											I		I
	GAME	NOTES  COMBO ROM 04-01-20	A20	A19	GAME S	A17	A16	A15	A14	A13	.5Mhz	.895Mhz	RAM WIDTH S6 D0-D4
	BALLY -17	REPLACING BALLY AS-2518-17	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4
000	Black Jack	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	ON	ON	ON	ON	IN	OUT	OFF / OUT
001	Eight Ball	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT
002	Evel Knievel	DIP 17, 18 & 19 ON for free play. Tilt exploit fixed. Drop target down logic.	ON	ON	ON	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT
003	Freedom Mata Hari	DIP 17, 18 & 19 ON for free play. Tilt exploit fixed. Drop target down logic. DIP 17, 18 & 19 ON for free play. Drop target down logic.	ON ON	ON ON	ON	ON	ON ON	ON OFF	OFF	OFF	IN IN	OUT	OFF / OUT
004	Night Rider	DIP 17, 18 & 19 ON for free play. Drop target down logic.  DIP 17, 18 & 19 ON for free play. Tilt exploit fixed. Drop target down logic.	ON	ON	ON	ON	ON	OFF	ON	OFF	IN	OUT	OFF / OUT
006	Night Rider Custom	Home ROM by Seymour Shabow	ON	ON	ON	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT
007	Power Play	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT
800	Strikes and Spares	DIP 17, 18 & 19 ON for free play. Enhanced Switch Test	ON	ON	ON	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT
200	BALLY -35	REPLACING BALLY AS-2518-35	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4
009	Black Pyramid BMX	DIP 25 & 26 ON for free play DIP 25 & 26 ON for free play	ON ON	ON ON	ON	ON	OFF OFF	ON	ON OFF	OFF	IN IN	OUT	OFF / OUT
011	Centaur	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	ON	OFF	OFF	IN	OUT	OFF / OUT
012	Centaur Home V27	Home ROM by Oliver O.	ON	ON	ON	ON	OFF	OFF	ON	ON	IN	OUT	OFF / OUT
013	Cybernaut	DIP 25 & 26 ON for free play	ON	ON	ON	ON	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT
014	Dolly	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	ON	ON	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT
015	Eight Ball Deluxe	DIP 25 & 26 ON for free play. Multiplayer bonus bug fixed.	ON	ON	ON	ON	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT
016 017	Eight Ball Deluxe Home V32 Elektra	Home ROM by Oliver O. DIP 25 & 26 ON for free play	ON ON	ON	ON	OFF OFF	ON	ON	ON	ON OFF	IN IN	OUT	OFF / OUT
018	Embryon	DIP 25 & 26 ON for free play	ON	ON	ON	OFF	ON	ON	OFF	ON	IN	OUT	OFF / OUT
019	Embryon Home R9	Home ROM by Oliver O. DIP 32=ON for 7 digit displays	ON	ON	ON	OFF	ON	ON	OFF	OFF	IN	OUT	OFF / OUT
020	Fathom	DIP 25 & 26 ON for free play	ON	ON	ON	OFF	ON	OFF	ON	ON	IN	OUT	OFF / OUT
021	Fathom Home V5	Home ROM by Oliver O.	ON	ON	ON	OFF	ON	OFF	ON	OFF	IN	OUT	OFF / OUT
022	Fireball Classic	DIP 25 & 26 ON for free play	ON	ON	ON	OFF	ON	OFF	OFF	ON	IN IN	OUT	OFF / OUT
023 024	Fireball II Flash Gordon	DIP 25 & 26 ON for free play DIP 25 & 26 ON for free play	ON ON	ON ON	ON	OFF OFF	ON OFF	OFF ON	OFF ON	OFF	IN IN	OUT	OFF / OUT
024	Flash Grodon French	DIP 25 & 26 ON for free play DIP 25 & 26 ON for free play. French Language	ON	ON	ON	OFF	OFF	ON	ON	OFF	IN	OUT	OFF / OUT
026	Frontier	DIP 25 & 26 ON for free play	ON	ON	ON	OFF	OFF	ON	OFF	ON	IN	OUT	OFF / OUT
027	Future Spa	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	ON	OFF	OFF	ON	OFF	OFF	IN	OUT	OFF / OUT
028	Harlem Globetrotters	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	ON	OFF	OFF	OFF	ON	ON	IN	OUT	OFF / OUT
029	Hotdoggin'	DIP 25 & 26 ON for free play. DIP27 OFF for reset letters at EOB	ON ON	ON ON	ON	OFF OFF	OFF OFF	OFF OFF	ON OFF	OFF	IN IN	OUT	OFF / OUT
030	Kings of Steel Kiss	DIP 25 & 26 ON for free play DIP 17, 18 & 19 ON for free play	ON	ON	ON	OFF	OFF	OFF	OFF	OFF	IN IN	OUT	OFF / OUT
032	Kiss 7-Digit	7 Digit displays. No free play.	ON	ON	OFF	ON	ON	ON	ON	ON	IN	OUT	OFF / OUT
033	Lost World	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT
034	Medusa	DIP 25 & 26 ON for free play	ON	ON	OFF	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT
035	Mr and Mrs Pacman	DIP 25 & 26 ON for free play	ON	ON	OFF	ON	ON	ON	OFF	OFF	IN	OUT	OFF / OUT
036	Mystic	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT
037 038	Nitro Ground Shaker Paragon	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. *** DIP 17, 18 & 19 ON for free play	ON ON	ON ON	OFF OFF	ON	ON ON	OFF OFF	ON OFF	OFF	IN IN	OUT	OFF / OUT
039	Paragon 7-Digit	7 Digit Displays. No free play	ON	ON	OFF	ON	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT
040	Playboy	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT
041	Playboy 7-Digit	7 Digit Displays. No free play	ON	ON	OFF	ON	OFF	ON	ON	OFF	IN	OUT	OFF / OUT
042	Rolling Stones	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	OFF	ON	OFF	ON	IN	OUT	OFF / OUT
043 044	Silverball Mania Skateball	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON ON	ON ON	OFF OFF	ON	OFF OFF	ON OFF	OFF	OFF	IN IN	OUT	OFF / OUT
044	Skateball Home	DIP 25 & 26 ON for free play DIP 25 & 26 ON for free play. Improved attract mode lighting.	ON	ON	OFF	ON	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT
046	Space Invaders	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	ON	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT
047	Speakeasy 4 Player	DIP 25 & 26 ON for free play	ON	ON	OFF	ON	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT
048	Speakeasy 2 Player	DIP 25 & 26 ON for free play	ON	ON	OFF	OFF	ON	ON	ON	ON	IN	OUT	OFF / OUT
049	Spectrum	DIP 25 & 26 ON for free play	ON	ON	OFF	OFF	ON	ON	ON	OFF	IN	OUT	OFF / OUT
050 051	Not Used Spy Hunter	Not used DIP 25 & 26 ON for free play.	ON ON	ON ON	OFF OFF	OFF OFF	ON ON	ON	OFF OFF	ON OFF	IN IN	OUT	OFF / OUT
052	Star Trek	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	OFF	ON	OFF	ON	ON	IN	OUT	OFF / OUT
053	Star Trek	7 Digit Displays. No free play	ON	ON	OFF	OFF	ON	OFF	ON	OFF	IN	OUT	OFF / OUT
054	Supersonic	DIP 17, 18 & 19 ON for free play	ON	ON	OFF	OFF	ON	OFF	OFF	ON	IN	OUT	OFF / OUT
055	Supersonic	7 Digit Displays. No free play	ON	ON	OFF	OFF	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT
056	The Six Million Dollar Man	DIP 17, 18 & 19 ON for free play. DIP31 must be OFF.	ON	ON	OFF	OFF	OFF	ON	ON	ON	IN	OUT	OFF / OUT
057 058	The Six Million Dollar Man Vector	7 Digit Displays, No free play DIP 25 & 26 ON for free play	ON ON	ON ON	OFF OFF	OFF OFF	OFF OFF	ON	ON OFF	OFF	IN IN	OUT	OFF / OUT
059	Vector Home V5	Home ROM by Oliver O.	ON	ON	OFF	OFF	OFF	ON	OFF	OFF	IN IN	OUT	OFF / OUT
060	Viking	DIP 25 & 26 ON for free play. DIP21 ON for 7 digit display. ***	ON	ON	OFF	OFF	OFF	OFF	ON	ON	IN	OUT	OFF / OUT
061		DIP 17, 18 & 19 ON for free play	ON	ON	OFF	OFF	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT
062		7 Digit Displays, No free play	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT
063	X's and O's	DIP 25 & 26 ON for free play	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT
064	Xenon STERN MPU-100	DIP 25 & 26 ON for free play REPLACING STERN MPU-100	ON DIP-1	OFF DIP-2	ON DIP-3	ON DIP-4	ON DIP-5	ON DIP-6	ON DIP-7	ON DIP-8	IN B1	OUT S1	OFF / OUT DIP-1 TO DIP-4
065	Cosmic Princess	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT
066	Dracula	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT
067	Hot Hand	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	ON	OFF	OFF	IN	OUT	OFF / OUT
068	Lectronamo	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	OFF	ON	ON	IN	OUT	OFF / OUT
065	Magic Mamanulana	Same ROM as Cosmic Princess  DIP 20 ON for free play Credit Display Always On	ON	OFF	ON	ON	ON	ON	ON	OFF	IN	OUT	OFF / OUT
069 068	Memory Lane Nugent	DIP 20 ON for free play. Credit Display Always On.  Same ROM as Lectronamo	ON ON	OFF OFF	ON	ON ON	ON	OFF OFF	ON	OFF	IN IN	OUT	OFF / OUT
070	Pinball	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT
071	Stars	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT
070	Stingray	Same ROM as Pinball	ON	OFF	ON	ON	ON	OFF	OFF	ON	IN	OUT	OFF / OUT
072	Trident	Factory Modified ROM P11A. Unknown changes. No free play.	ON	OFF	ON	ON	OFF	ON	ON	ON	IN	OUT	OFF / OUT
073	Trident	DIP 20 ON for free play. Credit Display Always On.	ON	OFF	ON	ON	OFF	ON	ON	OFF	IN	OUT	OFF / OUT
066	Wild Fyre STERN MPU-200 **	Same ROM as Dracula REPLACING STERN MPU-200	ON DIP-1	OFF DIP-2	ON DIP-3	ON DIP-4	ON DIP-5	ON DIP-6	OFF DIP-7	ON DIP-8	IN B1	OUT S1	OFF / OUT DIP-1 TO DIP-4
074	Ali	Stock ROM. No free play	ON	OFF	ON	ON	OFF	ON	OFF	ON	OUT	IN	ON / IN
075	Ali	Always free play	ON	OFF	ON	ON	OFF	ON	OFF	OFF	OUT	IN	ON / IN
076	Big Game	Stock ROM. No free play	ON	OFF	ON	ON	OFF	OFF	ON	ON	OUT	IN	ON / IN
077	Big Game	Always free play	ON	OFF	ON	ON	OFF	OFF	ON	OFF	OUT	IN	ON / IN
078	Catacomb	Stock ROM. No free play	ON	OFF	ON	ON	OFF	OFF	OFF	ON	OUT	IN	ON / IN
079	Catacomb	Always free play	ON	OFF	ON	ON	OFF	OFF	OFF	OFF	OUT	IN	ON / IN

	GAME	NOTES	GAME SELCT				LCTION DIP SWITCH S5				CPU CLOC	K JUMPERS	RAM WIDTH S6	
		COMBO ROM 04-01-20	A20	A19	A18	A17	A16	A15	A14	A13	.5Mhz	.895Mhz	D0-D4	
	STERN MPU-200 **	REPLACING STERN MPU-200	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4	
080	Cheetah	Stock ROM. No free play	ON	OFF	ON	OFF	ON	ON	ON	ON	OUT	IN	ON / IN	
081	Cheetah	Stock ROM. B16 version. No free play	ON	OFF	ON	OFF	ON	ON	ON	OFF	OUT	IN	ON / IN	
082	Cheetah	Always free play	ON	OFF	ON	OFF	ON	ON	OFF	ON	OUT	IN	ON / IN	
083	Cheetah Home	Only one collect bonus per ball.	ON	OFF	ON	OFF	ON	ON	OFF	OFF	OUT	IN	ON / IN	
084	Dragonfist	Stock ROM. No free play	ON	OFF	ON	OFF	ON	OFF	ON	ON	OUT	IN	ON / IN	
085	Dragonfist	Always free play	ON	OFF	ON	OFF	ON	OFF	ON	OFF	OUT	IN	ON / IN	
086	Dragonfist Home	Bonus X advance bug fix. No free play.	ON	OFF	ON	OFF	ON	OFF	OFF	ON	OUT	IN	ON / IN	
087	Flight 2000	Stock ROM. No free play	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OUT	IN	ON / IN	
088	Flight 2000	Always free play	ON	OFF	ON	OFF	OFF	ON	ON	ON	OUT	IN	ON / IN	
132	Flight 2000 V33 Home ROM	DIP 19 ON = free play.	OFF	ON	ON	ON	ON	OFF	ON	ON	OUT	IN	ON / IN	
089	Freefall	Stock ROM. No free play	ON	OFF	ON	OFF	OFF	ON	ON	OFF	OUT	IN	ON / IN	
090	Freefall	Always free play	ON	OFF	ON	OFF	OFF	ON	OFF	ON	OUT	IN	ON / IN	
091	Galaxy	Stock ROM. No free play	ON	OFF	ON	OFF	OFF	ON	OFF	OFF	OUT	IN	ON / IN	
092	Galaxy	Always free play	ON	OFF	ON	OFF	OFF	OFF	ON	ON	OUT	IN	ON / IN	
093	Iron Maiden	Stock ROM. No free play	ON	OFF	ON	OFF	OFF	OFF	ON	OFF	OUT	IN	ON / IN	
094	Iron Maiden	Always free play	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	OUT	IN	ON / IN	
095	Lightning	Stock ROM. No free play	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF	OUT	IN	ON / IN	
096	Lightning	Always free play	ON	OFF	OFF	ON	ON	ON	ON	ON	OUT	IN	ON / IN	
097	Meteor	Stock ROM. No free play. Factory stack overflow bug fix	ON	OFF	OFF	ON	ON	ON	ON	OFF	OUT	IN	ON / IN	
098	Meteor 7 Digit	V24 7 Digit Displays	ON	OFF	OFF	ON	ON	ON	OFF	ON	OUT	IN	ON / IN	
099	Meteor Divide by 10	Scoring divided by ten. No free play	ON	OFF	OFF	ON	ON	ON	OFF	OFF	OUT	IN	ON / IN	
100	Meteor Free	Always free play	ON	OFF	OFF	ON	ON	OFF	ON	ON	OUT	IN	ON / IN	
101	Nine Ball	Stock Rom. No free play	ON	OFF	OFF	ON	ON	OFF	ON	OFF	OUT	IN	ON / IN	
102	Nine Ball	Always free play	ON	OFF	OFF	ON	ON	OFF	OFF	ON	OUT	IN	ON / IN	
103	Orbitor One	Stock Rom. No free play	ON	OFF	OFF	ON	ON	OFF	OFF	OFF	OUT	IN	ON / IN	
103	Orbitor One	Always free play	ON	OFF	OFF	ON	OFF	ON	ON	ON	OUT	IN	ON / IN	
105	Orbitor One	No minimum game time. Always free play	ON	OFF	OFF	ON	OFF	ON	ON	OFF	OUT	IN	ON / IN	
106	Quicksilver	Stock Rom. No free play	ON	OFF	OFF	ON	OFF	ON	OFF	ON	OUT	IN	ON / IN	
107	Quicksilver	Always free play	ON	OFF	OFF	ON	OFF	ON	OFF	OFF	OUT	IN	ON / IN	
108	Seawitch	Stock Rom. No free play	ON	OFF	OFF	ON	OFF	OFF	ON	ON	OUT	IN	ON / IN	
109	Seawitch	Always free play	ON	OFF	OFF	ON	OFF	OFF	ON	OFF	OUT	IN	ON / IN	
110	Split Second	Stock Rom. No free play	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	OUT	IN	ON / IN	
111	Split Second	Always free play	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OUT	IN	ON / IN	
112	Star Gazer	Stock Rom. No free play	ON	OFF	OFF	OFF	OFF	ON	ON	ON	OUT	IN	ON / IN	
113	Star Gazer		ON	OFF	OFF	OFF	ON	ON	ON	OFF	OUT	IN	ON / IN	
114	Star Gazer Star Gazer Home R9	Always free play Home ROM by Oliver O.	ON	OFF	OFF	OFF	ON	ON	OFF	ON	OUT	IN	ON / IN	
		·		_		ON	ON	ON		OFF	OUT	IN	ON / IN	
129 115	Star Gazer Seymour Home V6		OFF ON	ON OFF	ON OFF	OFF	ON	ON	ON OFF	OFF	OUT	IN	ON / IN	
116	Viper Viper	Stock Rom. No free play	ON	OFF	OFF	OFF	ON	OFF	ON	ON	OUT	IN	ON / IN	
116	Bally Video and Special	Always free play  REPLACING AS-2518-133 and Conversion Kits	DIP-1	DIP-2	DIP-3	DIP-4	DIP-5	DIP-6	DIP-7	DIP-8	B1	S1	DIP-1 TO DIP-4	
447			ON	OFF	_	OFF	ON	OFF		OFF	IN	OUT		
117	Baby Pacman	No free play.		_	OFF			OFF	ON				OFF / OUT	
118	Granny and the Gators	No free play.	ON	OFF	OFF	OFF	ON		OFF	ON	IN	OUT	OFF / OUT	
119	Grand Slam 2 Player	DIP 25 & 26 ON for free play	ON	OFF OFF	OFF	OFF	ON	OFF	OFF	OFF	IN	OUT	OFF / OUT	
120	Grand Slam 4 Player	DIP 25 & 26 ON for free play	ON	_	OFF	OFF	OFF	ON	ON	ON	IN	OUT	OFF / OUT	
121	Goldball	No free play.	ON	OFF	OFF	OFF	OFF	ON	ON	OFF	IN	OUT	OFF / OUT	
122	Goldball Home	Home ROM by Oliver O.	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	IN	OUT	OFF / OUT	
123	Mystic Star	No free play	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF	IN	OUT	OFF / OUT	
124	World Defender	No free play	ON	OFF	OFF	OFF	OFF	OFF	ON	ON	IN	OUT	OFF / OUT	
125	Super Bowl	No free play	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF	IN	OUT	OFF / OUT	
126	Super Bowl	Custom Free play ROM by Quench	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	IN	OUT	OFF / OUT	
127	Saturn 2	No free play	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF	IN	OUT	OFF / OUT	
128	Midnight Mauraders		OFF	ON	ON	ON	ON	ON	ON	ON	IN	OUT	OFF / OUT	
130	Rapid Fire		OFF	ON	ON	ON	ON	ON	OFF	ON	IN	OUT	OFF / OUT	
131	Black Beauty	Stern Shuffle Board	OFF	ON	ON	ON	ON	ON	OFF	OFF	IN	OUT	OFF / OUT	
254	MEMORY CLEAR **	When the LED begins to blink the memory will be cleared.	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON	EITHER B	1 OR S1 IN	ON / IN	

## NOTES

RAM width may be zero ohm jumper shunts(OUT / IN) or a DIP switch (OFF / ON). IN / ON for MPU200 only.

B1 and S1 jumpers set the CPU clock speed. B IN for 0.5MHz (Bally -17, -35, -133 and Stern MPU-100). S IN for 0.895MHz (Stern MPU-200)

Jumper shunt U2 Enable is removed when the U1 expanded ROM socket is used.

Clear audits with the Test and NMI Audit Clear buttons after switching games.

Starting in Revision 14 the game select dip switch is oreintated so UP is on and DOWN is off.

\*\* If you experience wrong sounds in a Stern Meteor use the MEMORY CLEAR software (DEC # 254). Power up and when the LED begins to blink the memory has been cleared.

\*\*\*\* DIP 21 Must be off when using original six digit displays in a game that supports seven digit displays.

## MPU Setup pictures at http://nvram.weebly.com/mpu.html