Camping & Caravan 2013/2014
Radio and TV on holiday

KATHREIN

Antennen · Electronic

Contents

CAP 910 Twin

Parabolic antenna and LNB

The use of a parabolic antenna gives an extended reception range in comparison to the planar antennas previously used.

Twin

A twin LNB in the CAP 910 allows you to operate not just one but two receivers from your CAP 910.

Skew

The fully automatic polarisation adjustment (skew) of the LNB (± 45°) allows additional optimisation of reception at the margins of the footprint of the respective satellite.

GPS

A GPS receiver is used in the turntable to record and evaluate GPS data during the journey. This allows the turntable to be aligned more quickly at the new location.

Turntable

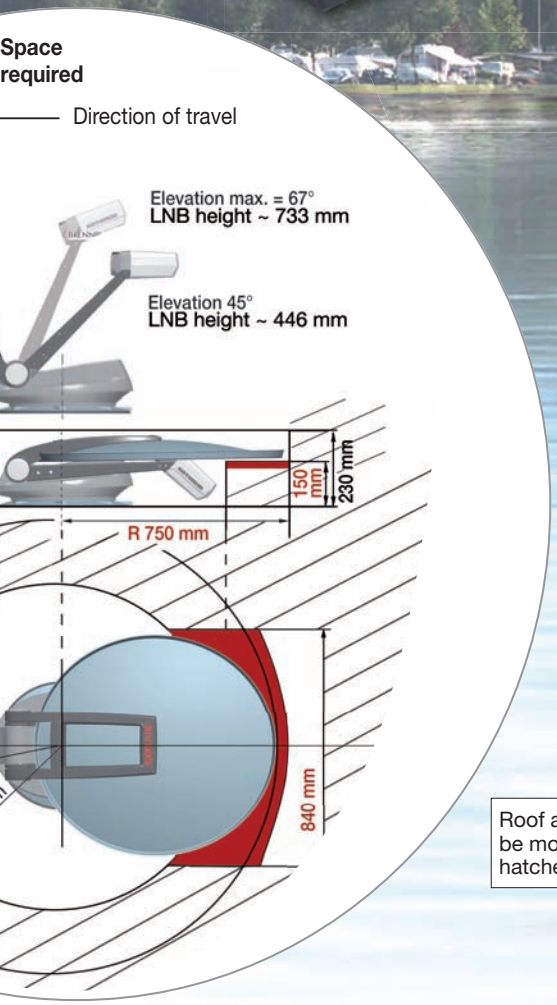
The aerodynamic design of the turntable and the antenna is only about 23 cm high, permitting vehicle speeds of up to 130 km/h (when lowered).

An additional receiver can also be connected

The UFS 940sw HDTV DVB satellite receiver required as a controller is also included in the CAP 910's delivery scope. See page 10/11 for receiver details.

Recording/timeshift on external hard disk

UFZ 112
(available as an accessory)



Roof attachments may be mounted within the hatched area

The CAP 910 package comprises:

- Turntable complete with electronic controls, parabolic antenna and twin LNB, mounting plate, fixings with roof duct, complete set of 8 metre long cables (2 x coax and 1 x power supply cable), installation and manual UFS 940sw
- HDTV DVB satellite receiver with infrared remote control, batteries, IR sensor, 12 V connection cable with shock-proof plug (cigarette lighter and 12 V connection plug), TV connection cable 3 x Cinch to 3 x Cinch, power supply unit 230 V/12 V, manual

CAP 720 Twin

Parabolic antenna and LNB

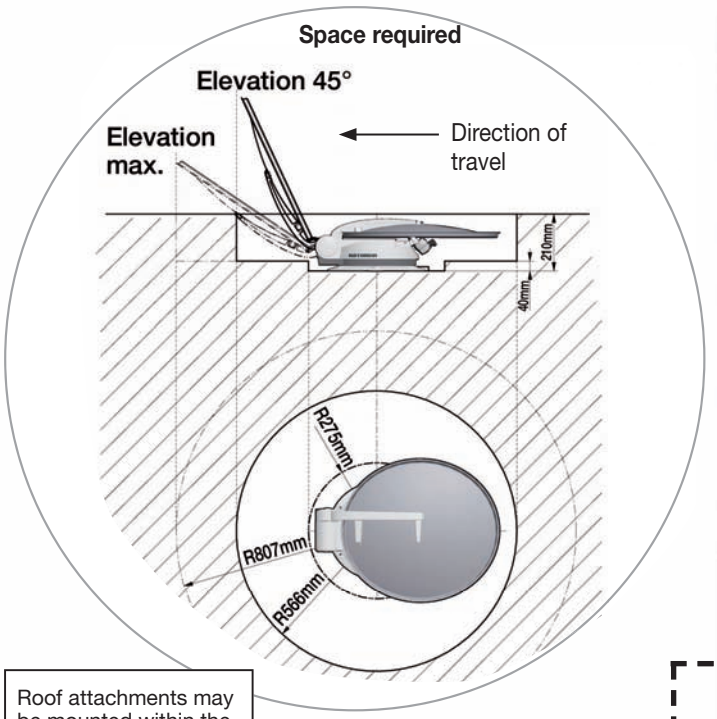
The use of a parabolic antenna gives an extended reception range in comparison to the planar antennas previously used.
The integrated twin LNB allows simultaneous connection of two receivers and can be mechanically adjusted to adapt polarisation, enabling optimal reception even at the margins of the respective satellite's footprint.

Turntable

The fully automatic turntable makes it possible to quickly align the antenna onto the desired satellite and thereby onto the desired programme. The satellite is specified automatically depending on the programmes chosen.
Automatic fine adjustment optimises the picture to the best quality. The entire turntable can be controlled via the receiver remote control.
Connecting the turntable to the vehicle's ignition signal ensures that the antenna is automatically lowered when the engine is started.
The aerodynamic design of the turntable and the antenna is only about 21 cm high, permitting vehicle speeds of up to 130 km/h (when lowered).

Installation

Due to its light weight, the turntable is optimised for installation. The small number of cables (one coax cable and one power supply cable) makes installation even easier.



Roof attachments may be mounted within the hatched area

An additional receiver can also be connected

Optimised weight < 10 kg

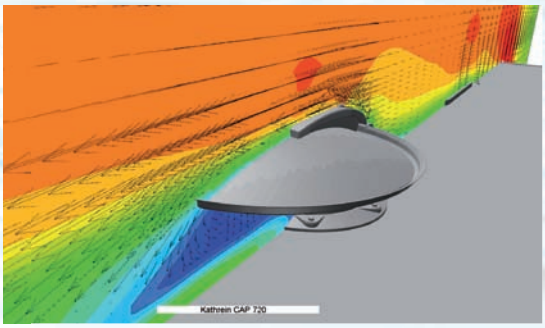
The UFS 940sw HDTV DVB satellite receiver required as a controller is also included in the CAP 720's delivery scope. See page 10/11 for receiver details.

Recording/timeshift on external hard disk

UFZ 112
(available as an accessory)

The CAP 720 package comprises:

- Turntable complete with electronic controls, parabolic reflector, twin LNB, mounting plate, mounting material with roof duct, complete set of cables with 8 m coax cable and 10 m power supply cable, mounting instructions and manual UFS 940sw
- HDTV DVB satellite receiver with infrared remote control, batteries, IR sensor, 12 V connection cable with shock-proof plug (cigarette lighter and 12 V connection plug), TV connection cable 3 x Cinch to 3 x Cinch, power supply unit 230 V/12 V, manual



Optimal aerodynamics

- Low air resistance
- Low acoustic emission

CAP 610

Based on the technology of the CAP 910 reception system, the complete CAP 610 package for fully automatic digital TV reception, consisting of a turntable, BAS 60 planar antenna and caravan receiver, is your ideal companion for a camping holiday.

Planar antenna and turntable

The BAS 60 planar antenna has long been a standard fixture on caravans and motorhomes. The BAS 60 can receive frequencies from 10.70 GHz to 12.75 GHz. It is thus suitable for reception of digital satellite signals.

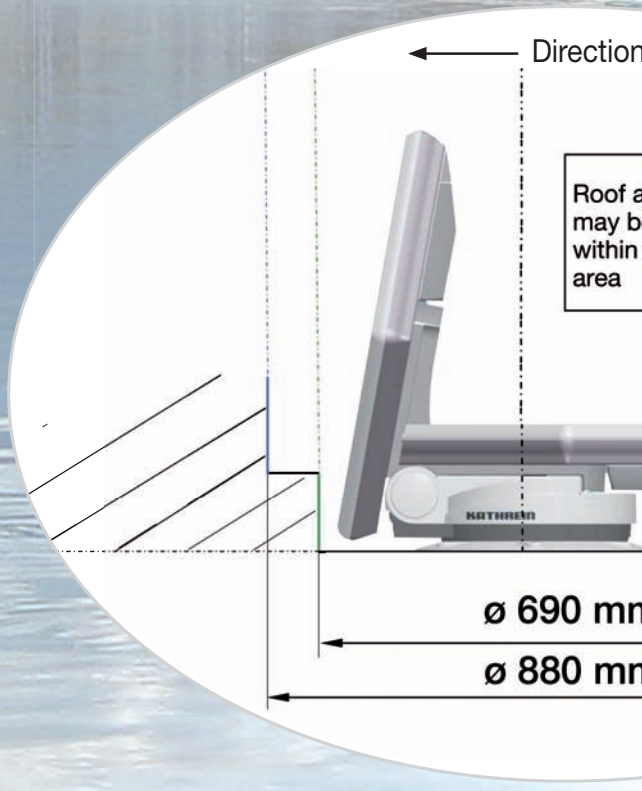
The fully automatic turntable enables the BAS 60 planar antenna to be quickly aligned to the respective satellite and thus to the desired programmes.

The satellites are specified by the programme selection and an analysis of the SI data contained in the digital data stream.

The entire turntable can be steered using the receiver remote control; automatic fine tuning optimises the picture for the best quality. Connecting the turntable to the vehicle's ignition signal ensures that the antenna is automatically lowered when the engine is started.

The aerodynamic design of the turntable and the planar antenna is only about 21 cm high, permitting vehicle speeds of up to 130 km/h. Due to the compact format, the space needed for a satellite search is minimal. The small number of cables (one coax cable and one power supply cable) makes installation even easier.

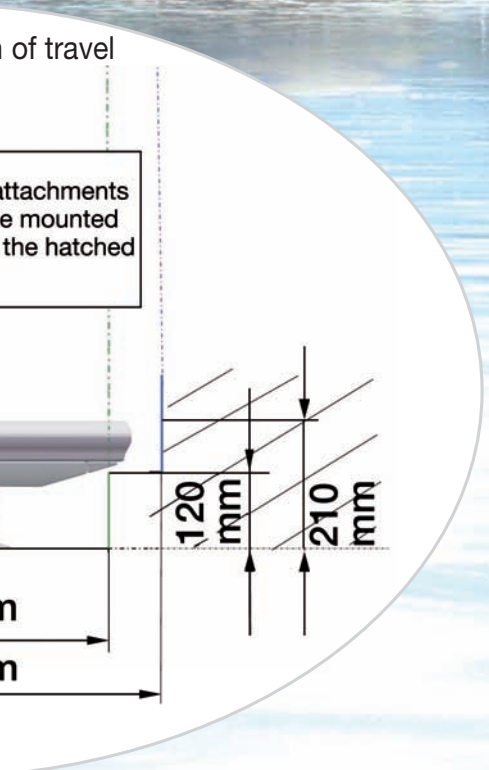
Space required



The UFS 940sw HDTV DVB satellite receiver required as a controller is also included in the CAP 610's delivery scope. See page 10/11 for receiver details.

Recording/timeshift on external hard disk

UFZ 112
(available as an accessory)



The CAP 610 package comprises:

- Turntable with integrated control electronics and pre-mounted BAS 60 planar antenna, mounting plate and installation materials including roof duct, complete cabling set with 8 m coaxial cable and 10 m power supply cable, mounting instructions and manual UFS 940sw
- HDTV DVB satellite receiver with infrared remote control, batteries, IR sensor, 12 V connection cable with shock-proof plug (cigarette lighter and 12 V connection plug), TV connection cable 3 x Cinch to 3 x Cinch, power supply unit 230 V/12, manual

HDTV satellite receiver for CAP systems UFS 940

The mobile concealed receiver

Suitable for 12 V or 230 V connection

Stand-by mode power consumption < 1 Watt

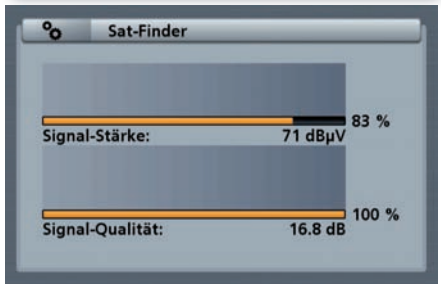
Recording/timeshift on external hard disk

Kathrein easy-use EPG

Special features

- Integrated bracket and compact dimensions facilitate concealed installation
- Removable remote control sensor for concealed installation
- TV control – TV can be switched on/off through HDMI
- Integrated set of commands to control the automatic turntables CAP 900/910, 700/710/720, 600/610
- Kathrein easy-use EPG with intuitive timer programming

Integrated SAT finder



Kathrein-Quality · Kathrein-Quality
Made in Germany

3D ready

Available accessory:

USB hard disk
UFZ 112

HDTV Fernsehen
DVB S Satellit
CI Schacht
DVR vorbereitet
TimeShift
USB Version 2.0
EPG Komfort
HDMI Ausgang
VT 800 Seiten
AUTO Software
AUTO Progr.-Listen
MENÜ Mehrsprachig
~230V Netzteil
12V Mobil
ONoff Netzschalter
HDMI TV-Ein-Aus

Additional features

- Reception of digital satellite TV and radio programmes in DVB-S2 (HDTV) and DVB-S transmission standards
- Video decoding of MPEG-2 and MPEG-4/H.264 signals (HDTV)
- Option to record TV and radio broadcasts on an external USB hard disk
- Upscaler to convert PAL signals (576i) to 576p, 720p and 1080i
- Guided first installation
- Antenna level shown on TV (optically and acoustically) for manual alignment of a parabolic reflector (Sat Finder)
- Common Interface for a CI module
- Pre-programmed programme list – immediate viewing without having to perform a programme scan
- Automatic download of software and programme lists
- Timeshift function using an external USB hard disk [1)]
- Eight favourite programme lists each for TV and radio
- 1,000 timers (serial and interval)
- Suitable for software updates (operational software and programme list separately) via satellite and USB stick
- Videotext decoder with 800-page memory capacity
- Language selection for programmes broadcast in several languages
- On-screen display (OSD) in eight languages (DE, GB, FR, IT, ES, CZ, PL, TR)
- DiSEqC™ 1.0/1.1/1.2/USALS, CAP command set and SCR single-cable distribution control signals (EN 50494)
- 12 V supply for mobile use 230 V power supply unit for stationary use
- 31 pre-programmed satellites
- 4,000 programme memory positions
- Infra-red remote control with command set switching
- Stand-by: < 1 W
- On/off switch (disconnection from 12 V supply)

Connections

- 2 x F-type sockets (1 x inputs, 1 x output)
- 1 x USB 2.0 (rear panel)
- 1 x CI slot
- 1 x HDMI output
- 1 x analogue Video (CVBS) – Cinch
- 2 x analogue Audio (l/r) – Cinch
- 1 x digital Audio S/PDIF optical
- 1 x IR sensor connection – RJ 11
- 1 x power connection 12 V

Delivery scope

- Infared remote control
- Batteries
- IR sensor
- TV connection cable 3 x Cinch to 3 x Cinch
- 12 V connection cable with shock-proof plug (cigarette lighter and 12 V connection plug)
- 230 V/12 V power supply unit
- Manual
- Safety notes

The receiver is available in black.

[1)] Only with hard disk drives from Kathrein's programme range or with approved hard disk drives (www.kathrein.de → Service → FAQ)

Technical data subject to change.

Easy conversion to HDTV

Your CAP system can be easily upgraded to the latest technology by simply replacing the UFS 740 with the UFS 940.

HDTV Reception of HDTV programmes and use of the digital recording feature on a USB hard disk drive can be done quickly and easily.

Recording/timeshift on external hard disk You have the choice of connecting an external hard disk drive to the USB connection. This enables programmes to be recorded without loss of quality. You can begin recording with the press of a button or set a timer that then records the programme according to the desired time. In addition it is also possible to timeshift programmes and watch them later. Of course you can also take recorded programmes with you on holiday to enjoy.

CAP 700

CAP 900

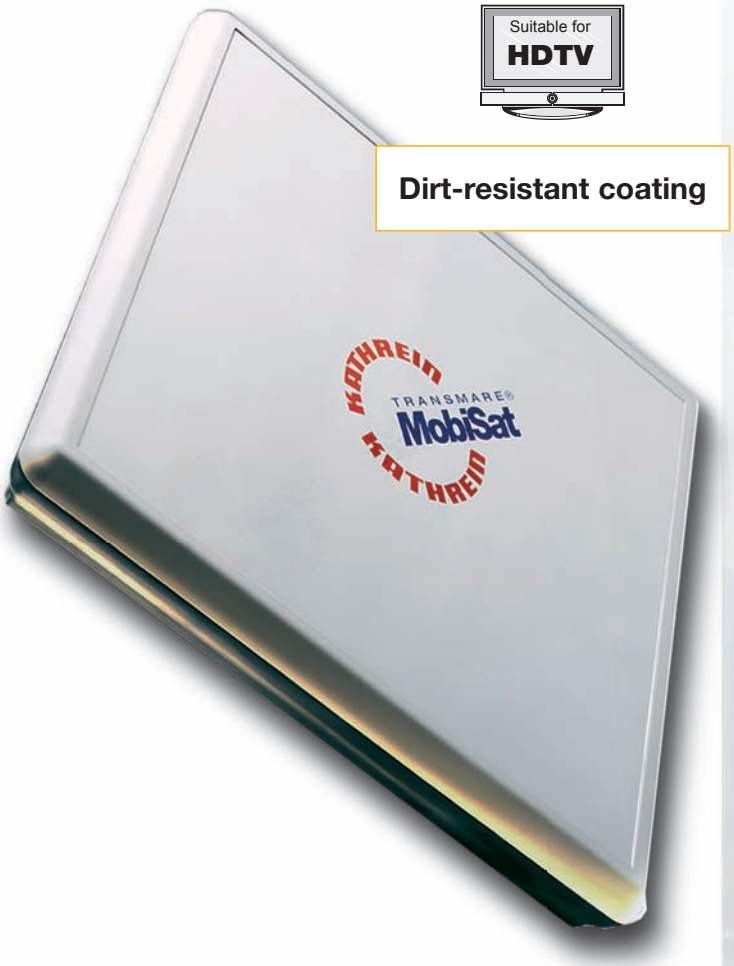
UFS 740

UFS 740

The receiver UFS 740 will be replaced

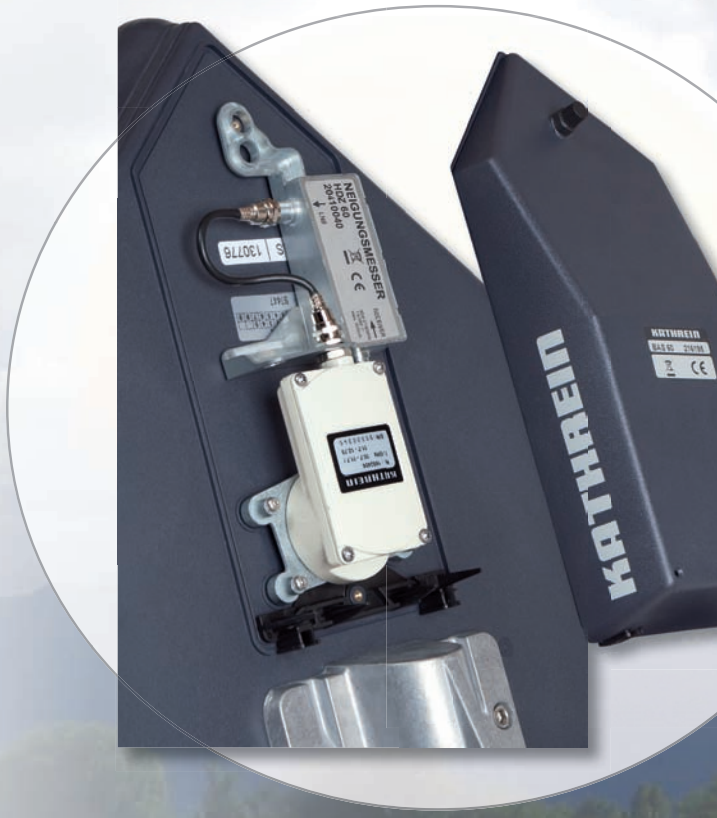
by UFS 940

BAS 60 planar antenna



Suitable for **HDTV**

Dirt-resistant coating



This planar antenna has long been a standard fixture on caravans and motorhomes.

Despite a length of just 50 cm, its reception performance approaches that of a conventional 60 cm parabolic antenna.

When mounted as directed and lowered for travelling, max. vehicle speeds of up to 130 km/h are possible with the BAS 60.

The BAS 60 can receive frequencies from 10.70 to 12.75 GHz.
It is thus suitable for reception of digital standard TV and HDTV programmes. Naturally your planar antenna also allows you to receive radio programmes (via satellite).

Specification of the BAS 60 planar antenna:

- One output
- Two polarisations (switchable with 14/18 V)
- Two frequency ranges
- Frequency range changeover with a 22 kHz signal frequency

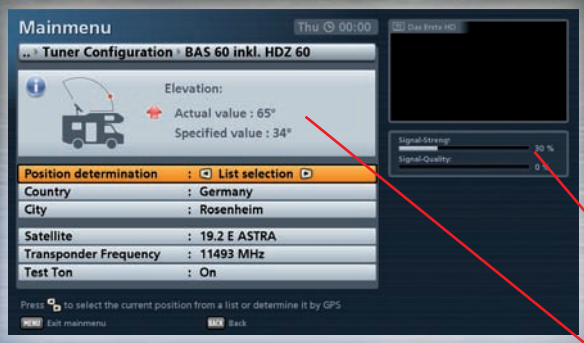
Inclinometer HDZ 60

To easily align the BAS 60 planar antenna with the HDM 14x jointed mast

In order to facilitate antenna alignment to the desired satellite for digital and HDTV satellite reception, Kathrein now offers the inclinometer HDZ 60 as an installation kit for the BAS 60 planar antenna.

In conjunction with the HDTV receiver UFS 946sw/CI+, it's the ideal means to align the antenna easily and conveniently.

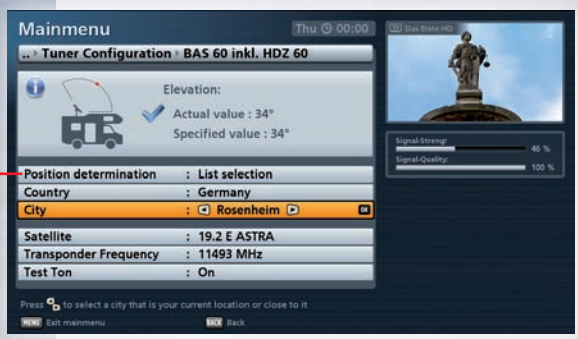
The inclinometer is installed in the LNB housing on the rear panel of the BAS 60 with little effort. The current elevation setting is transmitted to the receiver over the antenna cable. No additional installation of cables required.



Displays signal strength and quality, no additional measuring instrument required

Both the required and actual elevation are displayed

Determination of your location using the city list



The actual site is determined on entering GPS data

HDS 610 caravan SAT package HDTV

NEW

Comprises:

- **UFS 946sw/CI+ HDTV satellite receiver**
- **BAS 60 planar antenna**
- **HDZ 60 inclinometer (pre-assembled in planar antenna)**

Pre-assembled HDZ 60 on the rear panel of the BAS 60

BAS 65 planar antenna

- To receive digital standard TV/HDTV and radio programmes
- Frequency range: 10.70-12.75 GHz
- Integrated twin LNB (two outputs switchable)
- Can be mounted onto walls, masts, booms and on flat surfaces
- Power supply via drop cable
- Not suitable for mobile use with the HDM xxx jointed masts or with turntables

Application examples:

Easy conversion from manual to automatic

Turntable for BAS 60 [1)]

- The DVB-S receivers UFS 940sw/UFS 740sw are required to control the turntable
- User friendly due to receiver on-screen display (OSD)
- The entire turntable can be controlled using the receiver remote control
- Automatic alignment onto other satellites on changing to a programme on another satellite
- Easy to install as few cables are required (one coaxial and one power cable)
- Automatically lowers when the engine is started (park position)
- Emergency stop in case of overload
- Turntable software is updated via the receiver
- Little space is required for antenna alignment
- Max. allowable vehicle speed: 130 km/h (when lowered)
- Aerodynamic construction with only 21 cm in height

- Delivery scope:
  Turntable complete with electronic controller, mounting plate, fixings with roof duct, complete set of cables with 8 m coax and 10 m power cable, mounting instructions and manual

[1)] BAS 60 is not included in the delivery scope

About the most important receiver functions

Kathrein easy-use EPG (UFS 940, UFS 946/CI+)

EPG Komfort

Not only is it a well-structured electronic TV guide, but also offers a facility to take programmes from the respective EPG and include them in the timer. In addition, it is possible to sort programme information according to categories. What's more, the Kathrein easy-use EPG also features an extensive search function which enables one, for example, to search for reruns or key words.

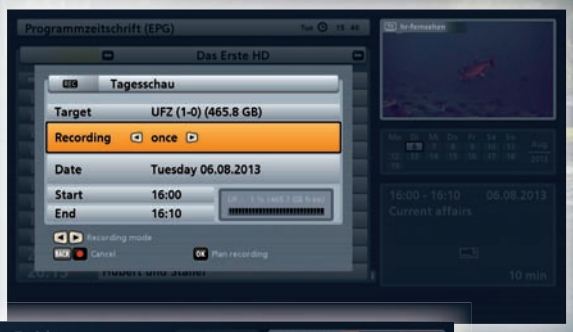
To ensure that EPG data are always up-to-date, the data of the first 25 channels and the first favourite list are automatically updated every night.

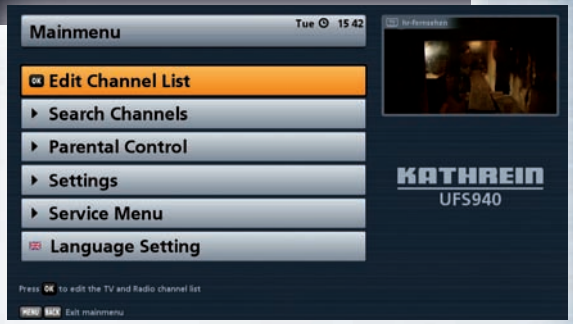
Kathrein EPG (UFS 641, UFT 676)

EPG Standard

The standard Kathrein EPG also provides clearly-arranged information on TV programmes. Programmes can be taken from the respective views and saved to a timer.

The Kathrein EPG not only delivers a programme preview but also offers detailed programme information on running programmes and future ones, up to seven days in advance.





TV control (TV on/off over HDMI) (UFS 940, UFS 946/CI+)

If the receiver is connected to the TV set via HDMI cable, TV control will make the TV remote control superfluous to a great extent. TV-control is based on the CEC protocol, whereby the TV set is automatically switched on and off as soon as the receiver is switched on or off. Furthermore, the function also makes sure that the HDMI port is automatically chosen as the input source.

This function must be supported by the TV set.

Recording/timeshift on an external hard disk drive – PVRready (UFS 940)

The USB port on the receiver rear panel allows connection of external storage media (USB stick/hard disk drive) for the recording of TV and radio programmes, making your receiver a digital video recorder.

Software and programme list updates (UFS 940, UFS 946/CI+, UFS 641)

Kathrein updates (software and programme lists) are normally provided over two media: via satellite and over the Kathrein website. In principle you can get information on the software and programme lists available at the time whenever you want on “www.kathrein.de“ (service→software and downloads→receiver). Here you will also see a list of all the changes that have been made since the previous version.

Timeshift TV – Timeshift (UFS 940)

If the receiver is equipped with an integrated hard disk drive or if the receiver can be connected to an external hard disk drive, all these Kathrein HDTV receivers allow time-shifted viewing.

If you press the Pause button on the remote control, the current broadcast being viewed is paused and at the same time recorded as it continues in the background. If you press the Play button, the broadcast will continue where it was paused.

DVB mobile satellite receiver HDTV UFS 946sw/CI+

Special features

- Simplified alignment of Kathrein antenna in conjunction with the inclinometer HDZ 60
- Common Interface for a CI+/CI module
- Remote control sensor for concealed installation TV control – switching on and off the TV via HDMI connection
- HbbTV (additional information and services from the internet [1])
- Network interface with streaming function
- UFScontrol – App for iPhone and Android smartphones

Stand-by power consumption < 0.5 Watt

Prepared for inclinometer HDZ 60

Sat finder menu

READY FOR HD+

Sie benötigen nur ein HD+ Modul inkl. HD+ Karte.

Powered by SHOUTcast Radio

CI+

YouTube READY

NEW

Additional features

- Reception of digital satellite TV and radio programmes in DVB-S2 (HDTV) and DVB-S transmission standards
- Video decoding of MPEG-2 and MPEG-4/H.264 signals (HDTV)
- Kathrein easy-use EPG with intuitive timer programming
- Eight favourite programme lists each for TV and radio
- Multimedia archive for pictures and MP3 play-out
- Integrated UPnP server/client
- Internet radio (SHOUTcast™ radio) [1)]
- YouTube™ videos [1)]
- Guided first installation
- Pre-programmed programme list – immediate viewing without a programme scan
- Automatic download of software and programme lists
- Upscaler to convert PAL signals to 1080p
- Language selection for programmes broadcast in several languages
- Allows software updates (operational software and programme list separately) via satellite and USB stick
- On-screen display (OSD) in ten languages (DE, GB, FR, IT, ES, CZ, NL, PL, TR, RU)
- DiSEqC™1.0/1.1/1.2/USALS and SCR single-cable (EN 50494)
- 12 V supply for mobile use
- 230 V power supply unit for stationary use
- Mains switch
- 5,000 programme memory positions
- 16-digit alphanumeric display

[1)] Receiver must be connected to the Internet

HDTV Fernsehen
DVB S Satellit
CI+ Schacht
Netzwerk
MP3 Wiedergabe
JPEG Diashow
EPG Komfort
HbbTV
APP UFScontrol
AUTO Software
AUTO Progr.-Listen
~230V Netzteil
12V Mobil
ONoff Netzschalter
HDMI TV-Ein-Aus

Connections

- 1 × F-type connector (f)
- 1 x Ethernet 10/100 Mbit/s – RJ 45
- 1 x USB 2.0 (rear panel)
- 1 x CI+/CI slot
- 1 x HDMI out
- 1 x analogue Video (CVBS) – Cinch
- 2 x analogue Audio (l/r) – Cinch
- 1 x digital Audio S/PDIF optical
- 1 x digital Audio S/PDIF electrical
- 1 x IR sensor connection – RJ 11
- 1 x power connection 12 V

Delivery scope

- Infrared remote control
- Batteries
- IR sensor
- HDMI cable
- 12 V connection cable with shock-proof plug (cigarette lighter and 12 V connection plug)
- 230 V/12 V power supply unit
- Manual
- Safety notes

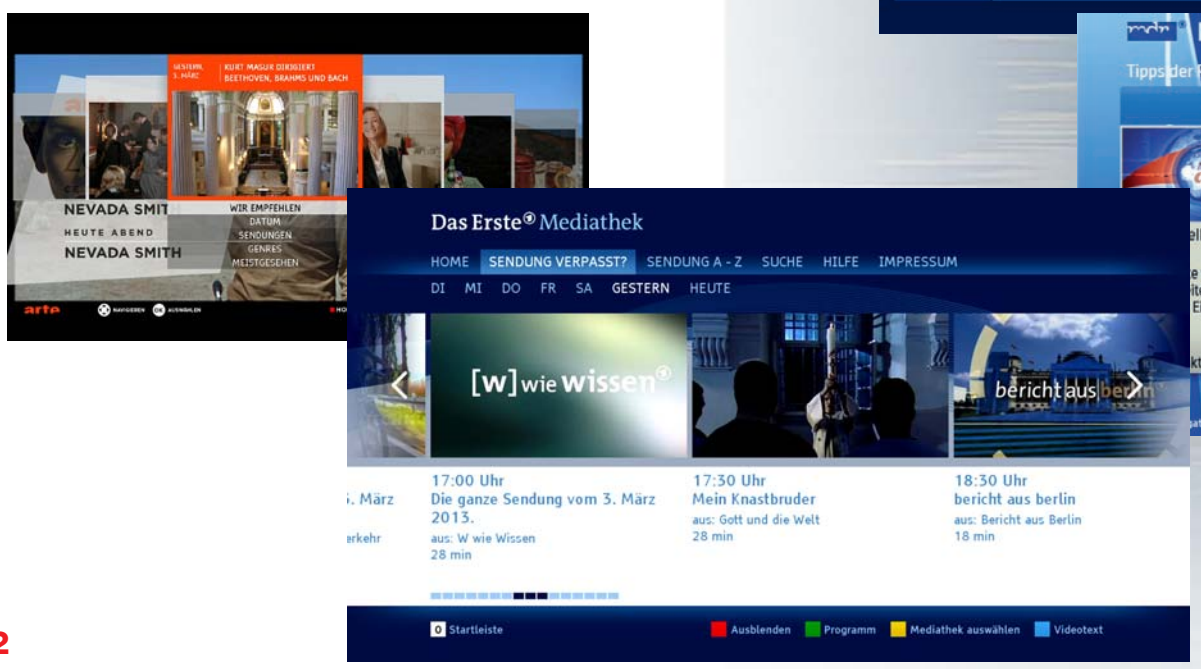
Special network functions with the UFS 946/CI+

More and more campsites are offering their guests Internet access. If the UFS 946/CI+ has Internet access, the receiver‘s variety of functions can be substantially enhanced.

Hybrid Broadcast Broadband TV – Smart-TV

Hybrid Broadcast Broadband TV or Smart-TV describes the fusion between standard television and the world of Internet. The HbbTV standard makes it possible to access additional Internet content provided by the broadcaster of a programme being viewed (Red Button function).

Videotext, media centres or detailed information on the current programme can thereby be provided to users. Since these extra services are especially tailored to the display on the TV set and to the navigation using the receiver remote control, users can count on the convenient, user-friendly operation characteristic of Kathrein products.



YouTube™

The UFS 946 brings YouTube™ to your TV set. The YouTube™ navigation is perfectly adapted to use over the receiver remote control. One has the possibility to create own favourites lists, to subscribe to special channels or to filter according to certain criteria (e.g. best rating, most popular videos, etc.)

Internetradio – SHOUTcast™ radio

Using the network connection, the UFS 946 can access and receive Internet radio stations. In order to keep operation and navigation as simple and straightforward as possible, a service was implemented with SHOUTcast™ radio allowing radio stations to be sorted by genre and enabling users to create their own favourite lists.

Smartphone app “UFScontrol”

With the free app “UFScontrol” Kathrein also enables remote control of the UFS 946 over iOS (iPad, iPhone, iPod touch) and Android devices. Due to 1:1 reproduction of the original remote control, the app offers complete remote control of the Kathrein receiver. The “UFScontrol” allows the Kathrein easy-use EPG to be viewed on the smartphone, enabling planning and administration of receiver recordings.

DVB satellite receiver UFS 641

The mobile entry-level model

Including mounting accessories for on-surface or under-shelf installation

Special features

- Guided first installation with national programme lists
- Pre-programmed programme list – immediate viewing without a programme scan
- HDMI output for top video quality on your flat-screen
- TV set suitable for 12 V or 230 V connection

Stand-by mode power consumption < 1 Watt

HDMI™ Port

Upscales from 576i to 576p, 720p and 1080i

Integrated SAT finder

Additional features

- Reception of digital satellite TV and radio programmes
- Upscaler to convert PAL signals (576i) to 576p, 720p and 1080i
- 4-digit display
- Common Interface for a CA module [1)]
- Kathrein-EPG with timer programming
- Antenna level shown on TV (optically and acoustically) for manual alignment of a parabolic reflector (Sat Finder)
- Suitable for software downloads via satellite and PC
- 12 V power supply for mobile use
- 230 V power supply unit for stationary use
- Eight favourite programme lists each for TV and radio
- On-screen display (OSD) in eight languages (DE, GB, FR, IT, ES, CZ, NL, TR)
- 14 timers; convenient programming via EPG
- Language selection for programmes broadcast in several languages
- Videotext decoder with 800-page memory capacity and videotext generation (only via Scart)
- Automatic 4:3 and 16:9 picture format recognition with choice of viewing format
- Programme scan
- Automatic date and time setting via DVB data stream
- Programme position sort function
- DiSEqC™1.0 and SCR single-cable system (EN 50494)
- 4,000 programme memory positions
- External IR sensor for concealed receiver installation (included in delivery scope)
- Stand-by power consumption: < 1 Watt
- On/off switch (disconnection from 12 V supply)

DVB S Satellit

EPG Standard

HDMI Ausgang

VT 800 Seiten

MENÜ Mehrsprachig

4X Anzeige

~230V Netzteil

12V Mobil

ONoff Netzschalter

Connections

- 2 x IEC connector (1 x input, 1 x output)
- 1 x CI slot
- 1 x HDMI out
- 1 x SCART (TV – RGB and CVBS)
- 1 x analogue Video (CVBS) – Cinch
- 2 x analogue Audio (l/r) – Cinch
- 1 x digital Audio S/PDIF electrical
- 1 x IR sensor connection – RJ 11
- 1 x power connection 12 V

Delivery scope

- Infrared remote control
- Batteries
- Mounting bracket
- IR sensor
- TV connection cable 3 x Cinch to 3 x Cinch
- 12 V connection cable with shock-proof plug (cigarette lighter and 12 V connection plug)
- 230 V/12 V power supply unit
- Manual
- Safety notes

[1)] CA module is not included in the delivery scope

DVB-T receiver UFT 676

Basic unit for DVB-T - Just watch TV

Energy-efficiency concept

Stand-by mode power consumption < 0.5 Watt

HDMI™ Port

Upscales from 576i to 576p, 720p and 1080i

Special features

- Typical power consumption during operations 5 Watt
- Stand-by mode power consumption: < 0.5 Watt
- An active DVB-T antenna (e.g. BZD 30, BZD 40) can be remote-fed through the RF input
- HDMI output for top video quality on your flat-screen TV set
- Guided first installation with national programme lists
- Programme sort according to pre-programmed programme list

Additional features

- Reception of digital satellite TV and radio programmes
- Upscaler to convert PAL signals (576i) to 576p, 720p and 1080i
- 4-digit display Kathrein-EPG with timer programming
- Logical channel numbering function
- Suitable for software downloads via (RS 232/RJ 11)
- Eight favourite programme lists each for TV and radio
- On-screen display (OSD) in eight languages (DE, GB, FR, IT, ES, CZ, NL, TR)
- 14 timers; convenient programming via EPG
- Language selection for programmes broadcast in several languages
- Videotext decoder with 800-page memory capacity and videotext generation (only via Scart)
- Automatic 4:3 and 16:9 picture format recognition with choice of viewing format
- 1,000 programme memory positions
- Automatic date and time setting via DVB data stream
- Programme scan
- Programme position sort function
- Mains switch
- Connection for an external
- IR sensor

DVB T Terrestrisch

EPG Standard

HDMI Ausgang

VT 800 Seiten

MENÜ Mehrsprachig

4X Anzeige

ONoff Netzschalter

DIGITAL fernsehen
TESTSIEGER
2.2011
gut
KATHREIN UFT 676SW
www.digitalfernsehen.de

Connections

- 2 x IEC connector (f)/pin (1 x input, 1 x output)
- 1 x HDMI out
- 2 x SCART (TV/VCR – RGB and CVBS)
- 1 x analogue Video (CVBS) – Cinch
- 2 x analogue Audio (l/r) – Cinch
- 1 x digital Audio S/PDIF electrical
- 1 x IR sensor connection – RJ 11

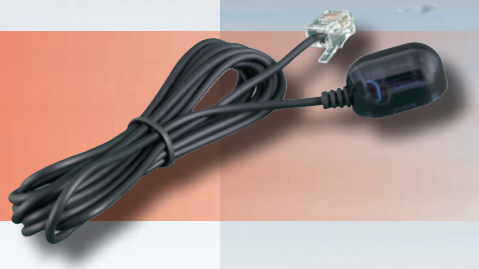
Delivery scope

- Infrared remote control
- Batteries
- Manual
- Safety notes
- Scart cable

Infrared sensor URS 100

Special features:

- External IR sensor for concealed receiver installation
- Cable length: 2 m



Sat jointed masts

The Sat jointed masts allow optimum erection and rapid alignment of the BAS 60 planar antenna from inside the vehicle.
The jointed tripod mast is designed for the erection of the planar antenna in your garden or in front of your caravan.

The jointed masts are made of rust-proof and seawater-resistant duralium; the tripod is made of black lacquered steel tubing.
Swivel heads made of die-cast aluminium.
Combined with the BAS 60, this series is the manual alternative to automatic equipment.

HDM 140 jointed mast

- To mount the BAS 60 planar antenna on the roof of a caravan or mobile home
- Complete with laid cable and two F-type connectors (m)
- With mounting brackets and roof seal
- 103 cm in length

Jointed mast HDM 141

- Smaller model to mount the BAS 60 planar antenna on the roof of a caravan or mobile home
- 76.5 cm in length
- Otherwise similar to HDM 140

Retrofit jointed mast HDM 143

- To retrofit the HD 35 terrestrial system onto the BAS 60 planar antenna
- The roof duct bracket can continue to be used
- Complete with fitted connection cable fitted with 2 x F-type connectors
- 103 cm in length

Accessories

Caravan roof duct HDZ 100

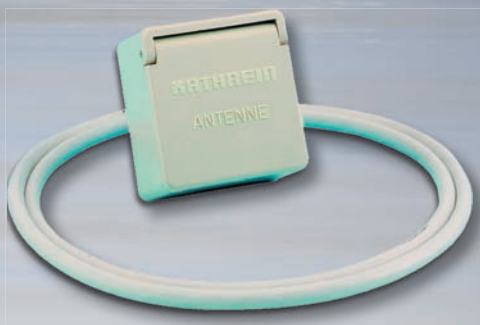
- Protective housing for cable interfaces
- Suitable as a roof duct and cable feed-through on the roof
- For a maximum of two RF cables and one DC cable
- Optimised for CAP systems
- Easy installation
- Unused inserts can be closed off with integrated blind caps
- Cable interface size: up to 29 x 17 mm

Application examples

You can order various spare parts for camping and caravan products from our service centre CSS Caravan-Sat-Service GmbH (you will find the address on page 35).

HDM 135

- Duralium mast to mount the HD 35
- 2 m long
- With mounting brackets and roof seal



EV 06

- Outdoor outlet with 5-metre long coax cable
- Connection: F-type connector (m)

Adjusting the satellite antenna on mobile equipment

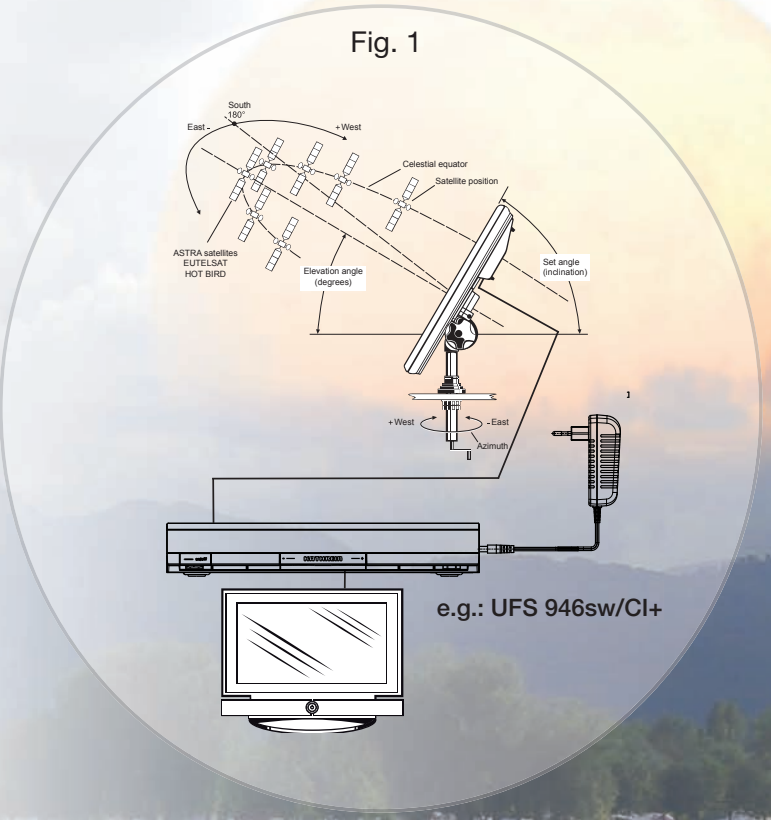
General

There must be a clear line of sight between antenna and satellite, unobstructed by trees, houses or other obstacles!

Instructions for the HDS 150 jointed tripod mast:
When installing the jointed tripod mast, refer to the safety instructions (danger of crushing) in the user instructions.

The following information will familiarise you with the settings for the planar antenna and the mast. Ensure that the components of the reception system are connected to each other as shown in the diagram in the user/operating instructions (see Fig. 1).

Fig. 1



Setting the elevation angle

HDM 140

Take the respective elevation value for your location from the table provided, and set your mast accordingly.

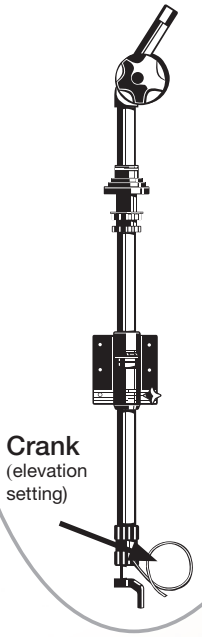
1 turn of the crank = 12°

Example (Rosenheim):
Elevat. angle = 34.7°.

Turn the crank on the antenna mast (90° - 34.7° = 55.3°) clockwise about 4½ turns.

Fig. 2

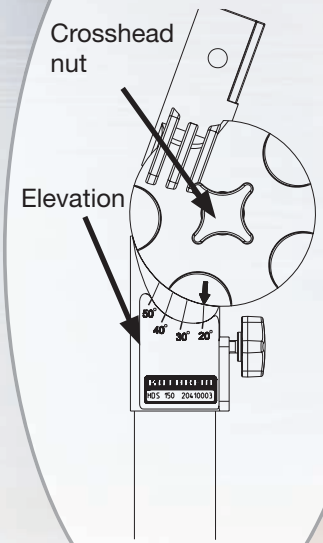
HDM 140



HDS 150

Fig. 3

HDS 150



Slacken the crosshead nut on the swivel head and then set the elevation angle (inclination angle) of the antenna on the antenna mast.

When performing the setting, refer to the graduated degrees on the mast joint (Fig. 3), then tighten the crosshead nut again. The value for your location can be found in the table provided (example: Rosenheim = 34.7°).

Receivers

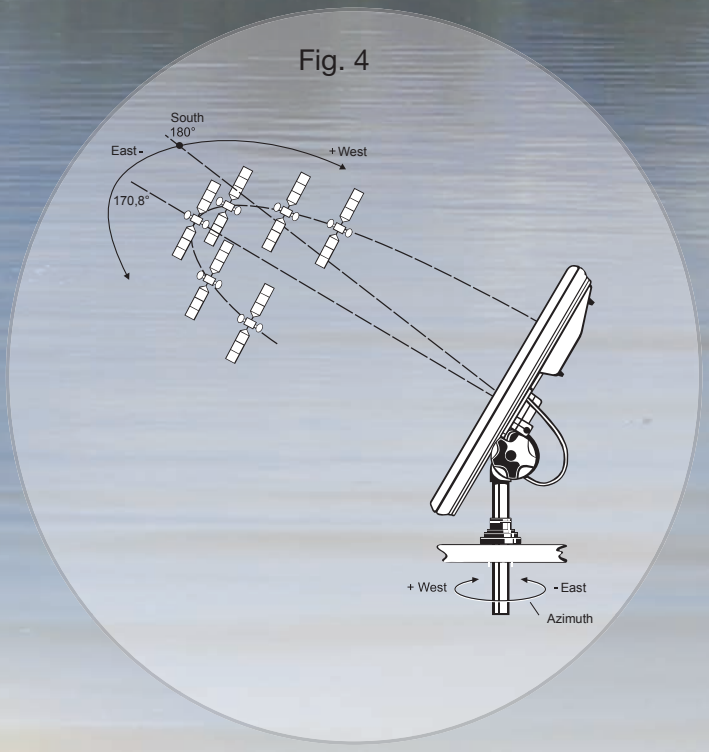
First, press the OK button to access the programme list and select a programme from the desired satellite (e.g. Das Erste HD, ASTRA 19.2° E).

Afterwards, return to your TV picture. To activate the Sat Finder function, press the i-button on your receiver remote control for approx. 7 seconds. Use the bar indicators “signal strength” and “signal quality” to align the antenna roughly.

The sound transmitted from the receiver through the TV set can also be used to align the antenna. The advantage of this method is that one does not have to have direct line of sight to the TV set.

To close the Sat Finder after alignment has been performed, press the i button on the receiver remote control for approximately 7 seconds. To ensure even easier and more comfortable alignment of the Sat antenna, we also offer the inclinometer HDZ 60 in conjunction with the UFS 946sw/CI+. For more information see page 15.

Fig. 4



Setting the azimuth angle

1. First point the antenna due South (on the HDS 150, first slacken the crosshead nut on the swivel head)
2. Now slowly turn the antenna in a horizontal direction (West/East) (Fig. 4) at the same time watching the TV display (“signal strength” bar), to obtain a bearing on the satellite. As soon as you receive a signal, seek to approach the point where reception is best – the “signal strength” bar helps you to determine this point. Now repeat all the settings in turn and check them to ensure you have found the optimum position.
3. After successfully completing the setting, lock the antenna in this position – e.g. by tightening the cross-head nut as shown in Fig. 3. When doing this, refer to the user instructions for the antenna mast/jointed tripod mast.
4. Exit the menu by pressing the “MENU” button.

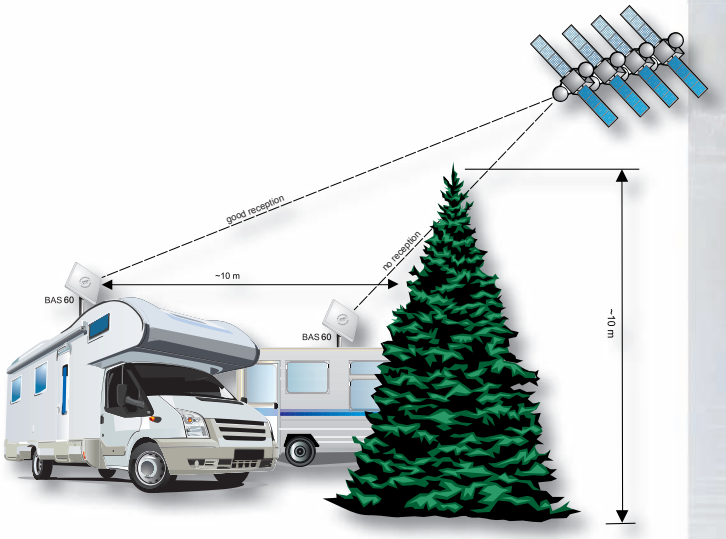
Footprints

ASTRA satellite systems

All ASTRA satellites of interest to caravanners are located on position 19.2° East and can be received with an antenna.

ASTRA footprint for digital reception

The inner line of the footprints here shows the area covered with digital signals by the ASTRA satellites. The outer dashed line of the footprints displayed here shows the area covered only by individual ASTRA satellites. Therefore not all channels are available within this footprint.

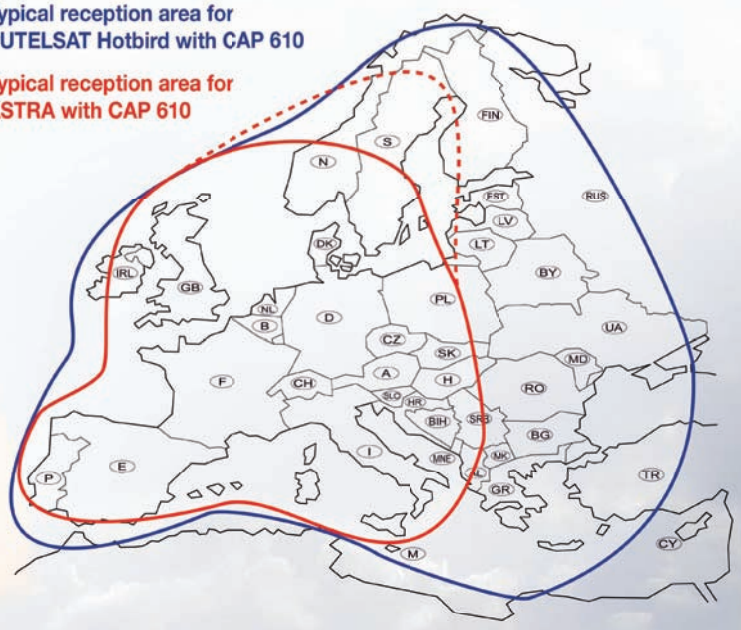


Choice of location

When choosing the location, make sure that the antenna has an unimpeded “view” of the satellite.
Trees, bushes or buildings can partially or completely obstruct the view, rendering reception poor or non-existent.
Heavy rain or snow can also affect the picture quality, as can snow or ice on the antenna.

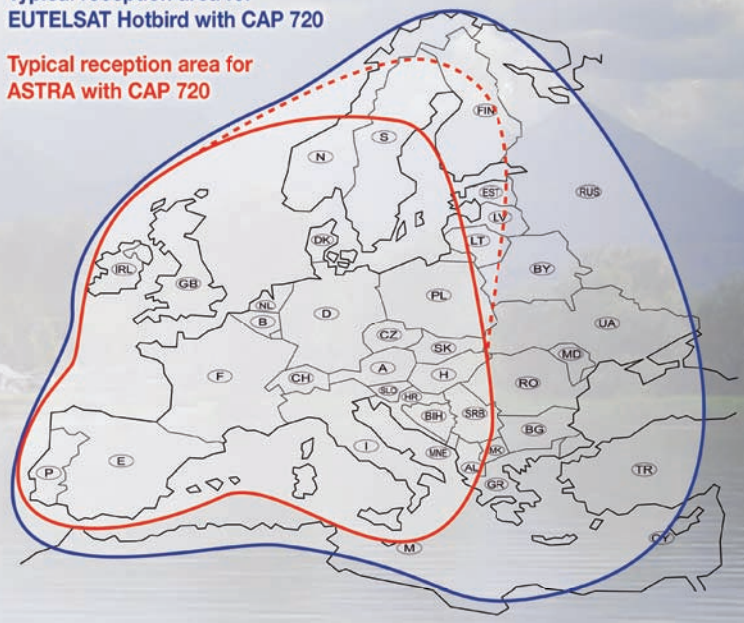
Typical reception area for
EUTELSAT Hotbird with CAP 610

Typical reception area for
ASTRA with CAP 610



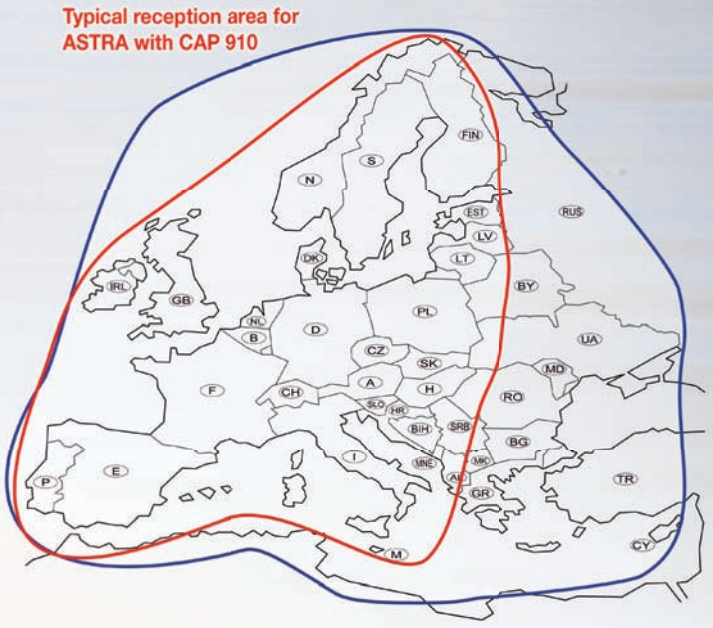
Typical reception area for
EUTELSAT Hotbird with CAP 720

Typical reception area for
ASTRA with CAP 720



Typical reception area for
EUTELSAT Hotbird with CAP 910

Typical reception area for
ASTRA with CAP 910



EUTELSAT satellite systems and footprints

With the HOTBIRD satellite at 13° East, the EUTELSAT satellite system also offers caravanners a system transmitting a wide range of great TV and radio programmes.

EUTELSAT will be of particular interest to those travelling abroad.

Depending on your location, there are of course many other satellites that can be received, such as: ASTRA 28.2° E, ASTRA 23.5° E, Turksat 42° E, EUTELSAT 10° E, EUTELSAT 16° E and Atlantic Bird 3, 5° W.

DVB-T accessories (antennas)

DVB-T: DasÜberallFernsehen
www.ueberallfernsehen.de

BZD 40

Active VHF/UHF outdoor antenna for the reception of digital terrestrial TV and radio programmes (DVB-T).

Features BZD 40

- Reception range: VHF: 174-230 MHz; UHF: 470-862 MHz
- For horizontal and vertical polarisation
- Attractive, space-saving design (Dimensions: 204 x 196 mm)
- Easy to mount on walls, masts or balconies
- Connection: F-type socket with protective cap
- Gain: B III: 18 dB; B IV/V: 15 dB
- Remote feeding (5 V/30 mA) over the coaxial cable through the connected DVB-T receiver or through external remote-feed power supply (5-25 V)
- Very low noise figure
- Accessories supplied:
  - Fixing material for wall or balcony mounting
  - 10 m connection cable, F-type connector and IEC connector

BZD 30

Active VHF/UHF indoor antenna for the reception of digital terrestrial TV and radio programmes (DVB-T).

Features BZD 30

- Reception range: VHF: 174-230 MHz; UHF: 470-862 MHz
- No specific alignment required, due to almost omni-directional characteristics
- For horizontal and vertical polarisation
- Attractive, space-saving design (Dimensions: 140 x 195 mm)
- Gain B III: 18 dB; UHF: 15 dB
- Remote feeding (5 V/30 mA) over the coaxial cable through the connected DVB-T receiver
- Very low noise figure
- Integrated trap filter against GSM and LTE interferences
- Accessories supplied:
  - Foot for easy mounting
  - Wall bracket with fixings
  - 2 m long connection cable with a straight and an angled IEC connector

HD 35

TV antenna with directional characteristics for reception of terrestrial TV signals in a parked caravan or motorhome (DVB-T)

- Includes 4 metre connection cable and on-top mount fixture for HDM 135 mast
- Max. admissible vehicle Vmax.: 110 km/h

Our experts answer your questions

Questions regarding 600/610/700/710/720/900/910 and HDS 900

Question: “The message ‚No connection to the turntable could be established‘ is displayed, and the system does not move.”

Possible causes:

- +12 V is on the ignition lead even when the ignition is switched off
- The ignition is switched on
- There is no power supply to the turntable
- The receiver has inadvertently been connected to the slave cable instead of the master cable (only applies to CAP 900/910 and CAP 720)

Remedy:

Check the connection cables.

Question: “The CAP 610/710/720 HDS 900 takes a very long time to search for the first satellite.”

Remedy:

- Press green button
- Select menu “Enter GPS data” press “OK”
- Enter GPS coordinates of one‘s site

Question: “The GPS data for the CAP 900/910 are wrong, how do I obtain the correct GPS data?”

or

Question: “After changing to a new location the CAP 900/910 searches in the entirely wrong place?”

or

Question: “The CAP 900/910 takes a very long time to search for the first satellite”.
To help find the desired satellite quickly, the CAP 900/910 uses GPS data which are saved during the journey. GPS data are only obtained when the green ignition lead and the turntable are connected to the 12 V power supply (the receiver can remain switched off).

Remedy:

If this is not possible, we recommend you to connect the turntable and the ignition lead to the 12 V power supply for about three minutes. The current GPS data will be determined during this period of time. As soon as the ignition lead has been removed, the receiver can be switched on – the CAP 900/910 will now perform a satellite search with the exact elevation.

Question: “When the receiver is switched on it no longer reacts to the remote control and the green LED is lit up or flashes.”

When a receiver is switched on, a lot of data is processed internally, especially if the turntable had been previously switched to stand-by mode and the receiver then switched off. This procedure lasts about 30 sec; afterwards, the red LED lights up and the system is then ready for operation.

Remedy:

Either wait 30 sec until the red LED lights up or re-press the stand-by button to stop data processing (this can be done at any time).

Question: “A satellite has already been found. Following an unsuccessful scan for another satellite, the previously found satellite no longer has a signal.”

Remedy:

Stop system, switch receiver off and then on again.

Question: The turntable is malfunctioning and cannot find a satellite.

Remedy:

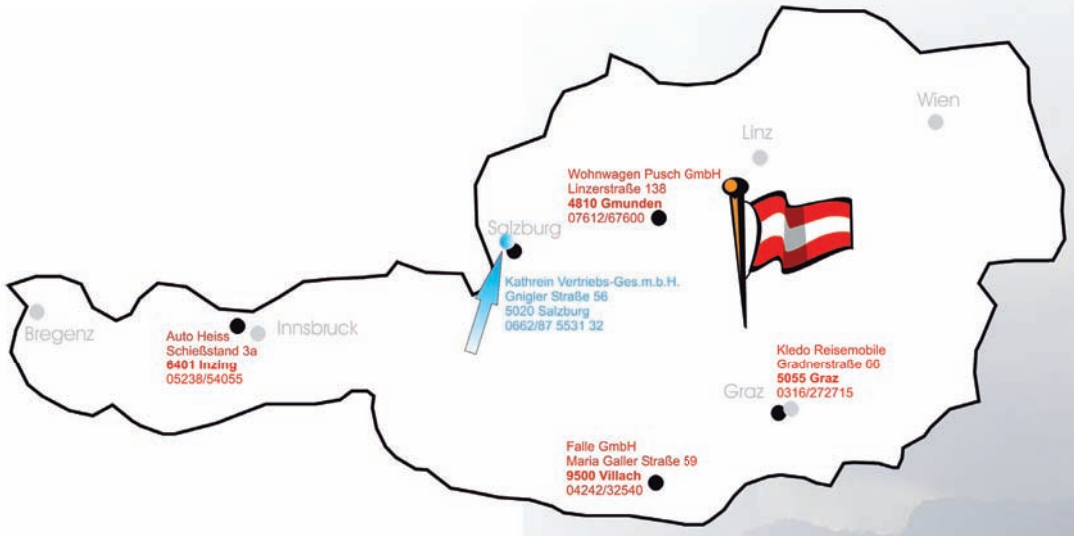
Reset CAP by pressing the green button on your remote control, going to the menu section “Antenna Configuration” and selecting “Reset CAP System”. If required, switch the receiver off and then on again.

Question: “Can I receive further satellites other than ASTRA?”:

- Yes, press the “OK” button to view the channel list
- The name of the satellite (e.g. ASTRA, HOTBIRD...) is shown in the right hand half of the display, alongside the transponder, the polarisation and the symbol rate.
- Press the ◄ ► buttons repeatedly until the desired satellite is shown
- Select a channel transmitted by this new satellite and press “OK”. You will be asked to perform a search for this satellite

For further inquiries see “www.kathrein.de/service”

Service partners



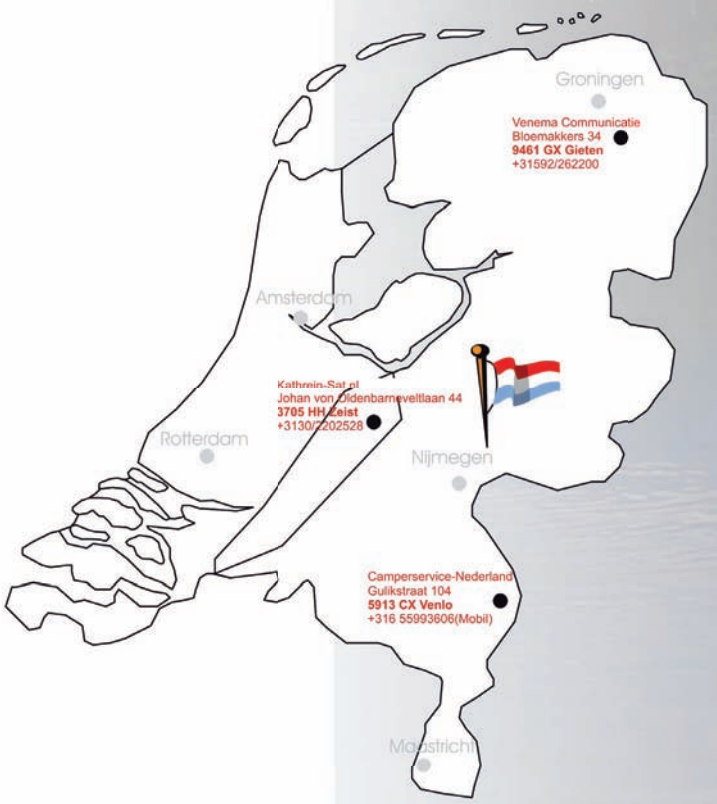
Recommendation: Please make an appointment before driving to our factory service company, CSS GmbH or to any one of our service partners for any repair or service work.

Assistance and Information

KATHREIN Servicepartner Camping -Österreich-

Müßigmann gezeichnet | 07.09.12 Datum

KATHREIN TRANSMARE® MobiSat KATHREIN



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KATHREIN Servicepartner Camping -Niederlande-

Müßigmann gezeichnet | 19.03.12 Datum

KATHREIN TRANSMARE® MobiSat KATHREIN

Caravapark Spannan
Werner von Siemens Str. 2
24783 Osterrönfeld
04331/949085

Caravan-Center Petschow GmbH
Neu-Hinrichsdorf 1a
18146 Rostock
0381/6867640

Caravan-Center Dahnke
Werftstraße 16/17
18439 Stralsund
03831/293915

Maik Poser Elektrotechnik
Dodoweg 41
26386 Wilhelmshafen
04421/368973

Kathrein Vertriebs-Zentrum Nord/West
Hermann-Wüsthof-Ring 12
21035 Hamburg
040/734755-0

B&M Fernsehtechnik
Koloniestraße 2
26802 Moormerland
04954/8932690

Mobile Freizeit Zeven UG
Zum Hochkamp 2
27391 Zeven
04281/957580

Autohaus Heuer
Geesthachter Straße 107
21502 Geesthacht
04152/88860

Willigs Elektronik Service
Solinger Straße 13
28199 Bremen
0421/504021

Albrecht Automobile
Porschestraße 15
21423 Winsen/Luhe
04171/601650

Caravan Handel Lander
Neu Zachuner Weg 1
19230 Bandenitz
038850/203

Pieper
Syker Straße 15
28844 Weyhe-Melchiorshausen
0421/79277690

Autohaus Meyer GmbH
Verderner Landstraße 190
31582 Nienburg
05021/601919

Freizeit-Wittke GmbH
Ernststraße 12
13509 Berlin
030/43777777

Zelt Caravan Camping Kranewitz
Braasstraße 29
31737 Rinteln
05751/993511

Pieper&Co
Sandstraße 14-16
45964 Gladbeck
02043/69930

Hammer
Caravan Service
Küferstraße 19
59067 Hamm
02381/3050666

Huppertz Freizeit&Mehr
Dunlopstraße 44
33689 Bielefeld
05205/950988

Brock
Weddeler Straße 7
38104 Braunschweig
0531/360138

Gebauer KFZ-Technik
Schötmarsche Straße 257a
32791 Lage
05232/6980140

Wohnmobil+Wassersportzentrum
Magdeburger Chaussee 71
06193 Sennewitz/Halle
034606/29168

Stellfeld&Ernst
Oberste-Wilms-Straße 18
44309 Dortmund
0231/5198143

Hagemann Camping/Freizeit GmbH
Marientaler Str. 84
38350 Helmstedt
05351/31266

Caravan Rossol GmbH
Kroppentalstraße 1
06618 Naumburg
03445/703055

Delgado Freizeit GmbH
Linde 62
42287 Wuppertal
0202/46028-0

Knocks Motors
Schulland 1
34474 Diemelstadt-Ammhsn
05694/990990

Schaffer Mobil Wohnmobile
Kötschenbroder Straße 125
01139 Dresden
0351/837480

Lippert Reisemobile
Dieselstraße 6
98716 Gschwenda
036205/95228

ABC Service Esch
Im Pützfeld 3
53937 Schleiden
02444/91033

Thein Wohnwagen
Karl-Götz-Straße 9
97424 Schweinfurt
09721/87153

Bezirkssreparaturstelle
Kathrein Burgstädt GmbH
Lindenstraße 3
09241 Mühlau
03722/607331

Deger Caravan KG
Schulstraße 9-11
95488 Eckersdorf
0921 / 7351-0

Garage Krawotec GmbH
Ruwerer Straße 29
54292 Trier
0651/6506969

Reimo GmbH
Boschring 10
63329 Egelsbach
06103/400574

Krebs Caravan
Ostendstraße 4
63811 Stockstadt
06027/402810

Planet Camping sàrl
1 bis, avenue de Luxembourg
F-54810 Longlaville
0033(0)/382262797

Grebner Caravan GmbH
Hafenstraße 11
90768 Fürth
0911/731011

Caravan Arena Stierle
Haller Straße 1/7
74549 Wolperthausen
07904/944340

Caravan Sperrfechter
Lämlinstraße 13
74080 Heilbronn
07131/44058

FH-Sat GmbH
Gewerbering 2
76351 Linkenheim-Hochstetten
07247/20700

RCS-Rudolf Caravaning Service
Obere Waldplätze 6
70569 Stuttgart
0711/8709409

Kathrein Vertriebs-Zentrum Süd
Eberhard-Finckh-Straße 57
89075 Ulm
0731/92767-0

Seltenhofer Freizeithafen
Am Kreuzhof 3
93055 Regensburg
0941/464550

Gast Caravaning
Daimlerstraße 20B
76316 Malsch
07246/30560-0

Bauer Caravan
Augsburger Straße 36
86444 Mühlhausen/Affing
08207/96170

Rapp Elektro
Auer Straße 7
89287 Bellenberg
07306 / 9275211

Glück Service Center
Chmstraße 22
85254 Sulzemoos
08135/937170

Konzes Campingshop
Im Dreiangel 2
78183 Hüfingen
0771/15891910

Milius Freizeitmobile
Auf dem Berg 27
88690 Uhldingen-Mühlhofen
07556/9299944

Zimmer Caravan
Traunsteinerstraße 9
83395 Freilassing
08654/7519

Caravan/Reisemobil Service Vogl
Ödenpullach 2
82041 Ödenpullach
089/74746090

Werksreparaturstelle
CSS Caravan-Sat-Service GmbH
Bahnhofstraße 110
83224 Grassau
08641/6998427

Neuss Freizeitpartner
Thanner 7
87509 Immenstadt
08379/929420

Caravan Zentrum Allgäu
Abt Hafner Straße 1
87629 Füssen
08362/9261097

Recommendation: Please make an appointment before driving to our factory service company, CSS GmbH or to any one of our service partners for any repair or service work.

Warranty repairs and general service

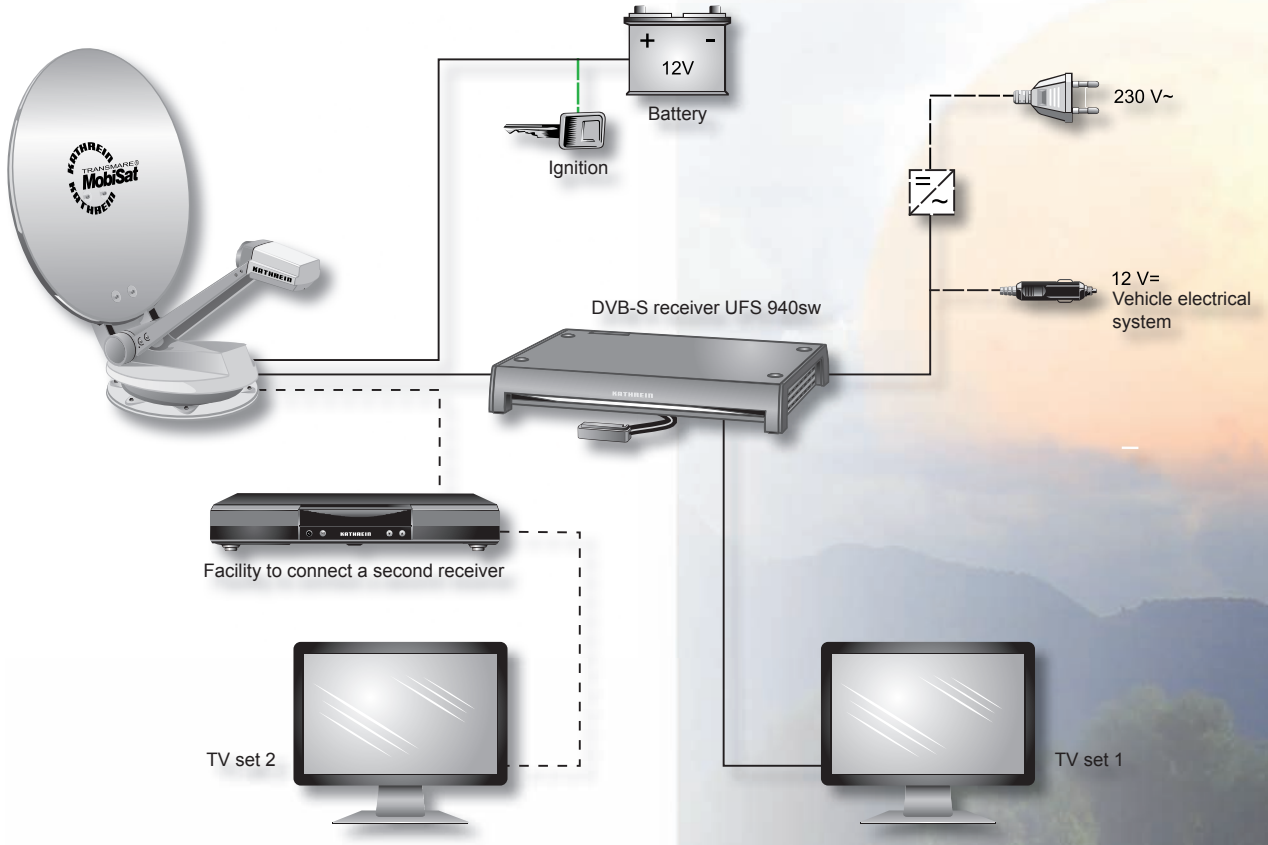
Assistance and Information

KATHREIN	Servicepartner Camping -Deutschland-	
Müßigmann gezeichnet	25.06.13 Datum	

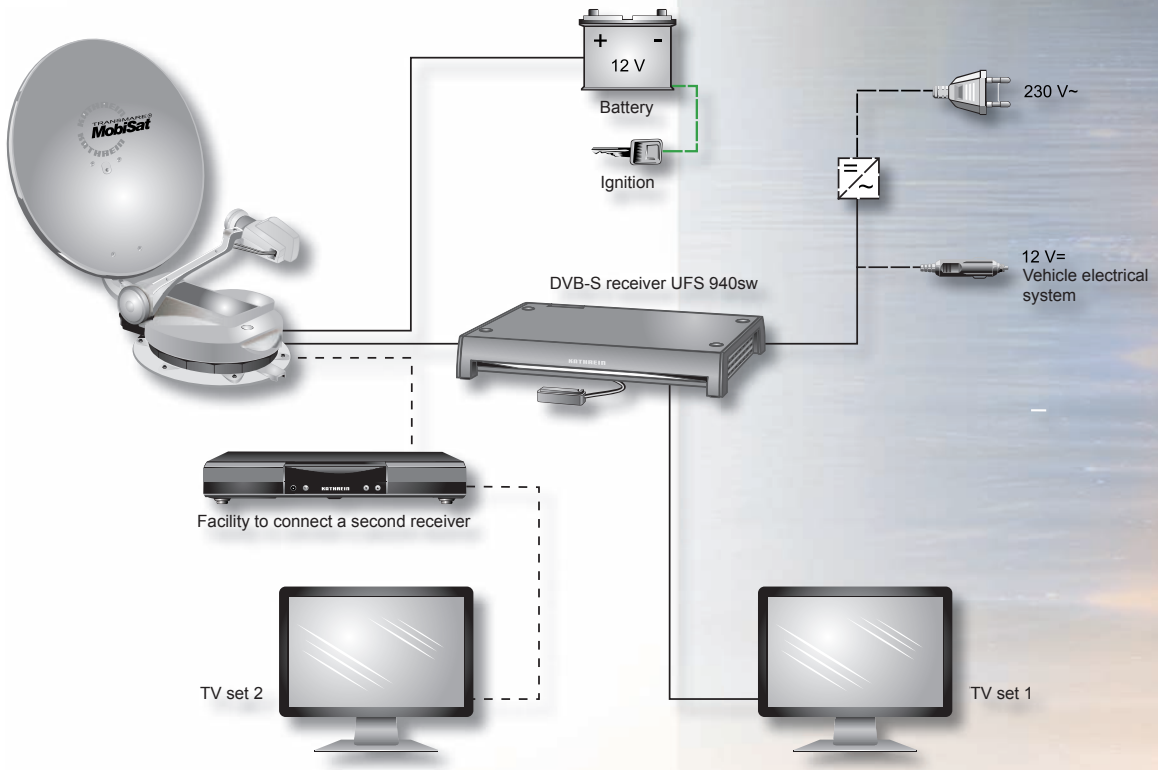
KATHREIN TRANSMARE® MobiSat KATHREIN

Connection examples

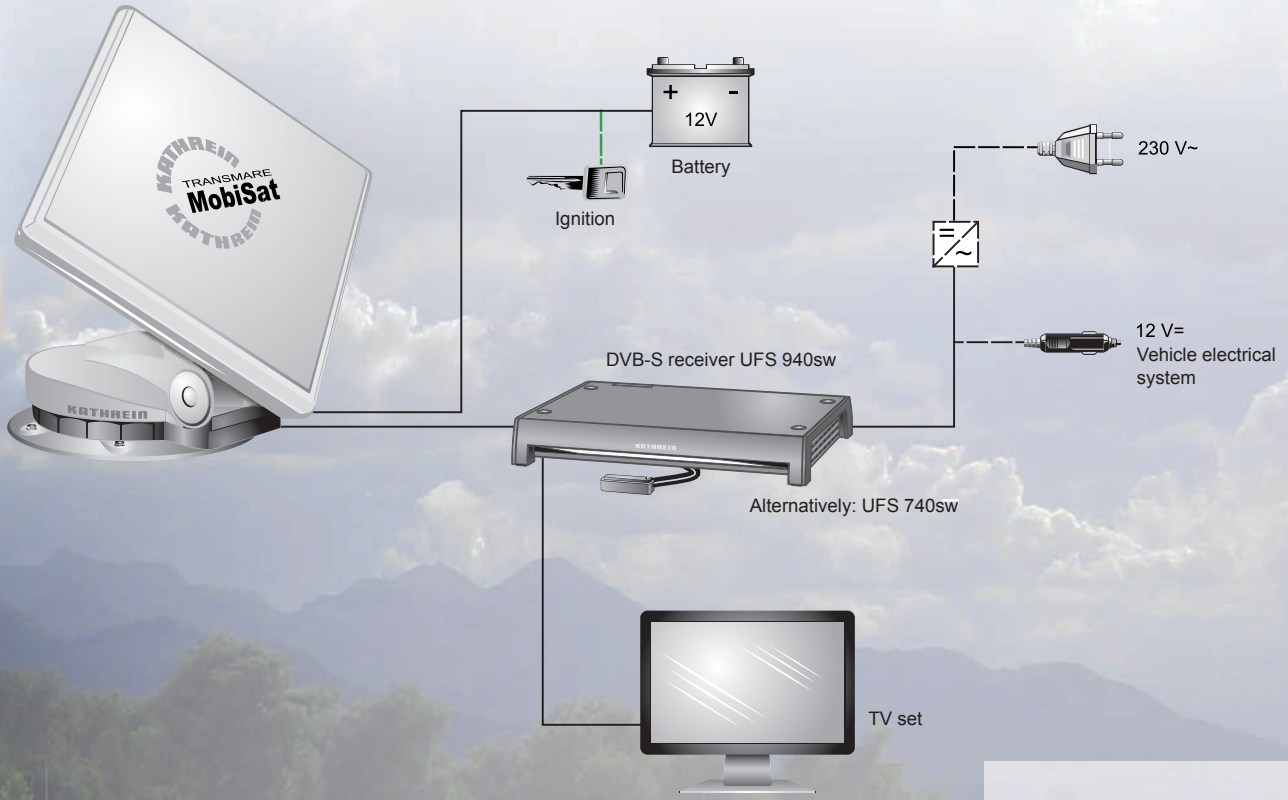
Connection example CAP 910



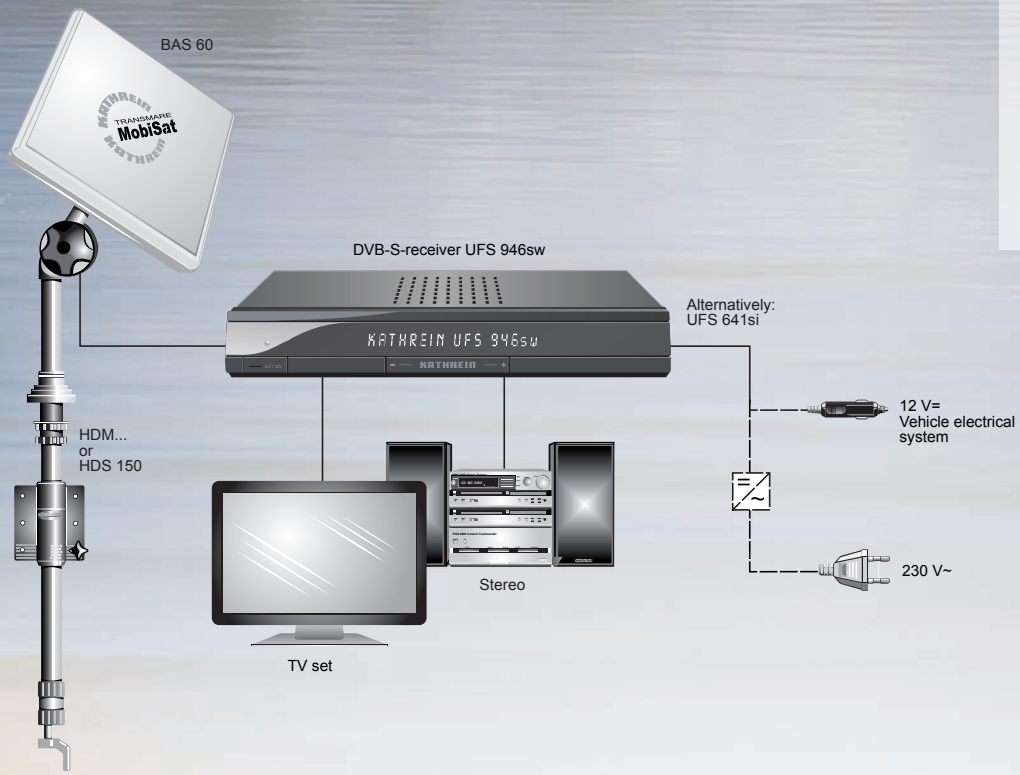
Connection example CAP 720



CAP 610 connection diagram



Connection diagram DVB-S receiver UFS 946sw/CI+sw



It is essential to note:

- Connect the power cable directly to the battery
- The automatic positioner will only work properly if the vehicle battery is well charged
- The vehicle electrical system voltage must be between 10.9 and 13.8 V
- The transient current for the turntable is 12 A

Technical data

Technical Data BAS 60/65

Type Order no.		BAS 60 216195	BAS 65 20010032
Application		Mobile use	Stationary use
To be mounted onto		HDP 600, HDM 140, 141, 143	Walls, masts, booms and on flat surfaces
Reception range	GHz	Switchable: 10.70-11.70 (0 kHz) – 11.70-12.75 (22 kHz)	
Polarisation		Switchable: Vertical (14 V) – Horizontal (18 V)	
Gain	dB	> 50	> 55
Half-power beam width [1]	°	Typ. < 3	
LNB		1 output switchable	2 outputs switchable
Output frequency	MHz	950-1,950/1,100-2,150	
Oscillator frequency (L.O.)	GHz	9.75/10.6	
LNB supply voltage	V	Vertical 11.5-14.0 - Horizontal 16.0-19.0	
Max. current drain	mA	160	220
Wind load [2]	n	240	240
Mast clamp range	mm	-	38-50
Setting range Elevation	°	0-90 (HDM 14x) – 10-90 (HDP 600)	0-50
Setting range Azimuth	°	360	± 65 (wall mounting)/360 (mast mounting)
Dimensions	mm	500 x 500 x 109 (without support)	500 x 500 x 121 (without support)
Packing unit/weight	pc./kg	1/6.5	1/8.2

[1] At mid-band
[2] At a dynamic pressure of 800 N/m² acc. to EN 60728-11

Technical Data CAP 910/720/610/HDP 600

Type Order no.		CAP 910 20310022	CAP 720 20310023	CAP 610 20310020	HDP 600 20410029
Diameter parabolic reflector approx.	cm	75	60	-	-
LNB		2 outputs switchable: V/H (14/18 V) Low/high (0/22 kHz)		1 output switchable: V/H (14/18 V) Low/high (0/22 kHz)	-
LNB supply voltage	V	Vertical: 11.5-14; Horizontal: 16-19			-
Input frequency	GHz	10.70-12.75	10.70-12.75	10.70-12.75	-
Output frequency	MHz	950-1,950/1,100-2,150			-
Oscillator frequency (L.O.)	GHz	9.75/10.60	9.75/10.60	9.75/10.60	-
Figure of merit (G/T) at 11.3/12.5 GHz	dB/K	16.9/17.9	13.4/13.7	13.3/13.7	-
Supply voltage (vehicle battery)	V	10.9-13.8	10.9-13.8	10.9-13.8	-
Current drain, 12 V on-board power supply: Transient current/Satellite scan/ TV reception/Stand-by mode	A	Typ. 10, max. 12/Typ. 3/ Typ. 1.2/Typ. 0.024			
Current drain from the receiver	mA	Typ. 200	Typ. 160	Typ. 160	Typ. 160
Setting range: Elevation/Azimuth/Skew	°	3-67/390/± 45	0-75/370/± 45	0-80/370/± 15	0-80/370/± 15
Weight turntable	kg	-	-	-	8.0
Weight turntable with parabolic reflector/ planar antenna		18.9/-	9.7/-	-/14.5	-/-
Packing unit/weight	pc./kg	1/32.5	1/19.5	1/23.4	1/12.75

		Digital satellite receivers (DVB-S)			Digital terrestrial receiver (DVB-T)
Type Order no.		**UFS 946/CI+** 20210222	**UFS 940sw** 20210151	**UFS 641si** 20210158	**UFT 676sw** 20210157
Colour		Black	Black	Silver	Black
RF range					
Input frequency range	MHz	950-2,150			174-230 and 470-862
Input level range	dBµV	44-78	44-83		28-86 (at 16 QAM)
Modulation, FEC, demultiplexer		DVB-S/ DVB-S2 standard		DVB-S standard	DVB-T standard
Modulation type		-	-	-	COFDM 2k, 8k
Channel bandwidth	MHz	-	-	-	7/8, automatically switchable
Mapping		-	-	-	QPSK, 16 QAM, 64 QAM
Guard Interval		-	-	-	1/4, 1/8, 1/16, 1/32
FEC		-	-	-	1/2, 2/3, 3/4, 5/6, 7/8
Video resolution		CCIR 601 (720 x 576 lines), 576p, 720p, 1080i, 1080p	CCIR 601 (720 x 576 lines), 576i, 576p, 720p, 1080i		
Video decoding		MPEG-2, MPEG-4/H.264, Xvid	MPEG-2, MPEG-4 (H.264/AVC)	MPEG-1 and MPEG-2 compatible	
Input data rate	MSymb/s	2-45 (30 for DVB-S2/8PSK)		-	5-32
TV system Audio					
Decoding		AC 3/MPEG-1, Layer 1, 2 and 3 (MP3)/HE-AAC	AC 3, MPEG 1, Layer 1 and 2	MPEG-1 and MPEG-2, Layer 1 and 2	
Sampling rate	kHz	32/44.1/48			
Power supply					
Mains voltage	V/Hz	230 (± 10 %)/50-60	230/50 ± 15 %		230/50 ± 10 %
DC voltage	V	12			-
Power consumption (max./typ. operation/stand-by)	W	< 34/Typ. 16/< 0.5	< 26/10/1	< 26/12/< 1	< 6/5/1
LNB supply (horiz./vert.)	V/mA	14/18; Max. 400			-
Control signal	kHz	22; DiSEqC™1.0/ -1.1/-1.2, USALS, SCR single-cable (EN 50494)	22; DISEqC™1.0/ 1.1/1.2/USALS, CAP command set, SCR single-cable (EN 50494)	22; DiSEqC™1.0; SCR single-cable (EN 50494)	-
Remote feeding	V/mA	-	-	-	5/75
Connections					
Sat-IF input/output (F-type connector)		1/-	1/1		-
RF input/output (loop-through)		-	-	-	IEC female/ male connectors
TV connection					
Video output (analogue)		1 x Cinch socket		Scart socket, Cinch socket	2 x Scart socket, Cinch socket
Video/audio output (digital)		1 x HDMI			
Audio output (analogue)		2 x Cinch socket			
Audio output digital (optical/electrical)		Standard optical (SPDIF)/1 x Cinch socket	Standard optical (SPDIF)/-	-/Cinch socket	
Common Interface/ encryption system		For 1 CI+/CI module	For 1 CI module		-
Data interfaces					
USB		1 x 2.0		-	-
Ethernet		1	-	-	-
IR sensor		RJ 11-mod		RJ 11 socket	
General					
Ambient temperature range	°C	Max. +5 to +40			
Dimensions (W x H x D)	mm	270 x 34 x 167	226 x 38 x 170	255 x 47 x 190	
Weight	kg	< 2	< 1.5	1.0	

Important addresses in Germany

Service centre in Germany

CSS Caravan-Sat-Service GmbH
Bahnhofstraße 110
83224 Grassau
Germany

Tel.: +49 8641 6998427
Fax.: +49 8641 6998429

E-mail: service@css-grassau.de

Technical support service

KATHREIN-Werke KG
Anton-Kathrein-Straße 1-3
83004 Rosenheim
Germany

Tel.: +49 8031 184-700
Fax: +49 8031 184-676

E-mail:
technische-kundenberatung@kathrein.de

Additional service partner (Find more on p. 34/35)

United Kingdom

RoadPro Ltd.
Stephenson Close
Drayton Fields Industrial Estate
GB- Daventry, Northamptonshire NN11 8RF

Phone: +44 1327 312 233
Fax: +44 1327 301 198

email: sales@roadpro.co.uk
website: www.roadpro.co.uk

Please see our website for SAT contacts in other countries who can be of assistance

Please contact us for advice:

99812110/1/0813/VKD/PF