

MODEL 6146S/PCI
IRIG B Time Code Synchronizer
(PCI bus)

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**Model 6146S/PCI
IRIG B TIME CODE SYNCHRONIZER**

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Model 6146S/PCI IRIG B TIME CODE SYNCHRONIZER

1.0 GENERAL

The Model 6146S/PCI is an IBM PCI bus compatible IRIG B time code reader designed to synchronize the host system clock to an applied IRIG B time signal.

2.0 CHARACTERISTICS

2.1 INTERFACE

The 6146S/PCI plugs into a standard 33 MHz 32 bit, 5 volt PCI slot on an IBM compatible PC. Driver software is supplied for Windows™ 95, 98, ME, 2000, XP and NT.

2.2 TIME CODE SYNCHRONIZATION

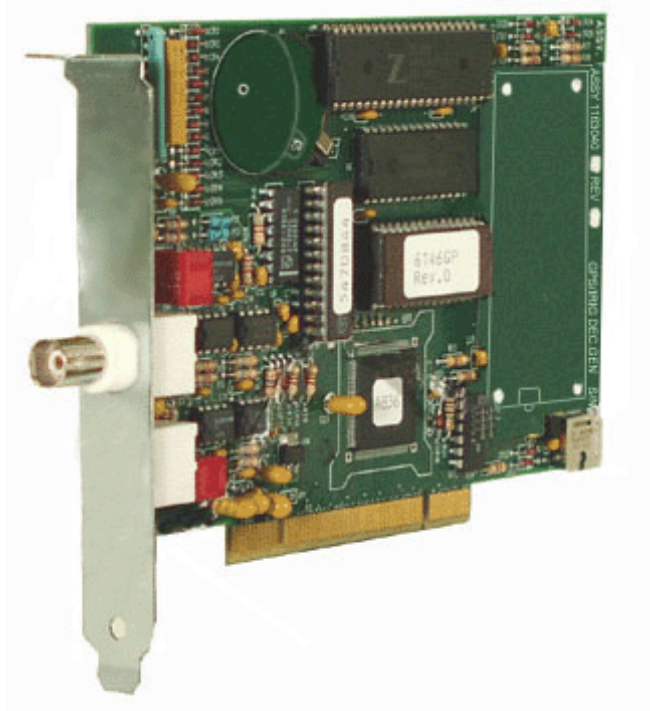
For normal operation the 6146S/PCI is synchronized to an external IRIG B serial time code signal. If the 6146S/PCI loses the IRIG lock after initial synchronization, it will continue to operate on an internal clock.

2.3 SYSTEM CLOCK SYNCHRONIZATION

When enabled, the 6146S/PCI will output time data which is used to lock the host PC's system clock to the incoming IRIG time reference.

3.0 MECHANICAL CONFIGURATION

Standard IBM PCI expansion board configuration. It occupies a single thirty-two (32) bit PCI 33MHz slot. A BNC connector on the rear panel receives the IRIG B input signal.



4.0 SPECIFICATIONS

4.1	Frequency Stability	2.5 parts in 10^6 when not locked.
4.2	IRIG B Input	Standard IRIG B serial time code IAW IRIG Standard 200-98.
4.3	Interface	33MHz, 32 bit, 5 volt PCI, interrupt INTA
4.4	Temperature	
	Operating	0°C to +55°C
	Non-operating	-20 to +70
4.5	Humidity	95% non-condensing
4.6	Package	Standard IBM card. Occupies single 32 bit, 5 volt PCI slot.

5.0 SETUP UTILITY

Included with the 6146S/PCI is a CD-ROM containing a self-installing utility program which allows the 6146S/PCI to be used as a PC clock synchronizer. When installed and configured, this program will automatically synchronize the PC clock to the applied IRIG time reference time. The utility runs on a Windows™ 95, 98, NT, 2000, ME or XP system and once installed will run automatically on boot up. User setup is aided by use of a Graphical User Interface (GUI) (see Figure 1).

5.1 INSTALLATION

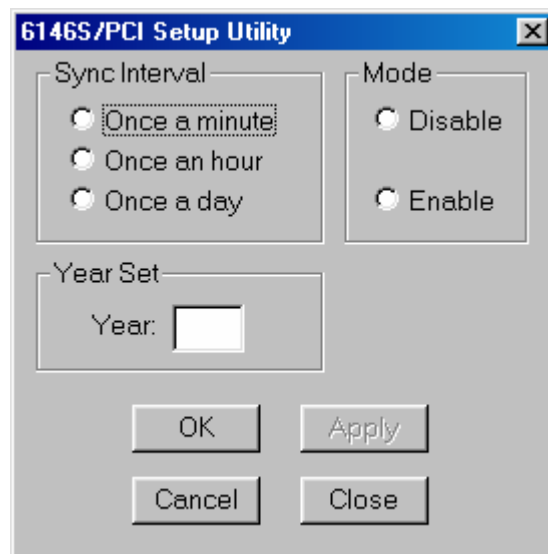
When Windows™ is finished booting, insert the installation CD-ROM and click through the responses as the auto-install process progresses. The last step in the install requires that the computer reboot to which the user must answer YES.

When the reboot is complete, the SETUP UTILITY menu (see figure 1) will be displayed. Enter the desired preferences in the menu screen (see section 5.2 for setup instructions). Once all preferences are entered, click the Mode Enable button and OK to start the program operation. The setup window will close and the program icon will move to the System Tray. To re-open the Configuration window, position the mouse on the System Clock Synchronizer icon in the Windows™ System tray, and click the left mouse button. The System Tray icon indicates the status of the 6146S/PCI interface. Loss of lock or synchronization from the Reference Source is indicated by the System Clock Synchronizer icon with the international symbol for 'No', a red circle with a slash. The program may be terminated or disabled/enabled by right clicking the icon, which will display an abbreviated menu.

5.2 SETUP

Setup of the System Clock Synchronizer is performed by clicking the corresponding radio button in the configuration menu.

Figure 1



5.2.1 Mode

The Mode selection Enables or Disables the 6146S/PCI the System Clock Synchronizer function. (Factory default is Disable). This must be set to Enable for time synchronization to operate. If the Mode is Disabled or the board is not locked, the System Tray icon will show a red slash overlay.

5.2.2 Sync Interval

Select an Interval for system clock synchronization update (Factory default is Once a Minute). This tells the system how often to check and if necessary correct the system clock to remain synchronized with the IRIG time.

5.2.3 Year Set

Enter the year in 4 digit format (i.e., 2006).

5.2.4 OK

The OK button applies any changes in configuration and dismisses the Utility window.

5.2.5 Apply

The Apply button applies any changes in configuration. The Utility window is not dismissed.

5.2.6 Cancel

The Cancel button dismisses the Utility window, ignoring all configuration changes.

5.2.7 Close

The Close button terminates the program and removes the icon from the System Tray.