



# **685 EMPIRE THE RETURN**

## **Category B3**

### **Operator Manual.**

ISSUE 1.0 March 2009  
Part Number **PM13709**

**Service And Help Desk Number 020 8664 3400.**

**Fax 020 8664 3449.**

**[www.projectcoin.co.uk](http://www.projectcoin.co.uk)**

**Email: [andy@projectcoin.co.uk](mailto:andy@projectcoin.co.uk)**

## **Contents.**

<b><u>1.General Product Description:</u></b>	Page 3.
<b><u>2.Installation Instructions:</u></b>	Page 4.
<b><u>3.Operator Procedures:</u></b>	Page 6.
<b><u>4.Service Information:</u></b>	Page 9.
<b><u>5.Main Components:</u></b>	Page 14.
<b><u>6.General Maintenance Tips:</u></b>	Page 15.
<b><u>7.Touch Screen Calibration:</u></b>	Page 15.
<b><u>8. Error Codes:</u></b>	Page 16.
<b><u>8.Jotter.</u></b>	Page 17.

# **1. General Product Description.**

## **EMPIRE THE RETURN MODEL 685:**

Empire is a 5 reel bar x game with 10 win lines and a top feature.

The feature is entered when 5 gorilla heads show in any position but only one per reel.

The feature is a gorilla climbing the Empire state building to the monetary amounts at the top. Prizes range from £5 to £500 in the feature.

Reel wins range from £1 to £500.

£1 per play with a maximum win of £500 in any one game.

This machine pays out in £1 and 10p coins only

All of the above is powered by an Axis 945 PC Controller Unit which is supplied with 1 Gig Byte of ram running Windows XP Embedded Service Pack 2.

I/O is achieved via ELO touch screen connected to Com Port 1 and a Heber X10i I/O Card attached to the Universal Serial Bus.

All of the I/O with the exception of the Touch Screen is managed via the X10i Card.

## **2. Installation Procedure.**

### **IMPORTANT NOTICE:**

**This is an electrical device - Installation and service should only be carried out by qualified personnel.**

#### **Unpacking:**

1. Carefully remove all packaging.
2. Check that no internal components have come loose in transport.
3. Plug in a mains lead and wait for machine to set up fully.

#### **Configuration:**

Please follow these simple steps to configure your machine ready for operation.

4. **To enter 'Utilities' with the door open insert refill key (87000).  
The key switch will be located in one of two places depending on your cabinet type.**
  - A) Left of centre of payout tray or B) Upper right hand side of cabinet.
5. **Navigate through the Utilities area via the touch screen.**
6. **Please note that some Icons when touched may report that they are not valid for this configuration.**
7. **Percentage:**  
**Please note that this is fixed at 90% and CAN NOT be adjusted.**
8. **Set Volume:**  
**Touch "Set Volume" on screen and then using +/- keys set Volume to your desired levels. Please see [Windows Xp Embedded Volume Control](#): at end of these instructions for further information on Volume control.**
9. **Set Hopper Float Levels:**
  1. **Touch "Hopper Utils" button to set hopper floats or empty hoppers.**
  2. **Touching 10p hopper float button sets 10p float to 250 (£25).**
  3. **Touching £1 hopper float button sets £1 float to 1000 (£1000).**
  4. **Now place corresponding amounts into each hopper.**
  5. **Hoppers can be set to custom floats via the 'Empty' procedure.**
    - 1) **Place the quantity of coins you wish to use as your float into each hopper.**
    - 2) **Touch empty 10p hopper. This counts out 10p coins and sets the quantity counted as the new float level.**
    - 3) **Repeat step 2 for the One pound hopper.**
    - 4) **Return coins to relevant hoppers.**

**Installation Procedure Continued On Next Page**

## **Installation Procedure Continued.**

**9. Remove refill key & Close main door.**

**10. Machine is ready for play.**

**11. Electronic Data Capture:**

**Your new game fully supports the BACTA approved industry standard for electronic data capture.**

**If your site requires Edc you will probably need to contact our customer services department On 020 8664 3400 to obtain advice on how to enable this functionality**

**The RS232 plug is situated just behind the £1 hopper and to left of PSU.**

**The cabinet has a shrouded out let on the back wall underneath the power supply unit which can be removed to allow you to pass EDC wires out of the cabinet.**

### **Dil switch information.**

1 Bank of 8 Dual in-line switches are located on X10i board which can be found on top of the Axis 945 unit.

<b><u>dil</u></b>	<b><u>function</u></b>
<b>1</b>	<b>On To Enable : Float Displayed Door Closed.</b>
<b>2</b>	<b>not used</b>
<b>3</b>	<b>On To Enable : Note Acceptor.</b>
<b>4</b>	<b>On To Enable : Float Over ride to £200.</b>
<b>5</b>	<b>On To Enable : Hand Pay.</b>
<b>6</b>	<b>not used</b>
<b>7</b>	<b>not used</b>
<b>8</b>	<b>NB: Must Always be switched on</b>

Touch Screen Calibration: From time to time it may prove necessary to recalibrate your Touch screen. This is done via the Windows operating system and Control Panel. To carry out the calibration you will require a key board and if the screen is particularly out of calibration a mouse too. Please see Touch Screen Recalibration at the end of this document.

Windows Xp Embedded Volume Control: For reference the default Windows Xpe settings for sound (viewable in control panel -> sound) are ;

Device Volume: slide bar set to centre (50%).

Speaker Volume: Both Left and Right slide bar set to centre (50%).

Advanced Settings:

Master Volume:	50%.
Wave Volume:	100%.
Sw Synth Volume:	100%.
CD Volume:	50%.

Should any of these values be changed the COMMIT procedure explained on page 15 would need to be carried out.

**Service And Help desk Number 020 8664 3400**

## 3. Operator Procedures.

**Most user inter action with the machine will occur via the 'Utilities' area. Two levels of access are offered. A shallow level of functionality is accessible when the machine door is closed. A far deeper level of functionality is exposed when the 'Door Open' utilities mode is accessed.**

**Please Note that some utility functionality will not be applicable to the operating format of your machine in these cases you will see a suitable on screen message.**

### Utilities Door Closed Mode.

- 1. Error Log:** Quick Display of the last 50 error messages. Please note that critical errors can only be cleared when the main machine door is open (See Door Open Mode below).
- 2. Last Games:** Displays the outcome of the last 10 games played. Games are time stamped and listed in chronological order. This screen also display a sequential list of values of the last five notes accepted by the machine. The last note accepted is left most.
- 3. Hand Pay:** Please note Hand functionality is governed by the state of Dil Switch Five. To enable Hand pay functionality place this Dil switch in the on state. Machine will advise you if the Dil switch is not set correctly. You can use this facility to clear any residual amounts via the on screen buttons. Any amounts paid out this way are recorded on the internal hand pay meters and will form part of the accounting reports.
- 4. Refill Hoppers:** User screens that facilitate accurate and controlled refilling of hoppers. Refilling through this mechanism ensures that all metering is kept up to date and is the manufacturer recommend way to refill hoppers.

### Utilities Door Open Mode.

- 1. Set Volume:** Use up and down Arrows to set your desired volume. This facility is not available to on line product.
- 2. Performance:** Displays the Long term and short term performance analysis summaries. These screens are effectively split into two halves to allow for some element of cross reconciliation checking. Please see **Cash Reconciliation** below for a detailed break down of actual Coins & Notes.
  1. The upper half shows records of all monies in and monies out. Income statements are made at a 'Gross' and 'Net' level
  2. The Lower half shows records of all Bets (VTP) and Wins.
  3. Cross Reconciliation: The Net Income should sum to zero when the Net Win which is (Bets-Wins) is subtracted from it.  
So Net Income – Net Win = 0.
  4. Payout Percentage is the pay back to the player and is based on  
$$\frac{\text{Total Wins}}{\text{Total Bets}}$$
  5. Retained Percentage is the amount of physical money paid out by the machine relative to physical money inserted.  
$$\frac{\text{Total Money out}}{\text{Total Money In}}$$
  
A higher Retained Percentage reading indicates players willingness to replay credits.

**Utilities Door Open Mode Continued on next page.**

**Service And Help desk Number 020 8664 3400**

## **Utilities Door Open Mode.**

### **Performance Continued.**

6. **Reset Short Term Meters.** Press this Icon to reset **ALL** of your short term meters. Please note that **ALL** short term meters will be **reset** – this includes the Cash Reconciliation meters too.
7. **Individual Games.** Displays a break down of the Top Line performance of each individual game that is available for play.
3. **Cash Recon:** Displays a detailed break down of both Long and Short term meters readings for Notes, Coins and Refill. Please note that readings are not expressed as monetary values rather a count of the actual quantity taken in by the machine.

4. **Print test:** Not applicable to This product.

### **5. Hopper Utils:**

1. **Set Hopper Float:** Screen showing current hopper float levels press the respective Set Hopper Buttons to return hopper floats to their default values. Default float values are **£1000** for the Left hand One Pound Hopper and **£25** for the right hand 10p Hopper.
2. **Empty Hoppers:** Screen showing the current float levels of each hopper. Pressing the Empty Hopper buttons defloat the hoppers. Post this operation the Hopper float will be set to the match the quantity of coins counted out. You can use this method to set a non standard hopper float level.
6. **S/W (Software) Upgrade:** Use this facility to automatically update game software supplied by Project on a USB Pen. The initial screen displays 3 options.
  1. **Cancel:** Use this to abort a software update and return to utilities screens.
  2. **Update:** NB before initiating an update insert the USB pen containing program update into one of the free USB connectors on the front face of the Axis Control Unit. Once the 'Update' Icon is pressed the application will search through any connected USB devices looking for an Update.ini file. A list of update items will be displayed on the screen. Items to be update will have a green check next to them. Press Continue to execute the update. Please note that some updates will trigger an automatic reboot. This is expected behaviour.

Failure to find the update.ini file will result in a warning message press the Continue Icon to terminate this attempt to update.

3. **Roll Back:** Use this to revert (Roll Back) to a prior release of software. The machine retains the ability to 'Roll Back' the previous update thereby protecting against an update that itself turned out to have issues.
7. **System Info:** Displays a screen of useful information about your machine its set-up and the software applications it is running.
8. **Error Log:** Display of the last 50 error messages. Please note that viewing the error log with the main machine Door Open will automatically clear any critical errors.

**Utilities Door Open Mode Continued on next page.**

**Service And Help desk Number 020 8664 3400**

## **Utilities Door Open Mode.**

- 9. Last Games:** Displays the outcome of the last 10 games played. Games are time stamped and listed in chronological order. This screen also post a sequential list of the face value of the last five notes accepted by the machine. The last note accepted is left most.
- 

The Remainder of this page has been intentionally left blank.

**Service And Help desk Number 020 8664 3400**

# **4. SERVICE INFORMATION:**

## **IMPORTANT NOTICE:**

**This is an electrical device - Servicing should only be carried out by qualified personnel.**

### **COIN HANDLING AND ROUTING:**

The machine is equipped with a Money Controls SR5i Coin Validator Model No B5E02AGB00009. Valid Coins are accepted via the parallel interface. CCTalk mode is not active.

The following coins are accepted £2,£1,50p,20p,10p and 5p coins.

The £1 coin is routed to the High capacity Suzo Snow Hopper which is situated centrally in the cabinet and may be referred to as the 'Left Hand Hopper' adjacent to that on the Right Hand Side and sitting on the internal cash box is a Money Controls Compact Hopper set up to hold and dispense 10p coins. All other coins are routed directly to the cash boxes.

The SR5i uses an 18 way routing plug to manage coin routing.

The £ coin is controlled via links to pins 7-8-13. which translates to pathways D – C.

The 10p coin is controlled via a link between pins 15 – 16 which translates to pathways B – A.

### **Switch Mode PSU:**

Manufactured by Sanken Power Systems UK Ltd. Model SPS077W.

In: 115/230 Volts 6.2a-3.2a 50/60hz.

Out : 0v Ground (Black) +5v Purple +12v (Red) +24v (Pink)

### **General Lighting:**

General lighting is achieved by the use of low voltage 'Cold Cathode' tubes.

### **Player Buttons & Lamps:**

All Buttons are designated on a right to left basis and use the industry standard mnemonic of RHx or Lhx.

#### **Switch:**

<u>Position</u>	<u>Function</u>	<u>Switch wires</u>
RH1	Start	Black – white/red.
RH2	Auto play	Black – white/blue.
RH3	Transfer	Black – white/yellow.
RH4	Not used	Black - white/green.
RH5	Not used	Black - white/brown.
RH6	Not used	Black - white/orange.
RH7	Not used	Black - white/black.
RH8	Collect	Black – white/grey.

#### **Lamps:**

<u>Position</u>	<u>Function</u>	<u>Lamp wires</u>
RH1	Start	red – yellow/red.
RH2	Auto play	red – yellow/blue.
RH3	Transfer	red – yellow/pink.
RH4	Not used	red – yellow/white.
RH5	Not used	red - yellow/brown.
RH6	Not used	red - yellow/orange.
Rh7	Not used	red - yellow/black
RH8	Collect	red – yellow/grey.

#### **Misc Switches:**

<u>Function</u>	<u>Switch wires</u>
Main Door	Black – Grey/Blue.
Cash Door	Black – Grey/Blue.
Key	Black - Grey/White.

**Service And Help desk Number 020 8664 3400**

### **X10i I/O Card Connectors:**

<b><u>Plug</u></b>	<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
2	1	Grey/Red	91	Cash Door Switch Not Used.
2	2	Grey/Blue	92	Main Door Switch.
2	3	Grey/Yellow	93	Paper Out Switch Not Used.
2	4	Grey/Green	94	Paper Jam Switch Not Used.
2	5	Grey/White	95	Key Switch.
2	6	Grey/Brown	96	Open Drain Input/Output Not Used.
2	7	Grey/Orange	97	Open Drain Input/Output Not Used.
2	8	Grey/Black	98	Coin Divert Path D.
2	9	Brown/Black	68	In Meter.
2	10	Brown/Red	61	Out Meter.
2	11	Brown/Orange	67	Refill Meter.
2	12	Brown/Yellow	63	Hopper Opto (Power).
2	13	Brown/Green	64	Hopper 1 Transistor.
2	14	Brown/Blue	62	Hopper 2 Transistor.
2	15	Brown/White	65	Hopper 1 Security Relay.
2	16	Brown/Grey	69	Hopper 2 Security Relay.
2	17	White/Orange	57	SR5i Ident Pin (pin 1).
2	18	White/Brown	56	SR5i Accept 5 (pin 2).
2	19	White/Green	54	SR5i Accept 1 (pin 4).
2	20	White/Yellow	53	SR5i Accept 2 (pin 6).
2	21	White/Blue	52	SR5i Accept 3 (pin 7).
2	22	White/Red	51	SR5i Accept 4 (pin 9).
2	23	Red/White	15	+12 Volts (Current Sensed) Meter supply.
2	24	Red	10	+12 Volts.
2	25	Empty	-	Ground (0V).
2	26	Empty	-	Ground (0V).
2	27	Black/Green	84	Left Speaker +.
2	28	Black/Red	81	Right Speaker +.
2	29	Black/Yellow	83	Left Speaker -.
2	30	Black/White	85	Right Speaker -.
2	31	Black	80	Ground (0V).
2	32	Black	80	Ground (0V).
2	33	Empty	-	Left Audio line In.
2	34	Empty	-	Right Audio line In.

Please note that Speaker Pairs are 'Twisted'.

<b><u>Plug</u></b>	<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
3	1	Yellow/Red	31	RH1 Start Button Lamp.
3	2	Yellow/Blue	32	RH2 Transfer Button Lamp.
3	3	Yellow/Pink	3A	RH3 Homepage Button Lamp.
3	4	Yellow/White	35	RH4 Button Lamp Not Used.
3	5	Yellow/Brown	36	RH5 Button Lamp Not Used.
3	6	Yellow/Orange	37	RH6 Button Lamp Not Used.
3	7	Yellow/Black	38	RH7 Button Lamp Not Used.
3	8	Yellow/Grey	39	RH8 Collect Button Lamp.
3	9	Purple/Red	B1	Open Drain Output Not Used.
3	10	Purple/Blue	B2	Open Drain Output Not Used.
3	11	Purple/Yellow	B3	Open Drain Output Not Used.
3	12	Brown/Black	68	SR5i Inhibit 1 (pin 15)
3	13	Brown/Red	61	Coin Mech Lamp.
3	14	Brown/Red	61	Coin Mech Lamp.
3	15	Orange/Black	78	SR5i Inhibit Linked,3,1,6 (pins 13,14,16,17).
3	16	Brown/Red	61	Coin Mech Lamp.

**X10i I/O Card Connectors Continued on next page:**

**Service And Help desk Number 020 8664 3400**

**X10i I/O Card Connectors Continued:**

<b>Plug</b>	<b>Pin</b>	<b>Colour</b>	<b>Code</b>	<b>Function.</b>
3	17	Orange/Black	78	SR5i Inhibit Linked,3,1,6 (pins 13,14,16,17).
3	18	Orange/Black	78	SR5i Inhibit Linked,3,1,6 (pins 13,14,16,17).
3	19	Orange/Grey	79	Coin Inhibit Path B.
3	20	Orange/Grey	79	Coin Inhibit Path B.
3	21	Orange/Red	71	Coin Inhibit Path C.
3	22	Orange/Grey	79	Coin Inhibit Path B.
3	23	Orange/Red	71	Coin Inhibit Path C.
3	24	Orange/Red	71	Coin Inhibit Path C.
3	25	Orange/Blue	72	Hopper 1 Opto.
3	26	Orange/Yellow	73	Hopper 2 Opto.
3	27	White/Red	51	RH1 Start Button Switch.
3	28	White/Blue	52	RH2 Transfer Button Switch.
3	29	White/Yellow	53	RH3 Homepage Button Switch.
3	30	White/Green	54	RH4 Button Switch Not Used.
3	31	White/Brown	56	RH5 Button Switch Not Used.
3	32	White/Orange	57	RH6 Button Switch Not Used.
3	33	White/Black	58	RH7 Button Switch Not Used.
3	34	White/Grey	59	RH8 Collect Button Switch.
3	35	Red	10	+12 Volts.
3	36	Red	10	+12 Volts.
3	37	Red	10	+12 Volts.
3	38	Red	10	+12 Volts.
3	39	Black	80	Ground (0V).
3	40	Empty	-	Ground (0V) Not Used.
3	41	Black	80	Ground (0V).
3	42	Empty	-	Ground (0V) Not Used.
3	43	Black	80	Ground (0V).
3	44	Empty	-	Ground (0V) Not Used.
3	45	Empty	-	Security Switch Common Not Used.
3	46	Empty	-	Ground (0V) Not Used.
3	47	Empty	-	Security Switch 1 Not Used.
3	48	Empty	-	Security Switch 2 Not Used.
3	49	Empty	-	Security Switch 3 Not Used.
3	50	Empty	-	Security Switch 4 Not Used.

<b>Plug</b>	<b>Pin</b>	<b>Colour</b>	<b>Code</b>	<b>Function.</b>
4	1	Orange	70	CCTalk Data Channel A.
4	2	Empty	-	Ground (0V) Not Used.
4	3	Empty	-	CCTalk Busy Channel A Not Used.
4	4	Empty	-	Ground (0V) Not Used.
4	5	Empty	-	CCTalk Reset Channel A Not Used.
4	6	Empty	-	Void Not Used.
4	7	Empty	-	+12v Not Used.
4	8	Empty	-	Ground (0V) Not Used.
4	9	Black	80	Ground (0V).
4	10	Empty	-	+12v Not Used.
4	11	Empty	-	CCTalk Data Channel B Not Used.
4	12	Empty	-	Ground (0V) Not Used.
4	13	Empty	-	CCTalk Busy Channel B Not Used.
4	14	Empty	-	Ground (0V) Not Used.
4	15	Empty	-	CCTalk Reset Channel B Not Used.
4	16	Empty	-	Void Not Used.
4	17	Red	10	+12 Volts.

**X10i I/O Card Connectors Continued on next page:**  
**Service And Help desk Number 020 8664 3400**

### **X10i I/O Card Connectors Continued:**

<b><u>Plug</u></b>	<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
4	18	Empty	-	Ground (0V) Not Used.
4	19	Empty	-	Ground (0V) Not Used.
4	20	Empty	-	+12v Not Used.

<b><u>Plug</u></b>	<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
6	1	Black	80	Ground (0V).
6	2	Black	80	Ground (0V).
6	3	Brown/Red	61	RS232 Input RXD A (Edc 25Way D Type).
6	4	Brown/Yellow	63	RS232 Output TXD A (Edc 25Way D Type).
6	5	Empty	-	RS232 Input CTS A
6	6	Empty	-	RS232 Output RTS A
6	7	Black/Red	81	TTL Input RXD B (Note Validator).
6	8	Black/Yellow	83	TTL Output TXD B (Note Validator).
6	9	Red	10	+12 Volts.
6	10	Grey	90	- 12 Volts (Edc 25Way D Type).
6	11	Empty	-	Aux Coms Output.
6	12	Empty	-	Aux Coms Output.
6	13	Empty	-	Aux Coms Output.
6	14	Empty	-	Aux Coms Output.
6	15	Empty	-	Aux Coms Output.
6	16	Empty	-	Aux Coms Output.

### **Peripheral Device Connectors:**

#### **RS 232 25 Way D Type:**

<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
2	Brown/Yellow	63	Rx.
3	Brown/Red	61	Tx.
7	Black	80	0 Volts.
11	Grey	90	-12 Volts.
25	Red	10	+12 Volts.

#### **NV9 Note Validator.**

<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
1	Red	10	+12 Volts.
2	Black	80	Ground (0V).
10	Black/White	85	Link to Pin 13.
11	Black/Yellow	83	TXD.
13	Black/White	85	Link to pin 10.
15	Black/Red	81	RXD.

#### **SR5i Coin Validator Coin Paths.**

<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
1	Black	80	Ground(0V).
7	Orange/Grey	79	Overrides Path B.
8	Orange/Red	71	Overrides Path C.
9	Grey/Black	98	Overrides Path D.

**Peripheral device Connectors Continued on next page:**

**Service And Help desk Number 020 8664 3400**

## **Peripheral Device Connectors Continued:**

### **SR5i Coin Validator Binary Interface.**

<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
1	White/Orange	57	SR5i Ident Pin.
2	White/Brown	56	SR5i Accept 5.
3	Black	80	Ground (0V).
4	White/Green	54	SR5i Accept 1.
5	Key	-	Key.
6	White/Yellow	53	SR5i Accept 2.
7	White/Blue	52	SR5i Accept 3.
9	White/Red	51	SR5i Accept 4.
10	Orange/Black	78	Not Used.
11	Red	10	+12 Volts.
12	Black	80	Ground (0V).
13	Orange/Black	78	SR5i Inhibit 3.
14	Orange/Black	78	SR5i Inhibit 2.
15	Brown/Black	68	SR5i Inhibit 1.
16	Orange/Black	78	SR5i Inhibit 5.
17	Orange/Black	78	SR5i Inhibit 6.

### **Hopper Control Board J3.**

<b><u>Pin</u></b>	<b><u>Colour</u></b>	<b><u>Code</u></b>	<b><u>Function.</u></b>
1	Black	80	Ground(0V).
2	Red	10	+12 Volts.
3	Purple	B0	+5 Volts (not From PSU).
4	Empty	-	Not Used.
5	Empty	-	Not Used.
6	Empty	-	Not Used.
7	Empty	-	Not Used.
8	Empty	-	Not Used.
9	Empty	-	Not Used.
10	Orange/Yellow	73	Hopper 2 Opto.
11	Orange/Blue	72	Hopper 1 Opto.
12	Empty	-	Not Used.
13	Brown/Grey	69	Hopper 2 Security Relay.
14	Brown/White	65	Hopper 1 Security Relay.
15	Brown/Blue	62	Hopper 2 Transistor.
16	Brown/Green	64	Hopper 1 Transistor.
17	Brown	60	12 Volt (Current Limited Pull Up).
18	Brown/Yellow	63	Hopper Opto (power).

**Service And Help desk Number 020 8664 3400**

## **5.Main Components.**

To assist with any spare part ordering the following list of major components is provided. Part Numbers not prefixed by 'PCM' are our supplier part numbers again these are listed to assist you.

<u>Manufacturer</u>	<u>Part No's</u>	<u>Product description</u>
Project	PM7493	Elite hopper driver board
Heber	PM13458 01-20096-1	AXIS 945 PC
Heber	PM12774 01-18331-7	X10i PCB AXIS
Money Controls	PM7542 B5E02AGB00009	SR5i Coin acceptor
Money Controls	PM8477 HCOMBBGB00307	Compact Hopper 10p
Innovative	PM12788 39NV9	NV9 Note Acc+300 stacker
Samsung	PM13518 E9888**	Main 19"LCD*
*Includes an affixed ELO touch screen		
**Screen Only part number.		
Samsung	Pm 12711 LC320wxn-sac1	upper 32" LCD
Sanken	PM10737 SPS077W	48Volt Switch Mode Power supply.
Suzo	PM11395 16-6049-12	Snow hopper with reverse gearing and opto counting

**Service And Help desk Number 020 8664 3400**

## 6.General Maintenance Tips:

1. Coin mechanism should have the reject gate lifted and the coin path wiped clean every 4 to 6 weeks.
2. Touch screen should be wiped ONLY with a clean lightly water dampened cloth.
3. Compact 10p hopper should have the opto cleaned every 4 – 6 weeks. Lever out angled coin chute to gain access to opto. Wipe with clean cloth.
4. Keep edges of touch screen clean of debris as this can give the impression the screen is not set up properly. (calibrated)
5. Do not leave booklets bags etc. on top of firefly unit as this would restrict the cooling vents.
6. For calibration of screen refer to next page.  
NB you should only need to recalibrate screen if the firefly or screen has been replaced !

## 7.Touch Screen Calibration:

Power up the machine with the Key board and mouse connected to the corresponding colour coded connectors on the front face of the Axis Control Unit. Note the Colour coding Purple for Keyboard Green For Mouse.

The Machine will power up in the normal way. Once it is stable and in the 'Homepage' (Game Select) environment invoke Windows 'Task Manager' via the simultaneous holding down of the Alt-Ctrl-Del Keys.

In the Task Manager Applications window highlight Shell Lib21 Running Once Highlighted select end task to terminate application. Once the Shell has stopped running you will need to highlight and stop the 'Select' application. It is important to close down the applications in this order as the shell is designed to constantly re launch the Homepage.

Once both applications have stopped navigate to Control Panel (Start->Settings->Control Panel). Double Click on the ELO Touch Screen Icon. Touch the 'Align' Icon and follow the on screen procedures. You will be asked to repeat these steps twice as windows does not know instinctively which of the two screens has the touch screen associated with it.

Your Touch screen is now calibrated. How ever your new Calibrations will **BE LOST** if you do not follow the next steps closely.

The C: Drive of your Axis is write protected by Windows Enhanced write Filter Manager. It is protected in this way so that transient disk writes interrupted by unscheduled shut downs cannot damage any data on the this disk partition.

Your calibration changes have to be **committed** in the following way. Close control Panel. Select -> Start → Run. Into the white rectangular box to the left of OPEN: type the following;  
*Ewfmgr c: -commit* Click on OK. Now restart the machine using the formal windows shut down procedure. NB If you simply unplug the machine at this time all of your changes will **BE LOST.**

**Service And Help desk Number 020 8664 3400**

## 8. Error Codes.

1	:	WARNING:TCP/IP Comm buffer full.	
2	:	ERROR:Barcode error.	
3	:	ERROR:TCP/IP Network comm failure.	
4	:	ERROR:Remote Random Number array empty.	
5	:	ERROR:Critical Memory Corruption.	
10	:	ERROR:Printer not found.	
11	:	ERROR:Printer failure.	
12	:	ERROR:Printer out of paper.	
20	:	ERROR:Maximum Credits exceeded.	
21	:	ERROR:Maximum win exceeded.	
90	:	ERROR>Note Validator Stacker full.	(WE).
91	:	ERROR>Note Validator Safe jam.	(WE).
92	:	ERROR>Note Validator Unsafe jam.	(WE).
93	:	ERROR>Note Validator Fraud attempt detected	(WE).
94	:	ERROR>Note Validator Software error	(WE).
95	:	ERROR>Note Validator Note Rejected	(WE).
96	:	ERROR:Hopper Optic Fraud (interrupted).	
97	:	ERROR:Left Hopper Optic Fail.	
98	:	ERROR:Right Hopper Optic Fail.	
99	:	ERROR:Hopper Short Pay (insufficient coins).	
100	:	ERROR:Hopper Coin Denomination Wrong.	
101	:	ERROR:Data Pac Coms Fail (RS232).	

Errors fall into two categories:-

1. 'Warnings' (WE) these are self clearing issues that are recorded into the error log for your reference. Repeated occurrences of these errors may flag that maintenance is needed.
2. 'Critical' These errors will lock the machine up requiring user intervention to clear.

Errors **03** & **101** are capable of **self clearing** if communications links are re established.

Error **99(IOU)**To allow resumption of payout this error **automatically clears** on entry to Utilities application. Please note that this error also **sets the corresponding hopper float to zero.**

The Error Log is accessed via the utilities screens which are in turn accessed via the Refill Key Switch. The Error Log can be viewed in both door open and door closed modes. Errors are listed in chronological order. A numerical error code, brief description and a time stamp are displayed.

Please note that **Critical** errors are **cleared** by viewing the Error Log in door open mode.

**Service And Help desk Number 020 8664 3400**

## **9.JOTTER.**

**Service And Help desk Number 020 8664 3400**

