



XPi 10

HD Radio Data Exporter and Encoder

Current HD Radio architectures have the advantage of eliminating PC-based equipment and audio processing at transmitter sites, improving reliability and flexibility.

The core functions of the XPi 10 are audio and data integration at the studio. It allows easy implementation of HD2 Multicasting and use of Program Associated Data (PAD), other messagecasting text and third-party data streams. The XPi 10 allows, in many installations, use of a single-direction broadband studio transmitter link (STL) and locating all processing in the studio. The result is a simpler and less expensive way to implement HD Radio, with more control over your content and operations.

The XPi 10 is paired with BE's FXi 60/250 FM-plus-HD Radio Exciter equipped with an Engine plug-in card located at the transmitter site.

Multiple Functions, One Compact Unit

The XPi 10 ingests your Main Program Service (MPS)—the audio and PAD/messaging content of both the analog transmission and primary HD Radio signal. It also ingests an Ethernet data signal from a BE IDi HD Radio Data Importer that consists of HD2 Multicast audio program channels, their related PAD/messaging data, as well as other data streams to be transmitted on the HD Radio signal. The XPi 10 encodes the MPS using iBiquity's HDC codec and combines it with the IDi data into a single, compact UDP stream.

A final function of the XPi 10 is to delay the analog audio program so that the analog and HD Radio signals are synchronous at listeners' receivers. The system architecture allows the delay to be implemented within the processing, so the XPi 10's delay may be bypassed.

An additional capability of the XPi 10 is a broadcast mode that allows a single unit to feed multiple FXi 60/250 excitors via different STL paths (terrestrial, microwave and/or satellite). This mode simplifies booster, main/alternate and other systems.

Flexible For The Future

The XPi 10 can also be located at the transmitter site with audio transported to the site by STL and data via a bi-directional Ethernet link. Should your requirements change, the XPi 10 can easily be redeployed to your studio.

The XPi 10 is based on BE's leading-technology FSi 10 HD Radio Signal Generator. The advanced design concept of the FSi 10 allows stations using it at their transmitter site (adjacent to the FXi 60/250) to easily and economically reconfigure to latest-generation architecture. Simply adding a plug-in board to the FSi 10 converts it to an XPi 10. The conversion kit also includes the requisite Engine card that relocates some of the HD Radio signal generation functionality to the FXi exciter. Only Broadcast Electronics offers this simple update path.



KEY PRODUCT FEATURES

- HD Radio Data Exporter and Encoder expands system architectures choices for FM HD Radio
- Broadcast mode for point-to-multipoint and main/alternate applications
- Permits use of unidirectional STL in many installations
- Allows all data and audio integration, as well as processing, to be handled at the studio
- Graphical touchscreen interface
- Integrated audio synchronization, automated bypass function and internal GPS receiver

XPi 10

HD Radio Data Exporter and Encoder

HD Radio System

