**INTERNET BASED 4-DAY FORECAST WEATHER STATION**   **Owner's Manual**

W194-X/W194-1/W194-0, W196

Thank you for purchasing the new generation of our Internet based 4-day forecast weather station. Designed and engineered with the state-of-art technology and components, this instrument will provide accurate and reliable readings of 4-day regional forecast & local weather information. Read this manual carefully to fully explore the features and functions of the new product.

Overview

Internet → (4-Day Regional Forecast)   > 20,000 Cities Selection   PC Transmitter   4-Day Regional Forecast   Main Unit (Receiver)   Outdoor Temp   Remote Sensor
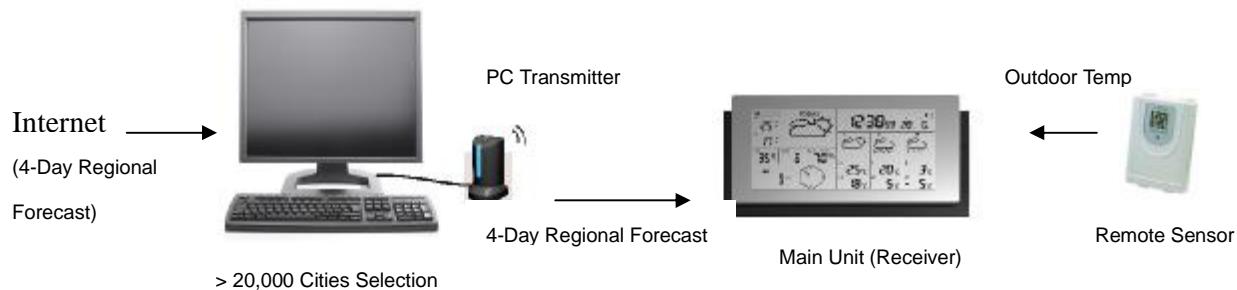
REGIONAL FORECAST

When your PC is online, 4-day regional forecast data will be updated from the Internet automatically and send to the main unit wirelessly via the PC transmitter

Forecast includes:

- Weather Forecast
- High & low temperature
- Average humidity
- Chance of precipitation
- Maximum UV index
- Average wind speed & direction

City list:

- Europe: Over 9,200 cities selection
- North America: Over 10,900 cities selection
- Asia Pacific: Over 300 cities selection in Japan & Australia

LOCAL WEATHER INFORMATION

Local weather information includes:

- Current indoor temperature
- Current outdoor temperature sent from the remote thermo sensor wirelessly
- Barometric pressure readings
- Local weather forecast

Quick start guide for basic setup

1) Connect 6.0V adapter to the main unit and insert 6 pieces of AA batteries

2) Install 2 pieces of AAA batteries in the remote sensor

3) Set the pressure unit, sea level pressure reading & current local weather condition icon using [UP] or [DOWN] button on the main unit. Use [BARO] button to confirm each setting. (See "Local Weather Forecast & Pressure Setting" section for more details)

4) Hold [CHANNEL / SEARCH] button for 3 seconds on the main unit to search for RF signal from remote sensor

5) Press [Tx] button inside the battery compartment of the remote sensor to transmit RF signal. The respective outdoor channel will appear on the upper left of the main unit when RF connection is established

6) Install 3 pieces of AAA batteries in the PC transmitter.

7) Connect the PC transmitter to your PC via USB cable

8) Ensure that your PC is connected to the Internet. Run the INSTALL.EXE (or NIS01_INSTALL.EXE) program in the CD to start installation

9) After the installation is completed, enter your home city location & other setting on the PC program. 4-day forecast will be updated on your PC program automatically via the Internet

10) Press [PC SEARCH] button repeatedly on the main unit until the RF antenna bar icon flashes. The main unit will start searching for RF signal from PC transmitter

11) Press [TRANSMIT] button on your PC Transmitter to enforce transmitting RF weather data to the main unit

12) Once the RF connection is established between the main unit & PC transmitter, RF icon with full strength & "LAST UPDATE: TODAY" will appear. It may take 10 minutes to 1 hour to receive & display all regional forecast information on the main unit

Name and Functions of Buttons on Main Unit:

Top Key

[MODE/SNOOZE/LIGHT]

- Toggle the next 3 days' forecast between
  - Hi/Lo temperature
  - Average wind direction / average wind speed / chance of precipitation
  - Maximum UV Index / average humidity
  - Auto-scroll " ⟳ " display function
- Extend backlight if adapter is not connected to your main unit
- Trigger snooze alarm

Back Keys	**Press Functions**	**Hold 3 seconds**
[PC SEARCH]	Receive RF signal from PC transmitter	
[CLOCK]	Read time, day-of-week & sunrise/set time	12/24 Hour & day/month format setting
[ALARM]	Read alarm time; enable/disable alarm	Alarm time setting
[WIND / ▲]	Select wind speed's unit 1 step forward in setting	Fast advance in setting
[C/F / ▼]	Select degree C/F 1 step backward in setting	Fast backward in setting
[CHANNEL/ SEARCH] (for W194-X/W194-1)	Select Channel 1,2,3, auto scroll ⟳	Search for remote sensor
[BARO] (for W194-X/W194-1)	Toggle current & past 12 hour pressure	Pressure unit, sea level pressure & local weather forecast setting

Name and Functions of Buttons on PC Transmitter:

Top Keys	**Press Functions**	**Hold 3 seconds**
[TRANSMIT]	Transmit regional forecast data & synchronize with main unit	Turn on/off blue light bar

Name and Functions of Buttons on Remote Sensor:

Top Keys	**Press Functions**
[Tx]	Transmit outdoor temperature data to main unit

[CH 1/2/3]   Select remote channel 1, 2 or 3

INSTALLATION

SETTING UP THE MAIN UNIT (RECEIVER)

BATTERY & ADAPTER INSTALLATION:

Main Power Source: Plug in the 6.0V adapter into the adapter socket at the back for basic operation and continuous backlight

Battery installation: Lift off the battery cover, install 6 pieces of AA batteries according to the polarity indicated and close the battery cover.

LOCAL WEATHER FORECAST & PRESSURE SETTING (For W194-X/W194-1)

A pressure sensor is built in the main unit to provide local weather forecast & pressure reading.

After battery installation, the main unit will enter pressure setting mode in the following sequence.

Pressure unit (mb / hPa or inHg) > Current sea level pressure > Current local weather condition > Exit

The corresponding icon will flash. Press [▲] or [▼] to select, press [BARO] to confirm each setting.

NOTE:

- Please check the current sea level pressure reading of your location from weather web site
- Please select current weather condition of your location between sunny, partly cloudy, cloudy, rainy or stormy

Sunny	Partly Sunny	Cloudy	Rainy	Stormy

- You may also enter the local weather forecast & pressure setting any time by holding the [BARO] button for 3 seconds. (Details also refer to the "BAROMETRIC PRESSURE & LOCAL WEATHER FORECAST" section)

SETTING UP THE REMOTE THERMO SENSOR

BATTERY INSTALLATION

Loosen the screws on the battery door with a small screw driver, insert 2 pieces of AAA batteries according to the polarity indicated. (Replace the cover and tighten the screws after the RF setting below)

ESTABLISH RF CONNECTION WITH MAIN UINIT

- Place the main unit away from metal & source of interference such as mobile phones, appliances, TV etc.
- For the first installation, turn on the main unit and then the remote sensor. Set Channel 1 for the first remote sensor.   Set channel 2 and channel 3 for the 2nd and 3rd sensor
- Hold [CHANNEL/SEARCH] button on main unit until a beep is sound to search for remote sensor. The corresponding channel number on the display will flash indicating it is in the searching mode

- Press the [Tx] button inside the battery compartment of remote sensor to transmit RF signal
- When RF connection is established, the respective temperature of the selected channel will appear on the main unit
- Replace the cover and tighten the screws on the remote sensor

PC TRANSMITTER & PROGRAM INSTALLATION

BATTERY INSTALLATION & USB CONNECTION

- Slide to open the battery door on the bottom of the PC transmitter, insert 3 pieces of AAA batteries according to the polarity indicated. Close the battery door.
- Connect PC transmitter to your PC via USB connection

PC PROGRAM INSTALLATION

- Before installation, ensure that
    1) Your PC is connected to the Internet. Try browsing through a couple of websites to make sure
    2) You are using Windows 2000, XP or Vista
    3) PC transmitter is connected to your PC via USB connection
- Insert CD into your CD ROM and double click the INSTALL.EXE (or NIS01_INSTALL.EXE) program to start installation. Follow the instruction to complete the installation. You need to have Microsoft .NET Framework Version 2.0 Redistributable Package (x86) installed in your Windows in order to complete the installation of the 4-day forecast PC program. If this file was not installed in your Windows before, the PC installation program will redirect you to the Microsoft web site for download. You may also access below web site directly. http://www.microsoft.com/downloads/details.aspx?familyid=0856eacb-4362-4b0d-8edd-aab15c5e 04f5&displaylang=en
- After the installation is completed, click [SETTING…] in the HOME WEATHER display. Then click [SET LOCATION] to enter your home city location on the PC program.
- After setting your home location, 4-day forecast of your home city will be updated on your PC program automatically via the Internet. You may click [UPDATE FORECAST] anytime to update the forecast display on the program.

NOTE: Refer "TROUBLESHOOTING" section if you have problem displaying 4-day forecast information on your PC program

ESTABLISH RF CONNECTION WITH MAIN UINIT

- Before setting up the RF connection, please ensure that you have successfully received 4-day forecast on your PC program for your home city
- Place the PC transmitter & main unit away from metal & source of interference such as PC monitor, mobile phones, appliances, TV etc. It is recommended to start with a short distance (eg. within 0.5 meter) between

the two units for initial RF setup. Once the RF connection is established, place the main unit within the effective transmission range from the transmitter. Shorten the distance if necessary for best reception.

- To search for RF signal from a new PC Transmitter, press [PC SEARCH] button on the main unit repeatedly until the RF antenna icon 📶 flashes.
- Press [TRANSMIT] button on the PC Transmitter to enforce transmitting RF weather data to the main unit
- Once the RF connection is established between the main unit & PC transmitter, the RF icon "📶" with full strength & "LAST UPDATE: TODAY" will appear on the main unit. In the first few minutes of the RF reception, the main unit is showing data on one part of the screen and this is normal. The rest of the screen display data will gradually appear in the next 10 minutes to 1 hour.

NOTE:
- If you have waited 1 hour or more without seeing the rest of the screen, shorten the distance between the PC transmitter & main unit, check the battery levels and repeat the setup procedure above
- If it continues to fail, try removing the USB connection and all batteries from the PC transmitter. Reinstall the batteries and then reconnect the USB connection again. Repeat above procedure to set up the RF connection

LOCAL WEATHER INFORMATION (For W194-X/W194-1)

MAIN UNIT'S DISPLAY
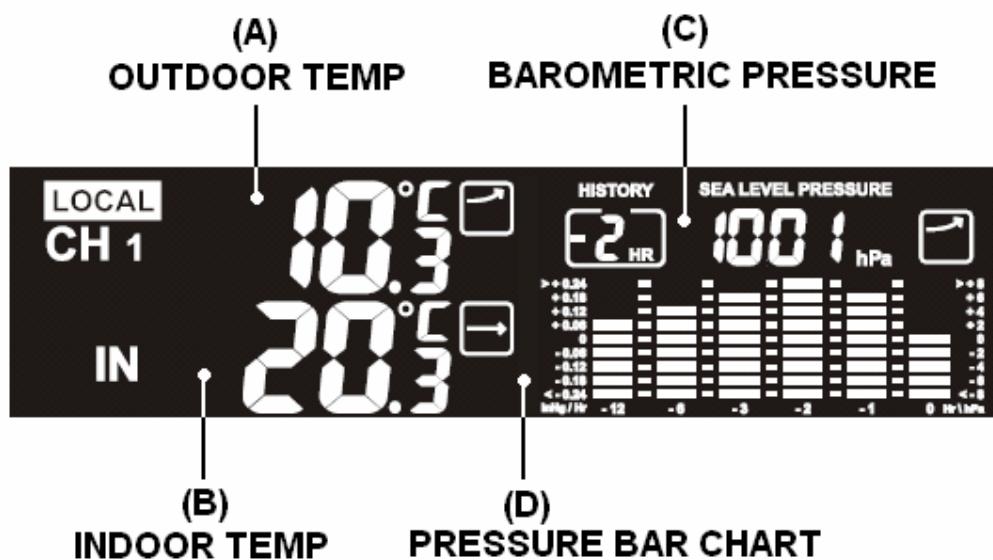
A & B) INDOOR & OUTDOOR TEMPERATURE

Press [C/F] button to select temperature unit C/ F.

Press [CHANNEL/SEARCH] to select Ch1, Ch2, Ch3 and auto-channel scrolling 🔄 display modes.

The arrow icons will indicate rising, steady or falling according to the trend of the temperature measurements in the past hour.

Hold [CHANNEL/SEARCH] to search for RF signal from remote sensor (See "SETTING UP THE REMOTE

THERMO SENSOR")

C) BAROMETRIC PRESSURE & LOCAL WEATHER FORECAST

A pressure sensor is built in the main unit to provide local weather forecast & pressure reading.

Press [BARO] repeatedly to show the past 12 hours of pressure measurements. "0 Hr" represents the current pressure reading. "-1 Hr" represents the pressure reading of the past hour and so on.

Hold [BARO] to enter local pressure setting mode and set the following items in sequence.

Pressure unit (mb / hPa or inHg) > Current sea level pressure > Current local weather condition > Exit

Press [Up] or [Down] to select, press [BARO] to confirm each setting.

NOTE:

- Please check the current sea level pressure reading of your location from weather web site
- Please select current weather condition of your location between sunny, partly cloudy, cloudy, rainy or stormy
- Local weather Forecast only appears when regional forecast is out-dated for more than 10 days. "LOCAL" icon will appear together with the local weather forecast graphic on the lower left of the display

D) PRESSURE BAR CHART

The pressure bar chart shows the historical sea level pressure trend of the past 12 hours.

4-DAY REGIONAL FORECAST INFORMATION

MAIN UNIT'S DISPLAY
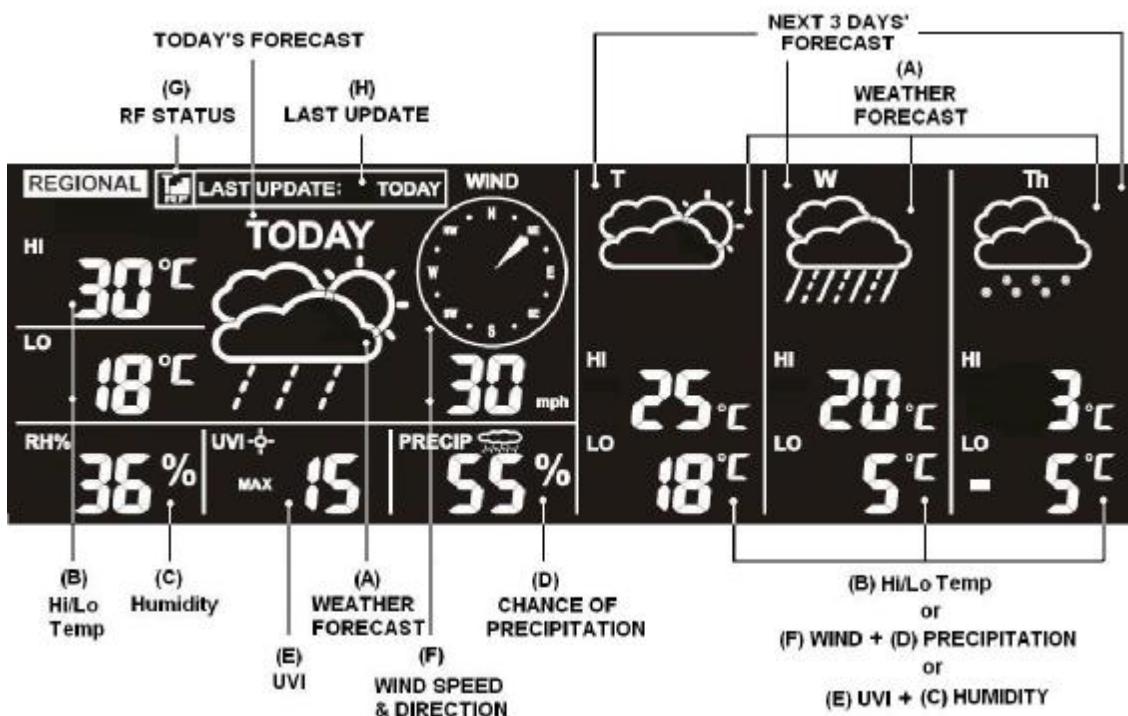
When your PC is online, 4-day regional forecast data will be updated from the Internet automatically and send to the main unit wirelessly via the PC transmitter

REGIONAL WEATHER FORECAST

4-day regional weather forecast with 28 different weather symbols

PC Program	Main Unit	Description				
		Clear			Mostly cloudy with thunderstorms
		Partly cloudy			Overcast
		Partly cloudy with light rain			Overcast with light rain
		Partly cloudy with light sleet			Overcast with light sleet
		Partly cloudy with light snow			Overcast with light snow
		Partly cloudy with showers			Overcast with showers
		Partly cloudy with sleet showers			Overcast with sleet showers
		Partly cloudy with snow showers			Overcast with snow showers
		Partly cloudy with thunderstorms			Overcast with rain
		Mostly cloudy			Overcast with sleet
		Mostly cloudy with light rain			Overcast with snow
		Mostly cloudy with light sleet			Overcast with thunderstorms
		Mostly cloudy with light snow			
		Mostly cloudy with showers			
		Mostly cloudy with sleet showers			
		Mostly cloudy with snow showers			

NOTE: If your PC is not online for more than 10 days, today's regional weather forecast will be replaced by local weather forecast measured by the built-in pressure sensor and the "LOCAL" icon will appear.

B) HIGH / LOW TEMPERATURE FORECAST

Press [C/F] button to select degree C or F

To view the high & low temperature for the next 3 days, press [MODE] repeatedly until HI & LO icons appear

C) AVERAGE HUMIIDTY FORECAST

Average humidity forecast is located next to the RH% icon.

To view the average humidity for the next 3 days, press [MODE] repeatedly until "RH%" icon appears

D) CHANCE OF PRECIPITATION

The chance of precipitation in term of percentage is displayed next to the "PRECIP" icon.

To view the precipitation forecast for the next 3 days, press [MODE] repeatedly until "PRECIP" icon appears

E) MAXIMUM UV INDEX FORECAST

The maximum UV index forecast is located next to the "UVI" icon

To view the maximum UV forecast for the next 3 days, press [MODE] repeatedly until "UVI" icon appears

UVI 1 to 2:   Maximum UV level is low. Low danger to the average person

UVI 3 to 5:   Maximum UV level is moderate. Moderate risk of harm from unprotected sun exposure

UVI 6 to 7:   Maximum UV level is high. High risk of harm from unprotected sun exposure

UVI 8 to 10:   Maximum UV level is very high. Very high risk of harm from unprotected sun exposure

UVI 11 to 15:   Maximum UV level is extreme. Extreme risk of harm from unprotected sun exposure

F) AVERAGE WIND SPEED & WIND DIRECTION FORECAST

Average wind speed & direction forecast is shown next to the "WIND" icon.

Press [▲/WIND] to select wind speed unit between km/h, m/s, knots & mph.

16 wind directions resolution: N for north, S for south, SW for south-west and so on

To view the wind speed/direction forecast for the next 3 days, press [MODE] repeatedly until "WIND" icon appears

G) RF RECEPTION STATUS

The icon shows the RF connection status between the main unit and the PC transmitter.

 Main unit is successfully synchronized to the PC transmitter and is receiving weather data from PC transmitter periodically.

 Flashing indicates the main unit is searching & receiving RF signal from PC transmitter

 Fail to receive RF signal from PC transmitter

(see "ESTABLISH RF CONNECTION WITH MAIN UINIT" section to reconnect the PC transmitter)

H) LAST UPDATE OF REGIONAL FORECAST

It shows the last update of regional forecast from the Internet.

"LAST UPDATE: TODAY":   regional forecast is updated today from the Internet

"LAST UPDATE: -1 DAY":   regional forecast is updated yesterday from the Internet

…. and so on

If your PC is not connected to the Internet for more than 10 days, it will show "LAST UPDATE: -- DAY" and the regional weather forecast will be replaced by the local weather forecast measured by the built-in pressure sensor. The rest of the forecast information such as temperature, humidity, chance of precipitation, UVI & wind forecast will show " - - " until the PC is connected to the Internet again.

TIME
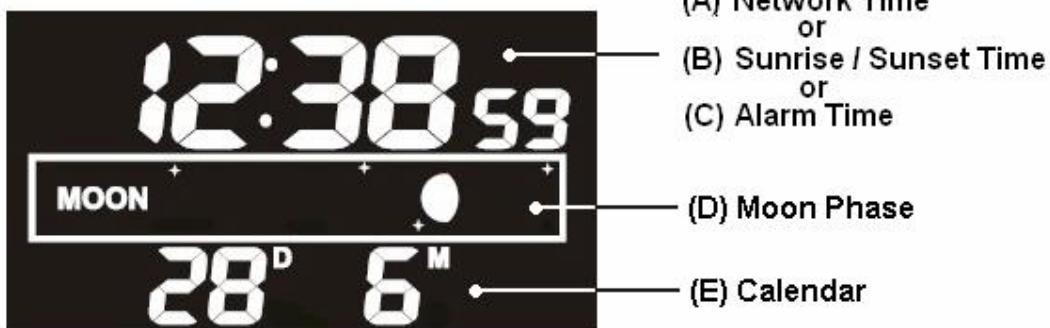
A) NETWORK TIME (Auto-synchronized clock)

The clock on the main unit is synchronized to the Internet network time automatically and is adjusted for optimal accuracy.

NOTE:

- If your PC is not connected to the Internet for a long period of time, the clock display may not be accurate
- You may set the time offset (+/- 0.5, 1, 1.5 or 2 hours) of your home city in the PC program to adjust DST & time zone if necessary and the time on your main unit will be updated accordingly

Hold [CLOCK] on the main unit to set the 12/24 hour format, press [▲] or [▼] to select and press [CLOCK] to confirm. The "M" & "D" icons will flash, press [▲] or [▼] to select day/month or month/day format for the calendar. Press [CLOCK] to confirm and exit.

B) SUNRISE / SUNSET TIME

To view the sunrise and sunset time of your home city, press [CLOCK] button repeatedly until the respective "SUNRISE" or "SUNSET" icon appears

C) ALARM TIME

Press [ALARM] button to view the alarm time and "AL" icon will appear. Press [ALARM] again to enable & disable the alarm. "♠ " icon appears when alarm is enable. Press [CLOCK] to return to time display

Hold [ALARM] for 3 seconds to enter alarm setting mode. Press "▲"or " ▼" to enter the desired Hr/ Min values and press "ALARM" to confirm setting. When alarm is going off, press [ALARM] to stop alarm for one day. Press [MODE/SNOOZE/LIGHT] to activate snooze function

D) MOON PHASE

Moon phase is displayed according to the current calendar automatically

E) CALENDAR

Press [CLOCK] repeatedly to show the time with day-of-the-week or seconds

Calendar can be displayed in day/month or month/day format. See section A "NETWORK TIME" for setting.

DISPLAY BACKLIGHT

Once the adapter is connected, the backlight will be turned on continuously.

Press MODE/SNOOZE/LIGHT for an extended backlight if adapter is not connected.

LOW BATTERY INDICATION

Low battery indication is available for the main unit, remote thermo sensors & the PC transmitter. Replace the batteries and follow the setup procedure in this instruction manual

	Low battery indicator
Main unit:	Next to the "IN" icon
Remote thermo sensor:	Below the "CH 1 2 3" icon (For W194-X/W194-1)
PC Transmitter:	Below the RF indicator

PC TRANSMITTER

PC transmitter comes with a blue light bar. You may disable or enable the continuous light bar function by holding the [TRANSMIT] button on the PC transmitter.

Press [TRANSMIT] to enforce transmitting RF weather data to the main unit.

See "PC TRANSMITTER & PROGRAM INSTALLATION" section to set up the PC transmitter

NOTE: To run the PC program, ensure that your PC transmitter is connected properly to the PC via an USB port

PC PROGRAM

After installation, a small toolbar icon of your PC program appears on the lower right of the Window indicating your program is running and it will automatically access 4-day forecast information when your PC is online. You may open the above PC program window by double clicking this toolbar icon to view the full details.

IMPORTANT NOTE*:* If the toolbar icon disappears, your PC program is terminated and no longer access the weather information from the Internet. Restart the program again.

HOME WEATHER

SETTING

Click [SETTING…] to set the home city's location & unit/time format. Click [SET LOCATION] to set your home location. Click [SAVE] to save your setting and exit. The forecast information will be updated on your PC program according to your new home location and send to your main unit automatically.

UPDATE FORECAST

Click [UPDATE FORECAST] to manually receive 4-day forecast from the Internet and display on the program

SEND TO RECEIVER

Click [SEND TO RECEIVER] to manually send the 4-day forecast data to the main unit via the PC transmitter.

It may takes more than 10 minutes to 1 hour to update all of the 4-day forecast data on the main unit.

CITY 1, 2, 3 & 4

SELECT LOCATION

Beside your home city, you can preset & monitor the regional forecast of up to 4 different cities on your PC program

- Click to select "CITY 1", "CITY 2", "CITY 3" or "CITY 4" on the top of the program
- Click [SET LOCATION] to select the location
- Click [SAVE] to save & exit the setting. The PC program will automatically update the 4-day forecast of your selected city from the Internet
- To view the weather forecast of your preset city list, click the corresponding city number

NOTE: The forecast information of city 1, 2, 3 & 4 will not be sent to your main unit

UPDATE FORECAST

Click [UPDATE FORECAST] to manually receive 4-day forecast from the Internet of your selected city.

TROUBLESHOOTING

1. Ensure that you are using Windows 2000, XP or Vista and your PC is connected to the Internet. Try browsing through a couple of websites to make sure. You need to have Microsoft .NET Framework Version 2.0 Redistributable Package (x86) installed in your Windows in order to complete the installation of the 4-day forecast PC program. If this file was not installed in your Windows before, the PC installation program will redirect you to the Microsoft web site for download. You may also access below web site directly. http://www.microsoft.com/downloads/details.aspx?familyid=0856eacb-4362-4b0d-8edd-aab15c5e04f5&displaylang=en

2. Ensure that the PC transmitter is properly connected to the USB port of your PC. Otherwise, you are unable to run the PC program and access the 4-day forecast update from the Internet

3. Ensure that adapter is plugged into the main unit and all batteries in the main unit, PC transmitter & the remote thermo sensor are fresh. Replace battery when the respective low battery indicator appears on the main unit (refer "LOW BATTERY INDICATION" section)

4. If the toolbar icon of the PC program disappears on the lower right of your Window, your program is terminated and no longer access 4-day forecast from the Internet. Restart the program again

5. In the first few minutes of the RF reception from PC transmitter, the main unit is showing data on one part of the screen and this is normal. The rest of the screen display data will gradually appears in the next 10 minutes to 1 hour. If you have waited 1 hour or more without seeing the rest of the screen, shorten the distance between the PC transmitter & main unit and check the battery levels. Then repeat the setup procedure in "ESTABLISH RF CONNECTION WITH MAIN UINIT" section. If it continues to fail, try removing the USB connection and all batteries from the PC transmitter. Reinstall the batteries and then reconnect the USB connection again. Repeat the setup procedure in "ESTABLISH RF CONNECTION WITH MAIN UINIT" section.

6. If the RF indicator is showing full strength but one or more of the next 3 days' forecast is missing on the main unit & PC program, your PC may be offline for many days. Connect your PC to the Internet again to receive the latest forecast update

7. If your time on the PC program & main unit is off by half an hour or more, click [SETTING…] on the PC program and set the hour offset until the proper time is set.

8. If your city does not appear in the 20,000 city list, select the one near your home location

9. Heavy Internet traffic may slow down the respond of the server temporary. Try later if you wish to update the forecast manually by the [UPDATE FORECAST] button.

BATTERY DISPOSAL

Replace only with the same or equivalent type recommended by the manufacturer. Please disposal of old, defective batteries in an environmentally friendly manner in accordance with the relevant legislation.
Attention should be drawn to the environment aspects of battery disposal.

-Symbol indicating separate collection for electrical and electronic equipment.

NOTE:
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

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 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.

SPECIFICATIONS

Software	:	Compatible with Windows 2000, XP & Vista
USB	:	1.1 or above

Rx W194-X, W194-1, W194-0

Indoor Temperature:		0 C to + 50 C (+32 F to +122 F)
Channel	:	Maximum 3 remote sensors (for W194-X/W194-1)
Transmission	:	Up to 100M (330 ft.) in open area RF 434 MHz
Resolution	:	0.1 degree C for temperature
Clock	:	Auto-synchronized clock from Internet, Quartz back-up
Power	:	6.0V adapter (W194-X only) & AA x 6 pcs for main unit

PC transmitter   W196

USB	:	1.1 or above

Transmission	:	Up to 100M (330 ft.) in open area , RF434 MHz
Channel	:	1 channel
Power	:	AAA x 3 pcs

Remote thermo sensor W186-D

Remote sensor	:	-20 C to +60 C (-4 F to +140 F)
Transmission	:	Up to 100M (330 ft.) in open area , RF434 MHz
Channel	:	3 channel
Resolution	:	0.1 degree C for temperature
Power	:	AAA x 2 pcs