

# Differential Space Counter

Model MT224

*This micro-processor-based sequential counter module was designed to meet the varied requirements of a multitude of counting applications.*



## USER-FRIENDLY

Front panel controls enable the user to "single step" the counter up or down, or to individually set each digit to the desired count.

These controls also allow for output relay to be manually overridden in either "Full" or "Space" modes. A four digit, seven segment display clearly indicates current mode of operation and total count.

## RELIABLE

Optically coupled input devices and a heavy duty output relay isolate internal electronics from potentially harmful environmental conditions.

An active memory system ensures that the last count is stored during power failures.

## FEATURES

- Compact "detector" size easily fits in gate or control panel
- 4 digit LED display of count (positive or negative w/flashing "FULL")
- Anti-coincidence logic with 2 inputs and 2 outputs
- Active memory stores last count during power interruptions for up to 24 hours
- Universal low voltage 12-24 VAC/DC operation
- Simple ADD/SUBTRACT buttons on front panel
- Rapid reset feature (each digit can be set individually)
- Heavy duty 5A output relay to control full signs
- Manual override of FULL condition

# Differential Space Counter, Model MT224

## FUNCTIONAL SPECIFICATIONS

■ Input Protection	Optical Isolation, 2500 VRMS Isolation Voltage
■ Spike Filter	On all inputs. Protects against induced voltages on long input lines.
■ Output Relay	5A @ 230V AC
■ Input Actuation	By contact closure
■ Input Signal	Absolute minimum duration: 50ms. Absolute maximum duration: no limit.
■ Display	Four digit, seven segment LED display. Character height: 10mm Maximum count: 9999
■ Output	Relay energizes on 0001 to 0000 transition; de-energizes on 0000 to 0001 transition. Relay has manual override.
■ Controls	Two pushbuttons. Extra functions operate after 1 second actuation.
■ Memory	Retains last data prior to power failure. Duration (Min): 1 hour Duration (Typ): 1 day
■ Power	12-24V AC/DC
■ Operating Temperature	-40°F to +149°F
■ Humidity	Up to 95% relative humidity without condensation
■ Circuit Protection	Conformal coating over the PCB and all components

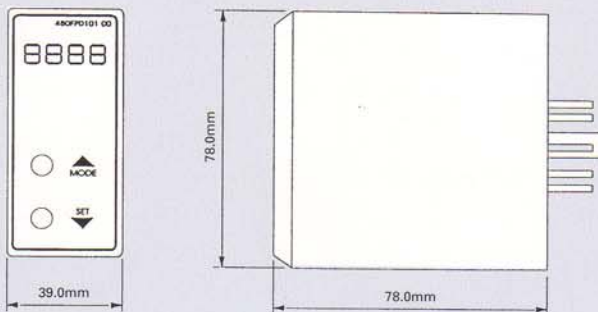


## HARDWARE SET-UP

The MT224 is designed to be shelf or DIN rail mounted with the controls and display at the front and wiring at the rear of the enclosure.

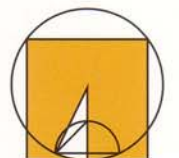
The power, input lines, and relay outputs are all connected to the single 11-pin plug which is mounted at the rear of the enclosure.

## MECHANICAL SPECIFICATIONS



- Housing material
- Mounting position
- Connections
- Housing size
- ABS Blend
- Shelf or DIN rail mounting
- 11-pin submagnal type (86CP1)
- 3.1" (H) x 1.6" (W) x 3.1" (D)  
– 78mm x 39mm x 78mm

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