# WINEGARD® AIR™ 360+

# OMNIDIRECTIONAL TV/FM ANTENNA + WIFI + 4G EXTENDER\*

\*WiFi & 4G functionality requires Winegard® Gateway™ (GW-1000) sold separately

## Model AR-360B







Requires Winegard Gateway router

#### Register your product at www.winegard.com/myantenna

www.winegard.com/air-360-plus
Manuel disponible en français au www.winegard.com





2452440 Rev0 7-19

#### Welcome

Thank you for purchasing the Winegard® Air™ 360+ and trusting Winegard to bring connectivity solutions to you while on the go. This product, combined with the Winegard® Gateway™ will provide you more freedom when choosing where to adventure, all while bringing the comforts of TV and secure internet to you and your devices.

Before installing or operating please read these instructions completely and carefully. Failure to follow these instructions could cause damage to the product and/or RV.

If you have any questions or need help, email help@winegard.com or call 1-800-320-9992.

#### **Contents**

Welcome	1
Contents	1
Specifications/Features	2
Parts Included	2
Product Information	3
Installation Instructions	4
TV Antenna Operation	10
Troubleshooting	12
Warranty Statement	13

#### Disclaimer

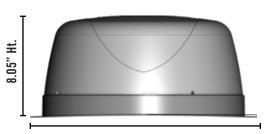
Although every effort has been made to ensure that the information in this manual is correct and complete, no company shall be held liable for any errors or omissions in this manual. Changes and technological advances are continuously being made in the over-the-air and wireless market. Information provided in this manual was accurate at time of printing. If the Winegard Air 360+ or Gateway do not function as expected, please contact Winegard Company at 1-800-320-9992, email help@winegard.com, or visit our website at www.winegard.com.

# **Specifications/Features**

- · Designed for RV use
- Durable UV and weather resistant
- 360° Signal Reception
- High Definition VHF/UHF Digital Signals
- ATSC 3.0 Ready
- Amplified
- State of the art pHEMT technology with 4G LTE Filter
- Range Up to 55 miles\*
- Height 8.05"
- Diameter of dome 18.2"

- Frequency Range:
  - VHF 54 to 216 MHz
  - UHF 470 to 700 MHz
  - FM 87.5-108 MHz
- Gain 18 dB
- Noise 1 dB
- Impedance 75 ohms
- Power Supply DC 12V
- (1) WiFi antenna\*\*
- (2) LTE antennas\*\*
- \*\* For use with the Winegard Gateway

\*Antenna mileage figures based on average terrain. Actual receiving distance will vary based on transmitting power, transmitting antenna tower height, global pattern of transmitter, height of receiving antenna, weather conditions, & terrain between receiving path including trees, buildings, hills, mountains, etc.



18.2" Dia.

# **Parts Included**

Tools needed for installing (not included) – Butyl Tape, Pencil, Scissors, Hole Saw, Drill, Phillips Screwdriver, Crimping Tool, 18AWG Power Wire



#### **Product Information**

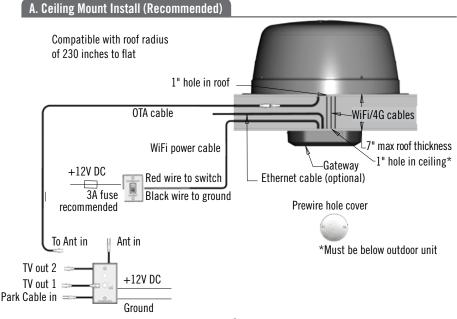
The Winegard® Air™ 360+ system will bring in over-the-air local broadcast television out of the box but has also been designed with the ability to work with the Winegard Gateway as a WiFi and 4G LTE Extender. It is not intended to work with any other router system.

The Air 360+ is designed for RVs with a roof-radius of 230 inches to flat and with a maximum 7 inch roof thickness.

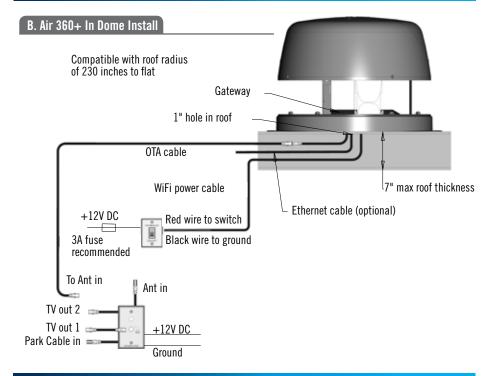
The Air 360+ allows the Winegard Gateway™ to be installed in two locations; inside the dome of the antenna or on the ceiling of the RV. For better performance, it is recommended to install on the ceiling of the RV shown in Option A below, however either option is acceptable.

The Air 360+ can replace another TV antenna and can utilize the coax cable that has already been installed. If doing this, you must ensure the coax runs to the Winegard antenna wall plate/power supply and, if the Winegard Gateway is to be installed, that the power cable is routed to the Gateway wall plate/power supply.

It is recommended to install the Air 360+ before attempting to install the Gateway™ system. Winegard recommends installing the Gateway directly under the Air 360+. Once the Air 360+ has been installed, there are two requirements to finding a location on the RV ceiling for installation: +12VDC must be present, and the three WiFi/4G antenna cables from the Air 360+ must be able to reach the connection points on the Gateway router.



#### **Product Information** cont.



#### **Installation Instructions**

#### Safety Recommendations

Do not attempt to install this system in the rain or under any wet conditions. Do not paint this antenna. Painting the antenna will void the warranty.

**Before mounting the antenna,** determine locations for both the TV antenna wall plate/power supply and Gateway wall plate/power supply. Keep in mind the following:

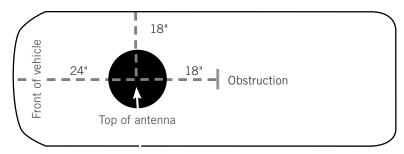
- Coaxial cables will have to run from the power supply to the antenna and from the power supply to each television.
- If using the Air 360+ to receive FM stations, an additional coax cable (not provided) will have to run from the wall plate to the coax to audio cable (provided) and into the radio.
- Coax cables will have to be routed through the roof directly under the perimeter of the antenna. It will not seal correctly for the cables to exit under the flange. Failure to install correctly could cause damage to the antenna and possibly the RV.
- A 12 V connection must be made to the back of both power supplies.

#### **Installation Instructions** cont.

• The Winegard® Gateway™ can always be installed later, however it is recommended to run the power cable to the intended mounting location of the Gateway router.

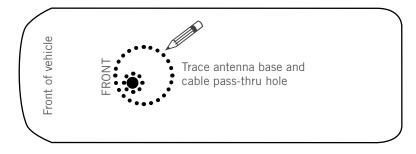
**Choose a location** for the antenna that meets the following requirements:

- Offers enough support for a secure installation
- Maintains adequate clearance from the edge of the roof and any obstructions:
- clearance distance of 24 inches needed from center of antenna to front of the vehicle.
- clearance distance of 18 inches needed from center of antenna to nearest obstruction and to the edge of the roof.



**Step 1** – Remove the dome of the antenna by unscrewing the 4 Phillips screws on the side of the dome. Carefully remove the dome and set it on its side as a coax cable is connected to the antenna attached to the roof of the dome.

**Step 2** – Place the base of the antenna in the location you intend to mount with the flange indicating **FRONT** facing the front of the vehicle. Next, with a pencil, trace around the base of the unit and the cable pass-thru hole that the coax cable exits. Remove the base from this location.



- > If installing the Winegard Gateway on the RV ceiling continue to Step 3.
- > If installing the Winegard Gateway in the dome of the Air™ 360+ continue to Step 11.

# Gateway Ceiling Mount Installation (recommended)

Figure 1

Step 3 – Where the cable pass thru hole was traced, drill, using a hole saw, a 1"-1½" diameter hole through the roof and ceiling of the vehicle. Be careful not to damage any wiring between the roof and ceiling. Do not exceed  $1\frac{1}{2}$ ".

**Step 4** – Replace the dome. Verify the dome holes align with the base holes. Ensure the dome and gasket are completely tight and screw in the four Phillips screws.

**Step 5** – Connect the provided 20' coax cable to the coax cable that exits the base

ax base REAR

of the Air 360+. If replacing an existing antenna, connect the coax cable that is already ran to the coax cable that exits the base of the Air 360+.

**Step 6** – Feed all 4 cables (Coax, Yellow, Green, and Red) into the roof of the RV.

**Note:** The coax cable will need routed wherever the antenna wall plate/power supply is going to be installed.

**Step 7** – It is recommended to use Butyl tape (not included) for extra protection under the entire base flange before screwing to the roof. Reposition the base of the antenna in the location you intend to mount with the flange indicating **FRONT** facing the front of the vehicle. Screw in 6 mounting screws into the 6 mounting holes around the flange of the base and into the roof.

**Step 8** – Next, add approved sealant (check with RV Manufacturer) completely around the flange base and over each screw.

**WARNING:** Ensure the gasket of the dome is complete sealed and that there are **NO** gaps between the sealant and the base of the Air 360+. Failure to do so could lead to water damage in the RV.

#### > If planning to install the Winegard Gateway now or at a later time:

**Step 9** – Run the Gateway power cable from the hole where the three antenna cables (Yellow, Green, and Red) enter the ceiling of the RV to the predetermined location of the Gateway wall plate/power supply. The white connector of this power cable should be at the same location as the Yellow, Green, and Red connectors. The Winegard Gateway will use this power cable. The bare wires of this power cable should be routed to where the On/Off switch will be for the Winegard Gateway extender.

## Gateway Ceiling Mount Installation (recommended) cont.

- > If installing the Winegard® Gateway™ now, please review the Winegard Gateway installation manual followed by reviewing the Power Supply Installation on page 8 of this manual.
- > If installing the Gateway at a later time continue to Step 10.

**Step 10** – Zip tie (provided) the prewire power cable along with the 4G LTE and WiFi cables (Yellow, Green, and Red) to the notch on the backside of the white prewire hole cover shown in figure 2. Make sure all the cables are inside the ceiling and screw the white prewire hole cover with 2 white screws (provided) into the ceiling.



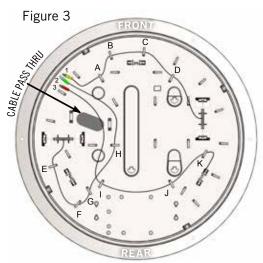
Figure 2

Continue to the Power Supply Installation section of this manual.

# **Gateway In Dome Mount Installation**

**Step 11**– Using a hole saw, drill a 1"- $1\frac{1}{2}$ " diameter hole through the roof of the vehicle. Do not drill into the ceiling and be careful not to damage any wiring between the roof and ceiling. Do not exceed  $1\frac{1}{2}$ ".

**Step 12**– Pull the Yellow, Green, and Red Cables into the dome from the Cable Pass Thru hole. Secure the Yellow cable into the A, B, C, and D clips. Do the same for the Green cable into the E, F, G, and H clips. Continue clipping in the Red cable into the I, J, and K clips. See figure 3.



**Step 13** – Next, using the provided cable tie, zip tie the Gateway prewire power cable, around 3 inches from the white connector, to tab O in figure 1 on page 6. With scissors, clip off the excess cable tie after the power cable is secured. Route this cable into the hole drilled into the roof of the vehicle all the way to the predetermined location of the Gateway wall plate/power supply. The Winegard Gateway will use this power cable. The bare wires of this power cable should be routed to where the On/Off switch will be for the Winegard Gateway extender.

# **Gateway In Dome Mount Installation cont.**

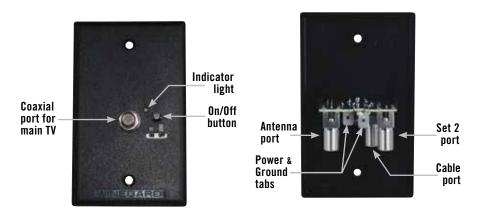
- > If installing the Winegard Gateway now, please review the Winegard Gateway installation manual followed by reviewing the Power Supply Installation on page 9 of this manual.
- > If installing the Gateway at a later time continue to Step 14.
- **Step 14** Replace the dome. Verify the dome holes align with the base holes. Ensure the dome and gasket are completely tight and screw in the four Phillips screws.
- **Step 15** Connect the provided 20' coax cable to the coax cable that exits the base of the Air 360+. Feed this cable through the hole drilled in Step 11 and route the cable to where the antenna wall plate/power supply will be located. If replacing an existing antenna, connect the coax cable that is already ran to the coax cable that exits the base of the Air 360+.
- **Step 16** It is recommended to use Butyl tape (not included) for extra protection under the entire base flange before screwing to the roof. Reposition the base of the antenna in the location you intend to mount with the flange indicating FRONT facing the front of the vehicle. Screw in 6 mounting screws into the 6 mounting holes around the flange of the base and into the roof.
- **Step 17** Next, add approved sealant (check with RV Manufacturer) completely around the base and over each screw.

**WARNING:** Ensure the gasket of the dome is complete sealed and that there are **NO** gaps between the sealant and the base of the Air 360+. Failure to do so could lead to water damage in the RV.

Continue to the Power Supply Installation section of this manual.

## Power Supply Installation – TV Antenna

WARNING: The power supply should be turned off when connecting cables.



**Step 1** – The power supply may be flush mounted in most standard electrical boxes. To flush mount, cut a hole in the wall to fit the box. Run two #12 wires between the wall plate and +12 VDC source, and route downlead cable to this location.

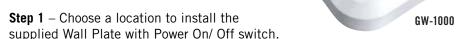
- **Step 2** Make a 12 volt connection from the RV to the power supply. Install the supplied terminals on wires from +12 VDC source, and crimp the terminals with an appropriate crimping tool.
- **Step 3** Push the wires onto tabs on the back of the power supply. ("PWR" and "GND" are also noted on the underside of the power supply electronics board).
- **Step 4** Connect the coax cable from the antenna to the "ANTENNA" port on the power supply, and tighten until fingertight. Then, tighten ½ turn more.
- **Step 5** If hooking up the antenna to two televisions, connect a coax cable from the "SET 2" port to the "Antenna In" port on the second television.
- If hooking up a cable input, connect the cable input to the "CABLE" port on the power supply.
- **Step 6** Mount the power supply in wall with the provided screws.
- **Step 7** Connect a coax cable from the coax port on the front of the power supply to the "Antenna In" coax port on the main TV.
- **Step 8** Press the "ON" switch on the front of the power supply, and check that the wall plate indicator light is on.

This unit is equipped with a polyswitch, which will shut down +12 VDC if there is a direct short between the antenna and power supply. The indicator light will not light. Once the short is eliminated, the device will reset itself.

# Power Supply Installation - Gateway

## Winegard® Gateway™

The Winegard Gateway is compatible with the Winegard Air 360+ ONLY. It is the accompanying piece to take your Air 360+ to the next level in Connectivity. For more information please visit www.winegard.com to find a dealer in your area.



When selecting a location, remember that a +12VDC power cable will need to be run from the Gateway to the switch.

**Step 2** – For a wall or panel mount, drill or use a hole saw to create a  $1\frac{1}{4}$ " hole. Pull the Gateway's power cable and the RV's power wire through the wall or panel.

**Step 3** – Be sure the switch is in the OFF position before continuing. Slide the power switch into the wall plate.

**Step 4** – Connect the +12V power wire from the vehicle to a small red terminal insulator. Crimp the connector.

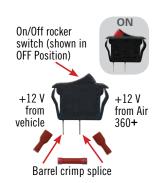
**Step 5** – Connect this small red terminal insulator to the isolated spade of the power switch.

**Step 6** – Connect the red wire from the Gateway's power cable to the other small red terminal insulator. Crimp the connector.

**Step 7** – Connect this small red terminal insulator to the middle spade on the switch.

**Step 8** –Slide the ground wire from the vehicle into one end of the barrel crimp splice, and slide the black ground wire from the Gateway's power cable into the opposite end of the splice. Crimp the splice.

**Step 9** – Mount the wall plate to the wall or panel with the two supplied wall plate screws.





Power switch into wall plate

# **TV** Antenna Operation



#### Scan.

Perform Channel Scan: Select Menu, then Channel Search



## Watch.

Scan monthly for programming updates.

First time users must run a channel scan to receive maximum programming.

Ensure the antenna power supply (wall plate) is in the "ON" position and the green indicator light is illuminated.

A new scan will find any new channels that have been added in your area as well as finding any channels that have changed or moved since the last scan.

While the steps to perform a channel scan may vary between televisions or compatible devices, here are some general guidelines to follow.

- Using the television remote, select "Menu" and then "Settings."
- Select "Channel Setup."
- Select "Antenna" or "Air," depending on your
   TV. Make sure you are not on "Cable."
- Select "Channel Search" or "Channel Scan."
   Keep in mind that steps to perform a channel scan may vary. If the wording in your TV differs from the options shown, refer to your TV user manual for help.

Running a channel scan is NOT the same as pressing Channel UP/DOWN on your remote.

To receive maximum programming, you have to run a channel scan after setting up the antenna. To keep your channel line-up up-to-date, it is a good idea to run a channel scan monthly, anytime a channel is lost, and anytime you change locations.

Power indicator light is green when power is on.



Power button

**Note:** Refer to Gateway manual for operation instructions.

# Winegard App TV Signal Finder with AR

#### FREE DOWNLOAD







Finding your favorite TV programming has never been easier! Using your current location, the app searches for all available signals and determines the correct antenna positioning.

Antenna Pointer – Use the top-down map view to locate all HDTV towers closest to your address or GPS location. Eliminate signal obstructions such as trees, hills, and buildings by switching to the AR view. Simply point your phone to the horizon and rotate 360 degrees to bring into view your desired TV tower and find where the local channels are in your location. The number displayed above a tower indicates the number of channels available. Tap the tower icon to see full channel details.

Avoid obstructions with the augmented reality (AR)\* view.

\*May not work on smartphones without sensors.



# **Troubleshooting**

**WARNING:** Do NOT install couplers, splitters, etc. between the power supply and the antenna. Installation of any item on the downlead may cause a short in the system. The downlead supplies +12 VDC to the preamp in the antenna.

What to do when your RV/TV antenna is not working properly:

#### TO TEST SYSTEM

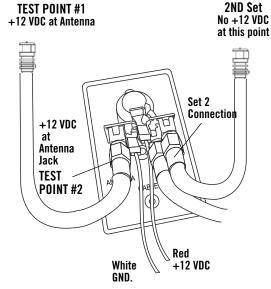
- **Step 1** Make sure TV set is working properly.
- **Step 2** Switch power supply ON and OFF watching for difference in picture quality. If there is NO difference, use following steps:

**CAUTION:** The power supply should be turned **OFF** when connecting/ disconnecting cables to power supply and antenna, but should be turned **ON** when testing for voltage.

Step 3 – Disconnect cable from antenna and check for +12 VDC at Test Point #1. If there is +12 VDC, the power supply is OK. Replace antenna.

Step 4 – If there is NO +12 VDC at Test Point #1, reconnect cable to antenna. Remove power supply from wall and visually inspect for burned/broken parts. If there are ANY broken/burned parts, replace power supply.

Step 5 – Disconnect cable from antenna jack on power supply. Check for +12 VDC at Test Point #2. If +12



VDC is present, there is a cable problem connecting the power supply to the antenna. Repair/replace cable.

**Step 6** – If +12 VDC is not present at Test Point #2, be sure the green indicator light is ON. If not, check the polarity of the red/white wires and the +12 VDC source. If there is still no +12 VDC, replace power supply.

#### WINEGARD MOBILE PRODUCTS LIMITED WARRANTY (2 YEARS PARTS: 1 YEAR LABOR)

Winegard Company warrants this product against defects in materials or workmanship for a period of two (2) years from the date of original purchase. During year one (1) of such warranty, Winegard Company will also pay authorized labor costs to an authorized Winegard dealer to repair or replace defective products. No warranty claim will be honored unless at the time the claim is made, Customer presents proof of purchase to an authorized Winegard dealer (to locate the nearest authorized Winegard dealer, contact Winegard Company, 3000 Kirkwood Street, Burlington, Iowa 52601, Telephone 800-288-8094 or visit www.winegard.com). Customer must provide proof of purchase with a dated sales receipt for the Winegard product to verify the product is under warranty. If the date of purchase cannot be verified, the warranty period shall be considered to begin thirty (30) days after the date of manufacture.

If a defect in material or workmanship is discovered, Customer may take the product to an authorized Winegard dealer for service. Customer must provide proof of purchase to verify the product is under warranty. If the product is brought to an authorized Winegard dealer for service prior to expiration of year one (1) of the warranty period and a defect in material or workmanship is verified by Winegard Technical Services, Winegard Company will cover the Winegard dealer's labor charges for warranty service. The Winegard dealer must contact Winegard Technical Services in advance for pre-approval of the service. Approval of the service is at the sole discretion of Winegard Company.

Alternatively, Customer may ship the product prepaid to Winegard Technical Services (located at 2736 Mt. Pleasant Street, Burlington, Iowa 52601, Telephone 800-788-4417). Customer must return the product along with a brief description of the problem and provide Winegard Technical Services with Customer's name, address, and phone number. Customer must also provide proof of purchase to verify the product is under warranty. If the product is returned before the expiration of the warranty period, Winegard Company will (at its option) either repair or replace the product.

This Limited Warranty does not apply if the product has been damaged, deteriorates, malfunctions or fails from: improper installation, misuse, abuse, neglect, accident, tampering, modification of the product as originally manufactured by Winegard in any manner whatsoever, removing or defacing any serial number, usage not in accordance with product instructions or acts of nature such as damage caused by wind, lightning, ice or corrosive environments such as salt spray and acid rain. This Limited Warranty also does not apply if the product becomes unable to perform its' intended function in any way as a result of the television signal provider making any changes in technology or service.

#### RETURN AUTHORIZATION POLICY

A Return Material Authorization (RMA) is required prior to returning any product to Winegard Company or Winegard Warranty Services under this warranty policy. Please call our Technical Services Department at 800-788-4417 or send an email to <a href="mailto:warranty@winegard.com">warranty@winegard.com</a> to obtain the RMA number. Please furnish the date of purchase when requesting an RMA number. Enclose the product in a prepaid package and write the RMA number in large, clear letters on the outside of the package. To avoid confusion or misunderstanding, a shipment(s) without an RMA number(s) or an unauthorized return(s) will be refused and returned to Customer freight collect.

WINEGARD COMPANY DOES NOT ASSUME ANY LIABILITIES FOR ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, MADE BY ANY OTHER PERSON.

ALL OTHER WARRANTIES WHETHER EXPRESS, IMPLIED OR STATUTORY INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY ARE LIMITED TO THE TWO YEAR PERIOD OF THIS WARRANTY.

In states that do not allow limitations on implied warranties, or the exclusion of limitation of incidental or consequential damages, the above limitations or exclusions do not apply.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion of limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

This warranty gives Customer specific legal rights. Customer may also have other rights that may vary from state to state.

SATELLITE RECEIVER WARRANTY
See manufacturer's limited warranty policy.

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