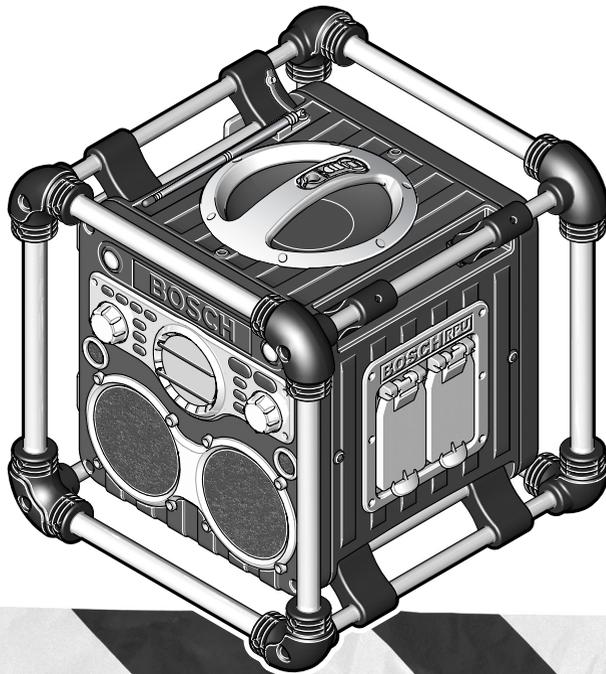


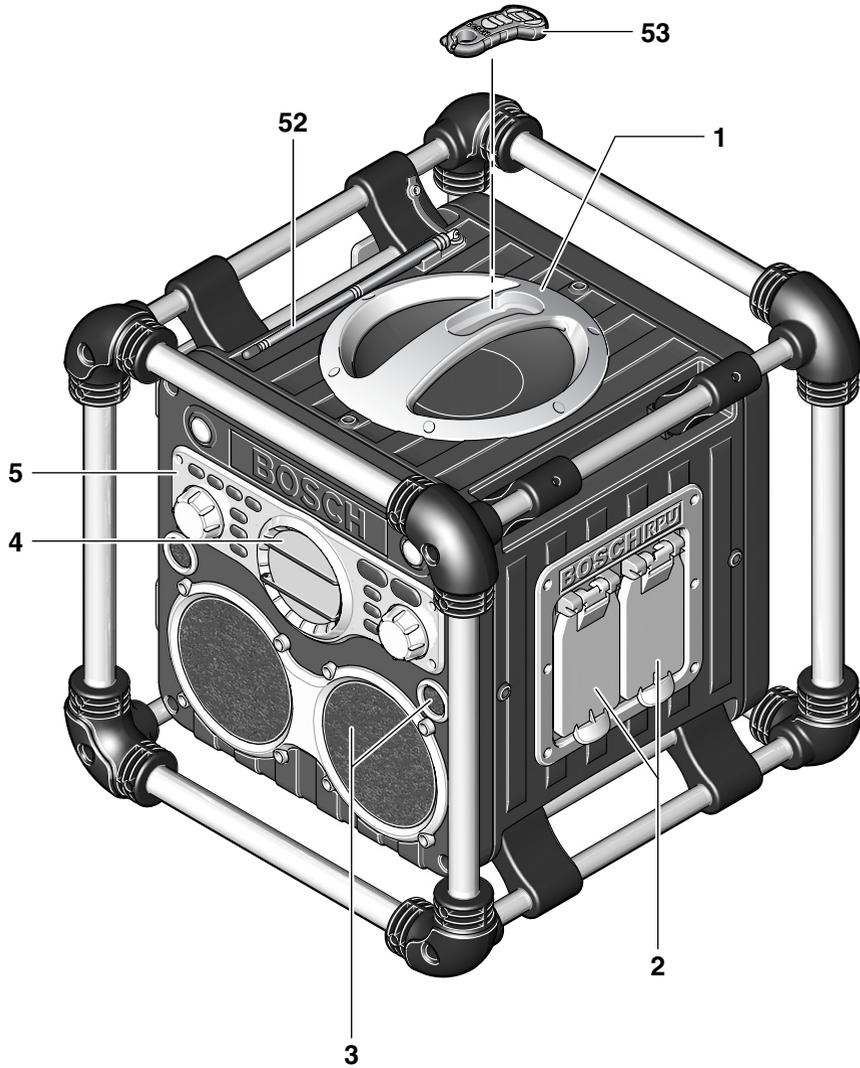
**GML 24 V
GML 24 V-CD
PROFESSIONAL**



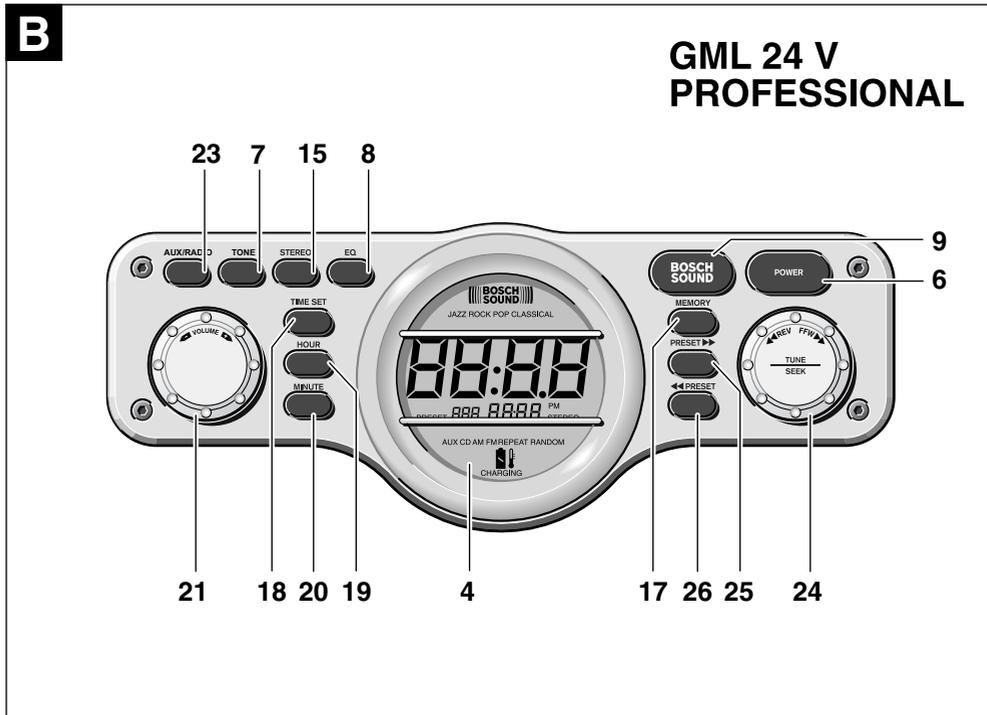
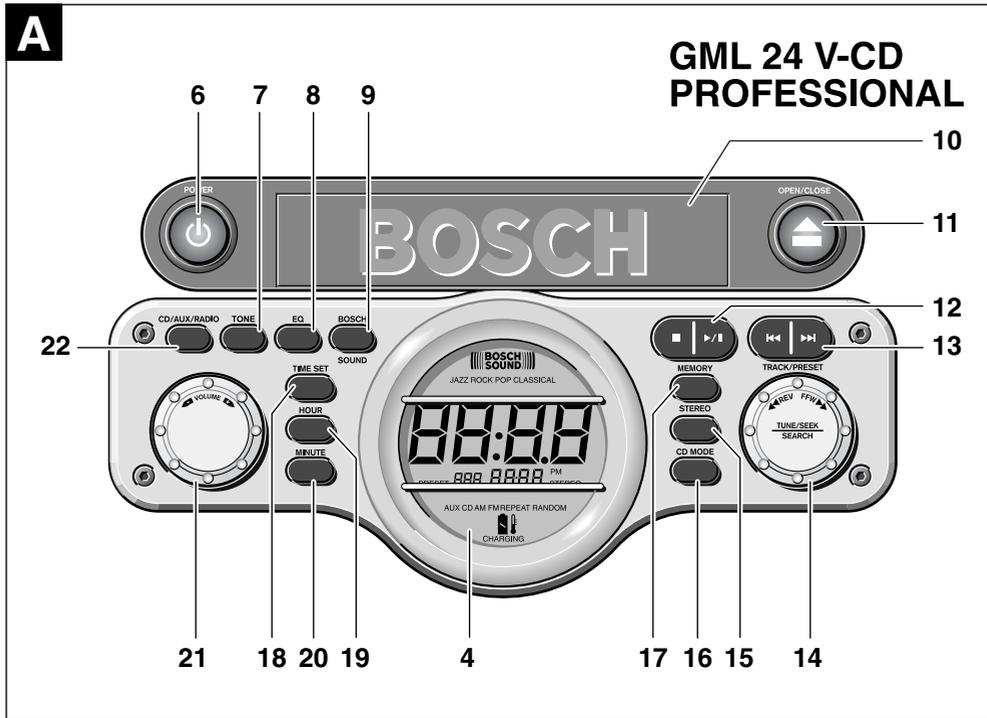
BOSCH

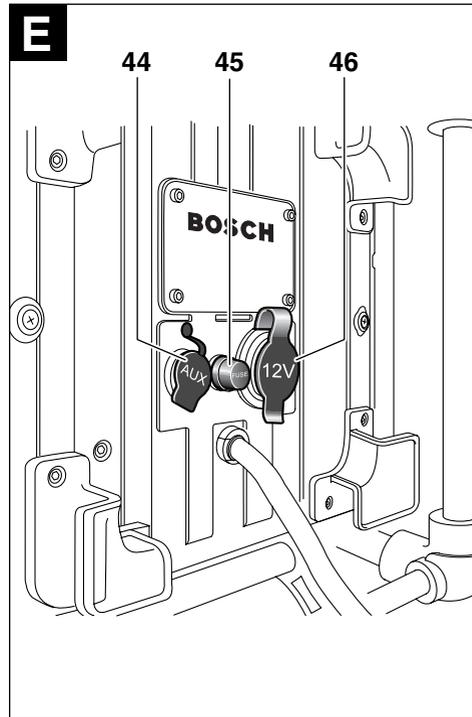
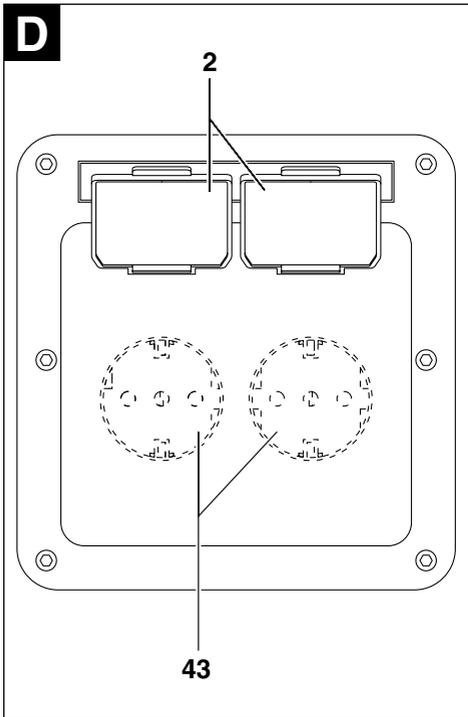
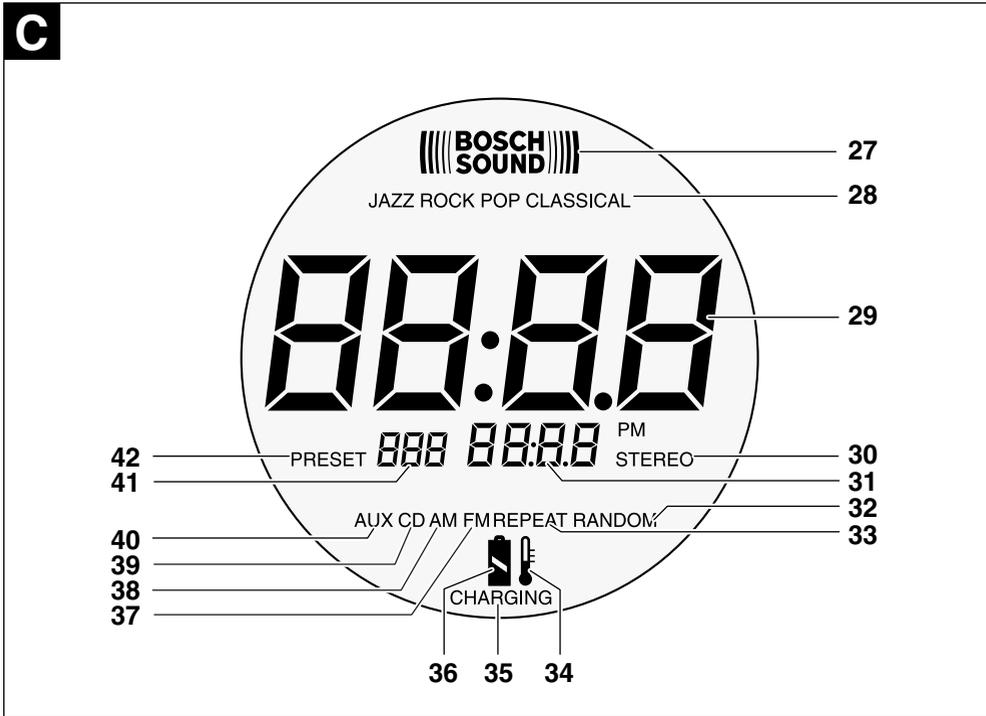
**Bedienungsanleitung
Operating instructions
Instructions d'emploi
Instrucciones de servicio
Manual de instruções
Istruzioni d'uso
Gebruiksaanwijzing
Betjeningsvejledning
Bruksanvisning
Brukerveiledningen
Käyttöohje
Οδηγία χειρισμού
Kullanım kılavuzu**

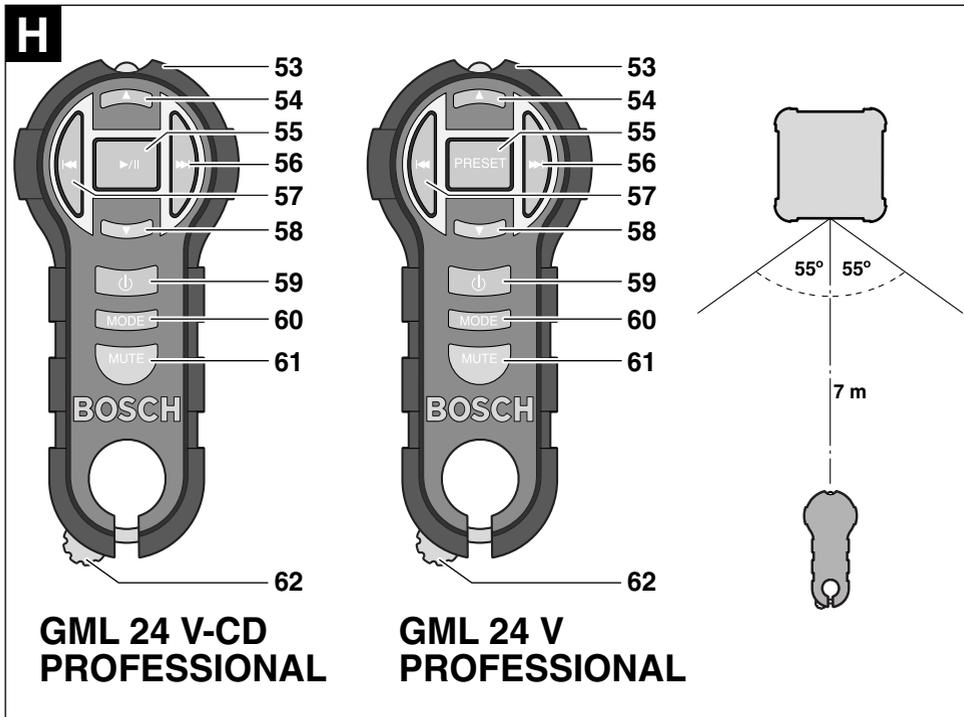
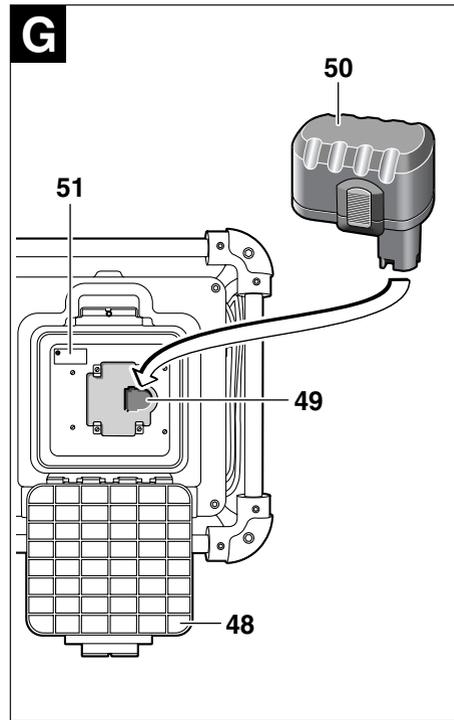
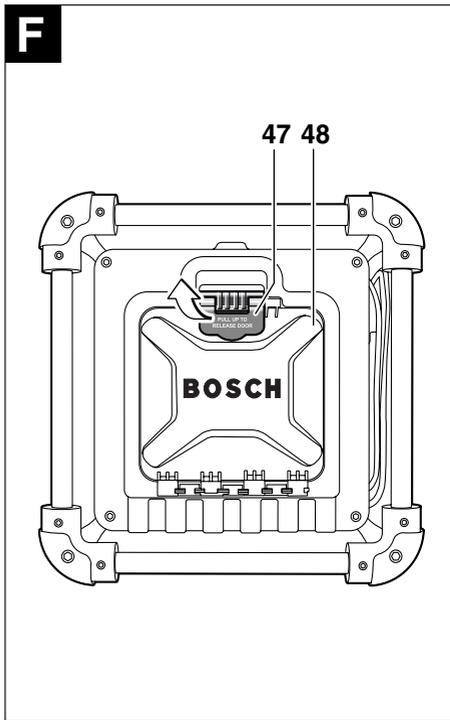




**GML 24 V-CD
PROFESSIONAL**







Safety Rules

⚠ WARNING **Read all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term “electrical device”, as used in the following, refers to mains operated electrical devices (corded) and to battery operated (cordless) electrical devices.

In these operating instructions the radio charger is also referred to as an electric device or as a charger.

Save these instructions.

1) Work area

- a) **Keep work area clean and well lit.** Cluttered and dark work areas invite accidents.
- b) **Do not operate the unit on easily inflammable surfaces (e. g. paper, textiles, etc.) or in inflammable environments.** Fire hazard due to occurring heat build-up.

2) Electrical Safety

- a) **The plugs of electrical devices must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) electrical devices.** Unmodified plugs and matching outlets will reduce the risk of electric shock.
- b) **Do not misuse the cord. Never use the cord for carrying, pulling or unplugging the electrical device. Keep cord away from heat, oil, sharp edges and moving parts.** Damaged or entangled cords increase the risk of electric shock.
- c) **When operating an electrical device outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- d) **Connect electrical devices that are used outdoors via a residual current device (RCD).**
- e) **Connect the electrical device to a mains supply that is properly connected to earth.** Socket and extension cord must have an operative protective conductor.

f) **Protect the electrical device from rain and moisture.** The penetration of water in a battery charger increases the risk of electric shock.

g) **Do not charge the batteries of other manufacturers.** Danger of fire and explosion. The device is only suitable for the charging of Bosch batteries (NiCd/NiMH) with a voltage range of 12 V and 24 V.

h) **Keep the battery charger clean.** Contamination may result in danger of electric shock.

i) **Check the electrical device, cable and plug each time before using. Do not use the electrical device when defects are detected. Do not open the electrical device yourself and have it repaired only by qualified personnel using original spare parts.** Damaged electrical devices, cables and plugs increase the risk of electric shock.

3) Service

a) **Have repairs performed only by a qualified technician and only using original spare parts.** This ensures that the safety of the electrical device is maintained.

Functional Description



Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

Functional Elements

The numbering of the device elements refers to the representation of the electrical device on the graphic page.

- 1 Carrying handle
- 2 Integrated outlet cover(s)
- 3 Speaker
- 4 Display
- 5 Control panel
- 6 POWER switch
- 7 "Bass/Treble" tone button
- 8 Button for equalizer settings
- 9 Enhanced BOSCH SOUND button
- 10 CD drive assembly (GML 24 V-CD)
- 11 CD OPEN/CLOSE button (GML 24 V-CD)
- 12 Button for CD functions STOP/START-PAUSE (GML 24 V-CD)
- 13 Button for CD function TRACK/radio function PRESET (GML 24 V-CD)
- 14 Control knob for TUNE/SEEK/SEARCH and CD functions REV and FAST FORWARD (GML 24 V-CD)
- 15 STEREO button for mono/stereo playback
- 16 CD MODE button REPEAT/RANDOM (GML 24 V-CD)
- 17 MEMORY button for radio stations/CD function program memo (GML 24 V-CD)
- 18 TIME SET button
- 19 HOUR button for changing of hour indication
- 20 MINUTE button for changing of minute indication
- 21 VOLUME control knob
- 22 Operating mode button CD/AUX/Radio FM/Radio AM (GML 24 V-CD)
- 23 Operating mode button AUX/Radio FM/Radio AM (GML 24 V)
- 24 Control knob for TUNE/SEEK function (GML 24 V)
- 25 PRESET forwards button (GML 24 V)
- 26 PRESET back button (GML 24 V)
- 27 Enhanced "BOSCH SOUND" indicator
- 28 Equalizer setting indicator
- 29 Time indication
- 30 STEREO reception indicator
- 31 Display for radio frequency/volume and running time of the CD track (GML 24 V-CD)
- 32 Indicator for "RANDOM" play mode of CD (GML 24 V-CD)
- 33 Indicator for "REPEAT" play mode of CD (GML 24 V-CD)
- 34 Battery warning indicator
- 35 Indicator "CHARGING"
- 36 "Battery inserted" indicator
- 37 FM frequency band indicator
- 38 AM frequency band indicator
- 39 Indication of CD source selection (GML 24 V-CD)
- 40 Indication of AUX source selection
- 41 Indicator for radio/CD track number preset (GML 24 V-CD)
- 42 PRESET function indicator
- 43 Power outlets
- 44 Connection socket for external audio source (AUX)
- 45 Fuse for 12 V connection
- 46 Connection socket for 12 V plug
- 47 Locking lever for battery compartment lid
- 48 Battery compartment lid
- 49 Charging compartment
- 50 Battery *
- 51 Battery compartment for AAA batteries
- 52 Rod aerial
- 53 Remote control
- 54 Increase volume button
- 55 Button for Start/Pause (GML 24 V-CD)/ Button for PRESET (GML 24 V)
- 56 Button for FAST FORWARD
- 57 Button for REVERSE
- 58 Reduce volume button
- 59 ON/OFF button
- 60 Operating mode button
- 61 MUTE button
- 62 Clip

* Illustrated or described accessories are not included as standard delivery.

Technical Data

Radio charger		GML 24 V PROFESSIONAL	GML 24 V-CD PROFESSIONAL
Article number		3 601 D29 4..	3 601 D29 5..
Operating voltage, radio/CD	V	12–24	12–24
Tuner			
FM frequency band	MHz	87.9–107.90	87.9–107.90
AM frequency band	kHz	520–1710	520–1710
CD Player			
Laser class		–	1
Frequency range	kHz	–	20–20000
Amplifier			
Power output (sine)	W	10	10
Battery Charger			
Allowable batteries		NiCd/NiMH	NiCd/NiMH
Battery charging voltage (automatic voltage detection)	V	12–24	12–24
Charging current, rapid charging	A	1.2	1.2
Charging current, trickle charging, approx.	mA	60	60
Allowable charging temperature range	°C	0–60	0–60
Charging time for battery voltage/capacity, approx.			
1.2 Ah	min	70	70
1.4 Ah	min	80	80
1.7 Ah	min	100	100
2.0 Ah	min	120	120
2.4 Ah	min	140	140
2.6 Ah	min	150	150
Weight according to EPTA-Procedure 01/2003	kg	8.5	8.5

Please observe the article number on the type plate of your radio charger. The trade names of individual radio chargers may vary.

The data applies for rated voltages [U] of 230/240 V. For lower voltages and in country-specific versions, these data can vary.

**CLASS 1
LASER PRODUCT**

This radio charger produces class 1 laser radiation according to EN 60825. When using the radio charger as intended for, hazards from laser radiation are not to be expected.

Operation

Starting Procedure

Observe correct mains voltage! The voltage of the power source must agree with the data specified on the type plate of the radio charger. Radio chargers marked with 230 V can also be connected to 220 V.

The radio charger can also be operated without a mains connection off a battery inserted in the charging compartment **49**. See section “Charging a Battery”.

To **start** the radio charger, push the power butto **6**.

When switching on the radio charger, the display **4** and the last set operating mode (FM/AM/AUX/CD) are activated.

To increase the volume, turn the VOLUME control knob **21** in clockwise direction. The selected volume is indicated for several seconds in the indicator **31** (VOL 00 – 20).

To reduce the volume, turn the VOLUME control knob **21** in anticlockwise direction.

To **switch off** the radio charger, press the power button **6** again.

Setting the Clock

When plugging the mains plug into the outlet or inserting a battery into the charge port, the radio charger switches to the standby mode. The indicated time on the display is "12:00". To adjust the correct time, proceed as follows.

- Press the TIME SET button **18**. The time indication **29** flashes.
- Press the HOUR button **19** as often as required until the correct hour is indicated. You can also press and hold the button until the correct hour is indicated.
- Press the MINUTE button **20** as often or as long until the correct minute is indicated.
- Press the TIME SET button **18** again. A "beep" confirms the new setting.
- Even when the device is switched off, the set clock will continue to run, powered by the AAA batteries.

Programming the Automatic Switch-off Function

The radio charger can be set to switch off automatically after a preset period.

- Press the TIME SET button **18** for three seconds until the "._:" symbol **29** time indication flashes in the time indication.
- Press the HOUR button for changing of hour indication **19** to select one of the pre-adjusted switch-off periods in steps of 30 minutes ("_2:00", "_1:30", "_1:00", "_:30", "OFF").
- Press the TIME SET button **18** again at the desired switch-off period. A "beep" confirms the desired setting.
- To indicate the remaining time until the radio charger switches off, press the MINUTE button for changing of minute indication **20**.

If the radio charger is switched off via the POWER switch **6** before the switch-off period has elapsed, the automatic switch-off setting is deleted.

Radio Operation

GML 24 V: Press the AUX/Radio FM/Radio AM operating mode button **23** until FM **37** and AM **38** are indicated in the display.

GML 24 V-CD: Press the CD/AUX/Radio FM/Radio AM operating mode button **22** until FM **37** and AM **38** are indicated in the display.

Connecting the Aerial

The radio charger is supplied with the mounted rod aerial **52**. Pivot the rod aerial in the direction with the best reception.

Setting the Radio Station

Before setting a radio station, reduce the volume to as low as possible.

- Briefly turn the TUNE control knob **14** (GML 24 V-CD) or **24** (GML 24 V) in clockwise direction to increase the frequency in steps of 0.05 MHz (FM frequency band) or 10 kHz (AM frequency band). The selected frequency is indicated in the display **31**.
- Briefly turn the TUNE control knob **14** (GML 24 V-CD) or **24** (GML 24 V) in counterclockwise direction to decrease the frequency in steps of 0.05 MHz (FM frequency band) or 10 kHz (AM frequency band). The selected frequency is indicated in the display **31**.
- Turn the TUNE control knob **14** (GML 24 V-CD) or **24** (GML 24 V) and hold it in this position to start the SEEK function. The tuner automatically searches for the next radio station with good reception.

When operating within the direct vicinity of radio plants and radio equipment, radio reception can be impaired.

Presetting Radio Stations

20 FM and 10 AM tuner presets are possible.

Before setting a radio station, reduce the volume to as low as possible.

- Select the desired FM or AM frequency band.
- Select the radio station with the TUNE control knob **14** (GML 24 V-CD) or **24** (GML 24 V).
- Press the radio station MEMORY button **17**. The PRESET function indicator **42** and the indicator for radio station preset **41** flash in the display. Press the PRESET forwards **25** or back button **26** (GML 24 V) or the radio function PRESET button **13** (GML 24 V-CD) to select the desired preset number.
- Press the radio station MEMORY button **17**. A "beep" confirms the adjustment.

Selecting Preset Radio Stations

Before setting a radio station, reduce the volume to as low as possible.

- Select the desired FM or AM frequency band.
- Press the PRESET forwards **25** or back button **26** (GML 24 V) or the radio function PRESET button **13** (GML 24 V-CD) to select the desired preset number.

CD Player Operation (GML 24 V-CD)

Press the CD/AUX/Radio FM/Radio AM operating mode button **22** until CD **39** is indicated in the display.

Inserting and Playing a CD

- Press the CD OPEN/CLOSE button **11** to open the CD drive assembly **10**.
- Place the CD centrally on the CD drive assembly, with the inscription facing upward.
- Press the CD OPEN/CLOSE button **11** to close the CD drive assembly **10**.
- Press the TRACK button **13** right or left to select the desired track, which is displayed in the CD track number indicator **41**.
- Press the START/PAUSE button **12** to the right; playback of the track begins.
- By turning the REV and FAST FORWARD control knob **14**, you can move to a certain location within a track.
- Press the START/PAUSE button **12** to the right; playback is stopped. Pressing the button again initiates playback from where it was stopped.
- Press the STOP button **12** to the left to end the playback.

Programming the Playback

You can play back the tracks of a CD in any sequence by programming them in the desired order. The program can include up to 20 tracks.

- Insert the CD, but do not start the playback.
- Press the CD function program memo button **17**.
- Select the desired track with the TRACK button **13** which appears in the indicator for the CD track number **41**. Press the MEMORY button **17** for the CD function program memo, to take over the track in the program.
- Press the START button **12** to the right; playback begins.

Repeated CD Playback

You can play all tracks on a CD repeatedly. After the last track has run off, the playback begins with the first track.

- Insert the CD, but do not start the playback.
- Press the CD MODE button **16** (REPEAT) until the REPEAT indicator **33** appears in the display **4**.
- Press the START button **12** to the right; playback begins.

Repeated Playback of a CD Track

You can repeatedly play a track on a CD. After the track has run off, the playback begins again.

- Insert the CD and start the playback of the desired track.
- Press the CD MODE button **16** until the REPEAT indicator **33** flashes in the display **4**.
- Press the START button **12** to the right; playback begins.

Random CD Playback

You can mix all tracks and play them randomly. When this function is performed again, the playback can be completely different.

- Insert the CD, but do not start the playback.
- Press the CD MODE button **16** until the RANDOM indicator **32** appears in the display **4**. (RANDOM)
- Press the START button **12** to the right; playback begins. The tracks are played in random sequence.
- To continue the playback even after playing the last track, press the CD MODE button **16** until the RANDOM indicator **32** and the REPEAT indicator **33** appear in the display **4**.
- Press the START button **12** to the right; playback begins.

Operation with External Audio Source

You can connect an external audio source, e. g., an external CD player or an MP3 player with line output, to the radio charger.

GML 24 V: Press the AUX/Radio FM/Radio AM operating mode button **23** until **AUX 40** is indicated in the display.

GML 24 V-CD: Press the CD/AUX/Radio FM/Radio AM operating mode button **22** until **AUX 40** is indicated in the display.

- Remove the protective cap from the AUX connection socket **44** on the left side of the radio charger.
- Insert the plug of the external audio source into the AUX connection socket **44**.
- Connect the other end of the cable with the external audio source.
- Set the volume of the external audio source to approx. 50 % and start the playback.
- Set the desired volume with the volume control knob **21**.

Audio Settings

Stereo/Mono

With a sufficiently strong signal and reception of a correspondingly transmitted radio programme, the tuner automatically switches to stereo reception. The STEREO reception indicator **30** appears in the display **4**. To switch between playback in mono and stereo, press the STEREO button **15**.

Tone Control

For optimal sound playback, an equalizer is integrated in the radio charger.

a) Manual Adjustment

The bass and treble settings of the radio charger can be controlled individually.

To raise or lower the basses, press the "Bass/Treble" tone button **7** until "BASS" is indicated in the display **4**. To raise the basses, turn the VOLUME control knob **21** in clockwise direction. The selected setting is indicated several seconds in the display **31** (BASS 00 – 10). To lower the basses, turn the VOLUME control knob **21** in anticlockwise direction.

To raise or lower the treble, press the "Bass/Treble" tone button **7** until "TREBLE" is indicated in the display **4**. To raise the treble, turn the VOLUME control knob **21** in clockwise direction. The selected setting is indicated several seconds in the display **31** (TREBLE 00 – 10). To lower the treble, turn the VOLUME control knob **21** in anticlockwise direction.

b) Equalizer

5 equalizer settings are available, which offer preset treble and bass settings for the respective music styles.

To change between the individual settings, press the equalizer settings button (EQ) **8**. The selected preset is indicated in the equalizer setting indicator **28** in the display **4**: NORMAL (no indication) – JAZZ – ROCK – POP – CLASSICAL.

Enhanced Bosch Sound

For playback of excellent and powerful sound, the radio charger is equipped with a digital sound processor.

Press the enhanced "BOSCH SOUND" button **9** to switch the sound effect on or off.

Remote control (see figure H)

The remote control **53** operates within a radius of $2 \times 55^\circ$ from the centre axis of the radio charger and within a range of up to 7 metres.

The remote control **53** can be stowed in the carrying handle **1**.

As an example, the remote control **53** can be fastened to a belt loop. Unlatch the clip **62** and hook on the remote control **53**.

Button		Function		
		GML 24 V		GML 24 V-CD
		Radio operation	Radio operation	CD operation
Increase volume	54	Increases the volume in steps	Increases the volume in steps	Increases the volume in steps
Start/Pause	55	–	–	Starting or stopping CD playback
PRESET	55	Advances forward to the next memorised station	–	–
FAST FORWARD (press briefly)	56	Increases the station frequency in steps	Advances forward to the next memorised station	Advances to the next CD track
FAST FORWARD (keep pressed)	56	SEEK station, forwards	SEEK station, forwards	FAST FORWARD, CD track can be heard distorted
REVERSE (press briefly)	57	Reduces the station frequency in steps	Advances back to the next memorised station	Advances back to the next CD track
REVERSE (keep pressed)	57	SEEK station, backwards	SEEK station, backwards	FAST REVERSE, CD track can be heard distorted
Reduce volume	58	Reduces the volume in steps	Reduces the volume in steps	Reduces the volume in steps
POWER	59	Switches the radio charger on and off	Switches the radio charger on and off	Switches the radio charger on and off
Operating mode	60	Selects operating mode: AUX/Radio FM/ Radio AM	Selects operating mode: CD/AUX/Radio FM/ Radio AM	Selects operating mode: CD/AUX/Radio FM/ Radio AM
MUTE	61	Mutes the tone	Mutes the tone	Mutes the tone

Replacing the Remote Control Batteries

- Unscrew the battery compartment screw on the rear side of the remote control and remove the lid.
- Replace the battery (type CR2032) and fasten the lid with the screw again.

Charging a Battery

Inserting a Battery (see figures F und G)

- Open the battery compartment lid **48** by unlatching the locking lever **47**.
- Insert the battery **50** into the charging compartment **49** as indicated in the figure.

Charging Procedure

The charging procedure starts as soon as the mains plug is plugged into the socket and the battery is inserted into the charging compartment **49**.

Due to the intelligent charging method, the charging condition of the battery is automatically detected and the battery is charged with the optimum charging current, depending on battery temperature and voltage. This gives longer life to the battery and always leaves it fully charged when kept in the radio charger for storage.

The charging procedure is indicated through the indicators in the display **4**. During the **rapid-charging procedure**, the "CHARGING" indicator **35** and the "Battery inserted" indicator **36** appear. The charging procedure is ended when the "CHARGING" indicator **35** goes out. The charger switches to the **trickle charging mode**, which equalizes the natural running-down of the battery. (CHARGING)

If the battery warning indicator **34** appears when a battery is inserted, then the battery temperature is not within the allowable temperature range (0 °C – 60 °C) and will not be charged. Bring the battery temperature within the allowable temperature range by cooling down or warming up. As soon as the battery temperature is within the allowable temperature range again, the battery charger automatically switches to rapid charging.

The charged battery can be removed from the charging compartment **49** or used as a mobile power source for the radio charger instead of a mains supply, when left in the charging compartment.



Check the temperature of the battery before removing it. The battery can warm up considerably during charging.

Practical Advice

A new battery or one that has not been used for an extended period of time requires five charging/discharging cycles to gain its full capacity. Leave the battery in the charging compartment until it has warmed up.

A significantly reduced working period after charging indicates that the battery is used up and must be replaced.

12 V Connection (see figure E)

You can connect an external electrical device/unit with a 12 V plug and a maximum current consumption of 1 A. When operating the radio charger with the inserted battery, the connection socket is switched off.

- Remove the protective cap of the 12 V connection socket **46** on the left side of the radio charger.
- Insert the plug of the external device into the socket of the 12 V connection **46**.
- If a 12 V voltage is not present, check the fuse **45**. For this, unscrew the fuse cap. Insert a 5 x 20 mm fuse with a 1 A rating, if required. Afterwards, firmly screw on the fuse cap.

Only use the specified 1 A fuse. Use of other fuses can cause damage to the radio charger.

Integrated Power Outlets

Two protective contact power outlets **43** are integrated in the radio charger for the supply of power to external power tools. The maximal allowable current consumption of the connected power tools may not exceed the value listed in the following table. The power outlets can vary depending on country-specific standards. The power outlets are deactivated when operating the radio charger via the inserted battery.

Article number		max. current consumption of the connected power tools
3 601 D29 ...		
...401, ...403, ...421, ...422, ...501, ...503, ...521, ...522	A	15
...471, ...571	A	12
...402, ...431, ...502, ...531	A	9

Replacing the AAA Batteries

- Open the battery compartment lid **48** by unlatching the locking lever **47**.
- Slide the plastic lever to the side and remove the lid of the battery compartment **51**.
- Replace the AAA batteries and reattach the lid of the battery compartment **51** again.

Fault Finding and Troubleshooting

Problem	Possible Cause	Corrective Measure
Radio or CD player not operative.	Mains plug not plugged in.	Plug in the mains plug.
	For battery operation: Battery not fully inserted.	Completely insert the battery.
	For battery operation: Battery discharged.	Charge the battery by plugging in the mains plug.
Insufficient radio reception.	Bad location.	Place the radio charger at a different location.
	Aerial not aligned optimally.	Turn the aerial to other directions.
12 V connection not operative.	Fuse for 12 V connection not inserted.	Insert a 5 x 20 mm 1 A fuse.
	Fuse for 12 V connection defective.	Replace the fuse.
Power outlets 43 not operative.	Mains plug not plugged in.	Plug in the mains plug.
Radio charger does not operate.	Mains plug not plugged in.	Plug in the mains plug.
	Software error.	If the display is not lit up when switched on, the software in the radio charger must be reset. Pull the mains plug and/or remove the battery and wait for 30 seconds.
Faulty clock display.	Clock batteries dead.	Replace the AAA batteries and reset the clock.

Maintenance and Service

Maintenance and Cleaning

Before any work on the radio charger, pull the mains plug from the power outlet.

If the radio charger should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for Bosch power tools.

In all correspondence and spare parts orders, please always include the 10-digit article number on the type plate of the radio charger. The type plate is located on the bottom side of the radio charger.

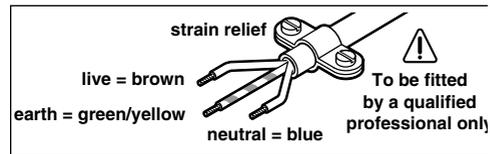
Mains Cable

The mains cable is fitted with a special safety connection. The mains cable may only be replaced by an authorised after-sales service agent for Bosch power tools.

WARNING! This appliance must be earthed.

Important instructions for connecting a new 3-pin plug.

The wires in the cable are coloured according to the following code:



Do **not** connect the blue or brown wire to the earth terminal of the plug.

Important: If for any reason the moulded plug is removed from the cable of this machine, it must be disposed of safely.