RADIO CONTROLLED CLOCK WITH INDOOR THERMOMETER

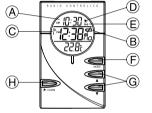*MODEL : RM962/RM962U*

Instruction Manual

INTRODUCTION

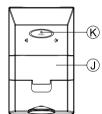Congratulations on your purchase of the Clock with Temperature Display RM962/RM962U .

The RM962 is a multifunction radio controlled clock. It can automatically synchronize its current time and date when brought within an approximate 1500 km radius of the radio signal DCF77 generated from Frankfurt, Germany (RM962U - the UK version from MSF-60 Rugby, England).

Features of this unit include: indoor temperature display, current date display, daily crescendo alarm with eight-minute snooze function and EL backlight.

DESCRIPTION OF PARTS

A 3-line LCD
Displays the time, date, alarm status and temperature

B [⊄] Battery-Low icon
Lights up when batteries are running dry

C [ ] Radio-Reception Signal
Indicates the condition of radio reception

D [ ] Alarm-on icon
Appears when the alarm is activated

E [ ] Alarm icon
Appears when the alarm time is displayed

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F MODE button
Toggles the calendar clock display modes or activates the calendar clock setting mode

G UP [▲] and DOWN [▼] buttons
Increases or decreases the value of a setting

H ALARM button
Displays the alarm time or sets the alarm status

I SNOOZE button
Activates the snooze function when an alarm activates or turn on the back light for five seconds

J Battery compartment
Accommodates two UM-4 or "AAA" size 1.5V batteries

K RESET button
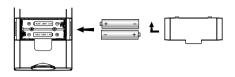Resets the unit by returning all settings to their default values

L Rotatable stand

BATTERY INSTALLATION

The unit uses two (2) UM-4 or "AAA" size 1.5V batteries.

To insert batteries:

1. Click open the battery door as shown.
2. Insert the batteries strictly according to the polarities shown therein.
3. Replace the battery compartment door.

Note: The battery life can be reduced vastly by frequent use of the back light or snooze function.

If not disposed of properly batteries can be harmful. Protect the environment by taking exhausted batteries to authorized disposal stations.

HOW TO USE THE BACKLIGHT

Press SNOOZE once. The back light will activate for five seconds.

ABOUT RADIO RECEPTION

This unit is a radio frequency (RF) controlled clock. When located within a 1500km radius of radio signal (DCF77) at Frankfurt, Germany, the clock time will automatically synchronize with DCF77 time-signal transmission. The benefit of a RF controlled clock is that highly-accurate time is maintained and manual adjustments to the time and date are not be required.

(RM962U - UK version within a 1500km radius of radio signal

(MSF-60) from Rugby, England)

When the batteries are first installed, the unit will automatically search for a radio signal.

When in search mode, the antenna icon [☀] will blink. This process takes between two (2) and ten (10) minutes. After initial search, short periodic reception-signal scans will commence several times a day.

The antenna icon indicates the quality of reception.

⟫	**STRONG**	ǀ	**NO RECEPTION**
⟩	**WEAK**	→⟩ǀ⟨	**RECEIVING**

When the reception is complete, the radio-reception signal will stop blinking.

Interference

Reception can be affected by a number of factors. For best reception, place the device away from metal objects and electrical appliances.

Note: Interference from sources such as TV sets can affect the signal. If, after batteries have been inserted for ten minutes, the signal is not received, then set the time manually (see section: How To Set The Calendar Clock Manually).

To deactivate the auto-reception of RF signal, press and hold both **[**

▲ **]** and **[** ▼ **]** buttons for 2 seconds. The antenna icon will disappear to show this deactivation.

To activate the auto-reception again, press and hold both buttons for 2 seconds again and the antenna icon will re-appear.

"SECONDS" AND DAY-OF-THE-WEEK DISPLAY

The "seconds" and the day-of-the-week share the same section of the display.

day-of-the-week display

"second" display

The day-of-the-week is displayed as an abbreviation in five languages.

To change the "seconds" display to the day-of-the-week display:

• When the "seconds" are displayed, press **MODE** once.

To change the day-of-the-week display to the "seconds" display:

• When the day-of-the-week is displayed, press **MODE** once.

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CALENDAR AND ALARM TIME DISPLAY

The calendar and the alarm-time share the same section of the display.

The calendar is displayed in a day-month format.

calendar mode   *alarm mode*

To change the calendar display to the alarm-time display:

• When the calendar is displayed, press **ALARM** once.

To change the alarm-time display to the calendar display:

• When the alarm time is displayed, press **MODE** once.

HOW TO SET THE CALENDAR CLOCK MANUALLY

If the unit is taken outside of the range of radio signal it will need to be manually set.

To manually set the clock:

1. When the calendar is displayed, press and hold **MODE** for two seconds. The month value will start to blink.

2. Enter the month using the [▲] and [▼] buttons. Hold down either button to rapidly increase or decrease the value.

3. Press **MODE** to confirm and proceed to set the day, display language, day-of-the-week, hour and minute.

4. For the display language, you can choose between (E) for English (D) for German (F) for French, (I) for Italian and (S) for Spanish.

Day-of-the-week

	Monday	Tuesday	Wed.	Thursday	Friday	Saturday	Sunday
E	Mo	Tu	WE	TH	Fr	SA	Su
D	Mo	Di	Mi	Do	Fr	SA	So
F	Lu	MA	ME	JE	VE	SA	DI
I	Lu	MA	ME	Gi	VE	SA	Do
S	Lu	MA	Mi	Ju	VI	SA	Do

5. When finished, press **MODE** to return to normal display. If changes are made on the minutes, the seconds will reset and start from zero.

HOW TO SET AND ACTIVATE THE ALARM

To set the alarm time:

1. Press and hold **ALARM** for two seconds when the alarm time is displayed.

2. Enter the value for the hour digits. Press **ALARM** to confirm and go to the minute digits. Enter the value and press **ALARM** to confirm.

3. The alarm is automatically activated. To deactivate it, press **ALARM** once.

ALARM AND SNOOZE FUNCTION

When the alarm is set, it will activate at the set time. The back light will go on for five seconds with the alarm-on icon **[▶]** flashing.

The crescendo function allows the alarm to start gently and step up its intensity in three steps. Without interruption, the alarm will activate for a minute.

To stop the alarm, press any key. If the SNOOZE button is pressed, the snooze function will be triggered. The alarm will stop for eight minutes before activating again.

INDOOR TEMPERATURE

The temperature is shown in Centigrade (°C). The unit is capable of measuring temperatures within the -5°C and 50°C range. If the temperature goes above or below that, the display will show "HHH" or "LLL".

HOW TO RESET THE UNIT

The **RESET** button allows you to return all settings to its factory values.

The button is required only when the unit is not operating in a favorable way, such as in the rare case of a malfunction.

PRECAUTIONS

This unit is engineered to give you years of satisfactory service if you handle it carefully. Here are a few precautions.

1. Do not immerse the unit in water. If you spill liquid over it, dry it immediately with a soft, lint-free cloth.

2. Do not clean the unit with any alcohol containing detergent, abrasive or corrosive materials. They may scratch the plastic parts and corrode the electronic circuit.

3. Do not subject the unit to excessive force, shock, dust, temperature or humidity, which may result in malfunction, shorter electronic life span, damaged battery and distorted parts.

4. Do not tamper with the unit's internal components. Doing so will invalidate the warranty on the unit and may cause unnecessary damage. The unit contains no user-serviceable parts.

5. Only use fresh batteries as specified in the user's instructions. Do not mix new and old batteries as the old ones may leak.

6. Always read the user's instructions thoroughly before operating the unit.

TROUBLESHOOTING GUIDE — RM962

Trouble	Possible Cause	Remedy
Reception icon "Antenna" is not shown	Auto-reception of clock radio signal has been disabled	Enable this function by following the instructions in the User's Manual
Displayed Temperature data is different from other measuring instruments	(1) The measurement method is different (2) The area under evaluation is different or being influenced by climate	(1) Use the same instruments with consideration of the tolerance of readings (1) Place the 2 instruments very closely for a time period (no less then 30 minutes), avoiding direct light and air movements
- Clock time is not correctly set; and/or - Reception icon "Antenna" displays as "No reception"	The clock radio signal is not received because: - Electromagnetic interference exist, or the Main Unit is located within reinforced concrete wall or shadowed area location - Orientation of placement is not at optimum position for reception of clock radio signal	- Locate the Main Unit far from PC, mobile phone etc and re-locate it near the window sill. Wait at least 24 hours (note: during night-time signal is less attenuate particularly after raining) - The clock radio signal is searched at 1:00, 2:00, 3:00, 9:00, 15:00, 21:00 every day automatically - To force the signal reception please refer to instructions in the User's manual

Warning:

- *For other cases not listed in the above, feel free to contact our help line*

- ***Do not dissemble the unit. This will void the warranty***

SPECIFICATIONS

Operating Temperature : 5° C to 50° C

Clock Functions

Radio Control	: Auto synchronize current time and date by Radio signal generated from Frankfurt, Germany DCF77
	(the UK version from MSF-60 Rugby, England)
Calendar	: Day of week in English / German / French / Italian / Spanish Current day / month format
Clock Time	: 24-hour format (12-hour format for UK version)
Alarm Duration	: 1 minute crescendo
Snooze	: 8 minutes
Accuracy	: +/-0.5 second/day (when RF is disabled)

Temperature Measurement

Indoor Measurement	: -5°C to 50°C
Temperature Resolution	: 0.1°C
Temperature Accuracy	: -5°C to 0°C +/- 2.0°C 0°C to 40°C +/- 1.0°C 40°C to 50°C +/- 2.0°C

General Specification

Battery Type	: Two (2) UM-4 or "AAA" size 1.5V battery
Unit Dimension	: 104 x 64 x 21 mm (H x W x D)
Unit Weight	: 80 g (without battery)

With carrying pouch

CAUTION

— The content of this manual is subject to change without further notice.

— The specification of this product can be changed without any notice.

— Due to printing limitation, the displays shown in this manual may differ from the actual display.

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EC-DECLARATION OF CONFORMITY

This product complies with the essential requirements of Article 3 of the R&TTE 1999 / 5 / EC Directive, if used as intended and the following standards have been applied:

Safety of information technology equipment

(Article 3.1.a of the R&TTE Directive)

Applied Standard **EN 60950: 2000**

Electromagnetic compatibility

(Article 3.1.b of the R&TTE Directive)

Applied Standards **ETSI EN 301 489-1-3 (Ver.1.4.1) :2002-08**

Additional information:

The product herewith complies with the requirements of the Low Voltage Directive 73 / 23 / EC, the EMC Directive 89 / 336 / EC and carries the CE marking accordingly.

Carmelo Cubito

Agrate Brianza (MI) / Italy January 2004

EC Mandatory of Manufacturer

CE

COUNTRIES RTTE APPROVAL COMPLIED
All EC countries, Switzerland CH
And Norway N