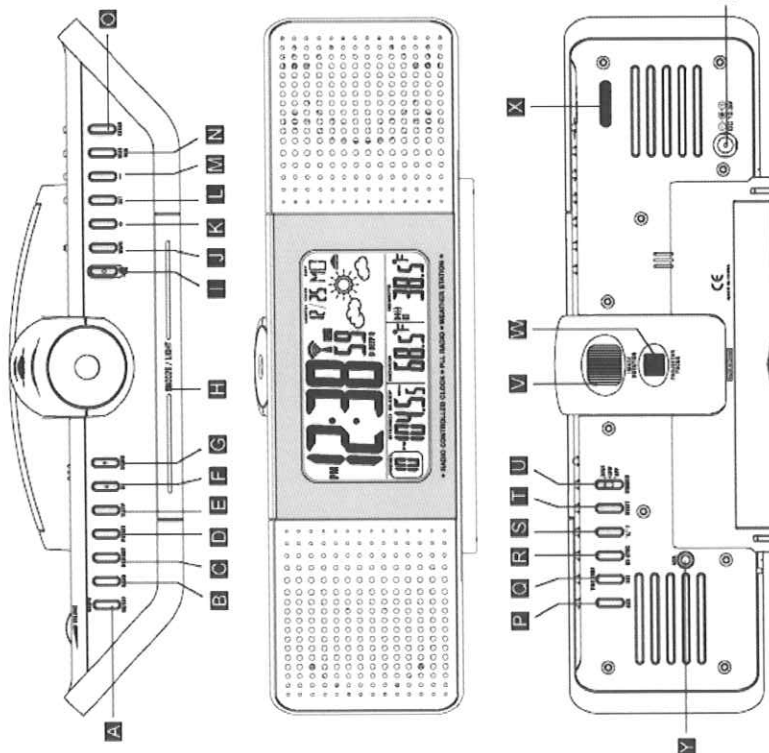


INSTRUCTION MANUAL

Locations of Control Main Unit

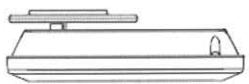
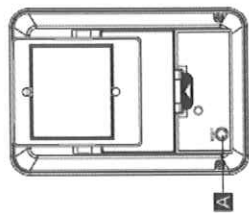
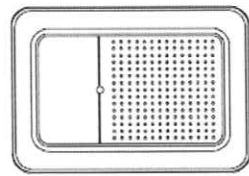


- | | | |
|-------------------------------|-------------------------------|---------------------------------|
| A RADIO ON /OFF BUTTON | J WAVE BUTTON | S °C/°F BUTTON |
| B BAND BUTTON | K + BUTTON | T RESET BUTTON |
| C MEMORY BUTTON | L SET BUTTON | U DIMMER LOW/HIGH BUTTON |
| D PRESET BUTTON | M - BUTTON | V IMAGE ROTATION SWITCH |
| E SLEEP BUTTON | N MIN/MAX BUTTON | W PROJECTOR FOCUS SWITCH |
| F TUNING UP BUTTON | O CLEAR BUTTON | X VOLUME SWITCH |
| G TUNING DOWN BUTTON | P AUX BUTTON | Y AUXILIARY INPUT |
| H SNOOZE/LIGHT BUTTON | Q DST/TIME ZONE BUTTON | Z DC JACK |
| I ALARM BUTTON | R RE-SYNC BUTTON | |

Model 4950

Remote Unit (Transmitter)

A RESET Button



Model 6725

- The configuration of your product may differ somewhat from that shown in the illustration.
- "AA" or "AAA" size battery. This clock may use more than one piece of battery. Please refer to the engraved battery marks inside the battery compartment for the correct battery type.

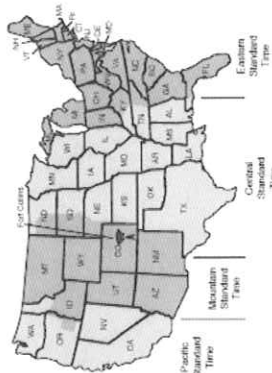
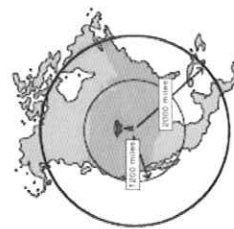
The RADIO-CONTROLLED Clock

With the Radio-Controlled Clock, you have the most accurate timepiece within the continent. It can receive the time signal transmitted by the National Institute of Standards and Technology (NIST), which is regulated by 3 atomic clocks and deviates less than 1 second within 3,000 years.

The NIST broadcasts the time signal (WWVB, 60kHz) continuously from Fort Collins, Colorado. This signal can be received anywhere in

the continental USA that long wave (AM) radio reception is possible with a portable radio. It is expected that the signal can reach a distance of 2,000 miles from the transmitter. Therefore, your clock will receive the signal within the broadcast range anywhere an AM signal can be received; generally the signal cannot be picked up in massive metal and concrete structures unless near a window. In addition, some environmental effects (see below) may affect the transmitting distance.

For more information, please study the WWVB WEB page of NIST at:
<http://www.boulder.nist.gov/timefreq/>



Feature

- Receive 60kHz WWVB signal transmitted by NIST at Fort Collins, Colorado
- Automatic time adjustment after signal reception
- Calendar with day of the week display
- Hour, minute and second display
- 12 or 24-hour format
- Indoor temperature and remote temperature
- Centigrade or Fahrenheit readout
- Indoor temperature measurement range from $-4^{\circ}\text{F} \sim 158^{\circ}\text{F}$ ($-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$)
- Outdoor temperature measurement range from $-58^{\circ}\text{F} \sim 158^{\circ}\text{F}$ ($-50^{\circ}\text{C} \sim 70^{\circ}\text{C}$)
- Temperature resolution 0.2°F (0.1°C)
- Dual alarm (Beep alarm + Wake to radio alarm)
- Clock operation temperature from $32^{\circ}\text{F} \sim 122^{\circ}\text{F}$ ($0^{\circ}\text{C} \sim 50^{\circ}\text{C}$)
- Time accuracy (Atomic clock) : better than 1 second in 3,000 years
- Time accuracy (free run) : within ± 60 second per month
- PLL AM/FM radio
- 30 preset station (15 station for AM and 15 station for FM)
- Sleep function
- Auxiliary input for MP3 or other sound source

Attention

The Radio-Controlled Clock obtains the accurate time with wireless technology. Same as all wireless devices, the receiving ability may be affected by, but not limited to, the following conditions:

- Long transmitting distance
- Nearby mountains and valleys
- Among tall buildings
- Near railway, high voltage cable, etc.
- Near freeway, airport, etc.
- Near construction site
- Inside concrete buildings
- Near electrical appliances
- Bad weather
- Inside moving vehicles
- Nearby metallic structures

Location Precautions

This clock receives a radio wave much like a TV or a radio. Be sure to locate it near a window or some other locations where reception is good. Avoid the following locations, which can interfere with proper reception.



Before You Begin

To ensure proper functioning of the Weather forecast station, please follow this set up procedure.

- Insert batteries for the main unit (Refer to section of **Battery Installation**).
- Place the main unit as close as possible next to the remote unit and insert batteries for the remote unit.
- Position the remote unit and main unit within effective transmission range, which in usual circumstances is 20 to 30 meters.

Note that the effective range is affected by the building materials and where the main and remote unit are positioned, try various setup for the best results.

Battery Installation

Battery Installation of the main unit

- Open the battery door
- Remove whole set of old batteries
- Load full set (4pcs AA size battery) of new batteries in polarity (+) and (-) as indicated
- Close the battery door
- Press RESET button once

Battery Installation of the Remote Unit

- Open the battery door
- Remove whole set of old batteries
- Load full set (2pcs AA size battery) of new batteries in polarity (+) and (-) as indicated
- Close the battery door
- Press RESET button once

Warning : Do not mix old and new batteries

Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel cadmium) batteries.

Alkaline battery is recommended.

Do not touch any other button or setting on your main unit. It will automatically receive the remote temperature and time signal after batteries inserted.

Getting Started

Thermometer

Upon power up of the remote unit (or pressing the RESET button), the temperature RF signal is immediately sent to the main unit. The main unit attempts to search the RF temperature signal for 5 minutes after power up (or pressing the RESET button).

If the RF signal is received within the first 5 minutes after power up of the main unit, the temperature will shown on the remote temperature display, otherwise it will showing blank $^{\circ}\text{F}$.

After the remote unit temperature is shown on the remote temperature display, the synchronization of main unit and remote unit is established, place the remote unit outside in a shaded, dry area to protect it as if under an umbrella.

If the RF temperature signal is not received within the first 5 minutes, press the RE-SYNC button on the main unit, the main unit will attempt remote temperature for another 6 minutes.

Radio Controlled Clock

As long as batteries are supplying power to the main unit, it receives the time signal and adjust time automatically. No manual adjustment is required after power up. Accurate adjustment of the clock based on the time signal is supported in the continental USA.

You are recommended to leave the clock overnight for searching time signal since night time allows better transmission of time signal.

Wave Signal Receive Operation

The main unit automatically receive the time signal everyday at 01:00am and make any required adjustment to the time setting.

The WAVE OK indicator and the antenna tower icon appears on the display if the time signal is successfully received.

Important : Do not perform any button or switch operation while a signal receive operation is in progress

Triggering a Wave Receive operation Manually

You can trigger a signal receive operation at any time by pressing the WAVE button, which cause the main unit to perform an immediate signal receive operation.

Unsuccessful Wave Signal Reception

If the automatic update other than 1:00am are unsuccessful, the wave on top of the antenna tower will be disappear. If the automatic update at 1:00am or manually triggered reception are unsuccessful, both of the wave icon and the WAVE OK icon will be disappeared.

If unsuccessful signal reception after battery installation or after reset, the main unit keep trying for 10 minutes every hour until time signal reception successful.

Manually Set the Clock

To Set the Calendar

- Press and hold SET button to active calendar set mode.
- Press + or – button sequentially to set year.
- Holding down either + or – button change the year at high speed.
- Press SET button to confirm year set and goes to date set.
- Press + or – button sequentially to set date.
- Holding down either + or – button change the date at high speed.

To Set the Time

- Press SET button after calendar set mode.
- Press + or – button sequentially to set minutes, when you press the + or – button once, the seconds count reset to 00.
- Holding down either + or – button change the time at high speed.
- Press SET button after desired time set and goes to time format set mode.
- Press + or – button to toggle between 12hr and 24 hr time display format.
- Press SET button to confirm and quit the set mode.

DST and Time Zone

To Set DST

- Press and hold the DST/TIME ZONE button until DST and ON icon shown.
- Press + or – button to set DST on or off.
- Press DST/TIME ZONE button again to confirm and quit.

To Set Time Zone

- Press the TIME ZONE button until your desire time zone shown on the display

Using Alarm

To Set Alarm Time

- Press ALARM button once, the BEEP ALARM icon turned on and the time display change to -:-.
- Press and hold ALARM button until the -:- change to previous set alarm time (default 6:00am after power up), press + or – button sequentially to set the alarm time.
- Holding down either + or – button change the alarm time at high speed.
- Press ALARM button again to confirm the alarm time set and quit.
- Press ALARM button twice, the RADIO ALARM icon turned on and the time display change to -:-.
- Repeat step 2 to 4 above.

To Active the Snooze Alarm

- Press ALARM button once, the (((BEEP))) icon turned on, press + or – will toggle the beep alarm time display and -:-, the snooze alarm enabled when the alarm time is shown and disabled with the -:- is shown.
- The unit will output beep sound for 1 minute and the (((BEEP))) icon will flash when beep alarm time reached, press the LIGHT/SNOOZE button will stop the beep alarm sound and the alarm will sound again 5 minutes after the alarm time and repeat for 2 times.
- To turn the alarm off, press the ALARM button once and the (((BEEP))) icon will stop flashing.

To Active the Radio Alarm

- Press ALARM button twice, the (((RADIO))) icon turned on, press + or – will toggle between the RADIO ALARM time display and -:-, the radio alarm enabled when the alarm time is shown and disabled with the -:- is shown.
- The unit will turn the radio on for 1 hour with previous set frequency and band as well as (((RADIO))) icon will flash when the radio alarm time reached.
- To turn the radio off, press RADIO ON/OFF button and the radio will turned off and the (((RADIO))) icon will stop flashing.

Using Radio

To Turn Radio On and Off

- Press RADIO ON/OFF button will make the unit turn the radio on with previous set frequency and band.
- Press RADIO ON/OFF button when the radio is turned on will turn the radio off and store the set preference and value before power off.

Tuning Frequency

- Press BAND button will toggle between AM and FM band when the radio is turned on
- Press UP or DOWN button will make the reception frequency increase or decrease in 50kHz for FM band or 10kHz for AM band.
- Press and hold the UP or DOWN for couple of second make the unit search for station and it will stop scanning once any station is detected.
- The STEREO icon will shown when the received signal is a stereo signal.

Memory Set

- Press and hold MEMORY button when a desire frequency shown on display
- Press PRESET button to change your desire station number
- Press MEMORY button once to confirm the setting and quit the memory set mode
- Repeat above steps to set all your desire station

Note : Press UP or DOWN buttons when the station number is flashing will make the unit about for memory set and quit the memory set mode

Recall Preset Memory

- Press PRESET button will recall the previous set or recall station number.
- Press PRESET button again will make the unit goes to next preset station.

Sleep Timer

- Press SLEEP button will enable the sleep function with 120 minutes count down.
- Sleep time will be decreased by 10 minutes with every single press of SLEEP button and eventually goes to 10 minutes sleep time, further press SLEEP button will turn the sleep function off accompany with OFF display.
- The SLEEP icon keep flashing during the sleep timer count down, the radio will be turned off when the sleep timer count to zero.

Using Auxiliary Input

- Connect a standard 3.5mm stereo cable between the unit and your sound source, for example MP3, iPod.
- Press AUX button will turn the unit on with AU shown on display.
- Press AUX again will turn the unit off.
- Press RADIO button when using AUX will switch the unit to radio.
- Press AUX button when using radio will switch the unit to AUX.

Check IN / REMOTE Temperature

The indoor temperature is displayed on the INDOOR temperature field and the REMOTE temperature will be shown on the REMOTE temperature field.

The LCD backlight will be always turned on once the unit is powered by an external adaptor and change color according to the REMOTE temperature as:

- RED : Higher than or equal to 75.2°F
- AMBER : Between 50.2°F to 75°F
- BLUE : Lower than or equal to 50.0°F

If the external adaptor is not connected to the unit, the LCD backlight will turned on according to the REMOTE temperature as above when the LIGHT/SNOOZE button pressed.

Maximum and Minimum Temperature

The maximum and minimum recorded temperature reading will automatically be stored in the memory.

Press the TEMP MAX/MIN button once to display the IN and REMOTE maximum record. Press the button again to show the IN and REMOTE minimum record. The respective indicator, MAX and MIN will be displayed.

To clear the memory, press CLEAR button when the maximum and minimum temperature records are shown, it will clear the record of the shown temperature field

Display Unit

The default unit for temperature is °F, press °C/°F button will toggle the display unit of temperature between °C and °F.

Receiver Stage Indicator

The RF signal indicator in the base unit remote temperature window will show the following:

	NO SIGNAL DETECTION
	SIGNAL DETECTION
	SUCCESSFUL RECEPTION

Weather Forecast

The main unit has a built-in barometer. The local weather forecast and weather tendency are predicted using the rate of change in atmospheric pressure, determined by a precisely calibrated pressure sensor. After turning on the unit for the first time, it takes 24 hours for the weather forecast data to be calculated for the first time. After 24 hours, the unit calculates the weather for the next 6 hours. To ensure a reliable weather calculation, do not relocate the unit during operation. Weather tendency is indicated by an up or down forecast arrow. (See table.)

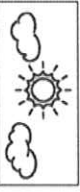
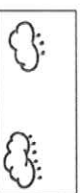
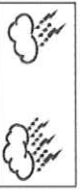
- The up arrow  indicates a significant increase in atmospheric pressure. This means the weather is going to improve.

- The down arrow  indicates a significant decrease in atmospheric pressure. This means the weather is going to get worse.
- The forecast icon  without an arrow indicates a steady/insignificant change of atmospheric pressure. This means the weather will remain unchanged.

Tendency - Steady	Tendency - Up	Tendency - Down
		

Weather Conditions

The current weather condition is displayed using one of five animated icons: Sunny, Sunny & Cloudy, Cloudy, Rainy and Stormy. (See table.) The Stormy icon only appears when a sudden and serious drop in atmospheric pressure is detected.

				
Sunny	Sunny & Cloudy	Cloudy	Rainy	Stormy

Losing Synchronization of the wireless thermometer

If the base unit displayed a proper remote temperature in the past but now displays blank "---", the remote unit and the main unit may have lost synchronization. If this occurs, press the RE-SYNC button of the main unit. The main unit will attempt outdoor temperature reception for another 6 minutes and reinitiate synchronization with the remote unit. If the remote temperature cannot be received, check:

- The distance of the main unit or remote unit should be at least 3-4 feet away from any interfering sources such as computer monitors or TV sets.
- Avoid placing the main unit onto or in the immediate proximity of metal window frames.
- Using other electrical products such as headphones or speaker operating on the same signal frequency (433MHz) may prevent correct signal transmission and reception.
- Neighbors using electrical devices operation on the 433MHz signal frequency can also cause interference.

Note: When the 433MHz signals is received correctly, do not re-open the battery cover of either the remote unit or the main unit, as the batteries may spring free from the contacts and force a false reset. Should this happen accidentally then reset both unit otherwise transmission problems may occur.

The maximum transmission range is 100 feet from the remote unit to the main unit (in open space). However, this depends on the surrounding environment and interference levels. The temperature signal travels in a straight line from the remote unit to the clock. The signal will not curve around blocking object. If no reception is possible despite the observation of these factors, all unit have to be reset.

Interference

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

Trouble – Shooting

- Press the RESET button when the clock is displaying irrelevant time even when the tower icon shows. This may happen when the external noise is severe enough to interfere with the time signal.
- Press the RESET button on the wireless transmitter if the readout is irrelevant or does not respond.

Care of your weather station

- Avoid exposing your weather station to extreme temperatures, water or severe shock.
- Avoid contact with any corrosive materials such as perfume, alcohol or cleaning agents
- Do not subject the weather station to excessive force, shock, dust, temperature or humidity. Any of these conditions may shorten the life of the clock.
- Do not tamper with any of the internal components of this weather station. This will invalidate the warranty and may cause damage.

Specification

Temperature measuring range

Indoor: -4°F ~ +158°F with 0.2°F resolution
Outdoor: -58°F ~ +158°F with 0.2°F resolution

Temperature checking interval

Indoor: 32 seconds
Outdoor: 16 seconds

Radio Frequency range

FM frequency range : 87.5MHz ~ 108MHz with 50kHz step
AM frequency range : 530kHz ~ 1710kHz with 10kHz step

Power source

Main unit: 4 X AA size battery (Alkaline recommended)

AC-DC adaptor (included)

Remote unit: 2 X AA size battery (Alkaline recommended)

Dimensions (L X W X H)

Main unit: 275 X 72 X 90mm

Remote unit: 100 X 70 X 22mm

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Under the environment with radio frequency interference, the unit may malfunction and require user to reset the unit.



<http://www.etl.com.hk>

Unit 903-7, 9/F, Tower 1
1 Hok Cheung Street, Hung Hom, Kowloon
Hong Kong