

Monitor Module

Controlled by RP... displayed on Monitor via HDMI and video files
Publicises game to passers by
Provides basic instructions
it also has 2 counters:
one measures the score of current contestant
then resets after each game.
The other measures the high score to date,
it resets if it is beaten.

8

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Raspberry Pi Master Module RPM: Box NO:1

This box contains a Raspberry Pi 4
It is the 'DOM' controlling the
5 'SUB' Arduinos over an RS 485 Bus
It is activated via a pulse from the coin slot
It has a node for the Bus

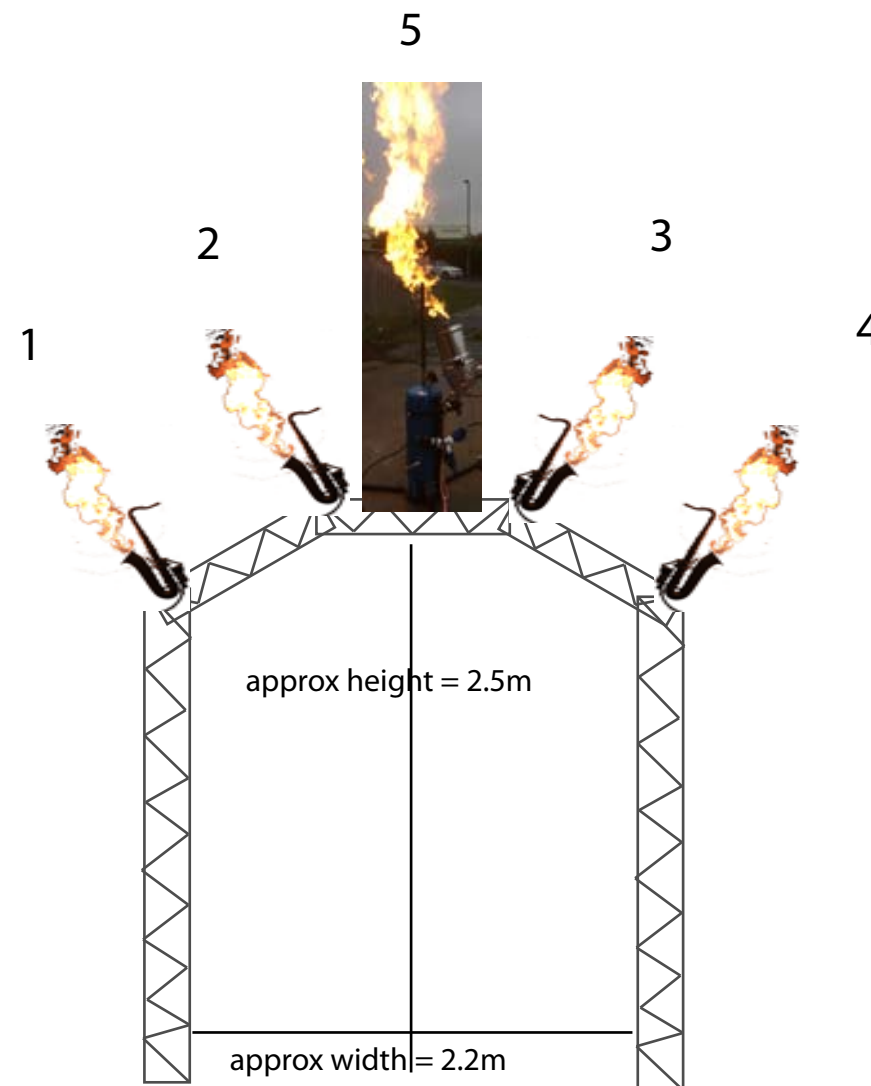
It controls peripherals via 2 x HDMI slots
and its 3.5mm sound jack

coin slot

A coin inserted into the slot
sends a pulse to the RP
to begin the Game!

Sound Module

Controlled by RP
plays a selection of sounds
and
tunes to accompany the game



Fire Module... Box NO:3

Arduino: 3

Instrument Flames:

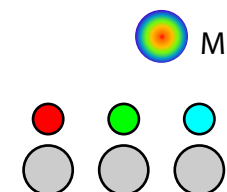
1-4 constructed from variety of old brass instruments
5 is the dragon Breath: a large flame...
all are Ignited Via:
240 volt solenoid valve + HT spark ignition
Controlled via by Arduino 3 via 5v low trigger relays.
This box also contains: all relevant power supplies,
1 x 'SUB' node for RS 485 bus

Box 3

Box 1

Rs 485 bus with Modbus for 2 way communication!

Box 2



Human Interface Space:



Human Interface Space

A reaction time game rather than force of hit!

this comprises of:

1 x lead neo Adafruit 16 pixel ring M
4 sets of pressure sensor 'Drum's with own neo pixel rings 1-4
pressure sensors work via capacitive difference.

Box 2 contains: 'SUB' Arduino 2
the Gubbins for controlling the Capacitance sensing
A node for the RS485 bus