

Diamond Cabinet

Users Manual

ATTENTION!

This product belongs to A type equipment. As the result of produced industrial interferences by domestic operation this product can disturb the functioning of other technical devices. In this case the corresponding adequate measures could be required from the user.

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2 Overview

2.1 Dimensions

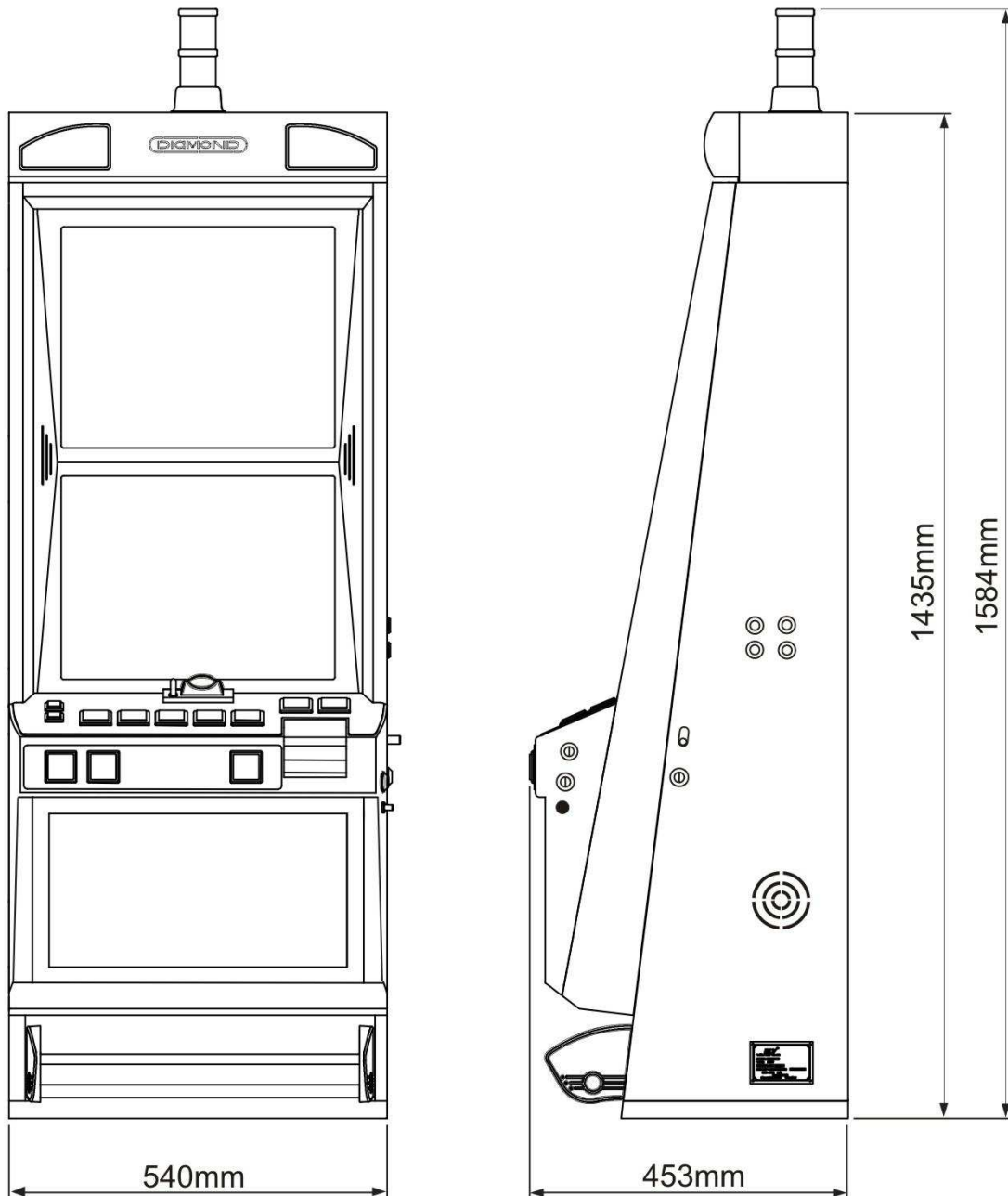


Figure 1: Machine dimensions

2.2 Operating Elements

1. Coin entry
2. Bill entry
3. I-Button key (optional)
4. Main door lock
5. Belly door lock
6. Coin tray

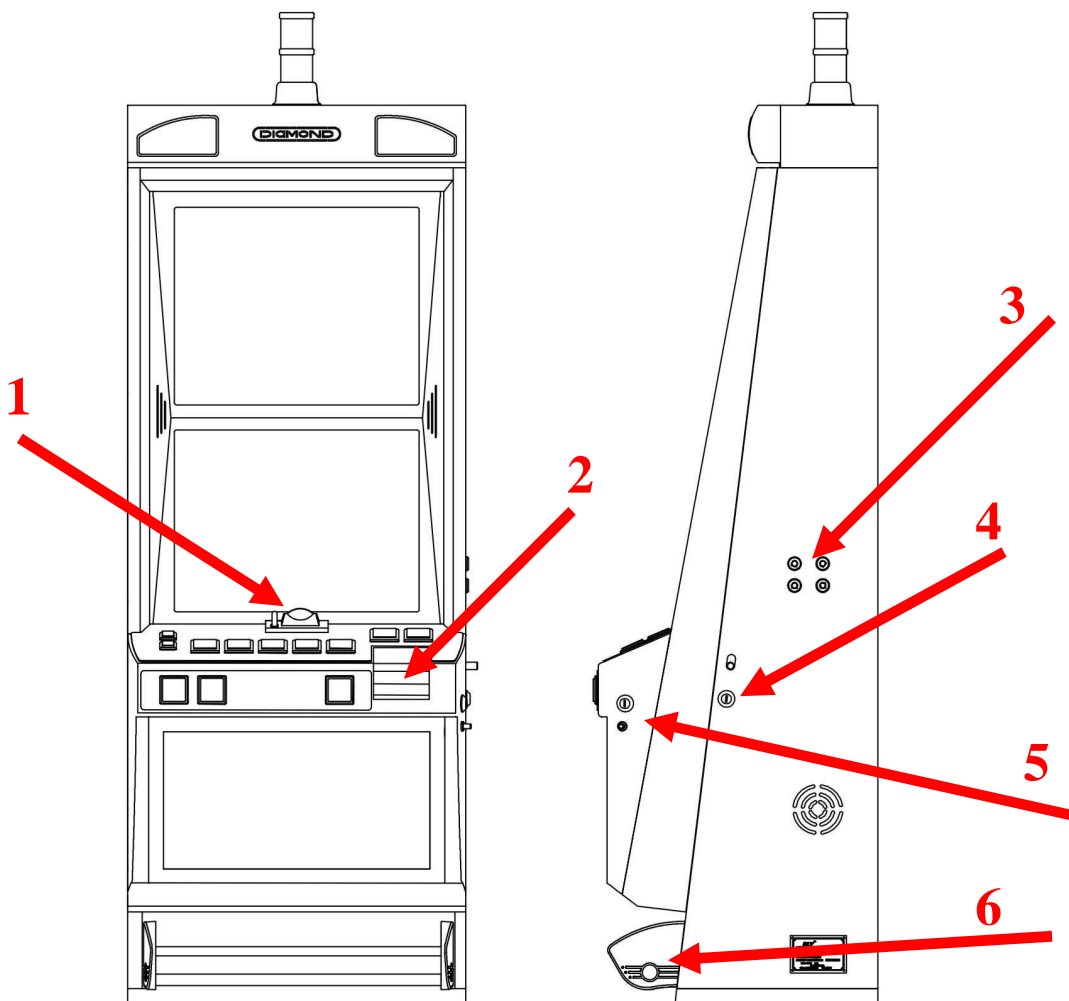


Figure 2: Machine Operating Elements

3 Installation

3.1 Installation instructions

Machine should only be operated in upright position.

Machine should be mounted tightly to the base by the parts provided by the manufacturer, see figure below.

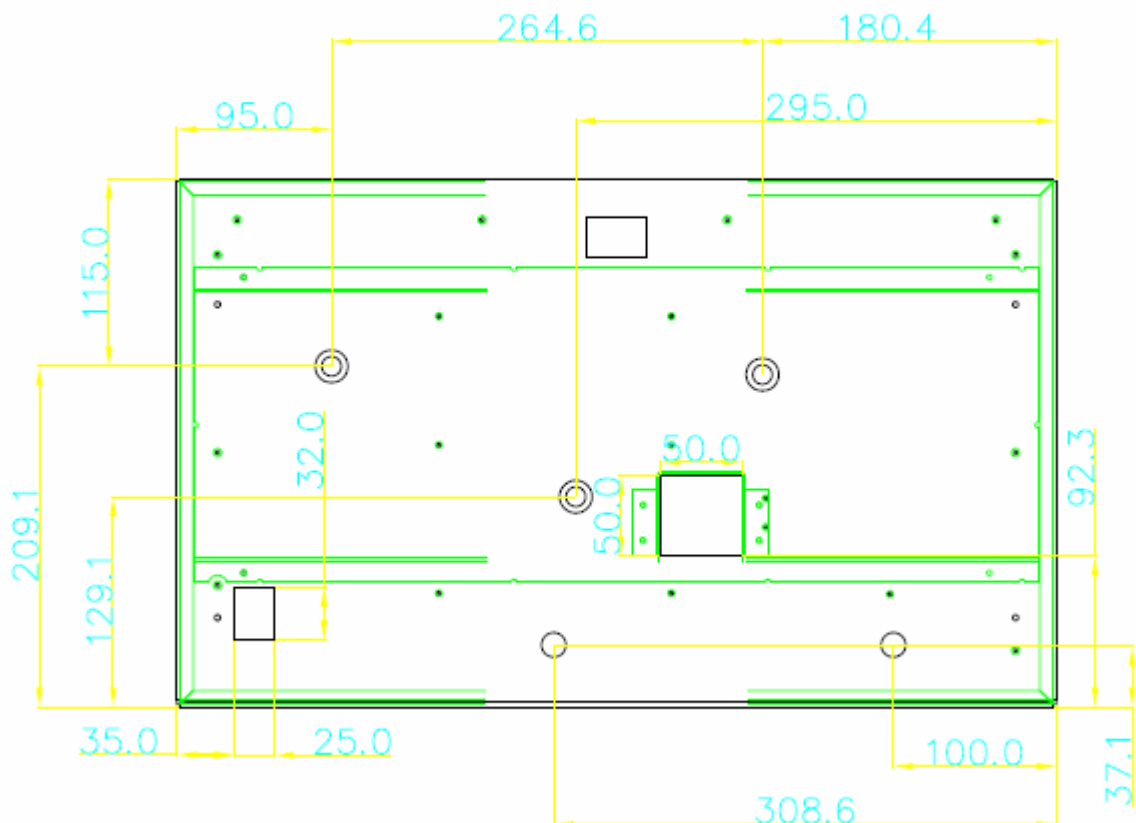


Figure 3: Machine mounting holes and dimensions

3.2 Power up

Before start check the line voltage and grounding. Machine is designed to operate at 100-120V/200-240V, 50-60Hz.

AC power outlet to which machine is connected should be easily accessed in case of emergency.

3.3 Safety precautions

This section is provided to avoid damage to the machine and minimize damage and chances of electric shock to maintenance personnel and users.

3.3.1 Static sensitive parts

Machine contains static-sensitive components, which could be damaged by electric discharges. Before maintaining inner components of the machine always touch ground straps inside the machine to neutralize electric charges.

3.3.2 Power off

In case of emergency power off the machine!

The machine will be completely powered off only when the AC plug is removed from the outlet. If the machine is connected with the uninterruptible power supply, be sure to switch it off.

WARNING: Unplugging the machine with wet hands or in wet environment can result in electric shock.

3.3.3 Cabinet ventilation

Do not block or insert any objects into the ventilation holes. This may result in machine overheating or could result in risk of fire or electric shock.

Provide adequate space between machine and other objects, to allow normal ventilation conditions.

3.3.4 Liquids

Avoid spilling any kind of liquids on the machine. This may result in risk of fire or electric shock. In case of an accident, unplug the machine immediately and contact the qualified technical staff.

3.3.5 Uncommon behavior

If there are unusual sounds, lights or smells coming out of the machine, power off the machine completely and contact the qualified technical staff. Failure of doing so may result in risk of fire.

3.3.6 Wires

Make sure that all the wires inside and outside of the machine are not damaged, squeezed or stretched. Also check the wire near the AC plug is not frayed.

Damaged wires can cause short circuit or fire risks.

3.3.7 Environment

Machine is suitable for indoor use only!

Do not expose the machine under any circumstances to wet environments or temperatures greater than 50°C.

After transportation or storage in cold environments do not power up machine immediately, wait for machine to reach normal operating temperature.

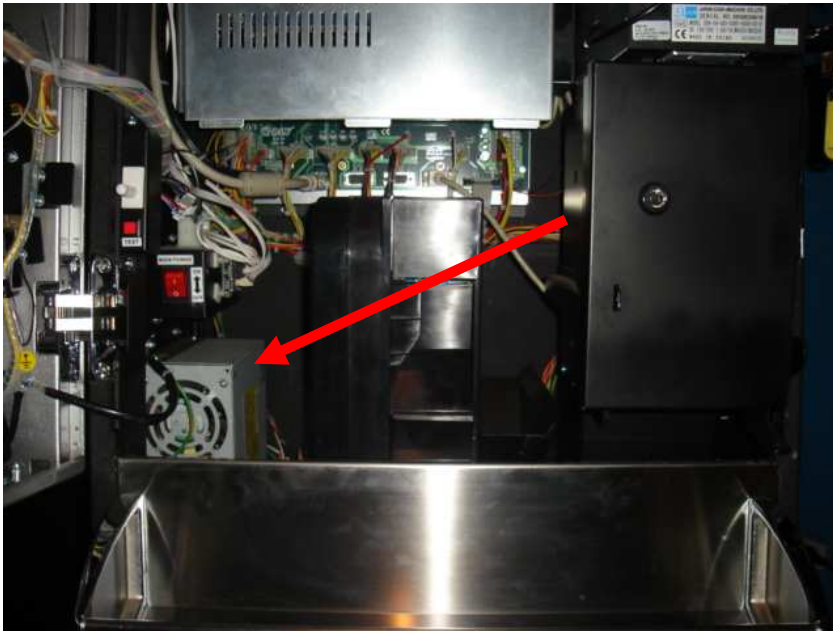
The recommended operating temperature is between 10°C and 35°C and relative humidity of 30% to 80% (non-condensing).

Do not install machine near heaters or other electronic devices that produce a lot of heat or dust. Failure of doing so can result in risk of machine malfunction, overheating or fire.

4 Power supply

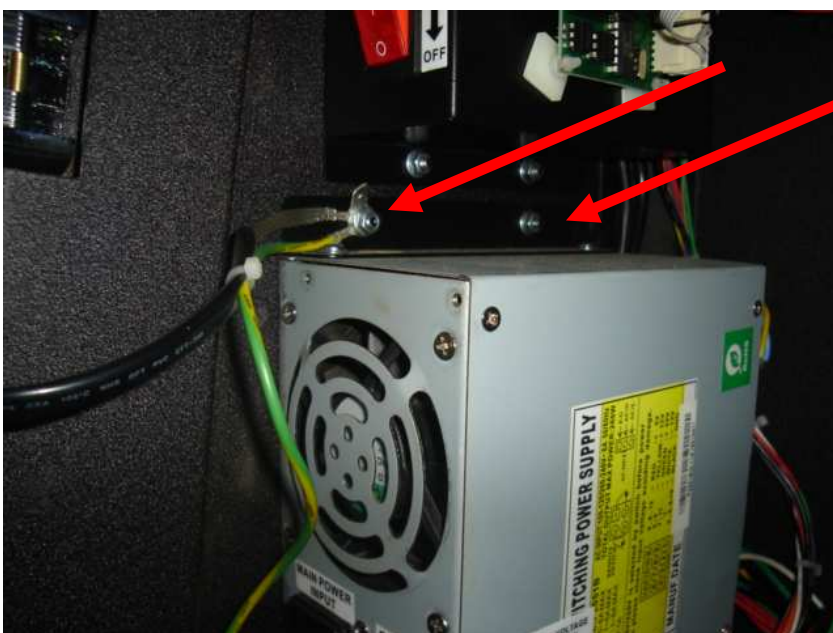
4.1 Position in machine

The power supply is located under the Logic box (as shown on picture).



4.2 Removal

To remove the power supply, disconnect all the wiring and unscrew two screws that hold the power supply in place (shown with red arrows).



4.3 Characteristics

Type	WEI-YA
Model	P2051B
Input	100-120/200-240 V
Output	+5V:8A
Output	+12V:6A
Output	-12V:1A
Output	+24V:6A
Output watt	260 W

4.4 Connectors

4.4.1 AC Output Connector

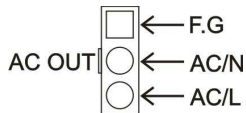


Figure 4: AC Output Connector

4.4.2 DC Output Connector

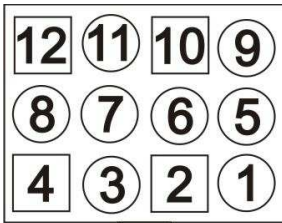


Figure 5: DC Output Connector

Pin No.	Color	Description
4, 8, 12	RED	+5V
5, 9	YELLOW	+12V
7, 11	GREEN	+24V
1	WHITE	-12V
2, 3, 6, 10	BLACK	GND

Table 1: DC Output Connector Pin Layout

4.4.3 Remote Switch Connector

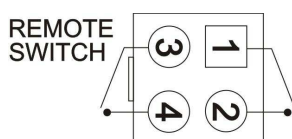


Figure 6: Remote Switch Connector

5 Coin Acceptor

5.1 Function

Type **NRI G-13** or compatible coin acceptor with up to 6 pre-programmed coin channels

The coin diverter is mounted underneath the coin acceptor and sorts the coins depending on the hopper fill level either to the hopper or directly to the cash box.

5.2 Accepted coins

Machine can accept following coins:

Country	Coin value
Latvia	1 LVL

Table 2: Accepted coin table

5.3 Error Handling

1. Unplug the machine and open the main door;
2. Check that the coin acceptor is positioned correctly, remove any jammed coins;
3. Ensure that the coin acceptor cable is connected properly to the device;
4. Check if coin sorter can freely move for one position to another.

5.4 Replacement

If coin acceptor can not be fixed in-place, the complete device should be replaced.

1. Unplug the machine and open the main door;
2. Loosen white plastic brackets;
3. Tilt the upper part of coin acceptor first, and then remove coin acceptor from the bracket;
4. Unplug the cable;
5. Repeat steps above in the reverse order;

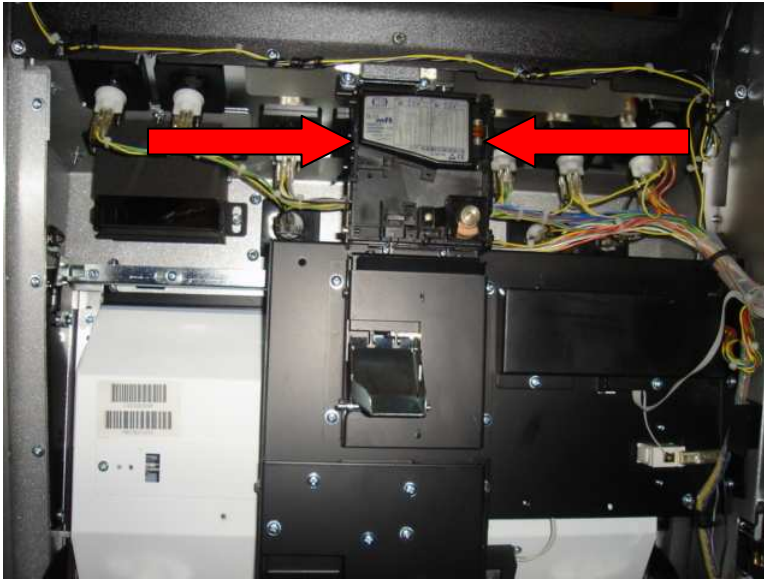


Figure 7: Coin Acceptor bracket position

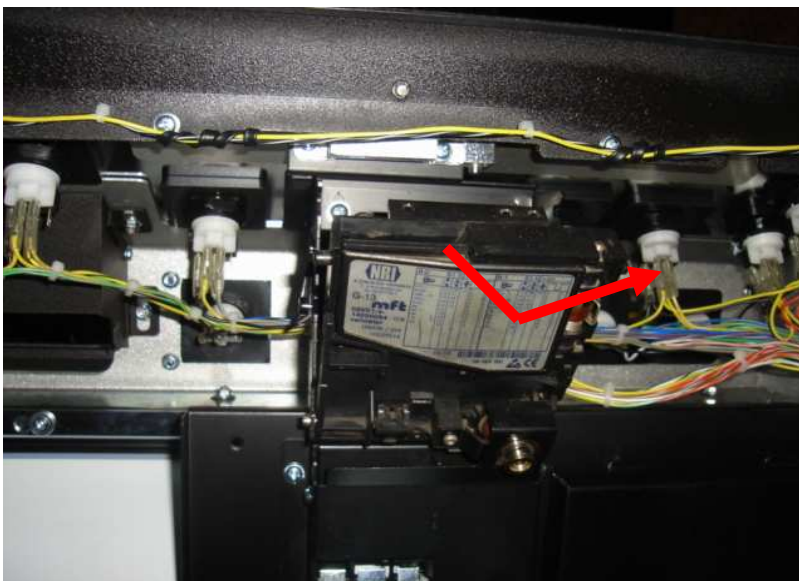


Figure 8: Removal of the coin acceptor

5.5 Connector

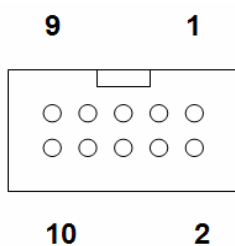


Figure 9: Coin Acceptor Connector

Pin No.	Description	Potential
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1	GND	Low
2	+12V DC	High
3	Coin E	Active low
4	Coin F	Active low
5	Return	Active low
6	Common inhibit	Active high
7	Coin A	Active low
8	Coin B	Active low
9	Coin C	Active low
10	Coin D	Active low

Table 3: Coin Acceptor Connector Pin Layout

6 Coin Hopper

6.1 Function

Type Money Controls Universal Hopper MK IV
Suzo Evolution Hopper EV01000

WARNING: Machine should be power off before removing or installing coin hopper!

6.2 Payout coins

Machine can pay out following coins:

Country	Coin value
Latvia	1 LVL

Table 4: Payout coin table

6.3 Error Handling

1. Check the correct mounting of the hopper;
2. Check the plug fitting;
3. Remove jammed coins if such exist
4. Clean the hopper from dirt and dust

6.4 Replacement

1. Unplug the machine and open the door
2. Lift the coin tray and take it out
3. Remove the Hopper forward.

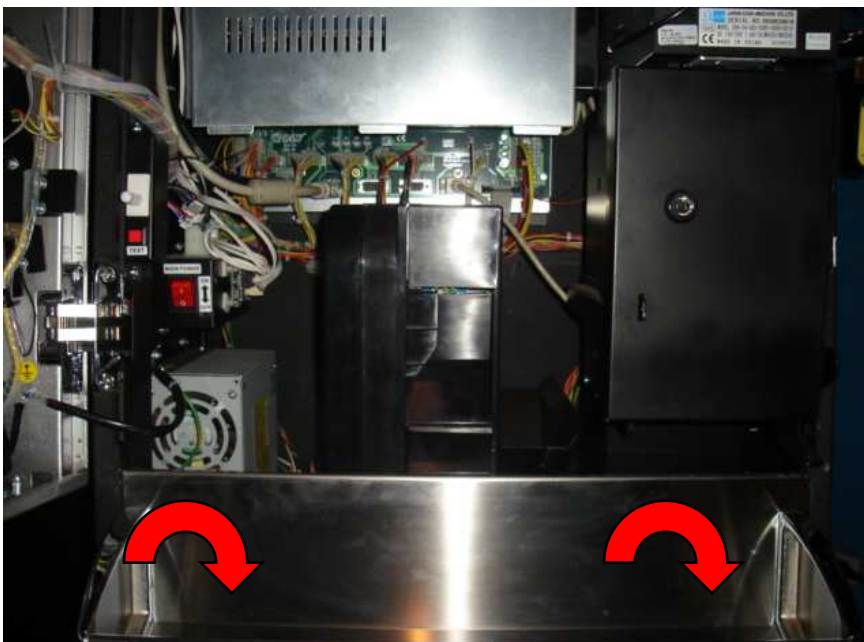


Figure 10: Coin Tray Remove Direction



Figure 11: Coin Hopper Remove Direction

6.5 Connector

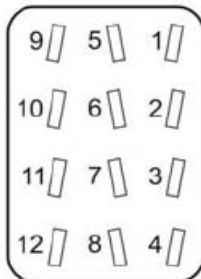


Figure 12: Coin Hopper Connector

Pin No.	Description
1	Motor supply 0 volt
2	Logic 0 volt
3	uP Sensor Output
4	IN1
5	Security output
6	High level sense output
7	Low level sense output
8	IN2
9	Motor supply +24V
10	Logic supply
11	Raw Sensor Output
12	IN3

Table 5: Coin Hopper Connector Pin Layout

6.6 Exploded view

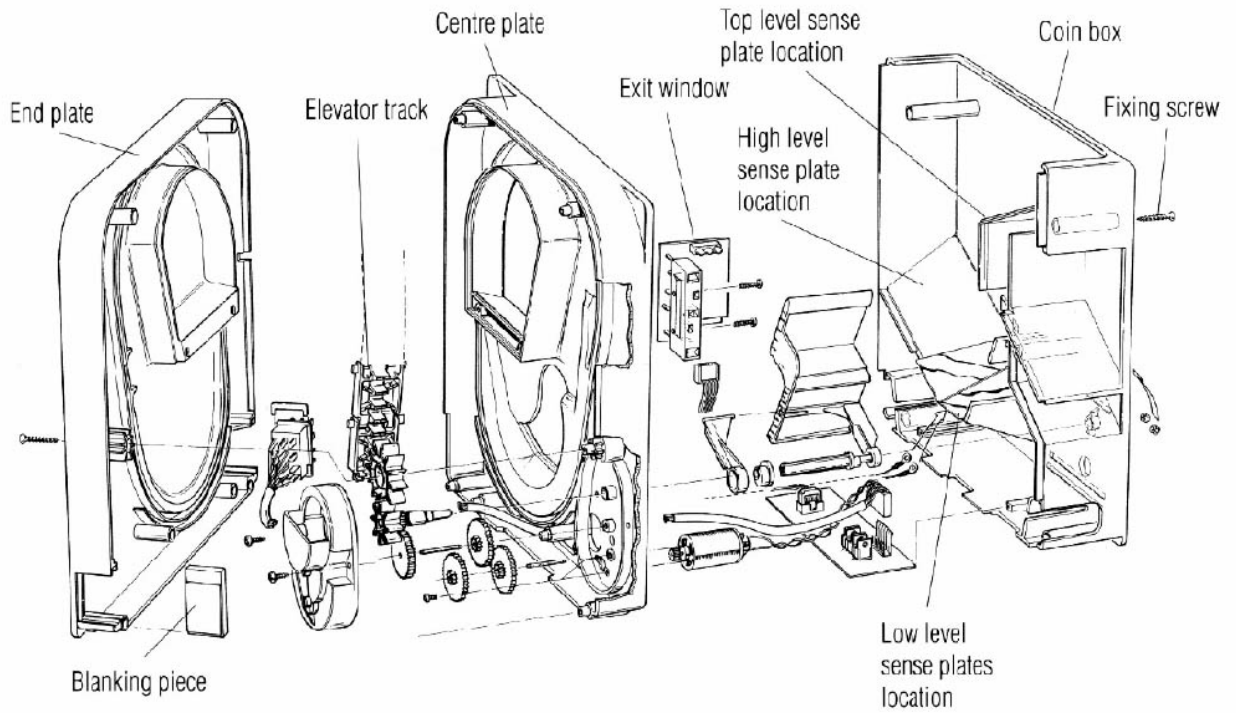


Figure 13: Coin Hopper Exploded View

7 Bill Acceptor

7.1 Function

Type JCM EBA-34 SD3
JCM UBA/WBA

The Bill validator accepts the bank notes in all 4 directions. By changing software in flash memory any country settings can be adjusted.

7.2 Accepted bills

Machine can accept and handle following banknotes

Country	Bill value
Latvia	5 LVL
	10 LVL
	20 LVL
	50 LVL
	100 LVL

Table 6: Accepted bill table

7.3 Adjustment and troubleshooting

Adjust voltage with potentiometer (see picture “removal of power supply”):

We suggest to do final adjustment of the +12V when machine is installed at final destination. Check +12V with Voltmeter at the output of the power supply and adjust by turning the potentiometer.

In case of a short circuit in the machine the power supply switches off automatically.

Switch machine back on after repair of the short circuit. In most cases the power supply will work properly again (red LED lit).

7.4 Error handling

7.4.1 Cleaning

To clean the lenses, use a lint-free cloth and mild nonabrasive detergent such as liquid dish soap mixed with water.

1. Pull the tabs on both sides of the acceptor forwarded to open the acceptor's head;
2. Open the acceptor head front and rear covers to clean bill path, rollers and belts.

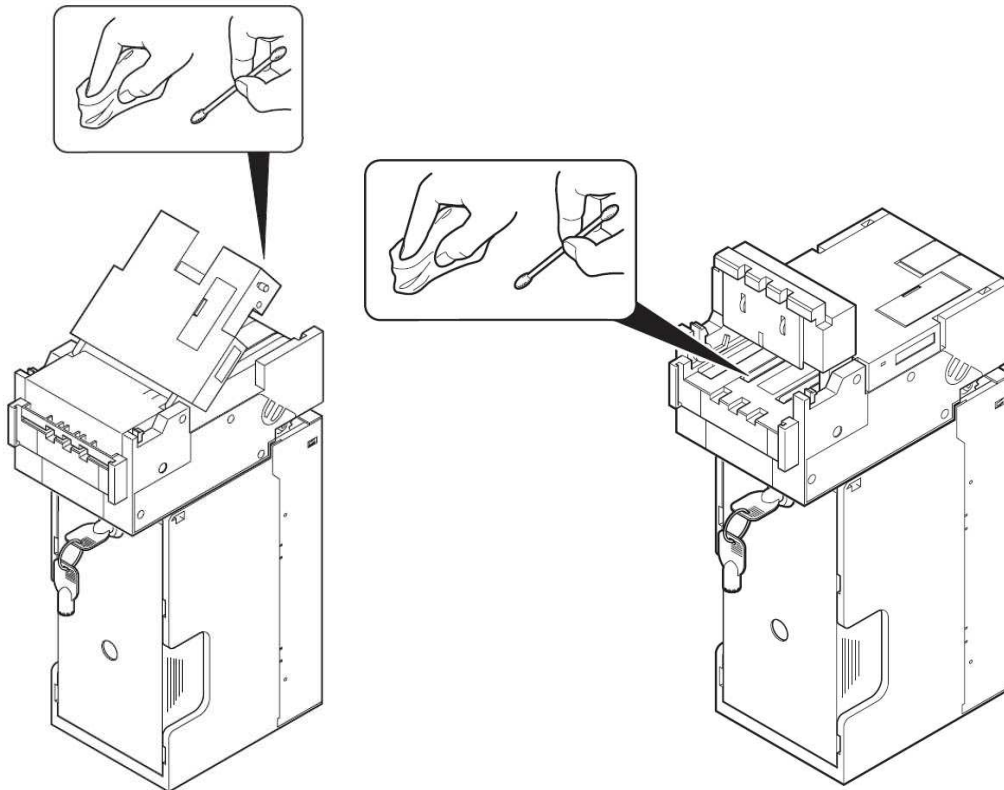


Figure 14: Bill Acceptor Cleaning

7.4.2 Bill is jammed in Acceptor

When a bill is jammed near the entrance of the stacker box, unlock the box and pull it out to remove the jammed bill.

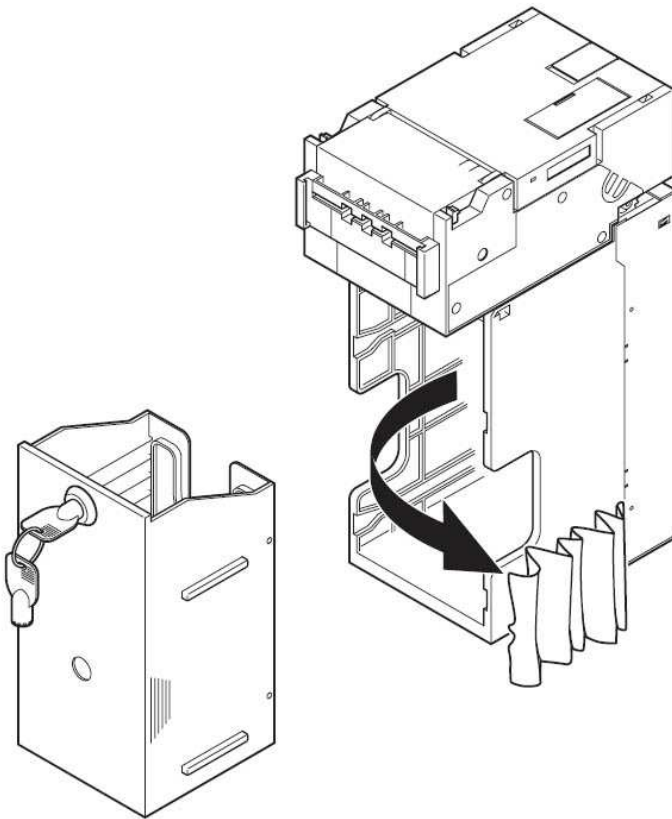


Figure 15: Removing jammed bill from the Bill Acceptor Stacker

7.4.3 Bill is jammed near the acceptor's entrance

When a bill is jammed near the acceptor's entrance, pull the tabs on both sides of the acceptor forward to open the acceptor's head. Remove the jammed bill. If the acceptor's head cannot be opened, use hexagon-head screwdriver on the side hole of the acceptor's head to reposition the centering guides to the home position.

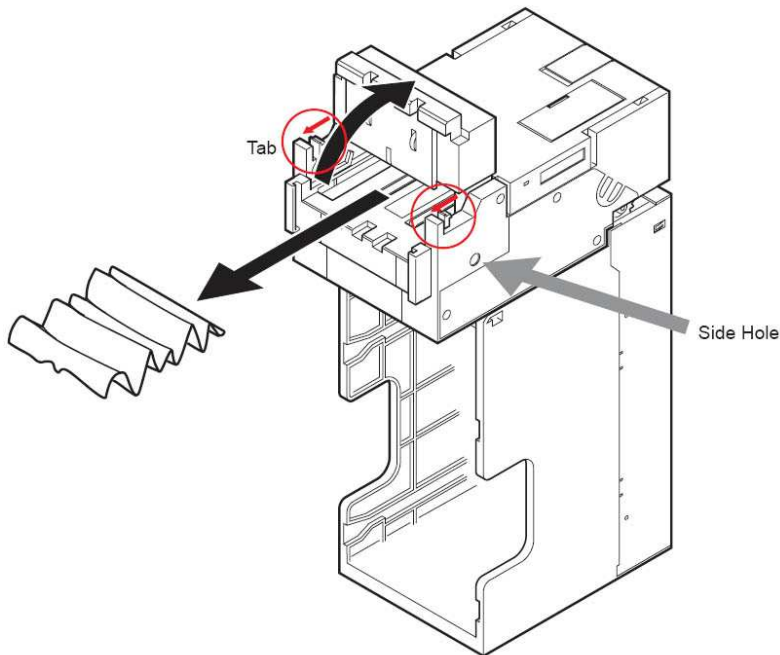


Figure 16: Removing jammed bill from the Bill Acceptor entrance

7.5 Connector

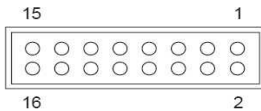


Figure 17: Bill Acceptor Connector

Pin No.	Signal name	I/O	Description
1	+12V	In	Power supply input 12V
2	GND		GND
3	+12V	In	Power supply input 12V
4	GND		GND
5	TXD	Out	Output signal line from acceptor to controller
6	SG		Signal ground
7	RXD	In	Input signal line from controller to acceptor
8	SG		Signal ground
9	(TXD)	Out	NC
10	(RXD)	In	NC
11	(MDB COM)		NC
12	(DIR)	Out	NC
13	(SICLK)	Out	NC
14	(SG)		NC
15	(SETLD)	Out	NC
16	(SG)		NC

Table 7: Bill Acceptor Connector Pin Layout

8 Hardware meters

8.1 Position in machine

Hardware meters are mounted on the main door behind the belly door glass.



Figure 18: Hardware Meters Position in Machine

8.2 Function

1. CREDITS WAGERED
2. CREDITS WON
3. GAMES PLAYED
4. BILL IN
5. COIN DROP
6. HANDPAY

8.3 Troubleshooting

1. Check the connectors of the meter unit.
2. If an error message is triggered by a malfunction or non-activation of individual meter, the device must be removed from the operation and the meters circuit board must be exchanged.

8.4 Exchange of the meters

If any defects cannot be repaired, the defective meter has to be exchanged.

1. Unplug the machine and open the main door;
2. Unscrew screws as shown on picture;
3. Remove meters circuit board;
4. Unplug cable from the meters circuit board;

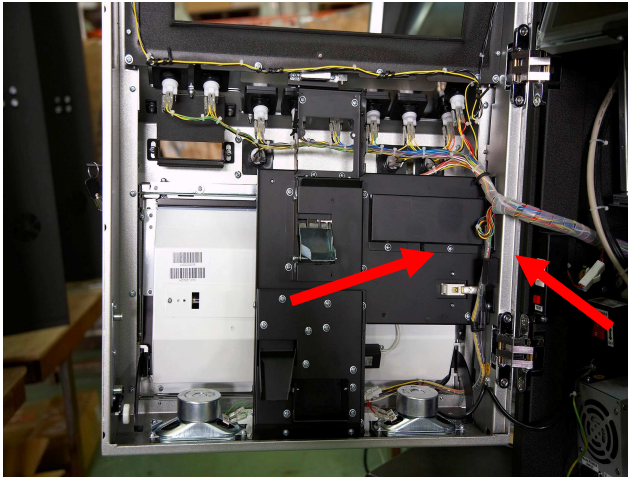


Figure 19: Exchange on the Hardware Meters Circuit Board

9 Monitors

9.1 Position in machine



Figure 20: Monitors Position in Machine

9.2 Function

The monitors show the game play, the error messages and the audit system.

9.3 Troubleshooting

Check if the monitors and the connectors of the cables are fixed correctly in their mounting.

9.4 Exchange of the monitors

If any defects cannot be repaired, the defective monitor has to be exchanged.



Figure 21: Monitors Exchange

10 Harness

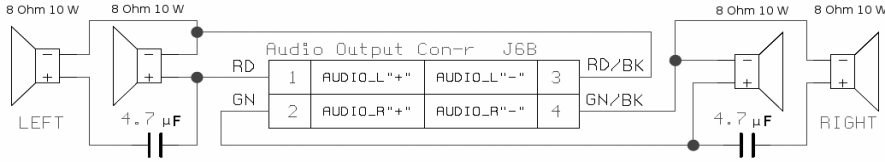


Figure 22: Audio Connector

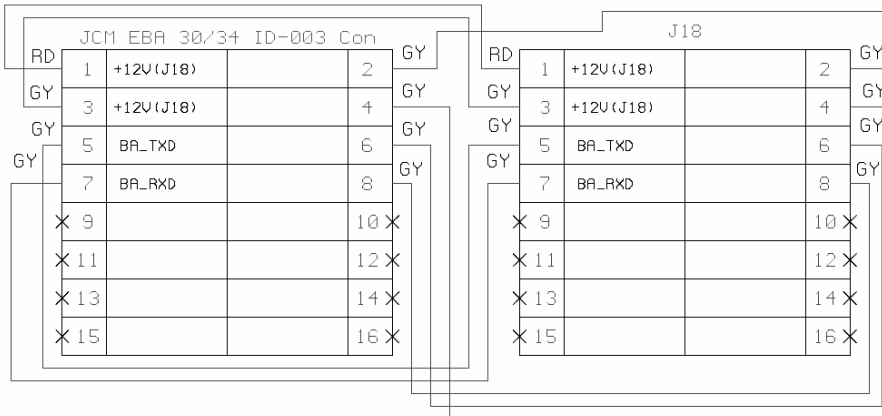


Figure 23: JCM EBA 30/34 Connector

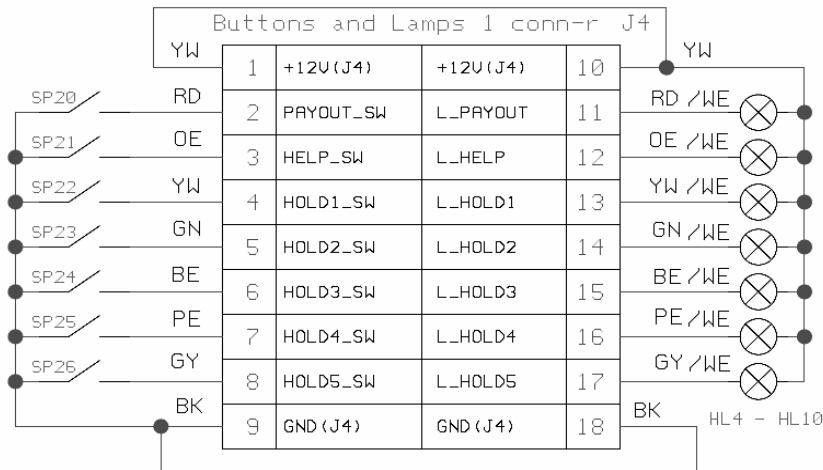


Figure 24: Buttons and Lamps Connector 1

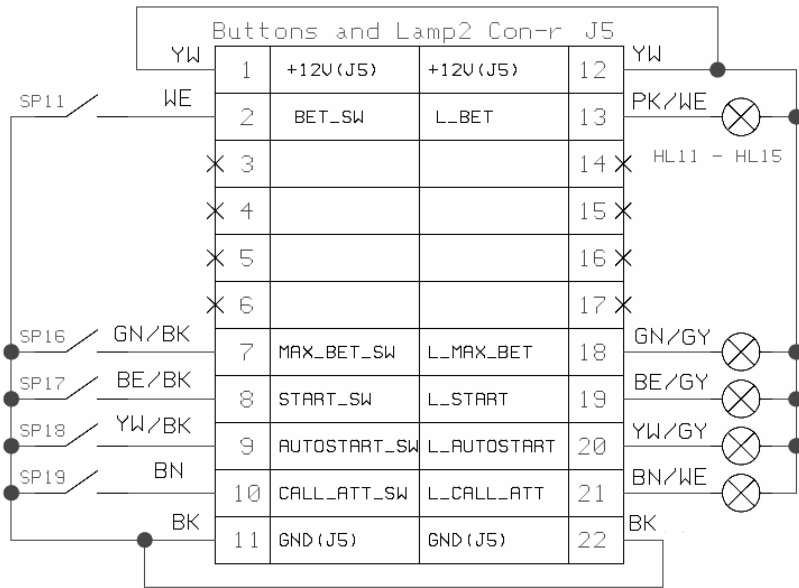


Figure 25: Buttons and Lamps Connector 2

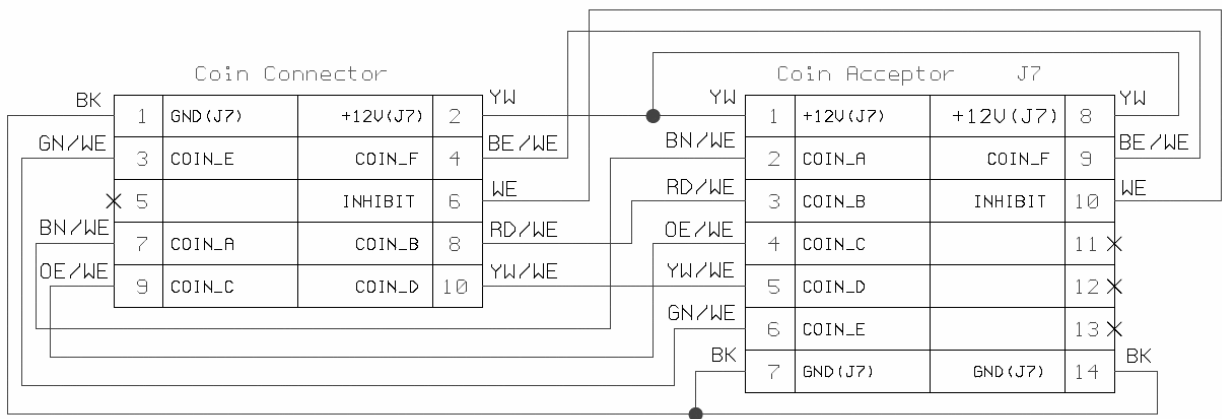


Figure 26: Coin Acceptor Connector

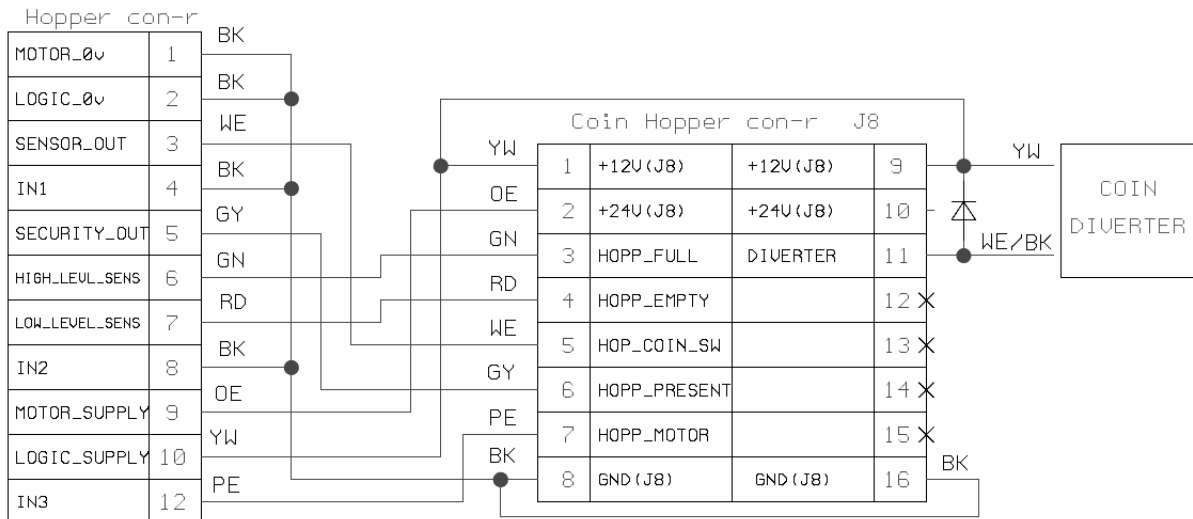


Figure 27: Coin Hopper Connector

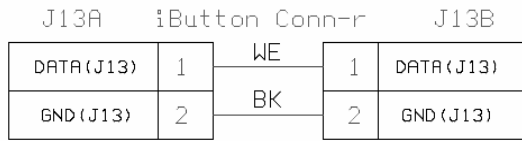


Figure 28: iButton Connector



Figure 29: Key and Door Switch Connector

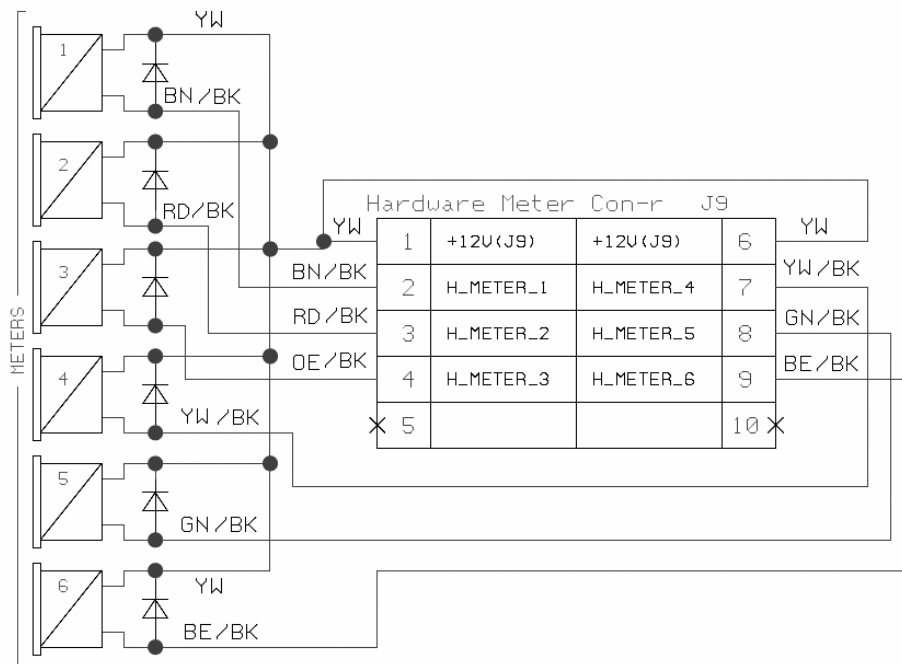


Figure 30: Hardware Meters Connector

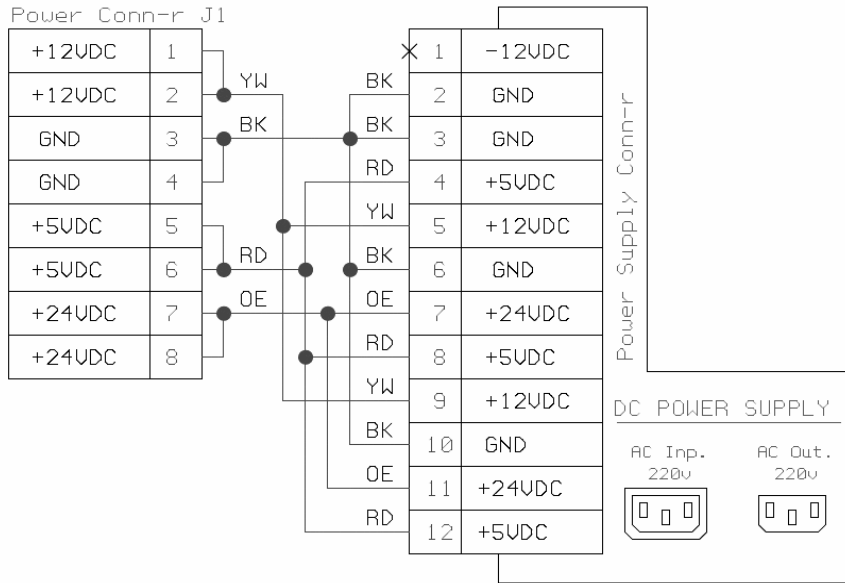


Figure 31: Power Connector

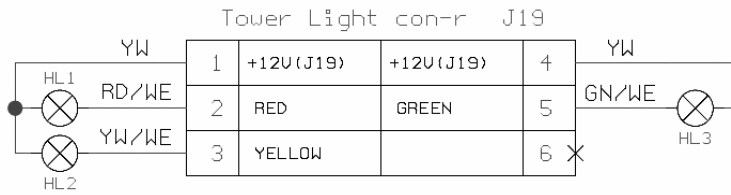


Figure 32: Tower Light Connector