OPERATOR'S MANUAL

PCB CONECTOR JAMMA FOR CABINET 1 AND 2

SOLDER SIDE			COMPONENTS SIDE
GND	A	1	GND
GND	B	2	GND
+5V	C	3	+5V
+5V	D	4	+5V
N.C.	E	5	N.C.
+12V	F	6	+12V
	H	7	
	J	8	COIN COUNTER
	K	9	
SPEAKER (-)	L	10	SPEAKER (+)
N.C.	M	11	N.C.
VIDEO GREEN	N	12	VIDEO RED
VIDEO SYNC	P	13	VIDEO BLUE
SERVICE SW	R	14	VIDEO GND
N.C.	S	15	TEST SW
	T	16	COIN
	U	17	START
	V	18	UP
	W	19	DOWN
	X	20	LEFT
	Y	21	RIGHT
	Z	22	ACCELERATOR
	a	23	SHIFT LEVER
	b	24	
VCC/VOLAN.	c	25	VOLAN. TOP
	d	26	
GND	e	27	GND
GND	f	28	GND

CONTROLS PANEL

JOYSTICK

CONTROL STICK

ACCELERATOR
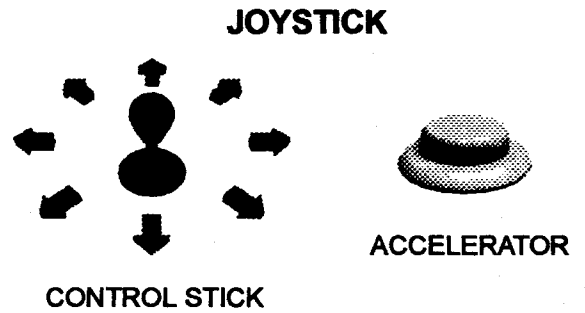
STEERING WHEEL

270° STEERING WHEEL (POTENTIOMETER 5K)

VCC/VOLAN.

VOLAN. TOP

GND

SOUND CONTROLS

P1 POTENTIOMETER SOUND CABINET 1

P2 POTENTIOMETER SOUND CABINET 2

SW1 DIP SW 1
SW2 DIP SW 2

JP1 JP4
JP2
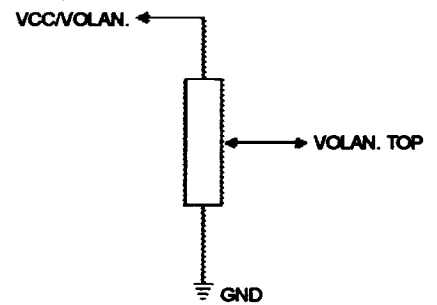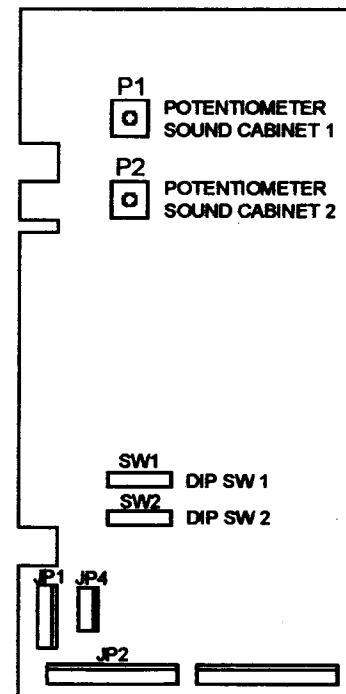
DO NOT CONNECT SPEAKER TO GND

COIN / CREDIT OPTION SWITCH SETTING   DIP SW1

OPTION		S1	S2	S3	S4	S5	S6	S7	S8
COIN CABINET 1	1 COIN 1 CREDIT						OFF	OFF	OFF
	1 COIN 2 CREDITS						OFF	OFF	ON
	1 COIN 3 CREDITS						OFF	ON	OFF
	1 COIN 4 CREDITS						OFF	ON	ON
	4 COINS 1 CREDIT						ON	OFF	OFF
	2 COINS 1 CREDIT						ON	OFF	ON
	3 COINS 1 CREDIT						ON	ON	OFF
	2 COINS 3 CREDITS						ON	ON	ON
COIN CABINET 2	1 COIN 1 CREDIT			OFF	OFF	OFF			
	1 COIN 2 CREDITS			OFF	OFF	ON			
	1 COIN 3 CREDITS			OFF	ON	OFF			
	1 COIN 4 CREDITS			OFF	ON	ON			
	4 COINS 1 CREDIT			ON	OFF	OFF			
	2 COINS 1 CREDIT			ON	OFF	ON			
	3 COINS 1 CREDIT			ON	ON	OFF			
	2 COINS 3 CREDITS			ON	ON	ON			
	START 1 CR./CONT. 1 CR.		OFF						
	START 2 CR./CONT. 1 CR.		ON						
FREE PLAY	NO	OFF							
	YES	ON							

OPTION SWITCH SETTING   DIP SW2

OPTION			S1	S2	S3	S4	S5	S6	S7	S8
GAME DIFICULTY		1 NORMAL							OFF	OFF
		2 EASY							OFF	ON
		3 HARD							ON	OFF
		4 HARDEST							ON	ON
MONITORS		TWO						OFF		
		ONE						ON		
DRIVING CONTROL	CABINET 2	JOYSTICK					OFF			
		STEERING WHEEL(POTENTIOMETER)					ON			
	CABINET 1	JOYSTICK				OFF				
		STEERING WHEEL(POTENTIOMETER)				ON				
ADVERTISE SOUND		YES			OFF					
		NO			ON					
COIN SLOT (*)		INDEPENDENT		OFF						
		COMMON		ON						
TEST		NO	OFF							
		YES	ON							

(*)   **INDEPENDENT** means that there is one coin slot for each cabinet.

    COMMON means that one coin slot controls two cabinets.

HOW TO LINK TWO CABINETS

link 2 cabinets as per the following
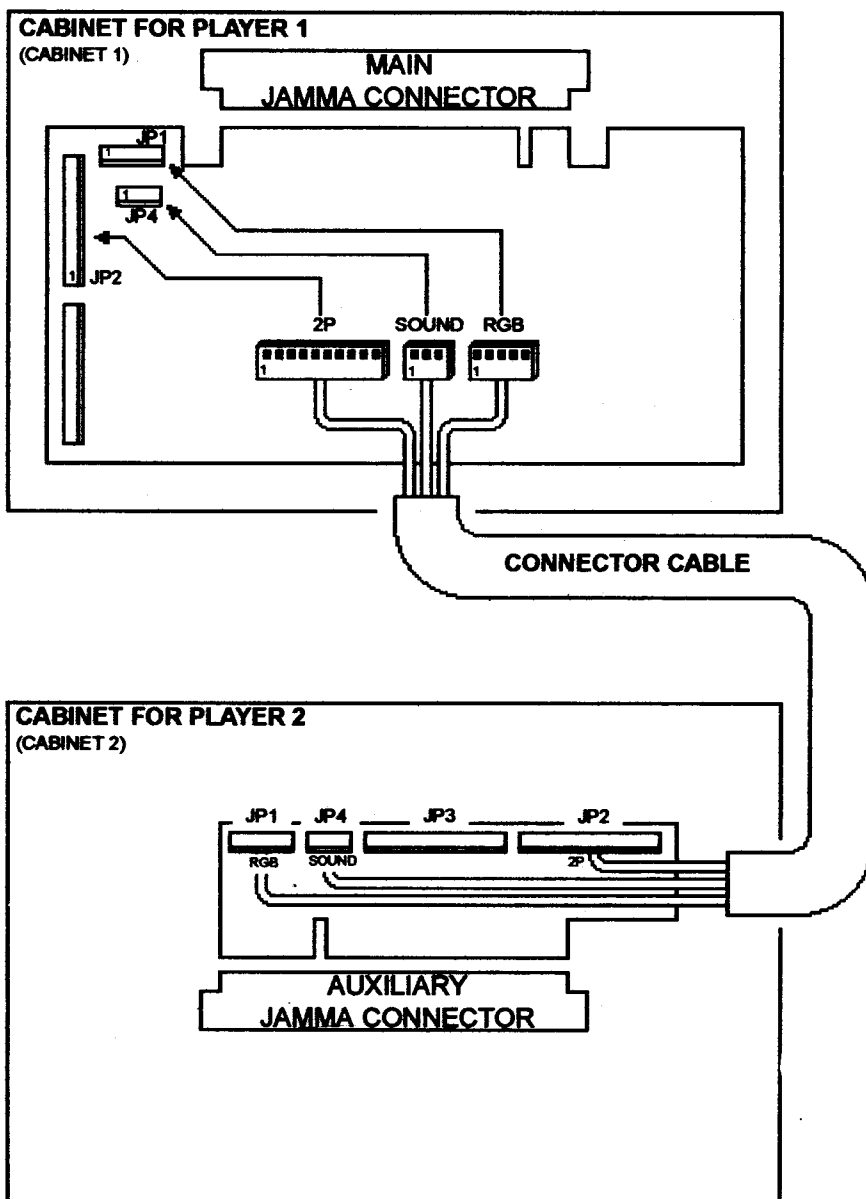
CABINET FOR PLAYER 1
(CABINET 1)

MAIN
JAMMA CONNECTOR

JP1

JP4

1 JP2

2P   SOUND   RGB

CONNECTOR CABLE

CABINET FOR PLAYER 2
(CABINET 2)

JP1   JP4   JP3   JP2

RGB   SOUND   2P

AUXILIARY
JAMMA CONNECTOR

JP1	JP4	JP2
1 - VIDEO SYNC	1 - SPEAKER (+)	1 - COIN
2 - N.C.	2 - SPEAKER (-)	2 - VCC/VOLAN
3 - VIDEO GND	3 -	3 - LEFT
4 - VIDEO BLUE	4 - GND AUDIO	4 - RIGHT
5 - VIDEO GREEN		5 - UP
6 - VIDEO RED		6 - DOWN
		7 - ACCELERATOR
		8 - SHIFT LEVER
		9 -
		10 - START
		11 - SERVICE
		12 - VOLAN. TOP
		13 - COIN COUNTER
		14 - GND
		15 -

TECHNICAL SPECIFICATION

— Standard Jamma connector.
— Power supply: +5 V. - over 6 Amp.
                              +12 V.
— Driving possibilities:
                    - Joystick
                    - Steering wheel with potentiometer 270°.
— Each board controls two cabinets (see section how to join two cabinets).
— Available for independent coin-slot: one for each machine
   or common coin-slot for both cabinets.
— Sound impedance for cabinet 8 Ohm. Power 15 Watts.
— Available set up through the monitor.
— Horizontal monitor.
— Synchronism: Input composite signals negative polarity (H/V).

DRIVING CONTROLS

This game allows to play via joystick or steering wheel system.

1/Joystick:

It requires an 8-positions joystick and a button to accelerate (see page 2).

2/Steering wheel:

It requires the following elements:
        - Steering wheel 270° with potentiometer.
        - Long single accelerator pedal with micro.
        - Normal shift lever two positions high-low.

Connection and steering wheel adjustment.

First, please visualize diagram for a right connection of the steering wheel
to the jamma connector.
For steering wheel adjustment, please proceed as following:
1/Set test mode through dipswitch nr.2.
2/Choose steering wheel option (S4, S5) from dipswitch nr.2.
3/Find CONTROL TEST in the screen, and leave steering wheel in stand-
by position. By using the own steering wheel potentiometer the visualized
red mark can be adjusted at the superior area inside the circle. Next to the
circle three figures can be visualized into a box. A right adjustment will
show 000.

HOW TO PLAY

Please proceed as following:

- Introduce enough coins for credit in the coin-slot.
- Press start button.
- Screen shows the message: CHOOSE A CAR.
- The game disposes of 10 sec. to choose a car.
- Any Rally is selected as described above.
- To choose an option use joystick or steering wheel. Chosen option will be shown on the screen.
- Press accelerator pedal or start button to validate option choice.

The game introduces 4 different Rally with 3 stages each one:

- Rally Portugal   (Easy)
- Rally Safari   (Normal)
- Tour de Corse   (Difficult)
- Rac Rally   (Expert)

Players can choose whatever Rally they want to. Games don't require a sequence to play with.

It is required that a player finishes every stage within 60 sec. If player exceeds time, he can conclude his play by introducing additional credits and pressing start button.

PLAY MODE

There are two play mode:

- One monitor: (one cabinet). It allows to play only one player. Not available for simultaneous competition.

- Two monitors, two interconnected cabinets or twin cabinet. The game allows to play independently, one player in each cabinet, or, one player against another player in a simultaneous competition.

How to play:
- Introduce credits in coint-slot cabinet nr. 1.
- Press start button.
- Choose a car.
- One screen shows message "WAITING OTHER PLAYER" and the other one shows message "WAITING YOUR ENTRY".

In case that nobody plays in the other cabinet, first player plays alone.

But, if the other player decides to join the competition, while above message is shown, he has to introduce credits and after that press start button to validate the message. They can now start a simultaneous competition.
Also, it could happen that one player is playing in one cabinet and, a second player (new player) starts to play at the other machine.

In this case, the game will ask the new player the following questions:
- COMPETITION?
- There are two options: YES   NO.
If new player chooses NO, it means that he decides not to compete against another player and he can play independently in his cabinet.
But, if the new player chooses YES, then he decides to compete. So, the scene is interrupted and appears the same message on the other monitor:
- COMPETITION?
- Choose: YES   NO.

- First player can choose YES. Then, the game changes to simultaneous competition mode and both players will compete againts each other. The game will start from the beginning (first stage).
- First player can choose NO. Then, it means the first player doesn't accept to compete and he will go on playing at exactly the same position where he was playing before being interrupted.