

MODEL 200 STEREOSCOPIC MULTIPLEXER

The model 200 StereoMultiplexer will interlace (multiplex) video from any two genlocked composite or component (YC, RGB, CAV, Hi8, SVHS) NTSC, PAL or SECAM sources to the field sequential RLRL format. It will also accept various types of computer generated video in the range of 30 to 120 Hz.

If used in the composite mode, video with composite sync must go into the Y input, or sync must be supplied to the sync input and the external/internal sync switch put in external position. When using YC cameras (e.g., SVHS or Hi 8mm), put Y into the Y and C into the R-Y or B-Y and take the output from the corresponding pins. When using CAV (Component Analog Video such as Betacam, Mill, etc.) the three components go to pins R-Y, B-Y, and Y. When using RGB cameras, R goes to R-Y, G to Y, and B to B-y. If there is no sync on the G, sync to the sync pin. If using it in composite mode you may use the RCA jacks on the rear of the unit.

The H Split & V Split positions of the rotary switch divide the viewed image on the monitor into halves from the right & left cameras for easy comparison of the focus & color balance. They also can be used in conjunction with 3DTV Corp.'s SpaceStations for over/under or side by side compressed stereo pairs in order to record all the fields of both cameras. In this mode, the two cameras are first run through the two channels of the SpaceStation (SS3 or SS4) and the outputs of the SS into the two inputs of the Model 200 with it's switch in the H Split or V Split position. The Model 200 output is then recorded with any VCR. The recorded tape is then played back into both channels of the SS and decompressed to give back all the fields of the original two cameras.

Field sequential 3D for viewing or recording is obtained from the appropriate pins of the D25 connector. The R, L and 3D positions of the switch provide left camera, right camera and multiplexed field sequential 3D. The DB25 pin out below will enable custom wiring of any two genlocked cameras. Since nearly every camera has a different cable, the user will have to do this themselves. It is recommended that camera wiring be done with the aid of the Model 200 Breakout Box. This unit plugs into the DB25 on the model 200 and breaks out the pins into BNC's. This is extremely useful when setting up new cameras or checking for problems.

The cameras must be properly genlocked. With some cameras simply running VBS from the other camera will achieve this, but others will require that both cameras receive external sync from a sync generator. Most modern industrial and professional cameras do not require a separate sync generator. Camera salespersons and even engineers for the camera manufacturers often unknowingly give false or misleading information on genlock. Some 30 units have been delivered and every problem on set up has been due to improperly genlocked cameras. You can test the Model 200 by running the video out of one camera into a Distributions Amplifier to split the signal (you may not use a Y). Radio Shack sells a 1 to 3 DA for \$30 which is suitable for testing composite video or each of the two or three components in turn. Run two video outs from the DA to the two video inputs of the Model 200. You now have a certain genlocked camera "pair", in all 3 switch positions, you should see a clear, steady 2D picture from the video out. Of course, you will see separate chroma and luma if using component input.

For good results, it is critical that all parameters of both cameras match precisely, including exposure values. Signal levels of the two cameras should be closely match. Even if Irises are set alike and cameras match to the eye, there may be significant differences in video level. Autoirises are slow and can cause problems when cameras or subject are moving or illumination is varying rapidly. The new “on chip” electronic iris cameras are recommended.

Power is 12V DC. PCB is shock mounted on rubber grommets. Units has been marketed since 1990 and has been sold to various agencies of the US Government.

Dimensions:

Both Model 100 and 200 are in a gray aluminum box 1.25x3.25x5.5 inches with the front switch protruding 0.5 inch and on Model 100, 3 BNC's protruding 0.5 inch. Model 200 has a DB25 connector and an external/internal sync switch on the side protruding 0.4 inch.

Warranty:

Units are guaranteed for 90 days parts and labor.