Memorex®

MODEL: 4688

AM/FM RADIO CONTROLLED DUAL PROJECTION CLOCK RADIO
WITH IN-OUT DOOR TEMPERATURE

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons	WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE. TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

Please read this before operating your unit

IMPORTANT SAFETY INSTRUCTIONS

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Unplug this apparatus during lightning storms or when unused for long periods of time.
13) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, unit has been exposed to rain or moisture, does not operate normally, or has been dropped.
14) This appliance should not be exposed to dripping or splashing water and no object filled with liquid such as vases should be placed on the apparatus.
15) ACCESSORIES
Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

15A) An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
16) Power Sources - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
17) Safety Check - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

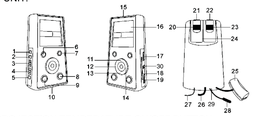
INSTALLATION

Unravel the AC cord and connect it to a conveniently located AC outlet having 120V and 60Hz only. The Clock Display will illuminate and a flashing time will appear in the window. The Clock Display will continue to flash until the time has been set.



CAUTION: To prevent electric shock, match wide blade of plug to wide slot, fully insert.
If the AC cord is disconnected or if there is a power failure, this electronic clock is designed to continue operating internally (without showing the time on the Clock Display) with 3 x 3V Flat Lithium battery CR2025 (not included). Insert the batteries in the battery compartment, making certain that the positive and negative (+ and -) battery terminals are attached to the corresponding terminals on the plate in the battery compartment.

MAIN UNIT:



1. PROJECTION TEMPERATURE ON/OFF BUTTON
2. PROJECTION CLOCK ON/OFF BUTTON
3. ALARM OFF/ ALARM BUZZER◘/ALARM RADIO☒SLIDE SWITCH
4. ALARM 1/ ALARM 2/ ALARM 1+2 SLIDE SWITCH
5. TEMPERATURE IN/OUT DOOR BUTTON
6. °C / °F BUTTON
7. SLEEP BUTTON
8. POWER ON/ OFF BUTTON
9. SNOOZE BUTTON
10. BATTERY COMPARTMENT (BOTTOM OF UNIT)
11. ▲ UP BUTTON (YEAR BUTTON)
12. TIME SET BUTTON
13. ▼ DOWN BUTTON
14. ALARM SET BUTTON
15. LCD BRIGHTNESS CONTROL SENSOR
16. LCD DISPLAY
17. TUNING CONTROL
18. DIAL SCALE AND POINTER
19. VOLUME CONTROL
20. FOCUS ADJUSTMENT (CLOCK)
21. CLOCK PROJECTOR
22. TEMPERATURE PROJECTOR
23. FOCUS ADJUSTMENT (TEMPERATURE)
24. RESET BUTTON
25. RADIO CONTROLLED CLOCK ANTENNA
26. AC POWER CORD
27. FM ANTENNA WIRE
28. TEMPERATURE SENSOR (IN DOOR)
29. RATING LABEL (AFFIXED AT THE BOTTOM OF UNIT)
30. WAVE BAND

INTRODUCTION
This unit is designed to automatically synchronize its current time and date with radio signal generated from 'WWVB'.

POWER CONNECTION
Plug the AC power cord to a household outlet AC source. This unit is equipped with a battery back up system, it requires a 3V flat lithium battery x 3 CR2025 (not included). Insert the battery in the battery compartment, making certain that the positive and negative (+ and -) battery terminals are attached to the corresponding terminals on the plate in the battery compartment. If an AC power failure occurs, the clock automatically switches to the battery power supply, the clock and timer memory continue running. When the AC power resumes, the clock switches back to AC again.

GETTING STARTED
Press the reset button (24) locates on the back of unit after AC plug in.
- The unit will display full segment for 2 seconds, then it will enter the normal mode.
- Display will lighten up.
- Color will keep flashing.
- The unit will display indoor temperature for 4 seconds.
- Remote Unit will start searching for 433 MHz transmission signal in 5 minutes.
- The unit will start searching RCC (RADIO CONTROLLED CLOCK) signal automatically.



Display in searching mode

- Antenna tower icon will turn on and keep displaying.
- Wave icon will start blooming and keep changing by 0.5 second interval.

- Automatically stop after 10 minutes if fail in receiving.

Note: Auto search can be stopped by pressing snooze button (9) for 3 seconds.



Display in good reception mode

- Antenna tower icon and all wave icons will keep displaying.



Display in poor reception mode

- Antenna tower icon and all wave icons will turn off.

(1) RECEPTION
- It will take 3-10 minutes to complete.

Reception signal	No signal

Note : For best results, place the radio controlled clock antenna (25) away from metal or electrical objects and near a window with a clear view to the sky.

(2) SETTING WITH RADIO CONTROLLED:
- Not necessary as it is automatically adjusted.

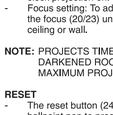
(3) SETTING WITHOUT RADIO CONTROLLED – MANUAL SETTING:
- Can be done when antenna tower icon is turned off by pressing 'snooze' button (9) for 3 seconds.

(4) TIME AND CALENDAR SETTING
(A) Setting Time and Calendar - Press TIME SET button (12) in normal mode and keep depress over 2 second to enter Time Set Mode, after enter the setting mode, press TIME SET button (12) to change the mode cycle as follows :

Normal → Language → Year → Month → Day → 12/24H → TIME ZONE → RTC Hour →RTC Min → Normal

Action (during data adjustment) :
- Press UP button (11) to adjust data forward
- Press DOWN button (13) to adjust data backward
- Keep depress UP or DOWN button for 2 second to enable auto forward

(a) Language Set Mode
Initial Value : English
Setting Cycle : ENG (English) → GER (German) → FRE (French) → SPA (Spanish) → ITA (Italian)



Display Show Select English



Display Show Select German



Display Show Select French



Display Show Select Spanish



Display Show Select Italian

(b) Year Set Mode
Initial Value : 2005
Year Range : 2000 to 2099



Display Show Year Set Mode

(c) Month Set Mode



Display Show Month Set Mode

(d) Day Set Mode



Display Show Day Set Mode

Remark : Weekday will recalculate when year, month or day is adjusted

(e) 12/24H Set Mode



Display Show 12/24H Set Mode (Select 12H)



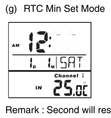
Display Show 12/24H Set Mode (Select 24H)

(f) RTC Hour Set Mode



Display Show Hour Set Mode

(g) RTC Min Set Mode



Display Show Min Set Mode

Remark : Second will reset for every minute adjustment

(B) Setting Alarm 1 and Alarm 2 - Press ALARM SET button (14) during normal mode and keep depress over 2 second to enter Alarm Set Mode, after enter the setting mode, press ALARM SET button (14) to change the mode cycle as follows :

Normal → AL1 Hour → AL1 Min → AL1 Weekend Alarm → AL2 Hour → AL2 Min → AL2 Weekend Alarm → Normal

Action (during data adjustment) :
- Press UP button (11) to adjust data forward
- Press DOWN button (13) to adjust data backward
- Keep depress UP or DOWN button for 2 second to enable auto forward



Display Show Setting Alarm 1 Hour



Display Show Setting Alarm 1 Min



Display Show Setting Alarm 1 Weekend Alarm – Mon to Fri



Display Show Setting Alarm 1 Weekend Alarm – Mon to Sat



Display Show Setting Alarm 1 Weekend Alarm – Mon to Sun



Display Show Setting Alarm 2 Hour



Display Show Setting Alarm 2 Min



Display Show Setting Alarm 2 Weekend Alarm – Mon to Fri



Display Show Setting Alarm 2 Weekend Alarm – Mon to Sat



Display Show Setting Alarm 2 Weekend Alarm – Mon to Sun

(5) Setting Alarm Output and Alarm On/Off
(a) Change the Alarm Output
Set Alarm off / Alarm buzzer◘ / Alarm radio ☒ Slide Switch (3) to Music position ☒ to select wake up by Radio, set to Buzzer ◘ position to select wake up by Buzzer, set to Alarm Off position to disable all alarm



Display Show Wake Up by Buzzer



Display Show Wake Up by Radio

(b) (i) Buzzer Pattern
1st 8 sec output 1 beep, 2nd 8 sec output 2 beep, 3rd 8 sec output 4 beep, after that continue output beep tone, the same pattern repeat at next minute again.

(c) Select Alarm 1 and Alarm 2 On/Off
By setting Slide Switch (3) to either MUSIC or BUZZER position, alarm is enable. Set Slide Switch (4) to AL1 + AL2 position to enable both alarm, set to AL1 position to enable only alarm 1, set to AL2 position to enable only alarm 2.



Display Show Enable Both Alarm and Select Wake Up by Buzzer



Display Show Only Enable Alarm 1 and Select Wake Up by Buzzer



Display Show Only Enable Alarm 2 and Select Wake Up by Buzzer



Display Show Enable Both Alarm and Select Wake Up by Radio



Display Show Only Enable Alarm 1 and Select Wake Up by Radio



Display Show Only Enable Alarm 2 and Select Wake Up by Radio

(6) Alarm Duration and Snooze Function
(a) Alarm Duration – Buzzer Alarm or Radio Alarm will continue output for 30 minutes if no key press, then it will stop automatically and wait for same alarm time on next day.
(b) Stop Alarm - Set the Slide Switch (3) to Alarm Off position will turn off (1) the current alarm, (2) cancel all Snooze function (if now in Snooze Mode) and (3) disable all Alarm
(c) When alarm coming, press SNOOZE button (9) will start Snooze function.

Action for Snooze :
- During alarming, press SNOOZE button (9) will enable snooze function, Buzzer Alarm or Radio Alarm will stop
- Snooze Interval is 9 minute (not include second offset)
- Snooze will continue unless Slide Switch (3) set to Alarm Off position or Buzzer Alarm or Radio Alarm stop automatically after 30 minutes

(7) Change Display Content
Press UP button (11) during normal can switch to display year, after 5 second timeout and return back to display date and month.



Display Show Year

(8) Sleep Function
During normal mode, press SLEEP button (7) to turn on Radio, the SLEEP time will keep flashing by 5 second, within 5 second and press SLEEP button can change the duration from 90 min, 60 min, 30 min and 15 min. Press Power button (8) to cancel sleep function.



Display Show Setting Sleep Duration



Display Show Under Sleep Mode (Radio Now Turn On)

RCC (Radio controlled clock)
- Unit will start receiving radio signal after power up or after reset.
- To turn RCC function on or off by pressing snooze button (8) for over 3 second.
- If radio turns on, current wave receive will stop or auto wave receive will disable.

DST - Daylight Saving Time (Only in RCC mode)
- DST will toggle on and off automatically after reception is done.



DST mode

(9) Thermometer Function
Indoor - The unit will check the indoor temperature by every 6 seconds
Outdoor - The unit will check the outdoor temperature by every 1 minute

Remark :
Temperature Range for Indoor : 0 to + 50°C or 32 to 122°F
Temperature Range for Outdoor : -20 to + 60°C or -4 to 140°F

(10) Change Display Indoor or Outdoor Temperature °F
Press IN/OUT button (5) to switch display Indoor or Outdoor temperature



Display Show Display Indoor Temperature

Display Show Display Outdoor Temperature

(11) 433 TX Function
The unit will start receiving under the following condition:
- After power up or reset - The unit will start receive 433 MHz transmission signal after power up or after reset for maximum 5 minutes, it will synchronize all channels signal.
- After receive the first signal, the unit will receive next signal for every 1 minute

RADIO OPERATION
- Press the power on/off button (8) to turn radio on
- Select AM or FM band using the wave band switch (29).
- Select the Station using the tuning control (17)
- Turn the volume control (19) to adjust volume as required.
- Press the power on/off button (8) to turn radio off.

Note :
- The AM band use an internal directional aerial. Rotate the radio for best reception.
- Ensure that the FM cord antenna (27) is completely unrolled and extended for best FM reception.

PROJECTOR
- This unit has a built-in projector (21/22) for clock and temperature.
- Press projection on/ off button (1/2) will switch on temperature and clock projection on.
- Focus setting: To adjust the projection clock brightness by turning the focus (20/23) until the projected time is clearly shown on the ceiling or wall.

NOTE: PROJECTS TIME IMAGE ON THE CEILING OR WALL OF A DARKENED ROOM.
MAXIMUM PROJECTION DISTANCE IS 3 - 9 FEET.

RESET
- The reset button (24) is located on the back of unit. Use a ballpoint pen to press it whenever you change the batteries, or unit is not performing as expected. This will return all settings to default value, and you will lose any stored data (alarm and clock settings).

CAUTON
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- Do not place the unit in closed bookcases or racks without proper ventilation.
- To prevent fire or shock hazard, do not expose unit to rain or any type of moisture.
- The unit should not be exposed to direct sunlight, very high or low temperature, moisture, vibrations or placed in a dusty environment.
- Do not use abrasive, benzene, thinner or other solvents to clean the surfaces of the unit. To clean, wipe it with mild non-abrasive detergent solution and clean soft cloth.
- Never attempt to insert wires, pins or other such objects into the vents or opening of the unit.

SPECIFICATIONS

Frequency range :	AM 530 - 1710 kHz FM 88 – 108 MHz
RCC :	
Carrier Frequency :	60kHz
Station :	WWVB
Output power :	350 mW
Speaker impedance:	8 ohm
Battery backup:	3V Flat Lithium x 3 CR2025 (for clock)
Power source :	AC 120V ~ 60Hz, 5 watts

WARNING: To reduce the risk of fire or electric shock do not expose this appliance to rain or moisture.

NOTE:
i) Do not connect FM antenna to outside antenna.
ii) The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.

REMOTE THERMO SENSOR

1. LCD DISPLAY
2. BATTERY LOW LED INDICATOR
3. °C / °F SLIDE SWITCH
4. BATTERY COMPARTMENT
5. RESET BUTTON
6. TABLE STAND
7. BATTERY DOOR
8. WALL-MOUNT HOLDER

For best operation:
1. Insert batteries for remote units before doing so for the main unit.
2. Place the main unit as close as possible next to the remote unit, reset the main unit after installing batteries. This will ensure easier synchronization between the transmission and reception of signals.
3. Position the remote unit and main unit within effective transmission range, which in usual circumstances, is 15 to 20 meters.

Note that the effective range is vastly affected by the building materials and where the main and remote units are positioned. Try various set.

Though the remote units are weather proof, they should be placed away from direct sunlight, rain or snow.

BATTERY INSTALLATION: REMOTE UNIT
The remote thermo sensor unit uses 2 x UM4 or "AAA" size alkaline batteries.

Follow these steps to install / replace batteries :
1. Remove screws on the battery compartment.
2. Select the temperature display unit on the °C/ °F slide switch.

3. Insert the batteries strictly according to the polarities shown therein.
4. Replace the batteries compartment door and secure its screws.

DISCONNECTED SIGNALS
Note that when the temperature falls below freezing point, the batteries of outdoor units will freeze, lowering their voltage supply and the effective range.

1. The transmission is within range and path is clear of obstacles and interference, shorten the distance when necessary.

TRANSMISSION COLLISION
Signals from other household devices, such as door bells, home security systems and entry controls, may interfere with those of this product and cause temporarily reception failure. This is normal and does not affect the general performance of the product. The transmission and reception of temperature readings will resume once the interference recedes.

NOTE ON °C AND °F
The unit of temperature display is selected on the °C / °F slide switch. Select °C for centigrade or °F Fahrenheit.

THE RESET BUTTON
This button is only used when the unit is operating in an unfavorable way or malfunctioning. Use a blunt stylus to hold down the button. All settings will return to their default values.