

# 5010, 5010-24Fps, 5010-VITC, 5010-VITC-24Fps

## Time Code Generator / Reader with Character Inserter



### ►Features & Benefits

- Generates time code in accordance with SMPTE 12M-1 locked to NTSC or PAL video or free run on internal crystal oscillator
- High resolution Character Inserter, with three Character sizes: 8,16 and 32 lines, time and user bits separately positionable on raster
- Reads LTC from 1/30th to 70x play speed
- Well proven input circuitry design permits reliable recovery of even severely distorted code
- Momentary or continuous Jam-sync modes
- Time and user bits are presettable from the front panel
- RS-232 serial port permits interfacing to computers
- 25 Fps ↔ 29.97 Fps SMPTE drop frame time code translator mode
- Parallel control of commonly used functions
- User bit Transfer from Reader Time or User bits
- On-screen programming menu
- Date/Time Zone may be encoded into user bits according to SMPTE 309M
- Generates and reads universal co-ordinated time (UTC) or local time in time/date mode
- Automatic daylight saving time adjustment in time/date mode
- 2 General purpose outputs can be assigned to several output modes

### Additional Features of the 5010-VITC

- Vertical Interval Time code Generator and Reader
- Separate genlock and PGM video inputs
- Set VITC Generator Line numbers from the front panel
- Translates LTC to VITC or VITC to LTC
- Reads VITC over the full shuttle range of most VTRs
- Selectable reader line range
- Optional Bypass Relay on VITC Generator

### Additional Features of the 5010-24Fps

- Genlocks to 23.98 'slow PAL' or NTSC
- 23.98 Fps ↔ 29.97 Fps time code translator mode
- Momentary or continuous Jam-sync modes
- Locks to 6Hz reference in 24Fps mode

### ►Time Code Feature Comparison

	5010-GPSII	5010-VITC-GPSII	5950	5010	5010-VITC
LTC Generator	✓	✓		✓	✓
Adjustable Output Level	✓	✓		✓	✓
VITC Generator		✓			✓
LTC Reader	✓	✓	✓	✓	✓
VITC Reader		✓	✓		✓
VITC to LTC Translator		✓	✓		✓
LTC to VITC Translator		✓			✓
LTC Re-shaper			✓		
PAL and NTSC	✓	✓	✓	✓	✓
Color Framing	✓	✓		✓	✓
Drop Frame	✓	✓	✓	✓	✓
Set User Bits (0-9, A-F)	✓	✓		✓	✓
Transfer RDR. Time or UB to GEN, UB	✓	✓		✓	✓
SMPTE ↔ EBU Time Code Translator				✓	✓
Date/Time Zone in User Bits	✓	✓		✓	✓
Momentary and Continuous Jam Sync	✓	✓		✓	✓
Character Generator	✓	✓	✓	✓	✓
On-screen Programming Menu	✓	✓		✓	✓
GPS Referenced Time Code	✓	✓			
Serial Remote Control				✓	✓
GPI Remote Control	✓	✓		✓	✓
GP Outputs	✓	✓		✓	✓

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## Time Code Generator / Reader with Character Inserter

### ► Specifications

#### LTC Generator:

Standard: SMPTE 12M-1  
NTSC 2/4 field; PAL 4/8 field menu selectable  
Output: NTSC or 24Fps (5010-24Fps only)  
Level: 3-pin male XLR type  
Rise Time: Adjustable, 0.5V to 2V p-p  
Jitter: 40 ±10ms  
< 2ms

#### LTC Reader:

Standard: SMPTE 12M-1  
Input: 3-pin female XLR type  
Level: 0.2 to 4V p-p, balanced or unbalanced  
Speed: 1/30th to 70x play speed, fwd and rev, machine dependent

#### VITC Generator (5010-VITC & 5010-VITC-24Fps):

Input: Comp. Video 1V p-p, 75Ω terminated  
Outputs: 2 Comp. Video + keyed VITC  
1 Output bypass relay protected when +BP option installed  
Differential Gain: < 0.5%  
Differential Phase: < 0.5°

#### VITC Reader (5010-VITC & 5010-VITC-24Fps):

Input: Comp. video 1V p-p, Hi-Z, BNC Loop  
Speed: Still frame to > 40x play

#### Character Generator:

Input: Comp. video 1V p-p, 75Ω terminated  
Output: Com. video 1V p-p + keyed high resolution characters, selectable background and sizes

#### Serial Remote Control:

RS-232/422 interface, 9-pin "D" connector  
Computer control of all functions, selectable baud rate

#### Physical:

Dimensions: 19"W x 1.75"H x 7.75"D  
(483mm W x 45mm H x 196mm D)  
Weight: 7lbs (3.5kg)

#### Electrical:

Power: Auto ranging 100-230V AC 50/60Hz  
30W  
Safety: ETL Listed  
Complies with EU safety directive  
Complies with FCC Part 15 Class A  
EMI/RFI: EU EMC Directive

### ► Ordering Information

5010	Time Code Generator/Reader
5010-24Fps	NTSC/24Fps Time Code Generator/Reader
5010-VITC	Time Code Generator/Reader with VITC
5010-VITC-24Fps	NTSC/24Fps Time Code Generator/Reader with VITC

#### Ordering Options

+BP Optional bypass relay for 5010-VITC, and 5010-VITC-24Fps