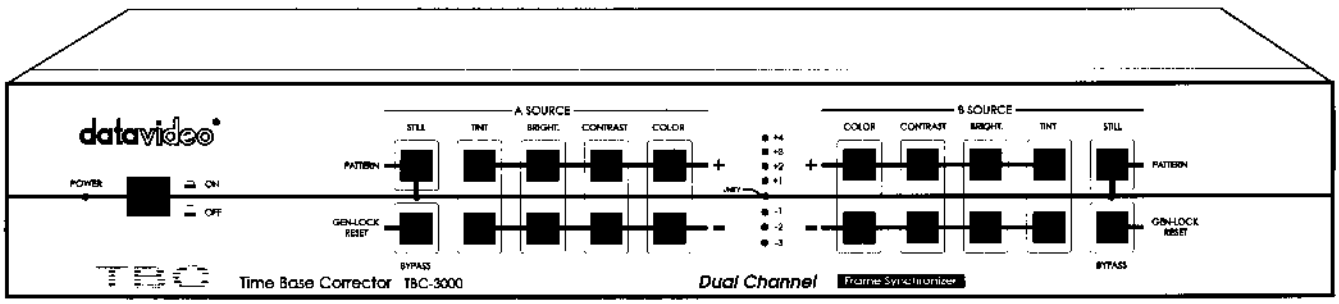
datavideo®

# INSTRUCTION MANUAL

## *DUAL CHANNEL*
## TIME BASE CORRECTOR TBC-3000




Professional Time Base Corrector (TBC) with broadcast-quality features:

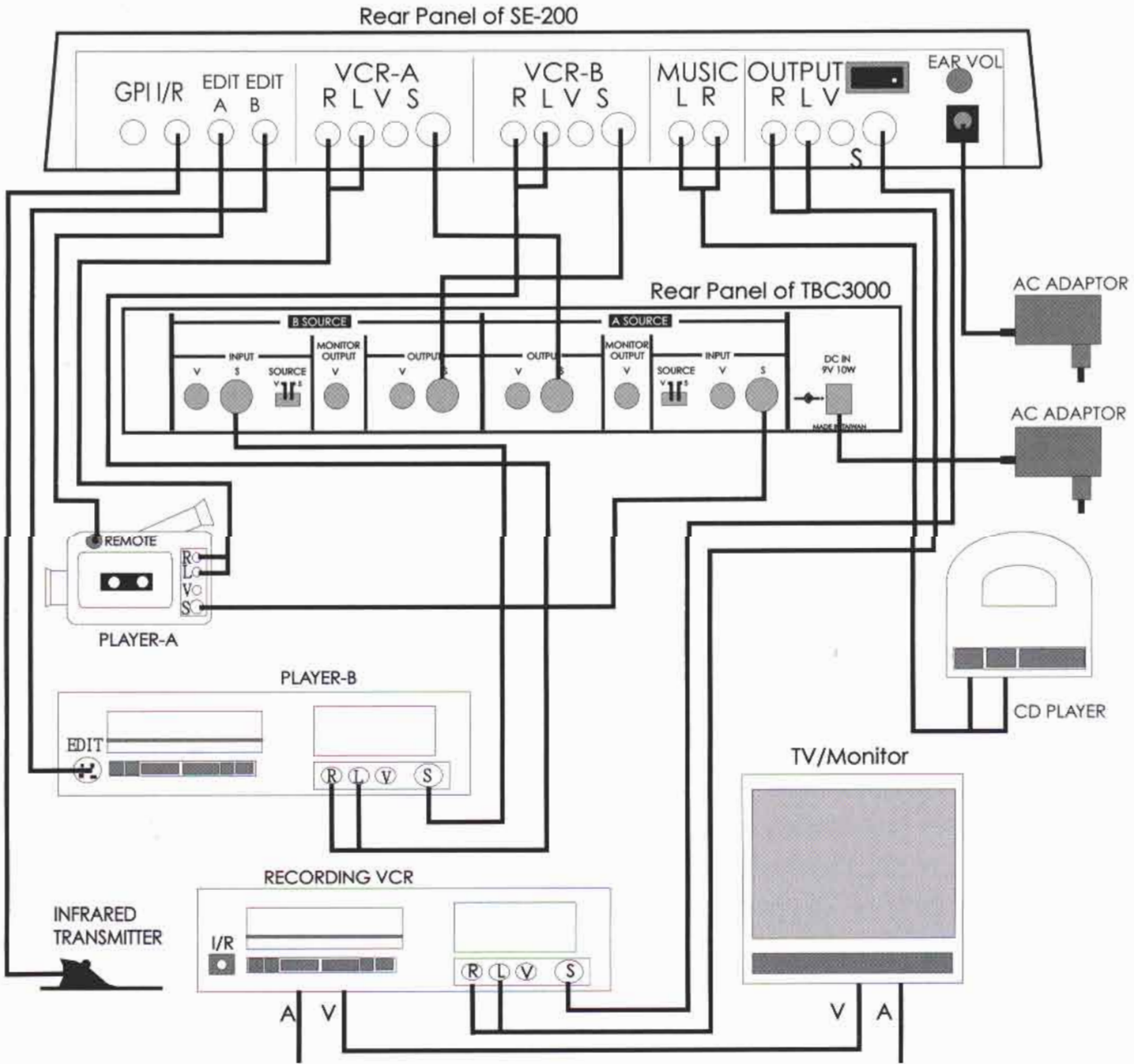
- Dual Channel frame synchronization with full frame memory
- Color bar pattern Generator
- Dual channel digital color processor
- Wide bandwidth, 8-bit video resolution
- True still frame capability
- 4 : 2 : 2 sampling rate

VHS
S VHS
VHS C
S VHS C
Video 8
Hi 8

# Hook -up the TBC-3000 with Datavideo SE-200 Integrated Editing Center

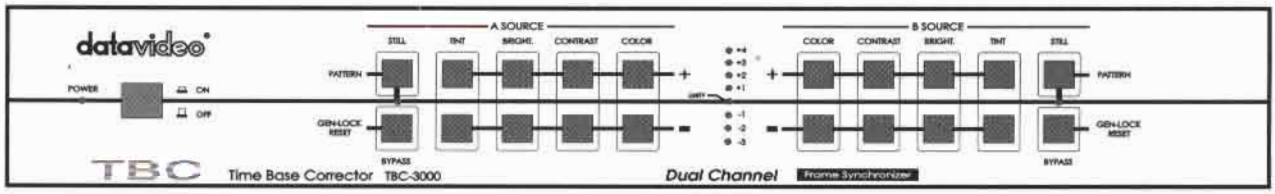
When two video sources have identical signal timing, they are "synchronous", and can be viewed simultaneously in the same video field (like a TV screen). This is not possible with non-synchronous video sources. A Time Base Corrector (TBC) is used to synchronize two non-synchronous video sources, and it is usually a very expensive piece of equipment. Datavideo, however, provides a low cost TBC with high performance (model TBC-3000), which is easy to hook up with the SE-200 for professional video effects like A/B Roll, A/B Dissolve and A/B Animation.

Typical installation of SE-200 with TBC-3000 Dual Channel Time Base Corrector and two non-synchronous video sources



# datavideo® TBC-3000

## Front Panel Controls:




1. POWER ON/OFF SWITCH
   Turns main power to TBC-3000 on and off.

2A. PATTERN SWITCH
   The TBC-3000 can generate color bar test pattern on both source channel A and B. To generate a test pattern, press the Pattern key and hold it for 3 seconds. To remove test pattern, press the PATTERN switch again.

   *NOTE: The PATTERN switch is the same as the STILL switch. Pressing and releasing this switch without holding it for 3 seconds activates the "Still" function (see below). Only when this switch is pressed and held for 3 seconds will the "Pattern" function be activated.*

2B. STILL SWITCH (see note above). Pressing and immediately releasing this switch "freezes" the source video image.

3A. GEN-LOCK RESET SWITCH. If color in the video image appear to be incorrect when you first turn on the TBC-3000's power, press this switch and hold it for 3 seconds to reset Gen-Lock and correct the color.

*NOTE: The GEN-LOCK RESET switch is the same as the BYPASS switch. Pressing and releasing this switch, without holding it for 3 seconds activates the "Bypass" function (see below). Only when this switch is pressed and held for 3 seconds will the "Gen-Lock Reset" function be activated.*

3B. BYPASS SWITCH (see note above). Pressing and immediately releasing this switch bypasses all color processing adjustments made to the source video image.

4. COLOR SWITCHS (+ and -) adjust the Chroma level of the source video.

5. CONTRAST SWITCHS (+ and -) adjust the Luminance level of the source video.

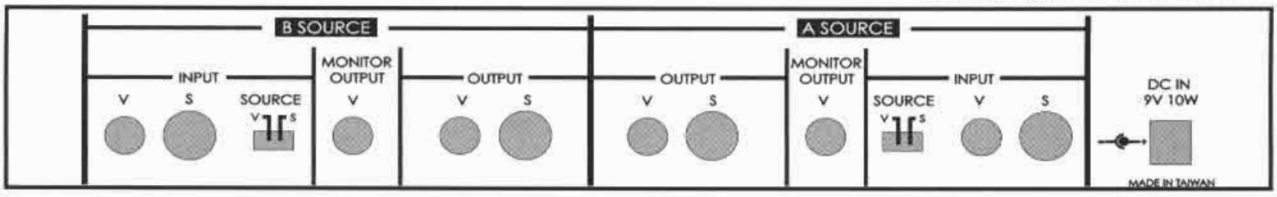
8. BRIGHTNESS SWITCHS (+ and -) adjust the Black level of the source video.

9. TINT SWITCHS (+ and -) adjust the Chroma Tint of the source video. (active only with the NTSC video system).

*Note: The LED level indicators will light up as you make adjustments to color, contrast, brightness, and tint. These LEDs will go out a few seconds after you have finished making adjustments.*

## Back Panel Controls:

Rear Panel of TBC-3000




1. Composite video input jack for Source B.

2. S-VHS video input jack for Source B.

3. S-VHS/Composite video input select switch for Source B.

4. Source B monitor out (for previewing Source B).

5. Composite video output jack for Source B.

7. S-VHS video output jack for Source B.

9. S-VHS video output jack for Source A.

10. Source A monitor out (for previewing Source A).

11. S-VHS/Composite video input select switch for Source A.

12. Composite video input jack for Source A.

13. S-VHS video input jack for Source A.

14. DC 9V power input jack.

# Specifications:

## INPUTS

| | |
|---|---|
| 1 S-VHS Source B | Y/C in: 4--pin 75 ohm DIN connector |
| 1 Composite Source B | 1.0 Vp-p 75 ohm RCA connector |
| 1 S-VHS Source A | Y/C in: 4-pin 75 ohm DIN connector |
| 1 Composite Source A | 1.0 Vp-p 75 ohm RCA connector |

## OUTPUTS

| | |
|---|---|
| 1 S-VHS Source B | Y/C out 4-pin 75 ohm DIN connector |
| 1 Composite Video Source B | 1.0 Vp-p 75 ohm RCA connector |
| 1 S-VHS Source A | Y/C out: 4-pin 75 ohm DIN connector |
| 1 Composite Source A | 1.0 Vp-p 75 ohm RCA connector |
| 1 Source B Monitor Out | 1.0 Vp-p 75 ohm RCA connector |
| 1 Source A Monitor Out | 1.0 Vp-p 75 ohm RCA connector |

## CONTROLS

| | |
|---|---|
| Brightness | +/- 10% |
| Contrast | +/- 3dB |
| Color | +/- 3dB |
| Tint (only available with NTSC system) | +/- 5° |
| Frequency Response | 4.5 MHz +/- 3 dB |
| DG, DP | +/- 2 %, 1° |
| S/N Ratio | > 50 dB |

## PROCESSING

| | |
|---|---|
| Still | Field |
| Component | 8-bit, 4:2:2; Y: 13.5 MHz |
| Correction Range | Dual channel full frame TBC |
| Pattern Generator | color bar pattern |

## GENERAL

| | |
|---|---|
| Power | DC 9V 10W AC Adaptor |
| Ambient Temperature | 32° - 131° F (0° -55° C) |
| Ambient Humidity | Less than 90 % |
| Dimensions | 420 (W) x 240 (D) x 60(H) mm |
| Weight | 3.2 Kg |
| Accessories | RCA/RCA and S-Video/S-Video cables |