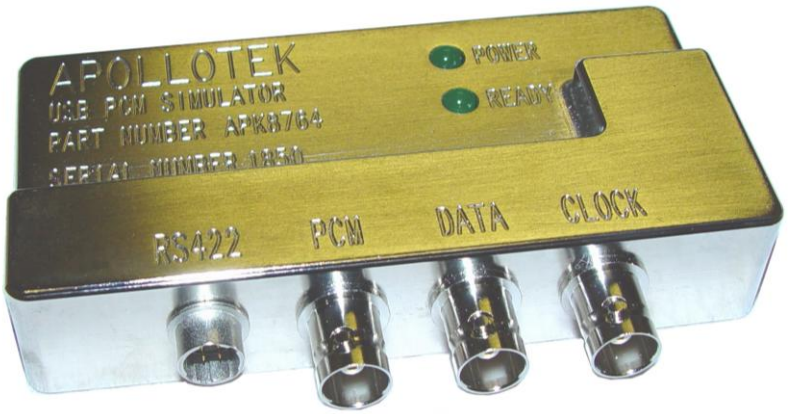
APOLLOTEK

Model APK 8764
USB PCM Simulator

USB Simulator Features:

- **USB Interface to a host PC for Set Up and Power**
- **PCM Simulation to greater than 20 MBPS**
- **Large on-board FLASH Memory**
- **Very Long Frame Capability with low frequency Dynamics**
- **Complex Sub-Frame Capability**
- **Super-Commutation**
- **Sub-Commutation**
- **Embedded Stream Generation**
- **Generates Programmable Dynamic Parameters including:**
- **Sine, Square, Ramp and Step**
- **Fixed Word Value**
- **Common Word Value**
- **External Data Insertion facility**
- **TTL Data and Clock Outputs**
- **RS422 Data and Clock Outputs**
- **Compatible with the Apollotek GDSmate Telemetry Environment Software package**
- **Common set up screen for setting up the simulator and the Apollotek range of USB PCM Decommutators**



The Apollotek Model APK8764 is a general purpose PCM Simulator which is set up through a USB connection to a host PC. The unit is also powered through the USB Port. The Model 8764 is designed to work directly with the Apollotek GDSmate Telemetry Environment Software package to provide a high performance programmable PCM Simulator.

As well as being capable of operating at high data rates, the APK8764 is also designed to simulate low frequency parameter simulation within large and complex frame formats.

The APK8764 provides outputs of PCM Data and Clock at TTL levels through BNC connectors. A nominal 1 V rms serial PCM output is also provided on a separate BNC connector.

In addition, PCM Data and Clock output signals at RS422 levels are provided through a circular 4-pin connector.

The TTL Clock Output BNC port can also be programmed to provide either a Bit Clock, Frame Clock or Sub-Frame Clock.

The APK8764 can also be supplied with an optional facility to read and insert user defined stored data into the generated PCM Frame.

The APK8764 is one of a family of Apollotek USB products which also includes high performance Bit Synchronisers and PCM Decommutators.

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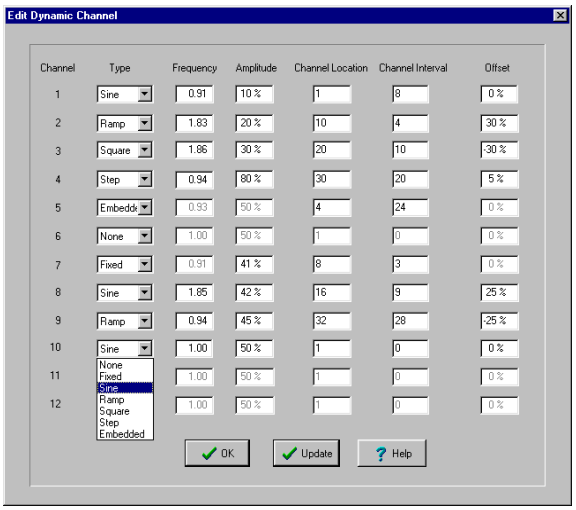
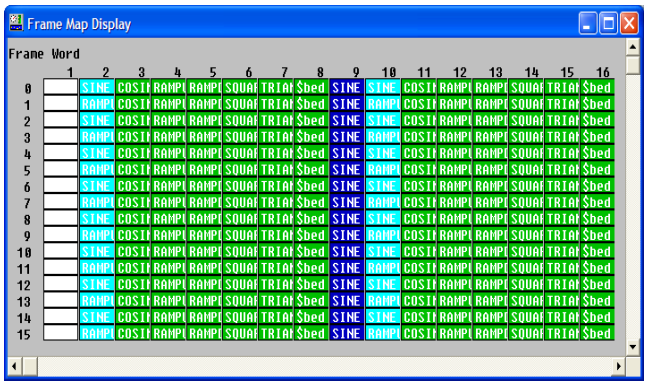
GDSmate Software Control

- Select the Bit Rate for PCM
- Build the Data Frame
- Variable Bits per Word supported
- Up to 32 bits per word
- Assign Variables to Words
- Assign Embedded Data Stream Words
- Select the Variable Frequency
- Select the Variable Amplitude
- Select the Channel Interval
- Select the Channel DC Offset
- Update the Simulator
- The Simulator can be also loaded with Frame Format files generated by the ApolloDas 8600 PCM Encoder Set-Up Software
- Output Simulated Data
- Colour Coded Format Status identification
- Control of simulated parameters through the GDSmate Frame Map display

Typical Variable PCM Word Set Up Form



Interactive PCM Format Frame Map Display



System Interface Specification

Interface Type:	USB 2 with USB 1 compatibility
Programmable Functions:	Source of data word. Individual channel amplitude. Individual channel offsets. Individual channel frequency. Frame Format characteristics. Bit Rate. Clock Output type.

Mechanical Specification

Standard Module dimensions:	Length: 115 mm Width: 70 mm (including connectors) Height: 20 mm
Construction:	Multi-layer printed circuit board with maximum use of Surface Mount components mounted inside an Aerospace grade aluminium housing precision machined from solid

All Specifications are subject to change without notice

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