



DSA-100 SDI SAFE AREA GENERATOR

OPERATING INSTRUCTIONS

Operation of the DSA-100 is extremely simple, as most commands are push on/push off, dedicated pushbuttons. On power up, with all functions off, the display will indicate the line rate of the SDI input signal. As each graticule or function is selected, its description will appear in the display.

Pushbutton Functions

4:3 SA - enables a 4:3 aspect ratio safe action graticule, representing 90% of active video of a 4:3 picture.

4:3 ST - enables a 4:3 aspect ratio safe title graticule, representing 80% of active video of a 4:3 picture.

16:9 SA - enables a 16:9 aspect ratio safe action graticule, representing 90% of active video of a 16:9 picture.

16:9 ST - enables a 16:9 aspect ratio safe title graticule, representing 80% of active video of a 16:9 picture.

To enable a 14:9 safe action or safe title, hold down the 16:9 SA or 16:9 ST pushbutton, and depress the "-" pushbutton.

CROSS - inserts a center cross into the picture. Three sizes of cross may be cycled through by repeatedly depressing the CROSS button. The cross may be positioned anywhere in active video by depressing the H POS or V POS button, followed by the +/- buttons. When positioned off center, the display will indicate the scanning line number where the X-axis lies, and the time in microseconds from the H start of active video to the Y-axis. To re-center the cross, depress the CROSS button. The display will read CENTER CROSS -
V:141 H:26.70 us for 525 line systems.
V:166 H:26.70 us for 625 line systems.

RECT - inserts a rectangle into the picture. This rectangle may be sized and positioned anywhere in active video by using the H & V SIZE, H & V POS and the +/- buttons. The aspect ratio (N:1) of the rectangle will continue to be updated on the display, as the size of the rectangle is changed. Depressing the RECT button a second time will enable only the two horizontal lines to be inserted. The display will read the scan line numbers of both the top and bottom horizontal graticules. Depressing the RECT button a third time will enable only the two vertical lines to be inserted. The display will read the timing in microseconds from the H start of active video to the left hand graticule, followed by the timing to the right hand graticule. Depressing the RECT button a fourth time will disable the RECT function.
Note: Should the RECT and CROSS both be active, the last one selected will be adjustable.

LTR BOX - blacks out the top and bottom of a 4:3 picture to display the appearance of a 16:9 picture. The readout will display the top and bottom scan lines of the picture, indicating the start and end of active video. The LTR BOX may be user defined using the V SIZE and V POS, followed by the +/- buttons. The start and end of active video will continue to be updated on the display as the letterbox is changed.

PANELS - blacks out the side panels of a 16:9 picture to display the appearance of a 4:3 picture. A 14:9 simulation may be achieved by holding down the PANELS button and depressing the "-" button. The side panels may be user defined, using the H SIZE and H POS, followed by the +/- buttons. The display will indicate the timing in microseconds of the start and finish of the visible picture.

B/W - switches the graticule indicated on the display between black and white. Default is white (LED off).

GRATICULE LUMINANCE ADJUST - hold the B/W button in, and depress the "-" button. Release both buttons. Luminance may now be varied from 10% to 100% using the +/- buttons. To exit this mode, hold the B/W button and depress the "-" button.

ACTIVE VIDEO MARKERS - may be enabled by holding down the H SIZE button and depressing the V SIZE button. Repeat this sequence to disable the markers.

STORE - will store a complete set of graticules in memory. The display will read CUSTOM 1 STORED. Ten storage bins are provided.

RECALL - will cycle through the ten storage bins as indicated by the display.

CUSTOM - will insert the complete pattern stored in the selected storage bin. Any pattern may be modified and re-stored.