



WARTRACKS OPERATORS MANUAL

PRELIMINAR

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About WARTRACKS

Thank you acquiring this COVIELSA product. The aim of this manual is to instruct you of how to operate correctly and safely your arcade machine. An incorrect operation of the machine might cause problems and malfunctions, hence we ask you to read carefully this manual before starting the exploitation of the machine.

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Any change and/or alteration to the machine WARTRACKS with kits or components not provided by COVIELSA can stop its guaranty.

The removal or alteration of the serial number and/or bar codes that identify the product, imply the cancellation of its factory guaranty.

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Note: This equipment complies the 50081-2 directive for electromagnetic compatibility. Never the less its operation in residential areas can cause interference. It is the operator's responsibility to apply the necessary protections to limit these radiations.

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1. GENERAL INFORMATION

1.1 Manufacturer and machine information

Manufacturer COMERCIAL VIDEO ELECTRONICA, S.A.
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Machine name WARTRACKS
Model UR

1.2 Legal referencies

The machine WARTRACKS complies with the following directives for security and electromagnetic compatibility:

- Electromagnetic compatibility directive 89/336/CEE and its amendments 91/263/CEE, 92/32/CEE y 93/68/CEE.
- Low voltage directive 73/23/CEE.

1.3 Technical services

COVIELSA. and its authorized distributors will provide technical services for the WARTRACKS - UR machine.

1.4 Manufacturers responsibility

Any changes or modifications on the original machine is of the entire responsibility of the operator, that in consequence will be the new manufacturer, hence assuming all responsibilities over the accomplishment of the legal, security and electromagnetic directives.

In case of an accident caused by a defective part, the manufacturer will assume the responsibility if the machine is in its original conditions. Having said this, this responsibility stays limited or is null if the operator does not follows the instructions in this manual, uses non-guaranteed parts or parts not authorised in writing by Covielsa, or part that don't accomplish the correspondent directives or technical specifications.

2. SPECIFICATIONS

2.1 Description of the game

The game runs over the operating system WINDOWS 98 SE using a TNT2 nVidia chipset for direct 3D graphics. The 3D engine is very complete and the handling of the cars is very realistic using 60 frames per second capabilities. The game is a futuristic racing game from the year 2200. The player can race in 4 different worlds, with an ascending degree of difficulty.

1. The Pole
2. Metro City
3. Grand Keys
4. Red Planet

Each world has 1 track with 3 variations. (Short, Medium and Long) The game is a drive, shoot and destroy type of game with 18 cars on track. There are 5 different types of cars, with ascending order of speed, weapons power and performance.

1. Steady
2. Rounder
3. Fast
4. Killer
5. SECRET CAR

2.2 Dimensions and machine weight

Width 760mm Length 1071 Length with seat 1162mm Height 1875,5mm
 Net weight 150Kg approx.

**Dimensions and weight of the packed machine over a standard European palette.
 (800x1200x144)**

Width 800mm Length 1200mm Height 2100mm Weight 160Kg
 approx.

2.3 Power Supply

Main system Switch mode power supply. – Mod:
 Power:
 Forcefeedback system. Bipolar DC 35V / 5A

2.4 Monitor

SVGA - 28" colour monitor , type Medium Planar

2.5 CPU Board

Board Mod. COVIARCADE Info II – WARTRACKS

2.6 Controls

Start game button (START)
Change views button (VIEW)
Gear shift lever (up - down) with shooting button
Steering wheel with 2 buttons (deploy – shoot)
Breaking and acceleration pedals

2.7 Miscellaneous supplied with the machine

Operators manual	(1)
Coin door keys	(2)
Back door keys	(2)
Mains supply lead	(1)
Linking cable	(1)

3. PRECAUTIONS

3.1 Machine operating environment

This machine was built to be used in closed places, residential or commercial. Under any circumstances this machine should be installed in uncovered places or in places with the following characteristics:

- Direct exposure to sunlight or contact with water.
- Dusty areas, with high humidity areas or high temperature zones.
- Places submitted to vibrations. The machine should be installed in plane floors with the correspondent levellers adjusted correctly.
- Close to ventilation pipes, as rapid changes in temperature might cause malfunctions in the system.
- Close to dangerous substances (flammable, corrosive, etc.)



Do not install the machine where it can obstruct passage in case of emergency (Ex. obstructing a fire exit door, next to fire extinguishers)

3.2 Incorrect operations with the machine

Please note the importance of this item, as it points out vital information about the safe operation of the machine.

- The machine should only be used in residential or commercial areas;
- The machine should not be used for supporting other objects;
- Do not use the machine next to areas where there are liquids or liquid dispensers. As a general rule, no liquid should be poured over the machine;
- The ventilation windows should never be blocked. For this, the machine should be installed at least 10cm (4") apart from the obstructing objects;
- Do not have the mains cable or link cable in areas where people walk by, as it might cause accidents.
- When transporting the machine, please avoid strong vibrations as the machine contains sensitive devices.

The machine should not be handled by people under the effects of alcohol or in poor physical conditions.

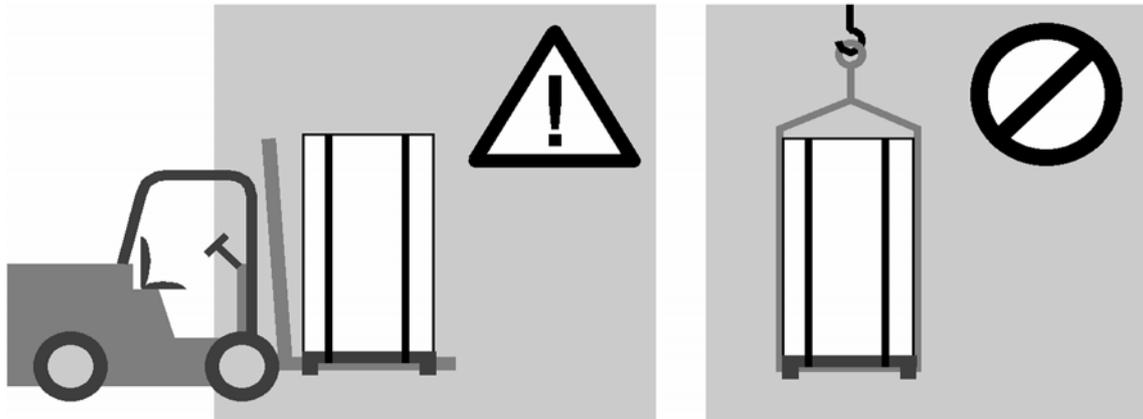
4. HANDLING AND TRANSPORTATION



This product must be handled and installed by authorized technicians. It contains sensitive parts to vibration, like the monitor or the CPU board, which include precision components. For this reason care must be taken when moving or transporting the machine.

4.1 Equipment to transport the packed machine

The packed machine must be handled with a forklift or a pallette carrier that ranges 160Kg We recommend that the machine is transported packed over its pallette.



One can not transport the machine hanged by straps or any other form, as the package does not have appropriate picking points.

4.2 Storage

The machine should be stored packed in dry and covered areas where the temperature is between +45°C and -5°C

4.3 Reception of the machine

The cardboard used to pack the machine must be inspected prior to the unpacking, to ensure the machine didn't suffer any damage during its transport, and is in good conditions.

The guaranty can be cancelled by damages caused during the transport. As soon as a damage is detected, one must report it to the distributor or to the transportation company.

4.4 Handling the unpacked machine

Once unpacked, the machine can be moved by its wheels, by adjusting the levellers so they don't touch the ground. When moving the machine in rough places, stairs or steps, care must be taken so damage is not created in the cabinet structure. It is completely forbidden to move the machine hanged over straps, as the cabinet is not fitted with picking points.

5. INSTALLATION AND SWITCHING ON

When you position the machine in its place of operation, make sure the cabinet is asserted in soil using the levellers. With this will avoid displacement that they can cause damages to the cabinet.

5.1 Inspection

Proceed according to the checklist below:

- Accomplish a visual examination of the cabinet, to check for possible cabinet damages.
- Open the back door panel that gives access to the machine inside. The keys to the door can be found in a bag inside the coin draw. Once you turned the key toward the left pull of the door toward you, and begin to incline the panel with both hands by the sides and pull upward. Thus it will detach it of the guide that holds it by down. **Do not incline too much the panel without pulling it of the guide, as this might cause damage to the wood where the guide is screwed.**
- Make sure all the connectors are plugged in. Connectors only go one way around, hence do not force the plug as it might break the connector or damage the pcb, in which case cancelling the guaranty.
- Check the main elements, such as the monitor, the handlebar, the connections of the plate CPU and of the power supply, as well as the earth connections, etc.
- Inspect the Mains cable and make sure that it does not present any breaks or damages.

To clean the cabinet, use a cloth wetted with a neutral detergent.
The use of solvents can injure to the plastic materials.

5.2 Cares before switching on the machine

Professional-trained technicians should perform the operations that are described below. In any case, before servicing in the interior of the machine, and specially if it is required to manipulate some connecting, one must disconnect the machine from the electrical mains supply, not only triggering the corresponding switch but withdrawing the cable from the plug.

- Make sure that the area chosen to service the machine is apart from sources from heat and that not obstructs emergency exits.
- Adjust the levellers manually so the cabinet is adapted to the ground on a stand still position. Once tight squeeze the blockade nuts.

- If one must to move the machine by some reason, remember rising the levellers so that they do not grub against the ground.
- When the machine is installed in its place of operation, connect the Mains cable in a provided plug of takes of land (220-230 VAC / 50 Hz).
- If you must disconnected the machine from Mains, pull of the cable grasping it by the peg. Never you should do it with the wet hands.
- If the Mains cable results damaged by some reason, do not use it and replace it by another one with the same specifications.
- In the inside of the machine there are areas with voltage that can give electrical shocks, therefore it is accurate to take cautions as long as is accomplished an inspection or an adjustment with the connected machine, specially in the environs of the monitor.
- For moving the machine, never drag it by the handlebars neither the seat, do it from the wooden cabinet.

5.3 Starting the machine

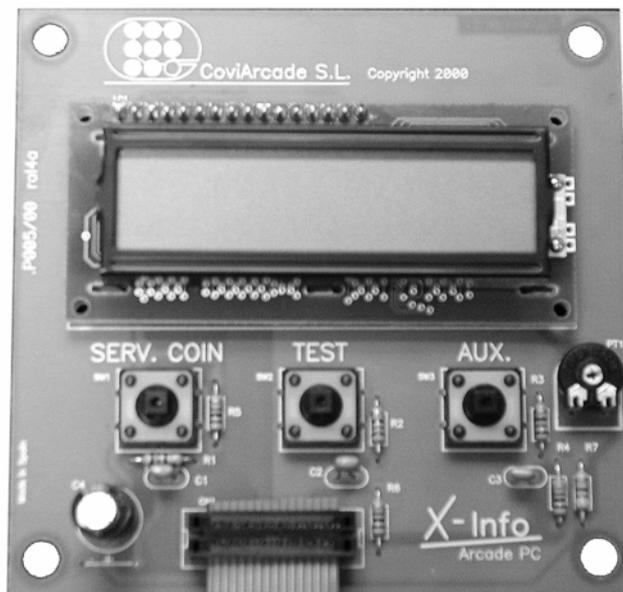
The Mains switch can be found in the subsequent part (right lower back area watching from the machine front). It is housed in the same element where is located the fuse and the Mains filter. To start the machine, toggle that switch to the position “I”.

The machine can be switched off toggling the switch into (position “O”). If at that moment a game is taking place, the credit will be lost. **To avoid a possible electronics breakdown, is recommended to wait some seconds before starting the machine again.**

6. PROGRAMMING OF THE MACHINE AND TEST MODE.

When the machine is lit it is effected an automatic monitoring of the electronics reports and other linked systems. After short seconds, if it has not detected anomaly, it enters automatically to the game.

To access Test Mode as well as the other adjustment, go to the Service Plate (CONTROL PANEL) that it is located behind the door of the coin mechanism. This plate consists of a button to access the Test Mode, a service coin button (SERVICE COIN) and of an auxiliary button (AUX) necessary in given occasions.



The SERVICE COIN button is used to insert credits in the machine for testing purposes, and does not count credits in the credits mechanical counter. Pressing the TEST button, one is given access to the TEST SCREEN of the game, from where it is possible to adjust the game variables, as difficulty, network, monitoring of controls, etc.

6.1 Technical menu

In the TEST SCREEN the cursor can be moved up/down through "VIEW" button and "START" button. To change the various options status use the push buttons located on the steering wheel are used. When it is considered a parameter of several levels, is proceed in the same way to rise or decrease of level (difficulty level 1, 2, 3...). **So that the changes that have been introduced are permanently maintained, when one selects the option "Exit technical menu" to exit the test mode.**



GAME ...	For setting up the various variables in the game
SOUND ...	For controlling all sounds of the game
CONTROLS ...	For testing and calibrating controllers
VIEW STATISTICS ...	Statistics of the machine performance
MONITOR TEST ...	Help screen for calibrating monitor
NETWORK ...	For testing and setting up the link properties
LANGUAGE	Select on-screen instructions in 5 languages English / Spanish / Italian / French / Portuguese
RESTORE FACTORY DFLTS	Resets all values to original programming
1 CREDIT FOR	Coin multiplication factor 1/2/3/4/5

6.1.1 Game



- FREE PLAY !** The machine operates free, no credits required
- SHOW MULTIPLAYER MENU** If machine is linked to others, then set this option ON so player is presented with the network lobby screen
- DISPLAY GAUGES** To turn ON/OFF the speed/revs and weapons gauges on the screen
- RESET HI-SCORES TABLE** To clear all player records of the machine
- RESET CODES DATABASE** To clear all names and codes registered in the machine
- DIFFICULTY** Level of difficulty ranging from 0 to 10. This setting only acts over time. 0 minimum time to complete a race, 10 maximum time available to complete a race. **It is recommended to start using level 3.**
- OPPONENTS INTELLIGENCE** Level of intelligence of the opponent cars ranging from 0 to 10. This setting makes the opponents more and more fast as well as powerful in weapons. **It is recommended to start using level 5.**
- UNITS** Toggle speed reading between KM/H and MPH
- TEST LED DISPLAY** Runs a LED test over the interactive steering wheel. (Only available in some machine models)

WORLD CONTEST	If the machine is connected to the internet and the world contest is activated at the server, then this option displays the world contest records when in demo.
NATIONAL CONTEST	If the machine is connected to the internet and the national contest is activated at the server, then this option displays the national contest records when in demo
REGIONAL CONTEST	If the machine is connected to the internet and the regional contest is activated at the server, then this option displays the regional contest records when in demo
INTERNET SETTINGS	This where operator sets all parameters to connect the machine to the internet. This menu lets you insert, country name, city name, local name, internet connection phone number, login and password.

6.1.2 Sound



MASTER VOLUME	Master control over the sound loudness
EFFECTS VOLUME	Volume control over the sound effects level

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ENGINE VOLUME	Volume control over the engine sound level
EXPLOSIONS VOLUME	Volume control over the explosions sound level
SHOOTING VOLUME	Volume control over the shooting sound level
MUSIC VOLUME	Volume control over the music of the game
MUSIC IN GAME	If one wants the game to have music along or not
SOUND DURING DEMO	If this option is ON, one of every 5 demo cycles will be with sound.

6.1.3 Controls



6.1.3.1 Calibrating and verifying controller

Once on this screen you can operate the various buttons and see on the right side the correspondent light indicating if they are working or not.

To verify the steering wheel motion is correct watch the cross moving accordingly. Start by accelerating and maintain, turn right the controller, release the accelerator, brake, turn left the controller and maintain the brake, release the brake, accelerate. Release all commands. Verify that the cross described a square touching the corners of the little blue screen.

If this is the case then your controller is working perfect. If this doesn't happen then you need to calibrate your controller.

Using the START button or the VIEW, select option "Start calibration".

Centre the controller (NOT THE CROSS) and press the RIGHT button on the wheel.

Now, accelerate and maintain, turn right the controller, release the accelerator, brake, turn left the controller and maintain the brake, release the brake, accelerate. Release all commands. Verify that you described a square.

Press the right wheel button until you reach the original screen. Verify it and exit. Your controller is now ready.

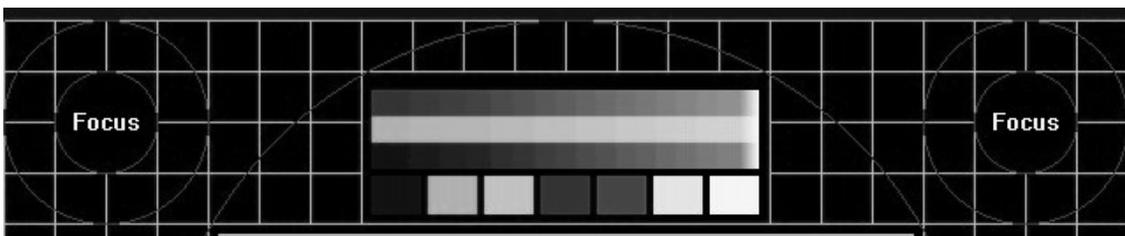
NOTE: If one has any problem with the controller use this option to adjust mechanically the potentiometers. This option should be also used to change a potentiometer.

6.1.4 Game statistics



This screen informs the performance of the game and its income. Here one can analyse the total PAID PLAYS, total credits in machine, and the FREE PLAYS, the number of plays the user didn't put a coin to play. If a player inserts a coin and qualifies for the 2nd race then the machine will count 1 paid play and 1 free play. If he qualifies for the 3rd race then 1 paid play, 2 free plays and so on.

6.1.5 Monitor test



Use this screen to adjust your monitor.

- Image sizes
- Focus
- Brightness
- Contrast
- CRT RGB convergence

6.1.6 Network



PROTOCOL	One can select IPX or TCP/IP protocol of network communications.
DEFAULT DRIVER NAME	If one has 4 machines linked, then set each one to a different name. Driver 1/2/3 or 4.

To check a good network connection, one must see on the screen the network tree being displayed. One should see on a 4 machine network with serial numbers WT3010 / WT3011 / WT3012 and WT3013, something like this.

-

```
WT
    \\ WT3010
    \\ WT3011
    \\ WT3012
    \\ WT3013
```

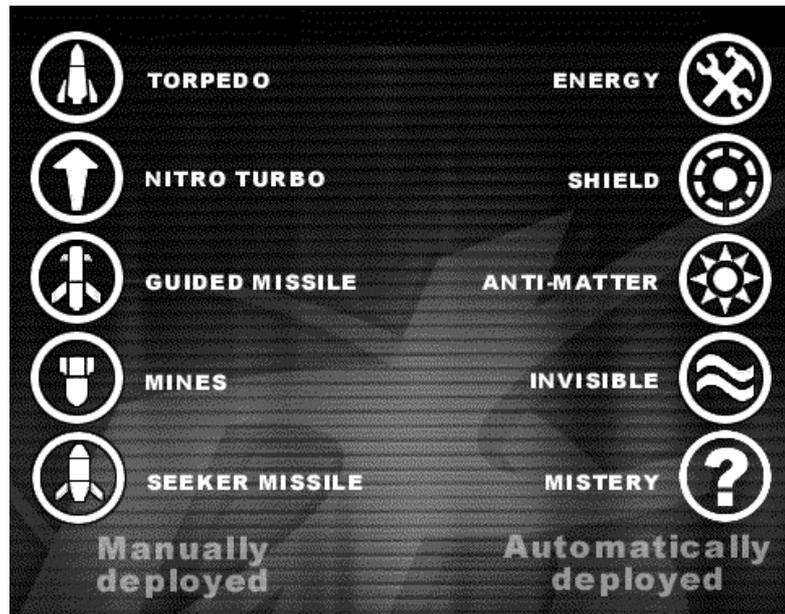
If one doesn't see the network tree printed, then check the cables or the stubs. In a network there is only 2 stubs that "close" the network cables.

7. HOW TO PLAY THE GAME

- Insert coin and press START

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- Insert your personal code. The game is fitted with a database that stores personal codes to be used after in order to add points to the player score points. If you don't have a code just register yourself with one of your choice.
- Select track, car and transmission type – Manual or Automatic.
- The game has 4 levels with 2 tracks each. To race the second track of a world, you must qualify in the first one.
- During a race every icon you collect, you add 100 points to your score and every car destroyed 200 points.
- Icons description.



- The game has 3 classes of cars. You start in the PLATINIUM class. When you have 250.000 points, you'll pass to the IRIDIUM class, 500.000 the TITATIUM class, and when you reach 800.000 points, you get to drive the secret car. As classes go up, so it goes the car performances and weapons effectiveness.
- Always remember your registration code, to keep on adding points to your score, and access the different classes.
- If you finish a race in 1st position, you'll get 10 seconds extra time bonus for the next race. If you finish 2nd, 9 seconds, and so on. From 11th position downwards, no bonus time is added for the next race.

- If you enter an Hi-Score table or finish within the first 3 positions in a race, you open the DESTROYER track. There is a destroyer track on each of the 4 levels. In this track the objective is to seek and destroy all the cars within a certain time. Each car killed adds 5 seconds to your time, and 200 points to your score board.
- Up to 4 players can be connected together

8. MAINTENANCE

8.1 Handle and adjustment

In the maintenance operations always follow the indications next:

- **When substituting some component, make sure that you are using a part that fulfils the specifications of the manufacturer.**
- **If you change the system by any chance, or have to replace a potentiometer, please have in mind that you need to re-calibrate the controller (Refer to point 6.1.3.1).**
- **Under no concept try to repair the system. It contains integrated microcircuits that are very sensitive and can be injured easily, even with the internal voltage of a multimeter. For any repair send the system back to your distributor.**

8.1 Troubleshooting

PROBLEM

POSSIBLE SOLUTION

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**Switch on the machine and
Nothing happens**

- ✓ Verify the mains cable and its connections
- ✓ Verify the entry fuses (filter)
- ✓ Test if there are 5VDC and 12VDC in the Jamma connector.

**The monitor remains black
Or the image is distorted**

- ✓ Verify monitor connections
- ✓ Verify connection of video cable onto the system.

**There is no sound or it is
of poor quality**

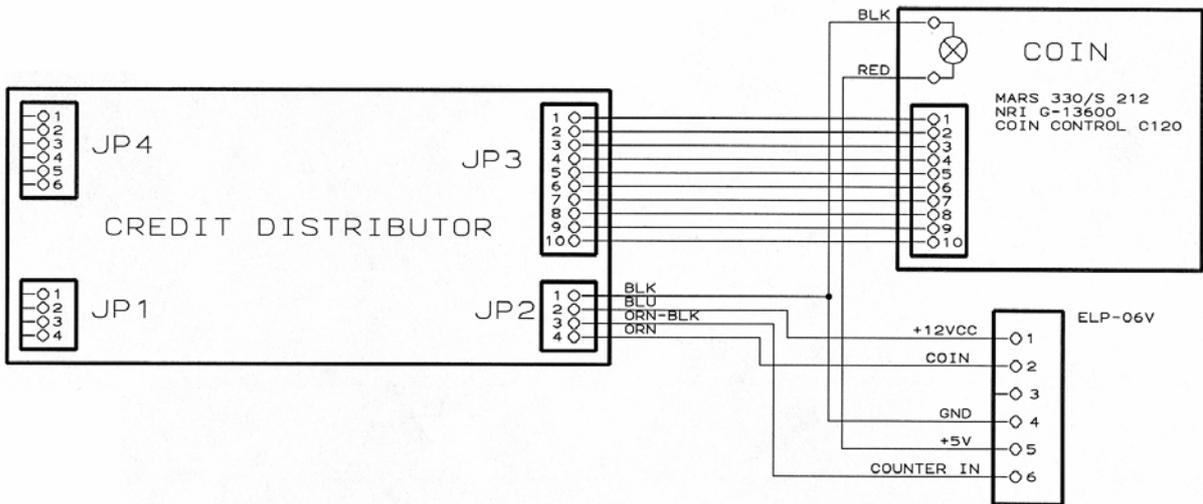
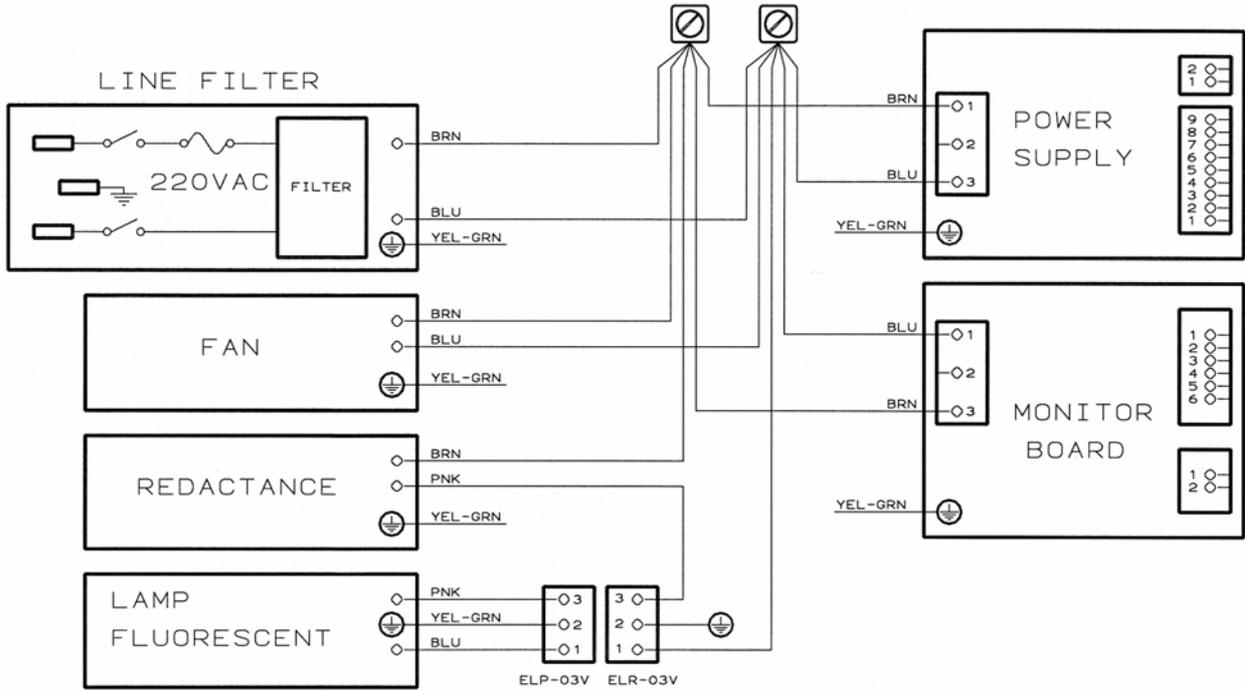
- ✓ Enter Test Mode and to prove the sound is ON
- ✓ Verify the amplifier for supply.
- ✓ Verify the loudspeakers and its connections
- ✓ Test for +12VDC on the Jamma connector

The steering wheel is not operative

- ✓ Use the controls option in the technician Menu and verify the controls

9. APENDIXES

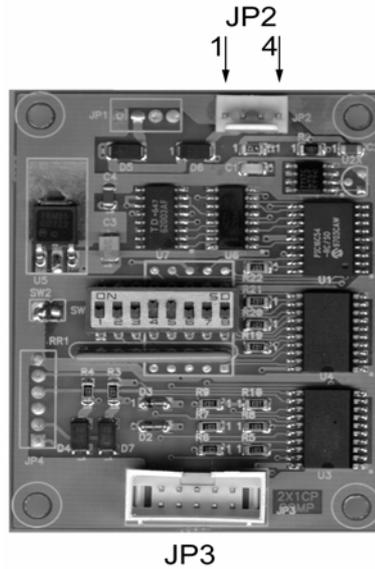
9.1 Wiring diagram



9.2 COIN MECHANISM SETUP

CONNECTORS

- JP1:** Not used
- JP2:** Cabinet
- JP3:** Coin controller
- JP4:** Not used



Connector JP2

The connector JP2 should be connected to the cable that comes from the INFO-II system.

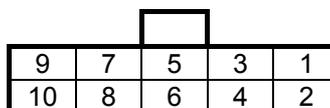
JP2	Description	Values	Source/Destination
Pin 1	Input GND.	GND	GND power supply
Pin 2	Input VCC	+12 VCC	CC power supply
Pin 3	Counter output	0/+5/+12 VDC	Coin counter
Pin 4	Credits output	+5/0 VDC	CPU.

Connector JP3

Input connector of electronic coin controller, programmed per channels.

PIN	Description	Active
1	0V	0V
2	+12VDC	+12VDC
3	Output 5	0V
4	Output 6	0V
5	---	
6	Lock	High
7	Output1	0V
8	Output 2	0V
9	Output 3	0V
10	Output 4	0V

Layout view corresponding to components side



9.3 PROGRAMMING CREDITS

Controllers supported: COIN CONTROL C-120
 NRI G-13.6000
 MARS CASHFLOW 330

	OPA	OPB	OPC	OPD	OPE	OPF
	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6
Coin Control C 120	Coin 1	Coin 2	Coin 3	Coin 4	Coin 5	Coin 6
Controlador de PIN	7	8	9	10	3	4
Alemania	==	==	5 Dm	==	2 Dm	1 Dm
Suiza	==	==	5 FS	==	2 FS	1 FS
Francia	20FF	10 FF	5 FF	==	2 FF	1 FF
Italia	==	==	500 L	==	200 L	100 L
Estados Unidos	==	==	==	1 \$	50 Ct	25 Ct
Gran Bretaña	==	1 Lb	50 Pe	==	20 Pe	10 Pe
España	500Pt	==	200 Pt	100 Pt	50Pt	25 Pt
Portugal	==	==	==	200 Es	100 Es	50 Es
Australia	==	==	5 \$	==	2 \$	1 \$
Belgica	==	==	50 FB	==	20 FB	==
Noruega	20 Kr	10 Kr	5 Kr	==	==	1 Kr
Grecia	==	==	==	==	100 Dr	50 Dr
Euro	2 EU	1 EU	50 cent.	==	20 cent.	10 cent.

9.4 DIP-SWITCH SETUP

SW1: Always OFF

SW2: Coin multiplication factor

SW2= OFF (Europe except Spain)	Channel:	1	2	3	4	5	6
	Value:	x 20	x 10	x 5	x 4	x 2	x 1
SW2= ON (Spain and USA)	Channel:	1	2	3	4	5	6
	Value:	x 20	x 10	x 8	x 4	x 2	x 1

SW3: Not used

SW4-SW5: Extra Credits (BONUS)

Combination of these two dip switches is used to program bonus (free games) according to the table below. The table varies according to the game price selected.

SW6-SW7-SW8: Game price

These dip switches are used to choose the game price. The bonus table shows the combination of game prices with the payments that allow the player to obtain extra games (bonus).

SPAIN												
CREDITS TABLE				BONUS TABLE (EACH PTS, 1 BONUS)								
GAME PRICE	SW6	SW7	SW8	SW4	SW5	SW4	SW5	SW4	SW5	SW4	SW5	
				OFF	OFF	ON	OFF	OFF	ON	ON	ON	
25 Pts	OFF	OFF	OFF	NO BONUS		125 Pts		100 Pts		50 Pts		
50 Pts	ON	OFF	OFF	NO BONUS		125 Pts		100 Pts		50 Pts		
75 Pts	OFF	ON	OFF	NO BONUS		125 Pts (*)		75 Pts		150 Pts		
100 Pts	ON	ON	OFF	NO BONUS		500 Pts		400 Pts		200 Pts		
125 Pts	OFF	OFF	ON	NO BONUS		625 Pts		500 Pts		250 Pts		
200 Pts	ON	OFF	ON	NO BONUS		500 Pts		400 Pts		200 Pts		
250 Pts	OFF	ON	ON	NO BONUS		625 Pts		500 Pts		250 Pts		
300 Pts	ON	ON	ON	NO BONUS		500 Pts		400 Pts		600 Pts		

(*) Adds another extra game if you deposit the double of this quantity.

9.5 APPLICATION EXAMPLE

Spain	SW1=	OFF	
	SW2=	ON	
	SW3=	OFF	Not used
	SW4= SW5=	ON ON	Extra CREDIT each 200pts.
	SW6= SW7= SW8=	ON ON OFF	4 pulses / 1 credit.
25 Pts = 1 pulse			
RESULT:	100 Pts / 1 credit; 200 Pts / 3 credits		

IN EUROS

SPAIN												
CREDITS TABLE				BONUS TABLE (EACH PTS, 1 BONUS)								
GAME PRICE	SW6	SW7	SW8	SW4	SW5	SW4	SW5	SW4	SW5	SW4	SW5	
				OFF	OFF	ON	OFF	OFF	ON	ON	ON	
10 cent.	OFF	OFF	OFF	NO BONOS		0,50		0,40		0,20		
20 cent.	ON	OFF	OFF	NO BONOS		0,50		0,40		0,20		
30 cent	OFF	ON	OFF	NO BONOS		0,50		0,30		0,60		
40 cent	ON	ON	OFF	NO BONOS		2,00		1,60		0,80		
50 cent	OFF	OFF	ON	NO BONOS		2,50		2,00		1,00		
80 cent	ON	OFF	ON	NO BONOS		2,00		1,60		0,80		
1,00 €	OFF	ON	ON	NO BONOS		2,50		2,00		1,00		
1,20 €	ON	ON	ON	NO BONOS		2,00		1,60		2,40		

10. WARTRACKS TEAM

Beam International Team

Lead programmer

Iain Cartwright

Programmers

Myles Abbott

Duncan Murray

Matthew Jones

Steve Scott

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NOTES

