Jampro **RCHA-323-10HD**

The Jampro RCHA-323-10 HD and smaller RCHA-222-10 HD Digital FM Radio Injectors provide high levels of isolation and have properly sized inputs for analog and digital FM transmitters. It satisfies I.B.O.C. (HD Radio) standards.

The RCHA-HD series Injectors both feature Jampro's established rugged design. The effective self cooling design provides safe combining without the need for AC powered cooling fans. Jampro can provide this injector for use with station provided coax and reject load or as a complete system with all these components included for a quick, trouble free installation.

Jampro computer aided design and manufacturing techniques ensure repeatable broad band performance for each and every unit.

TEL: (916) 383-1177 Web: www.Jampro.com

The ***Jampro Dual HD FM Antenna*** system provides exemplary linearity and power handling capability. The antenna is based on Jampro's 50 plus years experience of building FM and TV broadcast antennas.

The Dual HD antenna provides isolated and separate inputs for both analog and digital transmitters. This approach allows the digital transmitter to operate at its target power with NO power lost in reject loads and NO power reduction caused by 'lossy' digital injectors. There is no single point failure that can take the antenna system totally off the air.

Several other HD models are available including Dual Input Side Mount, Dual Input Panel, Space Combined Bays and Wide Band Combined arrays

JHPC-2 +JHPC-HD-1 Separate Bays

JAMPRO
ANTENNAS AND RF SYSTEMS, INC.

Your Partner for

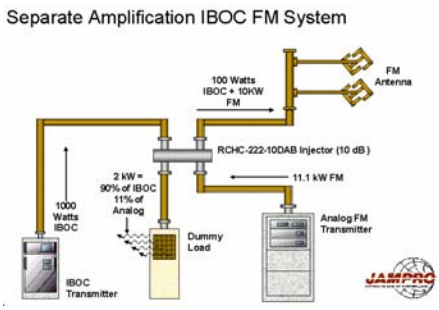
HD Radio

Solutions

KSL - 13 Station FM Antenna

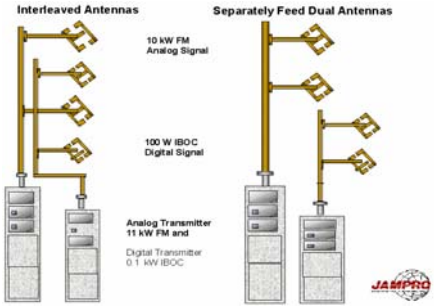
Jampro - HD Radio Steps To Success

Injector System:



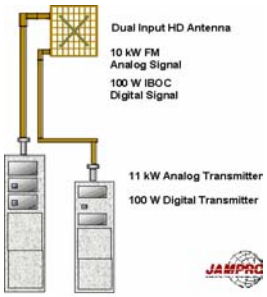
Applications	Pros	Cons
For All Power Level Stations	Inexpensive Hardware	One Antenna for both
Limited Tower Capacity	Use proven antenna	Wasted energy in reject load
Omni or Directional Patterns	Easy Installation	Single Failure points
Single or Multiple Frequencies	Use existing Analog Tx.	High Cost of Operation
Typically Single Station	Low Cost intro to HD	Low efficiency
	Increased Isolation	Higher Power HD Tx.
		HVAC Concerns

Spaced Combined HD Antenna



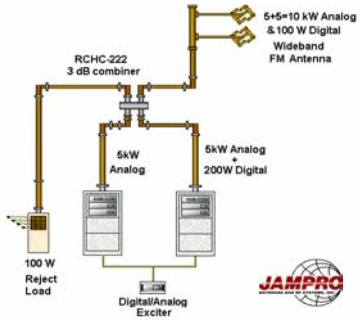
Applications	Pros	Cons
For All Power Level Stations	Lower Power HD Only Tx	More Tower Space - Separate Bays
Sensitive to analog signal protection	No Injector power loss	Possible Elevation Pattern effects
Tower capacity not an issue	Protects Analog Signal	Expense of 2nd Xmission line
Medium Cost intro to HD	Redundancy HD/Analog	Tower Loading for Separate Antenna
Single or Multiple Frequencies	Use existing Analog Tx.	HVAC sizing issues
Typically Single Station	Interleaved Saves Tower Space	
Omni or Directional Patterns	Increased Isolation	
	Inexpensive intro to HD	

Dual Input HD FM Antenna



Applications	Pros	Cons
For All Power Level Stations	Ground up design for HD	Higher Cost
Typically Multiple Stations	Predictable Performance	Higher weight & wind load
Use when HD/Analog Pattern Critical	Easier to do DA's	Larger Tower needed
Back Up Redundantly	Bandwidth/broadband	HVAC sizing issues
Large Face Sized Towers	No Injector power loss	
Critical Directional Patterns	Use existing Analog Tx.	
	Ability to add stations	

Medium Power Combined HD



Applications	Pros	Cons
Higher Power Levels	No Injector loss	More costly than other choices
Single Frequency	Use existing Analog Tx	More floor space
Where AC costs are high	Lower Power Reject load	Accurate tuning of Tx's needed
Can't change antenna	Re use Xmission Line	HVAC sizing issues
Can't change tower space	Re use FM Antenna	
TPO not available for low level combining		