

This antenna can be used for reception of all generations and models of XM, Sirius and SiriusXM™ radios. The antenna comes fully assembled for your convenience. All nuts are tightened to the proper tension and no additional tension is required. The antenna is assembled and can be installed right out of the box.

IMPORTANT SAFETY INSTRUCTIONS

- **Read and Retain Instructions** – Read all Instructions before operating equipment and save for future reference.
- **Outdoor Antenna Grounding** – The antenna and coaxial cable connecting to the unit should be properly grounded to provide protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code (NEC), ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.
- **Power Lines** – An outside antenna system should not be located in the vicinity of overhead power lines or electric light or power circuits, or where they can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits, as contact with them might be fatal.

Package Includes:

- (1) Antenna Panel & Wall mount
- (1) U-bolt
- (1) Saddle bracket
- (1) F-female to SMB-plug adapter 3' cable
- (1) Rubber weather boot
- (1 lot) Mounting and assembly hardware
- (1) Grounding lug and star washer



SiriusXM Reception

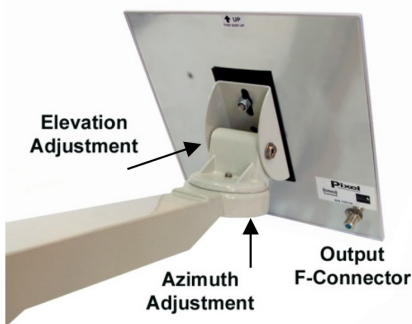
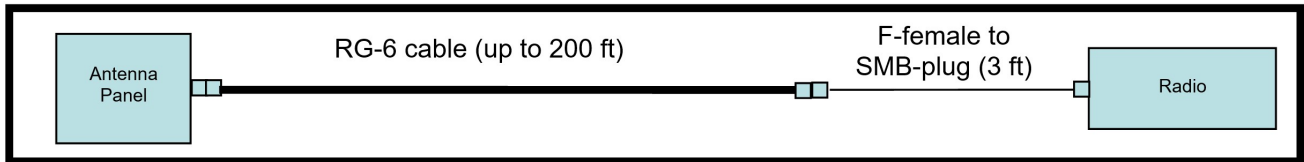
SiriusXM has two satellites located at fixed orbital positions in the southern sky (at 115° W longitude and 85° W longitude). These satellites each carry all of the SiriusXM channels, so it is only required to have an un-obscured line-of-sight to one of these orbital locations. To initially set up the antenna, orient it approximately due south at an up elevation angle of approximately 45°. Use this as starting spot and peak the signal reception for maximum signal reception on one of the SiriusXM satellites using the antenna alignment menu in the radio.

Important! Be sure to select an installation location that allows for a clear line of site to the southern sky.

Wall Mounting and Antenna Alignment

Attach the wall mount assembly to any vertical or horizontal flat surface. Use the supplied screws to secure the mount in the position desired (use of the included anchors requires 5/16" holes).

Connect an RG-6 coaxial cable (not supplied) not longer than 200 ft with male F-connectors to the antenna. Using the supplied 3 ft F-Female to SMB adapter cable, connect the antenna to the radio's antenna input. For cable runs exceeding 200 feet, use a line amplifier(s) (Pixel SBA-1, not supplied) to increase the signal strength



Elevation and Azimuth Adjustments



Horizontal Mount

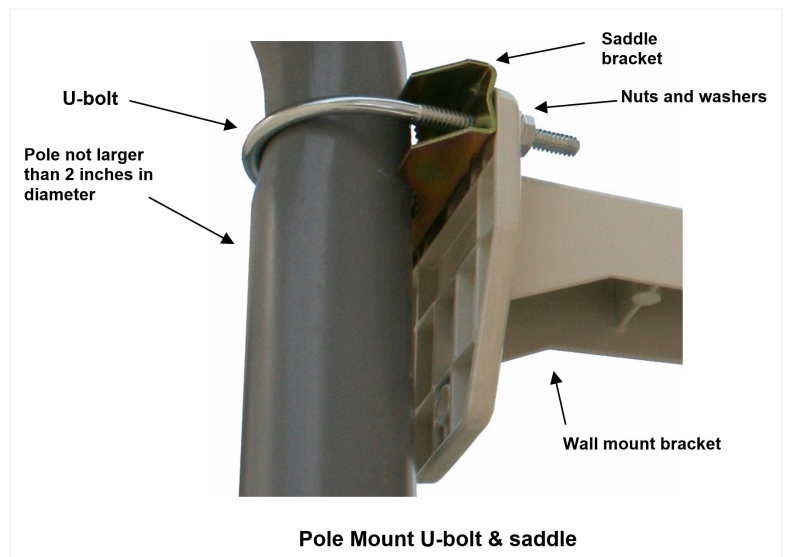


Vertical Mount

- Adjust the azimuth and elevation pointing of the antenna for best reception using the antenna signal strength menu in the radio. The antenna has a beam width of $\pm 25^\circ$, which is narrower than standard consumer-quality home-kit antennas, but provides higher gain and rejection to multi-path interference.
- Tighten all hardware and seal the outdoor connectors using the included weather boots or other means to prevent moisture ingress. Provide a strain relief for the cable.

Pole Mounting

Attach the pole mount bracket to any pole (not larger than 2 inches in diameter) using the U-bolt and saddle as shown in Figure 6. Tighten all hardware and seal the outdoor connectors using the included weather boots or other means to prevent moisture ingress. Provide a strain relief for the cable.



Pole Mount U-bolt & saddle

Installation Notes

- Mount the antenna outdoors with the supplied wall mount or pole mount bracket. Operation indoors or behind windows is not recommended. Window panes can have tinted coatings which can attenuate the signal. The attenuation of these coatings can vary greatly as the temperature changes.
- Use the menus in the radio to peak the satellite signal reception on one of the satellites. It is not necessary to position the antenna for simultaneous reception of multiple satellites.
- The antenna's internal low noise amplifier is designed to compensate for the loss of up to 300 feet of RG-6 cable. For longer cable runs use an in-line amplifier (Pixel Model SBA-1) to boost the signal.
- Although this antenna can receive signals from terrestrial repeaters, it is recommended to always use the satellite signals for primary reception at fixed sites. The satellite signals are much more stable and are not affected by many uncontrolled variables that can greatly impact signal quality from repeaters over time.
- Seal all outdoor coax connector fittings with the weather boot (supplied), sealant or weatherized tape to eliminate moisture ingress.

Troubleshooting

Problem: No signal reception and the following messages may be displayed on the radio:

Antenna:

This error signal indicates that the antenna is not properly connected.

- Ensure there are no "shorts" or discontinuities in the cables and that all connections are tight.
- With the radio turned on and all antenna cables connected at the radio, check the DC voltage at the antenna end of the cable. It should be between 4 VDC and 7 VDC.

No Signal:

This error signal indicates that the antenna is connected properly but that the signal is too weak for reception.

- Ensure the sum total of all cables between the antenna and radio does not exceed 300 Feet and it is RG-6 cable.
- Ensure the antenna is properly aimed.

Warning: Although in many locations it may be possible to receive signals from terrestrial repeaters, it is not recommended to use these signals at fixed locations. Repeater signal strength can vary greatly from day to day as function of many uncontrolled variables.

Appendix 1

The following chart shows the optimum azimuth bearing and elevation pointing angles for locations throughout the US and Canada. The azimuth has been magnetically corrected.

Warning: Although in many locations it may be possible to receive signals from terrestrial repeaters, it is not recommended to use these signals at fixed locations. Repeater signal strength can vary greatly from day to day as function of many uncontrolled variables.

City	St	XM Sat 1 (West 85°)		XM Sat 2 (West 115 °)	
		Azimuth°	Elevation°	Azimuth°	Elevation°
Birmingham	AL	179.1	49.1	223.5	39.8
Dothan	AL	182.1	51.8	227.5	40.9
Little Rock	AR	166.6	47.0	212.1	41.6
Phoenix	AZ	128.0	40.5	173.0	49.1
Fillmore	CA	119.2	35.5	160.0	47.9
Los Angeles	CA	119.8	36.3	161.2	48.4
San Diego	CA	120.6	38.0	163.4	50.0
San Francisco	CA	116.4	30.6	153.8	43.5
Denver	CO	142.4	37.9	184.4	40.8
Washington	DC	202.5	42.1	239.2	29.4
Ft Myers	FL	190.9	57.2	237.1	42.0
Jacksonville	FL	191.3	52.7	234.8	39.2
Key West	FL	191.3	59.6	238.9	43.4
Miami	FL	195.4	57.9	240.5	41.4
Tampa	FL	189.3	55.6	235.1	41.5
Atlanta	GA	185.0	48.8	228.0	38.1
Savannah	GA	192.8	50.6	234.9	37.4
Pocatello	ID	131.0	31.6	169.6	38.1
Chicago	IL	179.4	39.2	218.5	32.6
Dodge City	KS	151.1	41.6	194.9	41.7
Kansas City	KS	162.9	41.5	205.2	38.3
Louisville	KY	182.7	43.5	223.4	35.0
New Orleans	LA	170.1	52.9	219.5	45.0
Boston	MA	214.5	36.9	247.9	23.2
Germantown	MD	202.0	41.8	238.7	29.4
Caribou	ME	220.2	31.3	252.0	19.0
Portland	ME	216.1	35.3	248.9	21.8
Meridian	MN	166.9	36.1	205.8	32.8
Minneapolis	MN	167.7	35.1	206.0	31.8
St Louis	MO	172.6	42.8	214.4	36.9
Billings	MT	137.9	30.4	175.6	34.5
Kalispell	MT	129.1	25.8	164.8	32.0
Winston-Salem	NC	195.2	45.8	234.6	33.6
Minot	ND	151.7	30.0	188.7	30.6
North Platte	NE	150.8	37.8	192.0	38.2
Omaha	NE	160.7	38.9	201.7	36.6
Cherry Hill	NJ	206.7	40.5	242.3	27.4
Albuquerque	NM	137.5	41.8	183.0	46.4
Shiprock	NM	134.8	39.3	178.3	44.9
Elco	NV	125.7	31.9	164.4	40.5
Las Vegas	NV	124.9	36.3	166.5	46.0
Reno	NV	120.0	30.8	157.8	41.8
Brooklyn	NY	208.9	39.5	243.7	26.2
Albany	NY	209.5	37.3	243.8	24.6

City	St	XM Sat 1 (West 85°)		XM Sat 2 (West 115 °)	
		Azimuth°	Elevation°	Azimuth°	Elevation°
Buffalo	NY	199.1	37.8	235.1	27.3
New York	NY	208.8	39.4	243.7	26.2
Cleveland	OH	192.6	39.7	230.1	30.0
Tulsa	OK	158.8	44.6	203.8	41.9
Burns	OR	121.9	27.9	158.4	37.3
Eugene	OR	117.1	25.3	152.1	36.2
Pendleton	OR	122.6	26.2	158.3	34.8
Philadelphia	PA	206.4	40.6	242.0	27.5
Newport	RI	214.0	37.9	247.7	24.0
Columbia	SC	193.1	48.3	234.0	35.8
Pierre	SD	152.7	34.4	191.8	34.6
Nashville	TN	179.8	45.9	222.2	37.4
Dallas	TX	155.6	48.1	204.1	45.7
Houston	TX	157.3	52.0	209.1	48.1
Lubbock	TX	145.6	45.5	193.3	46.8
San Antonio	TX	150.0	51.2	202.8	50.0
Salt Lake City	UT	131.3	33.9	171.1	40.5
Milford	UT	128.8	35.6	169.9	43.4
Norfolk	VA	204.1	44.3	241.2	30.5
Burlington	VT	210.8	35.1	244.5	22.9
Seattle	WA	118.3	22.8	152.5	32.3
Green Bay	WI	179.3	36.2	217.1	30.3
Milwaukee	WI	179.1	37.9	217.6	31.6
Charleston	WV	192.2	43.3	231.2	32.6
Casper	WY	141.0	34.1	180.7	37.5

Canada		XM Rock (East 85°)		XM Roll (West 115 °)	
City	Pr	Azimuth	Elevation	Azimuth	Elevation
Vancouver	BC	115.9	22.9	151.3	33.0
Prince Rupert	BC	108.0	15.9	140.6	26.5
Calgary	AB	128.6	25.5	165.3	31.5
Edmonton	AB	162.3	23.5	198.2	28.8
Saskatoon	SK	141.4	27.0	178.6	29.9
Toronto	ON	198.6	39.3	236.5	28.4
Ottawa	ON	204.0	36.9	240.1	25.1
Montreal	QB	210.9	36.4	246.1	23.8
St Johns	QB	211.5	36.6	246.6	23.7
Halifax	NS	227.8	34.3	259.4	18.1
Saint John's	NF	240.4	27.1	268.6	9.7
Brandon	MT	154.3	31.1	193.0	31.1
Sault Sainte Marie	ON	188.3	36.5	226.7	28.7
Thunder Bay	ON	177.8	34.3	216.3	29.1
Whitehorse	YT	102.7	9.8	133.9	19.2
Winnipeg	MA	159.3	31.7	197.9	30.4
Yellowknife	NT	127.2	15.3	160.3	19.3

Warranty

Pixel Technologies warrants its products against defects in material or workmanship for a period of 12 months from the date of retail sale unless otherwise contracted. Defective products will be repaired or replaced at the sole discretion of Pixel Technologies, Inc.

Shipping Your Product for Warranty Repair

- When shipping your product, you must include the following:
- A copy of the receipt, invoice, or other proof of purchase.
- A description of the problem
- Include all original components that came with the unit. Missing components will not be replaced.
- Include return name, physical address, & telephone number/email address and RMA number.
- (An RMA number can be obtained by calling Pixel Technologies at (800) 595-0845
- Please ship product by traceable means (such as UPS, FedEx, etc)
- All return shipping charges must be covered by the recipient. Pixel is not responsible for shipping charges.

Return Material Authorization (RMA)

You must email or call us and obtain an RMA number before returning any product and be sure to write it clearly on the outside of the package. We reserve the right to refuse any products returned to us without a return authorization number clearly written on the outside of the return package. All returns or exchanges MUST be postmarked within 3 business days after an RMA number is issued. Please keep products and packaging in like-new condition when returning for a refund to avoid fees for damaged/missing items. Packaging may be opened, but ALL items must be present including the packaging itself and literature. Items that have been physically damaged and show clear signs of wear also cannot be returned.

Damaged, Missing, Delayed or Wrong Items Shipped

Pixel Technologies is not responsible for items that may be damaged, lost, or missing by the shipping company, or "carrier" (UPS, DHL, USPS, etc.). All products and packaging should be carefully inspected upon receipt. Any and all claims regarding wrong item shipped, missing items, or items damaged in shipping must be made to us by email or phone within **3 (three) calendar days** of your order being marked delivered to you by the carrier; after that we can no longer file any claims. The purchaser should alert the carrier and Pixel Technologies that a claim needs to be filed for that shipment. Once the claim is approved, we will re-ship your item at no additional charge.

If we shipped you the wrong item, we will ship out the correct item to you at no additional charge. We will ask that you return the incorrect item to us. An RMA number will be issued and you will be fairly compensated for your return shipping expenses. We reserve the right to choose a shipping method for your replacement, normally matching the same in-transit time as your original shipment.

If an item is missing, we will review the order, checking correct package weight, etc.. If we determine that the item was in fact omitted through our error, we will ship the item out at no additional charge to you. Shipping method will be equal in speed to the original shipping method at time of order (Air or Express service may not apply to shipments going to Hawaii, Alaska, or Canada).

If a piece is missing from a kit (for example, a cable) we will ship the missing piece via the carrier and shipping method of our choice. We will be happy to help you with the details of packaging and shipping your merchandise for credit or exchange if defective. Some limitations and restrictions apply.

Replacements for defective items are usually shipped within 1-3 business days (via ground) after receipt of the defective item.