



DXDPRO Test Signal

Service Bulletin SB-107

Prepared by Chris Anderson

Pineapple Technology, Inc.'s DXDPRO line of modulators have the option to output a **test signal** when all input transport stream signals are lost. The test signal is used to ensure that the transmitter is in working order when a transport stream is not available or it is suspected that there is something wrong with the input signal. Refer to Fig. 1 on the next page for the locations of everything mentioned in this service bulletin.

Changing the Test Signal Setting:

First, login to the DXDPRO web GUI in Firefox or Internet Explorer as **admin**. By default, the test signal setting is under **Output** at the lower half of the screen. It is in the form of a dropdown menu with four options: PRBS Auto, PRBS On, Single Carrier, and Off. PRBS Auto, is the setting that should be used to ensure that the modulator outputs RF when all input signals are lost. When set to **Off**, the modulator will not output RF when input signals are lost.

For clarity, PRBS stands for "Pseudo Random Binary Sequence."

Determining if an Input Transport Stream is Present:

In Fig. 1, the type of transport stream used is ASI. ASI Input-A is green because the modulator is receiving the stream. If the stream disappears, the input will turn red and look like ASI Input-B. If no input streams are present, the Test Signal setting will determine whether the Web GUI will display the rest of the transmitter as healthy. The Test Signal *will output RF*, but will not output a signal that a TV receiver can interpret, so the end user will see whatever their TV displays when a signal is lost (static, a blank screen, etc...).



Advanced Digital Modulator
DXDPRO

DTXPRO Web GUI Live Demo: Lodi, CA

TS-ID:347

PINEAPPLE

RECEPTION INPUT MODE PRE-CORRECTION OUTPUT

ATSC-MH(A153)

MONITOR

2/3

MH

Coder

8-VSB

Linear

Clipping

Non-Linear

Adaptive

RF Output

-0.5dBm
593MHz

RF

XMTR

Input-A ASI

Input-B ASI

MUTE

TSolP

Rx1

Rx2

REFERENCE

AUTO GPS

10MHz

1PPS

08:38:57

Input	Output	Output Signal
TS-Primary Alarms: Passive	Output Status: NORMAL	Mute reasons
TS-Secondary Alarms: Passive	RF Alarms: -Synthesis: Ok, -Level Out of Range: Ok	Active alarms
	Settings: Frequency: 593000000 Hz, Level: -0.5 dBm	Passive alarms: TS Primary Transport Stream ID, TS Secondary Sync Loss, TS Secondary Sync Error, Ext. 1PPS Loss, Ext. 10MHz Loss
	Test: Test signal: PRBS AUTO, Reconnect: <input checked="" type="checkbox"/>	

SYSTEM

Clear Apply

Fig. 1 – The default DXDPRO Web GUI.