the ground cable mounting screw including tooth lock washer from the grounding clamp at the mainboard (10). The ground cable fixation uses one of the four mainboard mounting points.

⇨ Detach the power connector (J2) from the mainboard.

⇨ Pick up the rear panel carefully and put it aside safely.

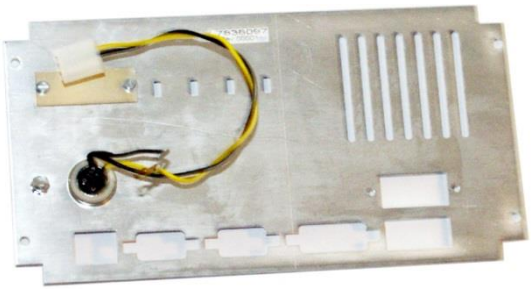

Figure 13, IR44CF II – Rear panel removed

☺ *The rear panel is removed.*

Mount the rear panel as follows:

⇨ Attach the rear panel to the IR44CF II frame.

⇨ Fasten the four rear panel screws.

⇨ Fix the grounding clamp with the ground cable mounting screw including tooth lock washer to the mainboard (10). The ground cable fixation uses one of the four mainboard mounting points.

⇨ Attach the power connector (J2) to the mainboard.

3.3.3 Removing / mounting the mainboard

PREREQUISITE:

- The rear panel is removed as described in chapter3.3.2: “Removing / mounting the rear panel”.

Remove the mainboard as follows:

⇨ Unscrew the mounting screws of the mainboard.

⇨ If an add-on card is attached to the mainboard, follow the chapter 3.3.4: “Removing / mounting an add-on card” to remove the add-on card.

⇨ Pick up the mainboard and put it aside safely on a properly grounded surface.

☺ *The mainboard is removed.*

Mount the mainboard as follows:

⇨ Position the mainboard onto the four mounting bolts of the IR44CF II frame base.

⇨ Fasten the mainboard with three mounting screws. The mounting hole next to the power connector (J2) remains empty.

⇨ Attach the rear panel including power connector and internal ground connection as described in chapter 3.3.2: “Removing / mounting the rear panel”.

☺ *The mainboard is mounted.*

3.3.4 Removing / mounting an add-on card

PREREQUISITE:

- The rear panel is removed as described in chapter “Removing / mounting the rear panel”.

There may be two add-on cards in your IR44CF II:

- Analog add-on card, PN 7170149

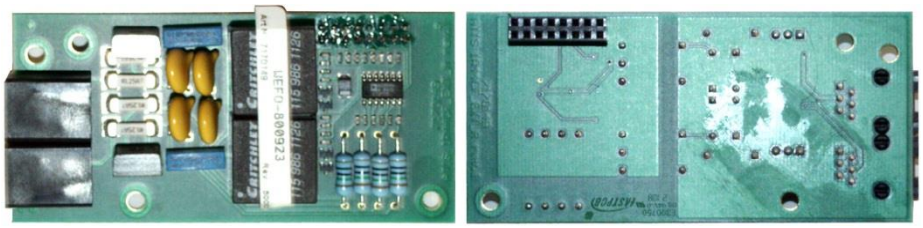

Figure 14, IR44CF II – Analog add-on card

The difference between the add-on cards is that the connector to the mainboard at the underneath is at a different position.

Remove an add-on card as follows:

⇨ Remove the three mounting screws including washers from the add-on card.

⇨ Take-off the add-on card and put it aside safely on a properly grounded surface.

☺ *The add-on card is removed.*

Mount an add-on card as follows:

⇨ If there was no add-on card in your IR44CF II before, install three hexagon head bolts, 16 mm long, with M3 mounting screws including washers from the mainboard’s underneath.

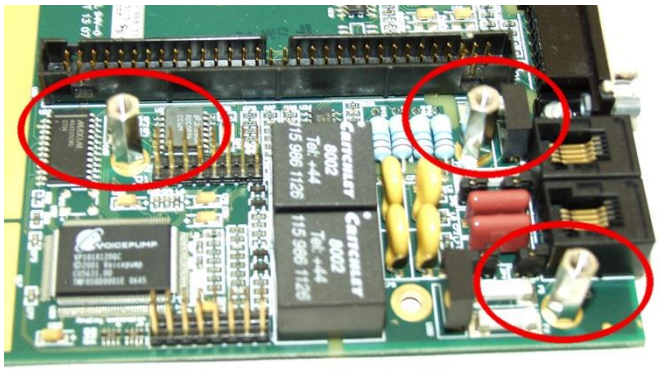

Figure 15, IR44CF II – Hexagon threaded bolts for add-on cards

⇨ Insert the 16-pin card connector into the mainboard's connector strip.
⇨ Position the add-on card onto the three hexagon threaded bolts.
⇨ Fasten with three mounting screws including washers.

☺ *The add-on card is mounted.*

3.4 Managing Hardware Related Issues

TIP:

- If you want change the number and type of channels please contact VOICECOLLECTcustomer service

This chapter gives an overview on the mainboard's ports and jumpers (as reference) and instructs how to manage some hardware related issues:

- Setting display brightness
- Replacing the internal CF card
- Overview of alarm contacts

3.4.1 Mainboard ports and jumpers

TIP:

- For a detailed description of the connectors and jumpers, see the "IR44CF II Technical Manual".

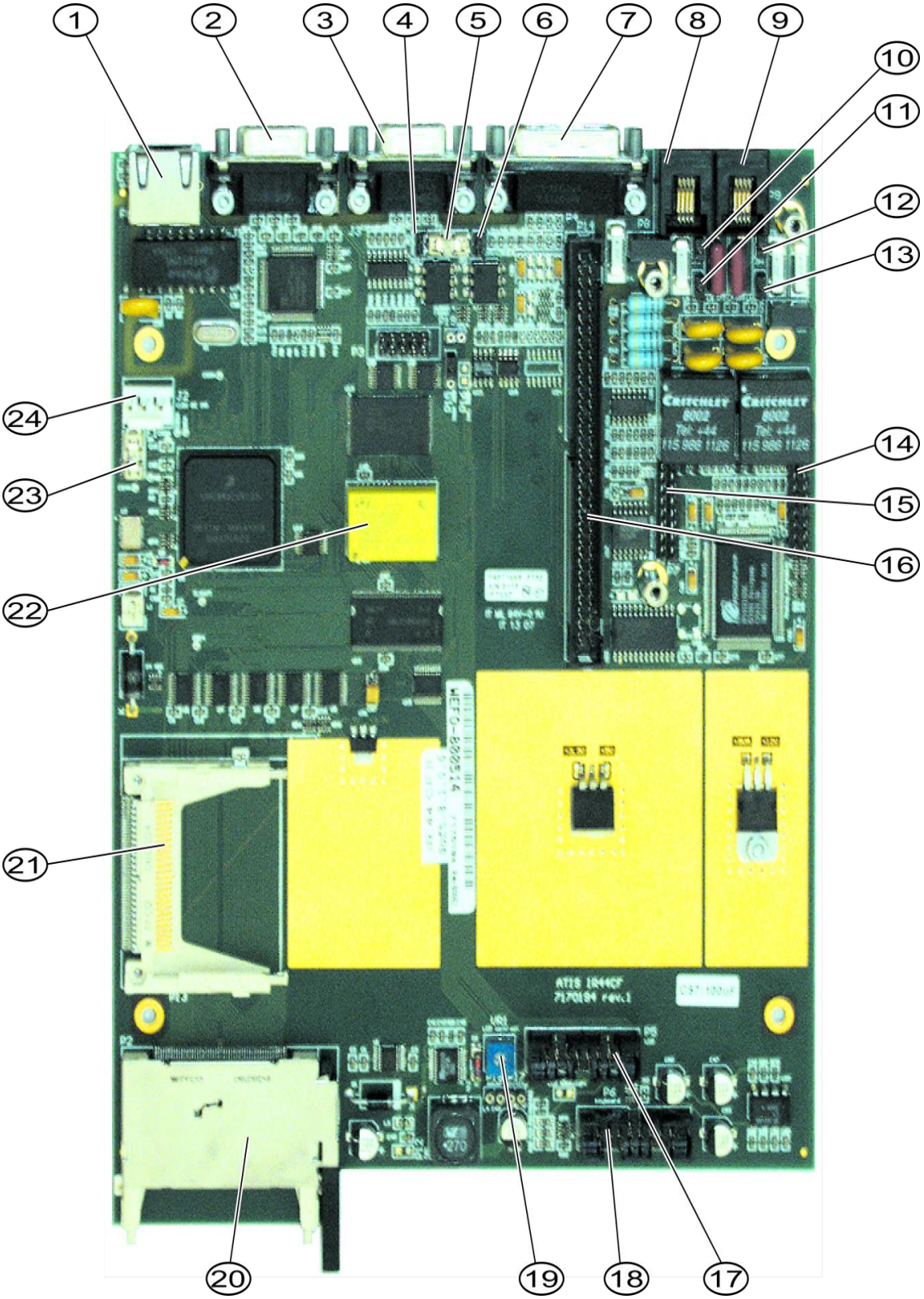

Figure 16, IR44CF II – Mainboard

Element	More, see chapter ...
P1 LAN	-
J1, Serial port1	-
J3, Serial port 2	
JP3, Speaker to J3	-
F2, +12 V to alarms fuse	“Replacing fuses”
JP1, +12 V to alarms	-
Line output, speaker, COR, alarms	“Jumper setting for fuse F2 – Alarm contacts”
P8, Phone line 2	-
P9, Phone line 1	-
JP5 Line 2 analog	-
JP6 Line 2 analog	-
JP4 Line 1 analog	-
JP3 Line 1 analog	-
P10, Analog extension	-
P7, S0 extension	-
P14, DSC400 extension	-
P5, LCD	-
P11, Keyboard	-
VR1, LCD brightness	3.4.2: “Setting the display brightness”
P2, External CF	-
P13, Internal CF	-
Battery	3.5.3: “Battery replacement only by customer service”
F1, +12 V input fuse	3.5.1: “Replacing fuses”
J1, +12 V power input	-

Tab. 7, IR44CF II – Mainboard ports and jumpers location

3.4.2 Setting the display brightness

To set the LC display brightness:

⇨ Connect the IR44CF II to power.

☺ *The LCD lights.*

⇨ Use a screwdriver to adjust the potentiometer VR1 until the LCD brightness is as desired.

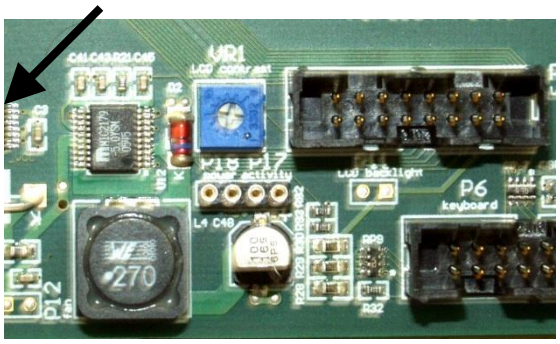

Figure 17, IR44CF II – Potentiometer VR1 for LCD brightness setting

3.5 Replacing Consumables

PREREQUISITE:

- While in the IR44CF II make sure you are aware of Electro Static Discharge (ESD), your IR44CF II power is disconnected, and that you are properly grounding yourself
- The IR44CF II is switched off and the top cover is removed to gain access to the components.

3.5.1 Replacing fuses

There are two special fuses on the IR44CF II mainboard.

	Description	See also
	+12 V Power supply overvoltage fuse	Pos. 23 in figure “IR44CF II – Mainboard”
	+12 V Alarm indicator fuse	Pos. 5 in figure “IR44CF II – Mainboard” on p

Tab. 8, IR44CF II – Fuses

F1 … The power supply overvoltage fuse must be checked if the IR44CF II does not start after power-on.
F2 … The alarm indicator fuse must be checked if jumper JP1 (1–2) is set (means: internal power supply of alarm contacts) and the alarm contact do not work.

- The F2 fuse is only relevant if the power for the alarm contacts is supplied internally (JP1 1–2 is set).
- The F2 fuse is not relevant if the alarm contacts are supplied externally (JP1 1–2 is not set).
- See also chapter 3.5.2: “Jumper setting for fuse F2 – Alarm contacts”

To replace a fuse:

⇨ Contact VOICECOLLECTcustomer service to obtain a replacement fuse.
⇨ Pull out the defective fuse using a forceps.
⇨ Plug in the new fuse using a forceps.

☺ *You have replaced the fuse.*

3.5.2 Jumper setting for fuse F2 – Alarm contacts

Fuse F2 is only active if the jumper JP1 (1–2) is closed. Only if this jumper is closed, +12 V internal power is applied to the alarm contacts (pin 15) of the COR/ALARM plug P4.

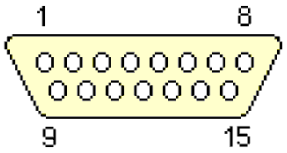

Figure 18, IR44CF II – Connection COR/ALARM plug P4 (D-Sub 15 male)

Usage jumper	See also
Supplies +12 V to both alarm contacts – connecti Pin 15)	Pos. 6 in figure “IR44CF II – Mainboard”
Supplies no power to alarm contacts on con-nector P4, Pin 15 (External power supply comes typically from the customer’s alarm signaling device.)	

Tab. 9, IR44CF II – Usage jumper JP1

PIN number Connector P4	Usage
7	Alarm contact 2 (information messages) – connection point no. 1 normal open
8	Alarm contact 1 & 2 GND
14	Alarm contact 1 (error messages) – connection point no. 1
15	Common connection point no. 2 of the alarm contacts 1 & 2 and Common +1 contacts 1 & 2 if JP1 is closed

Tab. 10, IR44CF II – Relevant pin connections plug P4 COR/ALARM

The alarm contacts are realized via optocoupler. They are located between the following pins:

- Pin 15 and pin 14 (Alarm contact 1, error messages)
- Pin 15 and pin 7 (Alarm contact 2, information messages)

After the application of power the alarm contacts of the IR44CF II go into work position and are closed (Alarm contacts active = closed).

In the alarm case the alarm contacts will be open (Alarm contacts inactive = open).

***TIP**:*

- If you close jumper JP1 (1-2), there are +12 V connected to pin 15. You can use this +12 V to let the alarm signal be switched through against GND (Pin 8).
- For more information please consult our customer service.

The voltages will be in this case:

Alarm contact active = closed = 12 V

Alarm contact passive = open = 100 mV

3.5.3 Battery replacement only by customer service

ATTENTION:

- Loss of all settings when pulling out the battery
- When the battery is pulled out the IR44CF II forgets all settings (system reset). If this happens the IR44CF II has to be repaired and reconfigured by the customer service
- Battery replacement only by customer service

PREREQUISITE:

- Ensure that the IR44CF II settings saved by the battery, if not already lost, is written down. If the time, language or IP address setting is not being saved your settings are already lost

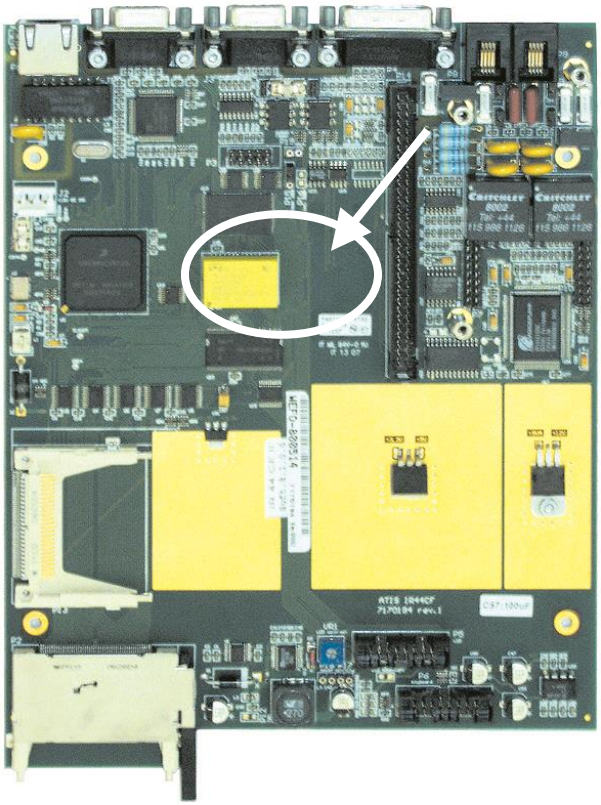

Figure 19, IR44CF II – Mainboard battery location

The battery is located on the mainboard. A battery exchange is required if the IR44CF II forgets one or several parameters like date or IP address during power-down periods.

The battery is responsible for the saving of the IR44CF II system configuration during power-down periods (time, language, IP address etc.)

If the IR44CF II is losing its settings, do the following:

⇨ First leave the IR44CF II on for 24 hours. In some cases this can charge the battery and resolve your issue. If this does not resolve your issue, follow the below step.

⇨ Inform VOICECOLLECTcustomer service and request a battery exchange. Do not replace the battery by yourself because a reconfiguration will be needed.

4 Maintenance

In order to ensure the readiness for use of your IR44CF II, please observe the references in the following chapter.

4.1 Preventive Maintenance

No preventive maintenance measures are needed for the IR44CF II.

4.2 Cleaning by the User

The following components should be cleaned regularly:

- Keyboard keys
- LC display

Please note:

- Switch off the device before cleaning.
- Only use appropriate detergents.
- Protect the device from humidity.

4.3 Maintenance during Operation

Software

- Clarify all system warnings with your system administrator or with VOICECOLLECT GMBH.
- Install only software or replacement parts to your system which are certified by VOICECOLLECT GMBH and after consultation with VOICECOLLECT GMBH.

Hardware

- Contact our service when the behaviour of your system becomes a little bit abnormal (e. g. lost date and time settings, battery replacement, hardware upgrade, failed firmware upgrade).
- Ensure the environmental conditions as described in chapter "First Use > Select Location" in the “IR44CF II Technical Manual”.

4.4 Maintenance Contract

VOICECOLLECTmaintenance contracts offer professional maintenance to your hardware and software. Your IR44CF II devices will be examined by our technicians regularly. These will contribute to the device availability. Device failures can be prevented due to preliminary inspections. Contact VOICECOLLECTcustomer service for further details.

5 Troubleshooting

This chapter contains the IR44CF II error messages and problem solutions.

Contact our Technical Customer Service if these proposals for solution do not succeed.

5.1 Basics to Alarming Devices

There are two types of alarm messages in the IR44CF II:

- Warning messages (no error has happened but a problem occurred which possibly could lead to an error)
- Error message (error occurred, e. g. danger of data loss)

Most often an alarm is given under the following circumstances:

- Error on the CF card
- CF card is 90% full and there is no `Card overwrite` recording mode configured, or
- The maximum number of buffered recordings has been reached.
- See details in chapter “Responding to Error Messages”.

The devices to which the IR44CF II should sent messages can be configured in the IR44CF II device setup or using the IR44CF WEBACCESS software.

The following alarm devices are supported:

Warning device	Description
LC display	The reason of the error / warning message is displayed in clear text play of the IR44CF II. This is the most detailed type of alarm messag
Warning tone / speaker	This is an acoustical alarm over the loudspeaker. There is no sound between warnings and errors. The goal of the warning tone is to give mation that something abnormal has happed in the device..
Alarm contact	A signal is issued on the alarm contacts of the IR44CF II. The alarm contacts are located between the following pins of COR/ALARM plug P4 (D-Sub 15 male): ▪ Pin 15 and pin 14 (Alarm contact 1, error) ▪ Pin 15 and pin 7 (Alarm contact 2, warning) See also chapter “Jumper setting for fuse F2 – Alarm contacts” in chapter : “Hardware” in this manual.

Tab. 11, IR44CF II – Warning devices

5.2 Configuring Alarms in the IR44CF II Device

5.2.1 Setting the alarm signal

To configure how the IR44CF II indicates alarms:

⇨ Select the Alarms entry in the SYSTEM CONFIG. menu.

See chapter “Configuring” in the “IR44CF II User’s Manual”.

☺ *Line 2 shows the actual setting:*

Tab. 12, IR44CF II display – System Config menu after the selection of Alarms

5.2.2 Configure the alarm for the display

⇨ Press Ô (Reverse) / Ç (Forward) until LCD is located on line 2.

⇨ Press |> (Play).

⇨ Option A: To display warnings in the display, press Ô (Reverse) / Ç (Forward) until On is located on line 2.

Option B: To hide warnings on the display, press Ô (Reverse) / Ç (Forward) until Off is located on line 2.

⇨ Press |> (Play).

5.2.3 Configure the alarm for the loudspeaker

⇨ Press Ô (Reverse) / Ç (Forward) until Speaker is located on line 2.

⇨ Press |> (Play).

⇨ Option A: To signal alarms through the loudspeaker, press Ô (Reverse) / Ç (Forward) until On is located on line 2.

Option B: To not signal alarms through the loudspeaker, press Ô (Reverse) / Ç (Forward) until Off is located on line 2.

⇨ Press |> (Play).

5.2.4 Configure the alarm output through the alarm contacts

⇨ Press Ô (Reverse) / Ç (Forward) until `Relays` is located on line 2.

⇨ Press |> (Play).

⇨ Option A: To transfer all alarms to the alarm contacts, press Ô (Reverse) / Ç (Forward) until `On` is located on line 2.

Option B: To not transfer alarms to the alarm contacts, press Ô (Reverse) / Ç (Forward) until `Off` is located on line 2.

⇨ Press |> (Play).

5.3 Responding to Error Messages

This chapter explains the meaning of the error and information messages on the display and the required actions.

5.3.1 Alarm output for alarm type “Error”

ATTENTION: The contents of the internal volatile buffer will get lost if you disconnect the IR44CF II from power.

Error	Display message	Required action

Error / timeout during CF card operations	`Ident. drive err.`
	`Sector read error`
	`Sector write error`
		If the error does not disappear after a restart, replace the CF card.

No space on CF card	`No space on device` May appear if overwrite mode is inactive	Insert an empty CF card, activate overwrite protection or delete all recordings
Max. number of records in the buffer (10) reached	`Max. buf. rec. in`	No calls have been lost. Insert an empty CF card. Or: Interrupt the power supply for a moment to delete the buffer.
Overwrite of records in the buffer (overflow)	`Rec. buf. overwrite`	Calls have been overwritten in the buffer (calls lost). Insert an empty CF card. Or: Interrupt the power supply for a moment to delete the buffer.

Error	Display message	Required action
Max. number (80,000) of records on a CF card reached	Max arch. reached	Insert an empty CF card.

Tab. 13, IR44CF II – Alarm output for alarm type “Error”

5.3.2 Alarm output for alarm type “Warning”

Error	Display message	Required action
IR44CF II not started	No display output	Check the power connection and the power connector fuse F1. To check the fuse, see chapter 5: “Hardware” in this manual.
Almost no space on the CF card	Less than 10m left May appear if overwrite mode is inactive	No calls have been lost. Insert an empty CF card, activate overwrite protection or delete all recordings
Only less than 500 records (from 80,000) possible on CF card	Appr. Max archived	No calls have been lost. Insert an empty CF card.
Max. number of record Ids reached (99999)	Max counted reached If 99999 is reached the counting restarts from 0.	For information only. No action required.

Tab. 14, IR44CF II – Alarm output for alarm type “Warning”

5.3.3 Acknowledging alarms

TIP:

- Up to 9 alarms will be saved in a ring buffer. When a new alarm comes in the oldest alarm will be overwritten
- Acknowledging alarms is not mandatory. The IR44CF II will work properly even if alarm messages are not acknowledged

⇨ To acknowledge an alarm which appears on the display, press |> (Play).

☺ *The alarm is acknowledged and the previous not acknowledged alarm appears.*

5.4 Troubleshooting IP Address Configuration

ATTENTION:

- The connection between IR44CF WEBACCESS and IR44CF II will get lost if you change the IP address of the IR44CF II from within the IR44CF WEBACCESS software. There is no option to read the IP address out of the IR44CF NET if this has been forgotten.

- If a loss of the IP address happens, the only possibility is to send the IR44CF II to the VOICECOLLECTcustomer service in order to set a new IP address

Problem	Solution
If the IP address has been changed from the IR44CF ADMIN, the connection between IR44CF WEBACCESS and IR44CF II will get lost.	Reconnect from the IR44CF WEBACCESS to the IR44CF II using the new IP address.

Tab. 15, IR44CF II – Troubleshooting IP address configuration

5.5 Troubleshooting Software Update

ATTENTION:

- Device error due to power loss
- If the power gets lost during a software update there will be nothing on the display after a restart (device does not start). The IR44CF II must be sent to the VOICECOLLECTcustomer service for repair.
- Do not power-off the IR44CF II during the software update

TIP:

- The software update is described in the "IR44CF II Technical Manual", chapter "Managing IR44CF II Software Update".

5.5.1 IR44CF II does not reboot after update

If the IR44CF II should not be rebooted automatically after the software update:

⇨ Disconnect the power supply of the IR44CF II for a short time.

☺ *The IR44CF II starts with the new software version.*

5.5.2 Resetting IR44CF II to its initial software

PREREQUISITE:

- Consult VOICECOLLECTcustomer service to be sure to use the proper software version

If the IR44CF II fails to work after a software update it is possible to reset the IR44CF II to its initial software which is guaranteed to work properly with your IR44CF II, but is functionally limited (basic software version).
You may reset the IR44CF II to its initial software if the IR44CF II is blocked and a restart does not help.

Follow these steps:

⇨ Switch off the IR44CF II.

⇨ Remove the cover.

⇨ Remove jumper P15 from pin 2-3 (OFF). See chapter : "Hardware" in this manual.

☺ *This jumper setting means that the initial software will be loaded during the next update.*

⇨ Repeat the software update as described in the “IR44CF II Technical Manual”, chapter “Installing Software Update from the CF Card using IR44CF II Configuration Menu”.

⇨ If the following request appears, press |> (Play, Yes) to proceed with the update.

Tab. 16, IR44CF II display – Request for correct setting of jumper P15

⇨ Follow the update description in the “IR44CF II Technical Manual”.

☺ *After the reboot the IR44CF II should show display activity.*

⇨ Switch off the device.

⇨ Attach jumper P15 again to pin 2-3 (ON).

☺ *This jumper setting means that the software currently in the* ATIS *directory on the CF card will be loaded during the next update.*

⇨ Repeat the software update.

☺ *The update starts with the software on the CF card.*

The IR44CF II should start properly.