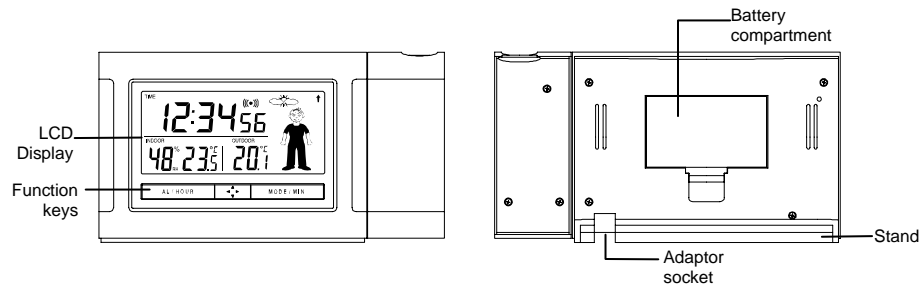


PROJECTION ALARM CLOCK WITH WEATHER BOY
Model WT513ER

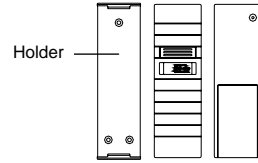
Instruction manual
!!Please read carefully before operating!!

INTRODUCTION:

Congratulations on purchasing this innovative Projection alarm clock which displays indoor temperature and humidity and also outdoor temperature (by 433MHz transmission). With the totally 14 different weather forecast icons featured by "weather boy", users can easily observe the forecast weather condition and will no longer worry about the sudden weather change. To enjoy the full benefits of this innovative product, please read this operating manual.



TEMPERATURE TRANSMITTER:

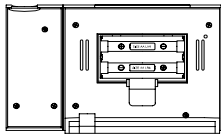


FEATURES

- Projection of time and outdoor temperature
- Weather forecasting with 14 easy-to-read weather forecast signs featured by weather boy
- Displays time with seconds, indoor temperature & humidity
- Display outdoor temperature
- Time alarm with snooze
- EL backlight

TO INSTALL AND REPLACE BATTERIES INTO THE PROJECTION ALARM CLOCK

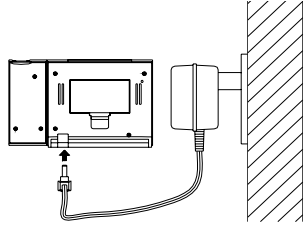
The Projection Alarm Clock uses 2 x AA, IEC LR6, 1.5V batteries. To install and replace the batteries, please follow the steps below:



1. Insert finger or other solid object in the space at the bottom centre of the battery compartment and lift up to remove the cover.
2. Insert batteries observing the correct polarity (see marking).
3. Replace compartment cover.

In addition or instead of inserting batteries, the AC adaptor can be used:

1. Connect the power adaptor to a wall socket
2. Insert the adaptor into the jack at the bottom of the clock



Important!

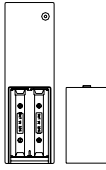
Use only the adaptor provided with the projection clock and make sure that your household voltage is appropriate to the working voltage of the transformer. Otherwise your Projection clock may be damaged.

POWER SUPPLIED BY BATTERIES AND AC/DC ADAPTOR

If the Projection clock is first powered by batteries and the power adaptor is subsequently used for extended period of time, the main power source of the Projection clock will switch to AC/DC power. The batteries will then act as a backup power source in case of power failure.

TO INSTALL AND REPLACE BATTERIES IN THE TEMPERATURE TRANSMITTER

The Temperature Transmitter uses 2 x AA, IEC, LR6, 1.5V batteries. To install and replace the batteries, please follow the steps below:



1. Remove the cover.
2. Insert the batteries, observing the correct polarity (see marking).
3. Replace the battery cover on the unit.

SETTING UP

1. First, insert 2 x AA, IEC LR6, 1.5V batteries into the projection clock. Once the batteries are in place, all segments of the LCD will light up briefly. Then the indoor temperature, the time as 00:00, will be displayed. If the indoor temperature is not displayed after a few seconds, remove the batteries and wait for at least 30 seconds before reinserting them. Once the indoor data is displayed proceed to step 2.

2. Within 1-1/2 minutes of activating the Projection clock, place 2 x AA, IEC LR6, 1.5V batteries into the transmitter.
3. After a few seconds of inserting the batteries into the transmitter, the projection clock will start receiving data from the transmitter. The remote temperature will then be displayed on the clock. If this does not happen after 2 minutes, the batteries will need to be removed from both units and reset from step 1.
4. In order to ensure sufficient 433 MHz transmission however, this should under good conditions be no more than 25 metres from where the Projection clock will be finally positioned (see notes on "**POSITIONING THE OUTDOOR TRANSMITTER**" and "**433 MHZ RECEPTION**").
5. Use the MODE/ MIN key to manually enter a time (and date) initially.

Note:

Should the total time of inserting the batteries into the transmitter take longer than 1-1/2 minutes from the time of inserting the batteries into the projection clock then temperature reception problems may occur. If the temperature is not being received, then see "**433 MHZ RECEPTION**", before resetting the units.

In the event of changing batteries to the transmitter, the projection clock needs to be reset. (See **RESETTING THE PROJECTION CLOCK**)

RESETTING THE PROJECTION CLOCK

To reset the Projection clock to the factory default setting or in case of a malfunction or changing batteries to transmitter, please remove all batteries from the unit and unplug the AC/DC adaptor from any power source. Wait at least for 3 minutes before powering up the Projection clock again.

BATTERY CHANGE:

It is recommended to replace the batteries in all units on an annual basis to ensure optimum accuracy of these units.



Please participate in the preservation of the environment. Return used batteries to an authorized depot.

PROJECTION OF TIME

Note:

The projection is a red light, not harmful under normal usage, yet care should be taken to **avoid looking directly into the light.**

1. When plugged into an AC outlet, the projection alarm clock can continuously project the time and the outdoor temperature

2. When operating on batteries alone, the projection alarm clock will only project when the SNOOZE button is pressed or the alarm is sounding.
3. The projection will auto-focus for display from about 1.7 to 2.0 metres away. At a dark enough surrounding, user may clearly see the projection.

The direction of the display can also be rotated 360° in 90° increments by pressing the Projection Direction button. The projector case can be rotated 180° to further help orient the projected display.

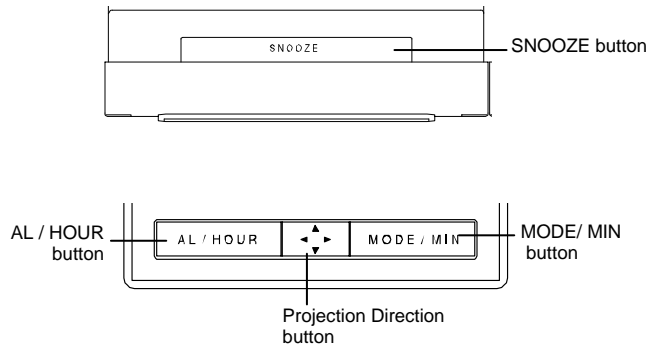
TOGGLE BETWEEN THE DISPLAY OF INDOOR TEMPERATURE/ HUMIDITY, PRESET ALARM TIME AND CALENDAR

By pressing shortly the MODE/MIN key, you will toggle between the following displays:

1. Indoor temperature and humidity;
2. Preset alarm time;
3. Month and day
4. Day and weekday;

FUNCTION KEYS

There are three function buttons located on the front of the projection alarm clock and one on the top. The function buttons are: AL/HOUR button, MODE/MIN button, Projection direction button, and SNOOZE button.



SNOOZE key

Press to initiate the snooze function when the alarm is sounding.
Press to activate the projection of time
Press to confirm the manual setting in the different setting modes
Press to activate the EL back-light

AL/HOUR key

Press and hold to advance to the alarm time setting
Press to set the hour in alarm setting mode
Press to set the hour in time setting mode
Press to set the date in calendar setting
Press to activate the EL back-light
Press to stop the alarm and snooze

MODE/MIN key

Press and hold to advance to the manual setting
Press to set the minute in alarm setting mode
Press to set the minute in time setting mode
Press to set the month and year in calendar setting mode

Press to toggle between various display for "day & month", "day & weekday", "indoor temperature & humidity" and "alarm time"
Press to activate the EL back-light
Press to stop the alarm and snooze

 **Projection Direction key**

Press to rotate the time/ outdoor temperature projection image in 90 increments
Press to activate the EL back-light

MANUAL SETTING

LCD contrast level

After pressing and holding the MODE/MIN key for about 3 seconds, the manual setting mode is activated. Then The LCD contrast can be set:

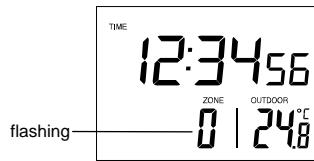


1. The contrast level will be flashing. Press the MODE/MIN key to adjust the contrast level 0 to 7 (default: 5).
2. Press the SNOOZE key to confirm and enter the **Time zone setting mode**.

Time zone setting

The time zone default of the Projection clock is "0". To set a different time zone:

1. The current time zone value at the bottom of the LCD display starts flashing.



2. Press and release MODE/MIN key to adjust the time zone. The range runs from 0, -1, -2 to -12, then 12, 11, 10 to 0, in consecutive 1-hour intervals.

3. Confirm with the SNOOZE key and enter the **Manual time setting**.

Manual time setting

The time can be manually set. The clock works as a normal Quartz clock.

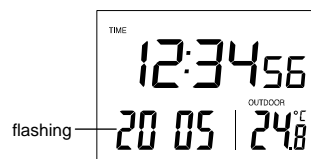


1. The hour and the minute digits will start flashing.
2. Use the AL/HOUR key to set the hour; MODE/MIN key to set the minute.
3. Confirm with the SNOOZE key and enter the **Calendar setting**.

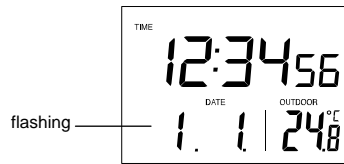
Calendar setting

The date default of the Projection clock is 1. 1. in the year 2005. The date can be set manually.

1. The year starts flashing.



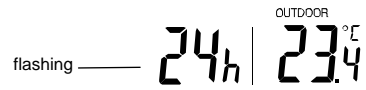
2. Use the MODE/MIN key to set the year (between year 2003-2029).
3. Press the SNOOZE key to confirm and to enter the month and day setting. The month and day digits will start flashing.



4. Use the AL/HOUR key to set the day and MODE/MIN key to set the month.
5. Press the SNOOZE key again to confirm and to enter the **12/24 hour time format setting**.

12/24 hour time format setting

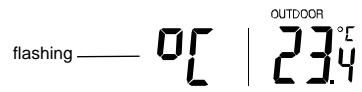
1. The time format digit starts flashing. Press the MODE/MIN key to select the 12-hour or 24-hour time format.



2. Press the SNOOZE key again to confirm and to enter the Temperature unit (C/ F) setting.

Temperature unit (C/ F) setting

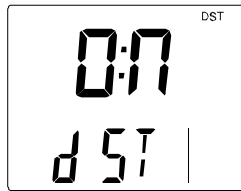
1. The temperature unit digit starts flashing. Press the MODE/MIN key to select the unit C or F.



2. Press the SNOOZE key again to confirm and to enter the Daylight saving time setting.

Daylight saving time setting

Note: This facility is not available in Australia and New Zealand.



User may skip doing this part of setting for this Australian version projection clock (press the SNOOZE key to exit the setting mode and go back to the normal display). Setting of "dST On" or "dST Off" will have no effect on the reception time.

TIME ALARM

Setting the alarm

1. Press and hold "AL/HOUR" button for about three seconds until the alarm time is flashing.



2. Press and release "AL/HOUR" to advance the hour, and "MODE/MIN" to advance the minute. The time will display in 24-hour format.
3. Press the SNOOZE key to confirm. The alarm is now set and activated.

Activating / Deactivating the alarm

1. After entering the alarm setting mode, the alarm is activated.

2. To toggle between activating and deactivating the alarm, press the "AL/HOUR" button briefly. Alarm-on icon, "(((•)))" will be displayed next to the time display when the alarm is activated.

Turning alarm off (while sounding)

1. While the alarm is sounding, press and release the SNOOZE bar to disable the alarm for 10 minutes. (After the SNOOZE bar is pressed, the alarm icon will keep flashing. After 10 min, the alarm will sound again.)
2. To disable the alarm, press and release the AL/HOUR or MODE/MIN button.

WEATHER FORECAST AND TENDENCY:

The weather forecast icons (Weather boy):

One of the 14 different weather icons (featured by Weather boy with different clothing) is displayed in the centre of LCD, which indicates the different forecast weather condition due to air pressure level (Sunny, Sunny + Cloudy or Rainy) and the current outdoor temperature:

	26 C	19 – 25.9 C	10 – 18.9 C	0 – 9.9 C	< 0 C
Sunny					
Sunny + Cloudy					
Rainy					

Note:

After setting up, readings for weather forecasts should be disregarded for the next 12-24 hours. This will allow sufficient time for the Projection Clock to collect air pressure data at a constant altitude and therefore result in a more accurate forecast.

Common to weather forecasting, absolute accuracy cannot be guaranteed. The weather forecasting feature is estimated to have an accuracy level of about 75% due to the varying areas the Projection Clock has been designed for use in. In areas that experience sudden changes in weather (for example from sunny to rain), the Projection Clock will be more accurate compared to use in areas where the weather is stagnant most of the time (for example mostly sunny).

If the Projection Clock is moved to another location significantly higher or lower than its initial standing point (for example from the ground floor to the upper floors of a house), remove the batteries and re-insert them after about 30 seconds. By doing this, the Projection Clock will not mistake the new location as being a possible change in air-pressure when really it is due to the slight change of altitude. Again, disregard weather forecasts for the next 12 to 24 hours as this will allow time for operation at a constant altitude.

THE WEATHER TENDENCY INDICATOR

Working together with the weather icons are the weather tendency indicators (the upward and downward arrow located near the Weather boy). When the indicator points upwards, it means that the air-pressure is

increasing and the weather is expected to improve, but when indicator points downwards, the air-pressure is dropping and the weather is expected to become worse.

Therefore, user may see how the weather has changed and is expected to change. For example, if the indicator is pointing downwards together with cloudy icons, it means that the last noticeable change in the weather was when it was sunny (the sunny icon only). Therefore, the next change in the weather will be the cloudy icons since the indicator is pointing downwards.

Note:

Once the weather tendency indicator has registered a change in air pressure, it will remain permanently visualized on the LCD.

BACKLIGHT

1. The projection alarm clock has an EL backlight designed for night-viewing. This will light up for about 9 seconds when any button is pressed.
2. The EL backlight cannot be turned on constantly; this would drain the batteries.
3. The EL backlight will be turned on when the alarm time is reached.

CHECKING FOR 433 MHZ RECEPTION:

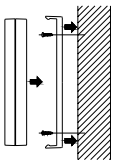
In normal surroundings (for example away from interfering sources such as TV sets), the outdoor temperature can usually be easily received within 2-1/2 minutes. If the outdoor temperature is not displayed on the LCD after 2-1/2 minutes, then check the following:

1. The distance of the units should be at least 1.5 - 2.0 metres away from interfering sources such as computer monitors or TV sets.
2. Avoid placing the units onto or in the immediate proximity of metal doors, window frames or structures.
3. Using other electrical products such as headphones and speakers that operate on the same signal (433 MHz) can prevent the transmission pick up.
4. Neighbours using electrical products operating on the 433 MHz signal can also cause interference. In most severe cases, the reception is only possible once all other electrical products using the 433 MHz are switched off.
5. Within thick concrete rooms such as basements and tower blocks, the 433 MHz signal can be weakened (avoid placing near metal frames and structures).
6. Transmission can be affected by exposure to extreme temperature conditions. For example, if the weather has been extremely cold (under -25°C) for an extended period of time then the transmission signal may be weakened. (Please bear this in mind when positioning the transmitter).

Note: Should after checking the above list and the outdoor temperature is still not received, then reset the units (see **Resetting the Temperature Station** below).

POSITIONING THE OUTDOOR TRANSMITTER:

The Outdoor transmitter is supplied with a holder that may be attached to a wall with the three screws or double-sided tape supplied. To attach to the wall using screws, please follow the steps below:



1. Mark the wall using a pen through the holes in the holder to obtain the exact drilling position.
2. Drill holes in the wall at the points marked.
3. Screw holder onto wall.

The Outdoor Transmitter simply clicks in or out of the holder. When inserting or removing the Outdoor Transmitter to or from the wall holder please hold both units securely to avoid tearing the holder from the wall.

There is also double sided tape included with the wall holder. On smooth surfaces this can be used instead of drilling holes. The mounting surface can, however, affect the transmission range. If for example the unit is attached to a piece of metal, it may then either reduce or increase the transmitting range. For this reason, we recommend not placing the unit on any metal surfaces or in any position where a large metal or highly polished surface is in the immediate proximity (garage doors, double-glazing, etc.). Before securing in place, please ensure that the Projection Clock can receive the 433 MHz signal from the Outdoor Transmitter at the positions that you wish to situate them.

CARE AND MAINTENANCE:

Extreme temperatures, vibration and shock should be avoided as these may cause damage to the units and give inaccurate forecasts and readings.

When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.

Do not submerge the units in water.

Immediately remove all low powered batteries to avoid leakage and damage. Replace only with new batteries of the recommended type.

Do not make any repair attempts to the units. Return it to their original point of purchase for repair by a qualified engineer. Opening and tampering with the units may invalidate their guarantee.

Do not expose the units to extreme and sudden temperature changes, this may lead to rapid changes in forecasts and readings and thereby reduce their accuracy.

SPECIFICATIONS:**Temperature measuring range:**

Indoor : -9.9°C to +36.9°C with 0.1°C resolution ("OF.L" displayed if outside this range)

Indoor humidity range: 1% to 99% with 1% resolution (Display "- -" if outside this range)

Indoor temperature checking intervals : Every 15 seconds

Indoor humidity checking intervals : Every 20 seconds

Outdoor : -29.9°C to +69.9°C with 0.1°C resolution ("OF.L" displayed if outside this range)

Outdoor temperature checking intervals : Every 5 minutes

Power consumption:

Projection alarm clock : 2 x AA, IEC LR6, 1.5V

Outdoor transmitter : 2 x AA, IEC LR6, 1.5V
(alkaline batteries recommended)

Dimensions (L x W x H):

Projection alarm clock : 165.8 x 48.5 x 90.6 mm

Outdoor transmitter : 39 x 21 x 128 mm (wall bracket excluded)

LIABILITY DISCLAIMER

Please ensure that all discarded packaging and unwanted electrical items are discarded in a correct and responsible manner. All recyclable material should be deposited at relevant recyclable waste collection points.

As stated on the gift box and labelled on the product, reading the "User manual" is highly recommended for the benefit of the user. This product must however not be thrown in general rubbish collection points.

The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.

This product is designed for use in the home only as indication of the temperature.

This product is not to be used for medical purposes or for public information.

The specifications of this product may change without prior notice.

This product is not a toy. Keep out of the reach of children.

No part of this manual may be reproduced without written authorization of the manufacturer.

This product is guaranteed for the period of 12 months from date of purchase against failure to operate correctly to its listed specifications due to any manufacturing defects.

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