

Operating Instructions

Kathrein Radio Satelliten Receiver UFD 231 260376



KATHREIN

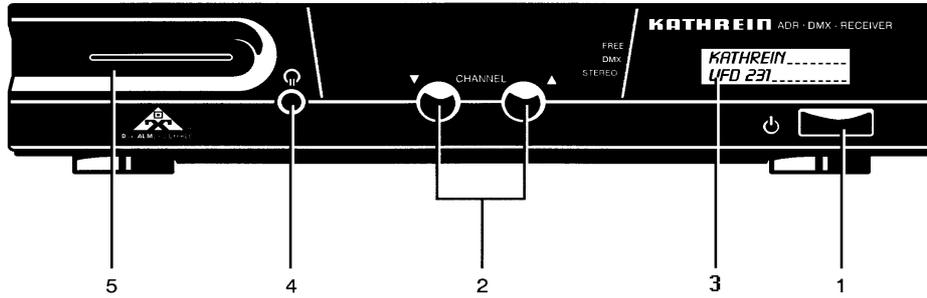
Antennen · Electronic

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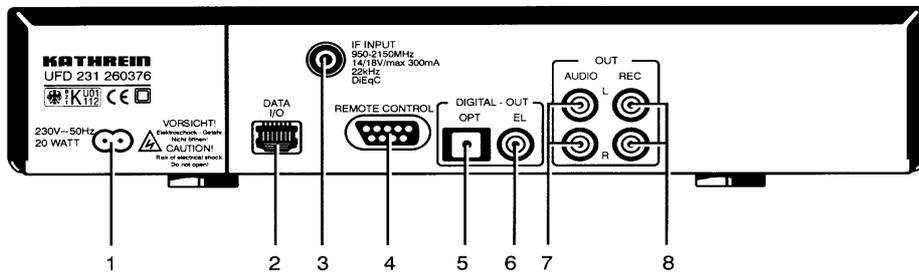
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FRONT, REAR AND REMOTE CONTROL HANDSET

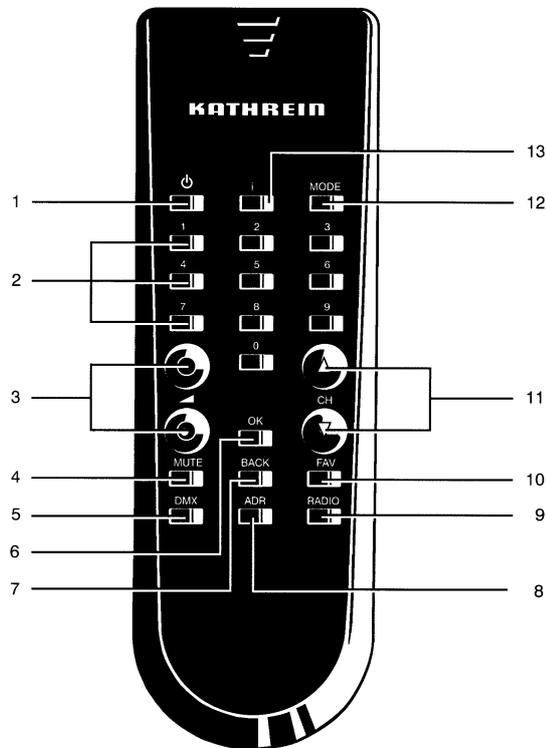
FRONT



REAR



REMOTE CONTROL HANDSET



DISPLAYS, KEYS AND CONNECTIONS

FRONT

- 1  Power switch (**with supply isolation**)
- 2  Pushbuttons for program selection
- 3 Two-line, 16-digit LCD display
- 4 Jack for headphone connection
- 5 Card slot for smart cards

REAR

- 1 Power supply socket
- 2 DATA socket **IO** for connection of an external infrared sensor and a **UFP 10** copy programmer (type Western 8-way)
- 3 Sat-IF input (F-socket)
- 4 Interface for PC card (type Sub-D 9-way)
- 5 Optical output in SPDIF format for connection to DAT recorder for digital recordings (EIAJ standard).
- 6 Electrical output in SPDIF format for connection to DAT recorder for digital recordings (Cinch socket)
- 7 Audio output L + R, adjustable (Cinch sockets)
- 8 Audio output L + R, non-adjustable (Cinch sockets)

REMOTE CONTROL HANDSET

- 1  Operative / standby mode key
- 2 Numeric keys **0-9** for inputting programs and frequencies
- 3  Dual function keys
 - a Volume control
 - b Call-up of individual functions in setup mode
- 4 **MUTE** Sound On/Off
- 5 **DMX** Invoke DMX program mode
- 6 **OK** Confirmation of entries; Activation of menus in setup mode
- 7 **BACK** Quitting of menus with no storing and display of last piece of music
- 8 **ADR** Invoke ADR program mode
- 9 **RADIO** Invoke analog radio program mode
- 10 **FAVORITE** Invoke favorite program mode
- 11  Dual function keys
 - a Step on to next program position (Up or down)
 - b Setting of parameters in setup mode
- 12 **MODE 1**. Key for calling up the various menus (see description of the remote control handset)
- 13 **i** Key for calling the Info menu

TECHNICAL DESIGN DETAILS

- Satellite receiving frequency range 950 - 2150 MHz
- Reception of digital (ADR/DMX) and analog radio programs
- Smart card reader for DMX radio programs
- 120 DMX program memory
- 100 ADR (free) program memory
- 100 Analog radio program memory
- Favorite mode for 200 program memory
- Automatic station search with storing of ADR/DMX radio programs in standby mode
- Two-line, 16-digit LCD-display for displaying DMX- and ADR-Info data (e.g. station ID, title, artist, album etc.)
- Coaxial and optical digital output in SPDIF format
- Freely-selectable LNB oscillator frequencies
- Connection for external infrared receiver
- Display of antenna signal level
- Power switch with supply isolation
- DiSEqC signal
- Programmable 22 kHz signal
- Audio carrier frequency range (digital) full-transponder operation possible
- Audio carrier frequency range (analog) from 5.00 to 8.82 MHz
- 2 pairs of audio Cinch sockets
- Stereo reception
- Dynamic noise suppression (DNR) Wegener-Panda for analog radio programs
- Mute control in addition to volume-, balance- and tone-control
- Data copying function for readin/readout of program data with the UFP 10 Copy Programmer
- Headset connection
- Functions for exchanging, sorting and copying program positions
- Programming via the remote control handset

ADR RADIO PROGRAMS

| Prog.- Platz | Programm- name | Programm- Sparte (Kategorie) | Sat- Frequ. (MHz) | Polari- sation | Orbit- position | Video- hub | Oszill. Frequ. Gruppe | Audio- modus | Audio- Frequ. (MHz) |
|-----------------|-------------------|------------------------------------|-------------------------|-------------------|--------------------|---------------|-----------------------------|-----------------|---------------------------|
| 1 | Bayern 1 | General | 11141 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,12 |
| 2 | Bayern 2 | General | 11141 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,30 |
| 3 | Bayern 3 | Pop | 11141 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,48 |
| 4 | Bayern 4 | Classic | 11141 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,66 |
| 5 | BR 5 aktuell | New Events | 11141 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,84 |
| 6 | Bremen 2 | General | 11494 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,10 |
| 7 | DLF | New Events | 11494 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,30 |
| 8 | DLR-Bln | General | 11494 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,48 |
| 9 | DW DProg | New Events | 11494 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,66 |
| 10 | DW Euro 1 | New Events | 11494 | Hor. Low | 1 | 16 | Lo 1 | Mono 1 | 6,84 |
| 11 | DW Euro 2 | New Events | 11494 | Hor. Low | 1 | 16 | Lo 1 | Mono 2 | 6,84 |
| 12 | Eins Live | Rock | 11053 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,12 |
| 13 | Energy | Pop | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,48 |
| 14 | FFH | Pop | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,10 |
| 15 | FHH-DAB | Pop | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,28 |
| 16 | Fritz | Rock | 11641 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,10 |
| 17 | Horeb | General | 10964 | Hor. Low | 1 | 16 | Lo 1 | Mono 1 | 7,56 |
| 18 | HR 1 | New Events | 11494 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 7,74 |
| 19 | HR 2 | Classic | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 7,74 |
| 20 | HR 3 | Pop | 11494 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 7,92 |
| 21 | HR 4 | General | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 7,92 |
| 22 | MDR Info | New Events | 11112 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,48 |
| 23 | MDR Kultur | Classic | 11112 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,66 |
| 24 | MDR Life | Pop | 11112 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,30 |
| 25 | MDR Sputnik | Rock | 11112 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,84 |
| 26 | NDR 2 | General | 11582 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,30 |
| 27 | NDR 3 | General | 11582 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,48 |
| 28 | NDR 4 | General | 11582 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,66 |
| 29 | NDR 4 spez. | General | 11582 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,12 |
| 30 | N-Joy | General | 11582 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,84 |
| 31 | Radio Ropa | New Events | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,12 |
| 32 | ROI Wien | New Events | 11141 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,10 |
| 33 | S 2 Kultur | Classic | 11186 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 6,48 |
| 34 | S4-Württemberg | General | 11186 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 7,74 |
| 35 | SDR 1 | New Events | 11186 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 6,30 |
| 36 | SDR 3 | Pop | 11186 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 6,12 |
| 37 | SR 1 Saar | Pop | 11494 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,28 |
| 38 | SRI Englisch | New Events | 10803 | Hor. Low | 1 | 16 | Lo 1 | Mono 1 | 7,92 |
| 39 | SRI Multiling | New Events | 10803 | Hor. Low | 1 | 16 | Lo 1 | Mono 2 | 7,92 |
| 40 | Starsat | Pop | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,30 |
| 41 | S-Techno | Pop | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,66 |
| 42 | SWF 1 BW | Pop | 11186 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 6,66 |
| 43 | SWF 3 | Pop | 11186 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 6,84 |
| 44 | WDR 2 D | New Events | 11053 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,30 |
| 45 | WDR 3 | Classic | 11053 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,48 |
| 46 | WDR 4 | Pop | 11053 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,66 |
| 47 | Radio 5 WDR | New Events | 11053 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 6,84 |
| 48 | Test | | 11141 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,46 |
| 49 | Test | | 10788 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 8,46 |
| 50 | Test | | 10788 | Vert. Low | 1 | 16 | Lo 1 | Stereo | 8,46 |
| 51 | ARD-STP 1 | General | 11494 | Hor. Low | 1 | 16 | Lo 1 | Mono 1 | 6,12 |
| 52 | ARD-STP 2 | General | 11494 | Hor. Low | 1 | 16 | Lo 1 | Mono 2 | 6,12 |
| 53 | Astra Test | General | 10964 | Hor. Low | 1 | 16 | Lo 1 | Stereo | 8,46 |

DMX RADIO PROGRAMS

| Progr- Numm. | Programm- name | Progr. Sparte (Kategorie) | Sat- Frequ. MHz | Polari- sation | Orbit- position | Video- hub | Oszill. Frequ. Gruppe | Audio- modus | Audio- Frequ. MHz |
|-----------------|-------------------|---------------------------------|-----------------------|-------------------|--------------------|---------------|-----------------------------|-----------------|-------------------------|
| 1 | Symphonic | Classic | 11377 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 2 | Chamber | Classic | 11377 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 3 | Opera | Classic | 11377 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 4 | | | | | | | | | |
| 5 | | | | | | | | | |
| 6 | Classical Guitar | Classic | 11171 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 7 | | | | | | | | | |
| 8 | BTFL Instrumental | Speciality | 11509 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 9 | Con Instrumentals | Speciality | 11038 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 10 | New Age | Speciality | 11038 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 11 | Classic Rock | Rock | 11421 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38 |
| 12 | | | | | | | | | |
| 13 | Dance / Techno | Rock | 11377 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 14 | US Hottest Hits | Rock | 11436 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 15 | Album Rock | Rock | 11421 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,56 |
| 16 | Heavy Metal | Rock | 11436 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 17 | Alternative Rock | Rock | 11436 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 18 | Rap | Rock | 11436 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 19 | UK Hits | Rock | 11377 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 20 | European Hits | Rock | 11436 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 21 | Power Hits | Rock | 11318 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 22 | Light Classical | Classic | 11097 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 23 | Rythmus u. Blues | Rock | 10979 | Vert. Low | 1 | 16 | LO 1 | Stereo | 6,66 |
| 24 | 50er Oldies | Oldies | 11171 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 25 | | | | | | | | | |
| 26 | 70er Oldies | Oldies | 11171 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | Pop Classics | Oldies | 11509 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 31 | Love Songs | Pop | 11479 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 32 | Soft Hits | Pop | 11171 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 33 | Great Singers | Pop | 11479 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 34 | Contemp Singers | Pop | 11479 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 35 | Smooth Sounds | Pop | 11479 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 36 | | | | | | | | | |
| 37 | | | | | | | | | |
| 38 | | | | | | | | | |
| 39 | Light Jazz | Jazz | 11421 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 40 | Classic Jazz | Jazz | 11421 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 41 | Big Band /Swing | Jazz | 11421 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 42 | Dixieland | Jazz | 11097 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 43 | Jazz Vocal Blend | Jazz | 11038 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 44 | Traditional Blues | Country | 11509 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 45 | Contemp Blues | Country | 11097 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 46 | Trad Country | Country | 11097 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 47 | Modern Country | Country | 11479 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 48 | | | | | | | | | |
| 49 | Solo Piano | Speciality | 10979 | Vert. Low | 1 | 16 | LO 1 | Stereo | 6,48 |

DMX RADIO PROGRAMS

| Progr- Numm. | Programm- name | Progr. Sparte (Kategorie) | Sat- Frequ. MHz | Polari- sation | Orbit- position | Video- hub | Oszill. Frequ. Gruppe | Audio- modus | Audio- Frequ. MHz |
|-----------------|-------------------|---------------------------------|-----------------------|-------------------|--------------------|---------------|-----------------------------|-----------------|-------------------------|
| 50 | | | | | | | | | |
| 51 | | | | | | | | | |
| 52 | Deutsche Schlager | Regional | 10994 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 53 | Deutscher Rock | Regional | 11171 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 54 | | | | | | | | | |
| 55 | | | | | | | | | |
| 56 | | | | | | | | | |
| 57 | French Chanson | Regional | 11509 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 58 | | | | | | | | | |
| 59 | | | | | | | | | |
| 60 | | | | | | | | | |
| 61 | Dutch Hits | Regional | 10994 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 62 | | | | | | | | | |
| 63 | Flemish | Regional | 11318 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 64 | Italian Hits | Regional | 10994 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 65 | | | | | | | | | |
| 66 | Dansish | Regional | 10994 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 67 | Norwegian | Regional | 10994 | Hor. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 68 | | | | | | | | | |
| 69 | Greek Music | Regional | 11318 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,92 |
| 70 | Hebrew Hits | Regional | 11318 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74 |
| 71 | Folk Rock | Rock | 11318 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 72 | | | | | | | | | |
| 73 | | | | | | | | | |
| 74 | Indian | Regional | 11038 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 75 | Reggae | Regional | 11509 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,28 |
| 76 | | | | | | | | | |
| 77 | | | | | | | | | |
| 78 | | | | | | | | | |
| 79 | Latin Contemp'ry | Regional | 10994 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,56 |
| 80 | 60er Oldies | Oldies | 10979 | Vert. Low | 1 | 16 | LO 1 | Stereo | 6,12 |
| 81 | Brazilian | Regional | 10979 | Vert. Low | 1 | 16 | LO 1 | Stereo | 6,84 |
| 82 | Mariachi | Regional | 11038 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,46 |
| 83 | | | | | | | | | |
| 84 | | | | | | | | | |
| 85 | | | | | | | | | |
| 86 | Soul Greats | Oldies | 11097 | Vert. Low | 1 | 16 | LO 1 | Stereo | 8,10 |
| 87 | | | | | | | | | |
| 88 | Beach Party | Oldies | 10979 | Vert. Low | 1 | 16 | LO 1 | Stereo | 6,30 |
| 89 | | | | | | | | | |
| 90 | | | | | | | | | |

ANALOG RADIO PROGRAMS

| Progr Platz | Programm Name | Sat- Frequenz MHz | Polari- sation | Orbit- position | Video- hub MHz | Osc. Frequ. | Audio Mode | Audio- Frequ. MHz | Audio- Deemp |
|----------------|-------------------|-------------------------|-------------------|--------------------|----------------------|----------------|---------------|-------------------------|-----------------|
| 1 | Antenne Bayern | 11214 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 2 | Deutsche Welle 1 | 11229 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 3 | Deutsche Welle 2 | 11229 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,74 | dnr |
| 4 | Deutsche Welle 3 | 11229 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,92 | dnr |
| 5 | Sky Radio | 11318 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 6 | Radio Eviva | 11332 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,74 | dnr |
| 7 | SRI Intern. | 11332 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |
| 8 | SRI Engl. | 11332 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 9 | Deutschlandfunk | 11347 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 10 | Deutschlandradio | 11347 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74/7,92 | dnr |
| 11 | Virgin 1215 | 11377 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 12 | RTL-Oldie | 11391 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 13 | RFI 2 | 11156 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |
| 14 | N-Joy Radio | 11464 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 15 | Sunrise Radio | 11479 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 16 | SWF 3 | 11494 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 17 | UCB Radio | 11509 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |
| 18 | American One | 11538 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,74 | dnr |
| 19 | Irish Sat Radio | 11538 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,92 | dnr |
| 20 | RTE 1 | 11538 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |
| 21 | WRN Network 1 | 11538 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 22 | BBC Radio 2 | 11553 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,74 | dnr |
| 23 | BBC Radio 4 | 11553 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |
| 24 | BBC Radio 5 | 11553 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,92 | dnr |
| 25 | BBC World Service | 11553 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 26 | NDR 2 | 11582 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 27 | NDR 4 | 11582 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,74/7,92 | dnr |
| 28 | CNN | 11627 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,92 | dnr |
| 29 | Dial | 11656 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 30 | SER | 11656 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,74 | dnr |
| 31 | Radio Sweden | 10964 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 32 | BBC Radio 1 | 10979 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 33 | BBC Radio 3 | 10979 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,74/7,92 | dnr |
| 34 | ERF 1/TWR | 11038 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 35 | ERF 2 | 11038 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |
| 36 | WDR 2 | 11053 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 37 | WDR/1 Live | 11053 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,74/7,92 | dnr |
| 38 | MDR Radio Sputni | 11112 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 39 | RFI | 11156 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 40 | ASDA FM | 11171 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |
| 41 | Supergold | 11171 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 42 | CMR | 10729 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 43 | Radio Eviva | 10803 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,74 | dnr |
| 44 | Radio Netherlands | 10847 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 45 | Costcutter | 10877 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 46 | BRTN-Nachtradio | 10921 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 47 | Radio Vlaand. | 10921 | Hor. Low | 1 | 16 | LO 1 | MNR | 7,38 | dnr |
| 48 | Campanile | 11523 | Hor. Low | 1 | 16 | LO 1 | Stereo | 7,74/7,92 | dnr |
| 49 | Country Music Rac | 10729 | Vert. Low | 1 | 16 | LO 1 | Stereo | 7,38/7,56 | dnr |
| 50 | RFI 1 | 11156 | Vert. Low | 1 | 16 | LO 1 | MNR | 7,56 | dnr |

Stand Januar 1997; Für die Richtigkeit und für Änderungen wird keine Gewähr übernommen!

FAVORITE PROGRAMS

| Programmbank 1 | | Programmbank 2 | | Programmbank 3 | |
|----------------|------------------|----------------|------------------|----------------|------------------|
| Progr Platz | Programm Name | Progr Platz | Programm Name | Progr Platz | Programm Name |
| 1 | | 1 | | 1 | |
| 2 | | 2 | | 2 | |
| 3 | | 3 | | 3 | |
| 4 | | 4 | | 4 | |
| 5 | | 5 | | 5 | |
| 6 | | 6 | | 6 | |
| 7 | | 7 | | 7 | |
| 8 | | 8 | | 8 | |
| 9 | | 9 | | 9 | |
| 10 | | 10 | | 10 | |
| 11 | | 11 | | 11 | |
| 12 | | 12 | | 12 | |
| 13 | | 13 | | 13 | |
| 14 | | 14 | | 14 | |
| 15 | | 15 | | 15 | |
| 16 | | 16 | | 16 | |
| 17 | | 17 | | 17 | |
| 18 | | 18 | | 18 | |
| 19 | | 19 | | 19 | |
| 20 | | 20 | | 20 | |
| 21 | | 21 | | 21 | |
| 22 | | 22 | | 22 | |
| 23 | | 23 | | 23 | |
| 24 | | 24 | | 24 | |
| 25 | | 25 | | 25 | |
| 26 | | 26 | | 26 | |
| 27 | | 27 | | 27 | |
| 28 | | 28 | | 28 | |
| 29 | | 29 | | 29 | |
| 30 | | 30 | | 30 | |
| 31 | | 31 | | 31 | |
| 32 | | 32 | | 32 | |
| 33 | | 33 | | 33 | |
| 34 | | 34 | | 34 | |
| 35 | | 35 | | 35 | |
| 36 | | 36 | | 36 | |
| 37 | | 37 | | 37 | |
| 38 | | 38 | | 38 | |
| 39 | | 39 | | 39 | |
| 40 | | 40 | | 40 | |

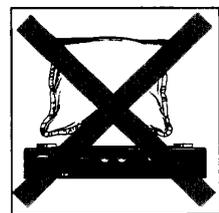
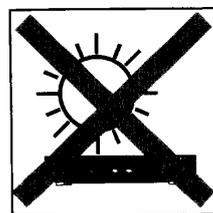
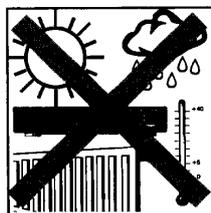
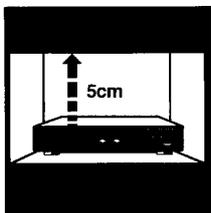
SAFETY AND INSTALLATION TIPS

- 1. Instructions**
Read carefully through the safety- and operating instructions before switching the unit on.
- 2. Supply-voltage**
Operate the Receiver only from a supply voltage of 230 V and 50 Hz supply frequency. The unit is not be connected up to the supply before the installation work is completed.
- 3. During thunderstorms, or before long periods of absence, always switch the unit off at the power switch on the unit.**
- 4. Grounding**
The parabolic antenna must be correctly grounded in accordance with regulations. The relevant regulations must be complied with (i.e. VDE in Germany or equivalent elsewhere).
- 5. LNB-supply-voltage**
If the feeder system (LNB) is going to be supplied from an external supply voltage, the LNB supply on the receiver must be set to "Off" (see Basic Setting Menu). Otherwise there is a risk that the receiver may be destroyed.
- 6. Installation**
All electronic equipment gives off a certain amount of heat simply as a matter of physics. The heat generated lies within a safe range however. Slight changes in the surface color of delicate furniture and veneers cannot however be excluded when subject to the constant effects of heat over a prolonged period. Color changes can similarly be brought about due to contact between the rubber feet on the unit and treated furniture surfaces. Therefore in critical cases place the unit on a suitable underlay.
- 7. Ventilation**
The heat generated in this unit will be dissipated satisfactorily. Never install the receiver unit in a cupboard, stand or rack where there is inadequate ventilation.

Never close-off those openings in the unit that were specially designed to dissipate heat out of the unit.

Do not place objects on the unit.

Maintain a clearance of **at least 5 cm** above the unit, so that the heat generated within the unit is carried away without any hindrance.
- 8. Humidity**
Guard the unit against humidity, drips and splashes.
- 9. Do not place the receiver close to radiators or place in a position exposed to direct sunlight.**
- 10. Pay attention that children do not insert objects into the ventilation slits.**
Risk of an accident.
- 11. Cleaning**
Withdraw the power plug before cleaning the unit. Use a damp cloth to clean the unit.
- 12. Repairs**
Repairs and adjustments to your receiver should only be carried out by qualified specialists. An unauthorized opening of the unit automatically incurs the loss of any guarantee.



DESCRIPTION OF KEYS ON REMOTE CONTROL HANDSET

1

This key switches the receiver into standby or back into operation again.

Caution: No supply isolation.

Note!

If the receiver is switched into standby and the appropriate setting has been made in the initial setup menu, an automatic station search will be carried out for ADR- and DMX-programs. This is then followed by an automatic switch into standby (factory setting). See also under "Search" in section "Programming".

2 Numeric keys 0-9

In normal radio operation (program mode) you can use these keys to enter the program positions. In setup mode the receive parameters can be adjusted.

3 **VOLUME**

⇒ Adjustment of volume, balance and tone control.

⇒ The settings are effective only at the "AUDIO" connections and not at the "REC" connections, so as to avoid disturbance to recordings.

⇒ Call-up of individual menu entries in setup mode.

4 **MUTE**

Muting of the sound.

The display indicates "**Sound off**".

While the sound is turned off, the volume at the headset jack can be adjusted by means of the volume  keys.

The muting is only effective at the "AUDIO" connections. At the "REC" connections the muting has no effect, to avoid disturbance to recordings.

5 **DMX**

⇒ Changeover to DMX program mode.

⇒ Invokes the DMX setup menu when used together with the **MODE** key. (Press the keys **MODE** and **DMX** in succession.)

6 **OK**

Confirmation of entries, activation of menus in setup mode, scrolls through the Info data on the display read-out.

7 **BACK**

⇒ Quitting of menu windows without storing. Closing of menus.

⇒ Fade-in of title of preceding piece of music.

8 **ADR**

⇒ Changeover to ADR program mode.

⇒ Invokes the ADR setup menu when used together with the **MODE** key. (Press the keys **MODE** and **ADR** in succession.)

9 **RADIO**

⇒ Changeover to analog radio mode.

⇒ Invokes the Analog-Radio setup menu when used together with the **MODE** key. (Press the keys **MODE** and **RADIO** in succession.)

10 **FAVORITE**

⇒ Changeover to favorite mode

⇒ (Preferred programs)

⇒ Invokes the FAVORITE menu when used together with **MODE** key. (Press the keys **MODE** and **FAVORITE** in succession.)

11

⇒ Move through the program positions step-by-step.

⇒ Inputting of receive parameters in setup mode

12 **MODE**

By using the **MODE** key together a **2nd.** key you can call the following menus:

⇒ **MODE + DMX** DMX setup menu

⇒ **MODE + ADR** ADR setup menu

⇒ **MODE + RADIO** Analog-radio setup menu

⇒ **MODE + FAVORITE** Favorite program assignment

⇒ **MODE + OK** Program selection via categories (in ADR/DMX mode)

⇒ **MODE + 0** Display of antenna signal level

⇒ **MODE + 1** Manual scrolling through Info data

⇒ **MODE + 2** Scroll Info data automatically

⇒ **MODE + 3** Display of title and artist

⇒ **MODE + 4** Display of title and author

⇒ **MODE + i** Adjustment of scroll time and display of various Info data-

in scroll mode

13 **i** Info

Activation of the Help menu for the following information:

⇒ Output of the unit's type

⇒ Display of the required key functions for invoking the individual menus.

RECEIVER OPERATION

The extensive equipping of this receiver permits reception of digital DMX pay-radio programs (with a card), free digital ADR radio programs and also analog satellite radio programs.

In the operating description that follows it is assumed that the receiver has already been properly connected up by a competent specialist. If this is not the case, and you intend setting up the connections yourself, please read the section "Connection and Start-up" beforehand.

Switching the unit on

Switch the unit on via the power switch  on the unit. The most recently selected program mode appears (DMX-, ADR- or Analog radio) together with the last selected program position. If the unit was in standby mode before being switched off, it returns again to standby mode when it is switched on via the power switch. The unit is switched between standby and in-operation via the  key on the remote control handset.

Program selection

The receiver offers the user a variety of program selection possibilities:

There is a choice from:

- **120 DMX Pay-radio program positions (with a DMX smart card)**
- **100 ADR Radio program positions (free radio programs)**
- **100 Analog radio program positions**

The ADR- and DMX-programs are transmitted digitally, i.e. almost in CD quality.

The transmission of analog radio programs is carried out using the well-known "Wegener Panda 1" standard.

The switch-over to the individual regions takes place using the "**DMX**"-"**ADR**"-"**RADIO**" keys on the remote control handset.

Program selection in the respective regions is possible via the numeric keys (0...9) and the  keys on the remote control handset and on the unit.

Digital radio reception

a) **DMX-Radio** Pay-radio programs

Display readout: **D..**

To receive DMX pay-radio programs, insert the smart card into the card slot on the receiver in the direction of the arrow (micro-chip on the underside).

Press the **DMX** key.

The program number, program name and program category assigned to the program appear in the two-line LCD display.

If you have forgotten to insert the card or you have not inserted it correctly the following message appears:

**ATTENTION:
PLEASE INSERT CARD**

The sound is not cleared.

Check that you have inserted the card correctly.

In DMX mode, the only valid **DMX** program numbers are those established by the program supplier that are also included in the transmission. These are shown in the LCD display.

A change in the predefined numbering is therefore not possible in DMX mode. (refer to Favorite mode however)

After approximately 3 seconds information about the title, artist, album, author and CD No. is faded-in alternately (TTA-data).

b) **ADR-radio reception** (free radio programs)

Display readout: **A..**

Press the **ADR** key

The station name, program number and category designation of the most recently selected program appear in the display.

In the case of ADR programs, aside from the station and category designation, there can also be additional information transmitted (radio text and other info.). These are then also shown in the LCD display (see also **Display Info.**).

Note:

The displays and fade-ins only appear if they are also sent by the program supplier.

If no information is transmitted, the message "No Data" appears.

RECEIVER OPERATION

Analog radio programs

To receive the analog radio programs press the "RADIO" key. The LCD display readout indicates "R .." together with the most recently selected radio program position.

Information, such as that for the digital radio programs (ADR and DMX), is not available with analog radio programs.

With analog radio programs, the program name is entered in the setup menu.

For setting program names see the section "Programming".

Program category selection with digital radio programs in ADR/DMX mode

The digital radio programs are divided into various categories by the program supplier. In this mode you can use the CH keys to select programs that belong to just one particular category (e.g. Rock or Classic).

The following categories are available:

1. GENERAL
2. CLASSIC
3. POP
4. OLDIES
5. ROCK
6. JAZZ
7. COUNTRY
8. SPECIALITY
9. REGIONAL
10. NEWS/EVENTS

In succession press **MODE + OK**

Display readout:

1. General
select → [OK]

With the   keys make the desired selection according to the table above and confirm with "ok".

Program selection is now only possible using the CH keys, the numeric keys can no longer be used.

If a category is not available the following message appears on the display:

Category
does not exist!

To quit the program selection in category mode press the **MODE + OK** keys once again and then press **BACK**

Display readout:

Category mode
inactive

Display last title

In ADR- and DMX-mode you have the possibility to fade-in the preceding music title once again by using the **BACK** key.

By pressing the **BACK** key once more the current title is then displayed again.

Volume, Balance, Tone control

You can adjust the volume by using the volume keys  .

Volume 32
.....

Whilst the volume indication is faded-in on the display, you can activate the balance control with the "ok" key and then press the **ok** key a further time for tone control setting (treble and bass setting). The setting is also carried out using the   keys.

The volume, balance and tone control is only effective at the **AUDIO** connections, and not at the **REC** connections.

Sound On/Off

You can turn the sound off by means of the **MUTE** key, e.g. if you making a phone call.

The sound muting is similarly only effective at the **AUDIO** connections and not at the **REC** connections.

RECEIVER OPERATION

Headset

The headset connection on the front is designed for a 6.3 mm stereo jack plug. The headset volume can be adjusted independently of the audio connections, if the **MUTE** key is used to turn off the sound at the audio connections.

Adjustment of the balance and tone control is not possible at the headset connection.

Favorite mode

Favorite mode allows you to specify a program sequence that corresponds to your particular requirements.

In Favorite mode it is possible to store **DMX-**, **ADR-** and **analog-** radio programs in any desired sequence.

Favorite mode comprises 200 program storage locations, which are divided up into 5 banks each containing 40 storage locations. This allows an arrangement of 5 arbitrary program sequences, so that each family member can assemble their own personal program bank for example.

Display of favorite program numbers
F01#1....F40#5

F = Favorite program number **1** to **40**

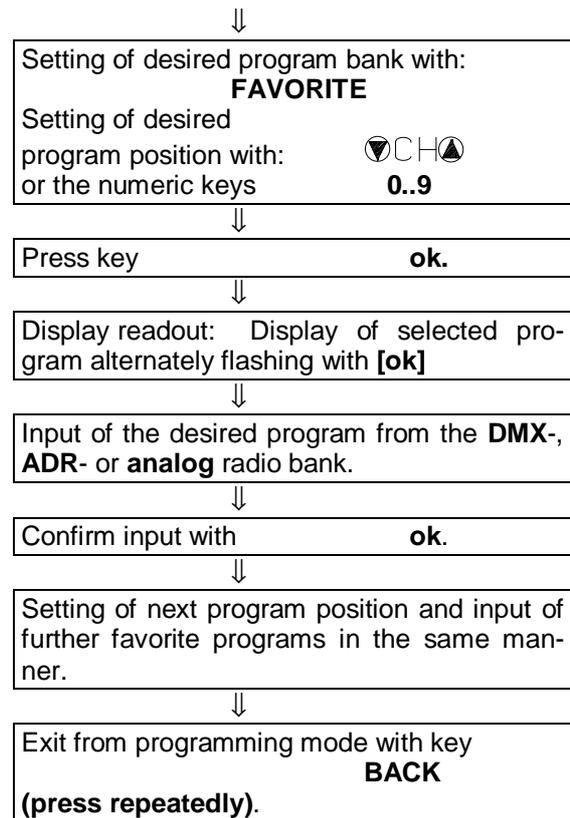
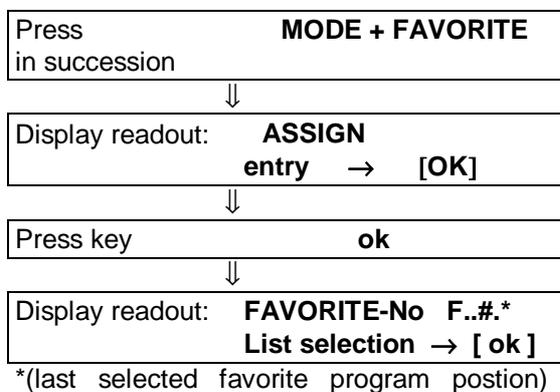
Selection of favorite program numbers 1...40 with the  keys or the numeric keys **0-9**.

= Program bank **1** to **5**

Selection of program bank 1...5 with the **FAVORITE** key

Programming Favorite Programs

Call up the programming mode for the Favorite-programs



Display information

In ADR/DMX mode it is possible to display the following information:

- ⇒ Title
- ⇒ Interpreter (Artist)
- ⇒ Album
- ⇒ Author
- ⇒ CD-No.

The setting that determines which of the above-listed information (TTA data) is to be displayed is carried out in the Info menu.

The Info menu is called up with **MODE + i** (press in succession)

- ⇒ Confirm selection with key **OK**
- ⇒ Step on to further menu entries by means of the keys 
- ⇒ Activation of menus with **ok**
- ⇒ Setting of parameters with 
- ⇒ Back with **Back**

See also Structure of the Info Menus at the end of this manual!

RECEIVER OPERATION

Further setting possibilities for the Info displays are:

1. Step on through the Info data manually with the **ok** key.
2. Info data running independently (scrolling) (the scroll interval is adjustable from 1 to 5 seconds).
3. Fade-in title and artist only.
4. Fade-in title and author only.

Setting of desired display:

Keys **MODE + Numeric key 1, or 2, or 3 or 4** according to desired display (press in succession).
This setting is independent of the setting in the Info menu.

Setting of scroll time:

Keys **MODE + INFO** (press in succession)
Set time with: **CH**
Return wit key **BACK.**

Note:

In ADR mode these data can also be faded-in provided that they are also transmitted by the program supplier.

In the "Analog-radio" mode this information is not available

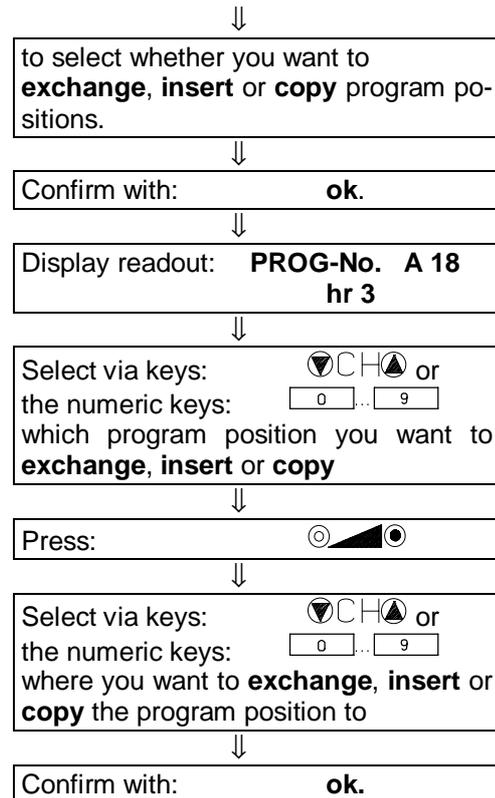
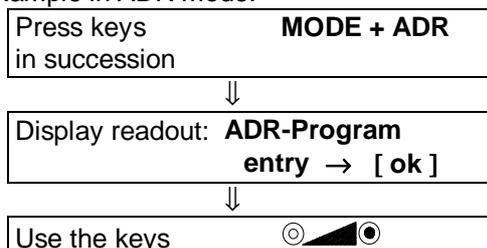
Exchange, insert (sort) and copy program position

(only possible in modes: **ADR-radio, analog radio** and **Favorite - not in DMX mode**).

- If you want to change the current program sequence, you can do this using the functions:
 - ⇒ Exchange program position or
 - ⇒ Insert program position (sort) or
 - ⇒ Copy program position.
- For this press the keys:
 - ⇒ "**MODE**" and "**ADR**" resp.
 - ⇒ "**MODE**" and "**Radio**" or
 - ⇒ "**MODE**" and "**Favorite**" in succession,

according to whichever group you want to make changes to.

Example in ADR mode:



If you want to manipulate further program positions continue using the same sequence of actions.

If you want to exit from the menu, press the **BACK** key until you are once again in normal program mode.

The functions are carried out in the same manner in the modes "Analog Radio" and "Favorite".

Caution!

When copying program positions, the program position that is being copied to is overwritten and is consequently no longer retrievable.

Operation without remote control

When the satellite receiver is switched on, it always returns to the operating state that was selected before it was switched off.

If the unit was previously in **Standby** mode when it was switched off at the power button on the unit, it switches back into **Standby** mode when it is switched on again.

If you happen to have mislaid the remote control handset, you can switch the receiver back into operation by simultaneously pressing both **CH** keys on the front of the unit.

In the same way you can change over to the other operating modes (**DMX, ADR, Radio** and **Favorite**).

Connection and Start-Up

Attention:

Do not connect the unit to the electrical supply until after all other installation work has been carried out in accordance with regulations

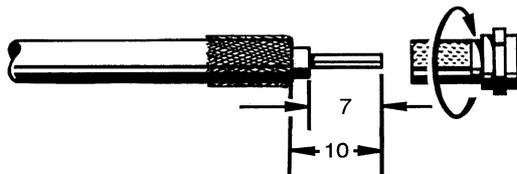
- **Satellite signal connection**

Connect the Sat-IF input of the receiver to the satellite receiving installation.

If there is a short circuit in the LNB supply voltage, the LNB supply voltage is turned off and the notification message "OVERLOAD" is displayed on the LCD display.

Use a coaxial cable with an F-standard attachment plug for the connection.

- If the F-plug is not yet mounted on the cable,
 - strip back the cable as shown in the sketch.
 - screw the F-plug carefully onto the cable end until the plug is firmly seated on the cable.



Attention!

When fitting the plug, ensure that no strands of wire from the braided shield are making contact with the inner conductor thus giving rise to a short circuit.

- **Audio connection**

Your satellite receiver has two pairs of audio Cinch sockets available for connection to hi-fi stereo equipment.

- Cinch socket pair (**AUDIO**):
The audio signal is adjustable at these sockets, i.e. volume, balance and tone can be adjusted. The sound muting (Mute) is also only effective at these connections
Connect a hi-fi system or active speaker units to these sockets
- Cinch socket pair (**REC**)
To benefit from the high quality of the digital radio programs (DMX- and free radio programs),

for high-quality hi-fi systems, and especially also for tape recordings. At this output you can take advantage of the full frequency range that is being transmitted (see technical data).

The sound muting, volume and tone controls are not effective at this connection in order not to disturb any recordings.

- **Digital audio recorder (DAT, DCC)**

If a digital audio recorder is available, it can be connected to the **SPDIF**-socket (Digital OUT EL) for recording of the digital data stream of ADR radio programs.

If there is an optical input available on the digital recorder, connect the UFD 231 to the optical input.

External infrared receiver

If the receiver is to be operated from a location that the remote control handset is unable to reach, (e.g. with the connection of another stereo system in a different room), an external infrared receiver can be connected via the data copy connection IO (Western modular 8-way). You can then also control the receiver from this room.

Now connect the receiver to the electricity supply.

Inserting batteries into the remote control.

- Open the cover located on the rear of the remote control handset
- Insert both of the supplied batteries into the remote control handset
- Take care that the batteries are inserted with the correct polarity!
- Replace the cover to the battery compartment (We recommend batteries of type : LR 3).

Note: Used batteries are a specialized waste product! Do not therefore throw out used batteries with household waste, instead hand them over to a collection point for old batteries!

Now switch on the satellite receiver via the power switch located on the front of the unit. The LED display on the unit indicates the last program position that was selected.

Check antenna signal level

With the key combination **MODE + 0** the signal level (bar diagram) is faded-in to the LCD display. This allows the antenna to be checked for optimal alignment.

PROGRAMMING RADIO PROGRAMS

The satellite receiver has been preprogrammed in the factory.

The predefined programs are all listed on pages 6 to 9 (German)!

More and more new programs are continually being transmitted via the satellites. To program-in these new programs you can obtain the necessary receiving parameters from current satellite magazines. If you already have a TV satellite receiver you can also call up the satellite transponder assignments (satellite channels) via the program "SAT 1" videotext from page 516.

Programming radio programs

The setting of new programs is carried out:

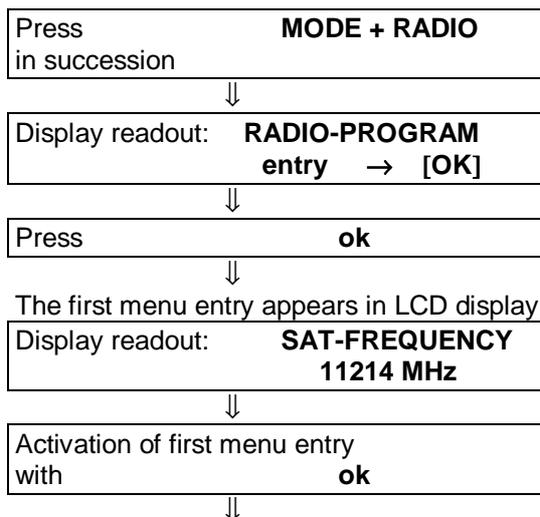
- manually only for analog radio programs.
- manually or via search for digital radio programs (ADR and DMX)

With manual programming of radio programs the following program parameters are to be set up:

- Satellite receiving frequency
- Polarization
- Orbit position
- Video deviation
- Oscillator
- Audio mode
- Audio frequency
- Audio de-emphasis (for analog progr. only)
- Program names (for analog progr. only)

Call the setup menu

(example for analog radio program)



Display readout: **SAT-FREQUENCY**
< **11214 MHz** >

The setting can now be made.

Input of the new satellite frequency
with the numeric keys **0...9**
or the keys **▼CH▲**

When setting further program parameters the following applies:

⇒ Step on to further menu entries with the keys



⇒ Activate the menus with **ok**

⇒ Setting of parameters with **▼CH▲** or with the numeric keys for frequency inputs.

Explanation of the individual menu entries:

Satellite frequency:

- The frequency value is entered using the numeric keys as a 5-digit number in the range 10700 to 12747 MHz
- You can carry out an optimization of the receiving frequency using the **▼CH▲**-keys.

Polarity:

- The satellites beam down their programs with varying polarization.
- Set up the required polarity as either **V** or **H**. Here vertical corresponds to **V** = 14 V and horizontal to **H**=18 V LNB supply voltage.
- The additional setting possibilities "High" and "Low" are intended for future control possibilities in conjunction with "DiSEqC"-matrices. In this case a different setting is chosen for the initial setting in the "DiSEqC" menu.
- For standard receiving equipment you do not need to pay any attention to High and Low.

Orbit position

If you have a multifeed receiving installation for reception of several satellites e.g. Astra and Eutelsat, assign each satellite to an orbit position, e.g. Astra "orbit position 1" and Eutelsat "orbit position 2". Take into account preprogramming in the initial setup menu

Deviation

Set the video deviation to 16 MHz for reception of Astra programs and to 25 MHz for reception of Eutelsat programs.

PROGRAMMING RADIO PROGRAMS

Oscillator

The receiver is preprogrammed with 4 different oscillator frequencies (LO-settings) to allow matching to different feeder systems. This also allows problem-free operation of the receiver with other feeder systems (receiving systems) that possibly use a different oscillator frequency.

The following oscillator frequencies (LO-frequencies) are preprogrammed.

| LO-group | Oscillator frequency MHz |
|----------|--------------------------|
| LO 1 | 9750 |
| LO 2 | 9750 |
| LO 3 | 10600 |
| LO 4 | 10000 |

To change the LO-frequencies see the Initial Setup Menu.

Audio mode

- Set the desired audio mode "Stereo", "Mono narrow" or "Mono wide" (for analog radio mode) or else "Stereo", "Mono 1" or "Mono 2" (for ADR and DMX radio modes).

Note!

The "Stereo" and "Mono narrow" modes are set on reception of the audio subcarrier while "Mono wide" is set on reception of the audio main carrier (5.80; 6.50; 6.60; 6.65; 6.80 MHz).

Audio frequency

- Call up the audio frequency display
- Using the numeric keys enter the relevant audio frequency directly in 3-digit form in the range from 5.0 to 8.82 MHz. For stereo reception enter the frequency for the left-hand audio channel. The frequency for the right-hand audio channel is then positioned automatically at 180 kHz above that of the left-hand audio frequency.
- When making settings using the  keys the frequencies listed in the following table can be set up.

Audio frequency groups that can be set using the -keys.

Frequency Table for Analog Radio Mode

| Mode: | Sound carrier frequencies: |
|---------------|----------------------------|
| Stereo | 7.02/7.20 MHz |
| | 7.38/7.56 MHz |
| | 7.74/7.92 MHz |
| | 8.10/8.28 MHz |
| Mono (narrow) | 7.02 MHz |
| | 7.20 MHz |
| | 7.38 MHz |
| | 7.56 MHz |
| | 7.74 MHz |
| | 7.92 MHz |
| | 8.10 MHz |
| Mono (wide) | 5.80 MHz |
| | 6.50 MHz |
| | 6.60 MHz |
| | 6.65 MHz |
| | 6.80 MHz |

Audio de-emphasis

- In the "Stereo" and "Mono narrow" audio modes the de-emphasis is automatically set to "dnr/75µs". In the "Mono wide" audio mode set the de-emphasis to either "50 µs" or "J 17" according to the best sound impression. (analog radio mode only)

Program name (in analog radio mode only)

In this menu entry you can enter a 5-position program name.

- Input with keys 
- Continue with 

The settings are now completed

Exit from the setup menu using the **BACK** key and comply with the display fade-ins for **storing** the selected parameters.

The settings for digital (ADR and DMX) radio programs are carried out in the same manner.

See also the Structure Menu at the end of the user manual!

PROGRAMMING RADIO PROGRAMS

Search for ADR- and DMX-programs

To locate new ADR- and DMX-programs the automatic search can be set up in the Initial Setup Menu for the UFD 231 receiver (setting in the delivered state).

The automatic search is started if the receiver is switched into standby using the  key on the remote control handset.

In the process the receiver searches through the entire frequency range for new programs.

If any are found the receiver then saves these programs.

When the search has finished the receiver finally switches into standby, and the newly-discovered ADR- and DMX-programs are displayed in the LCD display.

If you want to cancel the search, press the  key on the remote control handset once again.

By means of the function **sort** (insert) you can sort the new ADR radio programs into the desired order.

The DMX programs will be sorted automatically according to the predefined program numbers.

If the search is terminated with the message "Memory full!", this indicates that the ADR program memory is completely occupied. In this case at least one program must be deleted via the ADR-setup menu and the search is then to be started again.

The automatic search can be turned off in the Initial Setup Menu.

INITIAL SETTING

The matching of the satellite receiver to the satellite receiving installation is carried out in the Initial Setup Menu.

The receiver has however already been factory-preprogrammed for standard satellite receiving installations

Changes to the initial settings are therefore only necessary if your receiving installation differs from these types of installation.

These settings are generally carried out by the specialist dealer during installation of the satellite receiving system. You do not therefore need to be too concerned about this section!

The Initial Setup Menu is divided up into 4 sub-menus with the following menu entries. See also Menu Structure in the appendix!

⇒ General Menu

- LNB supply
- LNB supply in standby
- LNB voltage step-up
- Language
- Program selection

⇒ Oscillator Menu

- LO 1 to LO 4

⇒ DiSEqC Menu

- 22 kHz signal
- Tone burst
- Full DiSEqC

⇒ Search Menu

- Search
- Frequency band
- Orbit position
- Oscillator

Calling the Initial Setup Menu:

To prevent unintentional alteration of the initial settings, the Initial Setup Menu can only be called up from the switched-off state (switched off at the power button on the unit).

Call-up:

1. Simultaneously press both the program selection keys CH on the receiver and hold the keys pressed.
2. Switch on the unit with the power button.
3. Release the CH keys when the following appears in the LCD display.

General Menu
entry --> (OK)

The setting in the Initial Setup Menu is carried out in the same way as for the normal setup menu during station programming.

- Selection of main menus and submenus using the keys  .
- Call-up of a submenu and activation of the individual menu entries with **OK**. Active menu entries are indicated by **< >**. The setting can now be carried out.
- Setting of program data using the keys CH (and the numeric keys 0-9 for oscillator frequency input).
- Return using the key **BACK**.
- Storing of the input with **OK**

On quitting a menu entry the following query appears in the LCD display

Store?
YES>OK NO>BACK

Explanation of the menu entries:

General menu

LNB supply voltage

Here you are able to turn off the power supply for the feeder system if the feeder system works off an external power supply.

Presetting: **ON**

LNB supply voltage in Standby

When the receiver is in standby the LNB supply voltage is normally switched off. If the power supply to the components for intercoupling of satellite signals and terrestrial antenna signals is effected from the receiver, the power supply for the feeder system must also be ensured when the receiver is in standby. In this case switch the power supply in standby to "On".

Presetting: "Off".

LNB voltage step-up

If problems occur during polarization changeover, e.g. due to a very long antenna line or unfavorable tolerances in the distribution system with multi-user systems, you can increase the LNB supply voltage by approximately. 0.5-1 V.

Presetting: **OFF**

INITIAL SETTING

LCD display language

In this menu the LCD display language can be set up. The available languages are: German, English and French

Presetting: **German**

Program selection

The unit allows you to enter the program number in one-, two- or three-digit form.

| Setting | Settable program position |
|-------------------|---|
| One-digit input | program positions 1 to 9 |
| Two-digit input | program positions 1 to 99 |
| Three-digit input | program positions 1 to 100 (For DMX up to 120, if transmitted by the program supplier) |

Presetting: **"3-digit"**.

Oscillator Menu

Satellites beam down their programs in a frequency range that satellite receivers are unable to deal with. In the receiving system (known as the **LNB** - Low Noise Block converter or **LNC** - Low Noise Converter) this frequency is converted to a lower frequency that satellite receivers are then able to handle.

The satellite transmission frequencies lie within the following range:

10700 ... 11700 MHz
11700 ... 12750 MHz

The receiver input frequency however lies only within the range:

950 2150 MHz

The conversion of the high frequencies into a lower frequency is effected with the aid of an oscillator frequency (LO-frequency). Different oscillator frequencies are used for the conversion depending on the satellite frequency range and type of satellite receiving installation.

The following oscillator frequencies (LO-frequencies) are already preprogrammed in the delivered state.

| LO-Group | Oscillator frequency MHz |
|----------|--------------------------|
| LO 1 | 9750 |
| LO 2 | 9750 |
| LO 3 | 10600 |
| LO 4 | 10000 |

Select the LO-group that is to be changed and enter the required LO-frequency using the numeric keys or the **CH** keys.

The LO-frequency can be set within the frequency range between 9000 and 12000 MHz.

DiSEqC™ - Menu

DiSEqC is a proprietary name belonging to Eutelsat.

As already mentioned in the oscillator-frequency menu entry, the satellites beam down their signals in various frequency ranges.

Furthermore, with an appropriately equipped satellite receiving installation, several satellites can be received (multifeed installation).

The following receiving possibilities can be realized:

- ⇒ Lower receiving range only (Low Band)
Frequency range: 10700 ... 11700 MHz
- ⇒ Upper receiving range only (High Band)
Frequency range: 11700 ... 12750 MHz
- ⇒ Reception of lower and upper frequency ranges.
Frequency range: 10700 ... 12750 MHz
- ⇒ Reception of only Astra or only Eutelsat
- ⇒ Reception of both Astra and Eutelsat.

In order that the above-listed receiving possibilities may be fully exploited, there are various technical options available on the market, (change-over boxes, matrices) for changeover and distribution of the satellite signals to the individual subscribers.

If you are operating the receiver on such a receiving installation, you will be able to carry out the necessary settings with this particular receiver.

INITIAL SETTING

The following settings are possible:

- ⇒ **22 kHz** Off, High/Low or Pos. 1/2
- ⇒ **Tone Burst** ¹⁾ Off, High/Low or Pos. 1/2
- ⇒ **Full DiSEqC** ²⁾ Off, On or Remote Mode

¹⁾ **Tone Burst** (simple DiSEqC)

²⁾ **Full DiSEqC** (to Eutelsat specification)

The setting is dependent on the receiving system that is used.

Therefore look carefully at the specification of the receiving system and the other components contained within the receiving installation, such as change-over matrices, for example.

Presetting: **22 kHz signal Off**.

Search Menu

Search ON or OFF

In the Search Menu, you specify whether a search run is to be carried out after the receiver is switched out of operation into standby mode.

After finishing the search the unit switches into standby.

Presetting: **On**

In the Search Menu entries that follow on you set the parameters for the search run.

- Frequency band, Low or High
- Orbit position
- Oscillator

See also the Structure Menu at the end of the user manual!

General directions

- For particular queries relating to subscriptions to DMX programs and problems concerning smart cards contact (only for Germany):

Firma SELCO
Siedlerstraße 2
85774 Unterföhring
Germany
Telephone: (+49)-89-95007-788

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Technical Data

HF range:

Frequency range: 950 - 2150 MHz
Input level range: 47 - 78 dB μ V
IF band width: 27 MHz
FM threshold: <7 dB

Audio (digital)

Standard: ISO/IEC 11172-3
(MPEG-1/Layer II)
Audio carrier freq. range: 0.18 - 8.82 MHz
Tuning: Search, direct input
and adjustable in
groups
Bandwidth: 130 kHz
Frequency range: 20 Hz - 20 kHz
Distortion factor (1kHz): <0.03%
S/N (A-curve): >91 dB
Output voltage: 2 V_{eff} into 10 k Ω (DMX)
1 V_{eff} into 10 k Ω (ADR)
Bit error rate (9 dB C/N): 10⁻⁶

Audio (analog)

Audio carrier freq. range: 5.0 - 8.82 MHz
Tuning: Direct input and
adjustable in groups
Bandwidth: Mono wide 280 kHz
Mono narrow/Stereo: 130 kHz
De-emphasis
Mono wide: 50 μ s, J17
Mono narrow/Stereo: adaptive + 75 μ s
Wegener Panda
Frequency range: 40 Hz - 15 kHz
Distortion factor (1kHz): <0.3 % (DNR)
S/N (weighted): >80 dB (DNR)
Output voltage: 1 V_{eff} into 10 k Ω

Power supply:

Supply voltage: 220 - 240 V / 50 Hz
Voltage range: 150 - 260V
Power consumption: <25 W
Power consumption in standby: <4 W
LNB supply: Vert 14, Hor. 18 V
300 mA max
Control signal: DiSEqC
22 kHz rectangular
0.6 V_{ss}

Connections

Sat.-IF input: F-socket 75 Ω
Audio output: 2x2 Cinch sockets
Remote control: Interface for PC-card
(Sub-D, 9-way)

Electrical digital output:
(SPDIF-format) Cinch socket
Optical digital output:
(SPDIF-format) Standard LWL-socket
(EIAJ Standard CP-1201)

Infrared remote control and
Data-Copy IO-connection:
Western (modular)
8-way.

Headset connection: Stereo jack plug
6.3 mm R_a=270 Ω
For headsets from
8 - 600 Ω

Temperature range:

Operating temperature range: +5°C.....+40°C

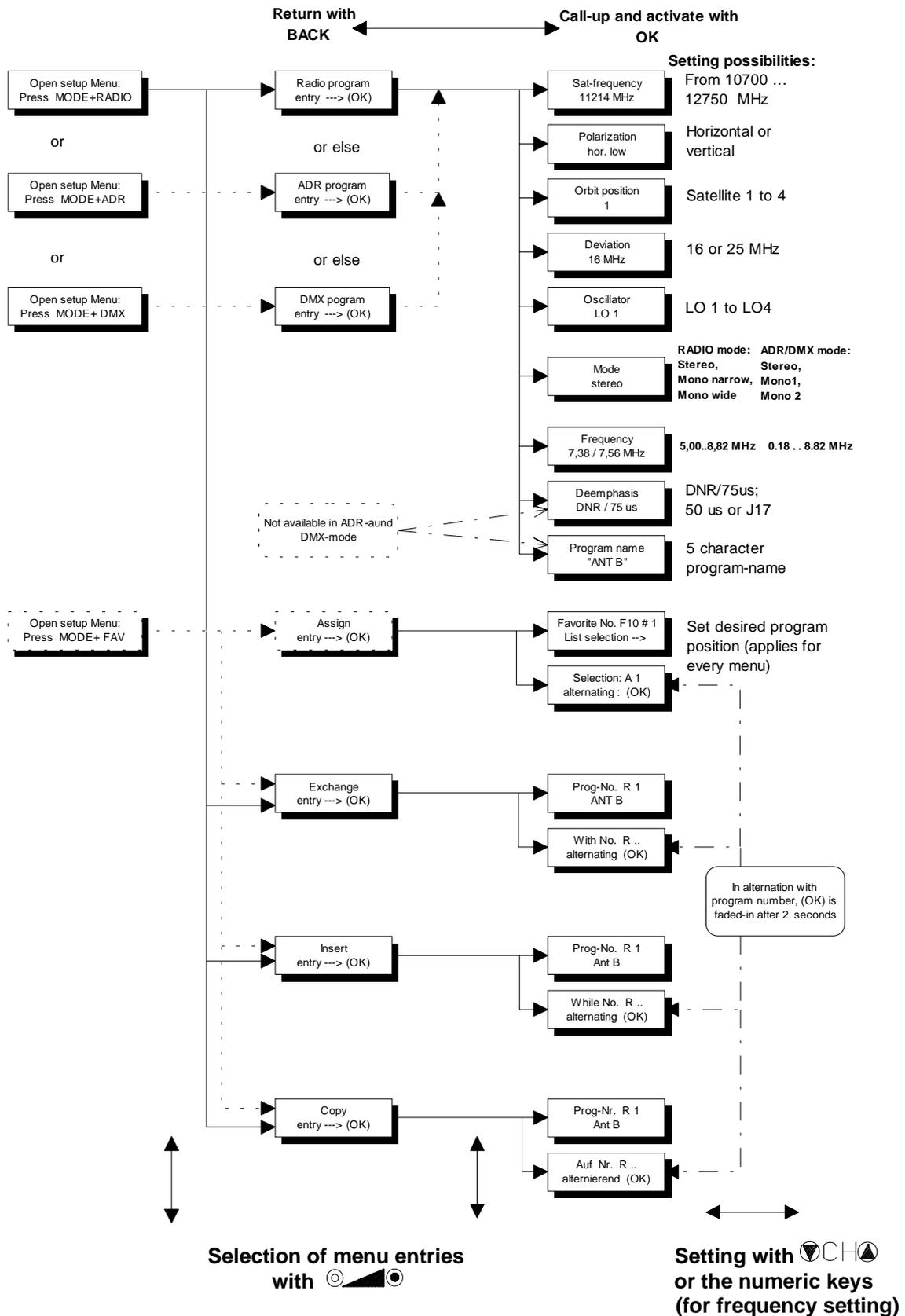
Other details:

Dimensions (W*H*D): 375*65*275 mm
Weight: approx. 2.0 kg
Packing dimensions
(W*H*D): 440*100*360 mm



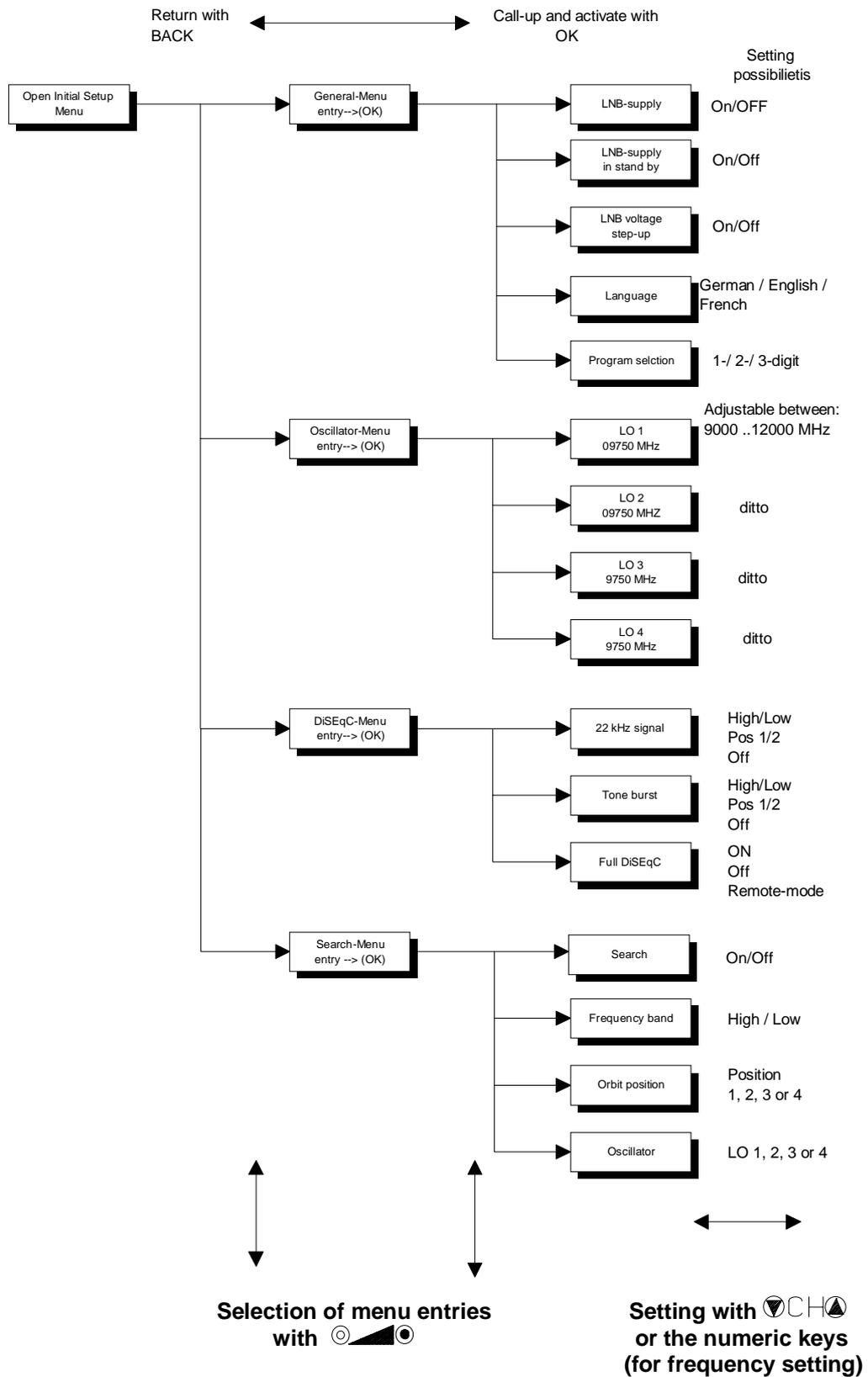
MENU STRUCTURE

Setup Menu



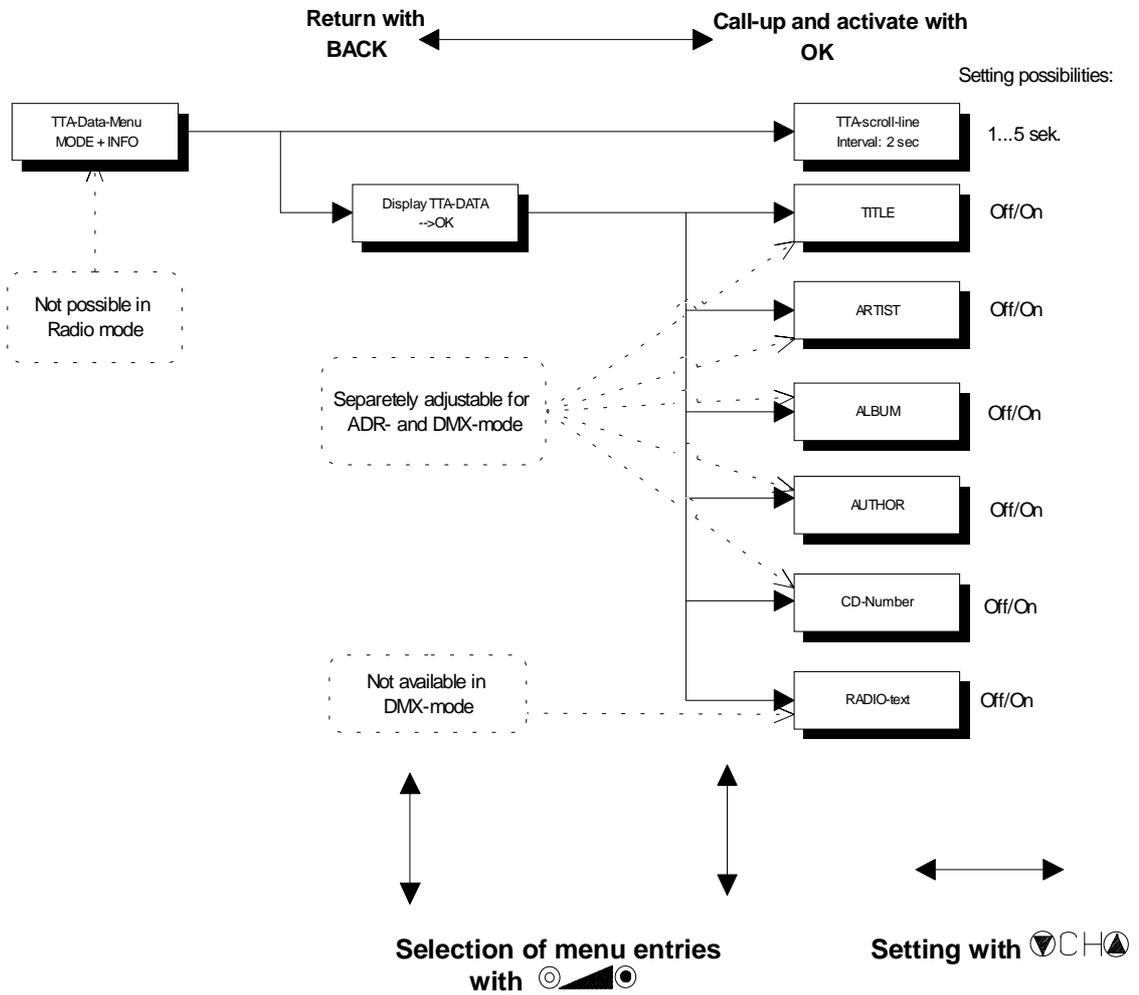
MENU STRUCTURE

Initial setup menu



MENU STRUCTURE

Info-Menu



TTA-Data (Title, Track Artist)