

ENCORE ELECTRONICS INC.
Model FL157A
Line Driver

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OPERATION
Model FL157A
Line Driver

- 1) Connect a 24V power supply capable of delivering at least 50mA to the +24V and COM terminals.
- 2) Connect the FL157A HI and LO input terminals to your frequency signal source.
- 3) Connect the Output terminals to your load.

The FL157A output is +5V normally, and drops to 0V when triggered. The FL157A triggers on input voltage rising above a preset threshold.

When using the FL157A with a narrow pulse (such as a 1/rev pickup) you may need to exchange the input signal connections (+ and -) for proper operation. If your pulse is negative-going and narrow, connect the signal to -IN and signal common to +IN. The internal isolation transformer keeps -IN separate from COM terminals.

SPECIFICATIONS
Model FL157A-001
Line Driver

INPUT SIGNAL: Frequency: 3.5Hz to 40kHz
Voltage: $\pm 200\text{mV}$ to $\pm 60\text{V}$

INPUT ISOLATION: 1000VRMS, transformer coupled input

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: Four 0-5V pulses into 100K loads

OUTPUT IMPEDANCE: 1000Ω each output

POWER SOURCE: 18-30VDC at .05ADC

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6" with
snap-on bracket for 35mm DIN-rail mount

SPECIFICATIONS
Model FL157A-002
Line Driver

INPUT SIGNAL: Frequency 10Hz to 40kHz
Voltage $\pm 15\text{mV}$ to $\pm 5\text{V}$; 30mA max.
Extended operation to 1.0Hz at $\pm 70\text{mV}$ min.

INPUT ISOLATION: 1000VRMS, transformer coupled input

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: Four 0-5V pulses into 100K loads

OUTPUT IMPEDANCE: 1000Ω each output

POWER SOURCE: 18-30VDC at .05ADC

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6" with
snap-on bracket for 35mm DIN-rail mount

SPECIFICATIONS
Model FL157A-003
Line Driver

INPUT SIGNAL: Frequency 10Hz to 40kHz
Voltage $\pm 15\text{mV}$ to $\pm 60\text{V}$
Extended operation to 1.0Hz at $\pm 70\text{mV}$ min.

INPUT ISOLATION: 1000VRMS, transformer coupled input

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: Four 0-5 volt pulses into 100K loads

OUTPUT IMPEDANCE: 1000Ω each output

POWER SOURCE: 18-30 VDC at 50mA

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6" with
snap-on bracket for 35mm DIN-rail mount

SPECIFICATIONS
Model FL157A-004
Line Driver
High Noise Immunity Version

INPUT SIGNAL: Frequency 3.5Hz to 40kHz
Voltage $\pm 400\text{mV}$ to $\pm 60\text{V}$; 30mA max.

INPUT SENSITIVITY: Decreases linearly from $\pm 400\text{mV}$ @ 3.5Hz
to $\pm 1.5\text{V}$ @ 40kHz

INPUT ISOLATION: 1000VRMS, transformer coupled input

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: Four 0-5V pulses into 100K loads

OUTPUT IMPEDANCE: 1000Ω , each output

POWER SOURCE: 18-30VDC at .05ADC

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6", with
snap-on bracket for 1 3/8" DIN-rail mount

SPECIFICATIONS
Model FL157A-005
Line Driver

INPUT SIGNAL: Frequency: 1Hz to 30kHz

MIN. INPUT LEVEL: Mag pickup: 30mVRMS 2-2kHz, 250mV at 30kHz
TTL (0-5V) input: 2.5V trigger threshold

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUT: 0-5V pulses into 1K min. load (5mA max.)

OUTPUT IMPEDANCE: <10V

POWER SOURCE: 8-30VDC at 10mADC

CONNECTIONS: Six labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 0.9", with
snap-on bracket for DIN-rail mounting

SPECIFICATIONS
Model FL157A-006, -008, -009
Line Driver

Note: These units have been modified to configurations specified by MDS AERO engineering personnel to meet their specific input characteristics.

INPUT SIGNAL: Frequency 1Hz to 40kHz

INPUT ISOLATION: 1000VRMS, transformer coupled input on -006 and -009,
-008 has a capacitor coupled input with no transformer

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: 0-10V pulses into 100K loads

OUTPUT IMPEDANCE: 1000Ω

POWER SOURCE: 18-30VDC at 50mADC

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic for 1 3/8" DIN-rail mount enclosure,
2.9" x 3.1" x 1.6"

SPECIFICATIONS
Model FL157A-007
Line Driver

INPUT SIGNAL: Frequency 10Hz to 40kHz
Voltage $\pm 15\text{mV}$ to 70mV min.60V
Extended operation to 1.0Hz at $\pm 15\text{mV}$

INPUT ISOLATION: 1000VRMS, transformer coupled input

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: 1 and 2, 0-5V pulses into 50 Ω loads;
3 and 4, 0-10V pulses into 100K loads

OUTPUT IMPEDANCE: 1 and 2, 50 Ω ; 3 and 4, 1000 Ω

POWER SOURCE: 18-30VDC at .05ADC

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6" with
snap-on bracket for 35mm DIN-rail mount

SPECIFICATIONS
Model FL157A-010
Line Driver

INPUT SIGNAL: Frequency 10Hz to 40kHz
Voltage 80mVRMS min., 60VRMS max.
Extended operation to 1.0Hz at 2VRMS

INPUT ISOLATION: 1000VRMS, transformer coupled input

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: 1 and 2, 0-5V pulses into 50 Ω loads
3 and 4, 0-10V pulses into 100K loads

OUTPUT IMPEDANCE: 1 and 2, 50 Ω
3 and 4, 1000 Ω

POWER SOURCE: 18-30VDC at 50mADC

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6", with
snap-on bracket for 1 3/8" DIN-rail mount

SPECIFICATIONS
Model FL157A-013
Line Driver

INPUT SIGNAL: Frequency: 0Hz to 40kHz
Voltage: Approx. 2V threshold, 10K Ω
to +15V for open collector source

INPUT ISOLATION: None - direct coupled input

NOISE IMMUNITY: Achieved with internal hysteresis

OUTPUTS: Four 12V pulses into 100K loads

OUTPUT IMPEDANCE: 1000 Ω outputs 3 and 4; 50 Ω outputs 1 and 2

POWER SOURCE: 18-30VDC at .05ADC

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6" with
snap-on bracket for 35mm DIN-rail mount

SPECIFICATIONS
Model FL157A-022
Line Driver

INPUT SIGNAL: Frequency 10Hz to 40kHz
Voltage +1V to \pm 60V
Extended operation to 1Hz for pulse inputs

INPUT ISOLATION: 1000VRMS, transformer coupled input

NOISE IMMUNITY: Achieved with internal hysteresis, 1V threshold

OUTPUTS: Four 0-5 volt pulses into 100K loads

OUTPUT IMPEDANCE: 1000 Ω each output

POWER SOURCE: 18-30 VDC at 50mA

CONNECTIONS: Twelve labeled wire clamp screw terminals

PACKAGE: Plastic enclosure, 2.9" x 3.1" x 1.6" with
snap-on bracket for 35mm DIN-rail mount