# 5010/5010-VITC/5010-24Fps

Full Function Time code Generator/Reader with Character Inserter



The 5010 is a full function Time code Generator and full speed Reader. A Video Character Generator with high resolution characters and on-screen programming menu is standard. The 5010 has the features to provide you with the power and flexibility to meet your most difficult operational requirements. The 5010 can be ordered in two versions. Model 5010 is an LTC Generator, Reader, Character Inserter. The Model 5010-VITC comes complete with Vertical Interval Time code capability.

#### **Features**

- Generates Time code in accordance with SMPTE 12M 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

- EBU << SMPTE drop frame time code translator mc</li>
- 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 savings time adjustment in time/date mode
- 2 General purpose outputs can be assigned to seve output modes

## Model 5010-VITC:

The 5010-VITC is a Time Code Generator/Reader/Character Inserter for both Longitudinal and Vertical Interval Time code As well as having all the listed 5010 features, the 5010-VITC also has the following additional features.

- 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 VTR'
- · Selectable reader line range
- Optional Bypass relay on VITC Generator

#### Model 5010-24Fps:

The 5010-24Fps is a special purpose time code generator designed to work with the 23.98Fps time code commonly in use with the high definition 1080p/24 video format. Refer to the 5010-24Fps individual brochure for full product information

- Genlocks to 23.98 'slow PAL' or NTSC
- 24 Fps <-> 30 Fps time code translator code
- Momentary or continuous Jam-sync modes
- Locks to 6Hz reference in 24Fps mode

## **Time Code Feature Comparison**

| Feature                 | 5010 | 5010-<br>VITC | 5010-<br>GPSII | 5010-VITC-<br>GPSII | 5950 |
|-------------------------|------|---------------|----------------|---------------------|------|
| LTC Generator           | /    | /             | /              | /                   |      |
| Adjustable Output Level | /    | /             | /              | /                   |      |
| VITC Generator          |      | /             |                | /                   |      |
| LTC Reader              | /    | /             | /              | /                   | /    |
| VITC Reader             |      | /             |                | /                   | 1    |
| VITC to LTC Translator  |      | /             |                | /                   | /    |

| LTC to VITC Translator                |   | 1 |   | /           |   |
|---------------------------------------|---|---|---|-------------|---|
| LTC Re-shaper                         |   |   |   |             | / |
| PAL and NTSC                          | 1 | / | / | /           | / |
| Colour Framing                        | / | / | / | /           |   |
| Drop Frame                            | / | / | / | /           | / |
| Set User Bits (0-9, A-F)              | / | / | / | /           |   |
| Transfer RDR.Time or UB to GEN, UB    | 1 | > | / | <b>&gt;</b> |   |
| SMPTE <-> EBU Time code<br>Translator | / | > |   |             |   |
| Date/Timezone in User Bits            | / | / | / | /           |   |
| Momentary and Continuous<br>Jam-sync  | / | > | > | >           |   |
| Character Generator                   | / | / | / | /           | / |
| On-screen Programming Menu            | / | / | / | /           | / |
| GPS Referenced Time code              |   |   | / | /           |   |
| Serial Remote Control                 | 1 | / |   |             |   |
| GPI Remote Control                    | 1 | / | / | /           |   |
| GPO Outputs                           | 1 | / | / | /           |   |

# **Specifications**

LTC Generator:

Standard: SMPTE 12M

NTSC 2/4 field; PAL 4/8 field menu selectable

NTSC or 24Fps (5010-24Fps only)

Output: 3 pin male XLR type

Level: Adjustable, 0.5V to 4.5V p-p

 Rise Time:
 40 +/- 10μsec

 Jitter
 < 2 μsec</td>

LTC Reader:

Standard: SMPTE, 12M Time code Input: 3 pin female XLR type

**Level:** 0.2 t 4V p-p, balanced or unbalanced

**Speed:** 1/30th to 70x play speed, fwd and rev, machine dependent

VITC Generator (5010-VITC):

**Input:** Comp. Video 1V p-p,  $75\Omega$  terminated

Outputs: 2 Comp. Video + keyed VITC (1 Output bypass relay protected when +BP option installed)

**Differential Gain:** < 0.5% **Differential Phase:**  $< 0.5^{\circ}$ 

VITC Reader (5010-VITC):

Input: Comp. Video 1V p-p, High Z, BNC Loop

Speed: Still frame to >40x play

**Character Generator:** 

**Input:** Comp. video 1V p-p,  $75\Omega$  terminated

Output: Com. video 1V p-p + keyed high resolution characters, selectable background and sizes

Serial Remote Control (5010 & 5010-VITC):

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 (483mmW x 45mmH x 196mmD)

Weight: 7 lbs. (3.5Kg)

### **Electrical**

Power: 115/230 V AC 50/60 Hz 30 VA

Safety: ETL Listed, Complies with EU Safety Directive

**EMI/RFI:** Complies with FCC Part 15 Class A EU EMC Directive

# Ordering Information

**Ordering Options** 

**5010:** Time Code Generator/Reader

**5010-VITC:** Time Code Generator/Reader with VITC

5010-24Fps: NTSC/24Fps Time Code Generator/Reader

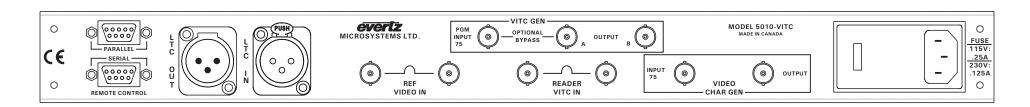
# **+BP:** Optional Bypass Relay for 5010, 5010-VITC

Optional Bypass Rolay for 6016, 6016 VIIIC

# 5010 Series Rear Panels



Models 5010/5010-24Fps/5010-GPSII



Models 5010-VITC/5010-VITC-24Fps/5010-VITC-GPSII