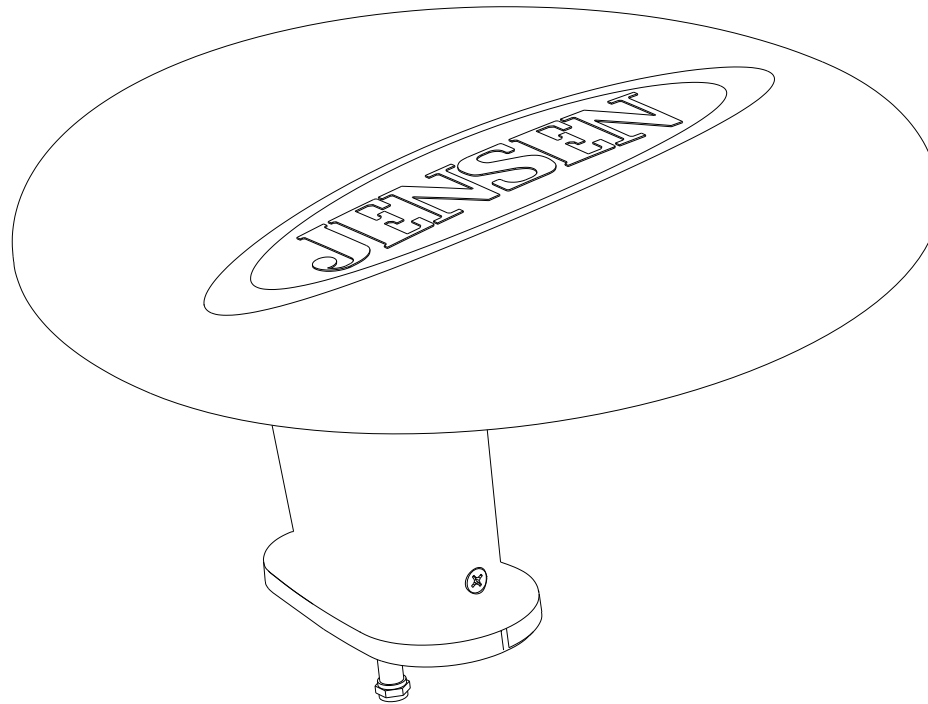JENSEN®

DESIGNED TO MOVE [YOU] ™

ANHD20

MOBILE OMNI-DIRECTIONAL WIDEBAND ANTENNA
Installation and Operation Manual

PATENT PENDING

INTRODUCTION

Thank you for choosing a Jensen. We've tried to make the instructions in this owner's manual clear and easy to follow. If you take a few minutes to look through it, you'll learn how to use all of the features of your new Jensen antenna for maximum enjoyment.

Contents

PRECAUTIONS

• **Proper Power Supply**
   This product is designed to operate with a 12 volt DC, negative ground power system

• **Use Authorized Service Centers**
   Do not attempt to disassemble or adjust this precision product. Contact a professional for service

• **Do not install couplers or splitters between the wall plate and antenna**
   Installation of any item on this cable lead may cause a short. This cable provides power to the Antenna preamp.

• **Power Supply should disconnected during installation**
   Connect all coax cable connections before connecting +12VDC wire to the wall plate. The switch should be in the OFF position when connecting/disconnecting cables.

• **All coaxial cable used should be RG-6U for optimal performance**

• **Painting the Antenna is not recommended and may affect performance**

• **Do not use solvents to clean antenna. Use only mild soap and water.**

PREPARATION
Please read all instructions before beginning the installation.

Tools and Supplies
• Drill or Battery Driver with a #2 Phillips Bit
• ½" Drill Bit
• Caulking Gun
• Tube of Approved Exterior Roof Caulk
• RG-6U Coaxial Cable
• 16AWG Power & Ground Wire

ANTENNA INSTALLATION

1. Remove all packaging contents from shipping box.

2. Locate the Antenna Housing

3. Determine a suitable location to mount the antenna. This location should allow for approximately 24" of clearance around the antenna. Avoid close proximity to other roof mounted objects (AC, Vents, & Roof Edges). See Figure 1 below.
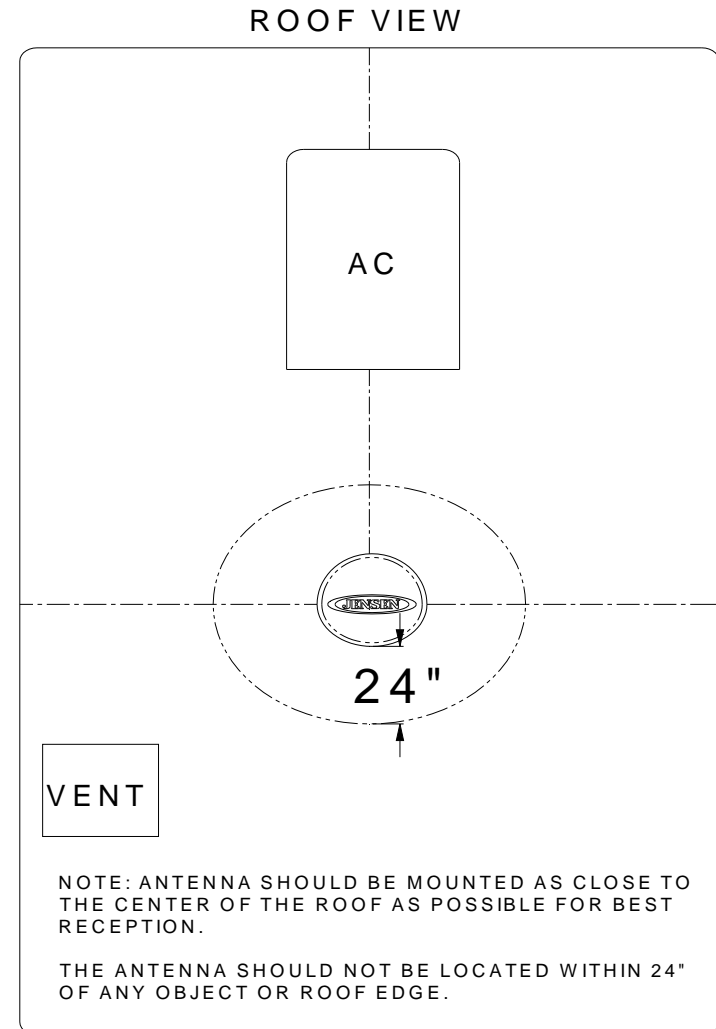

ROOF VIEW

NOTE: ANTENNA SHOULD BE MOUNTED AS CLOSE TO THE CENTER OF THE ROOF AS POSSIBLE FOR BEST RECEPTION.

THE ANTENNA SHOULD NOT BE LOCATED WITHIN 24" OF ANY OBJECT OR ROOF EDGE.

FIGURE 1

ANTENNA INSTALLATION

4. Remove metal base from plastic housing by removing the lock screw and sliding the base away from the plastic stalk. Mark hole locations on roof. Drill 5/8" hole for the coax cable. Pre-drill the 3 mounting screws holes with a 1/8" bit. Route RG6 Coax from wall plate through hole. See Figures 2, 3, & 4.
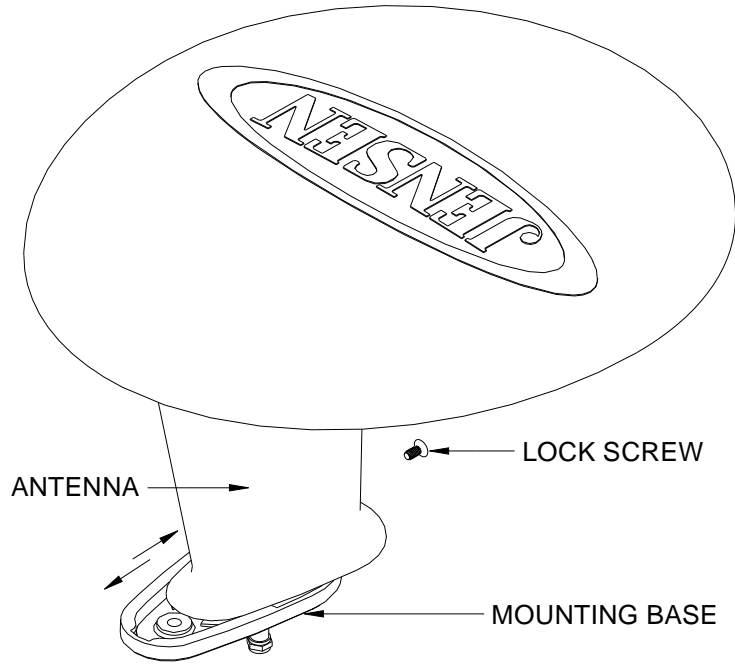

ANTENNA

LOCK SCREW

MOUNTING BASE

FIGURE 2

5. Apply approved caulking compound around all holes. Place base over holes and caulking. Secure base using the included 3 screws.   Apply approved caulking compound to screw heads and fill ½" hole with caulking compound. See Figure 4

6. Connect the 2 coax cables ensuring the fitting is snug (*Do Not Over tighten*). Reinstall the plastic housing onto the base. Reinstall the lock screw.

7. Additional caulking compound may be applied to the outside seam of the base. Please note there is a moisture weep hole at the rear of the base. If proper sealing techniques are used (as described in Step 5) you should not need to add additional caulking around the base.

NOTE: The Caulking compound used should be approved for the type of vehicle and environment. Check OEM recommendations for your vehicle. Material should be a non-hardening type such as Butyl caulking.
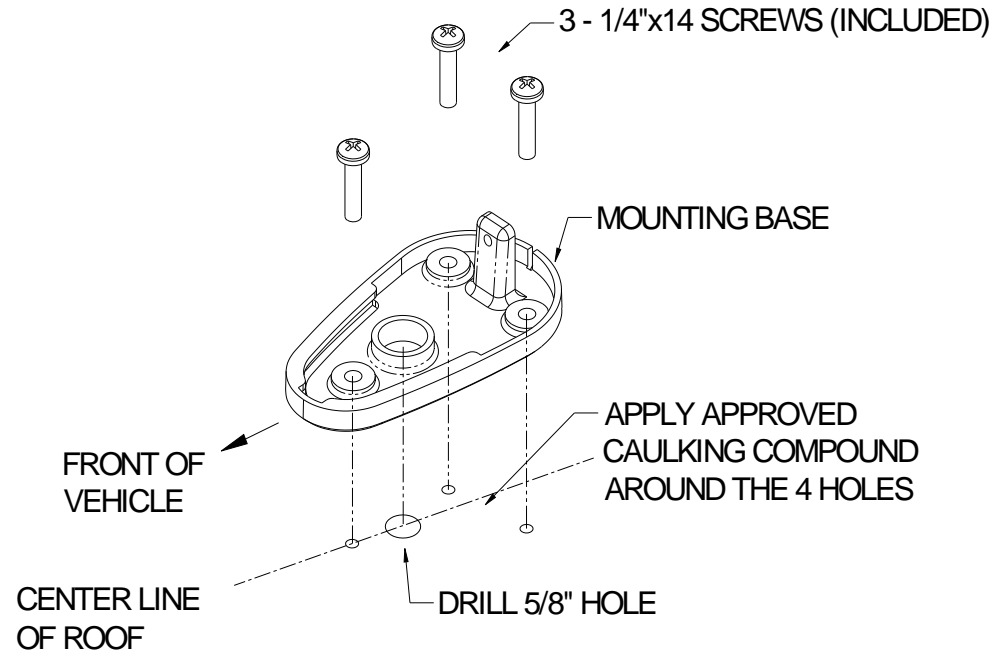

3 - 1/4"x14 SCREWS (INCLUDED)

MOUNTING BASE

APPLY APPROVED CAULKING COMPOUND AROUND THE 4 HOLES

FRONT OF VEHICLE

CENTER LINE OF ROOF

DRILL 5/8" HOLE

FIGURE 3

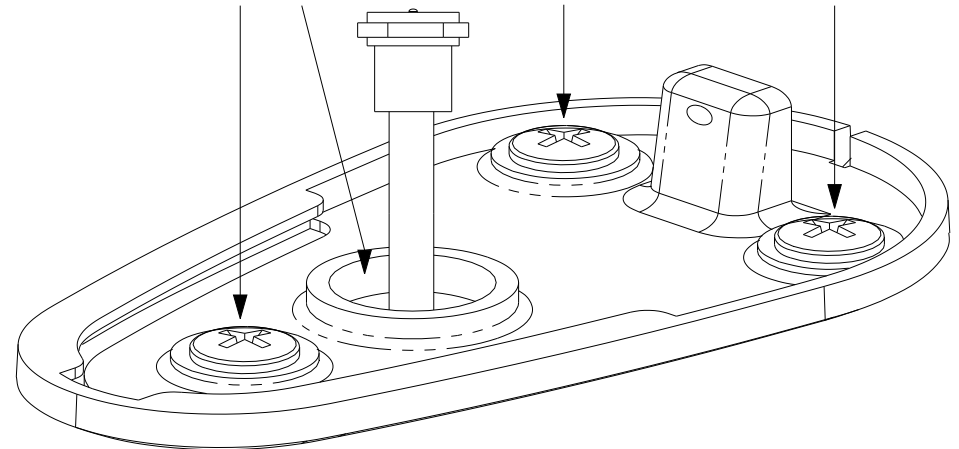APPLY APPROVED CAULKING COMPOUND 4 PLACES

FIGURE 4

WALL PLATE INSTALLATION

1. The wall plate/power supply assembly may be mounted in most electrical outlet/switch boxes. The plate can also be mounted without an electrical box. This mounting method requires a hole 2.75" x 2.0". Route 2 16AWG wires to this hole from the 12VDC source. Also route all coax cables to this hole. See Figure 5.

2. Connect all coax cables to the appropriate wall plate pigtails. Each pigtail has a label for identification. Connect the cable from the roof antenna to the "ANTENNA IN". Connect the "TV2 OUT to TV input. "RADIO OUT" goes to the input of the AM/FM radio. "CABLE IN" connects to the Park Cable Input. See Figure 6. (*Do Not Over tighten*)

3. After connecting all coax cables, connect +12VDC wire to the + male spade terminal on the circuit board (marked with a red dot) using a ¼" Insulated Female Spade Terminal. Then connect the ground wire (marked with a black dot) using the same type terminal. See Figure 6.

6. Install the wall plate using a two #6 Flat Head screws.

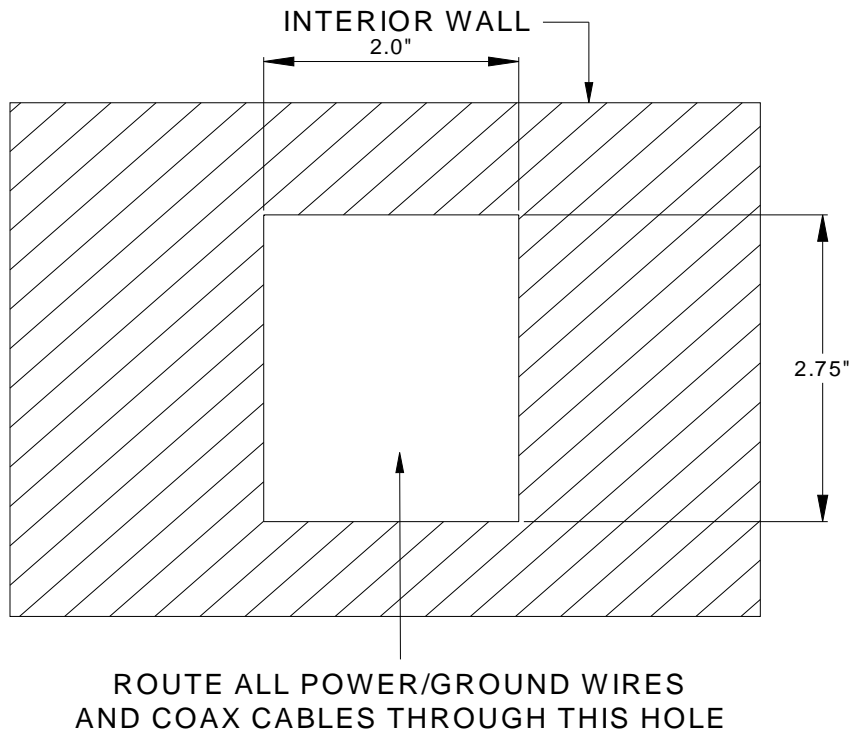7. Connect main TV to the TV1 output on the front of the wall plate.

INTERIOR WALL

2.0"

2.75"

ROUTE ALL POWER/GROUND WIRES
AND COAX CABLES THROUGH THIS HOLE
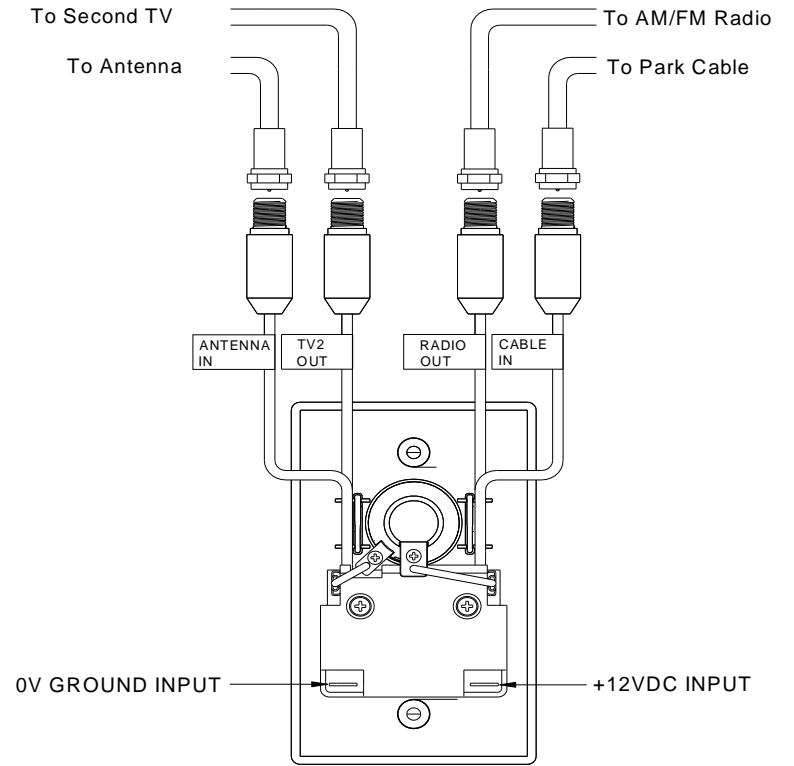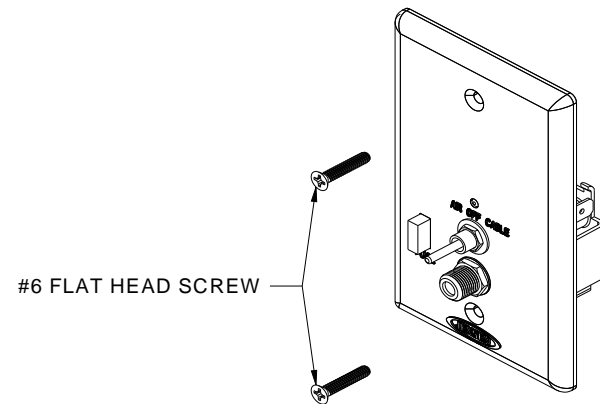
FIGURE 5

* Recommendation of RG-6U cable type with a maximum length of 10 feet between Plate and Antenna.

To Second TV
To Antenna
To AM/FM Radio
To Park Cable

ANTENNA IN
TV2 OUT
RADIO OUT
CABLE IN

0V GROUND INPUT
+12VDC INPUT

FIGURE 6

#6 FLAT HEAD SCREW

FIGURE 7

OPERATION

1. Select the desired source by moving the switch located on the front of the wall plate. Select either "AIR" or "CABLE". AIR will activate the roof mounted antenna which will provide over-the-air TV and AM/FM reception. Selecting CABLE will enable you to receive signals from your external Cable Service provider and AM/FM reception. Selecting "OFF" will disable the system completely and is recommending when the vehicle is not in use or storage. Note the Red LED indicator will be On in the "AIR" & "CABLE" positions. See Figures 8 & 9.

2. Next turn on all TV's and access your on screen menu. (refer to your TV owner's manual). If you selected "AIR" ensure that TV tuner is set to receive over-the-air ATSC/NTSC signals. Activate the TV's auto programming sequence to scan / store available channels.

3. If you selected "CABLE", then set your TV tuner to cable and activate the TV's auto programming sequence to scan / store available channels.

4. The 7.5 Amp DC Receptacle is designed to power DC TV's or other small amperage DC devices. The 7.5A fuse located on the front of the wall plate protects this receptacle and the power to the roof antenna. If this fuse blows then the antenna will not work. Do not connect high current devices.

5. Other wall plates do not have the DC receptacle and are fused at 1 Amp to protect the electronics.

*Warning: Replace Fuse with the same Fuse type & current rating. Failure to do so may cause damage and void warranty.

SPECIFICATIONS

POWER SUPPLY……………………………………………….9 – 16 VDC negative ground at 85mA
IMPEDANCE……………………………………………………………………………………….....75Ω
FREQUENCY RANGE………………………..40 – 850MHz, 500 – 1700KHz (AM, FM, VHF, UHF)
E-PLANE DIRECTIVITY……………………………………………………………....Omni-Directional
GAIN………………………………………………………………………………...…15dB (typical)
GAIN FLATNESS…………………………………………………………….……0.5dB (typical)
OIP3……………………………………………………………………………...…80dBmV (typical)
OPERATING TEMPERATURE………………………………………….-40C ~ 85C (-40F~ 185F)
OVERALL DIMENSIONS…………………………………………………8"(H) x 12.75"(W) x 14"(D)
Specifications subject to change without notice.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 2 conditions:
(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate this equipment.

ANWP12V

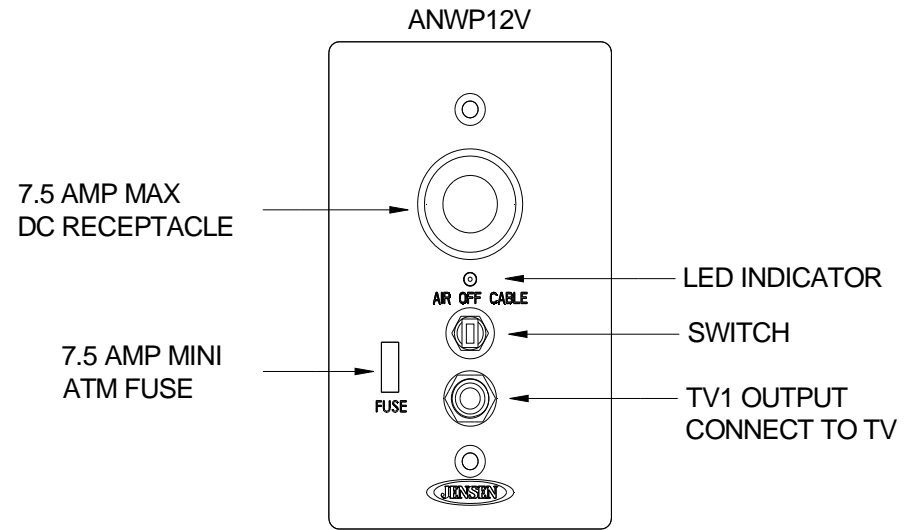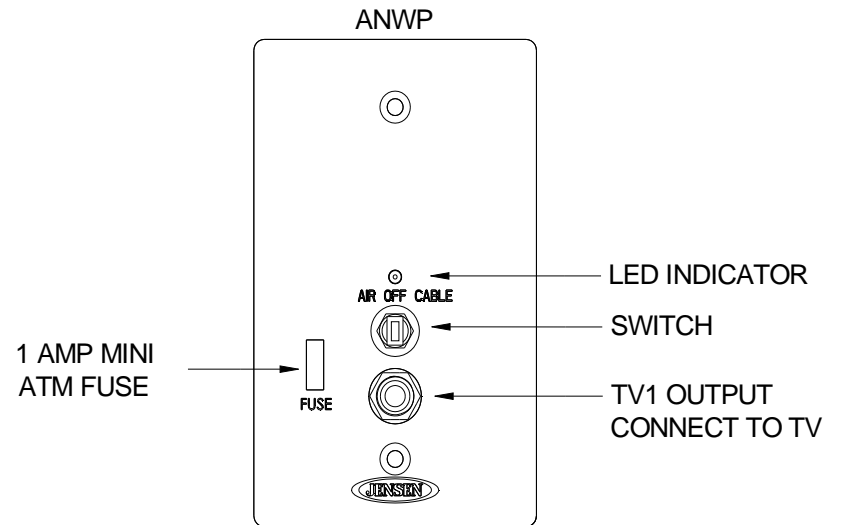7.5 AMP MAX
DC RECEPTACLE

LED INDICATOR

AIR OFF CABLE

7.5 AMP MINI
ATM FUSE

SWITCH

FUSE

TV1 OUTPUT
CONNECT TO TV

JENSEN

FIGURE 8

ANWP

LED INDICATOR

AIR OFF CABLE

SWITCH

1 AMP MINI
ATM FUSE

FUSE

TV1 OUTPUT
CONNECT TO TV

JENSEN

FIGURE 9

JENSEN SYSTEM LAYOUT

ANHD20

TV1

TV2

AMPLIFIED
SIGNAL

RG-6U
CABLE
(Max 10 feet
recommended)

AM/FM Radio
Female Motorola

AM/FM Radio Male Motorola
to F connector (P/N AN3FM)

Park Cable Input

ANTENNA
IN

TV2
OUT

RADIO
OUT

CABLE
IN

AIR OFF CABLE

WALL PLATE (ANWP or ANWP12V)
Provides power to the Antenna via the
coaxial cable center conductor

FUSE

6
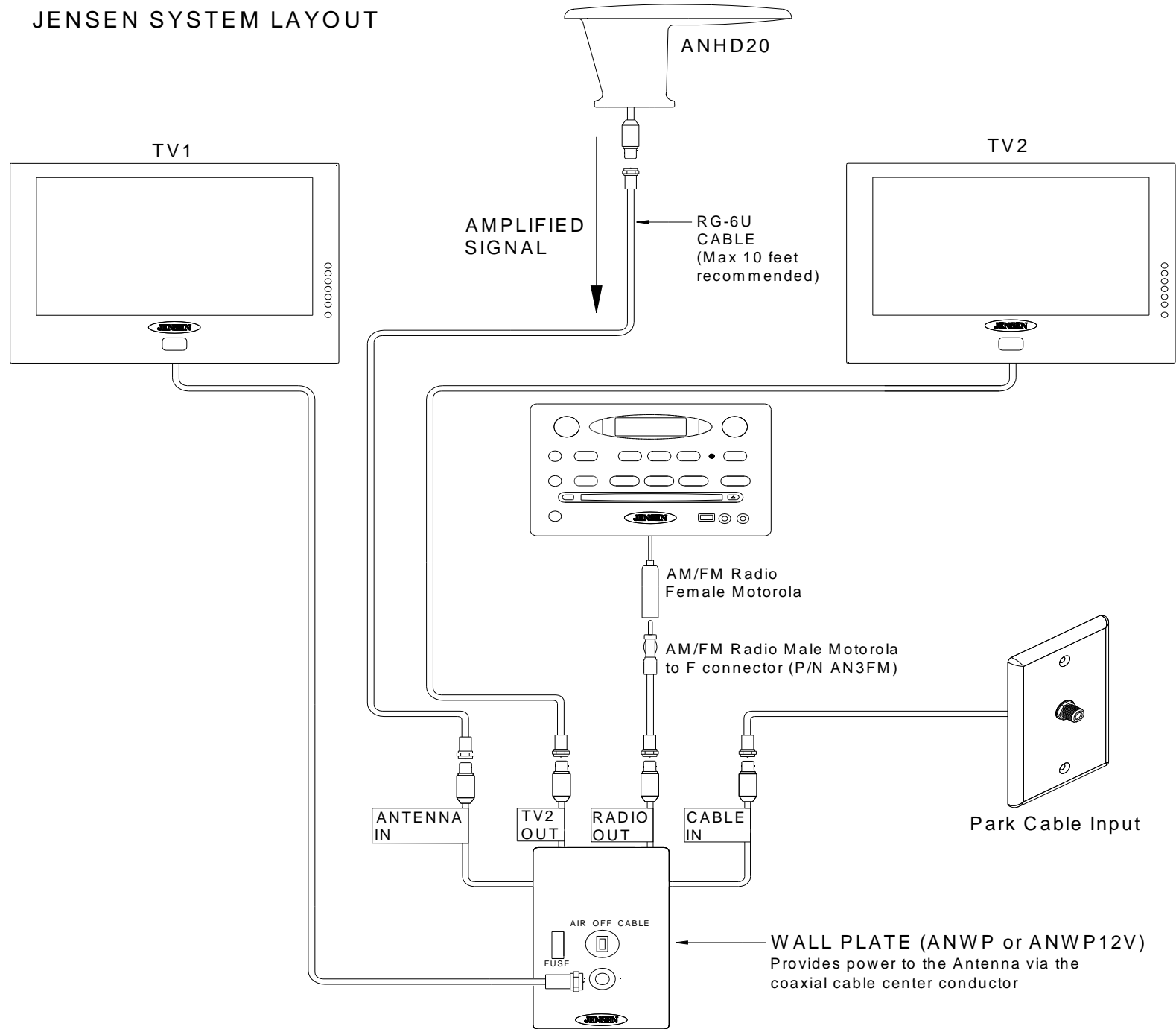
TROUBLESHOOTING

Problem	Cause	Corrective Action
No TV reception on AIR	No 12VDC power at PCB	Check power and ground connections with test light
	Blown Fuse	Check fuse in wall plate and main supply
	Bad coax connection	Check to ensure cables are connected properly at TV & wall plate
	Wall Plate Switch in wrong position	Move switch to AIR position
	TV tuner not set to AIR	Check TV tuner status in on screen menu
LED Indicator is Off	No 12VDC power at PCB	Check power and ground connections with test light
	Blown Fuse	Check fuse in wall plate and main supply
	Shorted coax connection	Check Antenna coax connection for short
	Switch in wrong position	Check switch position
No TV reception on Cable	No 12VDC power at PCB	Check power and ground connections with test light
	Blown Fuse	Check fuse in wall plate and main supply
	Bad coax connection	Check to ensure cables are connected properly at TV & wall plate
	Wall Plate Switch in wrong position	Move switch to CABLE position
	TV tuner not set to CABLE	Check TV tuner status in on screen menu
No power at DC socket	No 12VDC power at PCB	Check power and ground connections with test light
	Blown Fuse	Check fuse in wall plate and main supply

For technical assistance, please visit www.asaelectronics.com

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www.asaelectronics.com

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