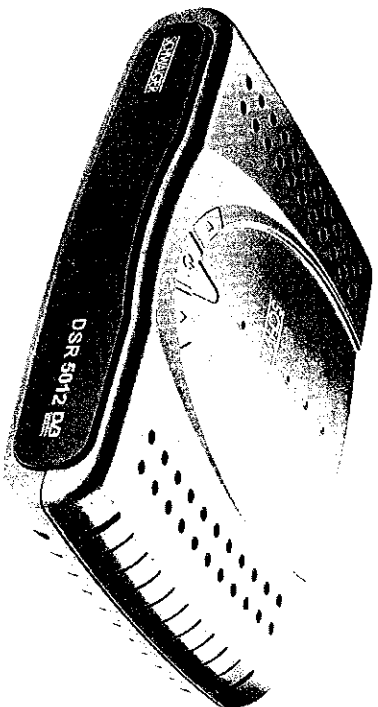


DSR 5012



Bedienungsanleitung

Digitaler SAT-Receiver Free-To-Air



User's Manual

Digital Satellite Receiver (FTA)

Dear Customer,

CUSTOMER INFORMATION

although our products are representing highly recognized performance standards we are continuously following up the enhancements and future trends in the world of digital pictures. Therefore, we are offering a SCHWAIGER update service that is always providing the latest software version for this unit through ASTRA satellite.

We recommend that you have this unit searched for the latest version of the operating software right after installation or first use - and then later on once within every few months. Thus, you can be sure always having your unit at the latest stand of technology - even after years of use.

For details of software update please refer to the owner's manual, paragraph "Software Update". In the Main Menu, item "System Information" you can start the software download.

We hope you always enjoy digital TV with your equipment!
Sincerely yours,
SCHWAIGER GmbH Langenzenn (Germany)

GB

Christian Schwäger GmbH & Co. KG
Würzburger Straße 17, D-90579 Langenzenn
Hotline 09101/702 299, www.schwäger.de

SCHWAIGER

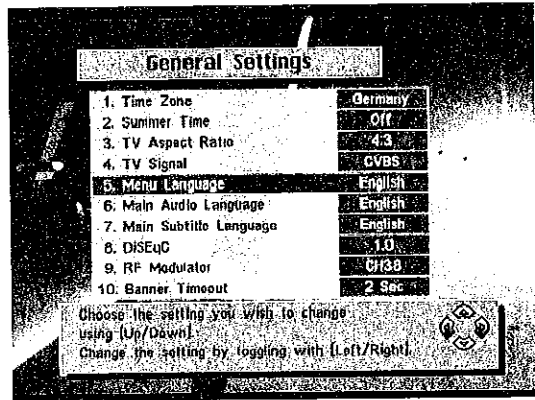
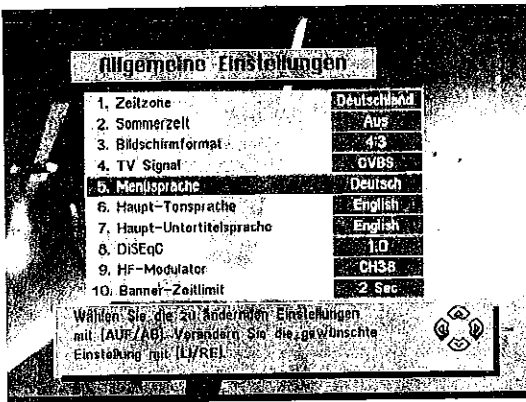
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Hinweis:

Das Menü "Allgemeine Einstellungen" wurde erweitert, um die Anzeige von Programm-Informationen zu verbessern.

Note:

The "General Settings" menu screen has been extended for easier and more comfortable access to program information.



GB

Das Menü wurde um den Punkt 10 ergänzt. Wenn Sie zu "Banner-Zeitlimit" gehen, können Sie die Zeitdauer einstellen, in der die "Info Box" unten auf dem Bildschirm sichtbar bleiben soll, wenn Sie auf einen anderen TV-Kanal schalten. Die Zeitdauer der Einblendung kann auf 2, 4, 6 oder 8 Sekunden eingestellt werden.

Menu point No. 10 has been added. When going to "Banner Timeout", you can adjust display time of the "Info Box" at the bottom of the screen that appears when selecting an other TV channel. Display time can be set to 2, 4, 6 or 8 seconds.

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1. Introduction

Thank you for purchasing this digital receiver. It has been designed for easy setup and getting quickly started right after connecting your antenna system and your TV set. The most popular TV channels on ASTRA and HotBird satellite have been pre-programmed in the channel list. If you do not wish to stay with this list or if you like to modify this list according to your personal preferences you may create your favorite selection of your own at any time. All necessary information for you will find in this manual.

To ensure that you get familiar with your receiver and that you will be able to make use of all advanced features, please read this manual and have it ready for later reference.

We hope you enjoy using this SCHWABER product.

2. Features

- Digital Satellite Receiver for all Free-to-Air TV programs.
- Slim-size design, horizontal and vertical operating position (Stand included)
- Additional external infrared sensor for "invisible" positioning of the receiver (IR sensor with connecting cable included)
- Universal home and mobile / outdoor use (10-26V 20W DC Adaptor and 12/24 volts DC car battery)
- Comfortable graphic user interface (OSD)
- 8 language menu (German, English, French, Italian, Spanish, Turkish, Arabic, Persian)
- DVB subtitle display (on/off)
- Major operating buttons also at the front panel
- EPG: Extended electronic program guide, (7 days)
- Integrated teletext function (OSD) and additional VBI display
- Automatic channel search and advanced manual search functions
- Network search
- Main channel list and 5 "favourite channel lists" for individual use
- 3,000 TV channel memories (TV and Radio)
- Signal strength and quality indicator bars for easy antenna configuration
- 1 SCART connector (TV)
- Additional audio / video output jacks (RCA)
- Video output signal format (SCART) selectable: RGB and CVBS
- Digital audio output connectors: for digital HiFi and home theater systems (Dolby Digital)
- 4:3 / 16:9 screen format selector
- Pre-programmed TV and radio channel list (ASTRA and HotBird)
- Software update "over the air" (OTA)
- Data interface for software update: RS-232
- SCPC and MCPC reception
- C / Ku Band reception
- DISEQC 1.0 and 1.2
- USALS (Universal Satellite Automatic Location System) for easy satellite tracing
- Infrared remote control with 35 functions
- Operating and stand-by indicator: dual colour LED
- LNB short circuit protection
- Receptacle foreexternal IR sensor

(All rights reserved)

3. Safety Notes

This set top box (STB) has been manufactured to satisfy the international safety standards. Please read the following safety precautions carefully.

MAINS SUPPLY: 230V AC

OVERLOADING : Do not overload a wall outlet, extension cord or adapter as this may result in fire or electric shock.

LIQUIDS : The STB shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

CLEANING : Disconnect the STB from the wall outlet before cleaning. Use a light damp cloth (no solvents) to dust the STB.

VENTILATION : The slots on top of the STB must be left uncovered to allow proper airflow to the unit. Do not expose the STB to direct sunlight or do not place it near a heater. Do not stack electronic equipments on top of the STB.

ATTACHMENTS : Do not use any accessories that are not recommended by the manufacturer of this unit as these may cause hazard or damage the STB.

CONNECTION TO THE ANTENNA : Disconnect the STB from the mains before connecting or disconnecting the cable from the antenna. Failure to do so can damage the antenna.

CONNECTION TO THE TV : Disconnect the TV from the mains before connecting or disconnecting the cable from the STB. Failure to do so can damage the TV.

GROUNDING : The antenna cable **MUST BE EARTHED** to the system earth of the antenna. The grounding system must comply with national standards for electrical safety.

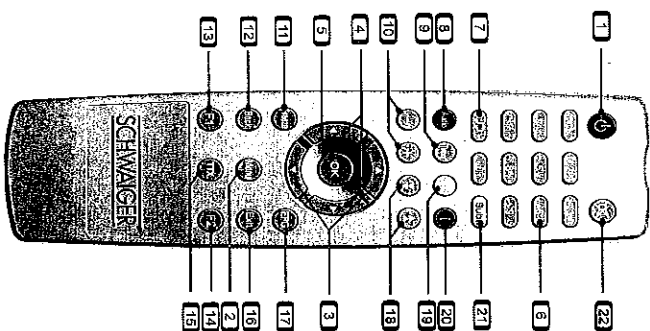
LOCATION: The STB is designed for indoor use only. Do not expose it to lightning, rain, or direct sunlight.

General

- Do not remove the cover.
- Do not allow the unit to be exposed to hot, cold or humid conditions.
- Do not connect or modify cable when the STB is plugged in.
- Use a soft cloth and a mild solution of dish washing liquid to clean the casing.
- Never allow liquids, spray or other materials to come into contact with the inside of the STB.
- Service should be carried out only at a authorized service centre, contact your local dealer for more information.
- Please note that the STB will be isolated completely from the 230V mains supply only after unplugging the AC adaptor from the wall outlet.

4. Your Receiver and its Functions

4.1 Remote Control Functions



- 1 POWER button
- 2 MENU button
- 3 Cursor UP / DOWN buttons
- 4 Cursor LEFT/ RIGHT buttons
- 5 OK (Enter) button
- 6 Numeric buttons (0 ~ 9)
- 7 RADIO button
- 8 AUDIO button
- 9 TIMER button
- 10 VOL (-) / VOL (+) buttons
- 11 FREEZE button
- 12 BACK button
- 13 free (F1) button
- 14 free (F2) button
- 15 TELTEXT button
- 16 EXIT button
- 17 EPG (Electronic Program Guide)
- 18 PAGE UP / DOWN button
- 19 LAST button
- 20 PROGRAM INFORMATION button
- 21 SUBTITLE button
- 22 MUTE button

* Batteries

Before using the remote control unit for the first time please insert the supplied batteries according to the instructions below:

- Open the battery compartment on the back of the Remote Control Unit.
- Install two AAA size batteries. Make sure that the (+) and (-) terminals are aligned correctly.
- Close the cover.

* Replacement

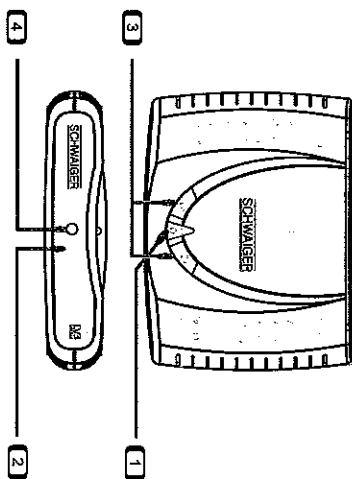
- Always replace all batteries at the same time.
- Mixing old and new batteries or mixing different types will reduce overall performance and could cause leakage or rupture.

Keys and its Functions

1. **POWER button**
To switch the Receiver ON and OFF (standby mode).
2. **MENU button**
To enter the main menu.
3. **Cursor UP / DOWN buttons**
To move up/down in the menus and change channels.

4. **Cursor LEFT/ RIGHT buttons**
To move left / right in the menus and change channels.
5. **OK (Enter) button**
To confirm selection of an item or to confirm a menu option.
(In viewing mode: to display the TV / Radio channel list.)
6. **Numeric buttons (0 ~ 9)**
To enter channel numbers and to select individual menu options.
7. **RADIO button**
To toggle between TV or Radio mode.
8. **AUDIO button**
To select the available audio mode.
9. **TIMER button**
To enter the program timer menu.
10. **VOL (-) / VOL (+) buttons**
To change the basic audio volume level.
11. **FREEZE button**
To freeze the current picture (still picture) or return to normal TV mode.
12. **BACK button**
To return to previous status or menu.
13. **F1**
This button is not available for this model.
14. **F2**
This button is not available for this model.
15. **TELETEXT button**
To enter teletext function.
16. **EXIT button**
To return to previous status or menu and cancel or abort an active process.
17. **EPG (Electronic Program Guide)**
To display the TV / Radio program guide. This Information is only shown if transmitted
18. **PAGE UP / DOWN button**
To change pages in a list faster than with up/down keys.
19. **LAST button**
To toggle between present and previous TV / Radio channels.
20. **PROGRAM INFORMATION button**
To display the "Info Bar" at the bottom of the screen and review extended information about current and next programs in EPG mode (if transmitted).
21. **SUBTITLE button**
To display DVB subtitles (on / off), if transmitted in specific programs
22. **MUTE button**
To temporarily mute the sound.

4.2 Front Panel Controls

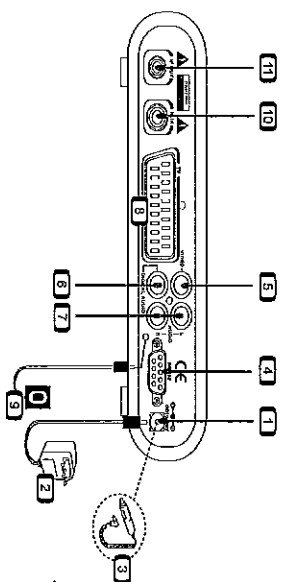


1. POWER Button
2. IR Sensor
3. CH UP / DOWN Buttons
4. Stand-by (Red) / Operation (Green) Indicator

The basic control functions of this unit (POWER ON / OFF, cursor functions) can be carried out by remote control and by front panel operations as well.

Infrared (IR) signals are being received through the front panel IR sensor.

4.3 Rear Panel Connections



1. DC power input (10 ~ 26 V, 20W)
2. AC DC Adaptor
3. Car Cigarette Lighter Power Cable
4. RS-232 Data Interface
5. Analog Video Output
6. Digital Audio Output (Coaxial)
7. Analog Audio Output (Stereo)
8. SCART Connector (TV)
9. Remote Eye
10. LNB Input
11. LNB Loop-Through Output

1. DC power input (10 ~ 26 V, 20W)

This connector is designed for plugging in the DC power cable of the AC_DC adaptor as well as any other suitable DC power source (such as a car cigarette lighter power cable, car battery, DC power from trucks, caravans, etc.). Please observe polarity: CENTER PLUS.

2. AC_DC Adaptor

This adaptor comes with the unit and may look different in some cases or areas. It will provide adequate 12 volts DC power for this unit. Please plug the DC cable into the "DC power input" jack (1) of this unit.

3. Car Cigarette Lighter Power Cable

This cable comes with the unit and is intended for connection of this receiver to all kinds of mobile power sources (cars, trucks, caravans, etc.)

4. RS-232 Data Interface

Computer interface for service stations and advanced users only. To be used for software update and channel list data transfer from another receiver (master / slave).

5. Analog Video Output

Analog video output for connecting Home Theater systems or monitors. The available video output signal format is "CVBS"

6. Digital Audio Output (Coaxial)

Dolby Digital and Linear PCM Stereo output for digital input of a HiFi or AV system with integrated digital decoder.

7. Analog Audio Output (Stereo)

Audio Stereo L/R signal for connecting your TV, HiFi or Home Theater system.

8. SCART Connector (TV)

For connection of all audio and video signals of this digital receiver to the TV set.

9. Infrared "Remote Eye"

Connect the supplied "Remote Eye" to this jack. It will receive the IR commands of your remote control unit even if the receiver itself has been installed in an "invisible" place. Fix the "Remote Eye" close to the front side of your TV.

10. LNB Input (IF INPUT)

Connect your satellite antenna system (LNB, multiswitch) to this jack.

11. LNB Loop-Through Output (IF OUTPUT)

If you have another analogue or digital satellite receiver and you wish to use the same LNB, then you can connect it to this "LNB loop-through" output jack.

CAUTION:

Do not mix up IF INPUT and IF OUTPUT jacks when connecting your satellite antenna!

5. Getting Started

This chapter explains some settings you will need to make before using the receiver for the first time. For easier operation the most popular TV and radio channels of ASTRA and Eutelsat (HotBird) satellite have been factory-preset. The sorting in the channel list has been made according to the viewing habits of many German-speaking TV viewers.

You may change the pre-programmed channel list or its sorting at any time.

5.1 Connecting the Satellite Receiver

• Mains Supply

This unit is designed for connecting to any wall outlet (mains voltage 230 volts AC), using the supplied AC_DC adaptor.

• TV Set




Connect the TV SCART connector on this satellite receiver to the SCART connector of your TV set, using a commonly available 21-pole SCART cable.

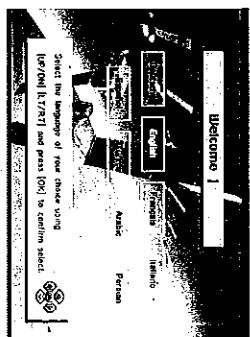
• Antenna

Connect the coaxial cable from your satellite antenna system (LNB) to the IF INPUT connector of the satellite receiver.

For details, please refer to section "Rear Panel Connections".

5.2 First Steps



Press the  button on the remote control or on the receiver. The RED standby indicator on the front changes to GREEN and the language selection menu appears on your TV. Use the  and  buttons on the remote control or on the receiver to select the language of your choice and then press the OK button. When selecting ENGLISH, a WELCOME screen appears on your TV screen:

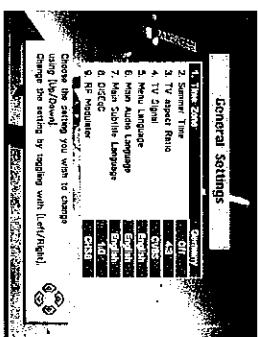


Your Digital Satellite Receiver is factory pre-programmed. After you have adjusted several settings in the **GENERAL SETTINGS** menu you have to press **[EXIT]** for loading the pre-programmed channel data.

If you don't want to use this data press **[MENU]** and select **INSTALLATION** to start your own searching.

Press OK to enter the "General Settings" menu.

In the "General Settings" menu you can perform individual settings that are related to the local time zone (summer/line included), your TV set, and desired language selections. For adjustments, please use the  and  buttons and see the explanations at the bottom of the menu screens.



- Press EXIT for loading the pre-programmed channel data. That may take some 30 seconds. (Please wait.)
- or
- Press MENU for selecting the "General Settings" menu. Then select "3. Installation" and perform item "1. Auto Search" or item "2. Manual Search", according to your needs.

6. Selecting TV and Radio Channels

The following steps are for viewing a preset channel. To select the channel you want to watch, use one of the following methods.

- Select the channel using the numeric buttons.
- Select the channel using the **▼▲** and **▶◀** buttons on the remote control or on the receiver.
- Press the OK button and select a channel from the channel list that appears. Then press the OK button.

6.1 Info Box

Your selected channel appears on the TV screen, along with the "Info Box" at the bottom of the screen that will be visible for about 3 seconds. To recall this "Info Box" please press the blue INFO button on the remote control, and press EXIT to cancel it.

The Info Box displays information such as the titles of the current and next programs as well as the reception quality and signal strength. For more detailed information about the current program press the INFO button again.

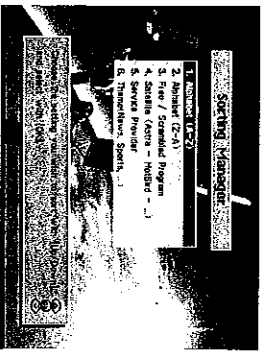
You can display all transponder info on any desired TV or radio channel.

- Press OK to display the "Total List" or any Favorite Channel List.
- Select the channel using the **▼▲** and **▶◀** buttons on the remote control or on the receiver.
- Press the INFO button.

6.2 Channel List and Sort Manager

Digital TV offers numerous channels. Therefore, all available channels are managed in lists.

- To view the "Total List", press the OK button while watching TV or listening to the radio.
- Three colored buttons are used to manage the Channel List.



RED Button:

Sorting the lists can be made in different ways:

- Alphabet (A-Z)
- Alphabet (Z-A)
- Free / Scrambled Program
- Satellite (Astra - HotBird or others)
- Service Provider
- Themes (News, Sports, etc.)

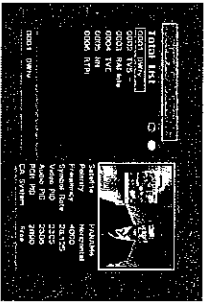
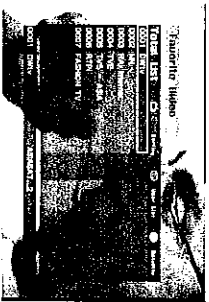
Please note that an individual sorting (others than mentioned above) cannot be restored.

GREEN Button:

Press the GREEN button on the remote control to change over to the user list(s) you created. (Such individual channel lists can be created through "Main Menu", sub menu "Channel Manager".

YELLOW Button

Press the YELLOW button on the remote control to view each satellite's channel list. The first channel on the list appears on the TV screen



6.3 Program Information

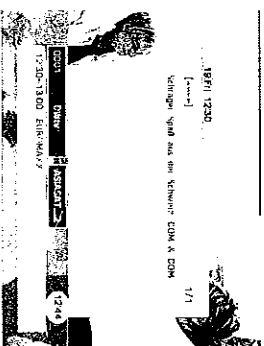
Please note that not all broadcasters provide program information. So, depending on the broadcaster, program information may not always be available. You can use the EPG and INFO buttons to view the extended program information.

Use the EPG button to view the information on program titles, broadcast schedule, program synopsis, etc., which are provided by the broadcaster of the current channel.

- Select the program you want to learn more about.
- Use the **▼▲** buttons on the remote control to navigate through different programs and use the **▶◀** buttons to navigate through the days of the week.
- Press the OK button. A synopsis of the selected program appears.

Use the INFO button to obtain information about the current program.

- While watching TV or listening to the radio, press the INFO button.
- When the button is pressed once, the channel information will be displayed in the Info Box.
- Press the INFO button again to display additional information, such as a synopsis of the current program, theme, etc.
- To display information about the next scheduled program, press the **▶◀** button.
- To return to viewing mode, press the INFO button again or press the EXIT button.



6.4 Subtitles

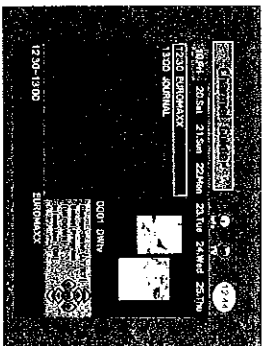
This receiver is capable of displaying DVB subtitles that come with selected TV channels. Please note that subtitles may not be available depending on the TV provider.

- To display subtitle text, press the SUBT button on the remote control.
- Press the SUBT button again to switch off subtitles.

6.5 Teletext

With this receiver, teletext can be viewed in two different ways.

- The so-called "OSD Text" is utilizing the built-in teletext decoder of this receiver. It can be operated with the remote control unit of this receiver. Usually, it is much faster than the conventional teletext. It can be used also with TV monitors or projectors that don't have an integrated teletext decoder.
- An other option is called "VBI Text" that leaves decoding up to a teletext decoder that is built into the TV set. In this case, all teletext functions must be operated through the remote control unit of the TV set.
- To enter "OSD Text" press the TTX button on the remote control unit of this receiver.
- To select the teletext pages use the numeric or **▼▲** buttons. The purpose of the color buttons on the remote control unit is explained in the bottom line of the teletext window.
- To switch off teletext, press the EXIT button or TTX button again.



6.6 Listening to the Radio

This receiver also enables you to listen to many radio stations that provide excellent digital HiFi quality, close to CD performance standards.

- To listen to the radio, press the RADIO button on the remote control.
- To return to TV viewing, press the RADIO button again.
- Radio channels as well can be managed in channel list as described above for TV channels.
- Many radio stations come with extended program information, same as described above for TV channels.
- To view this information please press EPG and / or INFO button.

7. Additional Operating Functions

Besides the fundamental and most frequently used functions, this receiver is offering an additional variety of convenient features that will be briefly introduced in this section.

7.1 Volume Control / MUTE Button

Use the VOL (+) and VOL (-) buttons on the remote control to adjust the basic volume level of your TV. When either button is pressed, the volume indicator appears on the TV screen. When you have finished adjusting the volume, the volume indicator disappears automatically.



- Press the MUTE button on the remote control to disable the sound temporarily.
- This icon will appear on the screen:
- Press the MUTE button again to restore the sound.

7.2 Last Channel

To return to the last channel you were watching, press the LAST button on the remote control.

7.3 Audio Mode

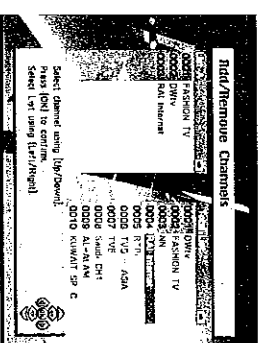
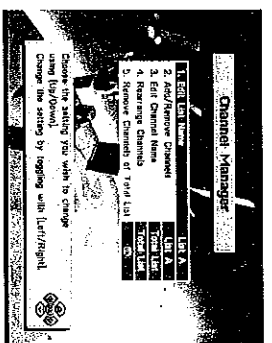
Audio Language and the Audio Mode can be selected if the Service Provider supports this feature.

- Press the AUDIO button on the remote control.
- To change the audio language, use ◀▶ buttons to select one of the languages provided by the broadcaster.
- Use the ◀▶ buttons to select the Audio Mode you want. You may select analogue STEREO, MONO (L), or MONO (R) as well as Digital Audio "AC3" (for DOLBY Digital / Linear PCM Stereo)
- When selecting "AC3" and connecting a Dolby Digital or Linear PCM Stereo equipment to the DIGITAL AUDIO Output jack on the rear panel, the analogue audio output channels are disabled. To return to viewing mode, press the AUDIO button again or press the EXIT button.

7.4 Create / Edit Favorite Channel Lists

The Favorite List is a collection of your favorite channels. You can group special channels into one or more favorite channel list(s).

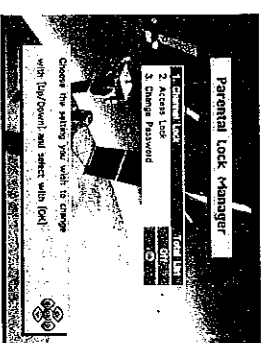
- Enter "Channel Manager" menu.
- Select "Add / Remove Channels"
- Add channels from the Total List to your Favorite List.
- You can also remove channels from your Favorite List.
- Follow the on-screen instructions.
- You can re-name your favorite lists. Enter "Edit List Name".



7.5 Parental Lock

This allows you to lock particular channels or the receiver itself. For example, you can prevent your children from accessing adult programs using this function.

- Select "Parental Lock Manager" from the Main Menu.
- When the "Enter Password" message appears, enter the password.
- The factory default user password is '0000'
- Select "Channel Lock" when you wish to lock specific channels only. (if someone switches to a locked channel, the password screen will appear.)
- Select "Access Lock" when you wish to lock the receiver when it is powered on. The password will be required before starting up.

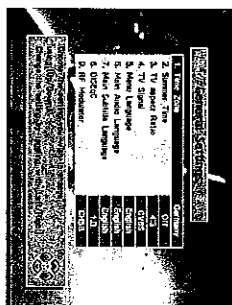
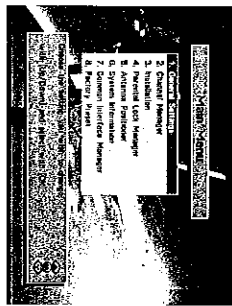


7.6 Change Password

The factory default user password is '0000'. For improved security we recommend to create an individual password, if needed.

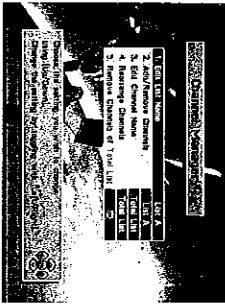
- Select "Parental Lock Manager" from the Main Menu.
- Select "Change Password"
- Follow the instructions on the screen.
- If you have lost your individual password you will need a master password which will unlock your system again. Please contact your dealer or your nearest service station.

8. Menu Structure (Main Menu)



2. Channel Manager

1. Edit List Name
2. Add / Remove Channels
3. Edit Channel Name
4. Rearrange Channels
5. Remove Channels of Total List



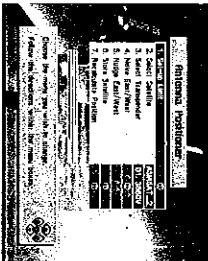
3. Installation

1. Auto Search
2. Manual Search
3. Transponder Editor
4. Data Transfer
5. Delete all Channels



5. Antenna Positioner

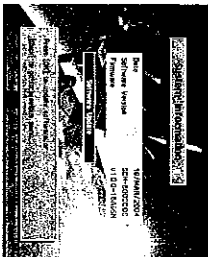
1. Set-up Limit
2. Select Satellite
3. Select Transponder
4. Move East / West
5. Nudge East / West
6. Store Satellite
7. Recalculate Position



6. System Information

- Software Update

7. Factory Preset



1. General Settings

1. Time Zone
2. Summer Time
3. TV Aspect Ratio
4. TV Signal
5. Menu Language
6. Main Audio Language
7. Main Subtitle Language
8. DISEqC
9. RF Modulator

4. Parental Lock Manager

1. Channel Lock
2. Access Lock
3. Change Password



9. Advanced Operation

In this section some settings and operations are described that require certain expertise and basic knowledge about satellite reception and digital TV for being carried out without fail. For most TV viewers there should be no need to use, modify or adjust the items as described below.

In case of doubt please ask your dealer for support.

9.1 LNB Settings

This receiver has been factory-preset to the requirements of the most commonly used LNB types. You can check or modify the actual settings in the menu "Installation", sub menu "Auto Search" or "Manual Search". In case you wish to edit the parameters using the "Auto Search" sub menu, you need to press the GREEN button first. These are the preset items:

- LNB Local Freq. Universal
- DISEqC OFF
- 22 KHz AUTO

These settings may need modifications if you use a specific LNB or a satellite antenna system that has been installed with DISEqC equipment (such as selector switches and / or motor antenna systems). Please follow the instructions that come with this equipment or ask your dealer.

9.2 DISEqC Setting (Main Menu)

There is a DISEqC option in the Main Menu. Please be sure to have selected the "DISEqC 1.0" option as long as you don't employ equipment according to "DISEqC 1.2" or "USALS" standards. Changes can be made using the ◀▶ buttons.

9.3 DISEqC 1.0

In principle, there are two kinds of external DISEqC switches on the market. One is for connection of two LNBs, the other one is for connection of up to four LNBs. In the "Auto Search" sub menu you can select the DISEqC LNB input 1 / 2 / 3 or 4 for each LNB connected to the corresponding switch port of the DISEqC switch.

For details please follow the instructions that come with you DISEqC equipment.

9.4 Antenna Positioner / DISEqC 1.2

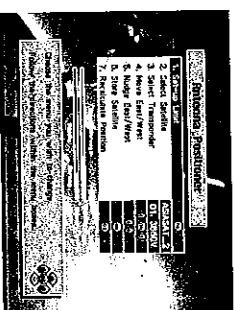
The "Antenna Positioner" function of this receiver enables you to use a motorized antenna to view multiple satellites. Most motor antennas can be controlled by DISEqC 1.2 technology, some of them also can be used for USALS. This convenient function locates the desired satellite if the latitude / longitude of the receiving place and satellite longitude are known.

For setting up such a system it is needed to set the DISEqC menu item in the "General Settings" menu accordingly:

- Select DISEqC 1.2
- or
- select USALS

according to your needs. Then please proceed to the "Antenna Positioner" sub menu in the "Main Menu".

To position the antenna using the DISEqC 1.2 method, you will need to set the movement limits first. The reason for this is to reduce the danger of the antenna coming into contact with any obstructing object during the antenna positioning operation. When the movement limits are set, the antenna only moves within the limits specified.



- Select "Set-up Limit" and then press the OK button.
- Select "Move East/West". Use the ◀ button to move the antenna to the East Limit position.
- Select "Set East Limit" and then press the OK button to save the East Limit you have set previously.
- Select "Move East/West" again. Use the ▶ button to move the antenna to the West Limit position.
- Select "Set West Limit" and then press the OK button to save the West Limit you have set previously.

Notes:

- To disable the movement limits, select "Disable Limits" and then press the OK button.
- To position the antenna at the center, select "Go to Reference" and then press the OK button.
- Once the limits are set, locate the reference satellite.
- From the "Antenna Positioner" screen, select "Select Satellite" and then use the ◀▶ buttons to select the satellite.
- Go to "Select Transponder" and select the TP with the strongest signal.
- Select "Nudge East/West" and then use the ◀▶ buttons to move the antenna. Find the position where the signal is strongest.

When doing this, if the position of the antenna is well away from the target satellite, use "Move East/West" in "Set-up Limit" to move the antenna first.

Alternatively, select "Nudge East/West" and then use the ◀▶ buttons to move the antenna. Each time you press either button, the antenna will automatically find the satellite.

- Once the satellite is located, select "Store Satellite" and then press the OK button. The position of the satellite is stored.

Notes:

If you select the stored satellite, the antenna moves in the direction of the satellite's position.

After locating a satellite, perform "Recalculation". This enables you to locate another satellite automatically by using the currently selected satellite as a reference point. However, this only provides an approximate position, so you will need to fine-tune the search.

- Select "Recalculate Position" and then press the OK button.
- When the message asking you to confirm your selection appears, press the OK button.

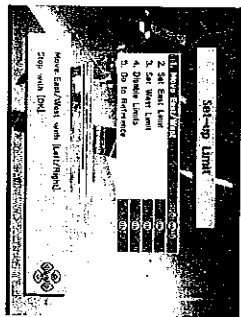
Notes:

Satellite Positions are stored in the "Antenna Positioner". Therefore, you will need to manually set the position of satellites that the "Antenna Positioner" does not currently support.

9.5 USALS

This convenient function locates the desired satellite by USALS if latitude/longitude of the receiving place and satellite longitude are known.

- Move to USALS mode by using the ◀▶ buttons at the DISSEQC item in the "General Settings" menu.
- Move to "Auto Search" or "Manual Search" to search the desired channel in USALS mode.
- Click the DISSEQC item in the Auto Search Menu to open the USALS Setting Popup Menu.
- Enter the user location latitude and longitude. Use numeric keys to enter values. Use ◀▶ buttons to convert East and West.
- Enter the latitude and longitude of the desired satellite. Use numeric keys to enter values. Use ◀▶ buttons to convert East and West.
- Click Store to save the input information. The antenna will direct itself towards the computed USALS result.



If it is physically impossible to direct the satellite, an error will be displayed. Press the "Back" key and enter new information if this happens.

Use the Signal Strength Bar to check if a satellite signal is received from the new antenna direction.

- Use Nudge East/West or Go to Reference to help the antenna work.

9.6 Auto Search Function

Auto Search is the one used most frequently used methods of channel search. It is intended to have the receiver automatically search all the channels from the satellite you selected.

- Select "Auto Search" and then press the OK button.
- Select the satellite using the OK button. If you want to change the Satellite Information, press the GREEN button on the remote control.
- Set the LNB Information and DISSEQC information for the satellite. You can use the existing setting. To change the setting, use the ◀▶ buttons.
- You can select the transponder (TP) you want to use and check the difference in signal strength and reception quality from one transponder to another.
- Set DISSEQC port to OFF (or to a port you want to use, if any) Select the type of channels to search: FTA, Scrambled, ALL or Network.
- Start searching for TV and radio channels using the above settings. Press the RED button.
- TV and radio broadcast channels will be searched.
- The names of the channels will be listed.
- Press the EXIT button to return to viewing mode and check whether the reception of the selected channel is good.

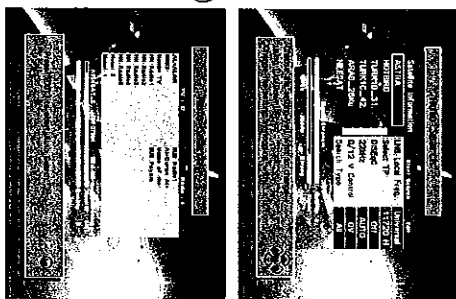
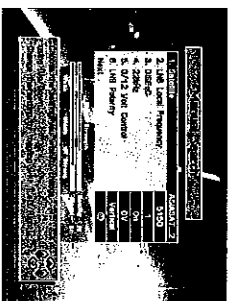
Note on Network Search:

In this search mode, the receiver first collects the network information first from the TP you selected. Then an Auto Search takes place to research all the channels in that network. The number of searched channels may vary depending on the TPs present in that network. Select whether to use the network information of the TP stream specified in "Select Transponder". Download the TP information of the satellite you want to find from a particular TP and then use this to Auto Search the channels in the TP group. The number of channels searched may vary depending on the TP information transmitted. Select Network Search and then use the ◀▶ buttons to set it.

9.7 Manual Search Function

Use this channel search by entering the TP information manually to the receiver. This channel search is often used to search for a particular channel or those channels that "Auto Search" has missed, but it requires comparatively more expertise.

- Select "Manual Search" and then press the OK button.
- Select the satellite you want to track.
- Set the LNB information and DISSEQC information for the satellite. You can use the existing setting. To change the setting, use the ◀▶ buttons.
- Set the LNB polarization of the TP to "Horizontal" or "Vertical".
- After the settings are completed, select "Next" and then press the OK button.
- Set the Down Frequency of the TP.
- Set the Symbol Rate of the TP.



- Select the type of channels to search: FTA, Scrambled, ALL or Network.
 - Press the OK button to start searching using the above settings.
- Another search method is "Advanced Search". Use this channel search to search for a particular channel or channels ones that you couldn't find using "Manual Search". Enter the PID of the channel you want to search.
- Set the channel's Video PID.
 - Set the channel's Audio PID.
 - Set the channel's PCR PID.
 - Press the OK button at "Start Search"
 - The names of the channels will be listed.
 - Press the EXIT button to return to viewing mode and check that the reception of the selected channel is good.

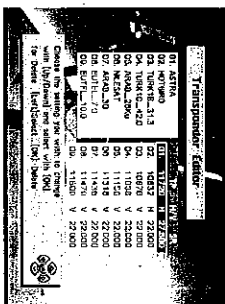
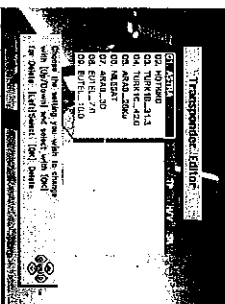
9.8 Transponder Editor

The "Transponder Editor" allows you to change, add, and delete satellite information.

- Go to the "Main Menu", select "Installation", select "Transponder Editor", and then press the OK button.

Add a Satellite

- Use the ▼ buttons to move to the last field on the list.
- Press the OK button. The screen will change to allow you to enter the name of the satellite you are adding.
- Use the ▼ buttons to enter letters. Use the ► buttons to change the cursor position.
- When you have finished entering the satellite name, press OK.
- Press the OK button to enter the added satellite's TP information of the added satellite.
- When the TP information input field appears in the right panel, press the OK button.



- Enter the TP information, such as Frequency, Polarization (H / V), Symbol Rate, etc., and then press the OK button. (Use the Numeric buttons to enter Frequency and Symbol Rate information, and use the ► buttons to enter H / V information).
- To cancel the entries you have made, press the BACK button or the EXIT button.

Delete a Satellite

Use this to delete the selected satellite. However, you won't be able to delete any of the satellites, which were set as factory defaults.

- Use the CH UP and CH DOWN buttons to select the satellite you want to delete.
- Press the ► button. A message appears, asking for your confirmation.
- If you want to delete, press the OK button.
- Otherwise, press the "Back" button or the EXIT button.

Modify Satellite TP Information

- To modify the TP information, move to the satellite you want and then press the OK button.
- The satellite TP information appears on the right side of the screen.
- Select the TP information you want to modify and then press the OK button.
- Modify the TP information, such as Frequency, Polarization, Symbol Rate, etc., and then press the OK button. (Use the Numeric buttons to enter Frequency and Symbol Rate information, and use the ► buttons to enter H / V information).
- After the changes are made, press the OK button to update the TP information.
- To cancel the TP information modification process, press the BACK button.

Add Satellite TP Information

- Move to the bottom of the screen where the satellite TP information is displayed and then press the OK button.
- Enter the TP information you want to add, such as Frequency, Polarization (H / V), Symbol Rate, etc. (Use the Numeric buttons to enter Frequency and Symbol Rate information, and use the ► buttons to enter H / V information).
- Press the OK button to register the TP information.
- To cancel the TP information addition process, press the BACK button.

Remove Satellite TP Information

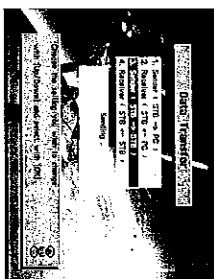
- Move to the TP information you want to delete.
- Press the LEFT button. A message asking for your confirmation asking for your confirmation appears.
- If you want to delete, press the OK button. Otherwise, press the BACK button or the EXIT button.

9.9 Data Transfer

This is intended to transfer the channel information on one receiver to another receiver of the same model / version. You can also transfer channel information from your PC to a receiver.

Receiver to Receiver (STB - STB)

- Use a RS232C cable (cross type, "0-modem") to connect both receivers.
- Go the Main Menu, select "Installation" and then select menu option "Data Transfer".
- Select "Sender" (Set to Sel) for the receiver that will send the channel data.
- Select "Receiver" (Set to Sel) for the receiver that will receive the channel data.
- Press the OK button on both receivers to start the transfer.



Cable Pin Configuration

(1) 0	0 (4)
(2) 0	0 (3)
(3) 0	0 (2)
(4) 0	0 (1)
(5) 0	0 (5)

- "Sending" appears on the sending receiver and "Receiving" appears on the receiving receiver.
- The transfer progress bar shows the progress of the channel data transmission. When the transfer is completed, "Complete" appears.
- You can check that the channel data on the Slave and Master receivers are the same.

PC to Receiver (PC - STB)

You will need a suitable software to be able to transfer the channel information from a receiver to your PC and vice versa. This software will be provided upon request. Please visit SCHWAIINGER website www.schwainger.de

- Use a RS-232C cable (cross type) to connect the Receiver to your PC.
- In your PC programme set your PC as "Sender (Set to Sel)". "Sender" signifies the device that is transmitting the channel information.
- On the receiver go the Main Menu, select "Installation" and then select menu option "Data Transfer".
- Set your receiver as "Receiver (STB <- PC)".
- Follow the instructions on the PC program to complete the rest of this process.

9.10 Delete all Channels

This function will delete all channel data from the receiver. All other individual settings will be kept.

- Go to the Main Menu, select "Installation", select "Delete All Channels".
- Enter password upon request.
- A warning message appears. Press "EXIT" to cancel or OK to confirm.
- The "Welcome" screen appears. Make your language selection and press OK.
- Follow the instructions on the screen: either load the pre-programmed channel data or start your individual channel search process.

9.11 Factory Preset

This function will delete all channel data and all individual settings from the receiver. The pre-programmed channel data will be loaded again, and all settings will be reset to their default values.

- Go to the Main Menu and select "Factory Preset".
- Enter password upon request.
- A warning message appears. Press "EXIT" to cancel or OK to confirm.
- The "Welcome" screen appears. Make your language selection and press OK.
- Follow the instructions on the screen: either load pre-programmed channel data or start your individual channel search process.

9.12 Software Update

If required, the latest development of the receiver operating software can be loaded to this unit by software update. There are two kinds of software update procedures: **Software update through satellite** (ASTRA 19/2E EAST). This method is also known as "OTA" ("On The Air"). Also, there is a method of **Software update through PC**, using the RS-232 data interface on the rear side of this unit.

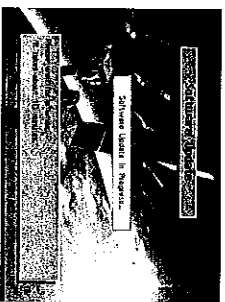
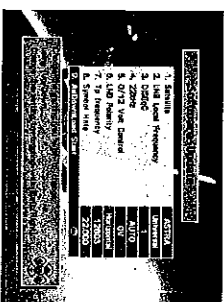
Software update through Satellite

- Go to the Main Menu and select "System Information".
Use this to check the software version or release date of the current software before upgrading. System Information screen offers date, software version, and firmware.

The software version is updated by downloading the new software via the satellite. Prerequisite for this is that a more up-to-date version is available.

- Press OK and enter password.
- The Software Update menu appears.
- All transponder receiving data are preset by default.
- All LNB / DISEQC data are also preset, but can be changed, if necessary.
- Select "AirDownload Start" and press OK.
- A message is displayed saying "Software Update In Progress ..."

- The receiver first checks whether a more up-to-date software version is available.
- If not, "No Satellite! Please try again later on" is displayed.
- After successfully downloading a new software version "Software update completed!!!" is displayed and the receiver automatically restarts.



Software update through PC

For carrying out this method you need to have the latest software file as well as a special "loader" software for your PC.

It will be available by download from SCHWAIGER website www.schwaiger.de. Please check availability.

10. Trouble Shooting

Digital communications involve the simultaneous transfer and processing of large amounts of data. Changing channels may take longer in comparison to analogue devices. Also, digital TV receivers are "close relatives" to personal computers, and their lifestyle is somehow similar. That means that it may also happen to a digital receiver that it "hangs up" like a PC without prior warning and without a visible reason. If this should happen please disconnect the unit from the wall outlet (or switch off mains using the rear panel power switch). After switching the receiver on again all function will be restored.

No	Problem	SolutionNo
1	No Video	- Channel data have changed. - Execute Factory Preset or Manual / Auto Channel Search
2	No Audio	- Check the volume control and MUTE function - Check Audio Language, Press Audio key and try to change the language - Check Main Audio language in "General Settings" menu.
3	Receiver fails to boot	- Re-apply AC power - Contact A / S Center if this problem occurs continuously.
4	Channel search fails	- Check DiSEqC setting or LNB cable connection
5	Screen continuously shows "No Signal"	- Check DiSEqC Setting or LNB cable connection - Adjust DiSEqC setting and try Manual Search of that channel
6	Video freezes	- Weak antenna signal - Check antenna position and weather condition
7	Remote control does not work	- Aim the receiver front panel correctly. Get closer (below 7 meters) - Check if the battery of Remote Control is still good.
8	Pre-programmed channel data do not load	- Execute the Factory Preset re-installation process - Check if Manual / Auto Search performs
9	No OSD menu visible	- Check SCART connector for safe connection to your receiver and to the TV
10	Data download through serial port does not work	- Check PC232 port or data cable for problems - Correct PC software settings?

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11. Technical Specifications

Tuner		Data Service Port	
IF Input Frequency	950 ~ 2,150 MHz	Connector	9 Pin D-sub Female
IF Loop through output	950 ~ 2,150 MHz	Protocol	Type RS-232 (asynchronous)
IF Input Impedance	75 ohms	Data Rate	115 200 bps (max.)
Antenna Input Signal Level	-65dbm ~ -25dbm	Front Panel	
LNB Polarization Switching	13/18 V DC @ Max 400mA, short circuit protected	3 Buttons	Power, Up, Down
Band Switching	22 kHz tone, DiSEqC 1,2, USALS	IR Sensor	38KHz
I/Q Output	Unbalanced Output, Controlled by AGC Input	Multi-color (2color) LED display	Power on(Green) & Stand-by (Red)
Symbol Rate	1 ~ 45 Msps	Rear Panel	
FEC Viterbi	1/2, 2/3, 3/4, 5/6, 7/8	IF Input	F-type, female
Decoding Rates	FEC 204, 188, t=8	IF Loop-Through Output	F-type, female
Reed Solomon Decoding :		AUDIO (left, right)	Cinch (RCA)
Transport Demultiplexer		VIDEO	Cinch (RCA)
De-multiplex	According to ISO / IEC 13818-1	Digital Out (SPDIF) TV	Cinch (RCA)
PID Handling Capability	32 PID	RS-232 Serial Port	9 Pin D-sub Female Type
SI Filtering	According to DVB-SI spec (ETS 300 468)	Remote Eye Power Input	IR Sensor 38KHz DC Jack (10V ~26V)
Video Decoding Parameters		Remote Control Unit	
Video Decoding	ISO / IEC 13818-2 MP@ML	Type	IR (Carrier Freq. 38 KHz)
Aspect Ratio	4:3, 16:9	Battery	2 x 1.5 V (AAA size)
Resolution	Max. 720 x 576 dots	35 keys	Power, Mute, 0-9, Page-up, Page-down, Exit, Menu
Audio Decoding Parameters		CH-UP, CH-DN, Left, Right, OK, Info, EPG, F1, F2, Vol-UP, Vol- DN, TV / Radio, Last, Freeze, Audio,	
Audio Decoding	ISO / IEC 13818-3 Layer I & II	General Data	
Operating Mode	Mono, Stereo	External Adaptor	AC 230V, 50Hz
Sampling Frequency	32, 44.1, 48 KHz	Power	Max 20Watts (Standard)
Base band Video/Audio Output		Consumption	210 X 150 X 50mm
Video Output Impedance	75 ohms	Dimension (W X D X H)	0.8 Kg
Video Output Level	1Vp_p 600 ohms	Weight	0 ~ 40 Deg.
Audio Output Impedance	(unbalanced) 3.0 Vp_p (with volume control)	Operation	
Audio Output Level	0.5 Vp-p (across 75 ohms)	Temperature	
Digital Audio Output Level			
Microprocessor and Main Memories			
Microprocessor Type	ST20 -C2 (STI 5518)		
Flash ROM (for program memory)	1 MB (16-bit)		
SDRAM (for decoding)	4 MB (16-bit)		

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