

WEEE Reg.-Nr. DE70592344



Stand: 1.0 November 2014 // Technical changes, misprints and errors reserved.
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MEGASAT



SAT>IP Server 2

user manual

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Safety Instructions

Please read the manual thoroughly before operating the equipment. In case of incorrect or improper handling, the warranty becomes void.

Power supply: Before start please check the correct operation voltage of the power point. The operating voltage of this device is AC 100 ~ 240V, 50/60 Hz.

Overload: Do not overload a wall outlet, extension cord or adapter, neither use damaged power cord or touch it with wet hand as this may result in electric shock.

Liquid: The device shall not be exposed to dripping or splashing water, and that no objects filled with liquids, such as base, shall be placed on the apparatus.

Ventilation: Keep the slots on top of the device uncover to allow sufficient airflow to the unit. Do not put the receiver on soft furnishings or carpets. Do not expose the receiver to direct light or do not place it near a heater or in humid conditions. Do not stack other electronic equipments on top of the receiver.

Risk of suffocation: Do not let children play with films or other packaging components, there is a risk of suffocation.

Cleaning: Plug out the device from the wall outlet before cleaning. Clean the device by a soft cloth or mild solution of washing-up liquid (no solvents).

Connection: Disconnect the device from the mains when you connect it to satellite LNB or disconnect it from LNB. Failure would possibly cause damage to the LNB.

Location: Put the device indoor in order to avoid lightening, raining or sunlight.

Uncover: Do not remove the cover, to reduce the risk of electric shock. Contact qualified and licensed service personnel to repair the receiver, or contact your dealer.

1. Introduction

SAT>IP Server 2 allows free satellite live TV/Radio programs to be received & distributed to SAT>IP Client compliant devices like smart phones, tablet pc's and notebook pc's & other client devices over Wired/Wireless home network in both unicast/multicast mode of transmission. SAT>IP Server 2 is equipped with four satellite tuners, so users can watch 4 x different frequency simultaneously & with same frequency 8 x different users can watch simultaneously.

SAT>IP Server 2 device must be connected to same home network in which the Client devices which are connected to.

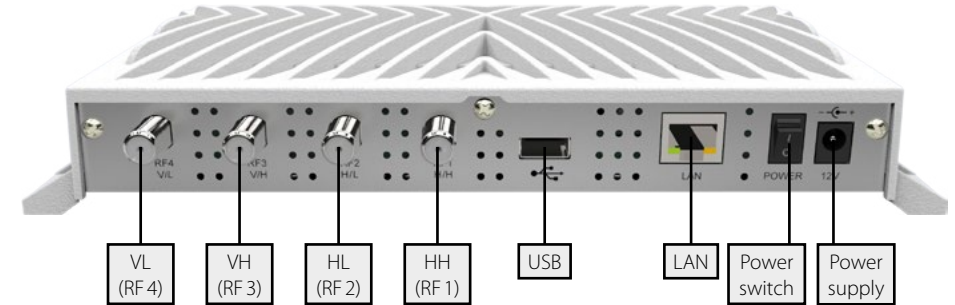
SAT-IP Server Features:

- Fully compliant with SAT>IP Specification version 1.2
- Streaming Live SD/HDTV & Radio programs to 4 compatible Clients over LAN/WLAN
- Support MPEG2/MPEG4 TS & PS over IP in both Unicast and Multicast
- Support Unicable, JESS, DiSEqC1.0, DiSEqC 1.2 and USALS
- Firmware update over USB stick or online over the network
- Web UI based device configuration and management (password protected)

Supported Client devices:

- SAT-IP supporting devices (IP 100,
- iOS devices (iPad, iPod, iPhone), Android tablets and smart phones using Elgato applications
- DLNA/UPnP compatible PC software applications e.g.VLC Player, DVB Viewer

2. Connection & How to access



Connection with a Universal LNB (z.B. Single, Twin or Quad LNB)

Single LNB = RF1
Twin LNB = RF1 + RF2
Quad LNB = RF1 + RF2 + RF3 + RF4 (The order is not important)

Connection with a Quattro LNB

The device must be connected to the appropriate connector on the Quattro LNB, please make sure the correct ports on the LNB:

Tuner RF1 = Horizontal High (HH)
Tuner RF2 = Horizontal Low (HL)
Tuner RF3 = Vertical High (VH)
Tuner RF4 = Vertical Low (VL)

Connection with a Unicable LNB

Unicable LNB = RF1

Note that a change must be made in the web configurator. The respective settings, see page 19.

Connection with a Jess LNB

Unicable LNB = RF1

Note that a change must be made in the web configurator. The respective settings, see page 20.

Connection with a DiSEqC controlled device

Depending on the connection used, please refer to the corresponding DiSEqC settings. The respective settings, refer to page 21.

Connection with a Motor (USALS)

Motor (USALS)= RF1

Note that a change must be made in the web configurator. The respective settings, see page 25.

2. Connection & How to access

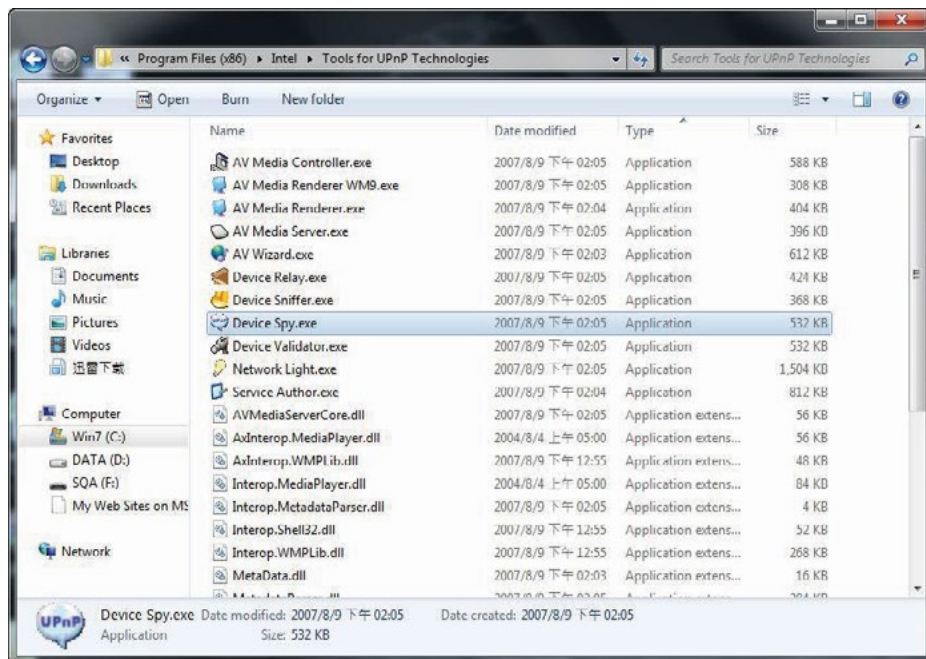
Identify the IP address

Turn on the server. The server connects to the network and receives own IP address automatically. You can also assign the server in your network a static IP address with DHCP.

To access the web configurator, it is necessary the IP address to identify the device. This can be found in the following manner:

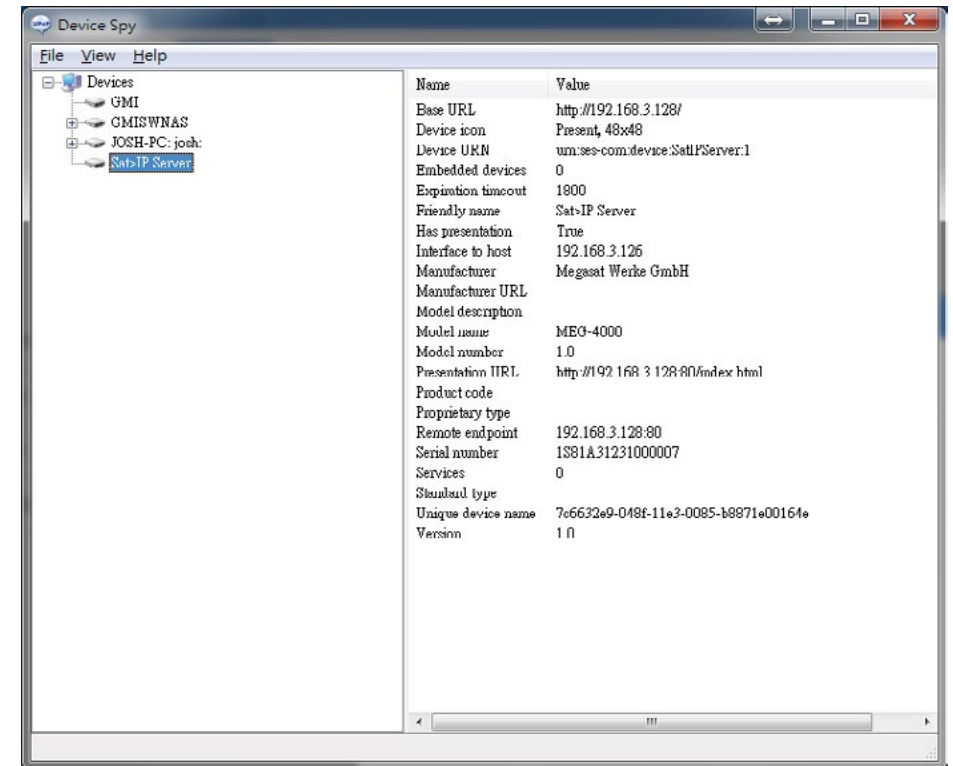
The Megasat SAT> IP Server 2 supports UPnP technology that experienced it Users allows the IP address to identify a free UPnP tool (eg Intel Developer Tools for UPnP Technologies).

- Download the appropriate software on the PC and install it.
- Open the „Device Spy“ from the Start menu.



2. Connection & How to access

- Select in the list of „UPnP Devices“ to „Megasat SAT> IP Server 2“, and read the corresponding „Base URL“ from (for example 192.168.2.100)



Configuration

The server can be configured with a PC that is located in the same network. The configuration is done through a web browser with which you have to log in to access the user interface of the server.

Open a web browser (Recommended: Google Chrome or Opera) and enter the server's IP address. You can find the assigned IP address in the configuration menu of the Internet router.



3. Login / Logout

Login

Once the browser was successfully connected to Server, then the „Login“ page will be displayed. The default user name for server is „admin“ and password is „admin“. Enter the Password and click the „Login“ button. The server page will be displayed on the screen.



We have restricted the password length to be minimum of 8 characters and maximum 16 characters.

Logout

To log out, click on „Logout“ icon place at right top corner.

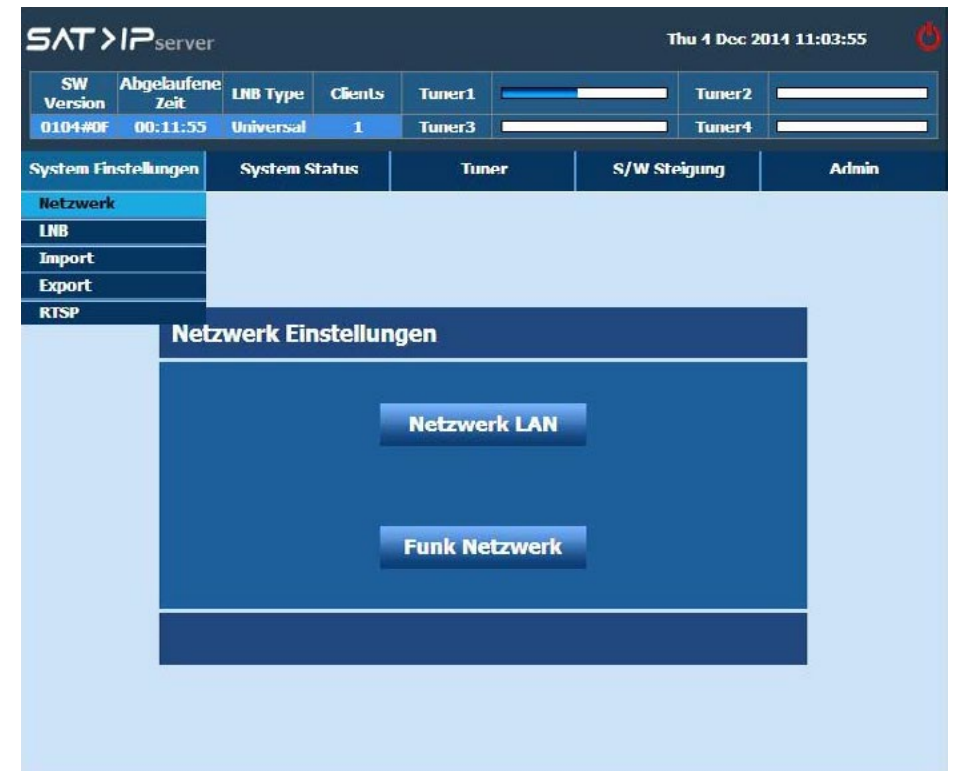
Select „Yes“ from the confirmation to log out from the Server page.



4. System Settings

Server box supports the below network mode of interfaces.

- Wired Network
- Wireless Network



Click „System Settings->Network Settings“ from the server page.

4. System Settings

Click „System Setting“ from the Server page.
Topics covered under Admin are listed below:

- Network Settings
- LNB Settings
- Import Settings
- Export Settings

4.1 Network Settings

Wired Network

Server box supports the below IP mode of configurations in Wired network,

- DHCP (Managed Network)
- AUTO IP (Unmanaged network)
- Manual (User IP configuration)

Note:

1. By default the Server box is in DHCP mode.
2. Server box failed to find DHCP server then it will automatically move to Auto-IP mode & allocate IP address in 169.x.x.x range.

Wireless Network

Server box supports the below IP mode of configurations in Wireless network.

- Auto
- Manual

4. System Settings

4.1.1 Wired

By default the Server box is in DHCP mode.

Server acquires IP address from DHCP server & listed the information on the screen.

Server box failed to find DHCP server then it will automatically move to Auto-IP mode & allocate IP address in 169.x.x.x range.

User can configure the IP settings by „Manual“ mode also. In manual mode user can enter/edit the IP settings. IP configuration can be edited from this dialog.

After complete the IP configuration, click „Apply“ for save.



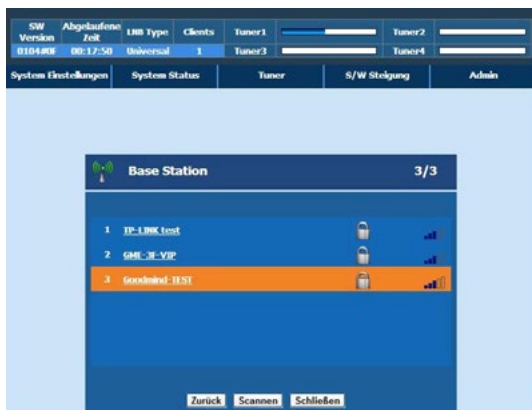
4. System Settings

4.1.2 Wireless

Wireless option can be configured by Auto (or) Manual.



If user selects „Auto“, WiFi routers which are available nearby can be discovered automatically & listed.



Network name (SSID): Name of the network. Network name will be truncated with ellipsis (...) if the network name exceeds more than 15 characters.

Signal Quality: Signal icon displayed with different colors based on the reception quality.

Lock: Lock icon will be displayed if the connection mode is secure. Supported security modes are WPA, WPA2, WEP-64 bit, WEP-128 bit.

4. System Settings

Password request screen will be displayed if user selects WPA secure system available WiFi router. Using keypad user should enter the valid WPA key.

A warning pop-up is displayed if the password is invalid or the Receiver is unable to connect to the network.

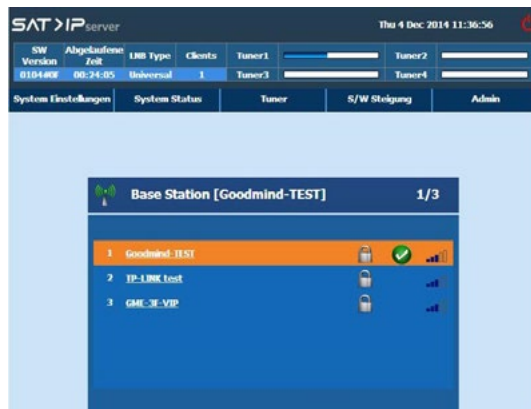
In the event that the warning pop-up is displayed, pressing any key causes the network list to be re-displayed with the same network in focus.

Enter valid password and select „Connect“ button; the wireless network will be connected successfully.



4. System Settings

The Green color tick icon is displayed if WiFi Router is connected without any problem. All WiFi network settings are stored in the system memory.



Wireless can be configured by Manually. To connect the Box to WiFi router user need to provide the Device information.

If users pressing OK key the base station will be opened. Further procedure will be same as explained for Auto mode.



4. System Settings

4.2 LNB Settings

Select the type of LNB that is connected to Satellite input of your box based on your satellite installation. Topics covered under are listed below:

Quad

Select „Quad“ when a Quad LNB, Octo LNB or Universal multiswitch is connected to your Server box.

Quattro (Quattro LNB)

Select „Quattro“ when a Quattro LNB is connected to your Server box directly.

Unicable (Unicable LNB or Unicable multiswitch)

Select „Unicable“ when a Unicable switch is connected to your Server box

JESS

Select „Jess“ when a Jess switch is connected to your Server box.

DiSEqC1.2

Select „DiSEqC“ when a DiSEqC1.2 motor is connected to your Server box.

USALS

Select „USALS“ when a USALS motor is connected to your Server box.

How to Access?

Click „LNB Setting“ from the Server page.

4. System Settings

4.2.1 LNB Settings

The screenshot shows the SAT>IP server interface with the LNB settings menu open. The top status bar displays 'SAT>IP server' and the date/time 'Thu 4 Dec 2014 13:36:18'. Below this is a table with columns: SW Version (0104#0F), Abgelaufene Zeit (00:30:02), LNB Type (Universal), Clients (1), Tuner1, Tuner2, Tuner3, and Tuner4. A navigation menu includes 'System Einstellungen', 'System Status', 'Tuner', 'S/W Steigung', and 'Admin'. The 'LNB' menu is expanded, showing options: 'Netzwerk', 'LNB', 'Import', 'Export', and 'RTSP'. The 'LNB Einstellungen' dialog is displayed, featuring radio buttons for 'Quad' (selected), 'Quattro', 'Unicable', and 'JESS'. The settings are: LNB Type: Universal; LNB Low Häufigkeit: 9750 MHz; LNB High Häufigkeit: 10600 MHz; and Stellungsregler: None. 'Anwenden' and 'Zurücksetzen' buttons are at the bottom.

To configure the below settings from the LNB settings menu.

- LNB Mode - Quad / Quarto / Unicable / Jess
- LNB Type - Universal / C band / Ku band / Extended C band / User
- LNB Low Frequency
- LNB High Frequency
- Positioner - None / DiSEqC / USALS

Configure the settings and click on „Apply“ button for save.

4. System Settings

4.2.2 Quad

This screenshot is identical to the one in 4.2.1, showing the LNB settings menu. The 'LNB Einstellungen' dialog is the same, but the 'Quad' radio button is selected, indicating the configuration is for a Quad LNB.

Satellite reception system consists of a Quad LNB. Connect the 4 outputs of the LNB to the inputs 1... 4 of the Server box via suitable SAT antenna cables.

Similar to all Tuners.

- Horizontally polarised, high band 11.70-12.75 GHz („horizontal high“)
- Horizontally polarised, low band 10.70-11.70 GHz („horizontal low“)
- Vertically polarised, high band 11.70-12.75 GHz („vertical high“)
- Vertically polarised, low band 10.70-11.70 GHz („vertical low“)

4. System Settings

4.2.3 Quattro

The screenshot shows the SAT>IP server interface with the LNB settings window open. The LNB Type is set to 'Universal'. The LNB Low Häufigkeit is 9750 MHz and the LNB High Häufigkeit is 10600 MHz. The Stellungsregler is set to 'None'. The window has 'Anwenden' and 'Zurücksetzen' buttons.

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	00:33:18	Universal	1	Tuner1	Tuner2	Tuner3	Tuner4

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

Netzwerk | LNB | Import | Export | RTSP

LNB Einstellungen

● Quad ● **Quattro** ● Unicable ● JESS

LNB Type: Universal

LNB Low Häufigkeit: 9750 MHz

LNB High Häufigkeit: 10600 MHz

Stellungsregler: None

Anwenden Zurücksetzen

Satellite reception system consists of a Quattro LNB. Connect the 4 outputs of the Quattro LNB to the inputs 1... 4 of the Server via suitable SAT antenna cables & and ensure the correct port assignment should be as follows:

- RF#4 - LNB output „horizontal high“ into input 1(11.70-12.75 GHz)
- RF#3 - LNB output „horizontal low“ into input 3(10.70-11.70 GHz)
- RF#2 - LNB output „vertical high“(11.70-12.75 GHz)
- RF#1 - LNB output „vertical low“ (10.70-11.70 GHz)

4. System Settings

4.2.4 Unicable

The screenshot shows the SAT>IP server interface with the LNB settings window open. The LNB Type is set to 'Universal'. The LNB Low Häufigkeit is 9750 MHz and the LNB High Häufigkeit is 10600 MHz. The window has 'Anwenden' and 'Zurücksetzen' buttons.

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	00:34:43	Universal	1	Tuner1	Tuner2	Tuner3	Tuner4

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

LNB Einstellungen

● Quad ● **Unicable** ● Quattro ● JESS

LNB Type: Universal

LNB Low Häufigkeit: 9750 MHz

LNB High Häufigkeit: 10600 MHz

	Benutzer Band(1 bis R)	Nutzer-Frequenzband(MHz)	Satelliten (A / B)
Tuner 1	1	1280	A
Tuner 2	2	1387	A
Tuner 3	3	1484	A
Tuner 4	4	1516	B

Anwenden Zurücksetzen

Unicable distribution is a satellite TV technology that enables delivery of broadcast programming to multiple users over a single coaxial cable.

- Unicable IF Channel have eight options: None, 1, 2, 3, 4, 5, 6, 7 & 8
- User has provided the edit option Centre frequency.
- User has provided the option to select the available Ports A or B.

4. System Settings

4.2.5 Jess

The screenshot shows the SAT>IP server interface with the Jess LNB settings page. The top navigation bar includes 'System Einstellungen', 'System Status', 'Tuner', 'S/W Steigung', and 'Admin'. The main content area is titled 'LNB Einstellungen' and features radio buttons for 'Quad', 'Quattro', 'Unicable', and 'JESS'. The 'LNB Type' is set to 'Universal'. Below this, there are input fields for 'LNB Low Häufigkeit' (9750 MHz) and 'LNB High Häufigkeit' (10600 MHz). A table lists four tuners with their respective user bands and satellite assignments:

	Benutzer-Band(1 bis 32)	Benutzer-Band(1 bis 32)	Satelliten (A bis H)
Tuner 1	28	1230	A
Tuner 2	12	1790	F
Tuner 3	1	1654	C
Tuner 4	25	1989	H

Buttons for 'Anwenden' and 'Zurücksetzen' are located at the bottom of the settings panel.

32 users can able to view the 8 different satellites via user band frequency.

4. System Settings

4.2.6 DiSEqC

The screenshot shows the SAT>IP server interface with the DiSEqC LNB settings page. The top navigation bar is identical to the previous page. The main content area is titled 'LNB Einstellungen' and features radio buttons for 'Quad', 'Quattro', 'Unicable', and 'JESS'. The 'LNB Type' is set to 'Universal'. Below this, there are input fields for 'LNB Low Häufigkeit' (9750 MHz) and 'LNB High Häufigkeit' (10600 MHz). A dropdown menu for 'Stellungsregler' is open, showing options: 'None', 'DiSEqC', and 'Usals'. Buttons for 'Anwend' and 'Zurücksetzen' are located at the bottom of the settings panel.

DiSEqC 1.2 is used to move the motor manually. Using this option user can move the motor with the following moving controls.

- User - Step by step movement, based on user input
- Installer - Continuous movement
- Goto X - Move to the dish to user specified position
- Advanced - Dish settings(For e.g. Dish moving limits, Reset dish position, etc.,)

4. System Settings

The screenshot shows the SAT>IP server interface with the following data:

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner 1	Tuner 2	Tuner 3	Tuner 4
0105	00:05:02	Universal	1				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

LNB Einstellungen

Quad
 Quattro
 Unicable
 JESS

LNB Type: Universal
 LNB Low Häufigkeit: 9750 MHz
 LNB High Häufigkeit: 10600 MHz
 Stellungenregler: DiSEqC
 RF Input Source: RF 1
 Umzug Type: Installer
 Position: 1
 Laufwerk E/W: östlich | Westen | **Bewegen**
 Satelliten: Astra 1KR/1L/1M/2C(19.2E)
 Transponder: 10744H_22000
 Häufigkeit: 10744
 Symbol Rate: 22000
 Polarisation: Horizontal
 Signal: 59%

Anwenden Zurücksetzen

Set the Dish moving type as INSTALLER. Press Left/Right key in Drive East/West option to move the motor. Now motor will be move continuously[coarse movement]. Motor movement will be stop when the user press again LEFT/RIGHT key.

4. System Settings

The screenshot shows the SAT>IP server interface with the following data:

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner 1	Tuner 2	Tuner 3	Tuner 4
0105	00:13:21	Universal	1				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

LNB Einstellungen

Quad
 Quattro
 Unicable
 JESS

LNB Type: Universal
 LNB Low Häufigkeit: 9750 MHz
 LNB High Häufigkeit: 10600 MHz
 Stellungenregler: DiSEqC
 RF Input Source: RF 1
 Umzug Type: User
 Position: 1
 Laufwerk E/W: östlich | Westen | **Bewegen**
 Satelliten: Astra 1KR/1L/1M/2C(19.2E)
 Transponder: 10744H_22000
 Häufigkeit: 10744
 Symbol Rate: 22000
 Polarisation: Horizontal
 Signal: 59%

Anwenden Zurücksetzen

Set the Dish moving type as USER. Press Left/Right key in Drive East/West option to move the motor. Now motor will be move slowly [step by step movement].

4. System Settings

GoTo X option is used to move the motor in specified position. To perform this action, select Dish moving type as GoTo X and enter the Dish position by pressing numeric keys. Then press OK key, now dish will be move to specified dish position.

4. System Settings

The above picture which shows the Advanced setup, through this setup user can perform the below listed Motor related settings,

- Enable / Disable limit - Enable or Disable the motor rotation to the restricted direction angle.
- Drive East / West - User can rotate the dish either East/West direction by pressing LEFT/RIGHT key.
- Set EAST / WEST limit - This option is only enable, when we set the „Enable limits“. Using this option, user can set the desired east / west angle. Afterward, they can't able to move the dish after that angle. If user want to move the dish after that angle, then they need to set the limit option as „Disable limits“. Recalculate Position - By pressing the RED key, user can achieve the „RECALCULATE“ function.
- This Recalculate position option will replace the logical positions set by the user. If user does this operation, confirmation will be displayed. If user selects YES option, „Dish Moving“ message will be displayed.
- Reset Position - The motor position can be reset to its reference position [0 degree] by using the Reset Position option. Confirmation message will be displayed after pressing GREEN color key. If user select YES option, „Dish is Moving“ message will be displayed.

4. System Settings

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2
0104#0F	00:55:55	Universal	1	Tuner3	Tuner4

System Einstellungen	System Status	Tuner	S/W Steigung	Admin
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LNB Einstellungen

Quad JESS

LNB Type:

LNB Low Häufigkeit: MHz

LNB High Häufigkeit: MHz

Stellungsregler:

RF Input Source:

Umzug Type:

Lautwerk E/W:

Beschränken:

Set Limit:

The above picture shows the Motor moving in-progress.

4. System Settings

4.2.7 USALS

SAT>IP server Tue 23 Dec 2014 14:12:39

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2
0105	00:16:25	Universal	1	Tuner3	Tuner4

System Einstellungen	System Status	Tuner	S/W Steigung	Admin
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LNB Einstellungen

Quad Quattro Unicable JESS

LNB Type:

LNB Low Häufigkeit: MHz

LNB High Häufigkeit: MHz

Stellungsregler:

RF Input Source:

Satelliten-Winkel:

Lokale Länge:

Lokale Breitengrad:

Satelliten:

Transponder:

Häufigkeit:

Symbol Rate:

Polarisation:

Signal:

USALS means Universal Satellite Automatic Location System. This type is used to move the dish towards the satellite position automatically.

USALS is used to position the dish automatically without user stress. By giving the input of satellite angle, user latitude & longitude angle, motor will be positioned automatically to the selected satellite.

4. System Settings

4.3 Import Settings

SAT>IP server Tue 23 Dec 2014 14:18:18

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0105	00:00:12	Universal	1				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

Einstellungen Importieren

Wählen Sie die zu importierende Datei

Import Settings: User can import the configuration information which was available from the receiver (can be extracted using export settings).

4. System Settings

4.4 Export Settings

SAT>IP server Thu 4 Dec 2014 14:18:04

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	01:11:02	Universal	1				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

- Netzwerk
- LNB
- Import
- Export**
- RTSP

Wählen Sie die zu exportierende Datei

Using export settings user can retrieve the user configured details of the Server & stored it as separate XML file.

5. System Status

System status menu gives the informations about:

- Tuner details
- Tuner parameters
- Streaming details

5.1 Tuner Status

SAT>IP server Tue 23 Dec 2014 14:22:00

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0105	00:03:57	Universal	2				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

Tuner Status

Tuner 1	Tuner 2	Tuner 3	Tuner 4
Tuner Details		Tuner Params	
Tuner Modus	Static	Frequenz	11954
Sperren Status	locked	Symbol Rate	27500
Signalstärke	-50dbm	Polarisation	horizontal
Signalqualität	36db	FFC	optional
Durchschnitt BER	0	22KHz	auto
Strom BLR	0	Modulation	qpsk
RF Auswahl	RF-1	Rezeption Std	DVB-S
LNA	12db	Tuner Quelle	1
Streaming Details			
Client 1			
Splefend	yes		
Stream Id	12837		
Verteilung	multicast		
Quelle	192.168.3.128:2000		
Ziel	239.1.0.0:2000		
Pld's	0,18,20,100,110,125,130,950		

Tuner status screen gives details about;

- Tuner details
- Tuner parameters
- Streaming details

6. Tuner

Select the type of Tuner of your box based on your satellite installation. Topics covered under are listed below:

Tuner Settings

- Select „Dynamic“ for Server box tuned the client requested carrier.
- Select „Static“ for Server box tuned the fixed carrier where the client can only tune that carrier.

Tuner Test

- Select „Tuner Test“ to check the tuner lock status.

6. Tuner

6.1 Tuner Settings

The screenshot shows the 'Tuner Einstellungen' page in the SAT>IP server interface. At the top, there is a header with the server name and a timestamp 'Thu 4 Dec 2014 14:44:59'. Below the header is a table with columns for SW Version, Abgelaufene Zeit, LNB Type, Clients, Tuner1, Tuner2, Tuner3, and Tuner4. The table shows the following data:

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	00:11:27	Universal	2				

Below the table, there are navigation tabs: System Einstellungen, System Status, Tuner, S/W Steigung, and Admin. The 'Tuner' tab is selected. The main content area shows the 'Tuner Einstellungen' form. It has a sub-header 'Tuner Einstellungen' and a table with columns for Tuner 1, Tuner 2, Tuner 3, and Tuner 4. The 'Tuner 1' column is active. The settings for Tuner 1 are:

- Tuner Type: Dynamische statisch
- Quelle: 1
- Häufigkeit: 11954
- Symbol Rate: 27500
- Polarisation: Horizontal
- Streaming Adresse: 239 . 1 . 0 . 0 Port 2000
- LNA: 12 db
- Pid's: 0,18,20,100,110,125,130,950

The status bar shows: Signal Unlocked, Stärke 0dbm, Qualität 0db. There are 'Anwenden' and 'Zurücksetzen' buttons at the bottom.

- By default the Server box is in Dynamic mode.
- Server box tuned the client requested carrier in Dynamic mode.
- Once the Client is requested to lock the particular frequency. Then Server box tuned that carrier in Dynamic mode.
- LNA used to attenuate the signal strength and quality.

6. Tuner

The screenshot shows the 'Tuner Einstellungen' page in the SAT>IP server interface. At the top, there is a header with the server name and a timestamp 'Tue 23 Dec 2014 14:24:54'. Below the header is a table with columns for SW Version, Abgelaufene Zeit, LNB Type, Clients, Tuner1, Tuner2, Tuner3, and Tuner4. The table shows the following data:

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0105	00:06:53	Universal	3				

Below the table, there are navigation tabs: System Einstellungen, System Status, Tuner, S/W Steigung, and Admin. The 'Tuner' tab is selected. The main content area shows the 'Tuner Einstellungen' form. It has a sub-header 'Tuner Einstellungen' and a table with columns for Tuner 1, Tuner 2, Tuner 3, and Tuner 4. The 'Tuner 1' column is active. The settings for Tuner 1 are:

- Tuner Type: Dynamische statisch
- Quelle: 1
- Häufigkeit: 11954
- Symbol Rate: 27500
- Polarisation: Horizontal
- Streaming Adresse: 239 . 1 . 0 . 0 Port 2000
- LNA: 12 db
- Pid's: 0,18,20,100,110,125,130,950

The status bar shows: Signal Locked, Stärke -50dbm, Qualität 34db. There are 'Anwenden' and 'Zurücksetzen' buttons at the bottom.

Select „Static“ for configure the tuner to the particular frequency where the client can only tune that carrier.

- Source - To select DISEqC 1.0 switch (A, B, C or D). The default value set to be 1.
- Frequency - To enter the fixed frequency.
- Symbol rate - To enter the fixed symbol rate(1000 to 65000 kps).
- Polarization - To select Horizontal / Vertical.
- Streaming Address - To enter the IP address and port number for multicast. Each field values shall be 0 to 255. Port no range should be 1024 -65535.
- LNA - To attenuate the signal from 0 to 16db.
- PID's - To enter (PAT, PMT, Audio, Video, Subtitle, Audio Descriptor, Teletext...) PID's. Maximum of 32 pids and no more duplication allowed.

6. Tuner

6.2 Tuner Test

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	00:17:47	Universal	2				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

Tuner Einstellungen
Tuner Test

Tuner Test

Tuner 1	Tuner 2	Tuner 3	Tuner 4
Tuner Quelle: 1			
Häufigkeit: 10780			
Symbol Rate: 27500			
Polarisation: Vertical			
LNA: 12 db			
Signallärke: 35%			

Anwenden Zurücksetzen

Enter the below valid parameters to check the tuner lock status.

- Source - To select the Tuner source
- Frequency - To enter the fixed frequency.
- Symbol rate - To enter the fixed symbol rate(1000 to 65000kSps).
- Polarization - To select Horizontal / Vertical.
- LNA - To attenuate the signal from 0 to 16db.

7. Software Update

In order to support S/W upgrading, we have supported the below upgrading modes,

- S/W download via USB
- S/W download via OND
- S/W download via WEB UI

7.1 USB

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	00:24:21	Universal	2				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

USB
OND
WEBUI

USB-Gerät ist nicht verbunden. Bitte überprüfen Sie USB an den Empfänger angeschlossen ist.

OK

The S/W Upgrade via USB option used to download the latest software by USB memory device

Procedure for S/W Upgrade via USB:

- Format (FAT32 file format) the USB stick and create the folder name „Update“
- Copy the .usb images directly in to the folder name „Update“ and insert the USB memory device in the STB USB port.
- Select the S/W Upgrade via USB option from the menu.

Note:

If USB media is not inserted and when user select „Software Upgrade via USB“ then above message will be displayed.

7. Software Update

The screenshot shows the SAT>IP server interface at 15:02:16. At the top, there is a status bar with the logo, 'server', and the date/time. Below it is a table with columns: SW Version (0104#08), Abgelaufene Zeit (00:28:24), LNB Type (Universal), Clients (2), Tuner1, Tuner2, Tuner3, and Tuner4. A navigation menu below the table includes 'System Einstellungen', 'System Status', 'Tuner', 'S/W Steigung', and 'Admin'. The 'S/W Steigung' menu is open, showing options: USB, OND, and WEBUI. A central dialog box with a blue header asks: 'Software-Image in der USB - Möchten Sie die Software aktualisieren?' with 'Yes' and 'No' buttons.

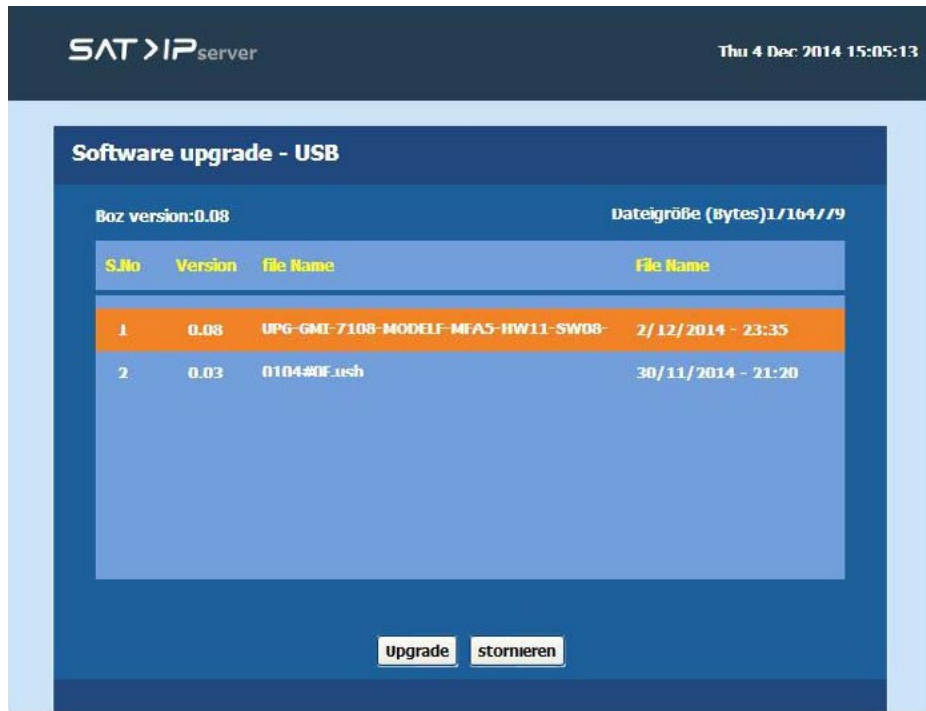
If USB media is inserted with S/W image and when user select „Software Upgrade via USB“ then above message will be displayed.

7. Software Update

The screenshot shows the SAT>IP server interface at 15:03:55. The top status bar and table are identical to the previous screenshot. The 'S/W Steigung' menu is still open. In the center of the screen, there is a progress bar with 10 blue segments and a black segment on the right. Below the progress bar, the text reads: 'Bitte warten Upgrader erhalten Booten...'

System switch to Upgrader mode when select Yes from the confirmation.

7. Software Update



System boot the upgrader mode and if the „Update“ folder in USB contains more than one file the above screen will be displayed. User need to select the correct image. Otherwise it directly start the S/W fusing.

7. Software Update



Select the correct image and press the ok key, downloading will start.

7. Software Update

The screenshot shows the SAT>IP server interface during a software upgrade. The top bar displays the logo and the date/time: Thu 4 Dec 2014 15:07:59. The main content area is titled "Software upgrade - USB" and lists the following details:

Box Version	0.08
file Name	UPG-GMI-7108-MODELF-MFAS-HW11-SW08-CID1-AID1_USB.usb
Dateigröße (Bytes)	17164779
Erstellt Datum & Zeit	2/12/2014 - 23:35
Neue S / W Version	0.08

Below the table, a yellow warning message reads: "Software-Upgrade kann der Empfänger die Leistung, Stabilität, usw. zu erhöhen, kann der Empfänger gehen tot im Fall von Stromausfällen. So vermeiden Verlustleistung während der Software- Modernisierung." A progress bar shows "Reading file from USB..." at 94% completion, with a time of 00:07:20. A red banner at the bottom contains the warning: "Achtung ! Nicht den Empfänger auszuschalten. Flash-Programmierung ist in -progress ..."

The above slide indicated downloading in-progress.
Warning - Don't power off the STB during software downloading/erasing/fusing.

7. Software Update

The screenshot shows the SAT>IP server interface after the software upgrade is complete. The top bar displays the logo and the date/time: Thu 4 Dec 2014 15:14:08. The main content area is titled "Software upgrade - USB" and lists the same details as the previous slide:

Box Version	0.08
file Name	UPG GMI 7108 MODEL MFAS HW11 SW08 CID1 AID1_USB.usb
Dateigröße (Bytes)	17164779
Erstellt Datum & Zeit	2/12/2014 - 23:35
Neue S / W Version	0.08

Below the table, the same yellow warning message is present. The progress bar now shows "Booting Application. Please Wait..." with a time of 00:03:43.

After complete the downloading, box booted with new S/W.

7. Software Update

7.2 OND

SAT>IP server Thu 4 Dec 2014 15:16:02

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	00:00:30	Universal	0				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

USB
OND
WFRUIT

Stelgung Upgrade Via OND

Netzwerk Interface: Ethernet WiFi

OND Server: 59 - 120 - 115 - 74

Suchen

Upgrade the software from anywhere in the network world through TCP/IP mode of connection in a secure manner.

Select the Network Interface mode and enter the OND server IP address for search the S/W availability.

7. Software Update

SAT>IP server Thu 4 Dec 2014 15:17:21

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#0F	00:01:50	Universal	0				

System Einstellungen | System Status | Tuner | S/W Steigung | Admin

Stelgung Upgr...

Das Suchen OND Server...

Netzwerk Interface: Ethernet WiFi

OND Server: 59 - 120 - 115 - 74

Suchen

When select „Search“ Button, STB will search new S/W in the Network.

7. Software Update

The screenshot shows the SAT>IP server interface. At the top, it displays 'SAT>IP server' and the date 'Thu 4 Dec 2014 15:18:44'. Below this is a table with columns: SW Version, Abgelaufene Zeit, LNB Type, Clients, Tuner1, Tuner2, Tuner3, and Tuner4. The table contains the following data:

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0104#OK	00:03:15	Universal	0				

Below the table are navigation tabs: System Einstellungen, System Status, Tuner, S/W Steigung, and Admin. The main content area shows a message box with the text 'Schon haben Sie neueste Software.' and an 'OK' button. Below the message box is a 'Suchen' button.

If new S/W is not available then STB shows the above message.

7. Software Update

The screenshot shows the SAT>IP server interface. At the top, it displays 'SAT>IP server' and the date 'Tue 23 Dec 2014 15:59:45'. Below this is a table with columns: SW Version, Abgelaufene Zeit, LNB Type, Clients, Tuner1, Tuner2, Tuner3, and Tuner4. The table contains the following data:

SW Version	Abgelaufene Zeit	LNB Type	Clients	Tuner1	Tuner2	Tuner3	Tuner4
0105	00:00:17	Universal	1				

Below the table are navigation tabs: System Einstellungen, System Status, Tuner, S/W Steigung, and Admin. The main content area shows a 'Steigung Upgrade Via OND' screen. It has a 'Netzwerk Interface' section with radio buttons for 'Ethernet' (selected) and 'WiFi'. Below this is an 'OND Server' section with input fields for '59', '120', '115', and '74', and a 'Suchen' button. At the bottom, there is a confirmation message box with the text 'Box Software-Version 03. Luft Software-Version 299. Möchten Sie die Software aktualisieren?' and 'Yes' and 'No' buttons.

If new S/W is available then STB shows the above confirmation message.

7. Software Update

The screenshot shows the SAT>IP server interface at 16:01:35 on Tue 23 Dec 2014. The main content area is titled "Software upgrade - OND" and contains the following information:

- Box Version: 0.03
- file Name
- Dateigröße (Bytes)
- Erstellt Datum & Zeit
- Neue S / W Version

A warning message is displayed in yellow text: "Software-Upgrade kann der Empfänger die Leistung , Stabilität, usw. zu erhöhen, kann der Empfänger gehen tot im Fall von Stromausfällen . So vermeiden Verlustleistung während der Software- Modernisierung."

At the bottom, a progress bar shows "Downloading firmware..." with a time of 00:00:00 and 28% completion.

Once user press OK STB starts to connect the server. Once successfully connected with server then downloading will be started.

7. Software Update

The screenshot shows the SAT>IP server interface at 16:02:05 on Tue 23 Dec 2014. The main content area is titled "Software upgrade - OND" and contains the following information:

- Box Version: 0.03
- file Name
- Dateigröße (Bytes)
- Erstellt Datum & Zeit
- Neue S / W Version

The same warning message is displayed in yellow text: "Software-Upgrade kann der Empfänger die Leistung , Stabilität, usw. zu erhöhen, kann der Empfänger gehen tot im Fall von Stromausfällen . So vermeiden Verlustleistung während der Software- Modernisierung."

At the bottom, the status is "Booting Application. Please Wait..." with a time of 00:00:36.

After complete the downloading, box booted with new S/W.

7. Software Update

7.3 WebUI

SAT>IP_{server} Tue 23 Dec 2014 14:29:31

Software upgrade - webui

Wählen Sie Software-Image - Datei (*.nig) 0105.nig

Box Version 0.03

file Name 0105.nig

Software-Upgrade kann der Empfänger die Leistung , Stabilität, usw. zu erhöhen, kann der Empfänger gehen tot im Fall von Stromausfällen .
So vermeiden Verlustleistung während der Software- Modernisierung.

This is simple file based upgrading process by this user can able to upgrade the s/w image from the local PC or from USB device connected to the PC. The s/w image should be of format .nig

7. Software Update

SAT>IP_{server} Thu 4 Dec 2014 16:26:59

Software upgrade - webui

Wollen Sie das System neu zu starten.

Yes No

Box Version 0.03

file Name 0104#01.nig

Software-Upgrade kann der Empfänger die Leistung , Stabilität, usw. zu erhöhen, kann der Empfänger gehen tot im Fall von Stromausfällen .
So vermeiden Verlustleistung während der Software- Modernisierung.

User can able to cancel the upgrade mode with confirmation via press the cancel button.

7. Software Update



„Please wait application get booting“ message get displayed to the user while receiver booting.

8. Admin

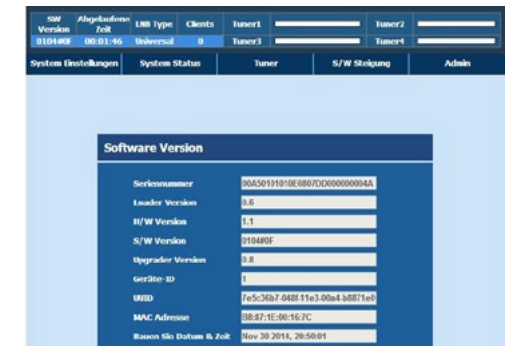
Server box supports S/W version display and Password setup mechanism to change the server configuration.

- S/W Version
- Change Password

8.1 SW Version

The Version menu displays below informations about the application.

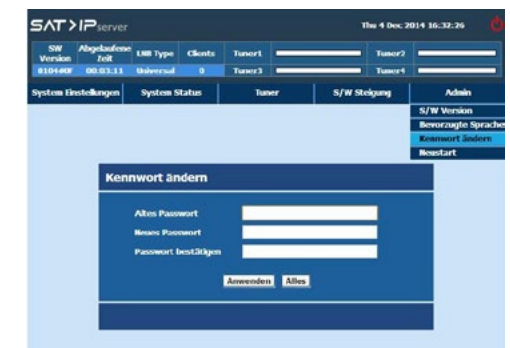
- Serial Number
- Loader Version
- H/W Version
- S/W Version
- Upgrader Version
- Device ID
- UUID
- MAC Address
- Build Date & Time



8.2 Change Password

Password for the Web interface can be changed using this „Change password“. Enter the old, new and confirm password into the corresponding input fields & click „Apply“ to confirm the new password.

Default password is „gmi_satip“.



9. Specifications

- Processor..... STi7108
- Flash..... 1 MB NOR / 128 MB NAND
- RAM..... 512 MB / DDR3-1066
- Ethernet..... RJ45 10/100/1000
- Specification..... SAT>IP 1.2 compatible
- Video / Audio Unterstützung..... MPEG2 / MPEG4 / TS & PS
- Protocoll..... Unicable, JESS, DiSEqC 1.0, 1.2 and USALS
- DVB-S input..... 4x
Connection via single, twin, quad, Qattro LNB
or a multiswitch
- USB port..... for Software Updates
- LED operating lights..... green (for On/Off) / red (for streaming)
- Applikation..... Elgato (for use on mobile devices)
- Power supply..... AC 100~230 Volt, DC 12 V, 3 A
- Operating temperature..... 0° - 40° C
- Power switch..... yes
- Dimensions..... 250 x 135 x 44 mm (L/W/H)
- Weight..... 742 g

Note:

Weight and dimensions are not absolutely exact values. Technical details can be changed at any time (according to manufacturer) without prior notice.

Declaration of Conformity

This complies with the following directives / standards is confirmed:

Electromagnetic Compatibility Directive 2004/108/EG

EN 55013: 2001 + A1: 2003 + A2: 2006

EN 55020: 2007

EN 61000-3-2:2006 + A1:2009 + A2:2009

EN 61000-3-3:2008

Low Voltage Directive 2006/95/EG

EN 60065: 2002 + A1: 2006 + A11: 2008

Notes

WEEE Reg.-Nr. DE70592344



Status: 1.0 November 2014 // Technical changes, misprints and errors reserved.
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