■ Models 408/408NPS (Model 408NPS shown)

LEADER

•NTSC-M (408 and 408NPS)
•PAL-B, C, D, G, H, I, K and L (408NPS only)
•SECAM Ⅲ-E, D, G, H, K and L (408NPS only)

Microprocessor control and digital synthesis give the 408, and 408NPS extreme flexibility in test signal programming of both video and RF outputs. Signals available simultaneously include composite video, Y/C super VHS, YB-YR-Y component, RGB analog and TTL, full sync generator outputs including 2 black bursts, audio test tones (400 Hz and 1 kHz) and modulated RF output from 30 to 900 MHz with 10 kHz resolution.

The neat thing about this generator is the ability to change the amplitudes of (sync, setup, burst, chrominance, luminance, R, G and B) either ganged or individually (0 to 200% except setup and burst 0 to 20%) to any test pattern and then storing and recalling the edited pattern along with an RF frequency into the 100 presets. This greatly simplifies and speeds changes to the GPIB as it is only necessary to step through the recalled presets. Further it allows dial in optimization to design and manufacturing test goals. For example, dropping the level of color burst by 6 dB and seeing if the board produces proper color signal.

Test patterns include 50 or 100% amplitudes for (narrow and wide) (video sweep and multiburst) with last burst variable to 15 MHz. The jog dial is used to vary the last multiburst packet and when multiplied by 80 gives screen resolution.

For example 4.2 x 80 = 336 lines of resolution.

Signal modifiers include polarity inversion, superimposed circle and moving marker as well as on/off and level control of burst, sync, setup, luminance, chrominance, R, G and B.

The 408 operates in the NTSC system, The 408NPS extends all operating features to NTSC, PAL and SECAM. Applicable video and audio modulation are selected by system designation. The FUNCTION DATA block provides easy access to all programming functions. Here, up to 100 test setups can be stored, each one holding front panel settings (pattern selected, genlock on/off, signal modifiers, etc.), tailored or standard video parameters, RF channel selected or tailored to any carrier frequency between 30 and 900 MHz. Program control over video parameters allow component values for Betacam or MII to be set up. The LCD panel shows partial programming menus, but the full menus may be superimposed on the selected pattern on a monitor screen. The connectors for 8-pin digital RGB, 21-pin RGB multi-connector and Y/C (S-video) are provided as standard. Genlock, 2 black burst outputs and remote control are standard. GPIB is available as an option.

FEATURES

- **15 MHz Sweep And Multiburst**
  Frequency range and level for video sweep and multiburst can be narrow or wideband from 100 kHz to 15 MHz. There are six & seven sweep markers respectively in bands 1 and 2. Markers can be toggled on and off. In multiburst the last burst is variable with the jog dial.
- **Genlock**
  Genlock function enables generator synchronization with another pattern generator.
- **100 Programmable Presets**
  Sync, burst (NTSC and PAL), luminance, chrominance (SECAM system: subcarrier level variable), and setup (NTSC) levels can be changed independently or ganged for any pattern and stored. Up to 100 front panel settings can be stored and recalled from memory with battery back-up.
- **Composite, Y/C, RGB, Y/R-Y/B-Y Outputs**
  Separate video output signals composite video, RF, 2 black burst signals (NTSC & PAL), H and V drive sync signals and composite sync signals.
- **Special Functions**
  There are 13 basic patterns including SMPTE color bars and convergence patterns. Luminance, chrominance, and RGB signals can be turned on and off. Circle pattern superimposition and moving marker synthesized functions can be used with the basic pattern to generate various patterns. (SECAM system: no DEM pattern)
- **VHF/UHF/Cable R-F Coverage With Lookup Table Charts**
  RF output covers VHF, UHF and Cable TV channels including most of the necessary broadcast channel data.
- **VHF/UHF RF Modulator Accepts Internal And External Video & Audio Modulation**
  The RF signal can be modulated with internal test patterns and audio signals, as well as external video and sound signals.
- **Sound Modulation**
  Audio modulation with 400 Hz or 1 kHz can be applied to the RF output. The 400 Hz and 1 kHz audio tones are also available as outputs to check audio circuits.
- **GPIB**
  The GPIB interface is available as a factory option.

● **408NPS REAR PANEL**