AH2004

Overview :

The AH2004 is a drop in replacement for the previous versions of the board with some enhancements.

Changes/Enhancements :

1) The input transformer can be rated from 12.6VAC to 28VAC with no heat problems. This is due to a high efficiency switch mode regulator right on the PCB. The unit can also be operated from 24VDC to 40VDC if needed. The power source should be capable of providing at least 12 watts of total power, 24 watts if a DBA is being used.
2) The unit now has a DBA port on it for a 12VDC DBA.
3) The unit can be used with a coin slide or coin mech and an option setting makes it much more difficult to cheat when using a slide.
4) The end of play score can now be set. (6 - 9).
5) The unit has a serial port to drive a sound board that is now in development.

Operation:

On power up the unit does a display test with a countdown.

In the attract mode the unit toggles the display between the last score and the credit amount.

During game play the display shows the current score.

When the game play is over the unit flashes the ending score for approximately 10 seconds before showing the current number of credits and then either going into attract mode or onto the next game if the credits are great enough.

AH2004 (V1.05)									
Description	Value	DIP Switch Number 1							
		1	2	3	4	5	6	7	8
End of Play Score	6	0	0						
	7*	1	0						
	8	0	1						
	9	1	1						
End of Play Timer (Minutes)	6			0	0				
	9*			1	0				
	12			0	1				
	15			1	1				
Coins Per Play If using a slide mech this is set to one and the slide determines the pricing.	1*					0	0	0	
	2					1	0	0	
	3					0	1	0	
	4					1	1	0	
	5					0	0	1	
	6					1	0	1	
	7					0	1	1	
	8					1	1	1	
Coin Slide or Mech	Slide*								0
	Mech								1
* Denotes factory Setting									

AH2004 (V1.05)					
Description	Value	DIP SW 2			
		1	2	3	4
DBA Factor What should the pulses out of the DBA be divided or multiplied by to equal one coin.	1*	0	0	0	
	2	1	0	0	
	3	0	1	0	
	4	1	1	0	
	5	0	0	1	
	6	1	0	1	
	7	0	1	1	
	8	1	1	1	
Multiply or Divide Pulses	MULTIPLY*				0
	DIVIDE				1
* Denotes Factory Setting					

Connector Pin Outs

Pin #1 is left hand pin facing connector and has square solder pad.

Connector	Pin #	Function
J2	1	+12VDC to DBA
(DBA Port)	2	GND to DBA
	3	N/C (Key)
	4	Coin 2 Input from DBA
	5	+5VDC for DBA EN+
	6	GND for DBA EN-
J3	1	+12VDC to Sound Board
(Sound Port)	2	TXD to Sound Board
	3	GND to Sound Board
	4	RXD from Sound Board

J1 Edge Connector Pin Out			
Top (Parts Side)		Bottom (Solder Side)	
AC IN 1	1	2	N/C
AC IN 1	3	4	Coin 2 Switch
AC IN 2	5	6	DC Ground
AC IN 2	7	8	DC Ground
N/C	9	10	Start Switch(N/U)
DC Ground	11	12	Left Puck Switch
DC Ground	13	14	Right Puck Switch
DC Ground	15	16	Coin 1 Switch
+12VDC	17	18	Credit Lamp(N/U)
+12VDC	19	20	Motor Relay
+12VDC	21	22	Counter 1
+12VDC	23	24	N/C
Counter 2(N/U)	25	26	+5VDC
KEY	27	28	KEY
DC Ground	29	30	N/C

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