

## Digital Time base Corrector / Frame Synchronizer

TBC300 is a wideband controller with time base correcting and frame synchronizing functions, which can compatible with digital SDI, analog components, and composite I/O interfaces. It can also provide more accurate and convenient solution to the time base error created by non-standard television signals. The problems such as video image distortion, dithering, asynchronies, instability and logo superposition will be no longer possible. With the help of this product, the signals can be Gen-Lock and switched without jitter, and there is no black burst when even if they were interrupted. It can be widely used in the television post-production, satellite TV receivers, live broadcasting, synchronous video broadcast systems and so on. Users may enjoy its full functionalities with stable performance and convenient updating & maintenance.

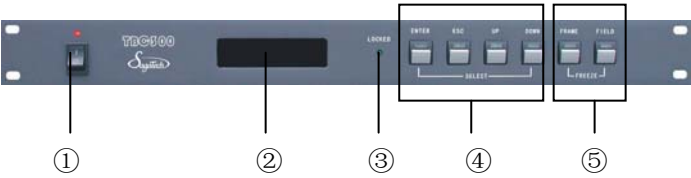
- With SDI, Y/C and Composite I/O interfaces.
- 12bits A/D input, 12bits D/A output. Built-in 10-Bit time base corrector .
- Introduce digital adaptive comb filter.
- Special circuit design, search VTR image with high speed.
- External Gen-lock.
- Adjustable video brightness, contrast, chroma, horizontal position ,H phase, SC phase.
- Drop vertical blanking interval teletext information.
- With function of automatic gain controlling.
- Support power off bypass.



### Video Index

|                       |   |                          |                                   |
|-----------------------|---|--------------------------|-----------------------------------|
| Input Signal          | PAL composite video, 1Vp-p, 75 $\Omega$ BNC | External Synchronization | PAL analog composite video signal |
| Input Signal          | SDI ( 75 $\Omega$ BNC )                     | SDI Jitter (1 KHz)       | < 350 PS                          |
| Output Signal         | PAL composite video, 1Vp-p, 75 $\Omega$ BNC | SDI Jitter (10 Hz)       | < 500 PS                          |
| Output Signal         | SDI ( 75 $\Omega$ BNC )                     | SDI Output Level         | 800 $\pm$ 50 MV                   |
| Sample Precision      | 12 Bits                                     | Differential Phase       | < 0.6°                            |
| Sample Frequency      | 27MHz                                       | Differential Gain        | < 1%                              |
| Signal to Noise Ratio | > 70 dB (weighted)                          | Bandwidth                | > 6MHz                            |
|                       |   | K Factor (2T pulse)      | < 1%                              |

Front Panel Description

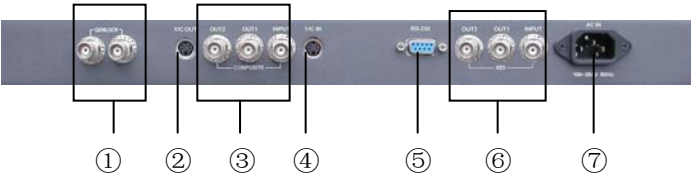


- ① Power & Power Light
- ② VFD Display Screen  
Displaying the current status of the machine.
- ③ LOCKED: Indicates the current GEN-LOCK status  
Light on: External Gen-lock signal input.  
Light off: Non external Gen-lock signal input.
- ④ Function Setup Button （SELECT）  
ENTER Confirm and enter into next steps.  
ESC Cancel or correct the current command.  
UP Add or step to the next command line.  
DOWN Subtract or step to the previous command line.
- ⑤ Special Functional Button (FREEZE)  
FRAME Output freeze frame.  
FIELD Output freeze field.  
FRAME and FIELD are Interlocking keys.

Physical Features & Environmental Req.

|                       |                        |
|-----------------------|------------------------|
| Input Connector       | 4 Y/C & BNC            |
| Output Connector      | 4 Y/C & BNC            |
| AC Input              | 220V/50Hz              |
| Power Consumption     | 20W                    |
| Operating Temperature | 0~40℃ (32~104 ℉)       |
| Moisture              | 5~95% (non condensing) |
| Dimension (W×H×D)     | 427mm × 44mm × 325mm   |
| Weight                | 4 Kg                   |

Back Panel Description



- ① Gen-Lock Interface for external Gen-Lock input.
- ② Y/C OUT S-Video output.
- ③ COMPOSITE  
OUT 2 Composite signal output without bypassing.  
OUT 1 Composite signal output with bypassing.  
INPUT Composite signal input terminal.
- ④ Y/C IN S-Video input.
- ⑤ Remote Interface(options)  
RS232 or RS422 remote control interface.
- ⑥ SDI  
OUT 2 SDI digital video output without bypassing.  
OUT 1 SDI digital video output with bypassing.  
INPUT SDI digital video input.
- ⑦ Power Supply Interface

Ordering information

|        |  |
|--------|--|
| TBC300 | Support for digital and analog signal time base correction and frame synchronization |
|--------|--|