# Antennas & Distribution Accessories for Satellite Radio, AM/FM & HD Radio (For High End Homes, Commercial & MDU)



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### Antennas

### AM / FM/ HD Radio Outdoor Antenna "Probably the best ever AM /FM Antenna for every home theater receiver"

#### Model AFHD-4

Designed for easy outdoor or attic installation with rugged pro-quality construction, this low profile omni-directional antenna will bring out the best performance from any AM/FM or HD Radio receiver.

- Best-in-class pro-quality AM/FM/HD radio antenna
- Receive stations from up to 30 miles in all directions (See Table 1)
- All signals combined on a single RG-6 cable (not included)
- Includes surge protector and all required adapters and jumpers
- Pole and wall mount capability
- Capable of driving up to 200 ft of cable
- No preamplifiers or external power supplies required
- 4 ft omni-directional monopole requires no ground plane









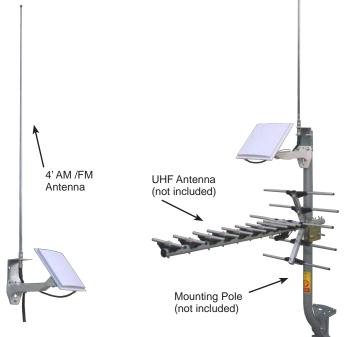
## Receive AM/FM + XM or Sirius + HDTV (by adding any UHF Antenna)

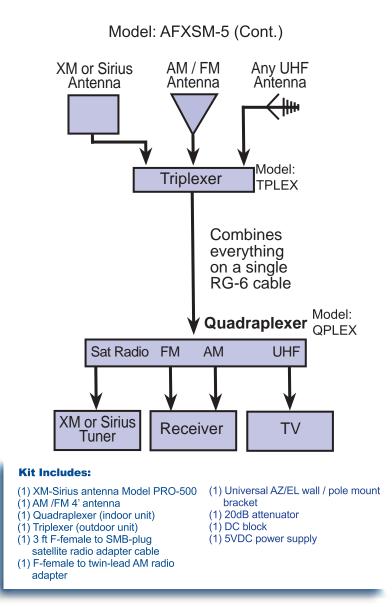
#### **Universal Outdoor Antenna Kit & Multiplexer**

Model: AFXSM-5

This kit includes an AM/FM antenna, an XM or Sirius antenna, a Triplexer and a Quadraplexer. Adding any over-the-air UHF TV antenna provides HDTV reception. *All signals are combined onto one RG-6 cable* and then split out at the destination receiver.

Available with PRO-500 or PRO-600 (AFXSM-6)





Additional Quadraplexers (Model: QPLEX) available separately for multi-receiver installations.



## Home Antenna Receives XM and Sirius Simultaneously

#### Model: PRO-600

The first high-quality, future-proof home antenna designed for simultaneous reception of both XM and Sirius.

- 70 ° beam-width for easy alignment and mounting
- Can drive up 200 ft of RG-6 cable with no external amplifiers required. (Additional line amps available for longer runs: Model SBA-1)
- AZ & EL adjustments for optimum aiming
- Two-stage high-quality filtering for ultimate rejection of out-of-band interference
- High-quality aluminum mount (no plastic parts)
- Mounts to any horizontal / vertical surface or pole up to 2 inches in diameter
- Works with any XM or Sirius radio
- Uses 'industry standard' low loss, RG-6 cable (not included)



#### Includes:

- (1) High gain antenna panel
- (1) AZ / EL adjustable surface-mount bracket
- (1) Pole-mount for attachment to poles up to 2 inches in diameter
- (1) COAX-SEAL<sup>®</sup> for ultimate connector weather proofing
- (1) 3 ft F-SMB adapter cable

### Antennas

### High Gain Antenna System Receives XM or Sirius

#### Professional High Gain Antenna System

Model PRO-500

- Receives XM or SIRIUS
- Optimized for interference / multi-path rejection and high gain reception of satellite radio signals
- Mounts to any horizontal or vertical surface via the included wall mount bracket
- Includes pole fixture for mounting to any pole up to 1-3/4" diameter (pole not included)
- High gain 12 dBi antenna (5 dB more gain than standard antennas)
- Includes two-stage ultra-high selectivity low-noise amplifier/ filter providing over 60 dB out-of-band attenuation to other RF signals that can interfere with reception
- Antenna amplifier / filter can drive up to 200 feet of RG-6 cable (not included). (Additional line amps available for longer runs: Model SBA-1)
- Includes 3 foot F-female to SMB-plug adapter cable to mate with radio

#### Includes:

- (1) 12 dBi amplified antenna
- (1) Wall mount bracket
- (1) Pole Mount bracket
- (1) Weather boot
- (1) 3' F-female to SMB-plug adapter cable
- (1) Set of mounting screws / hardware



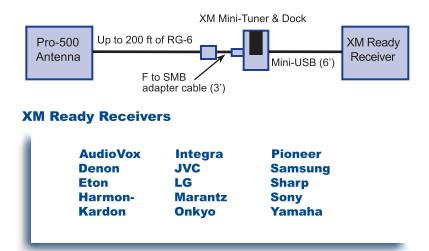


#### **Everything needed to add XM to any 'XM Ready' Receiver using RG-6 Cable**

XM-Ready Pro-Pack Model: XMR-1

This kit is for use with 'XM Ready' receivers and includes a PRO-500 Professional High Gain Antenna System, a CNP-2000 XM Mini-Tuner and a CNP-2000H Home Dock.

It permits the use of up to 200 feet of RG-6 cable between the antenna and the tuner dock. Longer runs are possible with the use of optional SBA-1 high gain line amplifiers.



Mini-Tuner & Dock Available Separately

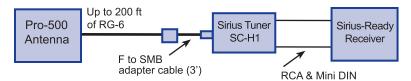
### **Everything needed to add Sirius to any 'Sirius-Ready' Receiver using RG-6 Cable**

Sirius-Ready Pro-Pack Model: SRR-1



This kit is for use with 'Sirius-Ready' receivers and includes a PRO-500 Professional High Gain Antenna System and a Sirius Model: SC-H1 Tuner.

It permits the use of up to 200 feet of RG-6 cable between the antenna and the tuner. Longer runs are possible with the use of optional SBA-1 high gain line amplifiers.



### **Sirius Ready Receivers**

Onkyo Pioneer Yamaha

**SC-H1 Sirius Tuner Available Separately** 

### Extend Home Kit Antenna Cables to Almost Any Length

#### RG-6 Cable Extender Kit Model EXT-1

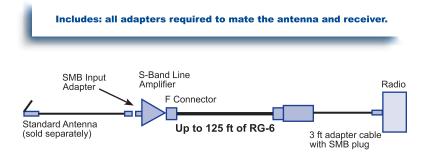


This kit includes the connectors and adapters to permit the use of standard RG-6 cable *(not included)* with satellite radio home kit antennas. When used with the included amplifier, this kit can extend the antenna cable up to 125 feet (for a total of 145 feet with a home antenna with a 20 foot attached cable).

Multiple amplifiers (one Model SBA-1 for each 125 foot segment) can be used to make longer cables.

For antenna installations involving runs in excess of 375 feet, the use of a power inserter (PS-1 or XM or PS-1S for Sirius) is recommended to overcome the DC drop through the cable, thereby providing enough DC voltage to power the amplifiers and low noise amplifier.

A 3 foot length of small diameter coaxial cable (F36SMB) is supplied with an SMB-plug to mate with the radio.



### **Antenna Extensions**

### **Extend Home Kit Antenna Cable**

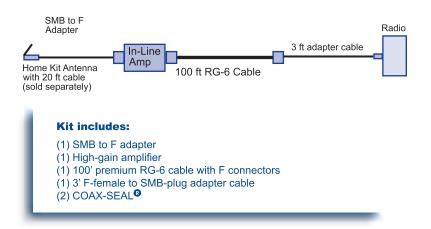
RG-6 Extension Cable Model: PRO-100



#### Premium, high-quality, low loss amplified cable extension kit.

This antenna extension cable is designed to operate with any satellite radio antenna (purchased separately) to extend the cable length 100 ft. (Lengths up to 300 feet can be accommodated by cascading three cable kits).

Includes COAX-SEAL<sup>®</sup> for ultimate weather-proofing.



**Power Inserters** 

#### Provide DC Power for Antennas and Line Amplifiers

Power Inserter

Models: PS-1

These kits are for use in networks with long cables designed to distribute satellite radio signals. They are used to provide DC voltage at the antenna sufficient to power the antenna's internal low-noise amplifier and will supply ample voltage and current to run in-line amplifiers.



### Operate up to Four Satellite Radios from a Single Antenna

#### Amplified 4-Way Splitter Kit Model SR-4



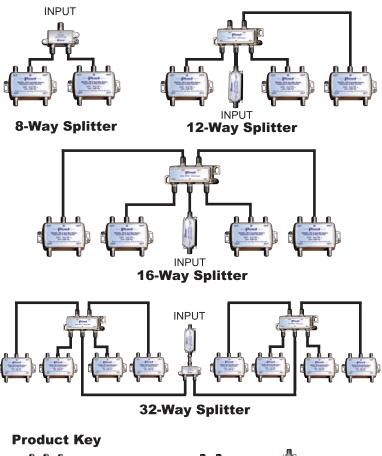
This amplified splitter is optimized for use with all satellite radio systems. It includes the adapters and accessories to permit operation of multiple satellite radios from a single antenna. In order to maintain the proper RF link budget for the radio, the splitter loss at 2.35 GHz has been compensated by an internal amplifier. This amplifier is powered by the DC voltage that is supplied by any of the radios connected to its output. The splitter will pass the DC voltage supplied by a radio at any output port to the splitter input port. This will provide power to any antenna connected to this port for the antenna's internal low-noise amplifier (LNA). Standard RG-6 cable with male F-connectors (not included) can be used to extend the output cable lengths. The splitter has 8dB of excess gain to permit output extensions of up to 70 feet. If cable extensions greater than 70 feet are desired, we recommend using Pixel Model: SBA-1 line amplifier(s) with the splitter. One amplifier (for example) placed at the input of the splitter will permit total cable lengths up to 150 feet from each individual output port to the radios.

This splitter has been designed with an output impedance that replicates that of a satellite radio antenna so the radio will operate in its normal mode without the need for external impedance terminating devices. Unused output ports do not have to be terminated for proper operation.

This splitter can also be cascaded with Pixel Models: SRSC-2 and SRSC-4 couplers to form complex multi-port splitter networks (see page 14).

## Make Complex Splitters with Easy-to-Use Building Blocks

#### **Combine SR-4 Splitters in Multiple Radio Systems**











SBA-1 RG-

RG-6 Cable

## Wide Band 4-Way Passive Splitter (For AM/ FM, HD Radio, Broadcast TV, Cable TV, Satellite Radio and TV)

Model: MBS-4

As opposed to standard splitters, this signal splitter has been specially designed to pass, with low-loss, signals from the bottom of the AM broadcast band (500 kHz) to beyond the top of the satellite radio band (2.4 GHz). With such a wide pass-band it is very useful for implementing whole-house and commercial RF distribution networks of signals used in all types of entertainment systems.

It is also designed to pass DC from any of its output ports to the input port via protection diodes that prevent DC feedback.

It can be used in tandem with model WBA-12 ultra-wideband amplifier to implement a lossless splitter.

Insertion loss: 12 dB Diode Protection: All Ports



## Ultra Wide Band Line Amplifier for AM, FM, HD Radio, Over- the- Air TV, Cable TV, Satellite TV and Satellite Radio

Model: MBA-12

As opposed to standard line amps, this unit has been specially designed to amplify signals from the bottom of the AM broadcast band (500 kHz) to beyond the top of the satellite radio band (2.4 GHz). With such a wide pass-band it is very useful for overcoming splitter and cable losses in whole-house and commercial RF coaxial cable distribution networks for signals used in all types of entertainment systems.

It is also designed to pass DC from any of its input port to its output port.

It can be used in tandem with Model MBS-4 ultra-wide-band splitter to implement lossless splitters.

Frequency Range:500 KHz - 2.4 GHzTypical Gain:12 dBOperating Voltage:5 VDC



## Wide Band Line Amplifier for FM, Over- the- Air TV, Cable TV (one way), Satellite TV and Satellite Radio

## Model WBA-20

This amplifier is designed to amplify signals from the bottom of the broadcast TV band (50 MHz) to beyond the top of the satellite radio band (2.4 GHz). It is useful for overcoming splitter and cable losses in whole-house and commercial RF coaxial cable distribution networks.

It is also designed to pass DC from its input port to its output port.



Specifications	Min	Typical	Max
Frequency range	50 MHz		2.33 GHz
Gain			
50-2050 MHz		20 dB	
Satellite Radio (2.3 -2.4 GHz)		14 dB	
Output Power (1 dB compression point)		-18 dBm	
Noise Figure		5 dB	
Current Consumption			50 milliamps
Operating Voltage		12 VDC	
DC Pass (both directions)		200 milliamps	
DC Pass voltage drop @ 200 milliamps		0.3 VDC	
Operating Temperature	-35º C		+65º C
Input / Output Impedance		75 Ohms	
Input / Output Connectors		F-female	

**Amplifiers & Adapters** 

### Compensate for Cable Loss with 'Satellite Radio Rated' Amplifiers

### **High Gain Line Amplifier** Models SBA-1 and SBA-10

This line amplifier is rated to provide 16dB of gain between 2320 and 2345 MHz when powered at 4.5 VDC (minimum) and is intended for use in overcoming cable and splitter losses



in satellite radio distribution networks. It is powered from the DC bias voltage provided by the radio at the input port.

- Compatible with XM or Sirius
- Available individually or in packs of 10

#### Includes:

**SBA-1**(1) line amplifier(1) F-male to F-male splice

**SBA-10** (10) line amplifiers (10) F-male to F-male splice

#### SMA Male to F-Female Adapter Model SMA-2F

Used for mating first generation Sirius and XM commercial antennas to standard RG-6 cable with F connectors.



Includes: (1) SMA-male to F-female adapter

### **Amplifiers & Adapters**

### **SMB-Jack to F-Male Adapter** Models SMBF and SMBF-10



Used for mating standard 'consumer grade' XM and Sirius antennas to line amplifiers and RG-6 cable with F connectors.

Includes:

**SMBF** (1) SMB-jack to F-male adapter

**SMBF-10** (10) SMB-jack to F-male adapters

## **3 Foot SMB-Plug to F- Female Adapter Cable** Models F36SMB and F36SMB-10



Used for mating RG-6 cable to XM and Sirius radios. The cable length (and weight) has been optimized to avoid placing excessive mechanical stress on the radio's panel mounted SMB-jack.

Includes: F36-SMB (3') (1) SMB-plug to F-female adapter cable

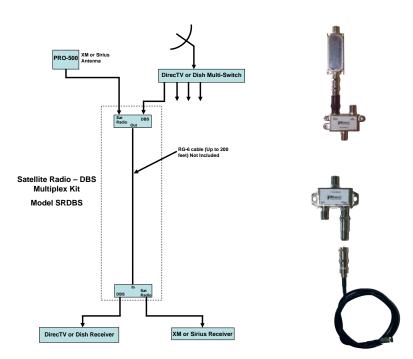
F36-SMB-10 (3') (10) SMB-plug to F-female adapter cables

### Multiplex Satellite Radio onto DBS TV Distribution Cables

### Model: SRDBS

- Compatible with DirecTV and DISH
- · Compatible with single wire multi switch distribution systems
- Designed to work with Model PRO-500 or PRO-600 Satellite Radio Antennas
- Supports cable runs up to 200 feet
- No external power supply required
- · All required jumpers and adapters included

This kit provides the components to multiplex the output of a model PRO-500 or PRO-600 satellite radio antenna (sold separately) onto the RG-6 cable that connects a DBS TV receiver to its multi-switch or antenna.



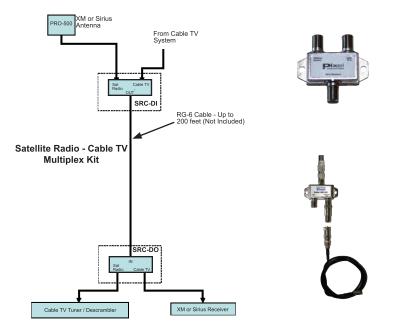
### **Multiplexers**

### Multiplex Satellite Radio onto Cable TV Distribution Cables

## Model: SRC-D

- Utilize existing cable TV wiring to distribute Satellite Radio
- Designed to work with Model PRO-500 or PRO-600 Satellite Radio Antennas
- Supports cable runs up to 200 feet
- No external power supply required
- All required jumpers and adapters included

This kit provides the components to multiplex the output of a model PRO-500 or PRO-600 satellite radio antenna (sold separately) onto the RG-6 cable that connects a cable TV receiver /descrambler to its distribution network switch or antenna.





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