

# **Fire Blasta**

## User Manual

**Note**

**This unit includes sound effects provided by the following company:**

**<http://www.freesfx.co.uk>**

Your Serial Number is:

Please quote this number when ordering parts or seeking telephone assistance.

### Company Information.

	Telephone	Fax	
Technical Help	+44(0)121-773-1827	(0)121-772-6056	Ask for Technical Help
Parts & Accessories	+44(0)121-773-1827	(0)121-772-6056	Ask for the Parts Dept
Unit Sales	+44(0)121-773-1827	(0)121-772-6056	Katie Roberts
Comments:	+44(0)121-773-1827		Stuart Bland

### Addresses:

#### Head Office, Sales Office & Production

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Hazelwell Road  
Birmingham  
B30 2PF  
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Tel: +44(0)121-773-1827  
e-mail: sales@tornado-uk.com  
www.tornado-uk.com

A Member of the Tornado International Leisure Group

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## Conventions used in this Manual

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For clarity the following conventions are used in this manual:

<b>Paragraph Heading</b>	<b>Meaning</b>
<b>Tip!</b>	Information which will assist in the operation of the product
<b>Note!</b>	Information which is important for the correct operation <i>of the product.</i>
<b>Caution!</b>	Information which is <b>VITAL</b> to avoid injury to persons or damage to the product.
<b>Warning!</b>	Information which is <b>VITAL</b> to avoid <b><i>serious injury</i></b> to personnel or the public.

Please take note of the information in shaded areas. If you have any questions with regard to the correct installation or operation of the product please contact Tornado International Ltd.

### **Important – Please Read This!**

This manual is provided in good faith and is believed to be accurate. Because Tornado International have no control over the manner in which the product is used, users should satisfy themselves that any information or instruction contained in this manual is appropriate for the conditions under which the product is being installed and operated.

In the interest of product development, Tornado International reserves the right to alter or modify the product as necessary.

**Warning!**

The following information regarding the control of legionella is provided for your guidance. However information regarding the bacteria, its health risks and effective control changes over time. The user should ascertain that they are using the latest information and control techniques and that the method of control they choose is suitable for the equipment and location of its use. The following information was published in September 2003.

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## Control of Legionella

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### 1.01 What is Legionnaires Disease?

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Legionnaires disease is a form of pneumonia which, for certain susceptible groups of people is potentially fatal. The cause of the disease is the Legionella bacteria which is found commonly in nature, in rivers, ponds and water courses.

### 1.02 How are people infected with the Legionella bacteria?

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Infection is caused by a person breathing in small droplets of water contaminated with the bacteria. Everyone is potentially susceptible but some groups of people are more at risk. People over 45, smokers, heavy drinkers, those with an impaired immune system and people suffering from chronic respiratory or kidney disease.

### 1.03 Under what conditions will the bacteria become a threat?

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As previously stated the bacteria is present in the environment but generally causes no harm. However under certain conditions it will thrive and multiply, producing water that is so contaminated that droplets of such water, if inhaled cause a real threat to health. Three conditions affect the risk of infection. These are water temperature, water cleanliness and droplet size.

*Water Temperature*

The bacteria thrives at water temperatures between 20°C & 45°C. At cooler water temperatures the bacteria is not killed but does not multiply. At higher water temperatures (above 60°C) the bacteria is killed.

*Water Cleanliness*

If the water is between 20°C and 40°C the bacteria will thrive if a supply of nutrients is present. Rust, sludge, scale, algae or other bacteria will provide a suitable nutrient source for the bacteria. It should be noted that nutrients may be present in water that appears to be clean to the naked eye.

*Droplet Size*

If the two conditions above are met then the final criteria to enable infection is droplet size. The droplets produced by the equipment's operation have to be small enough to be inhaled by people.

### **1.04 How can the risk be controlled?**

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Of the three conditions above two are outside of your control. The droplet size is a function of the water pressure at the gun, the angle the stream hits the targets and the weather conditions. The HSE advise that water falling into a bath from a tap can produce droplets of a suitable size, so it is reasonable to assume that the operation of Aqua Blasta will also produce droplets of a size that are able to be inhaled.

Water temperature will vary according to the time of day, the season and equipment's location. It should be noted that it is the water temperature that is important, not the air temperature. As a rule water heats up more slowly than air but takes longer to cool when the source of heat is removed. In practice this means that an Aqua Blasta sited outdoors and facing south in the United Kingdom will reach maximum water temperature in the late afternoon. It should be noted that if the water temperature exceeds 20°C for part of the day, it is possible for the bacteria to multiply during the warm period. As the bacteria is not killed by cooler temperatures they will survive the cooler periods, only to multiply again when the water returns to higher temperatures. It is thus possible for the bacteria to multiply by instalments, increasing in quantity with each successive warm period.

The bacteria will not multiply without both warm water and nutrients. However trying to deprive the bacteria of nutrients is not a practical solution as it is impossible to tell visually if nutrients are available.

It is preferable to have Aqua Blasta connected to a mains water supply as this will ensure that water lost during operation is replaced by fresh water, which can be considered to be free of the bacteria so long as the supply is kept cool and used regularly.

#### **Management Regime.**

The water temperature will need to be monitored using a water thermometer. If the water temperature stays below 20°C it is only necessary to keep the water clean by removing any debris promptly and changing the water as and when necessary.

If the water temperature exceeds 20°C then a biocide needs to be added to the water to kill the bacteria. Many biocides are available but consideration should be given to the following issues. The treated water will find its way onto skin and clothes of the public and as such needs to be safe in these conditions. The biocide chosen needs to be compatible with the materials used in the construction of Aqua Blasta. These include Glass fibre, PVC, Brass Stainless Steel and Cast Iron. Your employees will have to handle the biocide and consideration should be given to their training, health and safety.

**Caution!**

In all cases guidance should be obtained from the chemical manufacturer and their instructions followed carefully. Undiluted chemicals may cause harm to people and the Aqua Blasta. It is vital to train all relevant personnel in the correct use of any chemical.

The biocide needs to be diluted and administered according to the manufacturers instructions. You should keep records of temperature checks and biocide use.

**1.04 Your obligations under law**

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To comply with general health and safety law you must consider the risks from Legionella that may affect your staff or members of the public and take suitable precautions. You must :

Identify and assess the sources of risk

Prepare a scheme or course of action for preventing or controlling the risk

Implement and manage the scheme and appoint a person to be responsible for the scheme

Keep records and check that what has been done is effective

If you have five or more employees you must keep records in writing of the findings of any assessment and details of any monitoring, checking or treatment carried out.

## 2.08 Control Electronics

The control electronics is mounted in the door of the pump house. All of the game settings can be viewed or changed from the electronics LDC display. A comprehensive list of cash and game data can also be displayed.

### 2.08.01 Use of buttons

There are three buttons on the top of the electronics marked “Mode” “Up” and “Down”. All of the unit’s functions are accessed and controlled using these three buttons. Their use is described below:

Mode ►	Short press and release	Move to the next screen Store and move to the next screen
	Long press and release	Toggle the game total to cash total Toggle the cash total to game total Enter the change value mode
Up ▲	Short press and release	Increase the value by one unit Move up to the next display
	Press and hold	Scroll the value up Scroll the display up
Down ▼	Short press and release	Decrease the value by one unit Move down to the next display
	Press and hold	Scroll the value down Scroll the display down

### 2.08.02 Display current settings

With the Game turned on and the pump house open observe the LCD display. To view the current settings briefly press and release the Mode ► button. The display will advance each time the button is pressed. Repeat until the display shows “Vend Price” on the top line of the display. The bottom line shows the current vend price in the local currency.

VEND PRICE £01.00
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Press: Mode ►

Play Time 1.6 Minutes
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The bottom line shows the current play time in minutes and 1/10s of a minute.

**Tip!**

1/10 of a minute is equal to 6 seconds, i.e. a setting of 1.6 minutes will mean the game will last for 1 minute and 36 seconds.

Press: Mode ►

Attract Delay 5.0 Minutes
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The bottom line shows the amount of time the game must remain unused before the attract mode cycle is run. (See section 2.08.05 Change the Attract Time Delay for details)

### 2.08.02 Change an Unprotected Vend Price

The system has the facility to protect the vend price with a code to prevent unauthorised adjustment. To set the code see section 2.08.06 Setting the Code. To change a protected vend price see section 2.08.03 Change a Protected Vend Price.

With the Game turned on and the pump house open observe the LCD display.

Repeatedly press the Mode ► button until the display shows:

VEND PRICE £01.00
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Press & hold: Mode ► button until the display shows:

VEND PRICE ▲
CHANGE CODE ▼

The ▲ & ▼ arrows will be flashing to indicate that you should select the upper or lower option using the Up or Down buttons.

Press: Up ▲

VEND PRICE ▲
£01.00 ▼

The ▲ & ▼ arrows and the previously set price will be flashing to indicate that you may alter the vend price up or down using the Up or Down buttons. Adjust the price as required.

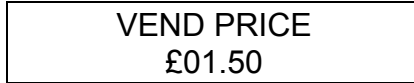
#### Note!

The vend price increments in steps of 5. It is important to choose a vend price which is exactly divisible by the lowest value coin your coin acceptors are programmed to accept. For example if the lowest coin the game accepts is 10, the vend price should not be set to any value ending in 5 (e.g. £1.25) as it is impossible for your customer to insert the correct price. If this should occur the



game will vend as soon as the vend price is reached and any additional credit will be retained against the next game on the same playing position. Any retained credit is lost if power is removed from the game.

Press: Mode ►



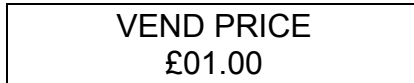
The new value is stored and displayed on the bottom line of the display.

**2.08.03 Change a Protected Vend Price**

The system has the facility to protect the vend price with a code to prevent unauthorised adjustment. To set the code see section 2.08.06 Setting the Code. To change an unprotected vend price see section 2.08.02 Change an Unprotected Vend Price.

With the Game turned on and the pump house open observe the LCD display.

Repeatedly press the Mode ► button until the display shows:



Press & hold: Mode ► button until the display shows:



The ▲ & ▼ arrows and the code 1<sup>st</sup> digit marker (#) will be flashing to indicate that you may enter the 1<sup>st</sup> digit of the code number by using the Up or Down buttons.

Press: Mode ►



The 1<sup>st</sup> digit is stored and the arrows move to the next marker. Enter the second code digit as before. Repeat until the four digits have been entered. When you press Mode ► after the last digit the display will change briefly to:



**Note!**

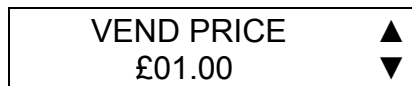
If you have entered an incorrect code the display will briefly show CODE INVALID on the bottom line. The display will then revert to the opening screen in this section. Restart this procedure from the beginning (2.08.03) being careful to enter the correct code.

It will then automatically change to:



The ▲ & ▼ arrows will be flashing to indicate that you should select the upper or lower option using the Up or Down buttons.

Press: Up▲

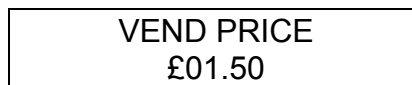


The ▲ & ▼ arrows and the previously set price will be flashing to indicate that you may alter the vend price up or down using the Up or Down buttons. Adjust the price as required.

**Note!**

The vend price increments in steps of 5. It is important to choose a vend price which is exactly divisible by the lowest value coin your coin acceptors are programmed to accept. For example if the lowest coin the game accepts is 10, the vend price should not be set to any value ending in 5 (e.g. £1.25) as it is impossible for your customer to insert the correct price. If this should occur the game will vend as soon as the vend price is reached and any additional credit will be retained against the next game on the same playing position. Any retained credit is lost if power is removed from the game.

Press: Mode ►



The new value is stored and displayed on the bottom line of the display.

**2.08.04 Change the Play Time**

With the Game turned on and the pump house open observe the LCD display.

Repeatedly press the Mode ► button until the display shows:

PLAY TIME  
1.5 MINUTES

Press & hold: Mode ► button until the display shows:

PLAY TIME ▲  
1.5 MINUTES ▼

The ▲ & ▼ arrows and the previously set value will be flashing to indicate that you may alter the play time up or down using the Up or Down buttons. Adjust the play time in steps of 1/10 of a minute as required.

**Tip!**

1/10 of a minute is equal to 6 seconds, i.e. a setting of 1.6 minutes will mean the game will last for 1 minute and 36 seconds.

Press: Mode ►

PLAY TIME  
1.6 MINUTES

The new value is stored and displayed on the bottom line of the display.

**2.08.05 Change the Attract Delay Time**

The game is fitted with an attract feature. If the game is not used for a pre-set time (the attract delay time) it will perform an attract cycle. This will cause the game to briefly turn on each of the guns in a pre-set pattern. The water and noise serve to attract the attention of any passing potential customer. Set the attract delay time as follows:

With the Game turned on and the pump house open observe the LCD display.

Repeatedly press the Mode ► button until the display shows:

ATTRACT DELAY  
3.0 MINUTES

Press & hold: Mode ► button until the display shows:

ATTRACT DELAY ▲  
3.0 MINUTES ▼

The ▲ & ▼ arrows and the previously set value will be flashing to indicate that you may alter the attract delay time up or down using the Up or Down buttons. Adjust the time in steps of 0.5 of a minute as required.

**Tip!**

The attract mode may be turned off by selecting “OFF” on this screen.

Press: Mode ►

ATTRACT DELAY  
6.0 MINUTES

The new value is stored and displayed on the bottom line of the display.

**2.08.06 Setting the Code**

The system has the facility to protect the vend price with a code to prevent unauthorised adjustment. The code must be four numbers. Do not use 0000 as this is used to turn the code function off.

Repeatedly press the Mode ► button until the display shows:

VEND PRICE  
£00.00

Press & hold: Mode ► button until the display shows:

VEND PRICE ▲  
CHANGE CODE ▼

The ▲ & ▼ arrows will be flashing to indicate that you should select the upper or lower option using the Up or Down buttons.

Press: Down ▼

ENTER NEW CODE ▲  
►#◀ # # # ▼

The ▲ & ▼ arrows and the code 1<sup>ST</sup> digit marker (#) will be flashing to indicate that you may enter the 1<sup>st</sup> digit of the code number by using the Up or Down buttons.

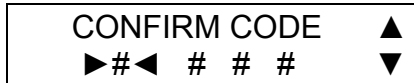
**Caution!**

Do not use the code 0000 as this is used to turn the code function off.

Press: Mode ►



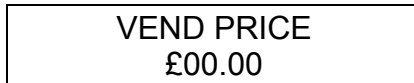
The 1<sup>st</sup> digit is stored and the arrows move to the next marker. Enter the second code digit as before. Repeat until the four digits have been entered. When you press Mode ► after the last digit the display will change to:



Re-enter the SAME code using the same procedure as above. When you press Mode ► after the last digit the display will briefly change to:



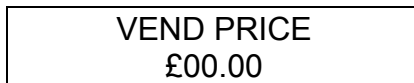
The display will automatically change to:



### 2.08.07 Changing the Code

Changing the code is split into two distinct sections. First you have to enter the EXISTING code number to allow access to the change code screen, then the new code can be entered.

Repeatedly press the Mode ► button until the display shows:



Press & hold: Mode ► button until the display shows:



The ▲ & ▼ arrows and the code 1<sup>ST</sup> digit marker (#) will be flashing to indicate that you may enter the 1<sup>st</sup> digit of the **EXISTING** code number by using the Up or Down buttons.

Press: Mode ►



The 1<sup>st</sup> digit is stored and the arrows move to the next marker. Enter the second code digit as before. Repeat until the four digits have been entered. When you press Mode ► after the last digit the display will briefly change to:



The display will automatically change to:



The ▲ & ▼ arrows will be flashing to indicate that you should select the upper or lower option using the Up or Down buttons.

This completes entry of the existing code, now you will enter the new code.

Press: Down ▼



The ▲ & ▼ arrows and the code 1<sup>ST</sup> digit marker (#) will be flashing to indicate that you may enter the 1<sup>st</sup> digit of the new code number by using the Up or Down buttons.

**Caution!**

Do not use the code 0000 as this is used to turn the code function off.

Press: Mode ►



The 1<sup>st</sup> digit is stored and the arrows move to the next marker. Enter the second digit of the new code as before. Repeat until the four digits have been entered. When you press Mode ► after the last digit the display will change to:

CONFIRM CODE ▲
▶#◀ # # # ▼

Re-enter the SAME new code using the same procedure as above. When you press Mode ▶ after the last digit the display will briefly change to:

CONFIRM CODE
CODE CORRECT

The display will automatically change to:

VEND PRICE
£00.00

#### **2.08.08 Turning the Code Off.**

Turn the code off by following the steps detailed in 2.08.07 Changing the Code, but for the new code use 0000.

#### **2.08.09 Lost Code.**

If you should forget the code contact our service department on for advise. Contact details will be found on page 2 of this manual.

#### **2.08.10 Display the Software Version**

With the Game turned on and the pump house open observe the LCD display.

Repeatedly press the Mode ▶ button until the display shows:

AQUABLASTA V1.0
TORNADO INT. LTD

The software version is indicated by the number after the “V” You may require this information when contacting our telephone help department.

#### **2.08.11 Display the Cash Meter by Console**

Cash from each pair of coin acceptors in the console is held in a common cash box. In order to make accounting more convenient the cash meter can be displayed by console there by providing a running total for each cash box

#### **Note!**

All of the meter displays (cash and games) are non re-settable.

Starting from the software version screen:

AQUABLASTA V1.0  
TORNADO INT. LTD

Press: Mode ►

1&2 £00005.00  
3&4 £00008.00

The display will show the cash meter by console. The meter is accumulative. To calculate the period's takings, the meter reading from the previous period should be subtracted from the reading for the current period.

If the display shows:

GAMES 1&2 000100  
3&4 000101

Press & hold: Mode ► button until the display toggles to the cash meter screen.

**Tip!**

In any of the meter displays you have the choice of either cash or game information. You can toggle between the two in any screen by pressing and holding the Mode► button. The system will continue to display your choice of cash or games information for all of the meter displays. Your choice is remembered if the game is switched off.

**2.08.12 Display the Cash Meter by Game**

This meter displays the total cash taken by the game in it's service life.

**Note!**

All of the meter displays (cash and games) are non re-settable.

Starting from the software version screen:

AQUABLASTA V1.0  
TORNADO INT. LTD

Press: Mode ►

1&2 £00005.00  
3&4 £00008.00

The display will show the cash meter by console.

If the display shows:



GAMES 1&2 000100 3&4 000101
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Press & hold: Mode ► button until the display toggles to the cash meter screen.

**Tip!**

In any of the meter displays you have the choice of either cash or game information. You can toggle between the two in any screen by pressing and holding the Mode ► button. The system will continue to display your choice of cash or games information for all of the meter displays. Your choice is remembered if the game is switched off.

Press: Mode ►

TOTAL CASH £000008.00
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The meter is accumulative. To calculate the period's takings, the meter reading from the previous period should be subtracted from the reading for the current period.

**2.08.13 Display the Cash Meter by Playing Position**

This meter displays the cash taken by each playing position. It is useful for fraud investigation or indicating if one of the playing positions is used less often than the others. This might indicate a coin acceptor or other technical problem.

**Note!**

All of the meter displays (cash and games) are non re-settable.

Starting from the software version screen:

AQUABLASTA V1.0 TORNADO INT. LTD
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Press: Mode ►

1&2 £00005.00 3&4 £00008.00
--------------------------------

The display will show the cash meter by console.

If the display shows:

GAMES 1&2 000100 3&4 000101
--------------------------------

Press & hold: Mode ► button until the display toggles to the cash meter screen.

**Tip!**

In any of the meter displays you have the choice of either cash or game information. You can toggle between the two in any screen by pressing and holding the Mode ► button. The system will continue to display your choice of cash or games information for all of the meter displays. Your choice is remembered if the game is switched off.

Press: Mode ►

TOTAL CASH £000008.00
--------------------------

Press: Mode ►

CASH POSITION ▲
? : £00008.00 ▼

**Note!**

The display might show the meter for any position 1 to 4. The display defaults to the meter for the position selected the last time this screen was displayed.

The ▲ & ▼ arrows will be flashing to indicate that you may select the other playing positions by use of the Up and Down buttons. When you have finished press: Mode ► to leave this screen.

**2.08.14 Display the Game Meter by Console**

Cash from each pair of coin acceptors in the console is held in a common cash box. In order to make accounting more convenient the Game meter can be displayed by console there by providing a running total for each cash box

**Note!**

All of the meter displays (cash and games) are non re-settable.

Starting from the software version screen:

AQUABLASTA V1.0 TORNADO INT. LTD
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Press: Mode ►

GAMES 1&2 000100 3&4 000101
--------------------------------

The display will show the games meter by console. The meter is accumulative. To calculate the period's games (and therefore cash), the meter reading from the previous period should be subtracted from the reading for the current period.

If the display shows:

1&2 £00005.00 3&4 £00008.00
--------------------------------

Press & hold: Mode ► button until the display toggles to the games meter screen.

**Tip!**

In any of the meter displays you have the choice of either cash or game information. You can toggle between the two in any screen by pressing and holding the Mode ► button. The system will continue to display your choice of cash or games information for all of the meter displays. Your choice is remembered if the game is switched off.

**2.08.15 Display the Game Meter by Total Games**

This meter displays the total games played in the unit's service life.

**Note!**

All of the meter displays (cash and games) are non re-settable.

Starting from the software version screen:

AQUABLASTA V1.0 TORNADO INT. LTD
-------------------------------------

Press: Mode ►

GAMES 1&2 000100 3&4 000101
--------------------------------

The display will show the games meter by console.

If the display shows:

1&2 £00005.00
3&4 £00008.00

Press & hold: Mode ► button until the display toggles to the games meter screen.

**Tip!**

In any of the meter displays you have the choice of either cash or game information. You can toggle between the two in any screen by pressing and holding the Mode ► button. The system will continue to display your choice of cash or games information for all of the meter displays. Your choice is remembered if the game is switched off.

Press: Mode ►

TOTAL GAMES
0000008

The meter is accumulative. To calculate the period's games, the meter reading from the previous period should be subtracted from the reading for the current period.

**2.08.16 Display the Games Meter by Playing Position**

This meter displays the games played on each playing position. It is useful for fraud investigation or indicating if one of the playing positions is used less often than the others. This might indicate a coin acceptor or other technical problem.

**Note!**

All of the meter displays (cash and games) are non re-settable.

Starting from the software version screen:

AQUABLASTA V1.0
TORNADO INT. LTD

Press: Mode ►

GAMES 1&2 000100
3&4 000101

The display will show the games meter by console.

If the display shows:

1&2 £00005.00
3&4 £00008.00

Press & hold: Mode ► button until the display toggles to the games meter screen.

**Tip!**

In any of the meter displays you have the choice of either cash or game information. You can toggle between the two in any screen by pressing and holding the Mode ► button. The system will continue to display your choice of cash or games information for all of the meter displays. Your choice is remembered if the game is switched off.

Press: Mode ►

TOTAL GAMES
0000008

Press: Mode ►

GAMES POSITION ▲
? : £00008.00 ▼

**Note!**

The display might show the meter for any position 1 to 4. The display defaults to the meter for the position selected the last time this screen was displayed.

The ▲ & ▼ arrows will be flashing to indicate that you may select the other playing positions by use of the Up and Down buttons. When you have finished press: Mode ► to leave this screen.

**2.08.17 Prime the Pump**

The electronics has a pump prime function. It should only be necessary to prime the pump if it has been emptied of water. This might be required for frost protection or if the pump is replaced. After the pump chamber has been filled with water this function will turn on the pump and open all of the water valves. This allows convenient and rapid priming of the pump.

With the Game turned on and the pump house open observe the LCD display. To advance to the prime pump function briefly press and release the Mode ► button. The display will advance each time the button is pressed. Repeat until the display shows:

PRIME PUMP
PRESS & HOLD ▲

Press and hold the Up button until a constant stream of water is sprayed from all of the guns.

Press: Mode ► to leave this function.