
From: brice gordon [REDACTED]
Sent: Thursday, December 6, 2018 8:52 PM
To: jeevacation@gmail.com
Cc: Larry Visok [REDACTED]
Subject: Fwd: AV and networking Report from LSJ and GSJ visit - Saturday 1st December 2018

Attached for you review

Sent from my iPhone

Begin forwarded message:

From: Rusty Henderson [REDACTED] >
Date: December 6, 2018 at 4:16:10 PM A=T
To: Brice Gordon [REDACTED]
Subject: AV and networking Report from LSJ and GSJ visit - Saturday 1st December 2018

A few notes from my last visit with a few pics attached:

LSJ - Pool Cabana Audio:

The amplifiers are good quality and appropriate for the application but there is no DSP (Digital Signal Processing) for the speakers. This means that every speaker, whether it's a low frequency subwoofer or a high frequency top speaker, is getting the full flat spectrum of sound. This will result in each speaker trying to deliver audio in a range that it was not designed for and it will not sound as good as it can.

The receiver that is being used was intended for a surround sound theatre room, not for a powerful stereo system. It has been configured as best as possible, but it not intended for this application.

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To re-use the current amps, the solution is to add a DSP stereo pre-amp. We recommend a QSC processor like this:

<https://www.qsc.co.uk/systems/products/q-sys-platform/products-peripherals-accessories/q-sys-core-110f/>

You can avoid using that processor if you buy amplifiers with a DSP built-in. Like this:

<https://www.k-array.com/en/products/type/amplifiers/> <<https://www.k-array.com/en/products/type/amplifiers/>>

For the audio source and control, rather than using an optical cable from the iMac, I recommend using a control interface that would be installed in the rack. An example is a SONOS connect. This can be controlled over the

network using a computer or mobile device. The other benefit is that it outputs an analogue signal which is required for the pre-amp and amplifiers. No extra cables required between the iMac and the audio system.

If the aesthetics are an issue, we would recommend a K-Array set up, which is club-grade and outdoor rated audio:

<https://www.k-array.com/en/products/line/rumble/> <<https://www.k-array.com/en/products/line/rumble/> = class=>
<https://www.k-array.com/en/products/type/systems/>
=><https://www.k-array.com/en/products/line/axle/> <<https://www.k-array.com/en/products/line/axle/>>

I do recommend running #12 or #10 wire to the subs. You can also double up the #14 if that is easier. Also, on every speaker, best to plug up the parallel output with a Neutrik dummy plug to prevent corrosion. Like this:
<https://www.neutrik.com/en/neutrik/products/accessories/sealing-accessories>
<<https://www.neutrik.com/en/neutrik/products/accessories/sealing-accessories>>

LSJ - Beach Area

Same as above, the location is using a surround sound receiver instead of a DSP pre-amp. The cabling is a bit odd. The Behringer is driving just one of the subs. The second sub is not connected. The other large format speakers are being driven by the surround amp which is going to be 125Watts/channel, which is low for these speakers.

I wouldn't re-use any of that kit. I would recommend a SONOS connect going in to some K-Array Amps and some K-Array speakers. These will be much more attractive, powerful and will sound much better than the current setup.

LSJ Theatre

I saw some new 8k projectors at a trade show San Diego. They ranged in price from \$18k to \$450k. The \$18k model I saw was so good, it would take a very trained eye to spot the difference. It was supposed to be out in October, I'll have to check on availability. The screen at LSJ is perfect for the 8k, although of course we will have to wait for some 8k content, the 4k image is stunning and a massive upgrade to the current projector.

The Sub is quite slack and "flabby". It sounds to me like all the low frequency sounds are the same. It would be interesting to try one of our K-Array subs to see if it makes an appreciable difference. I think it will. If it doesn't sound great out of the box, we'll have to check the DSP to make sure the signal being sent is not flat and shaped for a subwoofer.

GSJ - Various areas:

The current location of the rack is not very well protected and managed. We discussed the concept of moving the Antenna pole to the Manager's house and placing the Core Rack inside that building. All connections would then come from this building.

I recommend linking the Solar Area and Main house to the Staff core with fibre.

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The pool can be covered by a wireless access point connected by copper back to the staff core.

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The Beach Bar can connect to the Main House Rack over copper and local access points can be placed as needed. Audio can break out at the beach pavilion as needed. Recommend local Technomad Chiton Amps in the Pavilion that can handle the environment:

<https://www.technomad.com/products/powerchiton/>

I recommend you run a dedicated 20A circuit for each Amp.</div>

General note:

It would be a good idea to converge on to one family of products for the islands. QSC has a broad family of products that would serve you well. K-Array is also a brand I would consider where aesthetics and performance are needed. Secondary benefits is that you can keep a few parts as spares and all the connections and programming will be simplified.

Fibre, WiFi and Networking

If we run fibre to the key areas, it will make them very stable and reliable. We don't have to run fibre everywhere. You will need to run the fibre from the Core to each area that is critical. Non-critical areas could have a wireless link.

I cannot recommend using a wireless network as the best and most suitable solution for the islands. It is possible and it will work most of the time, but you will have issues but it will not be as reliable as the fibre.

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For Wifi, I highly recommend converting everything on to the Ruckus platform.

best wishes

Rusty Henderson



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