

## SUNRISE Timer Board, Mars Interface

**MARS COIN MECH INTERFACE.** (via the keyed 15 pin connector). Inputs for 10, 20, 50 cents, \$1.00 and \$2.00 coin. This interface can connect to MARS mechs with 13 or 15 pin connectors, via a double ended straight thru harness connecting all corresponding pins. Any individual coin channel may be disabled, causing coin rejection, by removing the appropriate jumper plug on the credit board.

**SECURITY.** Coin or token pulse widths greater than 250mS will be rejected and cause a lock-out of 10 seconds.

**COIN METER.** All coin registrations are accumulated as 10 cent units on a single coin meter. Connect a coin meter between 12 volts and the credit board Coin Meter Output . No diode is needed, the credit board contains an internal protection diode.

**OPERATION.** Minimum price to start timer is \$1.00, made up of any combination of \$2, \$1, 50c, 20c, or 10c coins. Coins inserted while the timer is running will add to the time. Coins inserted over \$1.00 add proportionally to the time. An optional piezo beeper or warning lamp may be connected. It will pulsate for the last 20 seconds of running time. Connect the beeper red wire to +12v and the black wire to the beeper output pin. Connecting an optional 7 segment LED display panel will allow viewing of the time remaining.

**DIP SWITCH SETTINGS.** The Dip Switch controls the time per dollar. Switches should be turned ON as required. Each switch adds time as follows.

SW 1	Adds 5 sec per dollar
SW 2	Adds 10 sec
SW 3	Adds 20 sec
SW 4	Adds 40 sec
SW 5	Adds 80 sec

### EDGE CONNECTOR PINOUT.

PARTS SIDE		SOLDER SIDE
+12v DC	1	+12v DC
GND	2	GND
GND	3	GND
-	4	Output, Relay, COM
-	5	Output, Relay, NC
-	6	Output, Relay, NO
-	7	-
-	8	-
-	9	Output, open collector
-	10	-
-	11	-
LED display clock	12	-
LED display data	13	-
-	14	-
-	15	Coin meter output, open collector
Piezo beeper or lamp, open collector	16	-
-	17	-
-	18	-

○	1	10c. inhibit
○	2	\$2 inhibit
○	3	\$1 inhibit
○	4	50c. inhibit
○	5	0 volts supply (GND)
○	6	+12 volts supply
○	7	20c. inhibit
○	8	20c. coin pulse
○	9	Unused
○	10	50c. coin pulse
○	11	\$1 coin pulse
○	12	Polarising key
○	13	\$2 coin pulse
○	14	output common (+12v)
○	15	10c coin pulse

PINOUT OF THE MARS INTERFACE.

Note.

Coin mech models MS100 & MS111 do not have pin 1 and 15, and 10 cents is not available for these models.

Enable the desired coin channels by setting the corresponding credit board jumper plugs as follows:-



**enabled**



**disabled**

This interface can connect to MARS mechs with 13 or 15 pin connectors, via a double ended straight thru harness connecting all corresponding pins. The MARS mech coin signals will be automatically set to give a momentary pulse to 12 volts. Any individual coin channel may be disabled, causing coin rejection, by removing the appropriate jumper plug on the credit board.