GRUNDIG

Operating instructions
Mode d'emploi

SATELLIT 300

Istruzioni per l'uso
Gebruiksaanwijzing
Instrucciones de manejo

GRUNDIG AG · D-8510 FÜRTH

15041-941.02

Specification

Power supply requirements:

Radio: 6 x HP 11 (IEC R14) batteries or equivalent

Clock and memory: 3 x R 6 PP or MN 1500 or equivalent

Mains operation with built-in power supply unit: adjustable to 220 – 240 V ± 10% or 110 – 127 V ± 10%; 50 – 60 Hz.

Mains switch in transformer secondary circuit

Wavebands:

VHF/FM:	87.5 – 108 MHz
LW:	150 – 353 kHz
MW:	513 – 1611 kHz
SW 1:	3.9 – 10.499 MHz
SW 2:	10.5 – 22.0 MHz

Output Power (to DIN 45 324):

Battery and mains operation: 2 W sine

Mains operation: 3 W music power

Resonant Circuits:

FM: 11 (3 tunable) + 3 ceramic filters

AM: 9 (2 tunable) + 1 ceramic 3-stage filter

Loudspeakers:

1 permanent-magnet dynamic speaker

Built-in Aerials:

Telescopic for VHF/FM and SW

Ferrite for LW and MW.

Connecting Sockets:

Mains lead socket with battery-mains switch

Head-/earphones socket for 3.5 mm jack plug (mono or stereo)

Socket for cassette/tape recorder or record deck: 5-pin standard socket (universal)

Socket for VHF/FM and SW external aerial (75 ohm coaxial socket)

Weight:

2.15 kg (without batteries)

Dimensions:

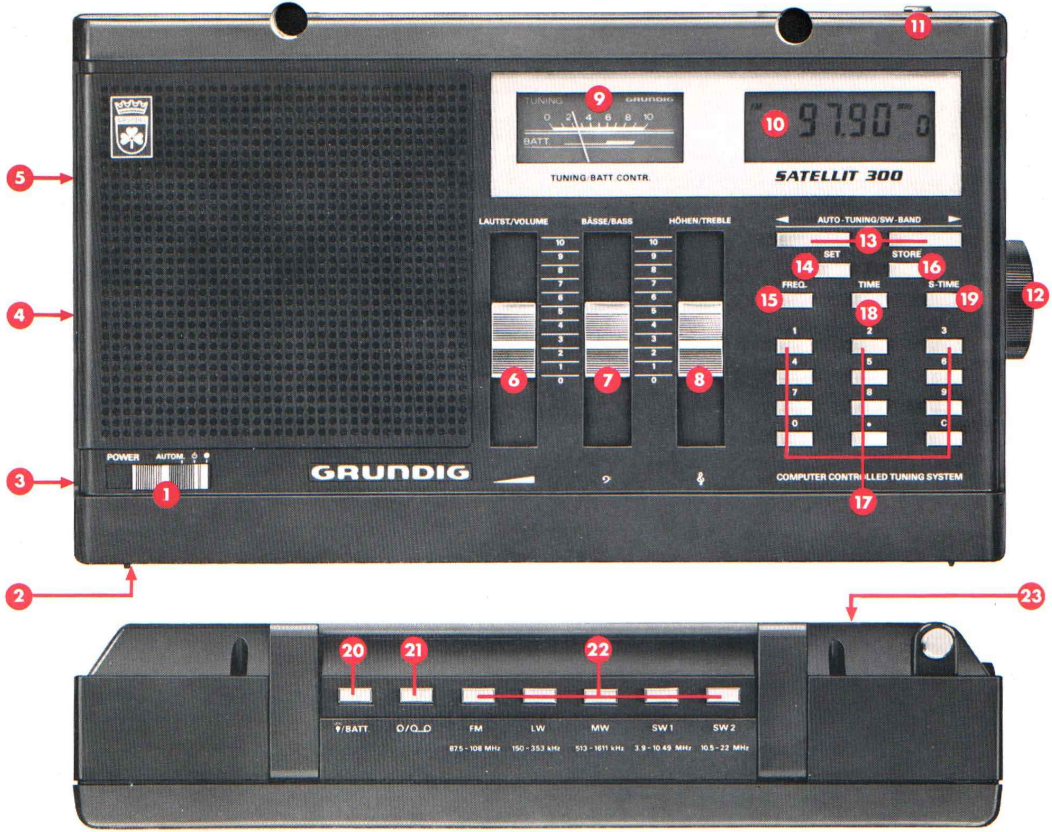
304 x 180 x 70 mm

Subject to technical alterations and alterations in styling.

Important

Only a soft cloth which picks up dust should be used to clean the cabinet.

Aggressive polishing or cleaning materials may damage the surface.


11
9
TUNING
GRUNDIG
0 2 4 6 8 10
BATT
TUNING BATT CONTR.
10
97.90
SATELLIT 300
5
4
3
LAUTST/VOLUME
BÄSSE/BASS
HÖHEN/TREBLE
AUTO-TUNING/SW-BAND
SET
STORE
14
13
16
FREQ.
TIME
S-TIME
15
18
19
12
6
7
8
POWER
AUTOM.
1
GRUNDIG
COMPUTER CONTROLLED TUNING SYSTEM
17
2
23
20
21
22
BATT
FM
LW
MW
SW 1
SW 2
87.5 - 108 MHz
150 - 353 kHz
513 - 1611 kHz
3.9 - 10.49 MHz
10.5 - 22 MHz

(GB) Brief Guide to Operation

① **Function Switch**
AUT. = radio switches on automatically at the preset time for 1 hour (AUTO-TIMING)
⏻ = Radio off
● = Radio on

② **Voltage Selector** (in base of set)
220–240 V/110–127 V ± 10 %, 50–60 Hz.
The unit is preset in the factory to operate from a mains supply of 220–240 V.
Before connecting the set to the mains via socket ③ check that the voltage selector is set to the voltage of the local mains supply.

③ **Mains Supply Socket**
(left-hand side-panel)

④ **Head-Earphone Socket**
(left-hand side-panel)
For ear-/headphones with 3.5 mm jack plug (eg: GRUNDIG GDHS 150 or 203 B).

⑤ **Universal Phono/Tape (TA/TB) Socket**
(left-hand side-panel)
Socket for cassette/tape recorder, or for record deck with ceramic or crystal cartridge.

⑥ **Volume Control** (▬)

⑦ **Bass Control** (ᘐ)

⑧ **Treble Control** (𝄞)

⑨ **Meter**
Indicates signal/field-strength of AM/FM stations;
Indicates battery conditions if button ⑳ is pressed.

⑩ **LCD-Display**
Provides following information depending on mode of operation:

- A = band scanning in progress
- C = check in progress ie: strength of station being checked to see if it is adequate (band scan)
- 0 = last station tuned to (manually, by band scanning or by direct frequency selection) (temporarily stored on button 0 of the input/station buttons ⑰.
- 1–9 = number of input/station buttons ⑰ for preset stations
- FM, SW1, SW2, MW or LW = selected waveband.
- kHz or MHz = frequency units
- m = broadcast band on SW1 or SW2 (»metre band«)
- Free = input/station button not allocated
- SET = enter data
- TIME = time of day (24-hour Clock)
- AUTO-TIMING = switch-on time

⑪ **Telescopic Aerial**
Extendable and capable of being tilted and rotated for optimum FM and SW reception.

⑫ **Manual Tuning Control**
with light magnetic notches
In 25 kHz steps for FM
In 1 kHz steps for AM
When the control is turned rapidly, the sound is muted and the tuning steps are increased.

⑬ **Band and Scan Start Buttons**
(FM, LW, MW)
◀ = downwards through the frequency band
▶ = upwards through the frequency band
On SW1 and SW2 the display ⑩ shows each broadcast band (m) in sequence when one of the buttons ⑬ is pressed:
SW1: 75, 60, 49, 41 and 31 m bands
SW2: 25, 19, 16 and 13 m bands
Shortly after the band scan button is released a frequency in MHz corresponding to the centre of the broadcast band appears in the display:

SW1		SW2	
m	MHz	m	MHz
75	3.95	25	11.835
60	4.905	19	15.275
49	6.075	16	17.8
41	7.2	13	21.6
31	9.635		

In each band stations on either side of these frequencies may be tuned to with the tuning control ⑫.

⑭ **SET Button**
Press before entering data with the buttons ⑰.

⑮ **FREQ. Button**
Press after entering frequency directly or to switch from time to frequency display.

⑯ **STORE Button**
Press to allocate station tuned to to one of the buttons ⑰.

⑰ **Input/Station Selection Buttons** (numbered buttons)
For entering data (time, frequency), and for selecting pre-set stations:
buttons 1 – 4 for preset LW and MW stations
buttons 1 – 9 for preset VHF/FM, SW1 and SW2 stations.
This group also includes a "C" (clear) button for clearing incorrect data during programming.

⑱ **TIME Button** (time of day)
Press to start clock after entering the time with the SET button ⑭ and the buttons ⑰, or to display time.

⑲ **S-TIME Button** (switch-on time)
Press after entering the automatic switch-on time with the SET button ⑭ and the station-memory buttons ⑰ or to display switch-on time.

⑳ **BATT./ Button**
To illuminate the meter and display for a short period when the set is operated from batteries and/or to check the battery condition.

㉑ **Button**
Press to amplify sound from cassette/ tape recorder or record deck

㉒ **Waveband Buttons**
FM = VHF
LW = Longwave
MW = Mediumwave
SW1 = Shortwave 1
SW2 = Shortwave 2

㉓ **Coaxial Socket** (at te back)
Connection for 75 ohm external aerial (for reception on FM, SW1, SW 2).

Power Supply

Mains Operation

The built-in power supply unit enables the set to be operated economically from 50 – 60 Hz mains and can be adjusted for mains voltages of 110 – 127 V ± 10% and 220 – 240 V ± 10%.

Before connecting the set to the mains, check that the setting of the voltage selector switch ② in the base of the set corresponds to the local mains voltage.
The set must not be connected to the mains before this has been done.

Any batteries fitted are automatically disconnected when the set is operated from the mains.

Additional Information for Sets Used in Great Britain

N.B. Ensure that the receiver is set for 220 – 240 V (GB: 240 V AC).

We recommend that a 13 Amp 3-pin plug fitted with a 3 Amp fuse be used. The brown lead must be connected to the live pin (marked "L" or "red" or "brown") and the blue lead to the neutral pin (marked "N" or "black" or "blue"). On no account should either of the wires be connected to the earth pin (marked "E" or "green/yellow"). If other mains plug are used, ensure that they are protected with a 3 Amp fuse.

Changing Fuses

Unplug the set from the mains before changing the fuses.

The two fuses are located in a compartment in the base of the set next to the voltage selector ② and access to them can be gained by removing the lid of this compartment. Make sure that each fuse is replaced by one of the same rating.

Warning

Never make improvised repairs to defective fuses, as this may result in damage to the set.

Battery Operation

The set is designed to operate from two sets of batteries:

Six HP11 (IEC R14) batteries or equivalent for radio operation;

Three HP7 (IEC R6PP or MN 1500 or equivalent) alkaline-manganese batteries for the clock and memory.

The battery compartment is in the base of the cabinet and is accessible after the lid has been removed.

Insert the batteries as indicated by the symbols (⊟+) in the battery compartment or holder.

Battery Condition Indicator

With the set switched on, the meter ⑨ indicates the radio battery voltage when button ⑳ (/BATT.) is pressed. The batteries are exhausted and must be changed if the pointer does not reach the white-coloured field of the meter.

Note: The switch ⑳ and meter ⑨ can also be used to check the battery condition when the set is switched off, but we recommend that the check be done with the set switched on.

Important

Exhausted batteries should be removed from the set immediately.

If the set is not in use for long periods or is permanently operated from the mains, the six HP11 (IEC R14) batteries for the radio section should be removed from the set. No responsibility can be accepted for damage due to leaking batteries.

The memory and the clock must always be supplied with power and standby batteries are therefore required for the period when the set is switched off or in case a mains failure occurs. The three HP7 batteries perform this function and should be fitted even if the set is permanently operated from the mains. They should be renewed roughly every 12 months. The set should be connected to the mains while these batteries are being replaced to ensure that the contents of the memory and clock information are retained.

Aerials

The telescopic aerial ⑪ is intended for receiving VHF/FM and shortwave (SW) stations. For FM reception the aerial should be fully extended, then swivelled and rotated until best results are achieved. For SW reception the telescopic aerial should be vertical. To improve reception on the shortwave bands (SW1 and SW2) a 75 ohm external aerial can be connected to socket ㉓.

Your dealer is familiar with local reception conditions and will be pleased to advise you on the choice of aerial and its installation.

The set has a built-in ferrite rod aerial for receiving mediumwave and longwave broadcasts. The best position for receiving a station should be found by rotating the set about its vertical axis.

Note

If the stand in the back is swung out, you will be able to place the set in front of you at an angle.

Radio

Switching On and Off

The set is switched on with switch ①.

● = On

⏻ = Off.

When the set is switched on and operated from the mains, the meter ⑨ and display ⑩ are permanently illuminated.

When the set is connected to the mains, but switched off, the display ⑩ is faintly illuminated.

When the set is operated from batteries, the meter ⑨ and display ⑩ can be illuminated for a short period by pressing button ⑳ (/BATT.).

Waveband Selection

The various wavebands can be selected with the group of buttons ㉒:

FM = VHF
LW = Long wave
MW = Medium wave
SW1 = Short wave 1
SW2 = Short wave 2

Volume and Tone Controls

Adjust the volume and tone to your requirements using the controls

⑥ (= LAUTST./VOLUME),

⑦ (= BÄSSE/BASS) and

⑧ (= HÖHEN/TREBLE).

Head/Earphone Socket ④

The earphone recommended for use with this set is the GRUNDIG earphone type 203B. Optimum sound quality will, however, be obtained with headphones such as the GRUNDIG type GDHS 150. The internal loudspeaker is switched off when this socket is used.

Phono/Tape (TA/TB) Socket ⑤

Press button ㉑ ( ) to amplify the sound from a cassette/tape recorder or from a record deck with a crystal/ceramic cartridge.

Station Tuning

1. Manual Tuning
(for all bands)

To tune to stations manually, the magnetically notched rotary tuning control ⑫ is used. Each notch alters the tuning by 1 kHz in the case of AM (LW, MW, SW1, SW2) and by 25 kHz in the case of VHF/ FM.

The rate of tuning and the tuning steps can be increased by turning the tuning control rapidly. In these circumstances tuning noise is automatically muted.

To tune a station in accurately adjust for a maximum reading on the field-strength meter ⑨.

The frequency of the station tuned to is indicated on the display ⑩. The display is in kHz for LW and MW bands and in MHz for VHF/FM and SW bands. The station tuned in last is automatically stored temporarily in the memory and can be recalled with the button "0" in the group of numbered buttons ⑰.

2. Automatic Station Location
(Band Scanning)

a) VHF, LW and MW Bands

This operates in steps of 9 kHz on the LW and MW bands and in steps of 50 kHz on the VHF band.

Select the required waveband with one of the button ㉒. The band-scan process is started by pressing one of the buttons ⑬ marked ◀ or ▶, thereby initiating a search for stations up or down the frequency band respectively. That band scanning is in progress is indicated by the letter "A" (automatic search) in the display ⑩. As soon as a station has been found, the scanning process stops and the strength of the station is checked to see if it is adequate; during checking the letter "C" (for "check") appears on the display ⑩. This check lasts 3 seconds, and if the set has responded to an interference signal or if the strength of the station is too low or varies considerably, the scanning process is automatically restarted at the end of this period. Scanning will stop at the next station and a check will again be made. This process will be repeated until a station of adequate strength is found. The latter will be stored on station button "0" and can be recalled at any time if another station in the memory is selected with the numbered buttons ⑰ or by band scanning.

If required, the band-scanning process can be interrupted at any stage by turning the tuning control ⑫ (short rapid movement) or pressing any of the buttons at the front or the top of the set (except the band scanning buttons ⑬ and the battery/illumination button ⑳). Reception should only be optimised by adjusting the aerial or rotating the set after the check phase ("0" display) has been completed.

b) Shortwave Bands 1 and 2

When one of the band scanning buttons ⑬ (◀▶) is pressed with one of the shortwave band selected, a shortwave broadcast band will be indicated in metres in the display ⑩. After a short interval the frequency corresponding approximately to the centre of the broadcast band concerned will appear in the display and the band can then be searched with the tuning control ⑫.

Press button ⑬ again to tune to other SW broadcast bands.

Important

Each programming step involving buttons ⑭ – ⑱ must be carried out not more than 10 seconds after the preceding one, otherwise the data already entered will be lost.

The operation should therefore be carried out without undue delays in the sequence indicated.

To clear any wrong data entered, press the button marked C (Clear) in the group of buttons ⑰. Programming can then be resumed.

3. Direct Frequency Selection
(for all wavebands)

The frequency of the station to be tuned to must be known (frequency data may be found in transmitter tables or local radio programme guides).

The frequency should be entered in kHz for LW, MW and SW, and MHz for VHF/FM.

Press the required waveband button ㉒ and the SET button ⑭. The word "SET" will light up in the display ⑩. Enter the required frequency with the numbered buttons ⑰; the frequency entered will appear in the display ⑩. Now press button ⑮ (FREQ.); the word "SET" will disappear from the display ⑩ and the new station tuned to will be heard. If needed, fine tuning is possible with the rotary control ⑫. The FREQ. button ⑮ must be pressed not more than 10 seconds after the preceding entry, otherwise the set will revert automatically to the last station heard.

If a frequency is entered which cannot be received in the waveband selected, the display ⑩ will flash when button ⑮ (FREQ.) is pressed and then show the last frequency tuned to. The process of entering the frequency should be repeated after the correct waveband has been selected.

Presetting Stations

Before a station is entered in the memory it is possible to check whether the numbered button has already been selected on the waveband concerned. To do this press the numbered button before pressing the SET button ⑭. While the check is made the station you wish to allocate will be temporarily held on the "0" button and can be retrieved after checking by pressing the latter button.

Up to 35 stations can be entered in the memory.

Buttons 1–9 can each be preset for one station on FM, one on the SW1 band and one on the SW2 band while buttons 1–4 ⑰ can each additionally be allocated to one broadcasting station on long wave and one on medium wave. If the set has been tuned to a station and you wish to enter this station in the memory press button ⑭ (SET). The frequency reading in the display ⑩ will go out and the word "SET" will light up. Press the numbered button ⑰ to which the station is to be allocated, followed by button ⑯ (STORE). The station is now stored in the memory under the number selected, and its frequency (kHz or MHz), waveband and selection button number (group of buttons ⑰) will appear in the display ⑩.

If a button which cannot be allocated to a station on the waveband selected is pressed by mistake (eg: "5" for a LW station), the display ⑩ will flash and then indicate the frequency already tuned to again. The station continues to be audible and can be stored on one of the other numbered buttons ⑰.

Selecting a Station Stored in the Memory

The frequencies stored in the memory can be selected by first pressing the appropriate waveband button ㉒ and then the numbered buttons ⑰. The display ⑩ will then show the frequency (in kHz or MHz), the waveband and the number of the selection button ⑰.

If a numbered button has not been allocated to a station in the waveband concerned, "FREE" will appear in the display ⑩. "FREE" will normally only appear in the display ⑩ when one of the numbered buttons ⑰ is pressed if it has never been allocated since the station allocated to a button can be replaced directly at any time by re-programming it. However, it is possible to remove a station from the memory without replacing it so that "FREE" is displayed when the corresponding station button is pressed. To do this for button 6, for example, the following buttons should be pressed in the sequence shown.

SET	.	6	STORE

If the numbered button "6" is now pressed, "FREE" will appear in the display. The fact that this sequence of operations is slightly longer than the normal one provides a safeguard against stations being accidentally removed from the memory. Moreover, any frequency accidentally removed in this way will not be lost imme-