

TIME CODE & CAPTION BOARDS FOR PCI-BUS COMPUTERS

Through hard work, customer support, and continuing improvements since 1988, we are presently by far the world leader in Vertical Interval Time Code (VITC) and Longitudinal Time Code (LTC) reader and generator boards for personal computers. Our universal PCI-bus boards also have the ability to read NTSC line 21 caption, text, V-chip, and clock data, plus the ability to display time code data on video monitors (window burns).

As you can see from the attached ordering guide (4 pages), we offer a wide variety of these boards, ranging from the PCI-LTC/RDR simple LTC reader only board, up to our top of the line PCI-21VL/RG1 combination LTC/VITC reader/generator board with line 21 data reader and with the OSD (on-screen display) and SERIAL (RS232/RS422 serial port) options installed.

Because these boards reside in your computer, you don't have to buy expensive external time code boxes with serial interfaces, plus extra serial ports for your computer. Your program development is easier, and system response is much faster too, since there are no serial data link delays.

Typical applications include captioning, titling, machine control, editing, PC clock jamming, testing of time code equipment and signals, tape logging, and system automation.

Attached you will find several sheets of information to aid you in selecting the right PCI-TC board to meet your needs. Please call us at 1-800-782-2321, or at the number above, if you have any questions. We look forward to hearing from you.

Sincerely,



Tracey Ruesch, President

P.S. - All boards come with a free program which can be used to jam your computer's time-of-day clock(s) to match an incoming LTC/VITC reference signal.

Adrienne, AEC, USB-TC, USB-IRIG, USB-LTC, USB-VITC, USB-VLTC, PCI-21, PCI-TC, PCI-LTC, PCI-VITC, PCI-VLTC, PC-LTC, PC-VITC, PC-VLTC, and AEC-BOX are trademarks of Adrienne Electronics Corporation. SMPTE is a registered trademark of the Society of Motion Picture and Television Engineers, Inc. IBM and IBM PC are registered trademarks of International Business Machines Corporation.

WHAT IS TIME CODE ?

Time Code assigns to each video frame (picture) a unique number, having the format Hours:Minutes:Seconds:Frames. This number may then be used for editing and/or control purposes. Time code standards have been around for many years, and are sponsored by both SMPTE (for NTSC) and the EBU (for PAL).

Vertical Interval Time Code (VITC) is encoded in the vertical interval (non visible portion) of a video signal. Longitudinal Time Code (LTC) is a specialized audio signal which is usually recorded on an audio track of a video tape, next to its associated video signal, but may also be used in an audio only environment.

Use of VITC frees up one audio track for other purposes, such as stereo audio. It also allows time code to be read at very low (including still) tape speeds, where fine positioning is important. However VITC cannot usually be read at tape speeds much above play speed.

LTC is commonly used because it is usually lower cost than VITC, can be added to a video tape after the initial video recording, and it can be read during high shuttle speeds (fast forward and rewind). However, due to record/playback limitations of tape machines, LTC cannot be read reliably at very low tape speeds.

In many cases LTC and VITC will be used at the same time, because of the advantages each has to offer.

WHAT IS NTSC LINE 21 DATA ?

NTSC Line 21 Data includes the customary closed caption data for the hearing impaired, plus text, V-chip, clock, and other data services. This is a specially encoded signal, similar to VITC in some respects, which carries 2 bytes of useful information per video field, even in the presence of noise and severe bandwidth limiting (like VHS VCR's). All of our PCI-21 boards can read this data from properly encoded NTSC video signals.

PCI-TC TERMINOLOGY

We use the generic term "PCI-TC" to refer to all members of our PCI-21, PCI-LTC, PCI-VITC, and PCI-VLTC board families. In fact, all of these boards use the very same bare "PCI-TC" printed circuit board, but with different components and software as needed.

COMPUTER REQUIREMENTS

In theory, any PC which has one or more 5.0V or 3.3V PCI bus slots available will work just fine, although our bootable test, demo, and support diskette is designed to work only in the IBM PC compatible world. Our diskette has its own demo operating system.

PCI-21, PCI-LTC, PCI-VITC, AND PCI-VLTC ORDERING GUIDE

All boards include a high performance on-board processor, advanced diagnostics, in-system electronic software updates, plug and play installation (no jumpers), software drivers, full FCC and CE-Mark approval, and auto SMPTE/NTSC and EBU/PAL and FILM operations. Each board comes with a CD test/demo/support disk, including SDK, a PDF format manual (on the diskette), and our 2 year warranty.

Model	Description	(US\$) Price
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PCI-21/RDR	NTSC Line 21 Data Reader Reads caption, text, V-chip, and clock data (no OSD option available for this board only).	325
PCI-21L/RDR	LTC Reader and NTSC Line 21 Data Reader Combines PCI-21/RDR and PCI-LTC/RDR boards.	395
PCI-21L/RG1	LTC Reader/Generator and NTSC Line 21 Data Reader Combines PCI-21/RDR and PCI-LTC/RG1 boards.	520
PCI-21V/RDR	VITC Reader and NTSC Line 21 Data Reader Combines PCI-21/RDR and PCI-VITC/RDR boards.	395
PCI-21V/RG1	VITC Reader/Generator and NTSC Line 21 Data Reader Combines PCI-21/RDR and PCI-VITC/RG1 boards.	520
PCI-21VL/RDR	VITC/LTC Reader and NTSC Line 21 Data Reader Combines PCI-21/RDR and PCI-VLTC/RDR boards.	500
PCI-21VL/RG1	VITC/LTC Reader/Generator and NTSC Line 21 Data Reader Combines PCI-21/RDR and PCI-VLTC/RG1 boards.	725
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All boards include a high performance on-board processor, advanced diagnostics, in-system electronic software updates, plug and play installation (no jumpers), software drivers, full FCC and CE-Mark approval, and auto SMPTE/NTSC and EBU/PAL and FILM operations. Each board comes with a 1.44MB test/demo/support diskette, including SDK, a PDF format manual (on the diskette), and our 2 year warranty.

Model	Description	(US\$) Price
PCI-CUSTOM	Custom PCI-TC Board These boards are powerful and fairly versatile. Contact factory with your large order requirements.	TBD

Options:

OSD	On-Screen Display of Time Code Numbers	100
SERIAL	RS232/RS422 Serial Interface	80
BNC2	Use BNC Connector for LTC Input	5.50
BNC3	Use BNC Connector for LTC Output	5.50
XLR2	Use Mini-XLR Connector for LTC Input (mate included)	22.50
XLR3	Use Mini-XLR Connector for LTC Output (mate included)	22.50

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Made in U.S.A.

To order, call TOLL FREE 1-800-782-2321, or send order to:

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