





2 temperature regulated fans Interlocking device Slots power supply CE The SKG 8 is CE certified and complies with all relevant EN standards. Changes and printing errors reserved. Version: August 2007

Contents



Must be observed:

Hazard and safety information

Figure of SKG 8

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Warns about various hazards to health, environment and materials.



This is a general information symbol.



Recycling: All of our packaging materials (packaging, identification sheet, plastic foil and bag) are fully recyclable.



Electronic equipment is not household waste – in accor dance with directive 200/96/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of 27th January 2003 on used electrical and electronic equipment, it must be disposed of properly. At the end of its service life, take this unit for disposalat a relevant official collection point.

2 Hazard and safety information

2.1 Installation instructions

The device may be installed only in dry rooms and on vertical surfaces.

Installation location: indoors

The device can be fastened to the wall using the supplied mounting materials.

1 Pictographs and safety information

Pictographs are icons with specific meanings. The following pictographs are used in the

installation and operating instructions:

2 Hazard and safety information

2 Hazard and safety information



The device must not come into contact with splashing or dripping water. Containers with liquid must not be placed on the device.

If there is condensation, wait until the device is completely dry.

The device generates heat which must be able to escape. It is therefore important that the vents are never covered. The accumulation of heat negatively influences the service life of the device and is a source of danger.



The specified minimum distances (at least 30 cm above and below) must be strictly observed. This applies above all when several devices are installed one over the other. By means of appropriate measures (e.g. the use of a specially designed air flow unit), the minimum distance between devices can be reduced if required.

The permitted ambient temperature is 0...50°C. Installation in unventilated cabinets or alcoves is not permitted.

Installation is permitted only in rooms which maintain the permitted ambient temperature even in changing climatic conditions.



Warning: When the device is installed in places such as storage areas and roof trusses, it must be ensured that the permitted ambient temperature is maintained.



If auxiliary fans are used for convection, it must be ensured that in the event of fan failure the device is disconnected from the power supply by means of appropriated measures in order to prevent damage to the device.



Because of fire hazard due to lightening, it is recommended that all mechanical parts (e.g. SKG 8, equipotential busbars, distributors, etc.) are mounted on non-combustible underlays. Combustible materials include wooden beams, wooden boards, plastics, etc.

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2.2 Opening the housing

Before opening the housing: Be sure to disconnect the power plug.



(Be careful when doing maintenance work on the power supply unit. There is also danger of injury after disconnecting the power supply due to electrically live elements.)

Do not service during thunder storms.

Opening the device must be done only by authorized personnel according to the national regulations, or by sending the device to SPAUN with an exact description of the fault.

Replace the power cables only with an original part power cable.

Replace fuses only with those of the same type, value and melt characteristics.

Important:



DIN VDE 0701 Part 1 and 200, servicing; EN 50 083 Part 1, safety requirements



3 Preparing the base unit

2.3 Potential equalization and grounding

The proper grounding and installation of the system must comply with EN 50 083 Part 1.

The power supply may be operated only in devices for which these power supplies have been approved and, due to high discharge current, only in power supply networks with a protected (grounded) circuit system (TN systems in compliance with EN 60950). Regulations in compliance with EN 50083 Part 1 and national regulations concerning IT/TT power supply networks must be observed.



Operation without equipment grounding conduction, device grounding or device potential equalization is not permitted

3 Preparing the base unit

3.1 Mounting bracket

Fasten the supplied mounting bracket either on the front panel (19" installation, Fig. 1) or rear panel (wall mounting, Fig. 2).



To do this, place bracket slots over the fittings on the base unit, push to the top and fasten securely with the middle screw.

3.2 Changing the power supply



Warning:

Installation work on the power supply unit may be performed only if the power plug is disconnected.

The power supply unit (power supply carrier) is secured with outside screws and screws at two points inside. These have to be loosened for deinstallation.

(Fig. 3 + 4)







3 Preparing the base unit

4 Configuration SKG 8

When uninstalling, it's best first to remove the plug-in cards at slot 1 and slot 8 using the plug-in card removal tool.

To press out the power supply unit carriers, the plug-in card removal tool is alternatel placed on the nuts on the side and pressed. This releases the plug contacts of the power



supply carrier from the base, (see Fig. 5), (See also Chapter 5 Installing plug-in cards.)

3.3 LNB-remote supply

When using the internal SATdistribution. the LNB remote power supply can be switched on for up to four of the five possible SAT-inputs (each max. 250 mA, short-circuit proof). On the mainboard, there are four iumpers between card slot four and five with which the remote power supply can be activated for each of the inputs. SAT-in-



puts with the option for LNB remote powering; input 5 (iumper position 16), input 6 (iumper position 15), input 7 (iumper position 13) and input 8 (jumper position 11). The numbers of the remote powered inputs can be different, depending on the customers' cable settings. The input B (Eingang B) of the upper distributor has no option for remote powering.

Apply mains voltage and connect SKP 5. The following display appears: **SPAUN SKG 8** Version X.XX 1=english (next ◇)

Line 2 displays the software status of the mainboard processor. Pressing "1" selects German.

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Select the next menu with the arrow key. The SKG 8 parameters are displayed.

4.1 Setting bus address

If several base devices (SKG 8 and SKG 5) are to be linked by means of the bus system, all connected devices must be set to different bus addresses.

Select line 2 with the 4 or V arrow key. Use the \leftarrow or \rightarrow arrow key to set the bus address (1-241).

This setting can also be made with the SPAUN SKPS 50 programming software. When doing so, it must be ensured that only the base device to be set is connected to the PC directly or via the bus system.

4.2 Temperature

The current temperature (mainboard surface) is displayed in line 3.

SKG 8 Parameter

Bus adress X.XX

Temperature XX°C



5 Installing plug-in cards

Lift out and remove the interlocking device by lightly pressing to the right (Fig. 7). It's a good idea to place the bar on top of the SKG 8 while the card is being installed. The connection labels speed up correctly assigning, for example, the SAT inputs. Further, thanks to the identification of the connected



orbit positions and polarizations and the terrestrial antennas, easy maintenance is ensured in the future.



IMPORTANT NOTE:

Installing of plug-in cards only after having disconnected the mains supply of the base unit!

5.1 Cards with SAT tuner

Twin cards

Ensure that all tuners (A and B) of the plug-in cards to be installed have a separate connection cable (Fig. 8). Remove any loop through cables or distributor cables that are present and install the supplied cable. Plug in the card. Connect the tuner A connection cable to the corresponding output SAT distributor board. Connect the tuner B connection cable to the corresponding output of the SAT distribution board.



Single cards

Plug in the card. Connect the tuner connection cable of the tuner with the output of the SAT distributor, which carriers the required polarization.

5.2 Cards for terrestrial conversion

Because the SAT distribution board is suitable exclusively for SAT intermediate frequencies (950-2150 MHz), the inputs from terrestrial cards (e.g. SKS TU 860, SKT FM or SKT DVB-T) must be fed in via external inputs.



Remove the nut screwed onto the connection cable and remove the washer. Plug in the card. Remove the plastic cover of the required external input. Install the F-connector of the connection cable in the required external input hole (Fig. 9)

5.3 (De-) Modulator cards

Install the D-sub connectors supplied with the card in the provided feedthroughs (Fig. 10) after previously breaking out the pre-punched metal covers. Plug in the card. Connect the 6-pin post connector



in accordance with the operating instructions of the plug-in card.

5 Installing plug-in cards

7 Level adjustment



5.4 Uninstalling plug-in cards

After disconnecting the cable connections, lift out the plug-in cards with the supplied plug-in card removal tool. Place the lever between the card and the alumi num frame and press down. This disconnects the plug contacts of the card from the mainboard (Fig. 11).

IMPORTANT NOTE:

Installing of plug-in cards only after disconnecting the mains supply of the base unit!





6 Configuration of all plug-in cards

Detailed information about setting the individual plugin cards is available in the supplied operating instructions.

7 Level adjustment

The optimal output level (measured at the output of the base device) is as follows:

- 100 dBµV for PAL channels
- 90 dBµV for QAM channels
- 96 dBµV for radio (FM) channels

To enable the setting, the level regulators of the individual plug-in cards are set accordingly (Fig. 12).



Level regulators

8



8 Configuration SAT-distribution board

The SAT-distribution board of the SKG 8 offers several possibilities of configuration.



The delivery state of the SAT-distribution board looks as printed above, that means 3x (1 input "Eingang" to 7 outputs "Ausgang") and 1x (1 input "Eingang" in 4 outputs "Ausgang").



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Please note: input B of the upper distributor (XSF 32) has no option for remote powering!

Note: Not used loop-through outputs must be terminated (ZFR 75 DC, order no.: 871511)



Additional configuration example



The configuration example offers

- 1 x (1 input "Eingang" in 2 outputs "Ausgang",
- 1 x (1 input "Eingang" in 9 outputs "Ausgang") and
- 2 x (1 input "Eingang" in 7 outputs "Ausgang").

Note: Not used loop-through outputs must be terminated!

Changes in the configuration should only be done via loop-through outputs of the upper

splitter, because a loop-through via the outputs of each splitter causes a high attennuation!





SKG 8 Technical specifications SKG 8 SAT processing, basic unit without cards				
Supply voltage	V~/Hz	230/50		
EMV/EMC		according to EN 50083 T2 / A1		
Permitted ambient temperature	°C	0 50		
Housing (H x W x D) without mounting bracket with front side mounting bracket with rear mounting bracket	mm	340 x 426 x 277 (19" / 7 HE Basis) 340 x 491 x 277 340 x 491 x 290 + 3 HE for air flow unit		

Mounting angle



HF - connecting cable



6 x 450 mm



2 x 700 mm

terminator

microfuse



1 x 75 Ohm



1 x 1,25 Ampere



Programmer

SKP 5

The external programming unit is required for the setting and programming of all of the operating parameters of the digital compact channel processing headends.

- Only one programmer required for the service work of different SKG 8 systems
- Handheld case with a 16-button keypad for setting and changing the parameters
- Easy and logic user manual
- Illuminated display: Visualization of the operating parameters on a 4-line, 16-digit LCD display
- System protection against unauthorized programming by simple disconnection from headend
- Connection cable with standard 9-pin Sub-D connector







The SKPS 50 programming software (order no. 829107) facilitates programming SKG 5 / SKG 8 headend systems with a PC or laptop computer. The user can store all headend parameters in the office prior to commissioning, for example:

- received satellite
- SAT programs
- output channel
- program video and audio parameters on PC or laptop and save to storage media.

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The user also has the option of remotely programming and maintaining headend devices via modem. These added features save the network operator service costs, for example when changes occur in transponder assignments. They mean rapid response in the event of processing card failure (replacement signal switching).

The software supports the replacement signal

switching. To activate replacement signal switching, the network operator only needs to select the "failed module" and the "replacement module (redundancy)." Manually reconfiguring the operating parameters for the redundancy module is not required.

The following processes are performed automatically:

- deactivating (HF) the failed module.
- copying all operating parameters of the failed module to the redundancy module.
- activating (HF) the redundancy module.

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SAT-ZF-Vorverteilfeld auslesen

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Schließen

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Technical Hotline For installers and wholesalers

Planning for the future - with SPAUN

The requirements for SAT-IF distribution technology become increasingly more diverse and more complex. In addition, customers become even more demanding and require central solutions.



We assist you with specialist and practice-orientated know-how across brands and manufacturers. In this way, you guarantee your customers a fast effective solution to problems and thus a high degree of customer satisfaction.

SPAUN electronic is not only a manufacturer of high quality products. Our technical hotline staff will accompany already during the planning phase of your projects.

By using up-to-date CAD planning software SPAUN electronic also offers you specifically customized solutions tailored to commercial sized major installations.

The international orientation of SPAUN electronic ensures that country requirements are taken into account in planning right from the start and implemented target-specifically.

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