3Sixty Technical Specification

1) Sources

1.1) Main PC

The main PC is capable of showing video across all four of the space's walls, treating them as one large screen. This means that when something is set to full screen, such as PowerPoint (when authored using the correct template) or a video it will fill the screens. It also has a separate monitor, visible only in the control room, which can be used to control the content of the 3Sixty's screens and can address all of the 32 available speakers, either in a consumer 5.1 configuration or as 32 individual channels when using appropriate software, such as Reaper.

The Specification of the main PC is:
- Intel I7-950 processor.
- 4GB ram.
- AMD Radeon 6950 – Driving the 3Sixty's walls.
- Nvidia GeForce 560 – Driving the control monitor.
- 5.1 Audio via on-board optical.
- 2 * Motu 24I/O audio interfaces.
- DVD rom drive.

The Main PC has PowerPoint, Reaper and a variety of internet browsers installed. Additional software may be installed upon request.

The main PC is not capable of displaying PowerPoint or video on just one wall of the space. All PowerPoint and video must be produced in the correct aspect ratio to fit the space's walls.

1.2) Backup PC

The backup PC capable of showing video across all of the space's walls, treating them as one large screen. It is capable of 5.1 audio.

The specification of the backup PC is:
- Intel I7 processor.
- 4GB ram.
- AMD Radeon 6970.
- 5.1 Audio via on board analogue outputs.

The backup PC is not capable of displaying PowerPoint or video on just one wall of the space. All PowerPoint and video must be produced in the correct aspect ratio to fit the space's walls.

1.3) Render PCs

The space also has 3 other PCs, which can be assigned to various rendering tasks as required. By default, they are not connected to the system and prior notice is required for their use.

The specification of the render PCs is:
- Intel I7 processor.
- 4GB ram
- Nvidia GeForce 560
- Up to 5.1 audio via on board analogue outputs.

1.4) Blu-Ray Player

The space has a resident Blu-Ray player. However, due to a lack of available inputs, it must be connected to one of the auxiliary DVI inputs when required. Its audio is permanently connected, selectable from the touch panel.

Due to a known bug in the space's routing matrices, the Blu-Ray player's HDCP negotiations may sometimes fail. Because of this, it is recommended that users contact the AV centre to either book support for their session or be shown how to solve the problem.

2) Inputs

2.1) Aux DVI

The system has four auxiliary DVI inputs, accessible via DVI-D connectors. Each auxiliary DVI input can be routed to one or more of the 3Sixty's four walls. The auxiliary DVI inputs are also suitable for use as HDMI inputs, with an appropriate adaptor cable.

Due to a known bug in the space's routing matrices, they do not currently support HDCP.

2.2) Aux RGBHV

The system has four auxiliary RGBHV inputs, each accessible via 5 BNC connectors. Each input can be routed to one predetermined screen (ie, input 1 feeds screen 1, etc). The auxiliary RGBHV connections do not offer the same quality as the auxiliary DVI connections.

2.3) Aux Component Video

The system has four auxiliary component vieo inputs, each accessible via 3 BNC connectors. Each input can be routed to one predetermined screen (ie, input 1 feeds screen 1, etc). The auxiliary component video connections do not offer the same quality as the auxiliary DVI connections.

2.4) Aux S-Video

The system has four auxiliary s-video inputs, each accessible via 2 BNC connectors. Each input can be routed to one predetermined screen (ie, input 1 feeds screen 1, etc). The auxiliary s-video connections are only capable of supporting standard definition video.

2.5) Aux Composite Video

The system has four auxiliary composite video inputs, each accessible via a BNC connector. Each input can be routed to one predetermined screen (ie, input 1 feeds screen 1, etc). The auxiliary composite video connections are only capable of supporting standard definition video.

2.6) Auxiliary Surround inputs

The 3Sixty features several additional surround sound inputs:
- An optical input.
- A coaxial input via RCA

Each of these inputs is connected to ports on an Extron SSP 7.1, which is connected in turn to the system's audio matrix.

Only one of: The Main PC's 5.1 output, the blu-ray player's output, the auxiliary surround inputs and the auxiliary stereo input may be used at once, as each is connected to the Extron SSP 7.1.

2.7) Auxiliary Stereo Input

The 3Sixty has an auxiliary stereo audio input, accessible via RCA or XLR connectors (balanced or unbalanced, depending on the connection cable used). This input is connected to an Extron SSP 7.1 and makes use of its crossover to route audio to the full range speakers and sub woofers as required, making it appropriate for playback from and IPod or laptop.

Only one of: The Main PC's 5.1 output, the blu-ray player's output, the auxiliary surround inputs and the auxiliary stereo input may be used at once, as each is connected to the Extron SSP 7.1.

2.8) Auxiliary XLR inputs
The system has 16 XLR inputs which feed directly to the audio matrix. Each can be configured as a balanced or unbalanced input, depending on the connector cable used.

3) Routing

3.1) Digital Inputs
The main PC, backup PC and auxiliary DVI inputs are all digital inputs. The system's digital inputs are mirrored on monitors in the control room and can be routed to one or more walls of the 3Sixty. This is particularly useful for showing the output of a laptop, for example, on more than one wall.

3.2) Analogue Inputs
The auxiliary RGBHV, component video, s-video and composite video inputs are all analogue inputs. Each analogue input can only be shown on the corresponding wall in the space (ie. Input 1 on wall 1, etc) and cannot be shown on the monitors in the control room.

3.3) Audio
All audio sources are routed to a 64 in, 48 out Extron MAV Plus 6448 AM matrix. This matrix is, in turn, connected to each of the 32 speakers in the space as well as 16 of the main PC's Motu inputs to allow recording. This means that any source can be routed to a speaker, or number of speakers, as required.

4) Outputs

4.1) Video
The 3Sixty's main video output is via four Panasonic PT-DZ6700 EL projectors, each with a native resolution of 1920*1200. When addressed as one large screen, the projectors have a total resolution of 7680*1200 pixels.

Each of the projectors has a corresponding monitor in the control room, which mirrors any digital signals sent to the projector.

4.2) Audio
The space is equipped with 28 Genelec 8050A full range active speakers and 4 Genelec 7071A sub woofers.