

# MODEL 6115SC TIME CODE GENERATOR TRANSLATOR

## FEATURES

- Generates IRIG A, B, E and G time codes.
- Generates 5 bi-level slow codes.
- Front Panel LCD Time/Status Display.
- Synchronizes to any of five IRIG time code serial inputs.
- Can operate as standalone generator using internal reference.
- RS-232 Serial Status Port.
- Powered by 100 to 240 VAC, 50/60 Hz line.



## DESCRIPTION

The Model 6115SC is a Time Code Generator/Translator that converts an applied time code to one serial time code and five slow codes. The unit operates on any of four IRIG time codes, A, B, E and G. The applied code is then translated into IRIG B and five Slow Codes, 1 sec, 5 sec, 10 sec, 30 sec and 60 sec. Any of the 5 slow codes is output via a power amplifier as selected by a front panel switch. A selectable IRIG time code output A, B, E or G is provided regardless of the input IRIG format. Therefore if set to IRIG B, this signal may be used to drive an external IRIG B display. If the applied time code signal is lost the 6115SC will automatically switch to an internal clock and continue generating the output IRIG signals. No discernible change in the IRIG or Slow Code outputs will occur when the input time code signal is removed after synchronization.

The 6115SC internal clock is automatically synchronized to the selected IRIG serial time code upon application of that time code signal to the IRIG input port. Once synchronized the IRIG signal can be removed and the unit will continue to operate on the internal clock, which also generates all serial IRIG signals and Slow Codes. The outputs are always synchronized with the time code generator and phase locked to the input signal when present.

The 6115SC may also be used as a stand-alone unit to generate IRIG time codes. The time-of-year may be set by the user via front panel switches. An LCD readout displays the days, hours, minutes and seconds as well as unit status.

The unit is housed in a 1.75 inch high (1U), 19 inch wide rack mountable aluminum enclosure, 9 inches deep and is powered by 100 to 240VAC, 50/60 Hz.

# Model 6115SC Time Code Generator/Translator

## SPECIFICATIONS

**Frequency Stability (internal clock)** 1 part in  $10^6$  (TCXO)

**Time to Lock** Lock time from application of input time code of:  
IRIG A: 0.3 seconds  
IRIG B: 3.0 seconds  
IRIG E: 30 seconds  
IRIG G: 30 milliseconds

**IRIG Input** Standard IRIG serial time code signals. IAW OSG IRIG Standard 200-98. Supports IRIG A, B E and G Input level 0.5 to 15 volts peak to peak with modulation ratio from 2:1 to 6:1.

**IRIG Outputs 1 and 2** Same as applied IRIG input as selected, except regenerated, Output level is internally adjustable, factory set at 3 volts p-p.

**SELECTED IRIG Output** Standard IRIG serial time code signal as selected by front panel switch, IAW OSG IRIG Standard 200-98. The selected time code signal is present regardless of IRIG input format. Output IRIG corresponds to an input IRIG signal to within  $\pm 50$  microseconds. Output level is internally adjustable, factory set at 3 volts p-p.

**Slow Code output** Any of five Bi Level Slow Code outputs as selected by front panel switch. Width modulated as follows:

Frame Time	Pulse Rate	Ref Pulse Width	Zero Width	One Width	Pulses per Frame
1sec	50pps	20ms	4ms	10ms	50
5sec	10pps	100ms	20ms	50ms	50
10sec	5pps	200ms	40ms	100ms	50
30sec	2pps	500ms	100ms	250ms	60
1min	1pps	1sec	200ms	500ms	60

Internal power output amplifier provides drive for multiple parallel loads.

**RS-232 Port** EIA RS-232C, 8 bit, no parity, 1 stop bit. Baud Rate selectable from 300 to 19200.

**Power** 100 to 240 VAC. 50/60 Hz

**Temperature (Operating)** 0°C to +55°C  
**(Storage)** -10°C to +70°C

**Humidity** 95% non condensing

**Package Size** 19" wide x 9" deep (including connectors) x 1.72" high.  
**Weight** 4.5 lbs.

