

# MC OPERATIONAL FEATURES



The MC has been designed to meet the specific needs of the host machine. Certain I/O signals and TILT conditions are configured into "personalities" for different applications. A library of personalities emulates many of the current Coin Comparitor product line. The 12VDC model has the same header and pin out as a CC-62. The 24VAC/24VDC/12VDC model has the same 6 pin JST header as the CC-16 and CC-40. The on board quad optics array verifies proper acceptance and routing of coins through the device. The MC has enhanced, accurate counting ability over other coin optic designs and offers a level of security against frauding not found in other devices. For new applications, the 7 pin 12VDC model offers all of the features available in the MC.

## INHIBIT INPUT FEATURE

- The INHIBIT feature is an input which allows you to disable the device without removing power from it. The INHIBIT control pin can be configured to accept either a LOW or HIGH level signal to inhibit the device.

## TILT OUTPUT

- The TILT signal is an output which alerts the machine of a malfunction or tampering of the device. There are different conditions which will generate a TILT signal, and the lengths of the pulses can be changed to accommodate different machine requirements. Additionally, a NULL signal is an internal signal generated when a valid coin passes the sensor coils. If this NULL signal is too long (> 250ms as sometimes occurs when stringing) the TILT line will output a signal. If any of the optics are blocked for 1.5 seconds or longer the TILT line will be active until the condition is corrected. If a coin is detected moving past the optics in a reverse direction (stringing) a TILT pulse occurs. If coin(s) pass the optics without a matching sense pulse a TILT occurs. The mechanism will not accept coins when the TILT line is active.

Example TILT Condition Table for a Personality #1

CONDITION	RESPONSE
Null signal > 250 ms - sample coin removed or coin held in coils > 250 ms	TILT line is active until condition is corrected
LED blocked > 1.5 seconds or LED failure	TILT line is active until condition is corrected
Coin breaks bottom optic pair then top with or without SENSE (reverse coin)	13ms TILT pulse

## CREDIT SIGNAL

- The CREDIT signal is an output which occurs for every valid coin that is accepted properly through the mechanism. A CREDIT is generated by the internal microcontroller only when a valid sense pulse is matched with a corresponding optic pulse. This close control between the sense signal and the optic signal allows more accurate monitoring of coins through the mechanism. The CREDIT signals are buffered and therefore are fixed in length and duty cycle regardless of coin feed rate.

## SENSE SIGNAL

- The SENSE signal is an output which simply indicates that a valid coin has passed the sensor coils. It is available for those applications requiring a pre-count or verification that valid coins have entered the device.

## MULTI-COLOR STATUS INDICATOR

- The MC incorporates a bi-color (green / red) LED on its front cover to easily indicate the operating status of the mechanism visually. The LED will be green when power is applied to the device and it is enabled (INHIBIT not active) to accept coins. The LED will be orange if the INHIBIT line is active (disable coin acceptance). The LED will be red when the TILT line is active (error condition) or if there is no resident coin in place.