

NE IBOC-AM: Turning Off Enhanced Carriers and Enabling Parametric Stereo

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IS10007 NE IBOC-AM: Turning Off Enhanced Carriers and Enabling Parametric Stereo INFORMATION SHEET

1 INTRODUCTION

This document describes how to perform the following functions on an operational NE IBOC-AM exciter that contains Ibiquity Release 4.3.2 software:

- Turning off Enhanced Carrier Power (see paragraph 2), and
- Enabling Parametric Stereo (see paragraph 3)

2 TURNING OFF ENHANCED CARRIER POWER

The Enhanced Carrier Power group of the Signal Configuration screen (see Figure 1) displays the level of the enhanced carriers as Normal, High (MA1 only) or Off.

When Normal is selected, the secondary and tertiary portions of the IBOC

waveform are set to -44 dBc and -50 dBc respectively for MA1 and -30 dBc for both in MA3.

When High is selected, the secondary and tertiary portions of the IBOC waveform are increased by 6 dB relative to the Normal setting.

When Off is selected, the secondary and tertiary portions of the IBOC waveform are turned off.

Reduce or turn off Enhanced Carrier power levels as follows:

- (a) Select Signal -> Signal Configuration screen.
- (b) In the Enhance Carrier Power section, select **Off** and then press **Save**.

-Digital Carrier	Analog ModulationEnhanc	ed Carrier Power PIDS High Pow			
On Out					
IQ Scale Facto	n	etAnalog Gain			
Value 12000.0	Value 0.0000	Value 1.000			
Magnitude/Phase Delay					
Value 11950	A Up ▼ Down Increm	ent 16 A Up V Dow			
	Primary Sideband Powe	r Level			
Lower Sideband Sca	ing (ub)				
Value 0.000	Up Down	Scaling Increment 1.000			
Value 0.000	Line (dD)	Scaling Increment 1.000			
Value 0.000	Ing (dB) ↓ Up ↓ ▼ Down ing (dB)	Scaling Increment 1.000			
Value 0.000	ing (dB)	Scaling Increment 1.000 Scaling Increment 1.000			
Value 0.000 Upper Sideband Scal Value 0.000	Ing (dB) Ing (Scaling Increment 1.000 Scaling Increment 1.000			

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Figure 1: Turning Off Enhanced Carriers

3 ENABLING PARAMETRIC STEREO

The exciter can set the core audio mode for the MPS audio stream using the Digital Audio Configuration screen (see Figure 2). The setting selected is normally based on the bit rate of the MPS audio stream.

For bit rates less than 16 kbps, the Monophonic setting is recommended.

For bit rates between 16 kbps and 32 kbps, the Parametric Stereo setting is recommended.

For bit rates greater than 32 kbps, the Stereo setting is recommended.

Enable Parametric Stereo as follows:

- (a) Select Audio -> Digital Audio Configuration screen.
- (b) In the Core Audio Stream Encoding section, select **Parametric Stereo** and then press **OK**.

Ext	riter	HD	930	AM ^o	PERATIONAL
©2007 iBiquity Digita	I Corp.			N	O ALARM Version 4.3.2
Audio Bypass		9	Audio Levels		SYSTEM
None	Core Audio St	ream Encoding			LOG
Digital Carrier Co					PLATFORM
On	🔾 Monophonic 🔍 Parametric Stereo 🔾 Stereo				STATION
Analog Modulatic					AUDIO
• On		Рок	🗶 Car	ncel	SIGNAL
Layer 1 Service					TEST
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Figure 2: Enabling Parametric Stereo

