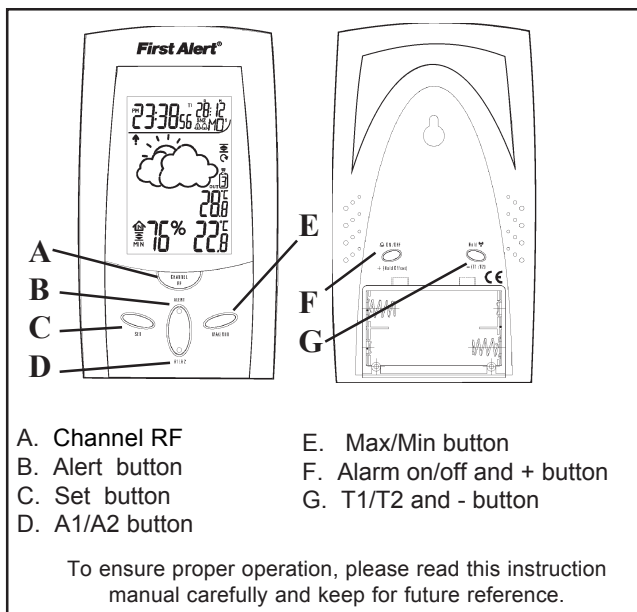


Congratulations! You now own a First Alert Brand Indoor/Outdoor Wireless RF Weather Station - Model FWS-105. This unit can receive and display temperature signals from up to 3 remote sensors. It can also identify changes in humidity and predict weather conditions for a 24 hr. period.



### Set-up

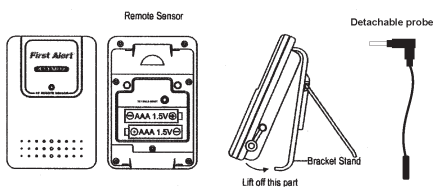
Both the Weather Station (receiving unit) and the Remote sensor (sending unit) require batteries. Insert the batteries in the Weather Station before doing so for the remote units.

#### To Install Batteries in your Weather Station

- 1 Remove the base stand. Press the door tab and slide down the battery cover on the back of the main unit. Insert 2 AA size batteries according to the "+" and "-" polarity marks shown in the battery compartment.
- 2 The (—) dash icon will flash on the LCD screen. The main unit is now ready to register with and receive the RF temperature signal from the remote sensor(s).

#### Battery Installation for your Wireless Remote Sensor

- 1 Lift off the bracket stand of the RF remote sensor, then use a small Philips screwdriver to remove the battery cover screws.
- 2 Insert 2 AAA size batteries according to the "+" and "-" polarity marks shown in the battery compartment.
- 3 Once the batteries are inserted, the sensor will transmit the temperature signal to the receiving unit at 30 second intervals or when there is a 0.2°C change in temperature. The sensor is also equipped with a manual transmission button (TX) located in the battery compartment. To operate, use a ball point pen or other pointed tool to press the TX button for 2 seconds.
- 4 Once the main unit has received the temperature signal, the icon "1" and the temperature of the corresponding sensor will be displayed on the lower part of the screen.
- 5 If you have more than one remote sensor, please do not insert batteries for all remote sensors at the same time. After registration of the first sensor is completed (i.e. the temperature is displayed on the screen), then insert the batteries for the second sensor and complete registration before proceeding with the third sensor.



**NOTE:** In order to protect our environment, please dispose the old batteries promptly and properly. Do not burn or bury them.

Before replacing the back cover, try the test described in the Operations section of the manual to make sure the two units are communicating.

#### For wireless remote sensor with attachable probe only

- If measurement of water, soil, or liquid is desired, open the cover of the plug hole at the side of the sensor and insert the probe plug.
- If the outdoor temperature is extremely low (below 10°C), extend the 6 foot probe cord outdoors, and keep the remote sensor unit indoors to avoid freezing up the battery.
  - The temperature readings will be displayed on the remote channel matching the remote sensor where the probe has been inserted.

## User Manual for Model FWS-105



### Troubleshooting

If the display for a particular channel shows a dash (—), check: the following items:

- The remote unit of that channel is still in place and connected.
- The batteries of both units are fresh. Replace as necessary.
- The transmission is within range and path is clear of obstacles and interference. Shorten the distance when necessary.
- Avoid signals from other household devices, such as home security systems and entry controls, that may interfere with this product and cause temporary reception failure. This is normal and it doesn't affect the general performance of the product. Temperature transmission and reception of readings will resume once interference recedes. The main unit and remote sensor contain no user serviceable parts

### Precautions

1. Do not clean the units with abrasive or corrosive compounds. It may scratch the plastic parts and corrode the electronic circuits.
2. Do not subject the units to excessive force shock, dust, temperature or humidity, which may result in malfunction, shorter electronic life span, damaged batteries and distorted parts.
3. Do not tamper with the units' internal components. Doing so will invalidate the warranty on the unit and may cause unnecessary damage battery and distorted parts.
4. Do not subject the units to excessive exposure to direct sunlight.
5. Never immerse in water or expose to heavy rain. The remote sensor is of a splash-proof design.
6. Always read the user's manual before operating the unit.

### FCC WARNING!

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, within strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been tested and found to comply with the limits of a Class B digital device in accordance with Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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:

1. Reorient the TV/ radio antenna.
2. Relocate the receiver away from the TV/radio receiver.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, D.C. 204502, Stock No. 004-000-00345-4

### FCC Notice

The user is cautioned that changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment. Linear radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However, there are some limitations which must be observed.

For U. S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 devices. As such they have a limited transmitter power and therefore limited range. A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies. Changes or modifications to the device may void FCC compliance. Infrequently used radio links should be tested regularly to protect against undetected interference or fault.

# sima®

140 Pennsylvania Ave.  
Bldg. #5  
Oakmont, PA 15139 USA  
Phone: 800-345-7462  
www.simacorp.com

First Alert® is a registered trademark of the First Alert Trust used under license

© 2003 Sima Products Corporation All rights reserved

## Operations - Testing the units

After installing the batteries in the remote sensor and before replacing the back cover, try the following test to make sure the two units are communicating.

1. Place the two units approximately five feet apart and press and hold for 2 seconds the TX button inside the battery compartment on the remote sensor. The receiving unit should now display the temperature reading for that sensor.
2. Next, place the sensor in the desired remote location and place the receiving unit in its desired location.
3. Press and hold the TX button again.
4. Check the receiving unit display for that sensor. If the dash icon (—) appears and flashes, it indicates a signal interruption. RF signal interruptions can be caused by interference from electronic devices or physical obstructions such as walls, buildings etc...
5. Rotate the sensor in 45° steps and press the TX button again to send the signal.
6. If there is still no display, move the remote sensor closer to the receiving unit or reposition both the receiving unit and the remote sensor until reception is observed.
7. When complete, put the rubber seal into the cover groove and close the battery cover. Tighten the screws, and snap on the bracket stand.

## Setting the (T1)Time, Offset (T2)Time Zone, Multi Language, Calendar, and Temperature reading

1. Press & hold the SET button for 3 seconds. 12 or 24 hr. is blinking.
2. Use the "-" or "+" button (on back of unit) to select 12 or 24 hr. mode, then press the SET button to confirm.
3. The hour digits will blink. Use "-" or "+" button to set required time (with each press, the button will increase or decrease the digits by one. Holding the button will cause the setting to change rapidly). Press the SET button to confirm.
4. The minute digits will blink. Repeat the same procedure to enter minutes, offset (alternate time zone "T2"), Multi Language, Month/Date or Date/month format, Year (from 2001 max 2050), current Month or Date (Weekday auto select), and °C or °F selection.

**NOTE: During time setting process, the seconds will reset to :00. If no button is pressed for 10 seconds while setting time, date or daily alarm function, the program will automatically exit the setting and it will return to normal reading.**

### Display T1, T2 or Autoscroll

Press the "T1/T2" button to select T1(current time), T2(offset time zone) or Autoscroll between the two modes.

### Remote Channel Auto Scroll

This device is equipped with an auto scroll function that when 2 or 3 remote sensors are active, it will automatically cycle through the remote channels 1 to 3 to display those temperature readings.

1. Press the "CHANNEL RF" button to select temperature channel 1, 2, 3 or auto scroll (if all 3 sensors are registered).
2. Press & hold "CHANNEL RF" button for 2 seconds to force the unit to register with remote sensor, press
3. "CHANNEL RF" button again to abort registration.

### Setting the Alarm 1 & Alarm 2

1. Press A1/A2 button to select 1 or 2. With the desired bell icon selected, the time digit will be displayed (0:00).
2. Press & hold SET button for 3 seconds. The hour digit will blink.
3. Use the "+" or "-" button (on back of unit) to set the desired hour. Press the SET button to confirm.
4. The minute digits will blink. Use "+" or "-" button to adjust minutes, and press SET button to confirm.
5. The bell icon for the alarm chosen will be displayed indicating that the alarm above is now activated.
6. When the alarm is beeping, press the SNOOZE/LIGHT button once to temporarily stop the alarm for 5 minutes. (Each press of the "SNOOZE/LIGHT" button increases the value by 5 minutes.  
For Ex: 5min. - 10min. - 15min. - 30min. - 60min.).
7. Press any button to stop the alarm, except SNOOZE/LIGHT button.
8. To enable or disable alarm function, press A1/A2 button to select the activated 1 or 2 bell icon for receiving unit the alarm, and press ON/OFF button.
9. Repeat the same procedure 1-8 to set for the 2nd alarm.

### How to Display MAX/MIN Temperatures

1. The main unit records the maximum and minimum temperature values of both the receiving unit and remote sensor units. It will display the temperature value for the remote channel selected.
2. To read max/min temperature records, press and hold the MAX/MIN button for 5 seconds
3. To erase the max/min temperature records displayed on screen, press & hold "MAX/MIN" button for 3 seconds.

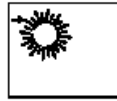
### To Activate Backlight

Press "SNOOZE/LIGHT" button to turn on the backlight for 5 seconds.

## Weather Offset

To get the accurate weather forecast for the next 12 to 24 hours, you need to tell your device what is the existing weather condition, thereby offsetting the difference of barometric pressure at different altitudes.

1. Press & hold "+" button for 3 seconds,
2. Press "-" button to select:



Sunny



Slightly Cloudy



Cloudy



Rainy



Stormy.

3. Enter the existing weather condition and press "+" button to confirm.

## Storm Alarm

When the unit detects a storm is coming, the cloud and rain icons will flash continuously, the backlight will be automatically on for 5 seconds, and the alarm will sound for 10 seconds. This sequence will repeat 3 times. Press any button to stop the storm alarm.

## Pressure Trend

The indicator tells you the barometric pressure tendency of the past 30 minutes. The pressure tendency will indicate in 3 ways.

- ◆ The weather is expected to be better.
- ◆ Remain unchanged.
- ◆ The weather is expected to be worse.

As with any weather forecast, 100% accuracy cannot be guaranteed. This Weather Station has been designed for use in varying climates. It is estimated to have a forecasting accuracy level of 75%. In climates that experience sudden weather changes (for example from sunny to rainy), the unit will be more accurate compared to use in climates where there is very little change.

## How to Set the Temperature Alarm

This device can be programmed to alert that the temperature has risen above or dropped below a pre-determined range at the receiving unit or any of the 3 remote sensors locations.

1. Press "ALERT" button to enable or disable temperature alert. Press & hold "ALERT" button for 2 seconds to start setting.
2. The upper/lower icon ▲ will blink. Using the "+" or "-" button (on back of unit) to select Indoor, Channel 1, 2 or 3 (if 3 sensors are available). Press ALERT button to confirm.
3. The upper limit icon ▲ and dash icon (—) will blink. Using "+" or "-" button to enter upper limit value. Press "ALERT" to confirm.
4. The lower limit icon ▼ will blink. Using "+" or "-" button to enter lower limit value, and press "ALERT" button to confirm.
5. To set alert values for other registered channel, select the desired channel and repeat the same procedure from (a) to (d).
6. When the upper/lower icon ▲ appears, all alarms previously set for each channel including indoor temperature channel will become active. When the alert ranges are reached or passed, alarm will sound and the upper/lower icon ▲ will flash.

## Battery Indicators

A low battery icon 🔋 will appear on the display of the receiving unit. when the batteries of the receiving unit and remote sensor(s) need to be replaced. For replacing batteries always use new batteries as specified in the user's manual. Do not mix old and new batteries as the old ones may leak.

## Specifications

### Recommended operating range

Indoor temp. range	+32°F to +122°F (0°C to +50°C)
Sensor temp range	+32°F to +122°F (0°C to +50°C)
Detachable outdoor probe	-58°F to +158°F (-50°C to +70°C)

### Batteries

Receiving unit	2 AA batteries (DC 3V)
Remote Sensor	2 AAA batteries (DC 1.5V)
Battery life	Receiving unit Typical 1 year
Battery life	Remote sensor Typical 6 mos

### Miscellaneous

Temp. sampling cycle	Indoor - 10 sec. / Outdoor - 30 sec.
Resolution	1% RH
Humidity measurement	20% to 99%
Transmission range	max. 100 feet open area
Transmission frequency	433.92 MHz.
Weather Forecast	Sunny, Slightly Sunny, Cloudy, Rainy, Stormy

## 90 Day Limited Warranty Sima Products Corporation

Sima Products Corp. ("Sima") warrants that the accompanying product proves to be defective to the original purchaser in material or workmanship within 90 days from the original retail purchase, Sima will, at Sima's option, either repair or replace same without charge (but no cash refund will be made). What you must do to enforce Warranty: You must deliver, mail or ship the product, together with both the original bill of sale and this limited Warranty statement as proof of warranty coverage to:

**Sima Products Corp.  
Att: Customer Service  
140 Pennsylvania Ave. Bldg. #5  
Oakmont, PA 15139**

### Limitation of Liability and Remedies

Sima shall have no liability for any damages due to lost profits, loss of use or anticipated benefits, or other incidental, consequential, special or punitive damages arising from the use of, or the inability to use, this product, whether arising out of contract, negligence, tort or under any warranty, even if Sima has been advised of the possibility of such damages. Sima's liability for damages in no event shall exceed the amount paid for this product. Sima neither assumes nor authorizes anyone to assume for it any other liabilities. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

**It is recommended that you call Sima at 412-828-3700 to obtain a return authorization number.**