

# HARDWARE User Manual

45MH610xx-0003mEN-01

For machine type SUPER GAMINATOR III FV610



#### Austrian Gaming Industries GmbH

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The instructions contained in this manual must be strictly observed.

This manual was created in accordance with the European norm EN 62079:2001 and is valid for

### SUPER GAMINATOR III (FV610)

until a newer manual version is released. The version number of the User Manual is indicated as the identification number on the bottom of the page.

For identification of the device refer to the ID plate attached on either side of it. The plate may also contain official approval symbols required for the respective market (e.g. CSA, IRAM, ÖVE).

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# 1 Legend and Safety Precautions

# 1.1 Legend



# DANGER

Risk of electric shock with possible serious injury or death.



# WARNING

Warning of a possible injury or death.



# CAUTION

Warning of a risk of damage to equipment.



# INFORMATION

Provides additional information and explanations.



# NOTE

Provides additional instructions and useful tips.



## MAINTENANCE

Explanations relating to maintenance, protection and equipment care including troubleshooting information.



# 1.2 Safety Precautions

The below service instructions are for use by authorised or trained personnel only.

The owner of the machine has to ensure that all service work is performed only by qualified or trained personnel.

To avoid personal injury or damage to the equipment, do not perform any servicing other than that described in this manual.

The machine contains no user serviceable parts. Refer all service work to qualified service personnel.

If you follow these instructions closely and if the machine is maintained and handled in a proper way, it complies with the usual safety standards.

The manufacturer warns explicitly against improper use of the machine as well as intentional misuse. Do not bypass the built-in safety precautions in the machine! The manufacturer hereby disclaims any warranties for improper handling of the machine.

All staff responsible for attending to the cash handling system will need to open the machine. Therefore staff must be made aware of the below safety precautions.

For operating safety and to avoid damage to the machine, carefully read and observe the below instructions.

## 1.2.1 Danger



### DANGER

In the situations described below there may be a risk of electric shock which may result in serious injury or death.

### In case of emergency power off the machine!

Only disconnecting the power line from the outlet will ensure that voltage is removed from the machine. For machines with an uninterruptible power supply (UPS) you have to switch the UPS off, too!

- Do not connect or disconnect the power plug with damp or wet hands. Risk of electric shock!
- If you detect smoke or unusual smells or sounds coming from the machine, there may be fire and a risk of electric shock!
   Unplug the unit from the AC outlet immediately. Contact qualified service personnel.
- Do not open the cabinet by force. Risk of electric shock or fire! The machine contains potentially dangerous high voltage components.
- Do not use a water jet to clean the device!

- Do not leave any objects inside the machine. Risk of short circuits, electric shock or fire! Do not push any objects through cabinet ventilation slots as they may touch dangerous voltage points.
- Avoid spilling any liquid in or on the machine. Risk of electric shock or fire! If liquids have been spilt on the machine, unplug the machine. Contact authorised service personnel for a machine checkup.

## 1.2.2 Warning



### WARNING

In the situations described below there may be a risk of injury or death.

• Avoid damage to wires. Risk of short circuits or fire. Keep wires away from where people could walk on them or stumble.

Avoid tension or compression on power cords and connectors.

- Thermal hazard! Danger of burns! Some components may reach high operating temperatures (e.g. TFT monitor).
- Mechanical hazard! Danger of injury! Some components inside the machine may have sharp edges. Improper opening and closing of the machine may cause bruises.

### 1.2.3 Caution



## CAUTION

In the situations described below there is a risk of damage to equipment.

- Do not use organic solvents like thinners or abrasive materials to clean the device!
- Provide adequate ventilation. Danger of overheating.

Openings on the top, on the sides and at the bottom of the cabinet are provided for ventilation. To ensure proper operation and to prevent overheating, these openings should not be blocked or covered. To allow hot air to escape, make sure that there is a minimum space of 10 cm between the fan outlets of the machine and a wall or like structure.

• Influence of magnetic fields on machines with a CRT monitor.

Do not install machines with CRT monitors close to strong magnetic fields like loudspeakers or fluorescent lamps. This equipment may affect the display of the image on the monitor. Additionally, this may cause unusual noise.

LCD monitors may be damaged if they are not properly cleaned!

Use a soft cloth and a window cleaner to clean the surface of the monitor. Do not use solvents like ethyl alcohol or thinners.



Ensure suitable ambient conditions!
Ambient temperatures range from 10° C to 35° C!
Ambient humidity should be between 30 % and 80 % (non-condensing)!
Excessive temperatures and humidity may cause a fire hazard, short circuit or other damage.
Suitable for indoor use only!
Do not expose the machine under any circumstances to rain or temperatures greater than 50° C.
The ambient temperature must not exceed 35° C.

If the machine has been exposed to very low temperatures, do not power it up immediately. Allow for the machine to reach room temperature.

The ambient humidity must be between 30 % and 80 % (non-condensing).

Do not install the machine near powerful heaters (heating radiators).

Do not install the machine in locations with rapidly changing temperatures or excessive dust.

 Unauthorised alterations and modifications of the machine are prohibited for safety reasons and void the warranty!

For safety reasons any exchange of defective parts has to be accomplished with original or manufacturer-approved parts.

Spare parts that were not delivered by Austrian Gaming Industries are not tested and not approved by Austrian Gaming Industries.

The manufacturer accepts no liability for damage that results from the use of components and spare parts that are not original or manufacturer-approved.

# 2 Machine Specifications

# 2.1 Dimensions FV610 (without topper)



Illustr. 2-1 Dimensions of SUPER GAMINATOR III FV610 without topper (in millimetres)

# 2.2 Dimensions FV610 (with topper)





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610

Z\_FV610\_Dimensions2-03.eps

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Illustr. 2-2 Dimensions of SUPER GAMINATOR III FV610 with topper (in millimetres)

#### **Operating Elements** 2.3



- 1 Audit keyswitch
- Main Door 2
- 3 Door in Door latch
- 4 Main Door 1 lock
- 5 Main Door opening lever
- 6 Main Door 2 lock

- Door in Door lock
- 8 Logic Door lock (behind Main Door)
- 9 Stacker Door lock (behind Door in Door)
- 10 Stacker lock
- 11 Drop Door 1 lock
- 12 Drop Door 2 lock



MACHINE SPECIFICATIONS DESCRIPTIONS OF COMPONENTS FV610

- 1 Monitor
- 2 Full-range loudspeaker
- 3 Coin acceptor
- 4 Mechanical meters
- 5 Coin acceptor USB device
- 6 USB KPanel
- 7 Ticket printer (optional)

- 8 Hopper
- 9 Topper
- 10 Switching power supply
- **11** Power distribution box
- 12 Power distribution box (low voltage)
- **13** Electronic unit

- 14 Bill acceptor
- 15 USB backplane
- **16** Stacker Door with lock
- 17 Subwoofer (behind stacker)
- 18 Switch module incl. main switch
- **19** Drop Door with lock

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# 2.5 Technical Data

Туре	FV610
	SUPER GAMINATOR III
Dimensions (without topper)	w: 610 mm
	h: 2017 mm without toplight
	h: 2112 mm with toplight
	d: 499 mm with base-footrest
Dimensions (with topper)	w: 610 mm
	h: 2241 mm without toplight
	h: 2384 mm with toplight
	d: 499 mm with base-footrest
Weight	max. 148 kg
Power supply	230 V / 120 V
	50 Hz / 60 Hz
	1.6 A / 2.5 A
Power consumption	250 W
Fuses	3.15 A time-lag
	3 A
	5 A
	10 A
Ambient temperature	10 - 35° C
Ambient humidity	30 - 80 % (non-condensing)



## 2.6 Block Diagram



Illustr. 2-5 Block diagram

# 2.7 USB Backplane - Positions of the Connectors



Illustr. 2-6 USB Backplane - positions of the connectors

### 12 USB ports

13 power supply connectors, 4 pin (+12V DC / +24V DC) for peripherals



Illustr. 2-7 Monitor arrangement

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# 2.8 FV610 Locking Position/Description

POSITION ON CABINET	NOTE	CAM LOCK (AGI-Standard)	САМ	Direction of Rotation for "OPENING"
MAIN DOOR 1	on main door (right side) - top	C510ZM	included in C510ZM (*)	only LEFT
MAIN DOOR 2	optional (Double Locking) on main door (right side) - bottom	C510ZM	included in C510ZM (*)	only LEFT
DOOR IN DOOR	on main door (left side)	C510ZM	included in C510ZM (*)	only LEFT
LOGIC	CPU-Drawer	C510ZM	included in C510ZM (*)	.)for CPU-Drawer for CF II / FF > only RIGHT .)for CPU-Drawer for FF2 > only LEFT
STACKER DOOR	only when using Bill Validator	C510ZS or C510ZM with distance washer 6mm	included in C510ZM (*) or C510ZS (*)	LEFT or RIGHT
STACKER BOX	only when using Bill Validator	C510ZS or C510ZM with distance washer 6mm	always incl. on stacker !!! (#)	
	on base door - right	C5107M	see part no. 69506098E3	
DROP DOOR 2	optional (Double Locking) on base door - left	C510ZM	included in C510ZM	only LEFT
* Straight Cam / work.length = 21 or 33.5mm (see part no. 69500007)				
# Part No. = misc.				
Recommended hole size = 19/16mm				
Cam Lock C510ZS> housing length = 17.6mm				
Cam Lock C510ZM = > housing length = 23.2mm				

Cam Lock C510ZM --> housing length = 23.2mm

MACHINE SPECIFICATIONS **2** 



Straight Cam 2.3 mm work. length 21 mm or 33.5 mm (part no. 69500007)





2.3



S 40.2

23.2±0.5

6.3

C510ZM

## C510ZS



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# 3 Installation

# 3.1 Inspection (damage caused by transport)

Remove the shipping carton and the material used to secure machine components during transport (necessary only for some types of cabinet).

Should any damage caused by transport have occurred on the exterior, report them immediately to the sender and have them confirmed by the same.

# 3.2 Installation Instructions

It must be ensured that the machine is operated in an upright position. Further, the machine has to be screwed down tightly to the base by means of the mounting material included in the delivery.

The minimum distance between two machines should be 21 cm to avoid possible damage when opening the Main Door.

The minimum distance to a possible back wall or the like should be 10 cm.

The drilling jig (see illustr. 3-1) has to be used in case the machine is to be installed on a table provided by the customer (i.e. if the machine has been delivered without base).



-supporting plate (baseplate) - leading edge

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### Illustr. 3-1 Drilling jig

For pilot drilling use a twist drill Ø 10 mm.

After the required drillings have been made by means of the drilling jig, continue with redrilling using a cylinder saw Ø 54 mm.





- 1) Before start check the line voltage. The machine has been designed to sustain 230 V  $\pm$  10 %, 50 Hz or 120 V  $\pm$  10 %, 60 Hz. Make sure that the line voltage corresponds to the voltage indicated on the machine.
- 2) As all machines of the SUPER GAMINATOR III Series are equipped with an earthing connection, it should be ensured that the main supply is also equipped with one.
- 3) Plug in the main plug correctly.
- 4) Open the Main Door.
- 5) If the machine is equipped with a coin comparitor, place the reference coin in there.
- 6) Refill the hopper (see Software User Manual).



Illustr. 3-2 Main switch with fuses

- 7) Switch on the machine.
- 8) After the machine has been powered up, the major parts of the machine
   (e.g. CPU board, bill acceptor, etc.) are subject to a self test.
   If this test has been successful, the machine switches automatically to the ready-for-play status.



### NOTE

If the machine detects an error, the corresponding code is shown on the screen (see Software User Manual).

- 9) Close the Main Door.
- 10) Credits can be added and a new game can be started now.

ΌΜΑ

# 4 Maintenance

The following service instructions are for use by qualified or trained personnel only. To avoid personal injury or damage to the equipment, do not perform any servicing other than the procedures described in this manual.

If you follow these instructions closely and the machine is maintained and handled in a proper way, it complies with the usual safety standards.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



## DANGER

Never use a water jet to clean the device!



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.





## NOTE

To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# 4.1 Bill Acceptor

## Cleaning the bill acceptor



## CAUTION

Before cleaning the bill acceptor, the acceptor head has to be dismounted!

# CAUTION

Do not use organic solvent like thinner! Do not use abrasive materials!



Illustr. 4-1 Cleaning the bill acceptor UBA



Illustr. 4-2 Cleaning the bill acceptor Cashflow SC / SCN - series



Illustr. 4-3 Cleaning the bill acceptor CashCode ONE



Illustr. 4-4 Cleaning the bill acceptor iVIZION



F\_ArdacElite\_Wartung.jpg

Illustr. 4-5 Cleaning the bill acceptor Ardac Elite

### Description

If reader sensors or magnetic sensors are dirty this may result in error messages as when bills are jammed, or the identification precision may decrease, which may result in bills being rejected more frequently. To clean the reader head / magnetic sensor use a soft cloth or cotton bud.

If necessary, a standard head cleaner for cassette recorders can be used.

# **Recommended maintenance interval: monthly**



## 

If bill acceptance does not improve after cleaning, the sensors may require adjusting.

Cleaning cards for the UBA bill acceptor are available from AGI (Cleaningcard-Kit).





## 4.2 Coin Acceptor

## 4.2.1 Cleaning the Coin Acceptor NRI G13

Only the coin validator's flight deck must be wiped clean from time to time with damp cloth (luke warm water with a small amount of dish detergent). No further maintenance work is required.



## CAUTION

Under no circumstances may the cloth be so wet that fluid runs into the device, otherwise the PCB will be damaged. Do not use any solvent or foam type cleaner which reacts with the plastic of the device.

Do not use abrasive materials.

### Description

To clean the optics inside the coin acceptor take out the coin acceptor.

Carefully open the flight deck on the left-hand side and hold it open (see illustr.4-6).

Use a cloth to wipe the coin runway inside the coin acceptor.

Close the flight deck again.

Insert the coin acceptor into the coin acceptor holder.



Illustr. 4-6 Direction to open the flight deck of the coin acceptor NRI G13

# **S** Recommended maintenance interval: 3-monthly

## 4.2.2 Cleaning the Coin Acceptor MC40



## CAUTION

Do not use any solvent or foam type cleaner which attacks the plastic of the device. Do not use abrasive materials.

### Description

Remove the coin acceptor.

Clean the outside of the coin acceptor with a short-hair brush and with isopropyl alcohol. Remove the sample coin from the sample coin holder.

Clean the inside of the coin acceptor using a spray-on contact cleaner or a short-hair brush. Reinsert the sample coin. Insert the coin acceptor into the coin acceptor holder.



Illustr. 4-7 Coin acceptor MC40







## 4.2.3 Cleaning the Coin Acceptor Condor Premier

The coin path area should be cleaned regularly to ensure accurate acceptance of coins and tokens. Clean the coin acceptor only with a damp cloth.



## CAUTION

Do not use any solvent or foam type cleaner which attacks the plastic of the device. Do not use abrasive materials.

### Description

To clean the optics inside the coin acceptor take out the coin acceptor.

Carefully open the flight deck on the top side and hold it open (see illustr. 4-8).

Use a cloth to wipe off the coin runway inside the coin acceptor.

Close the flight deck again.

Insert the coin acceptor into the coin acceptor holder.



**Illustr. 4-8** Direction to open the flight deck of the coin acceptor Condor Premier

# Recommended maintenance interval: 3-monthly

### MAINTENANCE COIN ACCEPTOR

## 4.2.4 Cleaning the Coin Diverter HSD

Clean the HSD coin diverter with a short-bristled brush, a cotton bud soaked with isopropyl alcohol, a contact cleaning spray or compressed air from a can.

# Do not use or:

Do not use any solvent or foam type cleaner which attacks the plastic of the device. Do not use abrasive materials.



Illustr. 4-9 HSD coin diverter



# **Recommended maintenance interval: 3-monthly**





# 4.3 Door Optics (Main Door)

### Description

If the machine has many errors of the Main Door, clean the door optics with a short-hair brush or a cotton bud soaked with isopropyl alcohol.

To realign the optics the fixing screws have to be loosened

(see "Calibration of the Door Optics" on page 178).



Illustr. 4-10 Positions of the door optics



# Recommended maintenance interval: semi-yearly

# 4.4 Monitor / Touchscreen

### Description

The monitor and/or the monitor with touchscreen should be cleaned at least once a week using a soft cloth and window cleaner.

In addition, the touchscreen requires regular calibration, which will depend on how much it is used but should at least be done once a week.

To calibrate the touchscreen follow the instructions on the screen (see Software User Manual). When calibrating the touchscreen make sure that you are looking at the screen at right angle (from the player's seated position) and that you are not touching the metal cabinet of the machine with your body.



## 4.5 Ticket Printer (print head)

Periodic cleaning operations will ensure continued high print quality.

### Paper dust removal

Use a soft brush to clean the paper dust from inside the printer and chassis area. The paper dust should also be removed from the sensor optics.

### Cleaning the print head

If streaking on the printed ticket is evident, the print head may need to be cleaned. This can be done by inserting a thermal printer cleaning card as elaborated below.

Open the Main Door.

Open the ticket cover and remove all tickets.

Close the ticket cover.

Insert the cleaning card into to the feed path. The cleaning card will be drawn inside automatically.

Open the ticket cover and then remove the cleaning card by gently pulling it out.

Repeat process if necessary.

Proceed with ticket loading procedure (see part 5.5 on page 88 resp. 96).

# Recommended maintenance interval: 3-monthly





All fans of the system should be tested for functionality. Remove dust from fans and check contacts. The fans should also be checked whenever the noise level of a fan is higher than normal.

### 4.6.1 Fan Grills



Illustr. 4-11 Positions of the back fan grills



Illustr. 4-12 Position of the side fan grill

## Cleaning the fan grills



## CAUTION

To prevent possible overheating, the accessible fans of the machine should be cleaned at regular intervals.

If dust is blocking the inlet and outlet of the fans located and accessible at the back and side of the machine, insufficient cooling air circulation can overheat the machine.

Remove any dust and dirt from the fans with a vacuum cleaner from outside the machine at least once a month.



## CAUTION

If a fan needs to be replaced, make sure that the same direction of the airflow is maintained and the fan type is identical.



**Recommended maintenance interval: monthly** 

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## 4.6.2 Air Cleaner Filter

### Filter unit replacement





F\_610\_posAirClean1.jpg

F\_610\_posAirClean2.jpg

Illustr. 4-13 Position of the air cleaner filter unit



Illustr. 4-14 Exchanging the air cleaner filter unit

Pull off the filter frame with the 4 plastic blind rivets.

Back out the filter unit on the backside, replace with the new unit and remount the frame.

The additional plastic blind rivets safeguard the filter frame against falling out unintentionally when mounted vertically.

### **Bypass-Filter replacement**





Illustr. 4-15 Position of the bypass filter





Illustr. 4-16 Exchanging the bypass filter

Pull out the filter frame from its mounting, by lifting the flap. Back out the filter unit, replace with the new unit and remount the frame in the ventilation unit.



## **Recommended maintenance interval: 3-monthly to yearly**

(depending on the surrounding)

## 4.7 Maintenance Intervals

Machine part	Interval
Bill acceptor	monthly
Coin acceptor	3-monthly
Door optics	semi-yearly
Monitor / Touchscreen	weekly
Ticket printer (print head)	3-monthly
Fan grills	monthly
Air cleaner filter	3-monthly to yearly (depending on the surrounding)

# 5 Hardware

# 5.1 Power Supply

### 5.1.1 Switch Module

### Position in the machine

See illustr. 2-4 on page 12.

### Function

ON/OFF switch and fuse of the machine.

The power supply is primarily protected with two 3.15 A time-lag single-pole fuses. These fuses are located on the front of the switch module.



Illustr. 5-1 Switch module with main switch and fuses

### Troubleshooting

Check all fuses (see illustr. 5-1). However, more details regarding defective line voltages can only be obtained by measurements with suitable devices.

In addition, check all connectors.

If an error occurs that cannot be cleared, the defective switch module must be exchanged.



## CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



### Exchanging the switch module

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



### DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



Illustr. 5-2 Exchanging the switch module

### For exchanging the switch module follow the instructions below (see illustr. 5-2):

- 1) Open the Main Door and disconnect the machine from the mains.
- Release the fixing screws of the bill acceptor retainer (A), disconnect all plug connections and remove the retainer together with the bill acceptor incl. stacker.
- Do not forget to disconnect the microswitch of the stacker!
- 3) Disconnect both plugs from the switch module (B).
- 4) Release both mounting screws of the holding plate (C).
- 5) Take out the switch module and remove it together with its holding plate from the machine.
- 6) Exchange the defective switch module.
- 7) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.







### Position in the machine

See illustr. 2-4 on page 12 and the following illustr. 5-3 (A).



Illustr. 5-3 Position of the power distribution box

### Function

Power distribution (230 V / AC or 120 V / AC) for the switching power supply (B).

### Troubleshooting

Check that all connectors are connected correctly. If an error occurs that cannot be cleared, the defective power distribution box must be exchanged.



## CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.
#### HARDWARE POWER SUPPLY 5

### Exchanging the power distribution box

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



### DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.







F\_FV610\_exchDIST1\_center-02.jpg

Illustr. 5-4 Exchanging the power distribution box

# For exchanging the power distribution box follow the instructions below (see illustr. 5-3 on page 36 and illustr. 5-4):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Disconnect all connectors from the power distribution box.
- 3) Release the mounting screws (A) of the power distribution box.
- 4) Remove the defective power distribution box from the machine and exchange it.
- 5) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.

## 5.1.3 Switching Power Supply

### Position in the machine

See illustr. 2-4 on page 12 and illustr. 5-3 (B) on page 36.

### Туре

PROTEK PFC200, Magic Power MEI-H205 or compatible

### Function

Power supply for the USB backplane and the monitors via the power distribution box (low voltage).

### Troubleshooting

Check all fuses.

However, more details regarding defective line voltages can only be obtained by measurements with suitable devices. In addition, check all connectors.

If an error occurs that cannot be cleared, the defective switching power supply must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the switching power supply

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.





Δ

Α



Illustr. 5-5 Exchanging the switching power supply

## For exchanging the switching power supply follow the instructions below (see illustr. 5-5 and illustr. 5-3 on page 36):

1) Open the Main Door and disconnect the machine from the mains.



# NOTE

Make a note of the correct plug positions!

- 2) Disconnect all cables from the switching power supply, the power distribution box and the power distribution box (low voltage).
- Release and remove the mounting screws (A). 3)
- 4) Take out the power supply holding plate from the machine.
- 5) Unscrew the switching power supply from the holding plate.
- Exchange the defective switching power supply. 6)



# CAUTION

Connect the cables correctly in the original positions to the new switching power supply.

- 7) To reinstall, follow the above instructions in reverse order.
- 8) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

## 5.1.4 Power Distribution Box (low voltage)

### Position in the machine

See illustr. 2-4 on page 12 and illustr. 5-3 (C) on page 36.

### Function

Power distribution for the USB backplane and the monitors.

### Troubleshooting

Check that all connectors are connected correctly. If an error occurs that cannot be cleared, the defective power distribution box (low voltage)

must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the power distribution box (low voltage)

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



### CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.







HARDWARE

POWER SUPPLY

F\_FV610\_exchDIST2\_center-02.jpg



# For exchanging the power distribution box (low voltage) follow the instructions below (see illustr. 5-6):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Disconnect all connectors from the power distribution box.
- 3) Release the mounting screws (A) of the power distribution box.
- 4) Remove the defective power distribution box from the machine and exchange it.
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

# 5.2 Bill Acceptor

# 5.2.1 Bill Acceptor USB Device

### Position in the machine

The bill acceptor USB device is located behind the bill acceptor.



Illustr. 5-7 Position of the bill acceptor USB device

### Function

The bill acceptor USB device is used to connect the bill acceptor to the USB backplane via USB cable.







Illustr. 5-8 Bill Acceptor USB device connectors

The DIP switches are used to select the module address in case of usage of further modules.

### Troubleshooting

Check that all connectors are connected correctly to the bill acceptor USB device. Check the connection between the bill acceptor USB device and the USB backplane.

If an error occurs that cannot be cleared, the bill acceptor can be temporarily deactivated to ensure further game play without the bill acceptor.



# INFORMATION

If the bill acceptor is deactivated, the coin acceptor can be used for the insertion of credits.

Exchange the defective bill acceptor USB device at the next opportunity.



### CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



### Exchanging the bill acceptor USB device

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



### DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

# For exchanging the bill acceptor USB device follow the instructions below (see illustr. 5-7 on page 43):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Take out the hopper from the machine.
- 3) Release the fixing screw of the USB device cover.
- 4) Disconnect the plugs of the bill acceptor USB device.
- 5) Remove the bill acceptor USB device together with the USB device cover from the machine.
- 6) Unscrew the bill acceptor USB device from the USB device cover.
- 7) Exchange the defective bill acceptor USB device.
- 8) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



## 5.2.2 Bill Acceptor UBA

### Position in the machine

See illustr. 2-4 on page 12.

### Function

The bill acceptor ensures the validation of banknotes. The bill acceptor validates, accepts and records all bills or tickets (Ticket In/Ticket Out) inserted and stores them in the stacker box.

The bill acceptor is programmed for the respective national currency.

After insertion of a bill or ticket into the bill slot the respective value is displayed in the CREDIT area of the monitor.

Stacker capacity: about 500 banknotes.

### Components of the bill acceptor UBA



Illustr. 5-9 Components of the bill acceptor UBA

### Troubleshooting

Check that the bill acceptor is fixed correctly in its mounting. Check the connection between the bill acceptor, the USB device and the USB backplane.

If an error occurs that cannot be cleared, the bill acceptor can be temporarily deactivated to ensure further game play without the bill acceptor.



# **INFORMATION**

If the bill acceptor is deactivated, the coin acceptor can be used for the insertion of credits.

Exchange the defective bill acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert.
The exchange of parts is the quickest way to perform a repair if this is eventually necessary.
If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300).
Return the defective component together with a short error description.

### Exchanging the bill acceptor UBA

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



### CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.







Illustr. 5-10 UBA details

Illustr. 5-11 UBA slot

# For exchanging the bill acceptor UBA follow the instructions below (see illustr. 5-9 on page 46, illustr. 5-10 and illustr. 5-11):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Pull down the locking bar (A) of the bill acceptor and simultaneously take out the bill acceptor in forward direction.
- 3) Release both mounting screws (B) fixing the mouthpiece.
- 4) Disconnect the cable for the slot illumination (C).
- 5) Pull the upper guide access lever to open the transfer unit cover and pull out the mouthpiece in upward direction.
- 6) Exchange the defective bill acceptor.
- 7) Insert the mouthpiece into the new bill acceptor and fix it with both mounting screws.
- 8) Connect the cable for the slot illumination from the board to the new bill acceptor.
- 9) Push back the bill acceptor into its retainer until the locking bar engages.
- 10) Turn on the machine and close the Main Door.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.

### Empty stacker - bill acceptor UBA



# WARNING

Great amounts of money may be inside the stacker box! Empty the stacker only in a safe surrounding!



Illustr. 5-12 Collecting bills - UBA

### For the collection of bills follow the instructions below (see illustr. 5-12):

- 1) Open the Door in Door.
- 2) Open the Stacker Door.
- 3) Grab the strap on the front side of the stacker box and pull it out in forward direction.
- 4) Open the stacker box and collect the bills.
- 5) Reinstate the stacker box.

### Bills jammed - bill acceptor UBA



Illustr. 5-13 Removing jammed bills UBA

Depending on the situation encountered, jammed bills must be removed.



### 5.2.3 Bill Acceptor Cashflow SC / SCN - Series

# — AMERICAS SALE

### Position in the machine

See illustr. 2-4 on page 12.

### Function

The bill acceptor ensures the validation of banknotes. The bill acceptor validates, accepts and records all bills or tickets (Ticket In/Ticket Out) inserted and stores them in the stacker box.

The bill acceptor is programmed for the respective national currency.

After insertion of a bill or ticket into the bill slot the respective value is displayed in the CREDIT area of the monitor.

Stacker capacity: about 500 banknotes.

### Components of the bill acceptor Cashflow SC / SCN - series



Illustr. 5-14 Components of the bill acceptor Cashflow SC / SCN - series

### Troubleshooting

Check that the bill acceptor is fixed correctly in its mounting. Check the connection between the bill acceptor, the USB device and the USB backplane.

If an error occurs that cannot be cleared, the bill acceptor can be temporarily deactivated to ensure further game play without the bill acceptor.



### **INFORMATION**

If the bill acceptor is deactivated, the coin acceptor can be used for the insertion of credits.

Exchange the defective bill acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert.
The exchange of parts is the quickest way to perform a repair if this is eventually necessary.
If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300).
Return the defective component together with a short error description.

### Exchanging the bill acceptor Cashflow SC / SCN - series

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



### HARDWARE BILL ACCEPTOR







Illustr. 5-15 Exchanging the bill acceptor Cashflow SC / SCN - series

# For exchanging the bill acceptor Cashflow SC / SCN - series follow the instructions below (see illustr. 5-14 on page 50 and illustr. 5-15):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Press the locking bar on the front of the bill acceptor module upwards and simultaneously pull out the bill acceptor module in forward direction (illustr. 5-15 left side).
- 3) Remove the mouthpiece.
- 4) Disconnect the cable for the slot illumination.
- 5) Exchange the defective bill acceptor.
- 6) Connect the cable for the slot illumination from the board to the new bill acceptor.
- 7) Attach the mouthpiece.
- 8) Push back the bill acceptor module into its retainer until the locking bar engages (illustr. 5-15 right side).
- 9) Turn on the machine and close the Main Door.
- 10) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

### Empty stacker - bill acceptor Cashflow SC / SCN - series



WARNING

Great amounts of money may be inside the stacker box! Empty the stacker only in a safe surrounding!



F\_CashFlow\_Stacker1\_2.jpg / F\_CashFlow\_Stacker2\_2.jpg Illustr. 5-16 Collecting bills - Cashflow SC / SCN - series

#### For the collection of bills follow the instructions below (see illustr. 5-16):

- 1) Open the Door in Door.
- 2) Open the Stacker Door.
- 3) Grab the strap on the front side of the stacker box and pull it out in forward direction.
- 4) Open the stacker box and collect the bills.
- 5) Reinstate the stacker box.

### Bills jammed - bill acceptor Cashflow SC / SCN - series



F\_CashFlow\_Head1\_2.jpg





Illustr. 5-17 Removing jammed bills - Cashflow SC / SCN - series

- 1) Remove the acceptor module from the chassis to open the front sensor area.
- 2) Open the acceptor module and remove the jammed bills.
- 3) Reinsert the acceptor module.





## 5.2.4 Bill Acceptor CashCode ONE

### Position in the machine

See illustr. 2-4 on page 12.

### Function

The bill acceptor ensures the validation of banknotes. The bill acceptor validates, accepts and records all bills or tickets (Ticket In/Ticket Out) inserted and stores them in the stacker box.

The bill acceptor is programmed for the respective national currency.

After insertion of a bill or ticket into the bill slot the respective value is displayed in the CREDIT area of the monitor.

Stacker capacity: about 500 banknotes.

### Components of the bill acceptor CashCode ONE



Illustr. 5-18 Components of the bill acceptor CashCode ONE

### Troubleshooting

Check that the bill acceptor is fixed correctly in its mounting. Check the connection between the bill acceptor, the USB device and the USB backplane.

If an error occurs that cannot be cleared, the bill acceptor can be temporarily deactivated to ensure further game play without the bill acceptor.



# INFORMATION

If the bill acceptor is deactivated, the coin acceptor can be used for the insertion of credits.

Exchange the defective bill acceptor at the next opportunity.





## CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the bill acceptor CashCode ONE

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

#### For exchanging the bill acceptor CashCode ONE follow the instructions below:

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Press the locking bar on the front of the bill acceptor module upwards and simultaneously pull out the bill acceptor module in forward direction (see illustr. 5-18 on page 54).
- 3) Lift the latch to open the transfer unit cover and pull out the mouthpiece in upward direction.
- 4) Disconnect the cable for the slot illumination.
- 5) Exchange the defective bill acceptor.
- 6) Connect the cable for the slot illumination from the board to the new bill acceptor.
- 7) Insert the mouthpiece into the new bill acceptor.
- 8) Push back the bill acceptor module into its retainer until the locking bar engages.
- 9) Turn on the machine and close the Main Door.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



# Empty stacker - bill acceptor CashCode ONE

# WARNING

Great amounts of money may be inside the stacker box! Empty the stacker only in a safe surrounding!



Illustr. 5-19 Collecting bills - CashCode ONE

### For the collection of bills follow the instructions below (see illustr. 5-19):

- 1) Open the Door in Door.
- 2) Open the Stacker Door.
- 3) Grab the strap on the front side of the stacker box and pull it out in forward direction.
- 4) Open the stacker box and collect the bills.
- 5) Reinstate the stacker box.

### Bills jammed - bill acceptor CashCode ONE



Z\_CashCodeONE\_JammedBills\_1.jpg

Illustr. 5-20 Removing jammed bills - CashCode ONE

Depending on the situation encountered, jammed bills must be removed.

## 5.2.5 Bill Acceptor iVIZION

### Position in the machine

See illustr. 2-4 on page 12.

### Function

The bill acceptor ensures the validation of banknotes. The bill acceptor validates, accepts and records all bills or tickets (Ticket In/Ticket Out) inserted and stores them in the stacker box.

The bill acceptor is programmed for the respective national currency.

After insertion of a bill or ticket into the bill slot the respective value is displayed in the CREDIT area of the monitor.

Stacker capacity: about 500 banknotes.

### Components of the bill acceptor iVIZION



Illustr. 5-21 Components of the bill acceptor iVIZION



### Troubleshooting

Check that the bill acceptor is fixed correctly in its mounting. Check the connection between the bill acceptor, the USB device and the USB backplane.

If an error occurs that cannot be cleared, the bill acceptor can be temporarily deactivated to ensure further game play without the bill acceptor.



# **INFORMATION**

If the bill acceptor is deactivated, the coin acceptor can be used for the insertion of credits.

Exchange the defective bill acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the bill acceptor iVIZION

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.





# For exchanging the bill acceptor iVIZION follow the instructions below (see illustr. 5-21 on page 57):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Pull down the transport unit release lever of the bill acceptor and simultaneously take out the bill acceptor in forward direction.
- 3) Release both mounting screws fixing the mouthpiece.
- 4) Disconnect the cable for the slot illumination.
- 5) Press in on the front upper guide access lever and open the transport unit's upper guide.
- 6) Pull out the mouthpiece in upward direction.
- 7) Exchange the defective bill acceptor.
- 8) Insert the mouthpiece into the new bill acceptor and fix it with both mounting screws.
- 9) Connect the cable for the slot illumination from the board to the new bill acceptor.
- 10) Push back the bill acceptor into its retainer until the locking bar engages.
- 11) Turn on the machine and close the Main Door.
- 12) After power-on of the machine a self test is performed.

After its completion the machine is ready for operation.



### Empty stacker - bill acceptor iVIZION



Great amounts of money may be inside the stacker box! Empty the stacker only in a safe

surrounding!



Illustr. 5-22 Collecting bills - iVIZION

### For the collection of bills follow the instructions below (see illustr. 5-22):

- 1) Open the Door in Door.
- 2) Open the Stacker Door.
- 3) Grab the strap on the front side of the stacker box and pull it out in forward direction.
- 4) Open the stacker box and collect the bills.
- 5) Reinstate the stacker box.

### Bills jammed - bill acceptor iVIZION





Depending on the situation encountered, jammed bills must be removed.

## 5.2.6 Bill Acceptor Ardac Elite

### Position in the machine

See illustr. 2-4 on page 12.

### Function

The bill acceptor ensures the validation of banknotes. The bill acceptor validates, accepts and records all bills or tickets (Ticket In/Ticket Out) inserted and stores them in the stacker box.

The bill acceptor is programmed for the respective national currency.

After insertion of a bill or ticket into the bill slot the respective value is displayed in the CREDIT area of the monitor.

Stacker capacity: about 600 banknotes.

### Components of the bill acceptor Ardac Elite



Illustr. 5-24 Components of the bill acceptor Ardac Elite



### Troubleshooting

Check that the bill acceptor is fixed correctly in its mounting. Check the connection between the bill acceptor, the USB device and the USB backplane.

If an error occurs that cannot be cleared, the bill acceptor can be temporarily deactivated to ensure further game play without the bill acceptor.



# **INFORMATION**

If the bill acceptor is deactivated, the coin acceptor can be used for the insertion of credits.

Exchange the defective bill acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the bill acceptor Ardac Elite

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.





# For exchanging the bill acceptor Ardac Elite follow the instructions below (see illustr. 5-24 on page 61):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Take the locking handle on the front of the bill acceptor module and pull out the bill acceptor module.
- 3) Remove the mouthpiece.
- 4) Exchange the defective bill acceptor.
- 5) Attach the mouthpiece.
- 6) Push back the bill acceptor module into its retainer until the locking handle engages.
- 7) Turn on the machine and close the Main Door.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



### Empty stacker - bill acceptor Ardac Elite



# WARNING

Great amounts of money may be inside the stacker box! Empty the stacker only in a safe surrounding!



Illustr. 5-25 Collecting bills - Ardac Elite

### For the collection of bills follow the instructions below (see illustr. 5-25):

- 1) Open the Door in Door.
- 2) Open the Stacker Door.
- Press down the locking latch of the stacker and keep it pressed. Take out the stacker in forward direction.
- 4) Open the stacker box and collect the bills.
- 5) Reinstate the stacker.

### Bills jammed - bill acceptor Ardac Elite



Z\_ArdacElite\_jammed.jpg

Illustr. 5-26 Removing jammed bills - Ardac Elite

Depending on the situation encountered, jammed bills must be removed.

# 5.3 Coin Acceptor

## 5.3.1 Coin Acceptor USB Device (for coin acceptors without USB interface)

### Position in the machine

See illustr. 2-4 on page 12 and illustr. 5-27.



Illustr. 5-27 Position of the coin acceptor USB device

### Function

The coin acceptor USB device is only installed, if the coin acceptor is not assembled with an integrated USB device.

The coin acceptor USB device is used to connect the coin acceptor to the USB backplane via USB cable.



### Positions of the connectors and DIP switches

Illustr. 5-28 Coin acceptor USB device - connectors

The DIP switches are used to select the module address in case of usage of further modules.



# Troubleshooting

Check that all connectors are connected correctly to the coin acceptor USB device. Check the connection between the coin acceptor USB device and the USB backplane.

If an error occurs that cannot be cleared, the coin acceptor can be temporarily deactivated to ensure further game play without the coin acceptor.



# **INFORMATION**

If the coin acceptor is deactivated, the bill acceptor can be used for the insertion of credits.

Exchange the defective coin acceptor USB device at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the coin acceptor USB device

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



# For exchanging the coin acceptor USB device follow the instructions below (see illustr. 5-27 on page 65):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Release the fixing screws of the USB device cover.
- 3) Disconnect all plugs of the coin acceptor USB device.
- 4) Remove the USB device cover from the machine.
- 5) Unscrew both distance bolts.
- 6) Exchange the defective coin acceptor USB device.
- 7) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.







### Position in the machine

See illustr. 2-4 on page 12.

### Function

The coin acceptor ensures the validation of coins. The coin diverter below the coin acceptor sorts coins either into the hopper or the cashbox. For nonrecognition, the coin is ejected.

### Troubleshooting

Check that the coin acceptor is fixed correctly in its mounting.

Check the connection between the coin acceptor, the USB device (if available) and the USB backplane. If an error occurs that cannot be cleared, the coin acceptor can be temporarily deactivated to ensure further game play without the coin acceptor.



### **INFORMATION**

If the coin acceptor is deactivated, the bill acceptor can be used for the insertion of credits.

Exchange the defective coin acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



### Exchanging the coin acceptor NRI G13 MFT

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



### DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.





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Illustr. 5-29 Exchanging the coin acceptor NRI G13 MFT

### For exchanging the coin acceptor NRI G13 MFT follow the instructions below (see illustr. 5-29):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Push the lock lever (A) of the coin acceptor to the left and simultaneously tilt the coin acceptor forward.
- 3) Disconnect the plug connectors between machine and coin acceptor.
- 4) Exchange the defective coin acceptor.
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

### 5.3.3 Coin Acceptor NRI G13 USB

#### Position in the machine

See illustr. 2-4 on page 12.

### Function

The coin acceptor ensures the validation of coins. The coin diverter below the coin acceptor sorts coins either into the hopper or the cashbox. For nonrecognition, the coin is ejected.

#### Troubleshooting

Check that the coin acceptor is fixed correctly in its mounting.

Check the connection between the coin acceptor, the USB device (if available) and the USB backplane. If an error occurs that cannot be cleared, the coin acceptor can be temporarily deactivated to ensure further game play without the coin acceptor.



### INFORMATION

If the coin acceptor is deactivated, the bill acceptor can be used for the insertion of credits.

Exchange the defective coin acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### HARDWARE COIN ACCEPTOR



## Exchanging the coin acceptor NRI G13 USB

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

### For exchanging the coin acceptor NRI G13 USB follow the instructions below

### (see illustr. 5-29 on page 70):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Push the lock lever (A) of the coin acceptor to the left and simultaneously tilt the coin acceptor forward.
- 3) Disconnect the plug connectors between machine and coin acceptor.
- 4) Exchange the defective coin acceptor.
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed.

After its completion the machine is ready for operation.
# 5.3.4 Coin Acceptor MC40

#### Position in the machine

See illustr. 2-4 on page 12.

#### Function

The coin acceptor ensures the validation of coins. The coin diverter below the coin acceptor sorts coins either into the hopper or the cashbox. For nonrecognition, the coin is ejected.

#### Troubleshooting

Check that the coin acceptor is fixed correctly in its mounting.

Check the connection between the coin acceptor, the USB device (if available) and the USB backplane. If an error occurs that cannot be cleared, the coin acceptor can be temporarily deactivated to ensure further game play without the coin acceptor.



# **INFORMATION**

If the coin acceptor is deactivated, the bill acceptor can be used for the insertion of credits.

Exchange the defective coin acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### HARDWARE COIN ACCEPTOR



## Exchanging the coin acceptor MC40

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

#### For exchanging the coin acceptor MC40 follow the instructions below

#### (see illustr. 5-29 on page 70):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Push the lock lever (A) of the coin acceptor to the left and simultaneously tilt the coin acceptor forward.
- 3) Disconnect the plug connectors between machine and coin acceptor.
- 4) Exchange the defective coin acceptor.
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed.

After its completion the machine is ready for operation.

## 5.3.5 Coin Acceptor Condor Premier

#### Position in the machine

See illustr. 2-4 on page 12.

#### Function

The coin acceptor ensures the validation of coins. The coin diverter below the coin acceptor sorts coins either into the hopper or the cashbox. For nonrecognition, the coin is ejected.

#### Troubleshooting

Check that the coin acceptor is fixed correctly in its mounting.

Check the connection between the coin acceptor, the USB device (if available) and the USB backplane. If an error occurs that cannot be cleared, the coin acceptor can be temporarily deactivated to ensure further game play without the coin acceptor.



## INFORMATION

If the coin acceptor is deactivated, the bill acceptor can be used for the insertion of credits.

Exchange the defective coin acceptor at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### HARDWARE COIN ACCEPTOR



# Exchanging the coin acceptor Condor Premier

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

# For exchanging the coin acceptor Condor Premier follow the instructions below

# (see illustr. 5-29 on page 70):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Push the lock lever (A) of the coin acceptor to the left and simultaneously tilt the coin acceptor forward.
- 3) Disconnect the plug connectors between machine and coin acceptor.
- 4) Exchange the defective coin acceptor.
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed.

After its completion the machine is ready for operation.

# 5.4 Hopper

# 5.4.1 Hopper USB Device (for hoppers without USB interface)

#### Position in the machine

The hopper USB device is located behind the hopper (see illustr. 5-30).



Illustr. 5-30 Position of the hopper USB device

#### Function

The hopper USB device is only installed, if the hopper is not assembled with an integrated USB device. The hopper USB device is used to connect the hopper to the USB backplane via USB cable.

# 

## Positions of the connectors and DIP switches

Illustr. 5-31 Hopper USB device - connectors

The DIP switches are used to select the module address in case of usage of further modules.

H A R D W A R E H O P P E R

## Troubleshooting

Check that all connectors are connected correctly to the hopper USB device.

Check the connection between the hopper USB device and the USB backplane.

Check that the hopper and the connectors are fixed correctly in their mounting.

Check that the hopper is pushed all the way in.

Check for jammed coins or dirt in the hopper.

If an error occurs that cannot be cleared, the hopper can be temporarily deactivated to ensure further game play without the hopper.



# INFORMATION

If the hopper is deactivated, the payouts are performed by the ticket printer.

Exchange the defective hopper USB device at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

## Exchanging the hopper USB device

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



# For exchanging the hopper USB device follow the instructions below (see illustr. 5-30 on page 77):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Remove the hopper funnel.
- 3) Pull out the hopper towards the front of the machine.
- 4) Disconnect all plugs of the hopper USB device.
- 5) Unscrew both mounting screws.
- 6) Unscrew both distance bolts.
- 7) Exchange the defective hopper USB device.
- 8) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



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# 5.4.2 Hopper MK4

# Position in the machine

See illustr. 2-4 on page 12.

# Function

Storage of inserted coins controlled by the coin diverter system and payout of wins.

# Troubleshooting

Check that the hopper and the connectors are fixed correctly in their mounting.

Check that the hopper is pushed all the way in.

Check the connection between the hopper, the USB device (if available) and the USB backplane.

Check for jammed coins or dirt in the hopper.

If an error occurs that cannot be cleared, the hopper can be temporarily deactivated to ensure further game play without the hopper.



# INFORMATION

If the hopper is deactivated, the payouts are performed by the ticket printer.

Exchange the defective hopper at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



## Exchanging the hopper MK4

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.





Hopper funnel

#### For exchanging the hopper MK4 follow the instructions below (see illustr. 5-32):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Remove the hopper funnel.
- 3) Pull out the hopper towards the front of the machine.
- 4) Exchange the defective hopper.
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

Illustr. 5-32 Exchanging the hopper

# 5.4.3 Hopper MK4 USB

#### Position in the machine

See illustr. 2-4 on page 12.

#### Function

Storage of inserted coins controlled by the coin diverter system and payout of wins.



Illustr. 5-33 Position of the hopper DIP switches

#### **DIP switches**

The DIP switches are used to select the module address in case of usage of further modules.

#### Troubleshooting

Check that the hopper and the connectors are fixed correctly in their mounting.

Check that the hopper is pushed all the way in.

Check the connection between the hopper, the USB device (if available) and the USB backplane. Check for jammed coins or dirt in the hopper.

If an error occurs that cannot be cleared, the hopper can be temporarily deactivated to ensure further game play without the hopper.



## INFORMATION

If the hopper is deactivated, the payouts are performed by the ticket printer.

Exchange the defective hopper at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300).

Return the defective component together with a short error description.

# Exchanging the hopper MK4 USB

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

## For exchanging the hopper MK4 USB follow the instructions below (see illustr. 5-32 on page 82):

- Open the Main Door and disconnect the machine from the mains. 1)
- Remove the hopper funnel. 2)
- Pull out the hopper towards the front of the machine. 3)
- Exchange the defective hopper. 4)
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

# 5.5 Ticket Printer

# 5.5.1 Ticket Printer Epic 950

#### Position in the machine

See illustr. 2-4 on page 12.

#### Function

The ticket printer enables the cashless payout of credits.

The player may gain a ticket by pressing the CASH button provided on the machine. The ticket can either be redeemed at the cash desk or after insertion of the ticket into the bill slot (Ticket In/Ticket Out) the value of the ticket will be booked onto the machine.

#### Test print - see Software User Manual.



## CAUTION

A test print without paper in the printer may damage the thermal print head!

#### Troubleshooting

Check that the printer is fixed correctly in its mounting. Also check the power supply of the printer and the plug connection to the USB backplane.

If an error occurs that cannot be cleared, the ticket printer can be temporarily deactivated to ensure further game play without the ticket printer.



# INFORMATION

If the ticket printer is deactivated, the payouts are performed by the hopper.

Exchange the defective ticket printer at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



## Exchanging the ticket printer Epic 950

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



Illustr. 5-34 Exchanging the ticket printer Epic 950

# For exchanging the ticket printer Epic 950 follow the instructions below (see illustr. 5-34 and illustr. 5-35 on page 87):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unplug the printer cable.
- 3) Press the release lever (A) underneath the ticket printer unit and remove the ticket printer unit from the machine.

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Illustr. 5-35 Ticket printer Epic 950 assembly

- 4) Remove the tickets from the printer (see page 89).
- 5) Remove the mounting screws with the plain bearings from the ticket printer unit.
- 6) Remove the mounting screws of the metal mouthpiece (B) and remove it.
- 7) Disconnect the cable for the mouthpiece illumination (D).
- 8) Remove the mounting screws of the mouthpiece with LED illumination (C) and remove it.
- 9) If available, remove the ticket tray extender.
- 10) Exchange the defective ticket printer unit.
- 11) Mount the mouthpiece with LED illumination on the new ticket printer unit with both screws (C).
- 12) Connect the cable for the mouthpiece illumination (D).
- 13) Mount the metal mouthpiece on the new ticket printer with both screws (B).
- 14) Install the plain bearings with the mounting screws to the new ticket printer unit.
- 15) If available, install the ticket tray extender to the new ticket printer unit.
- 16) To put the new ticket printer unit into the machine, align the plain bearings underneath the ticket printer unit with the holes of the mounting plate and slide in the ticket printer unit, until the release lever (A) engages.
- 17) Connect the printer cable.
- 18) Switch on the machine.
- 19) Load tickets into the ticket tray (see page 88).
- 20) Close the Main Door.
- 21) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

## Loading tickets - Epic 950





# INFORMATION

When loading a new ticket stack, make sure that there is power to the printer.

The printer's ticket tray is integrated with a guide to direct the ticket into the printer mechanism.



Illustr. 5-36 Loading tickets - Epic 950

#### To load tickets follow the instructions below:

- Open the Main Door. 1)
- Pull out the ticket printer in forward direction until the ticket tray is easily accessible. 2)
- Remove any remaining tickets from the tray (see page 89). 3)
- Load tickets into the ticket tray. Make sure that the black label is facing you. 4)
- Insert the leading ticket into the printer mechanism assembly's insertion guide area. 5) The ticket should be fed about 1/2 inch into the mechanism; at this time the printer automatically completes the feeding process.
- Slide the ticket printer completely into its retainer. 6)
- Close the Main Door. 7)

## **Removing tickets - Epic 950**

There are 2 ways to remove the unused tickets from the printer mechanism assembly:

- a) The first way is to release the ticket cover by lifting and rotating backwards. This will relieve pressure to the platen and tickets can be removed. This also will allow an opening that provides space to clean the print head or to check the printer for jams.
- **b)** The second way is to use the feed button, which will feed out tickets from within the printer mechanism assembly.



Illustr. 5-37 Removing tickets - Epic 950

#### To remove tickets by opening the ticket cover follow the instructions below:

- 1) Open the Main Door.
- 2) Pull out the ticket printer in forward direction until the ticket tray is easily accessible.
- 3) Lift and rotate the ticket cover backwards, towards the rear of the printer.
- 4) Remove all tickets from the ticket path and check for any debris.
- 5) Remove any remaining tickets from the tray.
- 6) Rotate the ticket cover back into the latched (magnetic) position.
- 7) Slide the ticket printer completely into its retainer.
- 8) Close the Main Door.

#### To remove tickets by using the FEED button follow the instructions below:

- 1) Open the Main Door.
- 2) Pull out the ticket printer in forward direction until the ticket tray is easily accessible.
- Separate the ticket currently loaded in the platen assembly from the ticket stack and remove any remaining ticket stack.
- 4) Press the FEED button to eject the ticket.
- 5) Slide the ticket printer completely into its retainer.
- 6) Close the Main Door.



## Status display - Epic 950

The status display reports the status of the printer whenever power is present.



Illustr.	5-38	Epic 950	status	display

CONDITION		LE	Ð	
CONDITION	READY	PAPER	OPEN	FAULT
Printer ready	ON	-	-	-
Ticket cover open	ON	-	ON	-
Chassis open	ON	-	BLINK	-
Ticket out	ON	ON	-	-
Ticket low	ON	BLINK	-	-
Paper jam	ON	-	-	BLINK

## Troubleshooting

ERROR	ERROR DESCRIPTION	TROUBLESHOOTING
Ticket cover open	The ticket cover is open.	Close the ticket cover.
Chassis open	The chassis is open.	Close the chassis.
Ticket out	Results when the printer does not	Load a new ticket stack.
	detect any paper present.	
Ticket low	Printer will run out of tickets soon.	Load a new ticket stack soon.
Paper jam	Results when the printer detects an	Open the printer head and inspect for
	error in the ticket path for presenting	a jammed ticket.
	the ticket to the customer.	

### Firmware upgrade - Epic 950

Occasionally, the printer can require a firmware upgrade. For this purpose, the printer features a firmware download port:



Illustr. 5-39 Firmware-upgrade - Epic 950

#### For upgrading the printer firmware follow the instructions below:

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Slide the inner chassis of the ticket printer out of the outer chassis.
- Connect the printer to the computer by using the download cable (Download Port - see illustr. 5-39).
- 4) For the upgrade procedure the printer needs tickets. If necessary, load a new ticket stack.
- 5) Open the ticket cover.
- Apply power to the printer by switching on the machine, while holding the FEED button on the printer. The "READY" LED will be blinking and the "FAULT" LED should be on solid (see illustr. 5-39).
- 7) Start the firmware download program. The following window will be displayed:

Communications Port: —		Firmware Download
COM1:		Select file to Download
Serial Performance:		Firmware Download File:
Printer Information		_Firmwareversionen\30-05-05\S01218.cbt
Get Printer Info	ormation	1
Boot Loader Rev: PB95	500-1.04	Download Now
Firmware Rev: PBO	OT-1.22	
Flash ID: MX2	9LV320AB	Abort Download

- 8) Select the proper serial port (Communications Port) to allow data transfer to the printer.
- Move the slider "Serial performance" to 115200 baud (do not select higher rates).
   Quit possible warning messages by pressing the OK button.





10) Select the printer symbol in the task menu and activate "XOn/XOff (serial)" by a mouse click.



- 11) Select the **Get Printer Information** button. Subsequently, the current printer information will be displayed below this button.
- 12) Click the Select file to Download button and choose the required firmware download file.
- 13) Confirm with the **Download Now** button to start the firmware upgrade procedure.



# CAUTION

Do NOT power down the machine or disconnect the cable from the PC during the following process!

- 14) The completion of the firmware upgrade procedure will be displayed by a message window.
- 15) Close the ticket cover.
- 16) Turn off the machine.
- 17) Disconnect the download cable from the printer.
- 18) Slide the inner chassis of the ticket printer completely into the outer chassis.
- 19) Switch on the machine.
- 20) Now an automatic test ticket is printed which shows the new configuration.
- 21) The ticket printer is now ready for operation.
- 22) Close the Main Door.

**FRICAS SAI** 

# 5.5.2 Ticket Printer GEN2

#### Position in the machine

See illustr. 2-4 on page 12.

#### Function

The ticket printer enables the cashless payout of credits.

The player may gain a ticket by pressing the CASH button provided on the machine.

The ticket can either be redeemed at the cash desk or after insertion of the ticket into the bill slot (Ticket In/Ticket Out) the value of the ticket will be booked onto the machine.

#### Test print - see Software User Manual.

A test print without paper in the printer may damage the thermal print head!

#### Troubleshooting

Check that the printer is fixed correctly in its mounting. Also check the power supply of the printer and the plug connection to the USB backplane.

If an error occurs that cannot be cleared, the ticket printer can be temporarily deactivated to ensure further game play without the ticket printer.



# INFORMATION

If the ticket printer is deactivated, the payouts are performed by the hopper.

Exchange the defective ticket printer at the next opportunity.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



## Exchanging the ticket printer GEN2

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



Illustr. 5-40 Exchanging the ticket printer GEN2

For exchanging the ticket printer GEN2 follow the instructions below (see illustr. 5-40 and illustr. 5-41 on page 95):

- Open the Main Door and disconnect the machine from the mains. 1)
- 2) Unplug the printer cable.
- 3) Press the release lever (A) underneath the ticket printer unit and remove the ticket printer unit from the machine.



Illustr. 5-41 Mouthpiece of the ticket printer GEN2

- 4) Remove the tickets from the printer (see page 97).
- 5) Remove the mounting screws with the plain bearings from the ticket printer unit.
- 6) Remove the mounting screws of the metal mouthpiece and remove it.
- 7) Disconnect the cable for the mouthpiece illumination (C).
- 8) Remove the mounting screws of the mouthpiece with LED illumination (B) and remove it.
- 9) Exchange the defective ticket printer unit.
- 10) Mount the mouthpiece with LED illumination on the new ticket printer unit with both screws (B).
- 11) Connect the cable for the mouthpiece illumination (C).
- 12) Mount the metal mouthpiece on the new ticket printer with both screws.
- 13) Install the plain bearings with the mounting screws to the new ticket printer unit.
- 14) To put the new ticket printer unit into the machine, align the plain bearings underneath the ticket printer unit with the holes of the mounting plate and slide in the ticket printer unit, until the release lever (A) engages.
- 15) Connect the printer cable.
- 16) Switch on the machine.
- 17) Load tickets into the ticket tray (see page 96).
- 18) Close the Main Door.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.

## Loading tickets - GEN2





# INFORMATION

When loading a new ticket stack, make sure that there is power to the printer. The printer's ticket tray is integrated with a guide to direct the ticket into the printer mechanism.



Illustr. 5-42 Loading tickets - GEN2

#### To load tickets follow the instructions below:

- 1) Open the Main Door.
- 2) Pull out the ticket printer in forward direction until the ticket tray is easily accessible.
- 3) Remove any remaining tickets from the tray (see page 97).
- 4) Load tickets into the ticket tray. Make sure that the black label is facing you.
- 5) Insert the leading ticket into the printer mechanism assembly's insertion guide area. The ticket should be fed about 1/2 inch into the mechanism; at this time the printer automatically completes the feeding process.
- 6) One or two test tickets are printed. Remove them when the printer has finished.
- 7) Slide the ticket printer completely into its retainer.
- 8) Close the Main Door.

#### **Removing tickets - GEN2**

There are 2 ways to remove the unused tickets from the printer mechanism assembly:

- a) The first way is to release the ticket cover by lifting and rotating backwards. This will relieve pressure to the platen and tickets can be removed. This also will allow an opening that provides space to clean the print head or to check the printer for jams.
- **b)** The second way is to use the feed button, which will feed out tickets from within the printer mechanism assembly.



Illustr. 5-43 Removing tickets - GEN2

To remove tickets by opening the ticket cover follow the instructions below:

- 1) Open the Main Door.
- 2) Pull out the ticket printer in forward direction until the ticket tray is easily accessible.
- Open the ticket cover by pressing the platen release lever. The spring-loaded cover opens, exposing the ticket path.
- 4) Remove all tickets from the ticket path and check for any debris.
- 5) Remove any remaining tickets from the tray.
- 6) Close the ticket cover.
- 7) Slide the ticket printer completely into its retainer.
- 8) Close the Main Door.

To remove tickets by using the FEED button follow the instructions below:

- 1) Open the Main Door.
- 2) Pull out the ticket printer in forward direction until the ticket tray is easily accessible.
- Separate the ticket currently loaded in the platen assembly from the ticket stack and remove any remaining ticket stack.
- 4) Press the **FEED** button to eject the ticket.
- 5) Slide the ticket printer completely into its retainer.
- 6) Close the Main Door.



## **Status display - GEN2**

The status display reports the status of the printer whenever power is present.



Illustr. 5-44 GEN2 - Status Display

CONDITION		LE	D	
CONDITION	READY	PAPER	OPEN	FAULT
Printer ready	BLINK	-	-	-
Ticket out	-	ON	-	-
Ticket cover open	-	-	ON	-
Missing black label	-	ON	-	-
Paper jam	ON	-	-	BLINK

## Troubleshooting

ERROR	ERROR DESCRIPTION	TROUBLESHOOTING
Ticket out	Results when the printer does not	Load a new ticket stack.
	detect any paper present.	
Ticket cover open	The ticket cover is open.	Close the ticket cover.
Black label on tickets	Results when the inserted ticket type is	Insert the correct kind of paper or
missing	the wrong kind of paper or if the paper	insert the ticket stack in correct
	was inserted in the wrong direction (so	direction.
	the black label is rotated 180°).	
Ticket low	Printer will run out of tickets soon.	Load a new ticket stack soon.
Paper jam	Results when the printer detects an	Open the printer head and inspect for
	error in the ticket path for presenting	a jammed ticket.
	the ticket to the customer.	

### Firmware upgrade - GEN2

Occasionally, the printer can require a firmware upgrade. For this purpose, the printer features a firmware download port:

HARDWARE TICKET PRINTER



# CAUTION

To run a firmware upgrade procedure, the program "Install FLI Download V2000016BetaG.exe" (or a later version) has to be installed on the PC. Make sure that the firmware file (.VFX) and the corresponding template file (.Slf) are also located in the installation folder. The printer must be loaded with tickets.



Illustr. 5-45 Firmware download port GEN2

#### For upgrading the printer firmware follow the instructions below:

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) <u>Option 1:</u>

Slide the inner chassis of the ticket printer out of the outer chassis. Connect the printer to the computer by using the download cable (Download Port - see illustr. 5-45).

Option 2:

Disconnect the printer cable from the USB backplane and connect it to the computer (probably by using an adapter- or extension cable, if necessary).

- 3) For the upgrade procedure the printer needs tickets. If necessary, load a new ticket stack.
- 4) Connect the machine to the mains.
- 5) Start the download program ("FLI Downloader V2000016BetaG.exe") and set up the required preferences:



6) Click the **Preferences** toolbar button to display the Auto Download Preferences dialogue:

10

44



	ref.dat	
Save to File Open File		
ap Your Preferences elect Download Files to Use		
RS232	Setup Communications Select Comm Ports For Auto Mode	
Vise Factory FLUSHTCL.A		
Vise Factory Printer Is Flushed Answer	COME	
Z Use st200app.bin		
Use Supplemental Load File	, and	
Reload If Same Version is Detected in Printer	Appy	
Quick Select Select Firmware		
Jsing Eirmware Version GBPOBNV42	J9600	

- 7) Select the serial port to which the printer is connected.
- 8) Click the **Apply** button to confirm your selection.
- 9) Click the Select Firmware button and open the respective firmware file (.VFX).
- 10) The version number of the selected firmware file is displayed in the "Auto Download Preferences" window.
- 11) Click the **Save to File** toolbar button to save these preferences and use them each time you access the Download Utility.
- 12) Click the Back to Prior toolbar button to return to the main window of the Download Utility.

# **CAUTION**Do NOT power down the machine or disconnect the cable from the PC during the following process!



13) Select the **Start Download** button (tab Comm 1) to start the firmware upgrade procedure. The state area of the main window updates to display the status of the download in progress:





14) After the firmware upgrade procedure is completed, the printer prints a ticket showing the firmware version and ticket package. Compare the firmware version with the version displayed on the screen. If the version numbers match, the download was successful.



15) Click the Abort Download button to complete the process.



# INFORMATION

If you would like to view the status of the printer download click anywhere in the state area of the main window:

PrinterStatusForr Com 1 Printer Status Raw Data: SI0IGRRUS Break->0 Frame->0 R	n SNV40 @ @ @ @ @ Q P xOverrun->0 TxFull->	l 0 Overrun->0 RxParity->2	Eleset Printer)
Printer is Idle. Head is OK. Print Region Data OK. Command OK. Printer Online. Paper Path OK. Ready To Receive.	System OK. Voltage is OK. Library Load OK. Print Libraries OK. Supply Index OK. Paper Full. Printer Pocketed.	Platten Engaged. Temperature is OK. Buffer Space OK. Chute Clear. TCL Print Mode. Barcode Clear. Last Batch Job was:	Paper Loaded. Library Reference OK. Job Memory OK. Flash OK. Cutter OK. At Top of Form.
Printer Library LI5 templates:10,1,2,3,4	.5.6.7.8.9A,C		

- 16) Turn off the machine.
- 17) <u>Option 1:</u> Disconnect the download cable from the ticket printer and slide the inner chassis of the ticket printer completely into the outer chassis.

Option 2: Disconnect the printer cable from the computer and reconnect it to the USB backplane.

- 18) Switch on the machine. The ticket printer is now ready for operation.
- 19) Close the Main Door.

#### HARDWARE TICKET PRINTER



# Firmware upgrade - GEN2 Universal

Occasionally, the printer can require a firmware upgrade. For this purpose, the printer features a firmware download port:



# CAUTION

To run a firmware upgrade procedure, the FL DFU software has to be installed on the PC. The printer must be loaded with tickets.



Illustr. 5-46 Firmware download port GEN2 Universal

#### For upgrading the printer firmware follow the instructions below:

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Slide the inner chassis of the ticket printer out of the outer chassis.
- Connect the printer to the computer by using a standard USB A to B cable (Download Port - see illustr. 5-46).
- 4) For the upgrade procedure the printer needs tickets. If necessary, load a new ticket stack.
- 5) Connect the machine to the mains.



- 6) Start the download program (FLDFU.exe). If the printer is connected, it is listed in the Device List area.
- 7) Click the Select FIRMWARE button in the main window.

#### HARDWARE TICKET PRINTER

- 8) Locate and select the respective firmware file (.dfu) in the Firmware Upgrade window.
- 9) Click the **Open** button.

IV, FutureLogic Device Firmware Upgrade Application V Help Options	2.2.3				
Name FLI-DFU 1.1, v09 is functional (\Device\US8PD0-11)	Mode VID PIE DFU 0x16/5 0x20	BCD(ID)	Progress	Pro	gress indicator
Select FIRMWARE E:\Doris Leitgeb Daten\D	)rucker/FutureLogic/Firmware/GEN	2U\Standard26mmBarcod	e\GURPOR014\GURPOR014.dl	Pat	h and version number
Full Upgrade (Recommended) Download Application Only				11	
Gen2U printer detected Flushing applicationPlease Vait Detaching Device \Device\USBPDO-10 Please wait till device comes back in Trinter came back in RUN mode sem	n BSP mode ding DFU_DETACH again				

10) The path and version number of the selected file is displayed next to the Select FIRMWARE button.



11) Click the **Download Application Only** button to start the firmware upgrade procedure. The progress bar in the Device List area displays the status of the download in progress.

ne DFU 1.1, v09 is functional (\Device\USBPDO-11)	Mode RUN	VID 0x16/5	PID 0x203	BCD(ID) 1	Progress
Select FIRMWARE ENDois Leitgeb DatenV	)rucker\FutureLo	gic\Fimmare'	\gen2U\s	tandard26mm8arcode	GURPOR014\GURPOR014.dlu
Full Upgrade (Recommended)					
FullUpgrade (Recommended) Download Application Only 20 printer detected					
FullUpgrade [Recommended] Download Application Univ 2U printer detected hing applicationPlease Vait ching Device \Device\USBPDO-10 iter came back in RUN modesen ching Device \Device\USBPDO-11 ting download	n BSP mode ding DFU_DI	ETACH ag	ain		

- 12) After the firmware upgrade procedure is completed, the printer automatically reboots.
- 13) Turn off the machine.
- 14) Switch on the machine while pressing the **FEED** button on the printer (see illustr. 5-46 on page 102).
- 15) The printer prints a ticket showing the firmware version. Compare the firmware version with the version displayed on the screen. If the version numbers match, the download was successful.
- 16) Disconnect the USB cable from the printer.
- 17) Slide the inner chassis of the ticket printer completely into the outer chassis.
- 18) The ticket printer is now ready for operation.
- 19) Close the Main Door.



# 5.6 Mechanical Meters

## Position in the machine

See illustr. 2-4 on page 12.

## Function

These mechanical meters represent the respective values of the machine accounting. Because of the variety of country-specific configurations the following illustration shows the "Novomatic Standard" as an example.

## **Example: Novomatic Standard**



## Troubleshooting

Check the connectors of the meter unit.

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



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### HARDWARE MECHANICAL METERS



## Exchanging the mechanical meters

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



Illustr. 5-47 Exchanging the mechanical meters

#### For exchanging the mechanical meters follow the instructions below (see illustr. 5-47):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Disconnect the connectors (A) from the USB kpanel and the meter board and if available from the coin acceptor USB device (see page 65).
- 3) Release the 4 mounting screws (B) of the meter cover and move the meter cover to the right.
- 4) Release the 4 mounting screws of the meter board.
- 5) Remove the meter board and exchange it.
- 6) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.


# 5.7 Monitors and Touchscreen

### 5.7.1 Monitors

### Position in the machine

See illustr. 2-4 on page 12.

### Туре

1 x 24" LCD / TFT with touchscreen (lower monitor), 2 x 24" LCD / TFT (middle and upper monitor)

### Function

The monitors show the game play, the error messages and the bookkeeping and configuration menus. In an error case the respective message appears (see Software User Manual).

### Troubleshooting

Check that the respective monitor is fixed correctly in its mounting. Check both connectors of this monitor, VGA cable and power supply cable. If any defects cannot be repaired, the defective monitor must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



# 5.7.2 Exchanging the Monitors

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

### Exchanging the lower monitor



### WARNING

The monitor surface may be very hot. Wait until the monitor is cooled down before you exchange it.



Illustr. 5-48 Exchanging the lower monitor

#### For exchanging the lower monitor follow the instructions below (see illustr. 5-48):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Release the cable ties.
- 3) Disconnect all plugs and cable connectors of the monitor.
- 4) Loosen the mounting screws of the monitor.
- 5) Grab the monitor unit with both hands and take it out of its retainer.
- 6) Lay down the monitor unit in a clean place, possibly covered with a soft cloth.
- 7) Release the mounting screws of the monitor unit and screw them onto the new monitor unit.
- 8) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



### INFORMATION

After a new monitor unit with touchscreen has been installed and before use, the touchscreen must be calibrated (see Software User Manual).



### Exchanging the upper monitor



# WARNING

The monitor surface may be very hot. Wait until the monitor is cooled down before you exchange it.



Illustr. 5-49 Exchanging the upper monitor

### For exchanging the upper monitor follow the instructions below (see illustr. 5-49):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Release the cable ties.
- 3) Disconnect all plugs and cable connectors of the monitor.
- 4) Loosen the mounting screws of the monitor.
- 5) Grab the monitor unit with both hands and take it out of its retainer.
- 6) Lay down the monitor unit in a clean place, possibly covered with a soft cloth.
- 7) Release the mounting screws of the monitor unit and screw them onto the new monitor unit.
- 8) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.

### Exchanging the middle monitor



WARNING

The monitor surface may be very hot. Wait until the monitor is cooled down before you exchange it.



Illustr. 5-50 Exchanging the middle monitor

#### For exchanging the middle monitor follow the instructions below (see illustr. 5-50):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Tilt the middle monitor unit forward by lifting and turning it.
- 3) Release the cable ties.
- 4) Disconnect all plugs and cable connectors of the monitor.
- 5) Hold the monitor unit in this position and release the mounting screw of the knotted link chain.
- 6) Grab the monitor unit with both hands and take it out of its retainer.
- 7) Lay down the monitor unit in a clean place, possibly covered with a soft cloth.
- 8) Release the mounting screws of the brackets and mount them onto the new monitor unit.
- 9) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



# 5.7.3 Adjusting the Monitor

At the back side of the monitor, a PCB is attached for the adjustment of brightness, contrast, colour and geometry of the picture.

Press the SW2 button to open the menu. Select the setting you want to change, by using the SW2 button again or the SW1 button. Use the SW3 (-) and SW4 (+) buttons to adjust the setting.



1	SW3	Value down	decreases the value of the selected item
2	SW4	Value up	increases the value of the selected item
3	SW5	Power switch	turns the monitor on and off
4	SW1	Previous item	selects the previous item to be adjusted
5	SW2	Next item	opens the main menu and selects the next item to be adjusted

# 5.7.4 Touchscreen Controller

### Position in the machine



Touchscreen controller (behind the monitor cover)

Illustr. 5-51 Position of the touchscreen controller

### Function

The lower monitor installed in the machine is a touchscreen allowing the operation of the machine by touching the functions indicated on the screen. The touchscreen allows players to place or cancel bets, resp. hold cards (dependent on the game) and change the on screen language by selecting the respective functions on the monitor. Additionally, the touchscreen facilitates easy menu operation and access to accounting statistics for the attendant.

### Troubleshooting

If the touchscreen does not react to a touch, the touchscreen or the touchscreen controller is damaged. Check the display for damage. If the display surface is damaged, the entire monitor unit

(monitor, touchscreen and touchscreen controller) has to be exchanged as described above.

If the display is not damaged, check the connectors of the touchscreen controller.

If the touchscreen controller is powered on, an automatic touchscreen reset should be initiated by opening and closing the Main Door.

If the touchscreen reset was not successful and the touchscreen still does not function properly, exchange the defective touchscreen controller.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### HARDWARE MONITORS AND TOUCHSCREEN



### Exchanging the touchscreen controller

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



### DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.





Illustr. 5-52 Exchanging the touchscreen controller

For exchanging the touchscreen controller follow the instructions below (see illustr. 5-52):

1) Open the Main Door and disconnect the machine from the mains.



## WARNING

The monitor surface may be very hot. Wait until the monitor is cooled down before you exchange the touchscreen controller.

- 2) Release both mounting screws (A), disconnect the plug connections and remove the touchscreen controller from the monitor unit.
- 3) Exchange the defective touchscreen controller.
- 4) To reinstall, follow the above instructions in reverse order.
- 5) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.



### INFORMATION

After a new touchscreen or touchscreen controller has been installed and before use, the touchscreen must be calibrated (see Software User Manual).



# 5.8 Electronic Unit

### 5.8.1 COOLFIRE II Motherboard

### Position in the machine

See illustr. 2-4 on page 12.

### Function

Game control and drive of the components. The main electronics of the machine consists of the COOLFIRE II motherboard and several components.

**Connectors and components - COOLFIRE II** 

# Connection to USB backplane Connection to USB backplane DIP switch Kernel module Connection of USB dongle (game selector) EEPROM VGA cards Connection of Dynamic game software memory F\_35500775.jpg Volume control Reset

#### Illustr. 5-53 Connectors and components of the COOLFIRE II motherboard





### **DIP** switch

The DIP switch is used to perform a RAM Clear. See Software User Manual for RAM Clear procedure.

#### EEPROM

The configuration of the machine is stored in a serial EEPROM.

#### **VGA** cards

For graphic cards there are two extension slots available. Each graphic card controls up to two monitors, this means that up to 4 monitors are supported by the main electronic unit. The connectors for the monitors are located on the USB backplane.

#### **Dynamic memory**

This memory module is used as the main storage which contains the currently running gaming program.

#### **Kernel modules**

Both 80 pins SIMM sockets are provided for the flash memory SIMM modules to be plugged in. One of these sockets is used for the system software, the second socket is reserved for future extensions.

#### Connection of the USB dongle (Game Selector)

The USB dongle assures security and time limitation for the game. The dongle activates only certain, licensed games in the machine. These are only activated for a limited time period. The DIP switch on the dongle is used to select the module address in case of usage of further dongles.

#### Connection of the game software

A special compact flash card is used to store the gaming program. These compact flash cards include an implemented protection to avoid alterations of the content.

#### **Volume control**

Use these buttons to adjust the volume of the acoustic signals of the machine.

#### Reset

The reset function resets the COOLFIRE II motherboard to its initial state and restarts the gaming program.

### Monitoring LEDs (front panel)

10A	10B	100	10D	10E	10F		
LED D	AUTO	LED	green	+12V	DC		
			aroon			UFF	
	IUB	LED	green	+5V I			
			rod	1 5			
		LED	ieu	+1.5			
ם חם ו			rod	11.05		UFF	
		LED	ieu	+1.20			
LED D	10E	I FD	red	not u	sed		
LED D	10F	LED	red	OS a	ctivity	blinking	
					.,	permanent lit	or OFF

### Monitoring LED (on board)



Illustr. 5-54 Position of LED D12 on the COOLFIRE II motherboard

LED D12 LED red CF card lit or blinking during activity



### Troubleshooting

If the displayed error messages of the COOLFIRE II motherboard (main electronic unit) cannot be cleared, the defective main electronic unit COOLFIRE II must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the main electronic unit COOLFIRE II

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



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Illustr. 5-55 Exchanging the COOLFIRE II motherboard

# For exchanging the main electronic unit COOLFIRE II follow the instructions below (see illustr. 5-55):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock (A).
- 3) Pull strongly on both grips and remove the main electronic unit.
- 4) Exchange the defective main electronic unit.



### INFORMATION

When mounting the main electronic unit, make sure that the connectors lock correctly into the USB backplane.

- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

#### 6 HARDWARE ELECTRONIC UNIT

### Exchange of the components



### Exchange of the EEPROM

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock and take out the main electronic unit.
- 3) Remove the existing EEPROM by pulling it straight up.
- 4) EEPROM and its socket have a notch on one side. When installing the EEPROM ensure that the notch on the EEPROM and the notch on the socket both face the same direction!



# CAUTION

Note the insertion direction!



Illustr. 5-56 Correct insertion position of the EEPROM

- 5) Insert the new EEPROM.
- 6) Reinstall the main electronic unit.

### Exchange of the VGA cards

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock and take out the main electronic unit.
- 3) Press both holding clips of the graphic card on the left and the right sideways.
- 4) Remove the graphic card from its socket by pulling it upwards.
- 5) Insert the new graphic card in upright position into its plug-in socket until both holding clips engage.
- 6) Reinstall the main electronic unit.

### Exchange of the kernel modules

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock and take out the main electronic unit.
- 3) Press both holding clips of the kernel module sideways.
- 4) Keep the kernel module tilted and pull it upwards.
- 5) Insert the new kernel module in tilted position into the plug-in socket and tilt the module backwards until both holding clips engage.
- 6) Reinstall the main electronic unit.

### Exchange of the USB dongle (Game Selector)

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock and take out the main electronic unit.
- 3) Remove the existing dongle.
- 4) Plug in the new dongle.
- 5) Reinstall the main electronic unit.

### Exchange of the game software

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock and take out the main electronic unit.
- 3) Pull the existing compact flash card out of its plug-in socket sideways.
- 4) Insert the new compact flash card into its plug-in socket.
- 5) Reinstall the main electronic unit.



# INFORMATION

After the components have been exchanged, a RAM Clear may be required (see Software User Manual).



# 5.8.2 Firefox

### Position in the machine

See illustr. 2-4 on page 12.

### Function

The main electronics of the machine consists of the Firefox motherboard and several components. The Firefox electronic unit represents the central processing unit for all components installed in the machine and ensures the control of the game play.

### **Connectors and components - Firefox**



Illustr. 5-57 Connectors and components of the Firefox motherboard

- 1 Connection to USB backplane
- 2 PCle x4 slot
- 3 PCI slot
- 4 PCI VGA card slot
- 5 PCIe x16 slot
- 6 PS/2 port
- 7 Compact flash socket (game software)
- 8 Power connector
- 9 USB 23 port (Disk On Chip)

10 USB 0 port (connect the USB memory module to the port located on top of USB 0)

ERICAS SAI

- 11 USB 1 port (connect the USB game selector to the port located on top of USB 1)
- 12 System fan connector
- 13 LAN port
- 14 SATA 0/1 ports
- 15 Reset button
- 16 USB 6 port (camera modul optional)
- 17 DDR2 socket (memory module)



### **Connectors and components - Firefox 2**





Illustr. 5-58 Connectors and components of the Firefox 2 motherboard

- 1 AGI-PCIe x4 slot
- 2 Connection to USB backplane
- 3 AGI-PCIe x4 slot
- 4 Power connector
- 5 USB 2.0 port
- 6 USB 2.0 port
- 7 PS/2 port
- 8 Extension pins for USB 2.0 ports
- 9 RAM clear button
- 10 CFast connector
- 11 PCIe x16 slot

- 12 SATA port
- 13 AGI-PCI slot
- 14 AGI-PCIe x4 slot
- 15 CFast connector
- 16 Compact flash socket
- 17 RAM SO-DIMM DDR3
- 18 LAN port
- 19 USB 2.0 port
- 20 Power LED
- 21 Reset button
- 22 USB 2.0 port



### Troubleshooting

If the displayed error messages of the Firefox motherboard (main electronic unit) cannot be cleared, the defective main electronic unit Firefox must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

### Exchanging the main electronic unit Firefox

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

# For exchanging the main electronic unit Firefox follow the instructions below (see illustr. 5-55 on page 123):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock.
- 3) Pull strongly on both grips and remove the main electronic unit.
- 4) Exchange the defective main electronic unit.



# INFORMATION

When mounting the main electronic unit, make sure that the connectors lock correctly into the USB backplane.

- 5) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



# 5.9 USB Backplane

### Position in the machine

The USB backplane is mounted on the back wall of the machine, behind the main electronic unit, see illustr. 2-4 on page 12.

### Function

The USB backplane has the following 2 functions:

- 1) Voltage supply for the main electronic unit and peripheral equipment.
- 2) Transmission of the complete communication between the main electronic unit and all peripheral devices inside the machine.

The communication between the peripheral equipment and the USB interface may be realised with an independent USB device for each peripheral unit.



# 5.9.1 Positions of the Connectors

Illustr. 5-59 USB backplane - connectors

- 1 VGA1-A (J25)
- 2 Door Logger 1 (J27)
- 3 Door Logger 2 (J12)
- 4 VGA2-A (J22))
- 5 VGL main electronic unit (J5)
- 6 COM 2 (J16)
- 7 VGA1-B (J40)
- 8 COM 3 (J17)
- 9 VGA2-B (J41)
- **10** COM 1 (J43)
- 11 COM 0 (J3)
- 12 Subwoofer (J42)
- 13 No function (J4)

- 14 VGL main electronic unit (J6)
- 15 Temperature sensor (J183)
- 16 Speaker (J19)
- 17 Speaker (J20)
- **18** Power supply (J26)
- **19** No function (J14)
- 20 2 USB ports +
  - 1 Ethernet port (J11)
- 21 Power Supply peripheral devices
- 22 USB ports peripheral devices
- 23 No function (J23)



### 5.9.2 Fuses and LEDs



Illustr. 5-60 USB backplane - fuses and LEDs

### Input fuse-protection for +24V DC and for +5V DC

Fuse F1		blade fuse 3A	
LED D3	+24V DC	LED green	OK
		LED red	not OK
LED D25	+5V DC	LED red	OK
		LED off	not OK

### Input fuse-protection for +12V DC

Fuse F2	-	blade fuse 5A	
LED D29	+12V DC	LED green	OK
		LED off	not OK

### Input fuse-protection for +24V DC

(supply voltage connector on the USB backplane)
Fuse F3 blade fuse 10A
LED D30 +24V DC LED green OK
LED off not OK

### Output fuse-protection for +12V DC

(supply voltage connector on the USB backplane)
Fuse F4 blade fuse 10A
LED D27 +12V DC LED yellow OK
LED off not OK



 LED D34
 LED D26
 LED D24
 LED D28

 Illustr. 5-61
 USB backplane position of LEDs

### Status Signal HUB:

LED D7	LED red	HUB1 enabled
LED D18	LED green	HUB1 disabled
LED D5	LED red	HUB1 configured
LED D16	LED green	HUB1 non configured
LED D10	LED red	HUB2 enabled
LED D21	LED green	HUB2 disabled
LED D8	LED red	HUB2 configured
LED D20	LED green	HUB2 non configured

### 5 HARDWARE USB BACKPLANE

### **Status Signal Ethernet:**

LED D34	LED green	link "on"
	LED off	no link
LED D26	LED yellow	collision "on"
	LED off	no collision
LED D24	LED red	100BT
	LED off	10BT
LED D28	LED yellow	full duplex
	LED off	half duplex

### Status Signal USB:

LED D36	LED green	OK
	LED blinking	error
LED D6	LED red	power
	LED off (40msec)	communication
LED D17	LED yellow	programming
	LED off	OK



# 5.9.3 PIN and Connector Assignment

Connector J1, J13, J29, J30, J31, J32, J33, J34, J35, J36, J37, J38, J172								
USB Power supply connector (4 pin Mini Fit Jr. header)								
PIN	FUNCTION	— Pin 3						
01	+24V_USB							
02	+12V_EX1							
03	GND							
04	GND	<b> 2</b>   1 }						
		Pin 1						

Connector J2, J7, J8, J9, J10								
Dual USB	Dual USB port							
PIN	FUNCTION							
A1	+5V_Dx_Dy							
A2	BP_D-x	B1 B4						
A3	BP_D+y							
A4	GND_Dx_Dy							
B1	+5V_Dx_Dy							
B2	BP_D-y							
B3	BP_D+y							
B4	GND_Dx_Dy							

Connector J3								
COM 0 (8	COM 0 (8 pin Mini Fit header)							
PIN	FUNCTION	— Pin 5						
01	+5V_EX2							
02	GND	8 7 6 5						
03	+12V_EX1							
04	GND							
05	TXD1							
06	nRTS1	Pin 1						
07	RXD1							
08	nCTS1							

VGL 1 (96 pin DIN 41612 female connector)



PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
A01	GND	B01	GND	C01	GND
A02	GND	B02	VSYNC_OUT1	C02	HSYNC_OUT1
A03	GND	B03	G_OUT1	C03	B_OUT1
A04	GND	B04	R_OUT2	C04	R_OUT1
A05	GND	B05	B_OUT2	C05	G_OUT2
A06	GND	B06	HSYNC_OUT2	C06	VSYNC_OUT2
A07	+5V_NGC	B07	VGA1_TMDS-CLK	C07	VGA1_TMDS-D0
A08	GND	B08	VGA1_TMDS+CLK	C08	VGA1_TMDS+D0
A09	+5V_NGC	B09	VGA1_TMDS-D1	C09	VGA1_TMDS-D2
A10	GND	B10	VGA1_TMDS+D1	C10	VGA1_TMDS+D2
A11	VGA1_DDC_DATA	B11	VGA1_TMDS-D3	C11	VGA1_TMDS-D4
A12	VGA1_DDC_CLK	B12	VGA1_TMDS+D3	C12	VGA1_TMDS+D4
A13	VGA1_HPD	B13	VGA1_TMDS-D5	C13	VGA2_TMDS-CLK
A14	+5V_NGC	B14	VGA1_TMDS+D5	C14	VGA2_TMDS+CLK
A15	GND	B15	VGA2_TMDS-D0	C15	VGA2_TMDS-D1
A16	+5V_NGC	B16	VGA2_TMDS+D0	C16	VGA2_TMDS+D1
A17	GND	B17	VGA2_TMDS-D2	C17	VGA2_TMDS-D3
A18	VGA2_DDC_DATA	B18	VGA2_TMDS+D2	C18	VGA2_TMDS+D3
A19	VGA2_DDC_CLK	B19	VGA2_TMDS-D4	C19	VGA2_TMDS-D5
A20	VGA2_HPD	B20	VGA2_TMDS+D4	C20	VGA2_TMDS+D5
A21	+5V_NGC	B21	+2.5V DC	C21	GND
A22	CF_LOCK1	B22	TX-	C22	RX-
A23	CF_LOCK2	B23	TX+	C23	RX+
A24	+3.3V DC	B24	NW_TXD	C24	nNW_RTS
A25	GND	B25	ETXD2	C25	nERTS2
A26	+3.3V DC	B26	NW_RXD	C26	nNW_CTS
A27	GND	B27	ERXD2	C27	nECTS2
A28	+3.3V DC	B28	HUB_6MHZ	C28	nHUB_I/O_RESET
A29	GND	B29	nERTS1	C29	nECTS1
A30	+3.3V DC	B30	ERXD1	C30	ETXD1
A31	GND	B31	EXT_D-2	C31	EXT_D+2
A32	+3.3V DC	B32	EXT_D-1	C32	EXT_D+1



VGL 2 (96 pin DIN 41612 female connector)



PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
A01	ETXD3	B01	GND	C01	B_OUT3
A02	nERTS3	B02	GND	C02	G_OUT3
A03	ERXD3	B03	CRT1_DDC_DATA	C03	R_OUT3
A04	nECTS3	B04	CRT1_DDC_CLK	C04	HSYNC_OUT3
A05	GND	B05	CRT2_DDC_DATA	C05	VSYNC_OUT3
A06	+5V_NGC	B06	CRT2_DDC_CLK	C06	GND
A07	GND	B07	GND	C07	B_OUT4
A08	GND	B08	GND	C08	G_OUT4
A09	GND	B09	CRT3_DDC_DATA	C09	R_OUT4
A10	GND	B10	CRT3_DDC_CLK	C10	HSYNC_OUT4
A11	CHA_LOUT	B11	CRT4_DDC_DATA	C11	VSYNC_OUT4
A12	CHB_LOUT	B12	CRT4_DDC_CLK	C12	VOUT_EX_SEN
A13	GND	B13	E_100MB-	C13	E_YL-
A14	GND	B14	E-FDUPLEX+	C14	E_GR-
A15	+5V_NGC	B15	+5V_NGC	C15	+5V_NGC
A16	+5V_NGC	B16	+5V_NGC	C16	+5V_NGC
A17	GND	B17	GND	C17	GND
A18	GND	B18	GND	C18	GND
A19	GND	B19	GND	C19	nECTS4
A20	ETXD4	B20	nERTS4	C20	ERXD4
A21	+12V DC	B21	+12V DC	C21	+12V DC
A22	GND	B22	GND	C22	GND
A23	GND	B23	GND	C23	LOGIC_DOOR_DETECT
A24	GND	B24	GND	C24	GND
A25	+24V DC	B25	+24V DC	C25	+24V DC
A26	+24V DC	B26	+24V DC	C26	+24V DC
A27	+24V DC	B27	+24V DC	C27	+24V DC
A28	GND	B28	GND	C28	GND
A29	GND	B29	GND	C29	GND
A30	GND	B30	GND	C30	GND
A31	nPFI	B31	MU/SB_L	C31	SV_LOUT
A32	GND	B32	N.C.	C32	SV_ROUT



Ethernet (RJ45) / dual USB combo

RJ45		
PIN	FUNCTION	
1	TX+	
2	TX-	
3	RX+	
4	N.C.	
5	N.C.	
6	RX-	B1 B4
7	N.C.	
8	N.C.	A1 A4
USB		
PIN	FUNCTION	
A1	+5V_D3_D4	
A2	BP_D-3	
A3	BP_D+3	
A4	GND_D3_D4	
B1	+5V_D3_D4	
B2	BP_D-4	
B3	BP_D+4	
B4	GND D3 D4	

Connecto	Connector J12		
Door Logg	er 2 (16 pin male connector)		
PIN	FUNCTION		
01	KEY_GND		
02	KEY_GND	Pin 1 Pin 2	
03	IN_11		
04	IN_12		
05	IN_13		
06	IN_14		
07	IN_15		
08	OUT_2		
09	OUT_3		
10	OUT_4		
11	OUT_5		
12	OUT_6		
13	OUT_7		
14	OUT_8		
15	+12V_L		
16	+12V_L		

Connect	Connector J16		
COM 2 (1	0 pin male connector)		
PIN	FUNCTION	$\nabla$ — Pin 1	
01	N.C.		
02	N.C.		
03	RXD3		
04	nRTS3		
05	TXD3	Pin 2	
06	nCTS3		
07	N.C.		
08	+5V_EX3		
09	GND		
10	N.C.		



Connect	Connector J19, J20		
Loudspea	Loudspeaker (4 pin Micro Fit header)		
PIN	FUNCTION		
01	SAOUT1+	Pin 2 – 📲 🏾 🖛 – Pin 4	
02	SAOUT1-	Pin 1 – 📲 🏾 🖛 – Pin 3	
03	SAOUT2+		
04	SAOUT2-	$\bigtriangleup$	

VGA2-A (15 pin D-Sub female connector)		
PIN	FUNCTION	
01	R_OUT2	
02	G_OUT2	
03	B_OUT2	
04	N.C.	
05	GND	
06	GND	
07	GND	
08	GND	
09	+5V_V2	
10	GND	
11	N.C.	
12	CRT2_DDC_DATA	
13	HSYNC_OUT2	
14	VSYNC_OUT2	
15	CRT2_DDC_CLK	



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# Connector J23

Power sup	Power supply connector (6 pin Mini Fit Jr. header)		
PIN	FUNCTION	Pin 4	
01	+24V_USB		
02	+12V_EX1	6  5  4	
03	+5V_EX4		
04	GND		
05	GND		
06	nPFI	Pin 1	

Connector J25		
VGA1-A (	15 pin D-Sub female connector)	
PIN	FUNCTION	
01	R_OUT1	
02	G_OUT1	Pin 1—Pin 11
03	B_OUT1	
04	N.C.	
05	GND	
06	GND	
07	GND	
08	GND	
09	+5V_V1	Pin 5—Pin 15
10	GND	
11	N.C.	
12	CRT1_DDC_DATA	
13	HSYNC_OUT1	
14	VSYNC_OUT1	
15	CRT1_DDC_CLK	

Conne	Connector J26			
Power (	Power (10 pin Mini Fit header)			
PIN	FUNCTION		Pin 6 Pin 1	
01	+24V_CF			
02	+24V_CF			
03	+24V_CF			
04	+24V_CF			
05	PFI_N			
06	GND		8  3)	
07	GND			
08	GND		9 4	
09	PGND		10 5	
10	PGND			



Connector J27			
Door Logger 1 (34 pin male connector)			
PIN	FUNCTION		
01	IN_1_MAIN_DOOR_RX		
02	+3.3V_DP	Pin 1 Pin 2	
03	OUT_1_MAIN_DOOR_TR		
04	+3.3V_DP		
05	DOOR_GND		
06	IN_22		
07	IN_23		
08	IN_20		
09	IN_21		
10	IN_18		
11	IN_19		
12	IN_16		
13	IN_17		
14	DOOR_GND		
15	DOOR_GND		
16	DOOR_GND		
17	IN_2		
18	DOOR_GND		
19	IN_3		
20	DOOR_GND		
21	IN_4		
22	DOOR_GND		
23	IN_5		
24	DOOR_GND		
25	IN_6		
26	DOOR_GND		
27	IN_7		
28	DOOR_GND		
29	IN_8		
30	DOOR_GND		
31	IN_9		
32	DOOR_GND		
33	IN_10		
34	DOOR_GND		

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Connector J40		
VGA1-B (	15 pin D-Sub female connector)	
PIN	FUNCTION	
01	R_OUT3	
02	G_OUT3	Pin 1—Pin 11
03	B_OUT3	
04	N.C.	
05	GND	
06	GND	
07	GND	
08	GND	
09	+5V_V3	Pin 5—Pin 15
10	GND	
11	N.C.	
12	CRT3_DDC_DATA	
13	HSYNC_OUT3	
14	VSYNC_OUT3	
15	CRT3_DDC_CLK	





Subwoofer (2 pin Mini Fit header)			
PIN	FUNCTION	Pin 1 — Pin 2	
01	OUT_N-		
02	OUT_P+		

Connector J43		
COM 1 (9	pin D-Sub male connector)	
PIN	FUNCTION	
01	+12V_EX1	
02	RXD2	Pin 5 Pin 9
03	TXD2	
04	N.C.	
05	GND	
06	N.C.	
07	nRTS2	
08	nCTS2	Din 6
09	+5V_EX3	

Connector J183		
Temperature sensor (3 pin Lock header)		
PIN	FUNCTION	— Pin 1
01	GND	
02	VOUT_EX_SEN	
03	N.C.	
		կուղուղով
		U U U
# 5.9.4 Cable Loom Connector Assignment

## Connector 01: 34 pin AMP MOD IV

(connection between USB backplane with DOOR LOGGER to doorswitches, keyswitches and toplight)

Pin	Colour	Function (machine)	Port BP
1	pink/blue	Main door receiver	IN_01
2	red	+3.3V_DC	***
3	pink/grey	Main door transmitter	OUT_01
4	red	+3.3V_DC	***
5	black	GND (for receiver)	***
6	nc	Doorswitch Ticket Printer	IN_22
7	pink/violet	Doorswitch Main door (mech.)	IN_23
8	nc	Doorswitch Bill door	IN_20
9	blue/black	Doorswitch Drop door	IN_21
10	green/black	Doorswitch Door in door	IN_18
11	pink	Doorswitch Stacker door	IN_19
12	nc	Doorswitch Reserve door 1	IN_16
13	nc	Doorswitch Service door	IN_17
14	black	GND (for Keys, Switches)	***
15	black	GND (for Keys, Switches)	***
16	black	GND (for Keys, Switches)	***
17	nc	Codepin Main Door (opt.)	IN_02
18	nc	GND (for Main Door opt.)	***
19	yellow/grey	Codepin Reserve door 1	IN_03
20	yellow/grey	GND (for Reserve door 1)	***
21	nc	Codepin Main door (mech.)	IN_04
22	black	GND (for Main door mech)	***
23	grey/brown	Codepin Bill door	IN_05
24	grey/brown	GND (for Bill door)	***
25	nc	Codepin Drop door	IN_06
26	black	GND (for Drop door)	***
27	nc	Codepin Door in door	IN_07
28	black	GND (for Door in door)	***
29	nc	Codepin Stacker door	IN_08
30	black	GND (for Stacker door)	***
31	grey/violet	Codepin Ticket Printer door	IN_09
32	grey/violet	GND (for Ticket Printer door)	***
33	green/violet	Codepin Service door	IN_10
34	green/violet	GND (for Service door)	***



## Connector 02: 16 pin AMP MOD IV

# (connection between USB backplane with DOOR LOGGER to doorswitches, keyswitches and toplight)

Pin	Colour	Function (machine)	Port BP	
1	black	GND	***	
2	nc	GND	***	
3	brown/black	Keyswitch Attendant	IN_11	
4	white/black	Keyswitch Audit	IN_12	
5	white/orange	Keyswitch Test	IN_13	
6	nc	Key 4 (Reserve)	IN_14	
7	nc	Key 5 (Reserve)	IN_15	
8	orange/pink	Toplight blue (red)	OUT_02	
9	red/black	Toplight white (yellow)	OUT_03	
10	violet/black	Toplight reserve (green)	OUT_04	
11	nc	Toplight 4	OUT_05	
12	nc	Toplight 5	OUT_06	
13	nc	Toplight 6	OUT_07	
14	white/green	Topper control	OUT_08	
15	yellow	+12VDC	***	
16	yellow	+12VDC	***	

# Connector 03: 4 pin (Molex)

(connection to P369 lightbarrier receiver or LS-assembly)

Pin	Colour	Function	Driver
1	red	+5VDC	***
2	pink/blue	doorswitch (receiver)	***
3	black	GND	***
4	nc	doorswitch (transmitter diode)	***

# Connector 06: 4 pin MOLEX

### (Toplight)

Pin	Colour	Function	Driver	
1	yellow	+12VDC	***	
2	orange/pink	toplight (blue) (=red)	***	
3	red/black	toplight (white) (=yellow)	***	
4	violet/black	toplight (reserved) (=green)	***	

Connector 08: 4 pin (Molex)					
(conn	(connection to P368 lightbarrier transmitter diode)				
Pin	Colour	Function	Driver		
1	red	+5VDC	***		
2	pink/grey	doorswitch (transmitter diode)	***		
3	nc	***	***		
4	nc	***	***		

Connector 16: 2 pin Mini-Fit Molex				
(powe	er supply 12VDC for topp	er)		
Pin	Colour	Function	Driver	
1	black	GND	***	
2	yellow	+12V DC	***	

Connector 17: 2 pin (Molex)					
(conn	(connection doorswitch "STACKER DOOR", stacker box lock lever monitoring)				
Pin	Colour	Function	Driver		
1	black	GND	***		
2	pink	Doorswitch "STACKER DOOR"	***		

Con	Connector 48: 2 pin Micro-Fit (Molex)				
(topper control on, off)					
Pin	Colour	Function	Driver		
1	nc	***	***		
2	white/green	Topper control (on, off)	***		

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Key 01 (Attendant), 2x 6.3x0.8mm 90° offset				
NO	brown/black	Attendant Switch	SW08	
(C)	black	GND	***	

Key 02 (Audit), 2x 6.3x0.8mm 90° offset				
NO	white/black	Audit Switch	SW09	
(C) black GND ***				

Key 03 (Test), 2x 6.3x0.8mm 90° offset				
NO	white/orange	Test Switch	SW10	
(C) black GND GND				

S18: Door Switch: 2x 4.8x0.5mm				
(connection doorswitch "DOOR IN DOOR", middle front door)				
NO	green/black	Doorswitch "DOOR IN DOOR"	***	
(C)	black	GND	***	

S21: Door Switch: 2x 4.8x0.5mm			
(connection doorswitch "DROP DOOR", bottom right door)			
NO	blue/black	Doorswitch "DROP DOOR"	***
(C)	black	GND	***

S23: Door Switch: 2x 4.8 x 0.5mm Fast On			
(connection doorswitch "MAIN DOOR", main door)			
NO	pink/violet	Doorswitch "MAIN DOOR"	***
(C)	black	GND	***

#### HARDWARE USB BACKPLANE

#### Troubleshooting

Check that all connectors are connected correctly to the USB backplane. If an error occurs that cannot be cleared, the defective USB backplane must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### Exchanging the USB backplane

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.





Illustr. 5-62 Position of the USB backplane



Illustr. 5-63 Exchanging the USB backplane

#### For exchanging the USB backplane follow the instructions below

(see illustr. 5-62 and illustr. 5-63):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unlock the Logic Door lock.
- 3) Pull strongly on both grips and remove the main electronic unit.
- 4) Remove the hopper funnel and take out the hopper in forward direction (see part 5.4 on page 77).
- 5) If the machine is equipped with a ticket printer, it also needs to be removed (see part 5.5 on page 85).
- 6) Unplug all connectors of the USB backplane.
- 7) Release all mounting screws of the USB backplane (A) and take it out of the machine.

8) Exchange the defective USB backplane.



## INFORMATION

When mounting the main electronic unit, make sure that the connectors lock correctly into the USB backplane.

- 9) To reinstall, follow the above instructions in reverse order.
- 10) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.



# 5.10 USB KPanel

#### Position in the machine

See illustr. 2-4 on page 12.



Illustr. 5-64 Position of the USB kpanel

#### Function

The USB kpanel consists of a microprocessor, which reads in the status of all buttons and switches of the machine and illuminates the corresponding lamps.

The USB kpanel connects the lamps and buttons with the USB backplane via a USB cable.



#### Positions of the connectors and DIP switches



Illustr. 5-65 Connections of the USB kpanel

1	J3	Power supply
2	J7	Lamps and buttons
3	J1	USB connection to the backplane
4		DIP switches

The DIP switches are used to select the module address in case of usage of further modules.

#### **PIN and connector assignment**

Connector J1			
USB port			
PIN	FUNCTION		
01	N.C.		
02	USB_D-	┊┢╪╨╻╔═╧══╗╭╠┿┪	
03	USB_D+		
04	USB_GND		

HARDWARE USB KPANEL **5** 

Connect	or J3	
USB Pow	er supply connector (4 pin Mini Fit J	r. header)
PIN	FUNCTION	— Pin 3
01	+24V	
02	+12V_B	4 3
03	GND	
04	GND	[2]  1 }
		Pin 1

# **Connector J7**

Game Keys (40 pin male connector)



PIN	FUNCTION	PIN	FUNCTION
01	GND	21	+12V_L
02	GND	22	+12V_L
03	IN_1	23	L_L1
04	IN_2	24	L_L2
05	IN_3	25	L_L3
06	IN_4	26	L_L4
07	IN_5	27	L_L5
08	IN_6	28	L_L6
09	IN_7	29	L_L7
10	IN_8	30	L_L8
11	IN_9	31	L_L9
12	IN_10	32	L_L10
13	IN_11	33	L_L11
14	IN_12	34	L_L12
15	IN_13	35	L_L13
16	IN_14	36	L_L14
17	IN_15	37	L_L15
18	IN_16	38	L_L16
19	GND	39	+12V_L
20	GND	40	+12V_L

#### Troubleshooting

Check that all connectors are connected correctly to the USB kpanel. Check the connection between the USB kpanel and the USB backplane. If an error occurs that cannot be cleared, the defective USB kpanel must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### **Exchanging the USB KPanel**

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



Illustr. 5-66 Exchanging the USB kpanel

#### For exchanging the USB KPanel follow the instructions below (see illustr. 5-66):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Unscrew the cover of the USB kpanel and remove it.
- 3) Disconnect the plug connections of the USB kpanel.
- 4) Release the distance bolts of the USB kpanel and take it out of the machine.
- 5) Exchange the defective USB kpanel.
- 6) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
  After its completion the machine is ready for operation.



# 5.11 Top Light

#### Position in the machine

See illustr. 2-4 on page 12.

#### Function

The top light indicates the different statuses of operation (error, service call, etc.).

#### **Novomatic Standard**



Blue light on:

The SERVICE button has been pressed. If the SERVICE button is pressed again, the light goes off.



#### White light is blinking in short intervals:

The machine is in idle mode with a door opened. The light is blinking until the end of the next valid game.



#### Blue light is blinking in long intervals:

Error - the machine is not ready for game play. The error message is displayed on the screen (see Software User Manual for identification of error).



# Blue light is blinking in long intervals and white light is blinking in short intervals:

Error - the machine is not ready for game play. The error message is displayed on the screen and one of the machine's doors is open (see Software User Manual for identification of error).



#### Blue and white lights are blinking in long intervals:

A manual payout by the attendant is required. Afterwards the lights go off.



#### **Bally France**





green red

yellow

#### Green light is blinking:

A limit has been reached. After the manual payout the light goes off.

#### Red light on:

Error - the machine is not ready for game play. The error message is displayed on the screen (see Software User Manual for identification of error).

#### Red light is blinking:

One of the machine's doors is open.



#### Yellow light is blinking:

The SERVICE button has been pressed. If the SERVICE button is pressed again the light goes off.



#### Troubleshooting

Check the power supply plug of the top light. If an error occurs that cannot be cleared, the defective top light must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

HARDWARE TOP LIGHT

#### Exchanging the top light

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.





Illustr. 5-67 Top light mounted on the topper

HARDWARE

TOP LIGHT

#### For exchanging the top light on the topper follow the instructions below (see illustr. 5-67):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Release both screws on the side of the topper base (1) and remove the cover.
- 3) Disconnect the power supply plug of the top light.
- 4) Release both fixing screws of the top light.
- 5) Release the ground strap.
- 6) Exchange the defective top light.
- 7) To reinstall, follow the above instructions in reverse order.
- 8) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.

#### Exchanging the top light illumination



Illustr. 5-68 Top light components

#### For exchanging the top light illumination follow the instructions below (see illustr. 5-68):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Remove the cap nut from the top cover of the top light.
- 3) Remove the cover and the cylinders.
- 4) Exchange the defective lamp.
- 5) Reassemble the top light and close the cap nut.
- 6) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.



# 5.12 Illumination

#### 5.12.1 Bill Acceptor Illumination

#### Position in the machine

The bill acceptor illumination is located on a circuit board inside the Main Door.



Illustr. 5-69 Bill acceptor illumination

#### Function

Bill Acceptor	Bill Acceptor Illumination
ready for operation	blue
NOT ready for operation	red

#### Troubleshooting

If an error occurs that cannot be cleared, the defective bill acceptor illumination must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



#### Exchanging the bill acceptor illumination

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



Illustr. 5-70 Circuit board of the bill acceptor illumination

#### For exchanging the bill acceptor illumination follow the instructions below (see illustr. 5-70):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Disconnect the plug connection of the circuit board (B).
- 3) Release the fixing screws of the bill acceptor illumination cover (A).
- 4) Remove the complete cover with the circuit board (C).
- 5) Unscrew the circuit board from the cover.
- 6) Exchange the defective circuit board.
- 7) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
  After its completion the machine is ready for operation.



## 5.12.2 Key Illumination

#### Position in the machine





Illustr. 5-71 Player panel / keyboard - Variant 1



Illustr. 5-72 Player panel / keyboard - Variant 2

#### **Function**

The key illumination shows the active buttons during game playing. If the machine is not equipped with a touchscreen, the functions of the menu are activated via the respectively illuminated buttons.

#### Troubleshooting

If an error occurs that cannot be cleared, the defective key illumination must be exchanged.



## CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### Exchanging the key illumination

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



### DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!

H A R D W A R E



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

#### Variant 1:



Z\_Lampensoci

Illustr. 5-73 Exchanging the key illumination

#### For exchanging the key illumination follow the instructions below (see illustr. 5-73):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Turn the lamp base of the defective lamp in the direction of the arrow and pull it down.
- 3) Exchange the defective lamp and press the base into the bracket.
- 4) Switch on the machine and close the Main Door.
- 5) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.



#### Variant 2:





Illustr. 5-74 Exchanging the key illumination

#### For exchanging the key illumination follow the instructions below (see illustr. 5-74):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Disconnect the plug connections (A) of the defective button unit.
- 3) Turn the key switch and illumination unit (B) to detach it from the button body (C).
- 4) Release the locking latches (D) and exchange the complete key unit.
- 5) To reinstall, follow the above instructions in reverse order.
- 6) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.



## INFORMATION

For easier exchange of the Gamesman buttons an Insertion/Extraction Tool is available from AGI.

## 5.12.3 Door in Door Illumination

#### Position in the machine



Illustr. 5-75 Position of the Door in Door illumination (version 1)



Illustr. 5-76 Position of the Door in Door illumination (version 2)

#### Туре

LED illumination (20 x LED), 12 V / 24 V DC

#### Troubleshooting

If an error occurs that cannot be cleared, the defective Door in Door illumination must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



#### Exchanging the Door in Door illumination

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.





Illustr. 5-77 Exchanging the Door in Door illumination

#### For exchanging the Door in Door illumination follow the instructions below (see illustr. 5-77):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Open the Door in Door.
- 3) Disconnect the plug connection (A) of the LED circuit board.
- 4) Release the mounting screws (B) of the LED circuit board (with spacers).
- 5) Exchange the defective LED circuit board.
- 6) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
  After its completion the machine is ready for operation.

## 5.12.4 Main Door Illumination

#### Position in the machine



Illustr. 5-78 Position of the Main Door illumination

#### Туре

LED illumination (15 x LED), 12 V / 24 V DC

#### Troubleshooting

If an error occurs that cannot be cleared, the defective Main Door illumination must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert.

The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.



#### Exchanging the Main Door illumination

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



## DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



# CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



Illustr. 5-79 Illumination cover

Illustr. 5-80 LED circuit board

# For exchanging the Main Door illumination follow the instructions below (see illustr. 5-79 and illustr. 5-80):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Release the mounting screws (A) of the illumination cover and remove the cover.
- 3) Disconnect the plug connection of the LED circuit board.
- 4) Release the mounting screws of the LED circuit board.
- 5) Exchange the defective LED circuit board.
- 6) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
  After its completion the machine is ready for operation.



# 5.13 Door Optics

#### Position in the machine



Illustr. 5-81 Positions of the door optics

#### Function

The door optics monitors the openings and closings of the Main Door.

#### Troubleshooting

Check the connectors of the door optics for any damage. If an error occurs that cannot be cleared, the defective circuit board must be exchanged.



# CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.





# 5.13.1 Calibration of the Door Optics

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Close the Main Door and check the positions of the light barrier receiver and the light barrier transmitter to each other.
- 3) Open the Main Door.
- 4) Release the mounting screws (A) of the bill acceptor retainer (see illustr. 5-82 on page 180).
- 5) Disconnect all plug connections and remove the retainer together with the bill acceptor and the stacker. Do not forget to disconnect the microswitch of the stacker!
- 6) Loosen the mounting screws (B) of the light barrier receiver (see illustr. 5-83 on page 180).
- 7) Loosen the mounting screws (B) of the light barrier transmitter (see illustr. 5-84 on page 181).
- 8) Align the light barrier receiver with the light barrier transmitter.
- 9) Close the Main Door and check the positions of the door optics to each other.
- 10) Open the Main Door and tighten the mounting screws of the door optics.
- 11) Close the Main Door and finally check the positions of the light barrier receiver and the light barrier transmitter to each other.
- 12) Open the Main Door.
- 13) Connect all plug connections and assemble the retainer together with the bill acceptor and the stacker. Do not forget to connect the microswitch of the stacker!
- 14) Mount the bill acceptor retainer with both screws.
- 15) After power-on of the machine a self test is performed.After its completion the machine is ready for operation.
- 16) Close the Main Door.
- 17) The message that the Main Door is open disappears either after the first game is played or the confirmation of the message. If not, calibrate the door optics again.

## 5.13.2 Exchanging the Door Optics

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



# DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



## CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.

#### Exchanging the light barrier receiver







Illustr. 5-83 Exchanging the light barrier (receiver)

Illustr. 5-82 Exchanging the door optics

# For exchanging the light barrier receiver follow the instructions below (see illustr. 5-82 and illustr. 5-83):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Release the mounting screws (A) of the bill acceptor retainer.
- Disconnect all plug connections and remove the retainer together with the bill acceptor and the stacker. Do not forget to disconnect the microswitch of the stacker!
- 4) Disconnect the plug connection of the light barrier receiver (C) and unscrew the mounting screws (B).
- 5) Exchange the defective light barrier receiver.
- 6) To reinstall, follow the above instructions in reverse order.
- 7) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.
### Exchanging the light barrier transmitter



Illustr. 5-84 Exchanging the light barrier (transmitter)

#### For exchanging the light barrier transmitter follow the instructions below (see illustr. 5-84):

- 1) Open the Main Door and disconnect the machine from the mains.
- Disconnect the plug connection of the light barrier transmitter (A) and unscrew the mounting screws (B).
- 3) Exchange the defective light barrier transmitter.
- 4) To reinstall, follow the above instructions in reverse order.
- 5) After power-on of the machine a self test is performed. After its completion the machine is ready for operation.



### 5.14 Loudspeakers

#### Position in the machine

See illustr. 2-4 on page 12.

#### Туре

Full-range loudspeaker oval, 8 Ohm, 10W, inside of the Main Door and Hi-Fi subwoofer 16 cm, 8 Ohm, 40 W, behind the bill acceptor.

#### Function

The loudspeakers are used for acoustic output of game sounds and audio warnings in case of any errors.

#### Troubleshooting

Check both plug connections of the speakers. If an error occurs that cannot be cleared, the defective loudspeaker must be exchanged.



### CAUTION

Usually, errors in the electronics can only be handled by an expert. The exchange of parts is the quickest way to perform a repair if this is eventually necessary. If no spare parts are at hand, contact the Technical Support of AGI (Tel. +43 2252 606-300). Return the defective component together with a short error description.

#### Exchanging the loudspeakers

The service instructions below should be carried out only by qualified and trained personnel. In order to avoid any injuries of people and damage to machines only such procedures as described in this manual may be performed.

If these instructions are followed closely and adequate maintenance and treatment is applied as required by the usage of the devices, the system complies with the usual safety standards. To avoid excessive errors, perform the cleaning procedures with the recommended frequency.



### DANGER

Before starting any maintenance work, make sure that the machine is disconnected from the mains by pulling the power plug out of the socket!



#### CAUTION

There are static-sensitive parts inside the machine which could be damaged by electric discharge.



Ground yourself by connecting a grounding wrist strap to the ESD bonding point inside the machine to neutralize electric charges before changing or maintaining inner parts.



Ground straps inside the machine are marked with yellow stickers like the symbol shown beside.



#### Exchanging the full-range loudspeakers



Illustr. 5-85 Full-range loudspeaker

#### For exchanging the full-range loudspeakers follow the instructions below (see illustr. 5-85):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Disconnect all plug and cable connections of the loudspeaker.
- 3) Release the mounting screws of the loudspeaker and remove the loudspeaker.
- 4) Exchange the defective loudspeaker.
- 5) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.

#### Exchanging the subwoofer







Illustr. 5-87 Subwoofer behind the bill acceptor

#### For exchanging the subwoofer follow the instructions below (see illustr. 5-86 and illustr. 5-87):

- 1) Open the Main Door and disconnect the machine from the mains.
- 2) Release the mounting screws (A) of the bill acceptor retainer.
- 3) Disconnect all plug connections and remove the retainer together with the bill acceptor and the stacker. Do not forget to disconnect the microswitch of the stacker!
- 4) Release the mounting screws of the cashbox funnel (B) and remove the cashbox funnel.
- 5) Disconnect the plug connection of the subwoofer.
- 6) Release the 4 mounting screws of the subwoofer and remove it.
- 7) Exchange the defective subwoofer.
- 8) To reinstall, follow the above instructions in reverse order.
- After power-on of the machine a self test is performed.
   After its completion the machine is ready for operation.



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## Glossary

Δ	Animation Display	On the Animation Display the current game play is presented. Players on the
		terminal can follow the game (sequences, bets and wins of all players) on the
		Animation Display.
	Ardac Elite	See bill acceptor.
	Audit Key	Key allowing access to the audit menu on the terminal.
	Audit Menu	Menu displayed on the terminal after the audit key is turned. This menu offers
		function tests for peripheral devices and a touchscreen calibration function.
		Additionally in the audit menu hardware settings, log files, game statistics and
		accounting data are displayed. The audit menu also offers the possibility to
		perform a RAM Clear and manual payouts.
R	Backplane	The backplane has the following functions: Providing power supply to the logic
		unit and peripheral devices (bill, coin acceptor, etc.) as well as transferring
		communication between the logic unit and the peripherals installed in the
		terminal. The communication between the peripheral equipment and the USB
		interface can be realised over an independent USB device. Additionally the
		backplane provides a Door Logger function that allows the monitoring of the
		terminal doors. As the backplane is equipped with a battery the door openings
		and closings will also be registered if the terminal is switched off.
	Barcode	A barcode is a sequence of vertical lines of varying widths representing binary
		data (letters or numbers). The barcode is printed on the tickets by the ticket
		printer.
	Barcode Reader	The barcode reader is a component of the Cashdesk system. It is a data
		acquisition device that is able to read the barcode printed on the tickets and to
		transfer this information to the Cashdesk system.
	Bill Acceptor	Device for examination and acceptation or rejection of bills or tickets if the
		TITO function (see TITO) is supported by the system. There are different bill
		acceptors in use, for example WBA and UBA.
	Bill Acceptor Channel	The bill acceptor comprises of various software channels to detect and accept
		different kinds of bills. Each channel is programmed to a certain bill value.
	BIOS	Abbr.: Basic Input Output System; a basic program that is automatically loaded
		every time a computer is started. After that it performs a self test, initialises
		the hardware devices and loads the operating system from a storage medium
		(hard disk, DOC) into the RAM. If the operating system attempts to interface
		hardware devices during running operations it may use BIOS routines.
	Black Box	A system for logging accounting transactions in an external device.
		The Black Box is reserved for certain jurisdictions and is installed in the
		Novo Unity Server cabinet (FS695).

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Camera	If a camera is installed in the system live images of game events (for example
	of the Roulette wheel) can be transmitted to the terminals, Animation and
	Wheel Information Displays in real time. In the game Novo TouchBet® Live
	Roulette the camera in combination with the respective software can be used
	for ball and/or intruder detection.
Camera Module	The camera module allows the transmission of videos in real time. The camera
	module can be installed in the terminal, Animation Display, Wheel Information
	Display and in the Game Server cabinet.
Cashbox	Repository installed in the terminal where accepted coins are collected.
CashCode	See bill acceptor.
CashCode One	See bill acceptor.
Cashdesk	The Cashdesk represents an additional software tool of the Novo Unity
	platform. This program is used for the ticket administration and generation of
	ticket reports.
Cashflow	See bill acceptor.
Coin Acceptor	Device for examination and acceptation or rejection of coins
	(e.g.: MC40, NRI).
Coin Acceptor	The coin acceptor comprises of various software channels to detect and accept
Channel	different kinds of coins. Each channel is programmed to a certain coin value.
Coin Diverter	The coin diverter below the coin acceptor sorts coins either into the hopper or
	the cashbox.
СОМ	Abbr.: Communications Port; a serial port interface allowing the communication
	with serial peripheral devices.
Compact Flash Card	The Compact Flash card is a non-volatile storage medium inserted into the
	Firefox logic unit where game data are saved.
<b>Condor Premier</b>	See coin acceptor.
COOLFIRE	Coolfire is the logic unit for a certain production line of terminals.
CPU	Abbr.: Central Processing Unit; refers to the central processor component of a
	logic unit. The CPU is in charge of processing data and executing programs.
CRC	Abbr.: Cyclic Redundancy Check; is a procedure for the creation of a
	data checksum allowing to detect alteration of data during transmission or
	duplication.
Credits	Deposit, gaming currency.

	1	
D	DHCP	Abbr.: Dynamic Host Configuration Protocol; this protocol dynamically assigns
		a terminal a free address from a list of available IP addresses and provides
		secure TCP/IP network communication.
	DIMM	Abbr.: Dual In-Line Memory Module; storage module with two contact lines. A
		DIMM is a circuit board assembled with multiple memory chips that is inserted
		into the motherboard.
	DIP Switch	Abbr.: Dual In-Line Package Switch; a set of tiny switches packaged in a
		group. These switches are used on printed circuit boards installed in peripheral
		devices to allow their configuration.
	DOC	Abbr.: Disk On Chip; is a non-volatile storage medium with USB interface
	Dongle	A dongle is connected to a USB port of the logic unit. It is used to prevent the
		unauthorised copying of software.
	Door Logger	Circuit board for door monitoring installed in the FS695 cabinet (Novo Unity
		Server). As the door logger is equipped with a battery the door openings and
		closings will also be registered if the Novo Unity Server is switched off. In
		addition the backplane installed in the terminals provides also a door logger
		function (see backplane).
	Firefox	Firefox is the logic unit for a certain production line of terminals.
	Firmware	Firmware is a software saved in a non-volatile storage (ROM) of a device. The
		firmware provides the main information for the operation of the device.
	Flash ROM	Abbr.: Flash Read Only Memory; a non-volatile storage. The information in
		a Flash ROM can only be read and is not lost when the machine is powered
		down. An alteration of the stored information requires a special operation. The
		Flash ROM does not have any battery supply.
G	Game Server	The Game Server controls the game play and transfers game-relevant data
G		(e.g.: winning numbers, game phases) to the connected terminals.
	Ground Strap	Metallic, non-insulated, electrically conductive part that is used to balance
		electrical potential.
н	Handpay	Manual payout of wins by the attendant instead by the terminal.
	Hopper	Coin dispensing device receiving and storing coins for payout.
	IP	Abbr.: Internet Protocol; refers to a messaging protocol in TCP/IP which is
		responsible for addressing and sending TCP packages in the network.
	Jackpot	Fund of non-distributed insertions in gaming; the Jackpot grows until one
U		player reaches the required win criteria.
1	LAN	Abbr.: Local Area Network; a local network of devices which are distributed
		over a relatively limited area and which are connected with each other through
		communication lines for the exchange of data.
	LED	Abbr.: Light Emitting Diode; an inorganic, punctiform light source based on
		semi-conductor technology featuring high mechanical stability and long life-
		span.
J	Jackpot LAN LED	<ul> <li>Fund of non-distributed insertions in gaming; the Jackpot grows until one player reaches the required win criteria.</li> <li>Abbr.: Local Area Network; a local network of devices which are distributed over a relatively limited area and which are connected with each other through communication lines for the exchange of data.</li> <li>Abbr.: Light Emitting Diode; an inorganic, punctiform light source based on semi-conductor technology featuring high mechanical stability and long lifespan.</li> </ul>

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М	MAC	Abbr.: Media Access Control; refers to the worldwide unique serial number of
IVI		the network component which is stored on the network card.
	MC40	See coin acceptor.
	Mechanical Meters	Mechanical devices for automatic counting of continuous, uniform activities
		such as coin insertions, payouts, wins, etc.
	Modem	A modem ("Modulator/Demodulator") enables transmission of digital data from
		the computer via an analogue telephone network.
	Motherboard,	The mainboard is the central part of the logic unit. It is assembled with
	Mainboard	components like the processor (CPU), storage media, BIOS, interface modules
		and slots for additional circuit boards.
Ν	Novo Unity	A database-based game platform universally expandable for future game
		developments, which allows to present all games installed on it in statistical
		form (accounting, wins, player behaviour, etc.). The main components of the
		Novo Unity platform include Windows XP Embedded, Novo Unity Server,
		Game Server, Novobase, game type and Management Console.
	Novo Unity Server	The Novo Unity Server includes a database where all system- and game-
		relevant parameters and data are stored. The Novo Unity Server is used for
		the installation of software, generates statistics, creates backups to save the
		accounting data of all terminals and controls parameter settings (e.g.language
		settings, minimum and maximum bet limits, etc.).
	NRI G13	See coin acceptor.
Ο	OLED	Abbr.: Organic Light Emitting Diodes; an organic, laminar light source based
		on semi-conductor technology. OLEDs are a further development of the LED
		technology. While LEDs are light spots OLEDs allow the illumination of full
		areas. Additional advantages are that OLEDs are filmy and do not need a
		backlight, so that many new products will be introduced into markets in the
		future, such as illuminated keyboards or in wallpapers integrated displays.
	Online Protocol	Each online system is controlled by an online protocol. With the Novo Unity II
		system compatible online protocols are for example: Gsp2500, Grips Crystal,
		SAS.
	Online System	A system in which several terminals are connected to an accounting system.
		Depending on the online protocol in use the online system offers certain
		additional functions, such as Cashless systems, Jackpot systems, IIIO, ticket
		administration, reporting, etc.
Ρ	PCI	Abbr.: Peripheral Component Interconnect; is a computer bus for attaching
		expansion cards (e.g. sound or network cards) in a logic unit.
	PCI-Express	Abbr.: Peripheral Component Interconnect Express; is a further development of
	<b>D</b>	the PCI computer bus allowing a higher data transfer rate.
	Pin	Connector
	PLC	Abbr.: Programmable Logic Control; the control unit of the Roulette wheel. The
		PLC is responsible for control and verification of motors, sensors and micro-
		SWITCHES.
	Processor	See CPU.

R	Raid System	The raid system installed in the Novo Unity Server cabinet (FS695) contains
11		both server hard disks. To provide additional security data are written to two
		hard disks at the same time (mirroring), i.e. the system always creates a back-
		ир сору.
	RAM	Abbr.: Random Access Memory; a RAM is a volatile memory of a logic unit and
		therefore also called a read- and writable memory. Data can be both read or
		cleared from and written to each single memory cell at any time. The RAM is
		cleared whenever the unit is powered down.
	RAM Clear	A RAM Clear can be performed by the attendant on the terminal. In this case
		all data stored on the terminal (e.g. accounting, statistics, tickets, log files) are
		reset to zero or cleared. On the Novo Unity Server the respective terminal data
		are also reset.
	Reference Coin	Coin used to verify inserted coins. The sample coin is inserted into the coin
		comparator.
	Remote	A function in the audit menu that allows the attendant to effect a pay-in of
		credits without inserting coins, bills or tickets.
	Reset	The reset function resets the main electronic unit to its initial state and restarts
		the gaming program.
	Results Display	On the Results Display the win statistics are presented. Players on the terminal
		can follow the results of the last games on the Results Display.
	ROM	Abbr.: Read Only Memory; a ROM is a non-volatile memory of a logic unit that
		can only be read.
	Router	Device used as a DHCP Server between the Novo Unity Server and the
		terminals, as a firewall against Internet security threats and as a network
		distributor.
S	SIMM	Abbr.: Single In-Line Memory Module; storage module with one contact line. A
		SIMM is a circuit board assembled with multiple memory chips that is inserted
		into the motherboard.
	Stacker	The stacker is part of the bill acceptor unit where accepted bills are collected.
	Switch	A switch is a network component for the connection of several computers or
		net segments within a local network (LAN). Switches analyse the network traffic
		and make logic decisions, so that data packages are not sent to all computers,
		but only to the target host. Thereby the network speed is increased.
	Switching Power	Power supply that provides voltage for all components installed in the terminal.
	Supply	

## MOVOMATIC — AMERICAS SALES —

Т	TCP/IP	Abbr.: Transmission Control Protocol/Internet Protocol; refers to a connection-
		oriented Internet protocol. TCP/IP encompasses the rules which determine how
		computers exchange data.
	TFT	Abbr.: Thin Film Transistor; the basic component of all liquid crystal displays
		(LCD), as each pixel is controlled by its own transistor. A TFT display offers
		high contrast, an easy viewing and brilliant colours.
	Ticket Printer	The ticket printer enables the cashless insertion and payout of credits (Ticket
		In/Ticket Out). The player may gain a ticket either by cash at the cashdesk or
		by printing remaining credits on a ticket by pressing the CASH button provided
		on the terminal. After insertion of the ticket into the bill slot the value of ticket
		will be indicated in the Credit display area on the terminal screen.
	ΤΙΤΟ	Abbr.: Ticket In/Ticket Out; a technology used in modern terminal systems to
		enable the cashless insertion and payout of credits. The player may gain a
		ticket either by cash at the cashdesk or by printing remaining credits on a ticket
		by pressing the CASH button provided on the terminal. The TITO function can
		only be used if the respective online protocol (e.g. SAS) is installed.
	Token	Gaming coin
	Top Light	Notification light on top of the device displaying different operating statuses.
	Touchscreen	Display equipped with a touch sensor field. Touchscreens are installed in the
		terminals to control certain functions by touching the respective area on the
		screen.
U	UBA	Abbr.: Universal Bill Acceptor - See bill acceptor;
0	UPS	Abbr.: Uninterruptible Power Supply; UPS provides uninterruptible and
		undisturbed AC voltage within defined tolerance (battery).
	USB	Abbr.: Universal Serial Bus; is a serial interface to connect external devices to
		the logic unit.
V	Validation Number	A generated coded number that verifies the authenticity of a printed ticket
		(barcode).
W	WAN	Abbr.: Wide Area Network; refers to a communication network which connects
		geographically distant devices.
	WBA	Abbr.: World Bill Acceptor - See bill acceptor;
	WID	Abbr.: Wheel Information Display; Display used within Roulette systems to
		present players game-related information, such as Hot and Cold Numbers,
		Minimum and Maximum Bet, live recording image of the Roulette wheel, etc.

### Annex

	GAMING INDUSTRI
CE	EG-Konformitätserklärung (Richtlinie 2006/95/EG und 2004/108/EG)
	EC-Declaration of Conformity (Directive 2006/95/EC and 2004/108/EC)
Dokument-Nr./document no.:	konf_FV610_CF2_ce.doc
Hersteller/manufacturer: Anschrift/address:	Austrian Gaming Industries GmbH Wiener Strasse 158 2352 Gumpoldskirchen
Produktbezeichnung: Product specification:	Spielautomat Super Gaminator III Video Slot machine Super Gaminator III video
Typen/types:	FV610 CF 2
Hiermit wird bestätigt, dass Parlaments und des Rates zur	oben bezeichnete Produkte der Richtlinie 2006/95/EG des Europäisch Angleichung der Rechtsvorschriften der Mitgliedstaaten betreffend elektrise g innerhalb bestimmter Spannungsprenzen und der Richtlinie 2004/108/EG o
Betriebsmittel zur Verwendun Europäischen Parlaments und elektromagnetische Verträglic	des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über o hkeit entsprechen.
Betriebsmittel zur Verwendun Europäischen Parlaments und elektromagnetische Verträglic Hereby we confirm that the ab European Parliament and of th electrical equipment designed European Parliament and of th electromagnetic compatibility.	des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über of hkeit entsprechen. ove mentioned products are in compliance with the directive 2006/95/EC of t e Council on the harmonisation of the laws of the Member States relating to for use within certain voltage limits and the directive 2004/108/EC of the ne Council on the approximation of the laws of the Member States relating to
Betriebsmittel zur Verwendun Europäischen Parlaments und elektromagnetische Verträglic Hereby we confirm that the ab European Parliament and of th electrical equipment designed European Parliament and of th electromagnetic compatibility. Zur Beurteilung der Erzeugnis For evaluation of product com	des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über of hkeit entsprechen. ove mentioned products are in compliance with the directive 2006/95/EC of t te Council on the harmonisation of the laws of the Member States relating to for use within certain voltage limits and the directive 2004/108/EC of the te Council on the approximation of the laws of the Member States relating to see wurden folgende Normen herangezogen : upliance the following standards are used:
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Betriebsmittel zur Verwendun Europäischen Parlaments und elektromagnetische Verträglic Hereby we confirm that the ab European Parliament and of th electrical equipment designed European Parliament and of th electromagnetic compatibility. Zur Beurteilung der Erzeugnis For evaluation of product com IEC 60 335-1; IEC 60 335-2- EN 55014-1; EN 55014-2; EN EN 61000-4-2; EN 61000-4-3 EN 61000-4-6; EN 61000-4-3 EN 61000-3-2; EN 61000-3-3 Einschränkung / restriction: nu Ort, Datum/place, date: Aussteller/issued by:	<ul> <li>a memory optimized optimizing generation and der reformation between des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über of hkeit entsprechen.</li> <li>ove mentioned products are in compliance with the directive 2006/95/EC of the le Council on the harmonisation of the laws of the Member States relating to for use within certain voltage limits and the directive 2004/108/EC of the le Council on the approximation of the laws of the Member States relating to see wurden folgende Normen herangezogen :</li> <li>see wurden folgende Normen herangezogen :</li> <li>spliance the following standards are used:</li> <li>82</li> <li>155022; EN 55024 ; EN 50366</li> <li>; EN 61000-4-4; EN 61000-4-5</li> <li>; EN 61000-4-9</li> <li>ar für Gewerbliche Zwecke / for commercial purposes only</li> <li>Gumpoldskirchen, 27.4.2011</li> <li>Austrian Gaming Industries GmbH</li> </ul>

Austrian



		GAMING INDUSTRIES	
CE	EG-Konformitätserklärung	GMEH NOVOMATIC GROUP OF COMPANIES	
	(Richtlinie 2006/95/EG und 2004/108/ EC-Declaration of Conform (Directive 2006/95/EC and 2004/108/	EG) nity EC)	
Dokument-Nr./document no.:	konf_FV610_F_ce.doc		
Hersteller/manufacturer: Anschrift/address:	Austrian Gaming Industries Gm Wiener Strasse 158 2352 Gumpoldskirchen	ьн	
Produktbezeichnung: Product specification:	Spielautomat Super Gaminator Slot machine Super Gaminator I	III Video III video	
Typen/types:	FV610 F		
Hiermit wird bestätigt, dass Parlaments und des Rates zur A Betriebsmittel zur Verwendung Europäischen Parlaments und d elektromagnetische Verträglich	oben bezeichnete Produkte der Richt Angleichung der Rechtsvorschriften der innerhalb bestimmter Spannungsgrenzen es Rates zur Angleichung der Rechtsvor keit entsprechen.	linie 2006/95/EG des Europäischen Mitgliedstaaten betreffend elektrische n und der Richtlinie 2004/108/EG des rschriften der Mitgliedstaaten über die	
Hereby we confirm that the abo European Parliament and of the electrical equipment designed for European Parliament and of the electromagnetic compatibility.	ve mentioned products are in complianc Council on the harmonisation of the law or use within certain voltage limits and th Council on the approximation of the law	e with the directive 2006/95/EC of the vs of the Member States relating to he directive 2004/108/EC of the ws of the Member States relating to	
Zur Beurteilung der Erzeugniss For evaluation of product comp	e wurden folgende Normen herangezoge liance the following standards are used:	:n :	
IEC 60 335-1; IEC 60 335-2-8 EN 55014-1; EN 55014-2; EN EN 61000-4-2; EN 61000-4-3; EN 61000-4-6; EN 61000-4-8; EN 61000-3-2; EN 61000-3-3	2 55022; EN 55024 ; EN 50366 EN 61000-4-4; EN 61000-4-5 EN 61000-4-9		
Einschränkung / restriction: nur	für Gewerbliche Zwecke / for commerc	ial purposes only	
Ort, Datum/place, date:	Gumpoldskirchen, 15.2.2012		
Aussteller/issued by:	Austrian Gaming Industries GmbH		
Rechtsverbindliche Unterschrif Signature of authorized person	t / Stempel: / Stamp: Novematic 4 2852 Generaldisk Tel_+432252-60 Ing. C Prokurist / A	Arrian Arriente Arriente Arriente Arriente Arriente Arriente Arrient	
Gaming Industries GmbH • Wiener Stra www.novomatic.com • e-mail: postbox	sse 158 – A-2352 Gumpoldskirchen – Austria Ønovomatic.com – Firmenbuch Landesgericht V	Europe Tel.: +43-2252-606 Fax: +43-2252-62 Nr. Neustadt, FN 109445z DVR 0594903	2208
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	GAMING INDUSTRIES
CC	NOVOMATIC GROUP OF COMPANIES
CE	EG-Konformitätserklärung (Richtlinie 2006/95/EG und 2004/108/EG)
	EC-Declaration of Conformity
	(Directive 2006/95/EC and 2004/108/EC)
Dokument-Nr./document no.:	EG_FV610_F2_ce_02.doc
Hersteller/manufacturer:	Austrian Gaming Industries GmbH
Anschrift/address:	Wiener Strasse 158
	2352 Gumpoldskirchen
Produktbezeichnung:	Spielautomat Super Gaminator III Video
Product specification:	Slot machine Super Gaminator III video
Typen/types:	FV610 F2

Hiermit wird bestätigt, dass oben bezeichnete Produkte der Richtlinie 2006/95/EG des Europäischen Parlaments und des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten betreffend elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen und der Richtlinie 2004/108/EG des Europäischen Parlaments und des Rates zur Angleichung der Rechtsvorschriften der Mitgliedstaaten über die elektromagnetische Verträglichkeit entsprechen.

Hereby we confirm that the above mentioned products are in compliance with the directive 2006/95/EC of the European Parliament and of the Council on the harmonisation of the laws of the Member States relating to electrical equipment designed for use within certain voltage limits and the directive 2004/108/EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Zur Beurteilung der Erzeugnisse wurden folgende Normen herangezogen : For evaluation of product compliance the following standards are used:

EN 60335-1:2002 + A1:2004 + A11:2004 + A2:2006 + A12:2006 + A13:2008 EN 60335-2-82:2003 + A1:2008 EN 62233:2009 EN 55014-1:2006 + A1:2009 + A2:2011; EN 55014-2:1997 + A1:2001 + A2:2008 EN 55022:2010; EN 55024:2010 EN 61000-3-2:2006 + A1:2009 + A2:2009; EN 61000-3-3:2008

Einschränkung / restriction: nur für Gewerbliche Zwecke / for commercial purposes only

Ort, Datum/place, date:	Gumpoldskirchen,	6.3.2014
Aussteller/issued by:	Austrian Gaming Industries GmbH	

Rechtsverbindliche Unterschrift / Stempel: Signature of authorized person / Stamp:

AUSTRI TRIFS Ing. Oto Sabo Prokurist / Authorised officer

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