



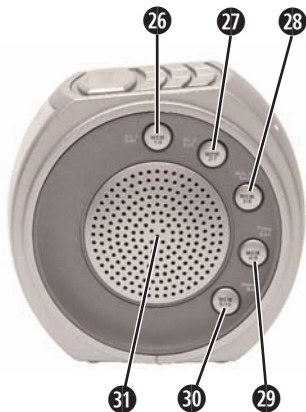
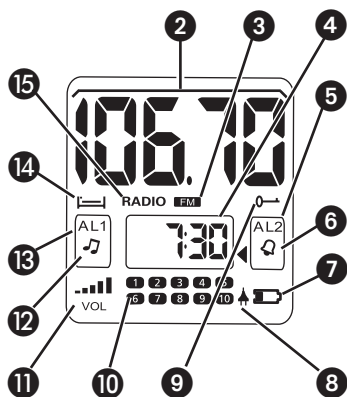


KOMPERNASS GMBH · BURGSTRASSE 21 ·  
D-44867 BOCHUM ·  
[www.kompernass.com](http://www.kompernass.com)  
ID No.: KH2217-01/07-V3



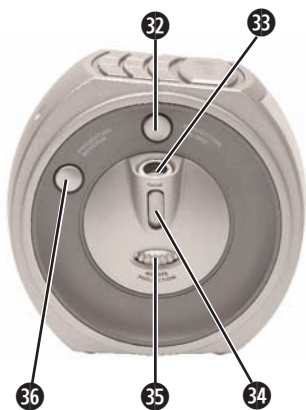
Ⓔ **Projection Clock with Radio KH 2217**  
Operating instructions













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Read the operating instructions carefully before using the appliance for the first time and preserve this booklet for later reference. Pass this manual on to whoever might acquire the appliance at a later date.

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## Projection Clock with Radio KH 2217

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### Safety instructions

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#### To avoid fatal injury through electric shock:

- Only use the appliance in dry rooms.
- Ensure that fluids or foreign objects can never enter into the appliance.
- Do not place objects containing fluids, e.g. flower vases, on the appliance.

#### To avoid burns and other injuries:

- Place the appliance at a location where it will not overheat itself. Never cover the ventilation slits!
- Do not place unprotected fire sources, such as candles, on the device.
  - Avoid additional heat sources, e.g. solar radiation, heaters, other appliances etc.!
  - Do not allow children or persons in need of constant attention to use the appliance unsupervised. They are not always able to correctly assess the potential risks.
  - When connecting the appliance to a mains power source use only the power adapter supplied with it.
  - Ensure that the power adapter is easily and quickly accessible in the event of an emergency and place the cable so that it cannot be stumbled over.

- Check the state and charge condition of the inserted batteries at least once a year.
- Wear protective gloves in the event of having to remove a leaking battery. Battery contents can cause chemical burns. Clean the battery compartment with a dry cloth.

#### **Electro-magnetic fields**

This appliance complies with the legal limits for electric smog, even within the casing!

However, if you still have doubts about installing it in the bedroom:

- Place the appliance about half a meter from the bed.

At this distance the electro-magnetic fields are no longer effective even for electro-sensitive people itself.

#### **Note:**

This appliance is equipped with non-slip rubber feet. Furniture upper surfaces comprise of various materials and are cleaned with various types of polishes and/or cleaning agents. Thus it cannot be completely excluded that some of these substances contain components that could attack the rubber pads and soften them. If necessary, place an anti-slip mat under the rubber pads of the appliance.

#### **Note:**

In certain countries there could be exceptional regulations for the allocated radio frequency ranges.

Take note that you may not exploit possibly received radio services, pass them on to third parties or improperly misuse them.

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## Intended use

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The equipment is intended for use as an alarm clock using a signal tone or a radio signal, and for receiving radio transmissions. All other usages of or modifications to the appliance are deemed to be improper use and may result in serious injury.

The manufacturer accepts no liability for damages that result from an improper use of the appliance or that are caused by an incorrect operation of it. The appliance is not intended for commercial use.

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## Items supplied

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After unpacking, immediately check to determine that all listed items are present and that there are no visible damages.

1 Projection Clock

1 Power adapter

1 Operating instructions/  
Warranty leaflet

Batteries are not supplied.

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## Appliance overview

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- ① Display
- ② Frequency display/Time
- ③ Frequency band display  
FM/AM
- ④ Alarm time display
- ⑤ Alarm time 2 (AL2)
- ⑥ Signal tone alarm call
- ⑦ Info display for change  
of batteries
- ⑧ Operation with power  
adapter
- ⑨ Buttons locked

- 10 Number of the selected save position
- 11 Volume display VOL
- 12 Radio alarm call
- 13 Alarm time 1 (AL1)
- 14 Sleep Timer switched on
- 15 Display in radio operation
- 16 Button for sleep function (SLEEP)
- 17 Button for saving radio station / Button lock (MEMORY KEY LOCK)
- 18 Button for alarm time 1 / Increase volume (AL1/VOL+)
- 19 Button for alarm time 2 / Decrease volume (AL2/VOL-)
- 20 Button for RADIO ON/OFF
- 21 Snooze button/Display illumination (SNOOZE/ DISPLAY DIMMER)
- 22 Button for changing frequency band (BAND AM/FM)
- 23 Button to seek saved radio station/Automatically save radio station (MEM SCAN/A.M.S.)
- 24 Button for radio station search downwards (DOWN)
- 25 Button for radio station search upwards (UP)
- 26 Button for save position 1/6, set alarm time 1 (MEM. 1/6, AL.1 SET)
- 27 Button for save position 2/7, set alarm time 2 (MEM. 2/7, AL.2 SET)
- 28 Button for save position 3/8, adjust minutes (MEM. 3/8, MIN.+ SET)
- 29 Button for save position 4/9, adjust time (MEM. 4/9, TIME SET)
- 30 Button for save position 5/10, adjust hours (MEM. 5/10, HOUR+ SET)
- 31 Loudspeakers
- 32 Button for projection of the time On/Off (PROJECTION ON/OFF)
- 33 Rotatable projection lens
- 34 Focusing slider (FOCUS)

- 35 Adjustment wheel to turn the time projection (ROTATE PROJECTION)
- 36 Button to turn the time projection through 180° (PROJECTION REVERSE)
- 37 Power adapter connection DC 7,5 V
- 38 Wire aerial
- 39 Battery compartment cover
- 40 Reset button
- 41 Power adapter with plug and cable
- 42 Connector plug

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## Technical data

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### Battery operation:

4 x 1,5 V Type  
Mignon/AA/LR6 (not supplied) for radio operation, display illumination and projection

### Mains operation:

DC 7,5 V  $\equiv$  400 mA

### Frequency range :

FM (USW) : 87,5–108,5 MHz

AM (MW) : 522–1656 kHz

### Power adapter:

Input: 230 V ~ 50 Hz  
30 mA

Output: DC 7,5 V  $\equiv$   
400 mA, 3 VA

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## Preparing for use

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- Remove the projection clock from the packaging.
- Place the projection clock on a level surface.
- Position the projection clock such that the projection lens 33 is directed onto an empty surface.

The room must be darkened for the time display to be clearly visible on a wall or ceiling.

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## Providing electrical power

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### **Important:**

Ensure that you have the correct polarities with the batteries and the power adapter. False polarity will damage the appliance. The appliance can be operated as follows:



- only with batteries ,
- only with the power adapter .

### **Inserting the batteries**

You require four 1,5 V batteries of the type Mignon/AA/LR6.

1. Open the cover  of the battery compartment on the underside.
2. Insert the four batteries, ensuring their positions comply with the polarity markings given in the battery compartment.

Make sure that the black textile strip is positioned under the batteries, this will make a battery exchange easier.

3. Close the lid , until it engages.
  - Exchange all four batteries when the information indicator for a battery renewal  is displayed.
  - Check the state and charge condition of the inserted batteries at least once a year.

### **Note:**

The saved radio stations will be erased if the appliance is without an electricity supply for longer than ca. 30 seconds. Provide electricity either by means of the power adapter or make sure you complete the exchange of batteries within 30 seconds.

## Connecting the power adapter

Use only the power adapter supplied with the appliance.

1. Insert the connector plug **42** of the power adapter **41** into the power adapter connection **37** on the back of the appliance.
2. Insert the plug of the power adapter into a power socket with 230 V ~ 50 Hz.

On the display the symbol **8** for mains power operation is indicated.

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## Using the clock

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### **i** Note:

To be able to adjust the time, the clock radio must be switched off.

### Setting the time

1. Press the button **29** TIME

SET.

The time on the display **1** blinks.

### **i** Note:

Complete the adjustments within 10 seconds. After ca. 10 seconds the appliance returns to its start setting. The adjustments completed to this point will be taken over.

The button **30** HOUR+ SET can be pressed numerous times in succession or held down firmly.

2. Press the button **30** HOUR+ SET to set the hours.
3. As soon as the desired hour indication is shown in the display **1** release the button.

The button **28** MIN+ SET can be pressed numerous times in succession or held down firmly.



4. Press the button **28** MIN+ SET to set the minutes.
5. As soon as the desired minute indication is shown in the display **1**, release the button.
6. Press the button **29** TIME SET or wait a few seconds.

The programmed time will be taken over.

### Selecting the 12 hour or the 24 hour modus

Press and hold the button **22** BAND for about 2 seconds.

In the display "24Hr" blinks to indicate the 24-hour mode.

Within 10 seconds repeatedly press the button **28**

MIN+ SET to switch between the 12-hour mode ("12Hr" blinks) and the 24-hour mode.

Press the button **22** BAND or wait a few seconds.

The selected mode is taken over. In the 12-hour mode the indicator PM appears under the time display for the hours of the afternoon/evening.

### Setting the alarm time

You can programme in two different alarm times, AL1 and AL2.

Alarm times can only be programmed with the radio switched off.

1. Press the button **26** AL1 SET.

The alarm time **4** AL1 blinks.

The button **30** HOUR+ SET can be pressed numerous times in succession or held down firmly.

2. Press the button **30** HOUR+ SET to set the hours.
3. As soon as the desired hour indication is shown in the display for alarm time **4** AL1, release the button.

The button **28** MIN+ SET can be pressed numerous times in succession or held down firmly.

4. Press the button **28** MIN+ SET, to set the minutes.
5. As soon as the desired minute indication is shown in the display for alarm time **4** AL1, release the button.
6. Press the button **26** AL1 SET or wait a few seconds. The programmed alarm time will be taken over.
7. To programme in the second alarm time, repeat the steps 1 to 6.
8. However, instead of pressing button **26** AL1 SET, press the button **27** AL2 SET.

## Switching the alarm function on

### **i** Note:

If you wish to be woken by the radio, programme in both the desired sound volume and the radio station for the alarm call in advance (see chapter "Adjusting the volume").

With each push on the buttons **18** AL1/VOL+ or **19** AL2/VOL- you switch through the available alarm options.

1. To switch on the alarm call with signal tone, repeatedly press the button **18** AL1/VOL+ until the bell symbol **6** appears in the field AL1 **13** on the display **1**.

The alarm time **4** is shown on the display **1**.

The signal tone becomes louder the longer it sounds.

2. To switch on the alarm call with radio, repeatedly press the button 18 AL1/VOL+, until the radio symbol 12 appears in the field AL1 13.

The alarm time 4 is shown on the display 1.

3. To switch off the alarm function, repeatedly press the button 18 AL1/VOL+ until a symbol no longer appears in the field AL1 13.

The alarm time 4 is nonetheless shown in the display 1, but the signal tone or radio does not sound at the programmed time.

#### **i Note:**

The alarm function is only active when the bell symbol 6 or the radio symbol 12 in the fields AL1 13 or AL2 5 are visible.

The action steps described are also valid for the button 19 AL2/VOL-.

### **To switch off the alarm function to the following day**

To switch off the alarm sound press one of the following buttons:

- Button 18 AL1/VOL+,
- Button 19 AL2/VOL-,
- Button 20 RADIO ON/OFF,
- Button 16 SLEEP.

The switching off of the alarm sounds is confirmed by a signal tone, except with the button 20 RADIO ON/OFF.

### **Snooze function**

With the button 21 SNOOZE/DISPLAY DIMMER you can interrupt the alarm function for a period of between 1 and 30 minutes, this period being programmed by yourself (see next section). The factory setting is 9 minutes.

On the expiration of this period the alarm tone or radio sounds again (Automatic after-call). The function can be repeated up to six times. After that, the alarm first sounds on the following day.

The automatic after-call allows itself to be individually adjusted to between 1 and 30 minutes. The radio is switched off and the automatic after-call is not active.

1. Press and hold the button **21** SNOOZE/DISPLAY DIMMER until *SNO* and the minute indication appears on the display.
2. Press the button **28** MIN+ SET to programme the minutes.
3. As soon as the desired after-call period is displayed, release the button.
4. Press the button **21** SNOOZE/DISPLAY DIMMER.

The programmed after-call period is taken over.

## Adjusting the display brightness

### Mains power operation:

1. Press the button **21** SNOOZE/DISPLAY DIMMER at intervals of 2 seconds. The display brightness changes itself as follows: Bright>Medium>Dark>Bright

### Battery operation:

To save energy, the display illumination is deactivated in battery operation.

1. Press the button **21** SNOOZE/DISPLAY DIMMER.

The display is illuminated for ca. five seconds.

### Projection of the time


For the time display to be well visible on a wall or ceiling, the room must be darkened.


### **Important:**


The time display projection is created with an LED.

NEVER look directly at the lightbeam. NEVER direct the lightbeam at other people or animals.


### **Mains power operation:**

1. Press the button  PROJECTION ON/OFF.


The projection lens  glows permanently.

2. Swivel the projection lens  in the desired direction.



The time is projected onto the selected position. The projection distance ranges from ca. 0,4 m to 4,0 m


3. Adjust the sharpness of the projection with the slider FOCUS .

You can turn the projection of the time through ca. 90° with infinite variability.


4. Turn the adjustment wheel  ROTATE PROJECTION.


You can turn or mirror the projection of the time through 180°.

5. Press the button  PROJECTION REVERSE.
6. To switch the projection off, press the button  PROJECTION ON/OFF once again.

The projection lens  extinguishes.

### **Battery operation:**

1. Press the button  PROJECTION ON/OFF.



The projection lens  glows for ca. five seconds.

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## **Using the radio**

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### **Switching On and Off**

1. Press the button  RADIO ON/OFF to switch the radio on.
2. Press the button  RADIO ON/OFF again to switch the radio off.

## Adjusting the volume

If you wish to adjust the volume in one sweep, hold the appropriate button down continuously. If you wish to adjust the volume in stages, repeatedly press the appropriate button in succession.

1. To raise the volume, press the button **18** AL1/VOL+.
2. To reduce the volume, press the button **19** AL2/VOL-.

## Selecting a waveband

1. To select a waveband (FM/AM), press the button **22** BAND.

You can improve the reception of radio stations in the VHF (FM) frequency range.

2. Move the wire aerial **38** slowly in various directions. When optimal reception is finally made, secure the wire aerial **38** in this position.

For the reception of medium wave (AM) radio stations an aerial is integrated into the appliance.

3. To improve AM reception, change the position of the appliance when the radio is on.

## Station search

1. Press briefly either the button UP **25** or DOWN **24**.

The search starts and stops automatically when a radio station with sufficient reception strength is found.

2. To continue the search, press the button **25** UP or **24** DOWN and keep it held down for a short period.
3. To discontinue the search, press the button **25** UP or **24** DOWN and keep it held down for a short period.

To make fine adjustments in the event of difficult reception conditions, proceed as follows:

1. Press the button **25** UP for a short period.

The reception frequency is raised.

2. Press the button **24** DOWN for a short period. The reception frequency is lowered.

### **Saving radio stations**

When you have found a radio station that you would like to save:

1. Press the button **17** MEMORY KEY LOCK.

A signal tone sounds and the display of the saving positions **10** blinks.

#### **i Note:**

Complete the following steps within 15 seconds. Otherwise, the appliance automatically saves the radio station to the displayed

save position. When the radio station is saved, two signal tones sound.

2. Press one of the five buttons **26 27 28 29 30** MEM., to determine which saving position from 1...10 is to be used.

**i Note:** The buttons **26 27 28 29 30** MEM. are double occupied. With each activation you alternate between the two occupancies (e.g. between 1 and 5).

3. Press the button **17** MEMORY KEY LOCK again.

The signal tone sounds twice and the radio station is saved.

Repeat the steps 1-3 to save further radio stations.

### **Selecting a saved radio station**

With the five buttons **26 27 28 29 30** MEM. You can select two radio stations per wave-band.

1. Press the button MEM.  
1/6.

A signal tone sounds.

The radio station saved on save position 1 is played.

2. Press the button MEM.  
1/6 again.

A signal tone sounds.

The radio station saved on save position 6 is played.

### AMS function

The appliance is fitted with an automatic radio station save function. You can save ten radio stations per waveband. The radio is switched on.

1. Press the button **23** MEM SCAN/A.M.S. for ca. two seconds.

The appliance now automatically saves the radio stations with sufficient reception strength to the save positions. The AMS function ends as soon as all save positions for the respective wavelength are occupied.

### Brief playback of all saved radio stations

You can briefly playback all radio stations saved to a wavelength. The radio is switched on.

1. Press the button **23** MEM SCAN/A.M.S.

The saved radio stations are each played for four seconds.

2. To cancel the function, press the button **21** SNOOZE /DISPLAY DIMMER.

### Button lock

You can lock all buttons against activation.

1. Press the button **17** MEMORY KEY LOCK for ca. two seconds.

In the display the BUTTON LOCK symbol **9** appears.

The buttons are locked against inadvertant activation.

2. To cancel the function, press the button **17** MEMORY KEY LOCK for ca. two seconds.



The **BUTTON LOCK** symbol **9** is no longer displayed. The buttons can be activated again.

### Sleep function

You can programme in a time at which the radio switches itself off. You can select a time between 15 and 90 minutes.

The radio is switched off.

1. Press the button **16** SLEEP.

The symbol **14** SLEEP appears in the display.

2. Press the button **16** SLEEP for ca. two seconds.

The display **SL:90** **2** blinks.

3. Press the button **16** SLEEP repeatedly until the desired time is shown.

With each press of the button the switch-off time is reduced by 15 minutes.

### Troubleshooting

To eliminate a malfunction of the display, proceed as follows:

1. Press the Reset-button **40** with a pointed object, e.g. a ballpoint pen.

The appliance returns to its factory settings. All adjustments made by yourself are erased.

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## Cleaning the appliance

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### Important:

NEVER use benzine, solvents or cleaners that can cause damage to plastics, as they could damage the appliance!

- Keep the appliance and the ventilation openings clean at all times.
- Fluids may not, under any circumstances, penetrate into the interior of the appliance
- Never use aggressive cleaners.
- For cleaning the housing and the display use a soft and slightly moist cloth.

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## Disposing of the appliance

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Do not dispose of the appliance in your normal domestic waste.

Dispose of the appliance through an approved disposal centre or at your community waste facility. Observe the currently applicable regulations. In case of doubt, please contact your waste disposal centre.

## **Disposing of batteries!**

Do not dispose of the batteries with household waste.

Every consumer is legally obliged to dispose of batteries at a collection site of his community / city district or at a retail store.

This obligation is intended to ensure that batteries are disposed of in an environmentally safe fashion. Only dispose of batteries when they are fully discharged.



Dispose of packaging materials in an environmentally responsible manner.

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## **Warranty and Service**

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The warranty conditions and the service address can be found on the warranty card.

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## **Importer**

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