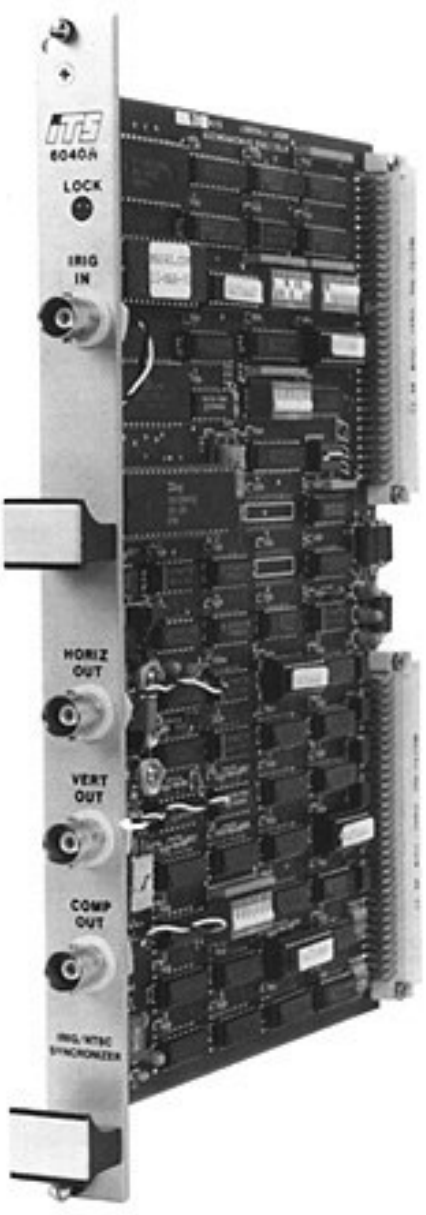
instrumentation technology systems

MODEL 6040A
VMEbus IRIG/RS-170 SYNCHRONIZER



FEATURES

- Generates RS-170 video frame, synchronized to an input IRIG B serial time signal.
- Provides both composite and individual horizontal and vertical sync outputs.
- Allows IRIG time to be read via the bus.
- Provides propagation delay correction.

DESCRIPTION

The ITS Model 6040A generates an RS-170 video sync frame which is synchronized with an applied IRIG B time code signal. The unit allows cameras in different locations, where IRIG is present, to be locked together without the need for a common sync generator and intercabling. All cameras driven by 6040A's via a common IRIG B signal will be precisely synchronized.

The 6040A plugs into a single 6U VME slot and requires only the standard VME power and an IRIG B time signal to generate the RS-170 sync frame. Composite sync as well as individual horizontal and vertical sync outputs are provided. The IRIG time as well as lock status may be read from the 6040A via the VME, if desired, through either polled I/O or vectored interrupt modes. The time, once read, may be used by the VME processor to synchronize other devices or processes, or may be annotated onto the video picture itself as either ASCII text or machine readable code by using an ITS VMEbus Video Insertion Generator. Models 6020, 9938, 9891A and 9891B are compatible and can provide those functions.

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Model 6040A VMEbus IRIG/RS-170 Synchronizer

SPECIFICATIONS

IRIG In	IRIG B standard serial time code (IRIG Standard 200-98).
Composite Sync (Out)	Composite sync, IAW RS-170, 0 to 5V peak-to-peak,
Horizontal Sync (Out)	0 to 5V peak-to-peak, 4.7 usec wide, 15750 Hz, negative true.
Vertical Sync (Out)	0 to 5V peak-to-peak, 190.67 usec wide, 60 Hz, negative true.
VMEbus Compatibility	A16:D16 Slave, Bus Address switch-selectable within 64K short I/O address space; occupies 1 word address space with supervisory/nonprivileged address switch selection Interrupter is switch-selectable, I (1) to I (7) or off; switch-selectable vector
Interrupts	Vectored interrupts generated at program controlled rates of either 1 Hz, 10 Hz, 100 Hz, 200 Hz, 500 Hz, 1000 Hz or 420 Hz (7x vertical sync). Interrupts may also be disabled under program control.
Power Requirements	5 volts @ 350 ma nominal +12 volts @ 4 ma nominal -12 volts @ 4 ma nominal
Temperature	
Operating	0° to 55°C (32° to 131°F)
Non-operating	-20° to 70°C (-4° to 158°F)
Humidity	95% non-condensing
Size	Dual-high VME card (6U form factor) occupies one slot (0.8 inch spacing)

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