BOB2 2 Channel

The JDA Systems BOB2 (Break Out Box 2) 2 channel is a dual channel bit sync, decom, encoder/generator, data processor and router with full VuSoft software installed to offer IRIG 106 Chapter 4, Chapter 7, Chapter 8, Chapter 9 and Chapter 10 support in a particularly small form factor able to withstand harsh environments.

The rugged milled aluminum case contains everything needed to recover and process dual PCM signals directly from receivers, encoders or recorder replay. The two inbuilt high performance bit synchronizers and decoms operate independently to allow for the processing of two data streams whether they come from the same source or are completely independent. The BOB2 has been specifically designed for low power consumption and low heat dissipation and requires only a single external 19V power supply make it ideal for remote or on board applications.

As the BOB2 is fitted with a full suite of computer interfaces so it is possible to connect a mouse, keyboard and display directly to the unit, or of course to fully remote control the unit over the built in gigabit Ethernet interface.

A built in solid state disk, that contains the operating systems and any user data, can easily be removed for declassification of the BOB2.

The BOB2 can act as an IRIG106 Chapter 10 recorder and replay device with it standard suite of VuSoft software and can serve Chapter 10 broadcast data over the built in gigabit Ethernet interface.

BOB2 2 Channel

BOB2 2 Channel Features

- Supports the IRIG Standards Including Chapters 4, 7, 8, 9 & 10
- Full Telemetry Ground Station Functionality From Receiver O/P to Post Processing
- Quad Independent Bit Sync & Decom Channels For High Speed Operation
- Real Time and Playback Data Regeneration and Network Broadcast Capability
- Low Power Operation with Low Heat Generation For Operation In Tight Spaces
- Small Form Factor and Light Weight
- Fitted With a Professional Grade Intel i5 Processor
- Customizable To Support Customer Unique Applications

Bit Sync Characteristics

Data Polarity	Normal or Inverted
Input Bit Rate	100 bps to 40 Mbps (Max)
Input Code Types	NRZ-L/M/S, BIO-L/M/S, DM-M/S, RNRZ/RNRZR-9/11/15/17/23
Output Code Type	NRZ-L BNC & Internal
Loop Bandwidth	Digital Fully Automatic
Acquisition Range	Digital Fully Automatic
Tracking Range	Digital Fully Automatic
Bit Error Probability	Within 1db to Theoretical
Loop Bandwidth	Automatic Full Digital
Tracking Range	Automatic Full Digital
Clock Format	0 Degree and 180 Degree

PCM Data Characteristics

IRIG 106 Types:	Chapter 4, Chapter 7, Chapter 8, Chapter 10
Bit Rate:	100 bps to >32 Mbps
Serial Input	RS422 (differential) & TTL(0-5V)
Serial Output	RS422 (differential) & TTL(0-5V)
Time Sources	IRIG A, B & G
Time Resolution	Internal 100 nSec
Time Accuracy	Better than 1 uSec
Frame & SubFrame	Optionally extended to Word/Frame >8912, Frame/Format >1024

Power Requirements

Input Voltage:	+19 VDC, Reverse Polarity Protected
Maximum Power:	3A

Mechanical

Material:	CNC Machined Chemically Coated Aluminum
Dimensions:	150mm L x 220mm W x 110mm H
Weight:	2.2 kg
Bit Sync Inputs:	SMA Female
Data Connectors:	BNC & Differential BNC
DC Supply, On/Off:	Sealed Push Switch

Environmental

Temperature (Operating):	-30°C to +65°C
Acceleration:	100 g, 3 Axes
Altitude:	50,000 m
Humidity:	Up to 95% @ Any Temperature Forming Frost or Condensation