

## ROYAL WSA555/WS15TX INSIDE/OUTSIDE THERMOMETER

### ROYAL WSA 555 INSIDE/OUTSIDE THERMOMETER

#### INSTRUCTION MANUAL

Congratulations on purchasing the Royal WSA 555 Weather Station. This model features indoor and outdoor temperature and humidity, time, minimum and maximum temperature and humidity, alarms and weather forecasting. Outside temperature and humidity is provided with the 433 MHz cable free temperature sensor. No wire installation is required. The WSA 555 can work with up to 4 remote sensors. One remote sensor is included with this package.

Please read all the instructions to ensure understanding of the features.

The WS 555 uses a liquid crystal display. On occasion, the display has an appearance of being damaged. This is especially true when first receiving the unit or when moving the unit. It is recommended leaving the unit on a flat table for 10 minutes. The liquid in the display will fill all the voided areas.

#### THE BATTERIES MUST BE INSTALLED IN THE REMOTE UNIT BEFORE INSTALLING THE BATTERIES IN THE BASE UNIT.

#### INSTALLATION OF THE BATTERIES

The remote unit uses two "AA" batteries. To install or replace the batteries, please follow these steps:

#### REMOTE UNIT:

##### SETTING THE REMOTE TRANSMITTER(S)

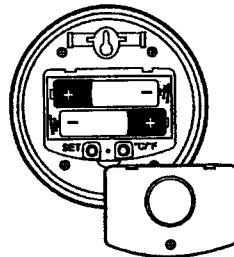
1. Pull out the kickstand base.
2. Unscrew the screw on the back of the compartment and remove the cover.
3. Insert the alkaline batteries observing the correct polarity.
4. Low Battery Indicator will indicate by a flashing "low battery" icon on the LCD display. In this case, batteries should be replaced accordingly.
5. The remote unit is now ready for setting the Channel and House Code.
6. There are 2 buttons under the battery door on the back of the remote. A. °C/°F - A multi function button that is used to either change the House Code of the remote, the Channel Number of the remote (1-4), or change from Centigrade or Fahrenheit. B. Set - to confirm the change of the House Code number.
7. After inserting the batteries, the House Code will flash "01H". Depress "C/F" button until desired House Code number appears. Depress the "SET" button to confirm after getting the desired House Code. Otherwise, the House Code will be automatically set to "01H" in 10 seconds. (01H indicates House Code 1).
8. The House Code is the frequency your base and remote system will be communicating.

##### ROYAL RECOMMENDS LEAVING THE HOUSE CODE ON 01H.

9. The range of House Codes is from "01" to "30". Make sure all transmitters in your system are set to the same House Code.
10. Use the C/F button to select the different Channel number (1-4) for each of your transmitter remotes.
11. This number will be confirmed upon depressing the SET button, or if no key is pressed for 10 seconds.
12. After setting, please do not change the House Code or Channel number again, otherwise the above procedures must be repeated.

Replace the battery cover on the unit and seal by rescrewing tightly.

**IF TEMPERATURES FALL BELOW 0 DEGREE FAHRENHEIT, THE BATTERIES IN THE REMOTE UNIT CAN FREEZE. ROYAL RECOMMENDS STORING THE REMOTE UNIT INSIDE UNDER THESE CONDITIONS. INDIVIDUAL BATTERY COMPANIES CAN OBTAIN VERIFICATION OF FREEZING POINTS.**



## ROYAL WSA555/WS15TX INSIDE/OUTSIDE THERMOMETER

### ROYAL WSA 555 INSIDE/OUTSIDE THERMOMETER

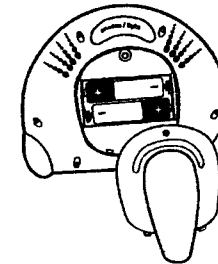
#### INSTALLATION AND SETTING THE REMOTE TRANSMITTER(S)

Royal provides a suction cup for mounting or, for smooth surfaces, use the supplied kickstand attached to the remote. Royal suggests adding some water to the suction cup to insure a secure fit. The suction cup can be removed by pulling down on the cup. Once the suction cup is removed, the remote can be mounted to the wall with a standard screw. The surface can, however, affect the transmission range. If, for example, the unit is attached to a piece of metal, it may 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 surface is in the immediate proximity. Before securing in place, please insure that the temperature base unit can receive the signal from the remote unit from where you wish to situate them both. **ROYAL RECOMMENDS PLACING THE TWO UNITS AS CLOSE TOGETHER AS POSSIBLE TO ELIMINATE ANY INTERFERENCE.**

#### BASE UNIT:

The base unit uses two "AA" batteries. To install or replace the batteries please follow these steps:

1. Using a screwdriver, remove the plate on the back of the base unit.
2. Insert the batteries observing the correct polarity.
3. Replace the battery cover.
4. After installing the batteries in the unit, the base unit will start the receive mode to memorize the channel number. A blinking square around the channel number indicates this. This will take approximately 3-5 minutes. After this time, the base unit will update the remote unit temperature and humidity. If the base unit does not receive a signal within 60 minutes, the outside temperature will blink. In this case you should try to relocate the base and/or remote units. The cause of this problem is interference, batteries or electrical problems.



**HUMIDITY IS CALCULATED BASED ON DEW POINT. WHEN THE TEMPERATURE FALLS BELOW 40 DEGREES FAHRENHEIT THE WORD "LO" WILL APPEAR IN PLACE OF THE OUTDOOR HUMIDITY. THIS IS NORMAL OPERATION FOR THIS UNIT. WHEN THE TEMPERATURE RISES, A NUMBER PERCENT WILL APPEAR. YOUR WSA 555 IS NOT DEFECTIVE. IF THE HUMIDITY DROPS BELOW 20%, "LO" WILL APPEAR ON THE DISPLAY.**

#### 433 MHz RECEPTION

The Royal Thermosolutions WSA 555 will receive outside temperature readings, utilizing wireless 433 MHz transmissions. Please see the following guidelines when selecting a location for the installation of your Royal WSA 555 and wireless remote.

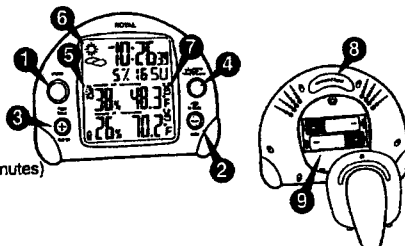
1. The maximum transmission range is 75-100 feet from the remote to the base unit (in open space). However, this depends on the surrounding environment and interference levels.
2. The distance of the WSA 555 or remote should be at least 6 feet away from any interfering sources.
3. Avoid positioning the WSA 555 or remote onto or in the immediate proximity of metal window frames.
4. Neighbors using other electrical devices operating on the 433 MHz signal could cause interference.
5. Extreme temperatures may affect the wireless remote range. If it has been extremely cold (under - 13°F) for an extended period of time, then the transmission power from the remote will not be sufficient due to the nature of the alkaline batteries. In this case, please store the remote inside until the temperature rises.

## ROYAL WSA555 / WS15TX INSIDE/OUTSIDE THERMOMETER

### ROYAL WSA 555 INSIDE/OUTSIDE THERMOMETER

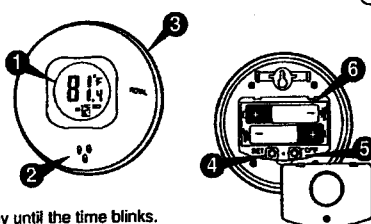
#### WSA 555

1. Mode
2. Min/Minute/-/Button/Date
3. Max/Hour+/+Month Button
4. °C/F/Remote/Alarm/C/F
5. Remote Number
6. Forecast
7. Temperature Trends (last 30 minutes)
8. Snooze / Light
9. "AA" Batteries



#### REMOTE UNIT/ WS15TX

1. Liquid Crystal Display
2. Sensor
3. Suction Cup
4. Set Button
5. C/F
6. "AA" Batteries



#### SETTING TIME

1. Depress and hold the Mode key until the time blinks.
2. Depress the Max/Hour button until the correct hour is selected.
3. Depress the Min/Minute button until the correct minute is selected.
4. To select the 12/24-hour format, depress and hold both the Max and Min keys at the same time.
5. The time must be in the setting mode (blinking).
6. Depress the Mode key to confirm.

#### SETTING DATE

1. Depress and hold the Mode key until the time blinks.
2. Depress the Mode key until the year and date blinks.
3. Depress the Year key until the correct year appears.
4. Depress the Month key until the correct month appears.
5. Depress the Date key until the correct date appears.
6. Depress the Mode key to confirm.

#### SETTING DAILY ALARM

1. Pressing the Mode key once (while clock is displayed) will display the alarm setting. The "AL" symbol will be lit.
2. Depress the Max/Hour button until the correct hour is selected.
3. Depress the Min/Minute button until the correct minute is selected.
4. Depressing the remote key will toggle the alarm on and off. On/Off status is shown on the display as the bell symbol.
5. If the alarm is turned on, it will sound when the Set Alarm Time arrives. Pressing the Snooze key on the back of the unit will activate the Snooze function, which will sound the alarm again after 5 minutes. Pressing any other key will silence the alarm.
6. Depress the Mode button 3 times to display the time.

#### TO SET CENTIGRADE OR FAHRENHEIT

For best operation:

This model has two types of temperatures; Centigrade and Fahrenheit. To set the correct type, press and hold the Mode key until the time blinks. Depress the remote key once and the temperature will toggle between Centigrade and Fahrenheit. Depress the Mode key twice to confirm.

## ROYAL WSA555 / WS15TX INSIDE/OUTSIDE THERMOMETER

### ROYAL WSA 555 INSIDE/OUTSIDE THERMOMETER

#### OUTSIDE TEMPERATURE

The WSA 555 can monitor up to 4 remote units. Up to 3 more optional transmitters can be purchased at your local retailer.

#### To View the Outside Temperature and Humidity:

The inside and outside (Remote 1) temperature and humidity will always be displayed at your default screen. Press the Remote button to view the temperature on the other optional remote channels.

**IF YOU ARE NOT GETTING AN UPDATE FROM THE OUTSIDE REMOTE, PRESS AND HOLD THE REMOTE/ALARM KEY FOR 5 SECONDS. THIS WILL FORCE AN UPDATE. IF THE OUTSIDE TEMPERATURE FALLS BELOW 40 DEGREES OR THE OUTSIDE HUMIDITY FALLS BELOW 20%, THE DISPLAY WILL SHOW "LO". IF THE OUTSIDE HUMIDITY GOES OVER 95%, THE DISPLAY WILL SHOW "HI". BOTH OF THESE SITUATIONS ARE NORMAL. NOTHING IS WRONG WITH YOUR UNIT. HUMIDITY IS CALCULATED BASED ON DEW POINT. WHEN THESE OCCURRENCES OCCUR, THE DEW IS NOT MEASURABLE IN THIS MODEL.**

#### Viewing the Daily Minimum and Maximum Temperature:

The WSA 555 maintains the minimum and maximum temperature on a daily basis. To view the minimum and maximum temperature:

1. Depress the Max key once. The display will show the daily maximum inside and outside temperatures. Depress the Remote button to view the maximum temperature for other remote channels. The daily maximum temperature will reset daily at 12:00 AM. Press the Max key once to return to the current temperature.
2. Depress the Min key once. The display will show the daily minimum inside and outside temperatures. Depress the Remote button to view the minimum temperature for other remotes. The daily minimum temperature will reset daily at 12:00 AM. Press the Min key once to return to the current temperature.

#### MAX/MIN TEMPERATURE ALARMS:

The WSA 555 has a minimum and maximum temperature alarm. By setting the minimum and maximum temperatures, the WSA 555 will sound an alarm when the temperature rises above the maximum or falls below the minimum temperature. To turn the alarm off, depress any key.

#### Setting the Max/Min Temperature:

1. Depress the Mode button twice for the inside Max/Min (for the outside Max/Min, depress the Remote button once).
2. Depress the + or - key to set maximum temperature.
3. Depress the Mode button again and an arrow pointing up will illuminate.
4. Depress the + or - key to set the minimum temperature.
5. Depress the Mode button again to confirm and an arrow pointing down will illuminate.

#### To Clear Max Alarms:

1. Depress the Mode button twice for the inside Max (for the outside Max, depress the Remote button once).
2. Depress + and - keys at the same time for 3 seconds.
3. Depress the Mode button.

#### To Clear Min Alarms:

1. Depress the Mode button twice for the inside Max (for the outside Max, depress the Remote button once).
2. Depress + and - keys at the same time for 3 seconds.
3. Depress the Mode button.

#### FORECAST FEATURE

The WSA 555 has a graphic forecasting feature. This feature is using a mathematical calculation based on the time, rising and falling temperature and humidity. **UNDER NO CIRCUMSTANCE DOES ROYAL MAKE ANY CLAIMS ON ACCURACY.** Various symbols such as Sun+Clouds, Sun, Cloud + Rain and Snow & Ice will appear. The moon replaces the sun at 9:10PM to 5:10 AM. A trend arrow appears next to the inside and outside temperature. This arrow indicates an increase or decrease of the temperature versus the last updated temperature.

# ROYAL WSA555/WS15TX INSIDE/OUTSIDE THERMOMETER

## ROYAL WSA 555 INSIDE/OUTSIDE THERMOMETER

### BACKLIGHT

By depressing the Backlight/Snooze button the display will illuminate. This illumination will last for approximately 5 seconds.

### SPECIFICATIONS

#### MAIN UNIT

Power Requirements:	2 x AA Battery operated
Operating/Detected Temperature:	-20 to 55°C (-4 to 131°F)
Operating Frequency:	434 MHz
Resolution:	0.1°C
Accuracy:	+/- 2°C
Operating Humidity:	20% to 90%
Detecting Humidity:	20% to 90%
Resolution:	1%
Accuracy:	+/- 5-8%
LCD Viewing Area:	70 x 62mm

#### REMOTE UNIT

Power Requirements:	2 x AA Battery operated
Operating/Detected Temperature:	-25 to 55°C (-13 to 131°F)
Operating Frequency:	434 MHz
Resolution:	0.1°C
Accuracy:	+/- 2°C
Operating Humidity:	16% to 90%
Detecting Humidity:	16% to 90%
Accuracy:	+/- 5-8%

### WARRANTY, REGISTRATION & TECHNICAL SUPPORT

PLEASE FILL OUT AND RETURN THE WARRANTY CARD INCLUDED WITH YOUR NEW ROYAL PRODUCT OR FILL OUT THE WARRANTY REGISTRATION FORM ON THE ROYAL WEB PAGE AT [WWW.ROYAL.COM](http://WWW.ROYAL.COM). IT ENTITLES YOU TO PRODUCT WARRANTY AND TECHNICAL SUPPORT UNDER THE TERMS AND CONDITIONS DESCRIBED HEREIN.

**BE SURE TO KEEP A COPY OF YOUR SALES RECEIPT!**

#### STANDARD WARRANTY

OLIVETTI OFFICE USA, Inc. d/b/a ROYAL CONSUMER INFORMATION PRODUCTS ("Royal"), 379 Campus Drive, Somerset, NJ 08875 WARRANTS that your NEW Royal product is free of defects of workmanship and materials. If there is a defect or malfunction of this product, Royal will repair it free of charge as follows:

**PARTS:** New or comparable rebuilt parts in exchange for defective parts for ONE YEAR from date of customer purchase.

**LABOR:** Royal provides labor warranty for NINETY DAYS from date of end-user purchase. Product must be sent postage prepaid and insured to Royal. At the completion of the repair, the consumer will be responsible for return shipping charges from Royal, and for any parts or services no longer covered under warranty.

This warranty does not apply to persons who purchased this product second hand or used.

This warranty does not include adjustments, parts and repair by circumstances beyond the control of Royal, including but not limited to, fire, or other casualty, accident, neglect, abuse, abnormal use or battery leakage damage.

THERE ARE NO OTHER EXPRESSED WARRANTIES EXCEPT AS STATED HEREIN. AFTER THE PERIOD OF EXPRESSED WARRANTY SET FORTH HEREIN, THERE ARE NO EXPRESSED OR IMPLIED WARRANTIES AND THOSE EXCLUDED INCLUDE THOSE OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE. Royal shall NOT be held liable for CONSEQUENTIAL DAMAGES resulting from any failure, defect or malfunction of this product. Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

#### WARRANTY PROCEDURES

Royal has taken great care to insure the product you have purchased will provide years of trouble-free service. Should the product require service within the first 30 days after purchase, Royal strongly recommends you return the product to the place of purchase for replacement. Please note, this 30-day replacement period may be subject to the limitations of the return policy that has been established by your retailer, may not be available at your retailer, or may be for a different period of time as established by your retailer. Your retailer may allow exchanges past this 30-day period. Should this be the case, Royal strongly recommends you return the product to the place of purchase for replacement.

#### TO OBTAIN SERVICE UNDER THE TERMS OF THIS WARRANTY:

In the event you are unable to obtain a replacement product from your retailer, please do the following:

1. Send a copy of your original sales receipt showing the original purchase date, along with your mailing address and a note describing the nature of the problem to:

Royal Consumer Warranty Processing  
PO Box 161  
Jamison, PA 18929-0161

#### Do Not Return the Product to This Address!

2. You will receive a return authorization number within 7-10 business days from the date your return request is received if it is determined that there is a basis for a replacement product. The return authorization form you receive will list the return procedures, applicable charges, if any, and the correct shipping address for the returned product.

#### PRODUCT SUPPORT HOTLINE:

For questions on use of this product call 1-800-272-6229 Monday through Friday between the hours of 8:30AM and 5:00PM. You can also email Royal at [hotline@royal.com](mailto:hotline@royal.com). Allow two to three weeks for email response.

WSA555/WS15TX

Wireless Weather Station  
WSA 555

**ROYAL**

Wireless Weather Station

**WSA 555**  
WS15TX

**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 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.

Royal Consumer Information Products, Inc.

Model: WSA555

FCC ID QLSWSA555TX    Made In China

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.

WSA555IM0504

**ROYAL**

Consumer Information Products, Inc.  
379 Campus Dr.  
Somerset, NJ 08873-1125

Made in China

## Operation Manual

