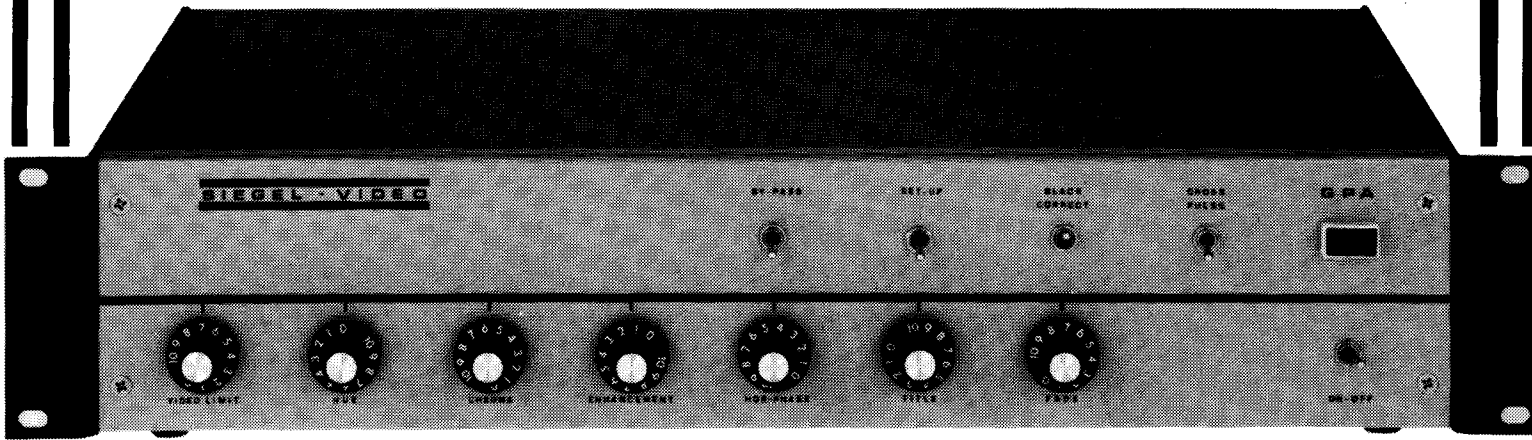


# GENLOCK PROCESSING AMPLIFIER

SERIES 1020



## FEATURES

- SELF ADJUSTING SYNC SEPARATOR
- SYNC & BLANKING RECONSTRUCTION
- EIA-RS-170A STANDARD VIDEO OUT
- IMAGE ENHANCEMENT
- MANUAL COLOR CORRECTION
- AUTOMATIC COLOR TRACKING
- SWITCHER-FADER FUNCTIONS
- CAMERA PLUGS DIRECTLY INTO UNIT
- BLACK BURST GENERATOR
- AUTOMATIC DARK CORRECT
- AUTOMATIC VIDEO LIMITING
- CROSS PULSE DISPLAY
- "PEAK WHITE" SET-UP SWITCH

## APPLICATIONS

The Genlock Processing Amplifier represents one of a new breed of video devices from Siegel-Electronics. In addition to it being an outstanding video processing amplifier, capable of recovering video signals thought hopeless, it also incorporates switcher fader type functions as well. Any video signal that can hold on a monitor can be processed with the GPA to the EIA-RS-170A standard video format.

For all situations where finished television presentations need to be made with a minimum of hardware, the GPA is the device of choice. The design philosophy was to make one piece of equipment that would: (1) clean up the Sync., blanking and burst; (2) let you fade to black without disturbing those signals; (3) allow you to plug a portable camera directly into the GPA so that white titles could be superimposed over the picture, with the turn of a knob, during editing. Thus keeping the process of completing a video presentation very simple. A GPA is like having a "studio in a box." It contains all those needed functions, that are part of completing a video production.

The processing amplifier itself is capable of features not found in other processing amplifiers. Video limiting insures that the video signal never goes so high that clipping or over modulation occurs, it does this without clipping itself, instead the signal level is reduced instantaneously when needed. This works much better than AGC. It has a special circuit that corrects for the dark current error inherent in B&W and color video cameras used under poor lighting conditions. The result is a dramatic increase of contrast and photographic realism. The built-in image enhancement circuitry, automatically adds more enhancement to higher level video, resulting in a high level of enhancement with

minimum added noise. A horizontal phase control is included on the front panel to allow perfect overlapping of non-standard video formats with the standard RS-RS-170A output of the GPA. The Sync. and blanking are totally reconstructed with a built-in genlocked sync. generator. At the flick of a switch a cross pulse of your incoming video signal is displayed on a standard monitor, so that tape tension can be set accurately. The GPA does not require a scope or wave form monitor in its operation. Thus resulting in a savings of another piece of expensive video equipment. Color tint and saturation can be corrected, and are maintained at that setting, by Automatic Color Tracking. The GPA allows monochrome and color tapes to be edited together, by operating in "black burst" mode. A peak white set-up switch is included so you can calibrate your video levels before recording. The knobs on the outside of the GPA are for production personnel. The adjustments that require technical knowledge are located on the inside of the unit. Usually these never need to be used. A bypass switch is also included for convenience. The GPA is constructed with standard electronic components similar to that of computer technology. While many video recording mediums have come and gone since the GPA was introduced, it still remains an extremely useful device.

When ordering please specify the type of camera you will be using with the GPA so that the camera connector on the rear of the unit can match. If you require all the Sync. pulse drive signals specify that as well. For any additional features, you might want to check with your video dealer or with the factory. The GPA is covered by the standard industry warranty of: (A) 90 days full coverage, (B), for the balance of the year, limiting our charges for labor and one half shipping costs. All subject to terms and conditions.

## SPECIFICATIONS

- **INPUT LEVEL:** ..... 5-2 VOLT P.P.
- **OUTPUT LEVEL:** ..... 1 VOLT P.P.
- **DIFFERENTIAL:** GAIN & PHASE  $\geq 1\%$
- **CHROMA GAIN:** ADJUSTABLE FROM 0-100%
- **CHROMA PHASE:** ADJUSTABLE FROM  $\pm 45^\circ$
- **POWER REQUIREMENT:** 117 VOLTS, @ 60 hz  $\leq 70$  WATTS
- **INPUTS:** VIDEO (BNC), CAMERA (BNC OR SONY 10 PIN CONN.)
- **OUTPUTS:** (ALL BNC) VIDEO, \*SYNC, \*BLANKING, \*H-DRIVE, \*V-DRIVE, \*SUBCARRIER, \*BURST FLAG, \*OTHER USER SPECIFIED
- **CONTROLS:** VIDEO LIMIT, HUE, CHROMA, ENHANCEMENT, H-PHASE, TITLE, FADE
- **SWITCHES:** ON-OFF, BLACK CORRECT, CROSS PULSE, TERM., BY-PASS, SET-UP
- **DIMENSIONS & WEIGHT:** "1/2" (8.9 CM) H, 19" (48.3 CM) L, 12" (91 CM) D, RACKMOUNT 14 LBS. (4.5 KILOS).

**SIEGEL-ELECTRONICS**

\*OPTIONAL

ELECTRONIC EQUIPMENT FOR THE VIDEO INDUSTRY  
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