

TVT With 3CCD Camera Supplementary Instructions

1. Mandatory Settings. Certain selectable Camera Menu options in your 3CCD camera must be set in a specific way in order for the Tobin Video Transfer TVT to operate properly, or at all. These possibly confusing Menus and Sub-Menus are shown on your video monitor screen and include:

1. Special set, output Y/C. NOTE: If this is incorrectly set, you will have to swap camera output connectors in order to see the menu on the video monitor. The TVT will not run while in this condition.

2. Menu 2, special set, lens type DC, iris mode auto, lens select mode 1, iris speed 8, open limit 127, close limit -128. The "Average Auto" function will not work if this is set wrong.

3. Sub menu 1, shutter preset. For 8 and 16 NTSC and 8/S8 PAL, 1/500. For 16 PAL, 1/250. For S8 Sound: ask us for specific special settings. If this is set wrong you will get a dark or an unsteady blurred picture.

2. Customizable Settings. We recommend not touching any of these as they are optimized for your TVT and normal use of it:

1. White balance. This is set using a 0.6 Neutral Density filter, to have the light source output at typical values and with the chroma output at maximum, for the most sensitive adjustment. We also insert a small amount of blue and cyan in the light path, to warm up skin tones from a strict neutral balance. Otherwise faces look a bit too blue on the typical TV set, which is adjusted for a 6500°K or 9300°K color temperature, more blue than daylight. This is similar in effect to using the "Shooter's Blues" white balancing cards for live video cameras.

2. Sub menu 2, shading mode flat, auto shading setting. We have made this setting to give an almost perfectly even illumination of the image. Once set it should not need to be changed. For this to work we have to move the camera out of focus and to a higher magnification, so the film aperture edges and corners do not show in the slightest. Otherwise you will get odd brightness patches at the edges and corners, which show in the picture.

3. Gamma On, Knee 1, Gain 0 dB, AGC off.

3. Operator Adjustments. Some settings can be altered by the operator. We recommend not changing any of these without viewing the results of a variety of films on a variety of monitors. These include the Averaging automatic video level, sharpness or aperture correction, color matrixing and the like. Optical focus is set using a suitable test film with a lot of fine detail. Loosen the focus locking screw on the side of the lens barrel, adjust focus with the screw on the end of the lens barrel, then lock the position with the screw on the side. Magnification and centering adjustments are moved and locked with the screws holding the camera in its position.

4. Optional Applications.

The camera has a small **Bars** push-button on the back. Pressing it will output color bars instead of video. Pressing it again will restore the video output. If this button needs to be accessed regularly, instead of using the color bar generator in your video facility, the end cover of the camera housing can be removed or a small hole drilled in it to reach the button. Be careful to not touch the White Balance button or it will have to be reset as described above.

The TVT may have an optional extra-cost **Genlock** input via a BNC connector. This does not need to be connected unless you are feeding to the input of a video switcher, and you will be switching or dissolving live between video sources. Connecting to the Black Burst or Color Bar output of the master sync generator of your plant will lock the TVT and camera to it. Fine phasing adjustments are then made using the sync and subcarrier phase adjustments of the camera. Refer to the Hitachi camera instruction manual for the procedure.

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