

# LEADER

## DIGITAL COMPONENT SIGNAL GENERATOR LT 425D

### THE CORNERSTONE OF YOUR DIGITAL COMPONENT FACILITY



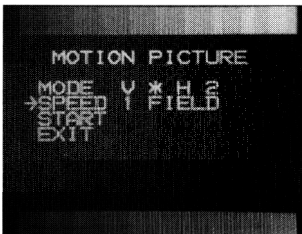
Main Menu



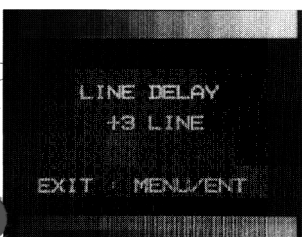
Embedded Audio Menu



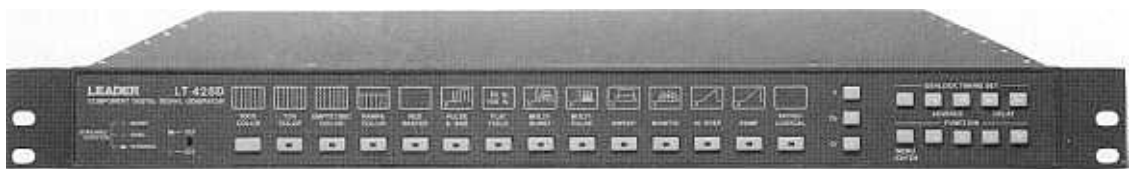
"Others" Menu



Motion Picture Menu



Genlock Offset Menu



LT 425D, your precision master source for a digital component signal reference and system test center. Take a look at these functions:

- 4 serial (includes 1 digital black) and 1 parallel outputs.
- EDH codes in accordance with RP-165.
- 4-channel AES/EBU embedded audio **plus**
- Independent AES/EBU digital audio output.
- 625/50 or 525/60 operation, front-panel switched.
- Compression tests include a variable-speed direction-controlled marker and sequentially-switched test patterns with variable dwell times.
- Digital genlock with user programmed advance or delay in line increments to  $\pm 16$  lines.
- 27-MHz clock output.
- 2 analog black-burst outputs.
- 20-character programmable source ID with calendar and clock.
- Front-panel Y, Cb, Cr on-off switching.
- Test signals (all adapt automatically to 625/50 or 525/60 requirements).
  - Full field 100% color bars.
  - Full field 75% color bars (EBU bars in 625/50).
  - SMPTE color bars 525/60 (BBC color bars 625/50).
  - Combination color bars/ramp (SMPTE or EBU bars, 25% oversized ramp).
  - Flat red field, 100%.
  - Multiburst (100% or 60%).
  - Multipulse.
  - Line sweep (100% or 60%).
  - Bowtie (used with permission of Tektronix, Inc.).
  - 10-step staircase.
  - Ramp-oversize, digital limit, and shallow (10 simultaneous shallow ramps).
  - SDI checkfield.

# Specifications

## VIDEO PARALLEL DIGITAL OUTPUT

### Applicable Standards

ITU-R601-3, SMPTE 125M-1992

### Sampling Frequencies

Luminance 13.5 MHz

Color-difference 6.75 MHz

### Quantitative Bits

10

### Output Connector

25-pin D-sub

### Number of Outputs

## VIDEO SERIAL DIGITAL OUTPUTS

### Applicable Standards

ITU-R656-1, SMPTE 259M

### Auxiliary Data

Embedded audio (SMPTE 272M)

CH2/CH4 menu switchable

800 Hz/1 kHz menu selectable

EDH (SMPTE RP-165) menu on/off

### Output Connector

BNC

### Number of Outputs

3

## DIGITAL BLACK

### Applicable Standards

ITU-R656-1, SMPTE 259M

### Auxiliary Data

EDH (menu on/off switchable)

No embedded audio

### Output Connector

BNC

### Number of Outputs

## ANALOG BLACK BURST OUTPUTS

### System

NTSC or PAL (follows digital choice)

### Output Impedance

75  $\Omega$

### Output Connector

BNC

### Number of Outputs

2

## INDEPENDENT DIGITAL AUDIO OUTPUT

### Applicable Standards

AES/EBU

### Sampling Frequency

48 kHz  $\pm$  0.1 Hz (sync to video)

### Number of Channels

2

### Quantitative Bits

20/16 (internal switch selection)

### Tone Frequency

1 kHz/800 Hz (internal switch selection)

### Tone Level

-18 dB/-20 dB (internal switch selection)

### Output Impedance

110  $\Omega$   $\pm$  20  $\Omega$

### Output Connector

3-Pin XLR

## Number of Outputs

## 27-MHz CLOCK OUTPUT

### Frequency Accuracy

27 MHz  $\pm$  13.5 Hz ( $\pm$  0.5 ppm)

### Output Circuit

Single ended ECL (10K family)

### Output Connector

BNC

## Number of Outputs

## 525/625 SELECTION

Panel operation, lockable

## Output Switching

On/off Y, Pb, Pr

## TEST SIGNALS

### Full Field Color Bars

100/0/100/0, 625/50 and 525/60

### EBU Color Bars

100/0/75/0, 525/50 Full Field Bars 525/60

### SMPTE Color Bars

75/0/75/25, 525/60 only

### BBC Color Bars

100/0/100/25, 625/50 only

## Ramp/Color Bar Combination

625/50- 25% of V scan oversized ramp

75% of V scan EBU bars

525/60- 25% of V scan oversized ramp

75% of V scan SMPTE bars

## Red Raster

100% saturation

## Pulse & Bar

## Flat Field

100% and 50%

## Multiburst

100% and 60%

## Multipulse

## Line Sweep

100% and 60%

## Bowtie

Used with permission of Tektronix., Inc.

## Staircase

10 step

## Ramp

Oversize

Digital limit

Shallow

## SDI Checkfield

## Motion Picture

Moving white chip traverses left, right, up, down or diagonally 30 steps. Dwell time for each step 1 field, 1, 2, 4, 8 or 12 frames.

## Still Picture

Test patterns switched in user-selected sequence with dwell times set to 1 field, 1, 2, 4, 8 or 12 frames

## GENLOCK FUNCTION

### Locking Modes

Sync lock and burst lock (burst priority)

## Input

75  $\Omega$  loop-through

## Input Signal

## Locking Method

Burst lock/sync lock automatically with burst lock priority. For sync lock, the analog BB color frame is not aligned. Menu-selected advance or delay of up to  $\pm$  16 lines with respect to timing reference.

## ID CHARACTER DISPLAY

### Control

Menu on/off switchable

### Number of Characters

20 max

### Font

7 x 7 dots

### Characters

Alphanumeric

### Display Location

Center screen, fixed

## CALENDAR/CLOCK DISPLAY

### Control

Menu on/off switchable

### Display Modes

a: 96.10 31 12:00

b: 10. 31. 1996 12:00

c: 1996. 10. 31 (MON)

d: 10. 31, 1996 (MON)

### Display Location

Lower-right of screen, fixed

## POWER REQUIREMENTS

90 to 250 V ac, 50/60 Hz, 55 VA

## PHYSICAL

### Size (W x H x D)

16<sup>3</sup>/<sub>4</sub> x 1<sup>3</sup>/<sub>4</sub> x 21<sup>7</sup>/<sub>8</sub> in.

426 x 44 x 530 mm

### Weight

9.9 lbs., 4.5 kg

## SUPPLIED ACCESSORIES

2 Rackmount Brackets

Spare Fuse

Call toll-free

1 800 645-5104

In NY State

516 231-6900

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FOR PROFESSIONALS WHO KNOW  
THE DIFFERENCE