

2340 South 900 West Salt Lake City, UT 84119 801-974-9116 Fax: 801-974-5458

# CRANE OPERATING INSTRUCTIONS

# TIKI HUT & CAPTAIN CLAW

This unit uses a CPU to control the left, right, front, back, down and up movement of the overhead crane. The customer uses skill in positioning the overhead crane over the desired object where the claw will open, drop and close over object. If proper skill has been used then the object is picked up and brought to the home position of the crane where the claw will automatically open dropping the object in the prize chute.

Proper adjustment of the claw strength with VR1 & VR2 is dependant upon the size and weight of prize. Larger heavier prizes will require more claw strength to pick up prizes and smaller lighter prizes require less strength. Factory settings will have to be adjusted according to your prize selection.

## **CAUTION:**

To prevent damage to machine, transport unit only in upright position and make sure overhead trolley assembly and claw are restrained.

# Adjustments

## **Dip Switch Setting:**

**SW 4 (RESET)** Re-start the program system and reset all the figures. In order to adjust SW1, 2, 3, please press SW4 after changing settings to save changes.

### **DIP SW1 SETTINGS**

DIP SW 1		1	2	3	4	5	6	7	8
Coin Slot 1	1 Coin 1 Credit (25¢)	0	0						
	2 Coins 1 Credit (50¢)	0	1			Γ	<b>)</b> EFA	<b>\</b> UL'	Γ
	3 Coins 1 Credit (75¢)	1	0						
	4 Coins 1 Credits (\$1.00)	1	1						
G : GI + 2	1 Coin 1 Credit			0	0				
Coin Slot 2	1 Coin 2 Credits			0	1				
Currently Disabled	1 Coin 3 Credits			1	0				
	1 Coin 5 Credits			1	1				
Display	Double Digit					0	DE	FAU	LT
	Single Digit					1			
Coin & Prize	Coin Slot 1	I	<b>D</b> EF/	<b>\</b> UL'	Τ		0		
Counter	Coin Slot 1 & 2						1		
Demo Music	ON	I	)EFA	<b>\</b> UL'	Γ			0	
	OFF							1	
Claw Voltage Setting	Normal		)EF/	AUL'	Τ				0
	Testing								1

The max credit of double digit is 99, the max credit single digit is 9.

# Manual for "Strong" & "Weak" Power of the Claw Setting And "Up" & "Down" Motor Test

- % Claw strength needs to be set and tested before placing unit on location.
- % Adjust pin #8 of DIP SW1 to the "ON" position, and then power unit on or press SW4 (reset) to perform function. Display will show a negative sign (–).
- % Move the joystick upward or downward to have the claw up or claw down motor test.
- % Move the joystick to the left or to the right to adjust the strong or weak power of the claw. Left for strong and right for weak.
  - 1. Setting for strong power of the claw is controlled by VR1, displays shows "H" (high).
  - 2. Setting for weak power of the claw is controlled by VR2, displays shows "L" (low).
  - 3. Check new settings by testing the unit.
- % After testing or adjusting settings, adjust pin #8 of DIP SW1 to "OFF" position to return to game play.
- We pin #7 of DIP SW2 to adjust the difficulty of play. The settings are "Normal" and "Difficult" and are adjusted by VR1 & VR2 voltage. Increase voltage for more strength and decrease voltage for less strength.
- % Adust the down travel speed of the claw by turning the main board VR2 speed control. A slower speed enables the claw to travel down smoothly without shaking.
- % After all adjustments have been made press the SW4 reset switch to save adjustments. You can also save adjustments by unplugging power cord and plug back in.

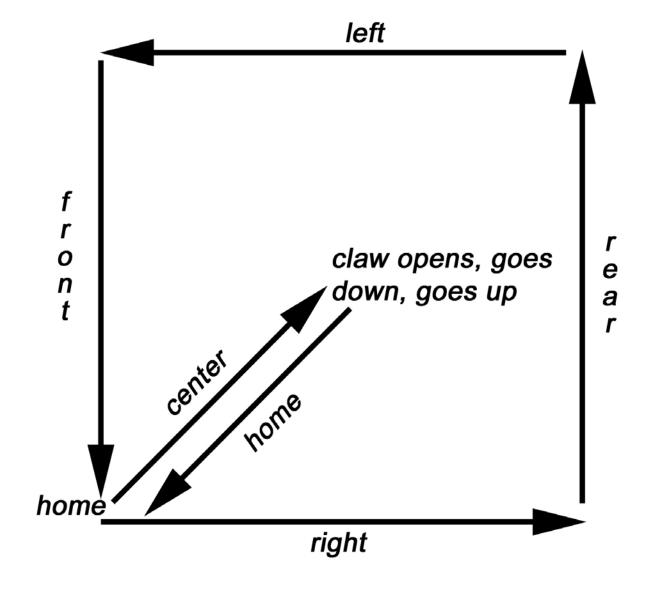
### **DIP SW2 SETTINGS**

DIP SW2			2	3	4	5	6	7	8	
	54 Times	0	0	0	0					
	50 Times	0	0	0	1					
	46 Times	0	0	1	0					
	42 Times	0	0	1	1					
	38 Times	0	1	0	0					
	34 Times	0	1	0	1					
	30 Times	0	1	1	0					
Strong Power / Times (Chance of getting	26 Times	0	1	1	1					
one strong power at	22 Times	1	0	0	0					
the playing times)	18 Times	1	0	0	1	]	DEFA	DEFAULT		
	15 Times	1	0	1	0					
	12 Times	1	0	1	1					
	9 Times	1	1	0	0					
	7 Times	1	1	0	1					
	5 Times	1	1	1	0					
	3 Times	1	1	1	1					
Reserved	Currently					0				
	Not Used					1				
Chance of	Fixed						0			
Winning	Random		]	DEF <i>A</i>	AULT	-	1			
Degree of Difficulty	Normal		]	DEFA	AULT	-		0		
	Difficult							1		
Auto Test Mode			]	DEFA	ULT	- -			0	
Auto Test Mode									1	

#### Overhead Crane Auto Test

This test checks the travel, pick up and drop functions of the crane. To begin the test set DIP SW2 pin #8 to position 1.

The crane will begin travel from its "Home" position (left front over prize chute) to right front position (display shows "R"), then the crane travels to right rear position (display shows "F"), next the crane travels left rear position (display show "L"), next the crane returns to "Home" position (display show "B"), next the crane travels diagonally to center position where the claw will open and go down to catch object (display shows "D"), after catching object or not the claw returns to the up position (displays shows "U"), and finally the crane returns to the "Home" position with the claw opening to drop object. Test will keep repeating until DIP SW2 pin #8 is set back to "0".



### **DIP SW3 Settings**

DIP SW 3			2	3	4	5	6	7	8
	30 Secs	0	0				DEFA	<b>A</b> ULT	
Come Time	35 Secs	0	1						
Game Time	40 Secs	1	0						
	45 Secs	1	1						
	8 Secs			0	0		DEFA	<b>A</b> ULT	-
Auto Crane	6 Secs			0	1				
Drop	4 Secs			1	0				
	No			1	1				
	Normal		DEFA	<b>A</b> ULT	-	0 0			
Time	0.2 Secs					0	1		
of Crane Delay	0.4 Secs					1	0		
·	0.6 Secs					1	1		
Crane	Joystick		DEFA	AULT	7			0	
Operation	Push Buttons							1	
Crane Home	Front		DEF <i>A</i>	AULT	-				0
Position	Back								1

Auto crane drop is the time limit setting that the claw will automatically drop when there is no movement of the overhead crane. Default is 8 seconds; consequently, if there is no right/left, front/back movement of the crane for a period of 8 seconds, then the claw will open and drop at the end of the 8 seconds.

#### Harness and Main Board Connector

- J1: Claw power, Voltmeter, VR1, VR2, Sound VR
  - 1. +5V
  - 2. VR1 Signal
  - 3. VR2 Signal
  - 4. Volume Out
  - 5. Volume In
  - 6. GND
  - 7. Voltmeter "+"
  - 8. Voltmeter "—"
- J2: Power Connector
  - 1. GND
  - 2. + 5V Input
  - 3. + 24V Input
  - 4. Motor Power "—"
  - 5. Motor Power "+"
  - 6. + 12V Input
  - 7. + 48 Input
  - 8. GND
- J6: Display Connector
  - 1. + 5V
  - 2. DA
  - 3. DB
  - 4. DC
  - 5. DD
  - 6. DE
  - 7. DF
  - 8. DG
  - 9. + 12V
  - 10. D01
  - 11. D02
  - 12. D03
  - 13. D04
- Position

Selection

7 Seg

Display

- J3: D Type Connector to Crane
  - 1. Front / Back Motor "+"
  - 2. Left / Right Motor "—"
  - 3. Up / Down Motor "—"
  - 4. Claw Coil
  - 5. Stop Front SW N.O.
  - 6. Stop Back SW N.O.
  - 7.
  - 8. Stop Left SW N.O.
  - 9. Stop Up SW N. C.
  - 10. Stop SW N.O.
  - 11.
  - 12.
  - 13.
  - 14. Front / Back Motor "—"
  - 15. Left / Right Motor "+"
  - 16. Up / Down Motor "+"
  - 17. Claw Coil
  - 18. Stop Front SW Common
  - 19. Stop Back SW Common
  - 20. Stop Left SW Common
  - 21. Stop Down SW Common
  - 22.
  - 23.
  - 24.
  - 25.
- J4: Coin Selector, Shaking Signal Connector
  - 1. + 12V
  - 2. + 12V
  - 3. Coin 1
  - 4. Coin 2
  - 5. GND
  - 6. GND
  - 7. GND
  - 8. Move Signal

#### J5: Direction Controller Connector

- 1. GND
- 2. Joystick Front
- 3. Joystick Back
- 4. Joystick Right
- 5. Joystick Left
- 6. Button 1
- 7. Button 2
- 8. Button 1 Lamp
- 9. Button 2 Lamp
- 10. + 12V

#### J7: Counter Connector

- 1. + 12V
- 2. Coin 1 Counter
- 3. Coin 2 Counter
- 4. Sensor Output Counter
- 5. Reserve
- 6. GND

### J8: Sensor Counter

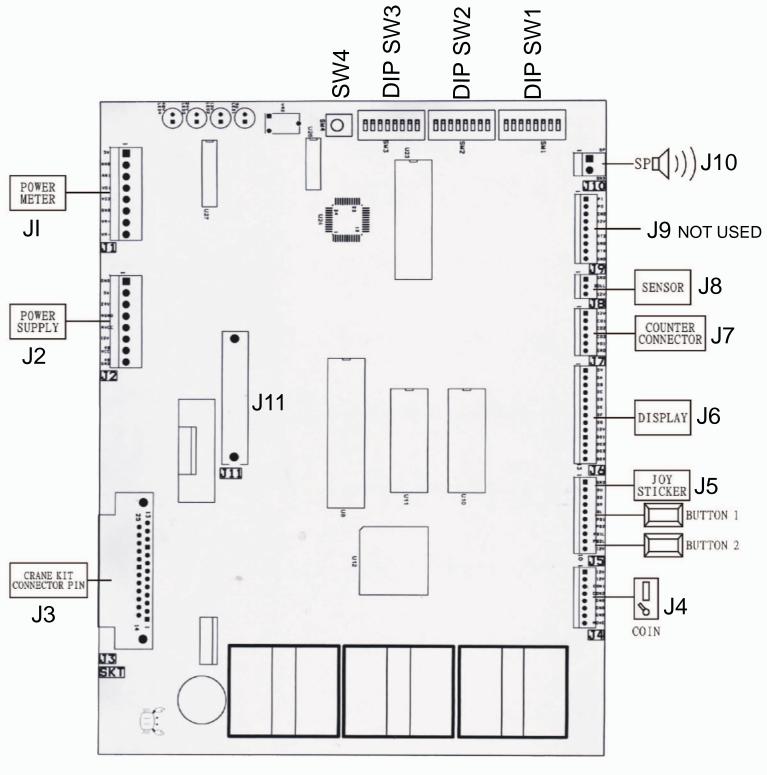
- 1. GND
- 2. Output Sensor
- 3. + 12V

## J9: Reserve, Not Used

### J10: Speaker Connector

- 1. SP
- 2. GND

### J11: Reserve, Not Used



	TROUBLE SHOOTING						
Error Code	Error Position	Error Elimination					
E0	N/C	Reserved, Not Used					
E1	Exit Sensor	Unknown objects cover up the senor or the sensor is out of order					
E2	N/C	Reserved, Not Used					
E3	Stop F SW	Check the Overhead Crane forward "F" SW					
E4	Stop B SW	Check the Overhead Crane forward "B" SW					
E5	Stop L SW	Check the Overhead Crane forward "L" SW					
E6	N/C	Reserved					
E7	Stop U SW	Check the Claw upward "U" SW					
E8	Stop D SW	Check the Claw downward "D" SW					
E9	N/C	Reserved, Not Used					
C1	Counter 1	Check if the wire of Counter 1 is connected or out of order					
C2	Counter 2	Check if the wire of Counter 2 is connected or out of order					
C3	Counter 3	Check if the wire of Counter 3 is connected or out of order					
11	Coin Slot 1	Check Coin Acceptor, possible Coin Jam					
22	Coin Slot 2	Check Coin Acceptor, possible Coin Jam					
55	Exit Sensor	The Exit Sensor is covered up by unknown objects from the machine					
88	Shaking Machine	The machine will stop when it is shaken during the game play, but will continue after 15 seconds of the alarm ringing					
EE	Overhead Crane Error	Adjust pin #8 on DIP SW2 to be "ON" position, then turn on the machine to run through the auto test to assure proper function of the crane motion					
FF	Error Ticket Dispenser	Re-supply the ticket dispenser					