DIRECTIONS FOR USE

NOAA ALL HAZARD ALERT WEATHER MONITOR

MODEL WR3000



Introduction

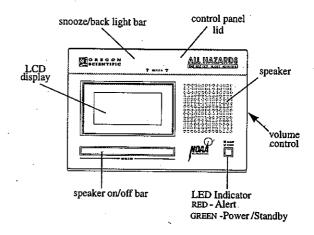
Thank you for purchasing the Oregon Scientific All Hazard Weather Monitor. Your Oregon Scientific Model WR3000 operates on all seven NOAA weather broadcast bands. It retrieves 24-hour messages from your local weather broadcast channel, receiving signals at 162.400 MHz to 162.550 MHz. The receiver's circuitry automatically locks in the emergency broadcast when the NOAA All-Hazard Alert tone is received — and emits an audible and visual warning signal.

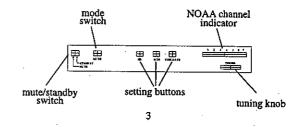
Your All Hazard Weather Monitor is equipped with a full-function LCD alarm clock. This versatile model may also be hung on a wall using the keyhole slots on the back of the unit.

 $\ensuremath{\mathfrak{C}}$ Oregon Scientific, Inc. All Rights Reserved

2

Features and Callouts





Getting Started

Power

NOTE: We recommend that you use an AC adapter as your primary power source for this unit and keep the batteries as a back up power source in the event of a power failure. Your WR3000 requires a 4.5 Volt / 250mA center pin positive AC adapter. Should you have any difficulty locating an adapter in your area please call Oregon Scientific at 800-869-7779.

Plugging in an Adapter (not included)

 Plug the pin of the adapter into the DC port in the back of the unit and plug the AC adapter power cord into a wall outlet. While the adapter is in use, the green-glow backlight illuminates the display panel at all times.

Installing the Batteries

- Model WR3000 is powered by three (3) "C" batteries (not included)
- Alkaline batteries are recommended

- During A/C adapter use, the batteries serve as a continuous backup power source (backup batteries should last 1 year)
- When the batteries are low, the Low Battery indicator will signal to change the batteries (for more information, see "Low Battery Indicator" section

NOTE: The power switch is built into the rotary volume control located on the right side of the monitor (see "Features and Callouts").

- Always turn the power to the "Off" position when removing old batteries and installing new batteries.
- 2. Slide the battery cover in the direction of the arrow and remove the cover.
- 3. Insert the batteries into the battery compartment, making certain the polarities (+ and -) match the positions noted.
- 4. Carefully replace the cover

Low Battery Indicator

- This unit is equipped with a low battery detection circuit which indicates when it is time to change the batteries
- With the unit's power switch in the "Off" posi-

tion, a battery icon (see "Features and Callouts") will appear at the top of the display when your batteries need to be replaced

- With the monitor operating in the "On" position, the battery icon will appear
- Replace the batteries immediately to ensure normal operation of the unit

NOTE: If you change the batteries in 30 seconds or less, the time keeping functions are retained in memory. If the unit is connected to A/C power adapter while you are changing the batteries, you do not need to hurry. The A/C adapter will sustain the time keeping functions.

All setting controls are found under the control panel lid (see "Features and Callouts")

Setting the Clock/Date/Alarm

IMPORTANT: Once any mode setting processes are started and the word icons (Time, Date, etc.) begin to flash, you have only 5 seconds to begin the process before the unit returns to normal operation. If this happens, simply press and hold MODE again and begin your set-

6

- Press and hold MODE until the word "DATE" begins to flash at the left side of the display
- Then press Hour/ to set the month and
 MIN/ to set the date until the correct date is displayed
- After the date is set, press MODE again to start the clock or select other functions
- Close the control panel lid
- If no other setting takes place, the clock will begin normal operation in 5 seconds

NOTE: To switch the display from time to date, press TIME/DATE to toggle back and forth between the two display functions.

Setting the Alarm

- Open the top lid of the control panel
- Press and hold MODE until the word "ALARM" begins to flash at the left side of the display
- Then press Hour/[↑] to set the hour and MIN/[▼] to set the minutes until the desired time is shown
- Press MODE again until you see both

tings within the allotted 5 seconds.

Setting the Clock

- Open the top lid of the control panel
- Press and hold MODE until the word "TIME" begins to flash at the left side of the display
- Then press Houn/[↑] to set the hour and MIN/[▼] to set the minute until the correct time is displayed

MPORTANT: If the PM indicator is shown, the clock is set for afternoon time. If no indicator is shown, the clock is set for AM or morning time.

- After the time is set, press MODE again to start the clock and select other functions
- Close the control panel lid
- If no other setting are made, the clock will begin normal operation in 5 seconds

Setting the Date

• Open the top lid of the control panel

- "ALARM" and "ON" flashing on the display When "ALARM" and "ON" are flashing, press
- HOUR/ to enable the alarm function
- This sets a daily alarm which can be stopped each day but repeats every 24 hours

NOTE: In "ALARM" mode, you can tell that the alarm is set if the "ON" icon is steady. If the "ON" icon is flashing, the alarm function is disabled.

IMPORTANT: Once any mode setting processes are started and the word icons (Time, Date etc.) begin to flash, you have only 5 seconds to begin the process before the unit returns to normal operation. If this happens, simply press and hold MODE again and begin your settings within the allotted 5 seconds.

Stopping the Daily Alarm

• While the alarm is sounding or during a snooze period, lift the control panel lid and press min/▼ to stop the alarm

NOTE: By completing this step, the alarm signal will stop, but the alarm will sound again at the set time in 24 hours.

Operating the Snooze Feature

- To operate the snooze when the alarm signal sounds, gently press the closed control panel lid – the entire lid acts as a large snooze bar
- Following a snooze duration of nine minutes, the alarm will sound again
- To stop the alarm, lift the control panel lid and press min/
- If neither the snooze bar/control panel lid or
 min/▼ is pressed, the alarm will sound for 9 minutes and then stop

Disabling the Alarm

- Lift the control panel lid, press and hold
 MODE until the word "ALARM" begins to flash at the left side of the display
- Press MODE again until you see both the "ALARM" and "ON" icons. on the display
- Press min/▼ to disable the alarm function
- The "ON" icon should now be flashing

IMPORTANT: This will completely disable the alarm

— the alarm will NOT sound again until the alarm
function is enabled.

10

Backlight

- When using battery power, to illuminate the display, press and release the snooze bar/control panel lid. Once the bar is pressed, a radiant green backlight will illuminate the display panel for five seconds.
- When using an AC adapter, the backlight will be continuously lit and cannot be disabled

Receiving the NOAA All Hazards Alert Signal

- Rotate the power switch/volume control to the "On" position.
- NOTE: If using battery power only, should the monitor is not be in use, we recommend that you keep this switch in the "Off" position to conserve battery power.
- Press the SPEAKER ON/OFF bar to turn on the speaker. You will hear background noise from the receiver, which is normal, until you tune in the correct frequency for your area.
- 3. Rotate the volume control to find the desired volume level.

11

4. Open the control panel lid.

- 5. At the right side of the control panel, locate the rotary tuner marked with channels 1-7
- 6. Turn the rotary control to find the strongest NOAA signal
- 7. It is possible that you may be able to receive more than one signal -- choose the strongest one (see list of frequencies in "Features and Specifications")

NOTE: In a weak signal area, try moving the unit to another location to improve reception of the NOAA signal. Extend the telescopic antenna, located at the back of the unit, to its full length. If the strongest signal you can receive is still weak rotate the antenna to find a better reception angle and/or move the unit to another location in the building.

8. After you have found a good signal, close the control panel lid. There is a frequency control circuit built into this unit. Once you close the control panel lid, the frequency you have selected will be locked in to prevent signal drift and degradation.

MARNING: If you are traveling with your Oregon

Scientific All Hazard Weather Monitor and you travel

more than 35 miles, you may need to reset the NOAA frequency to get the best reception and the most accurate weather information for your area. Follow steps 1-8 to find the best frequency for your new location.

Weather Alert Monitoring Options

NOAA transmits a warning signal if there are any emergency broadcasts. Your Oregon Scientific All Hazard Weather Monitor can be put into standby monitoring status to receive these alerts as follows:

WARNING: The tone-coded alert signal is volume adjustable by the volume control knob. If you have the volume control turned to the minimum setting, you will not hear an emergency weather alert

- Set the correct frequency as stated in the previous pages of these Instructions.
- Leave the power on.

If you want the speaker to turn on immediately when an emergency broadcast signal is received:

- 1. Lift the control panel lid
- 2. Slide **STANDBY/MUTE** to the "Standby" position

Close the control panel lid

When the alert signal is received:

- The tone-coded alert signal will sound
- The red LED POWER/ALERT light will flash
- The display panel will flash the word ALERT
- The speaker will automatically begin to broadcast the emergency alert message for one hour

 The Table of the speaker will automatically begin to broad-

NOTE: To listen to the NOAA All Hazard broadcast message at any time simply press the SPEAKER bar. To turn off the speaker (broadcast) and return to STANDBY mode, simply press the SPEAKER bar again.

If you do not want to be disturbed by the broadcast message when the emergency tone-coded alert signal is received:

- 1. Lift the control panel lid
- 2. Slide **STANDBY/MUTE** to the "Mute" position
- 3. Close the control panel lid When the alert signal is received
 - The red LED POWER/ALERT light will flash
 - The display panel will flash the word "ALERT"

14

NOTE: At this time the speaker will not activate, and no broadcast message will be heard. To listen to the NOAA All Hazard broadcast message simply press the SPEAKER bar. To turn off the speaker (broadcast) and return to MUTE mode, simply press the speaker bar again.

NOTE: If your WR3000 is set to either STANDBY or MUTE, and you want to hear a broadcast, simply press the SPEAKER bar. The SPEAKER bar setting overrides all other settings on your WR3000 for qui, easy access to weather broadcasts. To return to the previous setting, simply press the SPEAKER bar again.

15

Warranty

This Oregon Scientific product is warranted to be free of manufacturing defects for 1 year from the date of purchase.

This limited warranty does not cover products subjected to abuse, misuse, accidental damage or damage during shipment.

If you have any questions please contact your place of purchase, Oregon Scientific directly at 800-853-8883, or by email at helpme@oscientific.com

For more information on our products see us at WWW.OREGONSCIENTIFIC.COM

Specifications

- 1. There are seven channels of NOAA weather broadcasts:
 - 1: 162,400MHz
 - 2: 162.425MHz
 - 3: 162.450MHz
 - 4: 162.475MHz
 - 5: 162.500MHz
 - 6: 162.525MHz
 - 7: 162.550MHz

The coverage range of each NOAA broadcast station is approximately a 40-mile radius.

NOAA Weather Radio is a service of the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce.

As the "Voice of the National Weather Service," it provides continuous broadcasts of the latest weather information from local National Weather Service offices. Weather messages are repeated every 4 to 6 minutes and are routinely updated every 1 to 6 hours or more frequently in rapidly changing local weather or if a nearby hazardous environmental condition exists. Most stations operate 24 hours daily.

The regular broadcasts are specifically tailored to weather information needs of the people within the service area of the transmitter. For example, in addition to general weather information, stations in coastal areas provide information of interest to mariners. Other specialized information, such as hydrological forecasts and climatological data may be broadcast.

During severe weather, National Weather Service forecasters can interrupt the routine weather broadcasts and insert special warning messages concerning imminent threats to life and property. The forecaster can also add special signals to warnings that trigger "alerting" features of specially equipped receivers. In the simplest case, this signal activates audible or visual alarms, indicating that an emergency condition exists within the broadcast areas of the station being monitored, and alerts the listener to turn up the volume and stay tuned for more information. More sophisticated receivers are automatically turned on and set to an audible volume when an alert is received.

In the most sophisticated alerting system, NOAA Weather Radio Specific Area Message Encoding (SAME), digital coding is employed to activate only those special receivers programmed for specific emergency conditions in a specific area, typically a county. SAME can activate specially equipped radio and cable television receivers and provide a short text message that identifies the location and type of emergency. SAME will be the primary activator for the new Emergency Alert System planned by the Federal Communications Commission. Under a January 1975 White House policy statement, NOAA Weather Radio was designated the sole Government-operated radio system to provide direct warnings into private homes for both natural disasters and nuclear attack. This concept is being expanded to include warnings for all hazardous conditions that pose a threat to life and safety, both at a local and national level.

NOAA Weather Radio currently broadcasts from over 425 FM transmitters in fifty states, Puerto Rico, the U.S. Virgin Islands, Guam and Saipan on seven frequencies in the VHF band, ranging from 162.400 to 162.550 megahertz (MHz). These frequencies are outside the normal AM or FM broadcast bands.

Special radios that receive only NOAA Weather Radio, both with and

10

without special alerting features, are available from several manufacturers. In addition, other manufacturers are including NOAA Weather Radio as a special feature on an increasing variety of receivers. NOAA Weather Radio capability is currently available on some automobile, aircraft, marine, citizens band, and standard AM/FM radios as well as communications receivers, transceivers, scanners, and cable TV.

By nature and by design, NOAA Weather Radio coverage is limited to an area within 40 miles of the transmitter. The quality of what is heard is dictated by the distance from the transmitter, local terrain, and the quality and location of the receiver. In general, those using a high quality receiver on flat terrain or at sea can expect reliable reception far beyond 40 miles. Those with standard receivers, surrounded by large buildings in cities and those in mountain valleys may experience little or no reception at considerably less than 40 miles. If possible, a receiver should be tested in the location where it will be used prior to purchase.

NOAA Weather Radio is directly available to approximately 70 to 80 percent of the U.S. population. The National Weather Service is currently engaged in a program to increase coverage to 95 percent of

If you have a question regarding technical aspects of NOAA Weather Radio (such as transmitter locations and reception and transmitter characteristics of a station) or are interested in becoming a partner with the National Weather Service in identifying or providing local funding and facilities for the installation of a Weather Radio transmitter, please contact your nearest National Weather Service Office or the National Weather Service, Dissemination Systems Section (Attn: W/OSO153), 1325 East-West Highway, Silver Spring, MD 20910.

the population.

If you have a question about the weather information broadcast over NOAA Weather Radio, please contact the local National Weather Service

19

office responsible for programming the station, or the National Weather Service, Office of Meteorology, Customer Service (Attention: W/OM11), 1325 East-West Highway, Silver Spring, MD 20910.

Aiadama		
ANNISTON		162.475
AUBURN		162.525
BIRMINGHAM		162,550
CULLMAN		162.450
DEMOPOLIS/LINDEN		162.475
DOZIER		162,550
FLORENCE		162.475
FORT PAYNE		162,500
HUNTSVILLE		162,400
JACKSON		162,500
LOUISVILLE		162.475
MOBILE		162,550
MONTGOMERY		162,400
TUSCALOOSA		162,400
WINFIELD		162.525
Alaska		
ANCHORAGE		162.550
CORDOVA		162.550
CRAIG		162,400
FAIRBANKS		162.550
HAINES		162.400
HOMER		162.400
JUNEAU		162.550
KETCHIKAN		162.550
KODI		162,550
NOME		162.550
SEWARD		162.550
	20	

Alahama

SITKA	162,550
VALDEZ	162.550
WRANGELL	162.400
YAKUTAT	162.400
Arkansas	
FAYETTEVILLE	162.475
FORT SMITH	162.550
GURDON '	162.475
JONESBORO	162,550
LITTLE ROCK	162.550
MOUNTAIN VIEW	162.400
RUSSELLVILLE	162.525
STAR CITY	162.400
TEXARKANA	162.550
Arizona	
FLAGSTAFF	160.000
GRAND CANYON (Hopi Point)	162.400
PHOENIX	162.475
PRESCOTT	162.550
SHOW LOW (Porter Mt.)	162.525
TUCSON	162.400
WINDOW ROCK	162.400
YUMA	162.550
TOMA	162.550
California	•
BAKERSFIELD	162,550
COACHELLA	162,400
EUREKA	162,400
FRESNO	162.400
GRASS VALLEY (Wolf Mt.)	162.400
LOS ANGELES	162,550

MONTEREY

20

162,550

PT. ARENA/UKIAH	162.550		Florida	
REDDING	162,550		BELLE GLADE	162.400
SACRAMENTO	162,400	•	DAYTONA BEACH	162.400
SAN DIEGO	162.400		EASTPOINT	162.500
SAN FRANCISCO	162.400		FORT MYERS	162.475
SAN FRANCISCO MARINE	162.450	•	FORT PIERCE	162.425
SAN LUIS OBISPO	162.550		GAINESVILLE	162.475
SANTA ANNA MOUNTAINS	162.450	ŧ	INVERNESS	162.400
SANTA BARBARA	162.400		JACKSONVILLE	162.550
SANTA BARBARA MARINE	162.475	•	KEY WEST	162.400
BANTADAM			MELBOURNE	162.550
Colorado			MIAMI	162,550
ALAMOSA	162.475		OCALA	162.525
BETHUNE	162.525		ORLANDO	162.475
COLORADO SPRINGS	162.475		PANAMA CITY	162,550
DENVER	162,550		PENSACOLA	162,400
FORT COLLINS	162,450		SALEM	162.425
GRAND JUNCTION	162.550		SEBRING	162,500
GREELEY	162.400		TALLAHASSEE	162.400
LA JUNTA	162.500		TAMPA	162.550
MEAD/LONGMONT	162.475		WEST PALM BEACH	162.475
PUEBLO	162.400			
STERLING	162.400		Georgia	
DIDICIN'S			ATHENS .	162.400
Connecticut			ATLANTA	162.550
HARTFORD	162.475		AUGUSTA	162.550
MERIDEN	162.400		BAXLEY	162.525
NEW LONDON	162.550	*	CHATSWORTH	162.400
			COLUMBUS	162.400
			MACON	162.475
Delaware			PELHAM	162.550
LEWES	162.550		SAVANNAH	162,400
SALISBURY, MD	162.475	•	VALDOSTA	162.500
			WAYCROSS	162.475
	22			00
			•	23

en en anna anti-	A THE STREET AND STREET STREET, STREET STREET, STREET STREET,		
WAYNESBORO	162.425	SOUTH BEND	162.400
		TERRE HAUTE	162.400
Hawaii		,	102.400
HAWAII (South Point)	162.550	Iowa	
HAWAII (Kulani Cone)	162.550	CEDAR RAPIDS	162,475
KAUAI (Kokee)	162.400	DES MOINES	162.550
MAUI (Mt. Haleakala)	162.400	DIBUOUR	162,400
OAHU (Mt. Kaala)	162.550	SIOUX CITY	162.475
OAHU (Hawaii Kai)	162.400	WATERLOO	
,		WILKEOO	162.550
Idaho		Kansas	
BOISE	162.550	CHANUTE	162,400
LEWISTON	162.550	COLBY/GOODLAND	162,475
McCALL	162.475	CONCORDIA	162.550
POCATELLO	162.550	DODGE CITY	162.330
TWIN FALLS	162.400	ELLSWORTH	
		LENORA	162.400
Illinois		TOPEKA	162.425 162.475
CHAMPAIGN	162.550	TRIBUNE	
CHICAGO	162.550	WICHITA	162.550
MARION	162.425	WICHIIA	162.550
PEORIA	162.475	Kentucky	
ROCK ISLAND/MOLINE	162.550	ASHLAND	160 500
ROCKFORD	162.475	BOWLING GREEN	162.550
SPRINGFIELD	162.400	COVINGTON	162.400
		ELIZABETHTOWN	162.550
Indiana		HAZARD	162.550
BLOOMINGTON	162.400	LEXINGTON	162.475
EVANSVILLE	162.550		162.400
FORT WAYNE	162.550	MADISON COUNTY (CSEPP) MAYFIELD	162.525
INDIANAPOLIS	162.550	N	162.475
LAFAYETTE(Yeoman)	162.475	14/CV2OIA	162.425
LOUISVILLE, KY	162.475	PAINTSVILLE	162.525
MARION	162.450	PIKEVILLE	162.400
WEIGON	-	SOMERSET	162.550
	24		

A CONTRACT OF THE PARTY OF THE			27
	26	·	
ALFEINA	162.550	JACKSON	162,400
Michigan ALPENA	160.550	INVERNESS	162.475 162.550
State on the control of the control		HATTIESBURG	162,400
		GULFPORT	162.400
WORCESTER	162.550	COLUMBIA	162.550
MT. GREYLOCK	162.525	BUDE	162.550
HYANNIS (Camp Edwards)	162.550	BOONEVILLE	162.475
BOSTON	162.475	ACKERMAN	
Massachusetts	•	Mississippi	
		WILLIAM THE	162.475
HAGERSTOWN	162.475	WILLMAR	162.550
BALTIMORE	162.400	THIEF RIVER FALLS	162,475
Maryland		ST. CLOUD	162.475
		ROOSEVELT	162.475
SAIPAN (Mt. Tapoctchau)	162.550	ROCHESTER TAGE	162.550
GUAM (Nimitz Hill)	162,400	MINNEAPOLIS/ST. PAUL	162.400
Mariana Islands		MANKATO	162.550
		INTERNATIONAL FALLS	162,550
FALMOUTH	162.550	DULUTH	162.400
ELLSWORTH	162.400	DETROIT LAKES	
DRESDEN	162.475	ВЕМІДЛ	162,425
CARIBOU	162.525	Minnesota	
Maine	160 50 5		102.400
		TRAVERSE CITY	162.400
SHREVEPORT	162.400	SAULT STE MARIE	162.550
NEW ORLEANS	162.550	OSHTEMO	162.400 162.475
MORGAN CITY	162.475	ONONDAGA	· · ·
MONROE	162.550	MARQUETTE	162,400 162,550
LAKE CHARLES	162.400	HOUGHTON	162.475
LAFAYETTE	162.550	HESPERIA	162,550
BURAS	162.475	GRAND RAPIDS	162.500
BATON ROUGE	162.400	GAYLORD	162.475
ALEXANDRIA	162.475	FLINT	162.550
Louisiana		DETROIT	160.660
N ~			

		the state of the s	
MERIDIAN	162.550		
OXFORD	162.400	GRAND ISLAND	
	102.400	HOLDREGE	162,400
Missouri		LINCOLN	162.475
BOURBON	162.525	MERRIMAN	162.475
CAMDENTON	162.550	NORFOLK	162.400
COLUMBIA	162.400	NORTH PLATTE	162.550
HANNIBAL.	162,475	OMAHA	162.550
HERMITAGE	162.473	SCOTTSBLUFF	162,400
JOPLIN	162,450 162,425	PCOLIGHTOLK	162.550
KANSAS CITY	162.423	Nevada	
SIKESTON	162.400	ELKO	
SPRINGFIELD	162.400	ELY (Cave Min)	1 62,55 0
ST. JOSEPH		EUREKA	162.400
ST. LOUIS	162.400 162.550	HAWTHORNE	162.550
SUMMERSVILLE	162.330 162.475	LAS VEGAS COURTS	162.475
	162.473	LAS VEGAS (Boulder City) NORTHWEST NEVADA	162.550
Montana		RENO	162,450
BILLINGS	162,550	WINNEMUCCA	162.550
BUTTE	162.550 162.550	WINDMOCCA	162.400
GLASGOW		New Hampshire	
GLENDIVE	162,400	CONCORD	
GREAT FALLS	162.475	COLCORD	162.400
HAVRE (Squaw Butte)	162.550	New Jersey	
HELENA	162.400	ATLANTIC CITY	
KALISPELL	162,400	ALLANTIC CITY	162.400
MILES CITY	162.550	New Mexico	
MISSOULA	162.400	ALBUQUERQUE	
PLENTYWOOD	162.400	CARLSBAD	162.400
SCOBEY	162,475	CLOVIS	162.475
	162.450	DES MOINES	162,475
		FARMINGTON	162,550
Nebraska		, HODDO	162.475
BASSETT	100.000	HODES	162,400
	162.475	LAS CRUCES	162,400
	28	RUIDOSO	162.550
	20	· _	102.550

SANTA FE New York ALBANY BINGHAMTON BUFFALO ELMIRA KINGSTON NEW YORK CITY RIVERHEAD ROCHESTER	162.550	MINOT	162,400
	102.550	PETERSBURG	162.400
New York		WILLISTON	162.550
ALBANY	162,550	WILDIDION	102.330
BINGHAMTON	162.475	Ohio	
DINGHAMION		· -—-	1.00 100
BUFFALO	162.550	AKRON	162.400
ELMIRA	162.400	BRIDGEPORT	162,525
KINGSTON	162.475	CALDWELL	162.475
NEW YORK CITY	162.550	CLEVELAND	162.550
RIVERHEAD	162.475	COLUMBUS	162.550
ROCHESTER	162.400	DAYTON	162,475
STAMFORD	162.400	LIMA	162,400
SYRACUSE	162,550	SANDUSKY	162.400
WATERTOWN	162.475	TOLEDO	162.550
WILLEATOWIT	102.475	10,000	102.550
North Carolina		Oklahoma	
	160 400		
ASHEVILLE	162.400	CLINTON	162.475
BADIN	162,425	ENID	162.475
Cape Hatteras	162.475	LAWTON	162.550
CHARLOTTE	162.475	MCALESTER	162.475
FAYETTEVILLE	162.475	OKLAHOMA CITY	162.400
NEW BERN	162.400	PONCA CITY	162.450
RALEIGH/DURHAM	162.550	TULSA	162.550
ROCKY MOUNT	162.475		102,550
WILMINGTON	162.550	Oregon	
WINSTON-SALEM		ASTORIA	1.60 400
WIND I OIN-BALEM	162.400		162.400
		BEND/REDMOND	162.500
North Dakota		COOS BAY	162.400
BISMARK	162.475	EUGENE	162.400
DEVILS LAKE	162.425	KLAMATH FALLS	162.550
DICKINSON	162.400	MEDFORD	162,400
FARGO	162.475	MT. ASHLAND	162,475
GRAND FORKS	162.475	NEWPORT	162,550
JAMESTOWN	162.550	PENDLETON	
32110110110111	102,330	THIDIDION	162.400
	30	31	
• •			
Company of the compan			
the second of th			
	the control of the co		
	and the second of the second o		
PORTLAND			
PORTLAND	162,550	GREENVILLE	162,550
ROSEBURG	162.550 162.550	GREENVILLE SUMTER	162,550 162,475
ROSEBURG SALEM	162,550		162,550 162,475
ROSEBURG SALEM TILLAMOOK	162.550 162.550	SUMTER	
ROSEBURG SALEM	162.550 162.550 162.475 162.475	SUMTER South Dakota	162.475
ROSEBURG SALEM TILLAMOOK	162.550 162.550 162.475	SUMTER South Dakota ABERDEEN	162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA	162.550 162.550 162.475 162.475	SUMTER South Dakota ABERDEEN HURON	162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania	162.550 162.550 162.475 162.475 162.500	SUMTER South Dakota ABERDEEN HURON PIERRE	162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN	162.550 162.550 162.475 162.475 162.500	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY	162.475 162.475 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD	162.550 162.550 162.475 162.475 162.500	SUMTER South Dakota ABERDEEN HURON PIERRE	162.475 162.475 162.550 162.400 162.550
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE	162.550 162.550 162.475 162.475 162.500	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY	162.475 162.475 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG	162.550 162.550 162.475 162.475 162.500 162.400 162.550 162.400	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS	162.475 162.475 162.550 162.400 162.550
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN	162.550 162.550 162.475 162.475 162.500 162.400 162.550 162.400 162.550	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee	162.475 162.475 162.550 162.400 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN	162.550 162.550 162.475 162.475 162.500 162.400 162.550 162.400 162.550 162.400	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL	162.475 162.475 162.550 162.400 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA	162.550 162.550 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.550 162.400	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA	162.475 162.475 162.550 162.400 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH	162.550 162.550 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.475 162.550	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE	162.475 162.475 162.550 162.400 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE	162.550 162.550 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA	162.550 162.475 162.475 162.475 162.500 162.500 162.400 162.550 162.400 162.400 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.400 162.550
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO	162.550 162.550 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE	162.475 162.550 162.550 162.400 162.550 162.550 162.550 162.400 162.550 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE	162.550 162.550 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG	162.475 162.550 162.400 162.550 162.400 162.550 162.550 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO	162.550 162.550 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS	162.475 162.550 162.400 162.550 162.400 162.550 162.400 162.550 162.405 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE	162.550 162.550 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE	162.475 162.550 162.400 162.550 162.400 162.550 162.550 162.550 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT	162.550 162.550 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE	162.475 162.550 162.400 162.550 162.400 162.550 162.550 162.400 162.550 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT	162.550 162.550 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE	162.475 162.550 162.400 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO	162.550 162.475 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE	162.475 162.550 162.400 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico	162.550 162.550 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE	162.475 162.550 162.400 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN	162.550 162.475 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY	162.475 162.550 162.400 162.550 162.400 162.550 162.400 162.550 162.475 162.475 162.475 162.475 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island	162.550 162.475 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE	162.475 162.550 162.400 162.550 162.400 162.550 162.550 162.400 162.550 162.475 162.475 162.475 162.475 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN	162.550 162.550 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO	162.475 162.550 162.400 162.550 162.400 162.550 162.450 162.550 162.475 162.475 162.475 162.475 162.475 162.475 162.550
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island	162.550 162.475 162.475 162.475 162.500 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN	162.475 162.550 162.400 162.550 162.400 162.550 162.550 162.400 162.550 162.475 162.475 162.475 162.475 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE	162.550 162.550 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Temessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT	162.475 162.550 162.400 162.550 162.400 162.550 162.450 162.550 162.475 162.475 162.475 162.475 162.475 162.475 162.550
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina	162.550 162.475 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina BEAUFORT	162.550 162.475 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.470	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Temessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING BROWNSVILLE	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina BEAUFORT CHARLESTON	162.550 162.475 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475	SOUTH Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING BROWNSVILLE BRYAN/COLLEGE STATION	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475 162.475 162.470 162.550 162.475 162.475 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina BEAUFORT CHARLESTON COLUMBIA	162.550 162.475 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.470	SOUTH Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING BROWNSVILLE BRYAN/COLLEGE STATION	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.550 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina BEAUFORT CHARLESTON	162.550 162.475 162.475 162.475 162.500 162.500 162.500 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.400	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING BROWNSVILLE BRYAN/COLLEGE STATION CEDAR HILL/Dallas/Ft Worth)	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475 162.475 162.400 162.550 162.475 162.475 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina BEAUFORT CHARLESTON COLUMBIA	162.550 162.475 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.400 162.550 162.400	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING BROWNSVILLE BRYAN/COLLEGE STATION CEDAR HILL(Dallas/Ft. Worth) CORPUS CHRISTI	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.550 162.475
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOHNSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina BEAUFORT CHARLESTON COLUMBIA CONWAY/MYRTLE BEACH CROSS	162.550 162.475 162.475 162.400 162.550 162.400 162.550 162.400 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.400 162.550 162.400	SOUTH Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING BROWNSVILLE BRYAN/COLLEGE STATION CEDAR HILL(Dallas/Ft. Worth) CORPUS CHRISTI	162.475 162.475 162.550 162.400 162.550 162.400 162.550 162.475 162.425 162.475 162.475 162.475 162.400 162.550 162.475 162.475 162.400
ROSEBURG SALEM TILLAMOOK UMATILLA Pennsylvania ALLENTOWN CLEARFIELD ERIE HARRISBURG JOENSTOWN PHILADELPHIA PITTSBURGH STATE COLLEGE TOWANDA WELLSBORO WILKES-BARRE WILLIAMSPORT Puerto Rico MARICAO SAN JUAN Rhode Island PROVIDENCE South Carolina BEAUFORT CHARLESTON COLUMBIA CONWAY/MYRTLE BEACH	162.550 162.475 162.475 162.475 162.500 162.550 162.400 162.550 162.400 162.475 162.550 162.475 162.550 162.475 162.550 162.475 162.550 162.400 162.550 162.400	SUMTER South Dakota ABERDEEN HURON PIERRE RAPID CITY SIOUX FALLS Tennessee BRISTOL CHATTANOOGA COOKEVILLE JACKSON KNOXVILLE LAWRENCEBURG MEMPHIS NASHVILLE SHELBYVILLE WAVERLY Texas ABILENE AMARILLO AUSTIN BEAUMONT BIG SPRING BROWNSVILLE BRYAN/COLLEGE STATION CEDAR HILL(Dallas/Ft. Worth) CORPUS CHRISTI	162.475 162.550 162.400 162.550 162.400 162.550 162.450 162.550 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.475 162.400 162.550 162.470 162.550 162.475

GALVESTON	162.550	LYNCHBURG	162,550
HOUSTON	162.400	NORFOLK	162.550
KERRVILLE	162.450	RICHMOND	162,475
LAREDO	162.475	ROANOKE	162.475
LLANO	162.420	WASHINGTON DC (Manassas)	162,550
LUBBOCK	162.400	(Vidinassas)	102,550
LUFKIN	162.550	. Virgin Islands	
ODESSA/MIDLAND	162.400	ST. THOMAS	162.475
PARIS	162.550	BI. IIIOMAB	102.473
PHARR	162.400	Washington	
SAN ANGELO		NEAH BAY	160 550
	162.550		162.550
SAN ANTONIO	162.550	OKANAGAN (Tunk Mt.) OLYMPIA	162.525
SHERMAN	162.475		162,475
TYLER	162.475	PORT ANGELES MARINE	162.425
VICTORIA	162.400	RICHLAND	162.450
WACO	162.475	SEATTLE	162.550
WICHITA FALLS	162.475	SPOKANE	162,400
		WENATCHEE	162.475
Utah		YAKIMA	162.550
LAKE POWELL	162.550		
LOGAN	162.400	West Virginia	
MILFORD/CEDAR CITY	162.400	BECKLEY	162.550
SALT LAKE CITY	162.550	CHARLESTON	162.400
ST. GEORGE (Utah Hill)	162.475	CLARKSBURG	162.550
TOOELE (South Mt.)	162.450	GILBERT	162.475
TOOELE (Vernon Hills)	162.525	HINTON	162.425
VERNAL	162.400	MOOREFIELD	162.400
		SPENCER	162.500
Vermont		SUTTON	162.450
BURLINGTON	162.400		
MARLBORO	162.425	Wisconsin	
WINDSOR	162.475	ADAMS	162,400
Virginia		GREEN BAY	162.550
HEATHSVILLE	162,400	LA CROSSE	162,550

 MADISON
 162.550

 MENOMONIE
 162.400

 MILWAUKEE
 162.400

 PARK FALLS
 162.500

 SISTER BAY
 162.425

 WAUSAU
 162.475

 Wyoming
 CASPER MOUNTAIN
 162.550

 CHEYENNE
 162.475

 LANDER
 162.475

 SHERIDAN
 162.500

34

© Oregon Scientific, Inc. Portland, Oregon, USA All Rights Reserved