Weather forecast with hygrometer, Cable Free in-out Thermometer and Radio Controlled Clock

USER'S MANUAL

(GARNI 635EL)

BRAND GARNI 635ELMANUAL (ENG) SIZE: W65 X H105 (mm)
BY EMILY TSOI 07/08/06

INTRODUCTION

Congratulations on your purchase of the weather station.

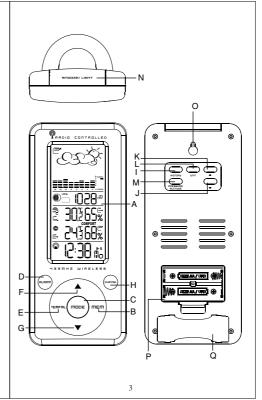
The basic package comes with a main unit, which is the weather forecast station and, a remote unit, the thermo hygrometer thermo sensor.

The main unit is capable of keeping track of the maximum and minimum temperature of different sites. And no wire installation is required and operates at 433MHz.

Apart from temperature it shows the indoor and outdoor relative humidity and rates of the comfort level. It also retains the maximum and minimum relative humidity readings. A remote thermo-hygro sensor is able to receive and display readings from up to 3 remote sensors.

The built-in barometer enables to display the atmospheric pressure with user-selectable altitude adjustment. A bar graph will show the pressure trend of the last 24 hours.

What is more, is equipped with a moon phase scanner, which lets you check the moon phase of the forward & backward 39 days.



Facilitates easy reading of weather forecast, indoor & outdoor humidity, remote and indoors temperatures and calendar clock, weather forecast, Atmospheric pressure chart and moonphase.

B MEMORY [MEM] BUTTON

Recalls the maximum or minimum temperature and humidity of main and remote unit

C MODE BUTTON

Toggles the display modes and confirms entry while setting the values for display

D ALARM BUTTONDisplays the alarm time or sets the alarm status

E TEMPERATURE ALARM BUTTON

Displays the temperature alarm or sets the upper or lower limit.

F UP (▲) BUTTON Advances the value of a setting

G DOWN (▼) BUTTON Decreases the value of a setting

H CHANNEL BUTTON Displays different sensor temperature

I HISTORY BUTTON

Displays the pressure history of previous hours.

DOWN (▼) BUTTON (REAR PANEL)

Display the moonphase of previous days or sets the altitude or sea level pressure.

K UP (▲) BUTTON (REAR PANEL)
Display the moonphase of following days or sets the altitude or sea level pressure.

L UNIT BUTTON (REAR PANEL) Sets the unit of altitude or pressure

M PRESSURE / ALTITUDE BUTTON (REAR PANEL)
Toggles the display between local pressure, sea level
pressure and altitude.

N SNOOZE/LIGHT BUTTON
Activate the snooze function and backlight (for LED/EL light version)

O WALL-MOUNT RECESSED HOLE

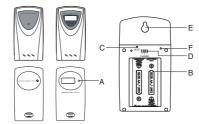
For mounting the main unit on a wal

P BATTERY COMPARTMENTS
Accommodates two UM-3 or "AA" size 1.5V batteries

Q REMOVABLE TABLE STAND

standing the main unit on a flat surface

MAIN FEATURES: REMOTE UNIT



A LED INDICATOR

Flashes once when the remote unit transmits a reading Flashes twice when low battery is detected on sensor unit

B BATTERY COMPARTMENT

Accommodates two LR6 (AA) 1.5V batteries

C RESET BUTTON

Press to reset all setting if you have selected different channel.

CHANNEL SELECTOR

elect the channel before you install batteries.

E WALL-MOUNT RECESSED HOLE

Supports the remote until in wall-mounting

F °C/ °F BUTTON

BEFORE YOU BEGIN

For best operation,

- 1. Insert batteries for remote units before doing so for the main unit.
- 2. 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 vastly affected by the building materials and where the main and remote units are positioned.

Try various set-ups for best result.

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

BATTERY INSTALLATION: REMOTE UNIT

- 1. Remove the screws on the battery compartment.
- Select the channel
- 3. Install 2 batteries (UM-3 or LR6 (AA) 1.5V) strictly according to the polarities shown.
- 4. Replace the battery compartment door and secure

BATTERY INSTALLATION: MAIN UNIT

- Open the battery compartment door.
 Install 2 batteries (UM-3 or LR6 (AA) 1.5V) strictly according to the polarities shown.
- 3. Replace the battery compartment door.

LOW BATTERY WARNING

When it is time to replace batteries for the remote sensor, the respective low-battery indicator [\bigstar] will show up on the indoor or outdoor temperature & hygrometer display.

HOW TO USE THE TABLE STAND OR WALL MOUNTING

The main unit has a removable table stand, which when connected, can support the unit on a flat surface. Or you can remove the stand and mount the unit on a wall using the recessed screw hole.

GETTING STARTED

- 1. SETTING UP THE BAROMETER
- a. When batteries are installed, the display will show the "hPa" and "mBar". User should press the "Unit" key to adjust the unit of pressure, it will shows "0" and "meter". User can use the "Up" or "Down" keys to change to "feet", or use the "Unit" key to confirm the unit.

 b. After user confirmed the unit of height, it will shows
- "10" with "meter" or "32" with "feet". User can use the "Up" or "Down" keys to change to height of the place, and use the "Unit" key to confirm the height.
- Remark: The default unit of pressure is hPa/mBar, unit of height is meter, height is 10 meters. It will use the default value if no key is pressure for 60 seconds.

2. SETTING UP THE THERMO - HYGROMETER AND RADIO CONTROLLED CLOCK

- a. Once batteries are in place for the remote unit, they will start transmitting temperature and humidity readings at around 45 seconds intervals.
- The main unit will also start searching for signals for about two minutes once batteries are installed. 10 seconds upon successful reception, the outdoors temperatures and humidity will be displayed. The main unit will automatically update its readings at about 45-second intervals.
 b. If no signals are received, blanks "•• " will be displayed.
- Hold [▼] for 2 seconds to enforce another search for about 2 minutes. This is useful in synchronizing the transmission and reception of the remote and main units.

c. When remote signal reception is finished, it will automatically synchronize its current time and dated when brought within rang of the DCF77 signal.

Repeat this step whenever you find discrepancies between the reading shown on the main unit and that on the remote unit.

HOW TO CHECK REMOTE AND INDOOR TEMPERATURES AND HUMIDITY

The wave display on the outdoors temperature indicates the reception of the remote unit is in good order.

If no readings are received from the remote unit for more than two minutes, blanks "**." will be displayed until further readings are successfully searched. Check the remote unit is sound and secure. You can wait for a little while or Hold [▼] for 2 seconds to enforce an immediate search. If the temperature or humidity goes above or below than the reasuring range of the main unit or the remote unit (stated). measuring range of the main unit or the remote unit (stated in specification), the display will show "**-" & "HHH" or "LLL" respectively.

HOW TO READ THE KINETIC WAVE DISPLAY

The kinetic wave display shows the signal receiving status of the main unit. There are three possible forms:

The unit is in searching mode.	. @
Temperature readings are securely registered.	a
No signals.	••. °C

MAXIMUM AND MINIMUM TEMPERATURES AND HUMIDITY

The maximum and minimum recorded indoor temperature, humidity and outdoor temperatures will be automatically stored in memory. To display them, Press [MEM] once to display the maximum readings and again the minimum readings.

The respective indicators

The respective indicators, [MAX] or [MIN] will be displayed.

To clear the memory, hold down [MEM] for two seconds. The maximum and minimum readings will be erased.

If you press [MEM] now, the maximum and minimum readings will have the same values as the current ones until different readings are recorded.

TEMPERATURE AND HUMIDITY TREND

The trend indicator shows the trend of temperatures and humidity collected at that particular remote sight. Three trends: rising, steady, and falling will be shown.

Arrow indicator	TREND	(TREND	TREND
Temperature Humidity Trend	Rising	Steady	Falling

WEATHER FORECAST

The unit is capable of detecting atmospheric pressure changes. Based on collected data, it can predict the weather for the forthcoming 12 to 24 hours

Symbol auf dam Display	\$	CTŽ.	Œ		<u> </u>
Forecast	Sunny	Slightly Cloudy	Cloudy	Rainy	Snowy

- 1. The accuracy of a general pressure-based weather forecast is about 70%.
- 2. The weather forecasts. It may not necessarily reflect the current situation.
- 3. The "Sunny" icon, as applies to night time, implies clear weather.

ATMOSPHERIC PRESSURE

The atmospheric pressure indicator, in the weather forecast window, uses arrows to indicate if the atmospheric pressure is increasing, remaining stable, or decreasing.

Arrow indicator	TREND	(TREND	TREND
Pressure Trend	Rising	Steady	Falling

COMFORT LEVEL INDICATORS

The comfort level indicators COM, WET or DRY will tell you if the current environment is comfortable, too wet or too dry. The comfort indicators will appear on the display of the main unit when the following conditions are satisfied:

Indicator displays on the unit	Temperature Range	Humidity Range	Shows that the Current Environment
сом	20°C to 25°C (68°F to 77°F)	40%RH- 70%RH	Ideal range for both relative humidity and temperature
WET	-5°C -+ 50°C (23°F - 122°F)	OVER 70%RH	Contains excess moisture
DRY	-5°C -+ 50°C (23°F - 122°F)	Below 40%RH	Contains inadequate moisture
No Indicator	Less than 20°C (68°F) or More than 25°C (77°F)	40%RH to 70%RH	No comment

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HOW TO CHECK THE BAROMETRIC PRESSURE

The current and historical barometric pressure is shown on the atmospheric pressure window.

For user staying at a higher altitude such as in the mountain area, see-level barometric pressure applies. Use Pressure/ Altitude key to toggle the display to sea level pressure display.

Press and hold the Pressure/Altitude key to enter the sea level pressure adjusting mode.

Use the UP or DOWN key to enter sea level pressure and use Pressure/Altitude to confirm.

The atmospheric pressure can be displayed in mb/hPa or

inHg.

To change the pressure unit, press and hold the Unit key at sea level pressure display and use UP or Down key to select. Press the Unit key to confirm.

If you want to check the pressure history for a particular hour during the past 36 hours, press the HISTORY button. Each press on the button will go back by an hour.

The recorded atmospheric changes for the past 24 hour are displayed in a bar chart above the atmospheric pressure window.



HOW TO USE AND SCAN THE MOON PHASE

The product is equipped with a moon phase display and scanner with which eight moon phases are displayed on the screen from new moon to waning crescent. The one falls on the current day will flash on the screen.

If it is a full moon or new moon day, the icon will flash faster. The eight phases are:



Firs

To check the moon phase for a particular day, press the UP or DOWN button once. The clock will enter moon phase scanning mode.

Use the UP or DOWN button to locate the date you want to check. The calendar will be day-driven in this mode. You can go back 39 days travel to next 39 days. The corresponding moon phase will appear immediately

on the screen.

The unit will return to the last display mode when the UP and DOWN buttons are left idle for 2 seconds.

DISCONNECTED SIGNALS

If without obvious reasons the display of the outdoor temperature goes blank, Hold [▼] for 2 seconds to enforce an immediate search.

If that fails, check:

- . The remote unit is still in place.
- 2. The batteries of both the remote unit and main unit.

Replace as necessary.

Note: When the temperature falls below freezing point, the batteries of outdoor units will freeze, lowering their voltage supply and the effective range.

3. 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.

HOW TO CHANGE THE TEMPERATURE ALARM SETTING

- 1. Press once [TEMP ALARM] button
- 2. Then Press and hold [TEMP ALARM] button for 2 seconds.
- 3. Enter the Hi [▲] or Lo [▼] temperature alert setting value by using [▲] or [▼] button.

 4. Press [TEMP ALARM] once to exit.

HOW TO SET THE RADIO CONTROLLED CLOCK

- After the batteries are installed. The clock will automatically search the radio signal. It takes about 3-5 minutes to finish this process
- 2. If user wishs to disable the auto-reception feature, holds the "Up" front panel) for 2 seconds to disable it.
- 3. To enable the auto-reception feature again, holds the "Up" for 2 seconds again to force it receive and allow it receive at desired time.
- 4. If the radio signal is received, the date & time will be set automatically with radio control signal icon [] turns on.

 5. If the clock fails to receive the time signal, it will be show
- as [] icon. Then user can set the time manually.

CALENDAR CLOCK DISPLAY MODES

The clock and the calendar share the same section of the display. The calendar is displayed in a day-month format.

Each press on the MODE button will change the display between clock with second, clock with day of week, zone time with day of week.zone time with second and day-month.

HOW TO SET THE CLOCK MANUALLY

To set the clock manually, hold **MODE** for two seconds it will show the year. Use $[\, lacklapha \,]$ or $[\, lacklapha \,]$ to change it. Press MODE to confirm. Repeat the same procedure to set display language, °C/°F, year, month, date, date-month format, 12/24, hour and minute.

During the setting, press and hold [▼] or [▲] will

increase or decrease the value rapidly. For display language, you can choose among English (En), German(DE), French(Fr), Italian (IT) and Spanish (SP) in that order.

If there is an item you do not wish to change, simply press

[MODE] to bypass the item.

When you finished the change, press [MODE] to exit. The display will return to the clock mode

HOW TO SET AND ARM THE ALARM

To set an alarm,

- 1. Press [ALARM] once to display alarm time. If the alarm is disarmed, the time will be displayed as "OFF".
- 2. Hold [ALARM] for two seconds. The hour digits will blink.
- 3. Enter the hour using [▼] or [▲].
 4. Press [ALARM]. The minute digits will blink.
- 5. Enter the minutes using [▼] or [▲]. 6. Press [ALARM] to exit.
- 7. Repeat the same procedure to set other alarm.

ALARM FEATURE

- * Weekday Alarm
 The alarm sound will be activated and the icon will be flashed on weekday when it is armed and the alarm time is reach.
- * Single Alarm

The alarm sound will be activated and the icon will be flashed once when it is armed and the alarm time is reach. Once it finished, it will be disabled automatically.

The pre-alarm sound will be activated and the icon will be flashed if outdoor temperature under or equal two degree C. Which is programmable 15, 30, 45, 60 or 90 minutes earlier than the weekday alarm or single alarm time.

HOW TO SET THE ZONE TIME

- To set the zone time,

 1. Press [MODE] until at zone time display mode,

 2. Hold [MODE] for two seconds, the zone time offset will be displayed.
- 3. Enter the offset using [▼] or [▲].

4. Press [MODE] to exit.
The alarm "("W" " ("S" and "Pre-AL" icons will be displayed indicating which alarm is armed. You can also arm or disarm an alarm by pressing the [\blacktriangle],[\blacktriangledown] button at alarm display mode.

Press MODE to return to clock display mode.

SNOOZE FEATURE

When the alarm sound is on, press the snooze key enter snooze mode. After 8 minutes, alarm sound will be wake up automatically. The snooze cycle will be restarted if you press the snooze key again.

If you leave the alarm sound on for 2 minutes, it will enter

poze mode automatically with maximum 3 time

HOW TO STOP AN ALARM

Press [ALARM] on the unit to stop an alarm.

PRECAUTIONS

This product 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.
- 2. Do not clean the unit with abrasive or corrosive materials. They may scratch the plastic parts and corrode the electronic
- 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
- 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
- 5. Only use fresh batteries as specified in the user's manual.
- Do not mix new and old batteries as the old ones may leak.

 6. Always read the user's manual thoroughly before operating

SPECIFICATIONS

Temperature Measurement

Indoor Temperature measurement

: -5.0°C to +50.0°C Proposed operating range 23.0°F to 122.0°F Humidity Measuring range : R.H. 25% to 90%

at 25°C (77°F) : 0.1°C Temperature resolution

0.2°F : 1% R.H. Humidity resolution

Remote unit

: -10°C to + 50°C Proposed operating range

23 °F to 122 °F : 0.1°C 0.2°F Temperature resolution

: 433 MHz RF Transmission Frequency . 3

Maximum No. of Remote unit

: Maximum 30 meters RF Transmission Range (open area) Temperature sensing cycle : around 43~47 seconds

Relative Humidity Measurement

Remote relative humidity · 25% to 95%

measurement range : 1%RH Resolution

Barometric Pressure Measurement

: 750 to 1100 mb/hPa Pressure measuring range

at 25°C (22.15 to 32.49 inHg) : 20 minutes

Pressure sampling cycle Moon Phase Functions Moon Phase Scanner Range

: forward/ backward 39 days

17

16

Calendar Clock

Day of week selectable in 5 language (E, F, D, I,S) Dual 2-minute crescendo alarm with snooze Pre-alarm for ice alert

Power

: use 2 pcs UM-3 or LR6 (AA) Main unit 1.5V batteries

Remote sensing unit : use 2 pcs UM-3 or LR6 (AA)

1.5V batteries

Weight

Main unit : 231g (without battery) Remote sensing unit : 62g (without battery)

Main unit : 93.5(L) x 185.7(H) x 33.2(D) mm Remote sensing unit : 55.5(L) x 101(H) x 24(D) mm

CAUTION

- The content of this manual is subject to change without further notice.
- Due to printing limitation, the displays shown in this manual may differ from the actual display.
- The contents of this manual may not be reproduced without the permission of the manufacturer.

EC-DECLARATION OF CONFORMITY

Product: GARNI 635EL

This product contains the approved transmitter and complies with the essential requirements of Article 3 of the R&TTE 1999/5/EC Directives, if used for its intended use and that the following standard(s) has/have been applied:

Efficient use of radio frequency spectrum (Article 3.2 of the R&TTE Directive)

applied standard(s) EN 300 220-1,3:2000

Electromagnetic compatibility

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

applied standard(s) applied standard(s) EN 301 489-1.3:2000 EN 300 339:2000

Low voltage directive

EN 60950-1:2001 applied standard(s) applied standard(s) EN 50371: 2002

Additional information:

The product is therefore conform with the Low Voltage Directive 73/23/EC, the EMC Directive 89/336/EC and R&TTE Directive 1999/5/EC (appendix II) and carries the respective CE marking.

RTTE Compliant Countries:

All EU countries, Switzerland (CH) And Norway N

QA MANAGER: H.Y.WANG K.S plastic factory Guan Lan / Shen Shen / China

