



GOODNESS, LOVE AND MERCY

The story, the reason.



ABSTRACT

Over the last year I have recorded a band playing a six track EP called Goodness, Love and Mercy. The aim of the project is to present The Good News (Appendix 1) of Jesus Christ through the medium of music. This was achieved with prayer through the final products of the EP and a concert held in the Atrium of the Richard Steinitz Building.

[J.D.Davies U1659577](#)

Creative Music Technology

Contents

INTRODUCTION TO THE PROJECT	3
Musician and Song Choice	3
Biblical Order	3
STUDIO PRODUCTION	4
Drum Tracking Session	4
Band Tracking	6
Vocal Tracking	7
Mixing	8
Mastering	9
OVERALL PRODUCTION	10
Planning	10
Tests	11
Promotion	11
Load In	11
LIVE MIXING	13
GLOSSARY	15
REFERENCES	17
DISCOGRAPHY	17
BIBLIOGRAPHY	17
APPENDICES	18
Appendix 1 - The Good News	19
Appendix 2 – Track List	19
Appendix 3 – Drum Tracking Day Patch	21

Appendix 4 – Drum Tracking Studio Schematic	22
Appendix 5 – Guitar Signal Paths In Studio	23
Appendix 6 – Mixing Process Signal Path	24
Appendix 7 – FOH Live Patch	25
Appendix 8 – Monitors Live Patch	26
Appendix 9 – Lighting Desk Patch and Design	27
Appendix 10 – Live Physical Plan	28
Appendix 11 – Live Power Plan	29
Appendix 12 – Live Crew Plan	30
Appendix 13 – Live Recording Plan	31
Appendix 14 – Live Showcaller Checklist	31
Appendix 15 – Array Calc plot and emulations	32
Appendix 16 - Truss Risk Assessment	34
Appendix 17 – Artwork, Posters and Graphic Design	35
Appendix 18 – Gantt Diagram	42
 THANKS AND ACKNOWLEDGEMENTS	 43



Introduction to the project

Over the last year I have recorded a six-piece band playing a six track EP called *Goodness, Love and Mercy*. The aim of the project is to present The Good News (Appendix 1) of Jesus Christ through the medium of music. This was achieved with prayer through the final products of the EP and a concert held in the atrium of the Richard Steinitz Building, chosen for its standing capacity and ease of access.

Musician and Song Choice

The band was put together specifically for this project from Christians with a connection with Huddersfield. It was very important to me that all of the musicians are Christians because of what they would be singing; I feel that it is important for them to not only believe what they are singing, but to also experience the joy associated with this. Furthermore, by being involved in the project, each of them would have the opportunity to speak to people about it; I wanted everyone of them to view it in the same way as me, as a means of telling people about who Jesus is and what He has done.

The choice of musicians was also influenced by the style of music that I wanted. Before I chose any musicians, I chose the songs. The process of choosing began with seeking the LORD during July 2019. I prayed about what songs I should include and the first to be put upon my heart was *Goodness, Love and Mercy* (Tomlin. C, 2018). From there I brainstormed several other songs that came to mind. I also looked at the themes in *Goodness, Love and Mercy* (Tomlin. C, 2018) and used this to refine the choice of songs.

Biblical Order

Finally, I wanted the album to flow as one continuous set, apart from the final track. This follows a biblical pattern for worship as laid out in *The Tabernacle of David* (Conner, K. J. 1976). The fundamentals of this from a musical sense are broadly outlined below, but this barely touches the surface of the matter as it focuses solely on the musical characteristics of each section. If you have further interest in this the book is very thorough in its exposition of the concepts.

1. Praise is at the beginning; the lyrical content is based on thanks and praise. This is also the highest tempo section of music.
2. Mid tempo. From a spiritual standpoint this is where a congregation, in a church following this pattern of worship, proceeds in pushing into the presence of God. In a practical sense it is the step between the first section and the last section.
3. Finally, the last section is the slowest and most considered.

Key changes across this pattern of music are not compulsory, but an aim is to keep a sense of flow, not breaking the focus of people. As a result, key changes in this EP were always up.

The bible puts a high value on singers and sung worship. I therefore decided that a key part of my sound was going to be vocals with four out of the six people in the band being singers. The importance of the singers also informed my mixing for both the EP and in the live show.

Abi Sykes	Singer
Obed Pius	Singer and Acoustic Guitarist
Ben Ault	Singer and Electric Guitarist
Nathan Berwick	Singer and Bassist
Mike Pounce	Pianist
Jonathan DeBem	Drummer

Studio Production

This EP was recorded at the University of Huddersfield, primarily utilising the recording studio alongside Phipps hall for tracking drums and the choir and some of the EMS studios for other sessions. It was completed in multiple overlapping stages (Appendix 18), each new stage building on the work from previous weeks.

Drum Tracking Session

The largest single stage was the first day of tracking. The aim of this day was to track drums for the whole EP and to lay down guide tracks for everything else.

The load in began the day before, starting with the DiGiCo SD8 and D2 rack which I positioned in the control room (Appendices 3 & 4). I recorded using the SD8 rather than the SSL console installed in the studio because:

1. It has more available inputs making my channel count possible.
2. It has very flexible output routing enabling me to mix in ears for each musician separately. A more personal mix for a musician encourages them to play with more confidence.
3. You can make a detailed show file with the offline editor.

However, there were also some drawbacks:

1. The set up and de-rig became much longer and more involved. This resulted in less time being available to track each song.
2. Although the audio was very clean and clear, I did not fully utilise the available analogue microphone preamps.



The decision to use the DiGiCo was a good one. To overcome the extended set up time associated with bringing a new mixing desk to the control room I planned to start earlier. I arranged in advance to have security let me into the building before it is usually opened to continue the set up that had been started the day before.

I also decided to remove the resonant head from the drum kit; this was because it wasn't a ported head and I knew that in the mix I would want to have the use of a kick in microphone.



The recording session was a success, the band arrived promptly, and we spent the first hour mixing the bands in ear monitors. It was important to spend this time upfront in order to allow the musicians to play as well as possible when we began recording. Initially, the plan for the day was to spend 45 minutes per song, aiming to complete one song and then move on to the next. This would have given us a very clear structure for the day, allowing us to know if we were on schedule or not. However, I decided to change this significantly part way through the day. As each song is arranged to flow directly into the next, we were focusing on getting each song to flow into the next by tracking transition sections. As the band was playing well together, I decided to come back from the lunch break to record some continuous takes of the whole EP. This was an ambitious decision, but it resulted in a significantly improved feel. It took several takes, but the fourth take was fantastic, and this was what was used for the drums in the first four tracks.

However, the fifth track was much less successful. I had decided that the band would achieve a greater feeling of natural flow if they had the freedom to play with some rubato. Because I wanted some rubato, I did not prepare a click track for this song. The band collectively tended to speed up over the course of this song. To combat this, I created a click track for this song mid-session, but we still didn't quite achieve what I wanted for this track within the time that was available to us.

I retracked drums for *All The Praise*, which was also fraught with problems. I set up the kit and microphones in as close to the same position to the original tracking day as possible. The original drummer was unable to attend the session, so I used a second drummer. Unfortunately, one of the toms had a low and unpleasant resonance that I did not pick up on during tracking and it affected almost every single microphone. I did not have the time to retrack at a later date so had to make the best of the audio. In future sessions I will invest more time at the beginning of the recording session to, check everything acoustically, record a small section and do a quick test mix to see how the audio responds to processing. As the drums were not critical to the sound of this piece, I mixed them much further back in the mix using just the overheads to inform the rhythm of the track. The attention of the listener is on the choir for most of the track so the much more distant drums are subtle enough not to demand the listeners attention. I decided to keep them in the track despite this because the performance injected more energy.



Band Tracking

Bass was tracked next, in separate sessions for each song, through a JDI into SSL mic preamps. We did not track using amplifiers, instead using amp simulators, Waves Gtr3. In the mix of first two tracks I used both amp simulators and DI, but for the rest of them I only used the cleaner amp and the DI. By not spending tracking with amplifiers we saved a great deal of time, enabling us to focus more on capturing a good performance. Time was spent punching in and out of record to stitch together different takes while we were in the studio. This meant that nothing was missed by assuming that a mistake could be fixed by borrowing from a different take later.

Piano was tracked with a keyboard rather than an acoustic piano because I wanted consistency over a larger number of sessions. I kept some of the guide tracks and recorded the rest myself over the following weeks as we tracked more of the bass.

Acoustic guitar was tracked using a Guild guitar, recorded with a stereo pair of DPA 4011. This was a challenge to get right. The sensitivity of the 4011s is such that they picked up my stomach rumbling during tracking. Even with the air conditioning in the room turned off, they picked up the air conditioning in the next room. This resulted in me retracking several times before the lockdown. Izotope Rx was used to reduce noise as much as possible when the lockdown was imminent, ruling out the possibility of retracking. If there was not a lockdown I would retrack the acoustic guitar using another guitar with a clearer tone in a different room to minimize extraneous noise.

I tracked the electric guitars in several different sessions with Ben Ault, Michael Bell and myself playing in different sessions. I kept some of the guide tracks from the drum tracking day where Ben captured the desired performance, because the energy on that day would have been very difficult to recreate. (See appendix 5 for signal path diagrams for each guitar set up). Finally, I tracked some of them with a telecaster at home into Waves GTR3 amp simulators, as with the bass.

Vocal Tracking

When it was available the vocals, with the exception of the choir, were primarily tracked using the Neumann M149 and AKG C12 into the SSL preamps. I used the SSL compressors and a bricasti M7 reverb unit during tracking to help the singers achieve the best performances possible. By tracking with analogue processing, you eliminate computing based latency that can be distracting for musicians. The SSL also makes it very easy to change the mix that you are sending to the singers in real time, compared to changing a headphone mix from within ProTools.



I decided to use a choir on *All The Praise* because of the importance of the vocals in this piece specifically. The original recording of this song was an enormous choir arrangement and I really wanted to capture a small part of this feel, while not completely disconnecting it from the acoustic aesthetic of the rest of the EP. To achieve a good capture, I tracked a small choir of twelve people in Phipps with one close mic per section and a blumlein pair for an overall room tone. I gave the choir director and half of the choir headphones for monitoring, but they did have an unfortunate tendency to become flat throughout a take. Due to time constraints and the difficulty of arranging to have so many people there at the same time I decided to press on.

A better means of keeping monitoring would have been to have speakers at a low level in the room. This would have compromised the quality of the room mics with the spill, but I believe it would have been worthwhile. In the end I needed to do a large amount of post-production work on the choir to tune them which did constrain the quality of the sound a great deal. I had to pitch correct by ear each part separately, very rarely using the room mics to minimize phase alignment issues. Some parts were more effective than others but there are still some audible problems. The effect was however worth it. They brought about an enormous amount of character to the songs they sung, particularly in the bridge of the final track, Goodness Love and Mercy, where they sing “I’m gonna dwell in the house of the LORD forever”.



Mixing

Mixing was completed in a hybrid manner, a lot of processing being done in the box, including de-essing and a great deal of drum processing. I then bussed this out onto the SSL AWS mixing console's 24 faders. I chose to work in this way because of the sound of the desk and the outboard hardware, as well as the practical hands on workflow suiting my style. I found in early comparisons there was a sweeter feeling to the sound of the analogue mix. The higher frequencies could be bright but in a clear and warm way that I struggled to replicate in the box. The feel of the SSL bus compressor is also a big incentive to work in this manner; it is rightfully a legendary piece of audio hardware that gives a mix a more cohesive feeling. This workflow also encourages you to listen more closely, as when you cannot see an EQ curve, you cannot be tricked into mixing with your eyes. You can just place your fingers onto the potentiometer, close your eyes and move it until the sound is improved.



The use of the hardware to such an extent also encourages the use of the analogue automation as it complicates the mix if you are going in and out of the box multiple times. The way in which I automated was using the SSL automation which requires you to physically move the faders. I found this more physical means of interacting with the sound very conducive to deliberate changes that somehow disconnected from you while in the box. Moving forward into other projects where I have not been able to use the SSL automation, I have increasingly been using DAW control surfaces as Goodness, Love and Mercy has changed the way that I mix.

I usually used the 1176 on the lead vocals for any given song and the Avilon 747 on backing vocals. The vocals, specifically the lyrics, were the most important elements of every track and so I mixed to make sure they were always clear. I mixed on a track by track basis allowing me to change my processing for different songs. This also allowed me to better utilise the 24 faders available by, in one instance, routing FX returns to the same faders as the choir in songs not requiring the choir. I was able to do a similar thing in When I Survey where I put the viola on a channel that had previously been used for a mono guitar track.



The use of the SSL also encouraged me to use hardware FX rather than routing back into the box. Initially I considered using hardware for everything but in the end, I only used the Bricasti M7 for my main reverb, and Lexicon for the main delay. Everything else was bussed back into ProTools and sub mixed back onto one of my FX return faders. (Appendix 6)

There are also some drawbacks to mixing in this manner:

1. Recalling can take a while. At the beginning of every mix I needed to load a file on the mixing desk that told me where I had every individual potentiometer at the end of the last mix of that track. It could take up to 15 minutes to precisely change all the 493 potentiometers and 919 analogue buttons.
2. You cannot simply bounce a mix in a matter of minutes. Rather, you record a print of the mix from the mix bus back into ProTools.

The mixing process was cut short by COVID-19. By the time of lockdown, I had made several mix passes and was getting close to the final mix of everything; I was really blessed to have got so far ahead. Once the lockdown was set in, I had to make the decision to either start mixing all over again in the box, or to use the most up to date draft mixes. I chose to stick with my analogue methods and keep the mixes I had already done.

Mastering

Mastering was the final step in this process, but, unable to use the university's analogue hardware, I mastered in the box at home. I used Cubase to master rather than ProTools for a two reason:

1. You can view the controls for as many plugins as you like at once in Cubase allowing you to watch the meters of multiple at once.
2. The metering is clearer to me, and you can easily view peak level as well as LUFS at the same time.

I mastered each track with an almost identical chain with an extra plug in on two of them to make some further adjustments. Every track had the following chain:

1. Waves SSLComp Stereo
2. SoftClipper
3. Waves J37
4. Waves TG12345 Stereo
5. Stereo Enhancer

In every case the bus compressor was used to enhance the punchiness of the drums, as well as adding some extra colouration to the sound. The soft clipper, J37, and TG12345 were all then used to soften the peaks and to add some saturation to the whole mix. In some cases the TGI12345 was also used to make some very slight, but very broad EQ changes, such as in All The Earth Will Sing Your Praises where I cut the treble frequencies by less than a dB. I used the Waves C6 Multiband Compressor on Goodness, Love and Mercy to control a few bass frequencies. I used the Waves Q1 Stereo to make a small boost to the mid frequencies of All The Earth Will Sing as I felt the final mix could benefit from a bit more low mid weight.

The final stage of the mastering process was to level the tracks. Because I had recorded them to flow, I was not simply able to bring them up to a uniform peak level and leave it there. In the context of this EP it was right that some be louder than others. I levelled all the tracks relative to each other by ear and then began to bring them up to level, monitoring everything to avoid clipping. The saturation was limiting the excessive peaks nicely, allowing me to bring it up to a level that I was happy with.

If I were able to do this again then I think at this point I would consider pushing every track through one last limiter to try and get a touch more level out of them. That said, I decided against this because I was enjoying the dynamic range of the EP and did not want to squash it in the name of loudness.

Overall Production

Planning

The live concert was a triumph of organization and contingency plans; miracles happened to make it work. Planning fell into several areas:

1. Audio Systems (Appendices 7, 8 & 15)
2. Lighting and AV (Appendix 9)
3. Infrastructure (Appendices 10 & 11)
4. Health and Safety (Appendix 16)

Audio system design began immediately in September with some models made in Array Calc (Appendix 15). To combat the acoustic challenges of the space, I decided that the use of more speakers would be important to maintain a clear direct sound from the listening positions. To further combat the acoustic challenges of the room, that stage noise should be as close to zero as possible by exclusively using IEMs; having all amplifiers in a separate room; and by putting a screen and baffles around the drum kit. On reflection, however, the sound could have been improved further by hanging curtains from the truss and using a full height drum screen with a lid. Unfortunately, my personal budget could not stretch to this.

Tests

In order to minimize wasted time on the day I conducted several tests of the different system components in the weeks and months preceding the event. These were:

- | | |
|--------------------|---|
| Speaker Test 1 | Set up several speakers in the atrium with SMAART on a laptop to look at the effects of different sub configurations. |
| Truss Test Fit | A test set up of the truss to determine the maximum size that could be achieved within the space. The curved nature of the room put into doubt our ability to calculate this based on the plans alone. |
| Speaker Test 2 | A second speaker test in the atrium to determine the optimum amount of delay to put on the side fills and the balcony fills. |
| Remote Sound Check | We were not permitted to do a full set up in the atrium in advance to sound check, so I gathered the band in the recording studio and we did a full sound check in there to test all the inputs to the system and to make a big start on the IEMs |



Promotion

A not insignificant amount of the quantifiable success or failure of the live show depended on the audience. In an effort to fill the atrium I enlisted the help of Joel Felix to promote. (Appendix 17) Videos produced by Joel Felix, including an interview he did with me in the recording studio, helped bolster the social media campaign he had created. I spent an afternoon having my photo taken by Nicoletta Assioti, these were used to create some posters that were placed around the Richard Steinitz Building. Posters and fliers were also hung up and handed out outside the Richard Steinitz Building, featuring the album art created by Kathryn Smith.

Load In

The scale of this production was such that a significant crew was required. Every one of them very generously worked for free for the whole duration. (Appendices 12 & 14) The final preparations began the week of the gig, equipment arriving from different sources in parts up to the day itself. I was given official access to the venue to set up the evening prior to the gig from 8pm. I arranged for a few members of the crew to arrive early to enable a prompt start.

The first stage of the build was the truss assembly. This began with a safety briefing delivered by myself and overseen by my supervisor, Stewart Worthy. This was followed by the building of the truss footprint, then the assembly and elevation of the four towers. Once this had been done the truss was raised to a height of approximately 6ft to allow easy access to the lighting fixtures and to run power to the grid. The power was taken from a 32amp socket at the far end of the atrium, flown to the balcony, before being flown down to the truss, it was then distributed out into multiple 16amp sockets that were

used to power all of the lighting (Appendix 11). Finally, the truss was raised to full height and the safety chains were applied prior to leaving for the evening.

In the morning I arrived very early with David Allcock, my lighting engineer, to program the lighting and build the stage. This was a time-consuming process that involved a large amount of time up ladders. In future I will more carefully label my fixtures in advance and flash the system while the truss is still at head height. The projector was set up and an advert for the gig was displayed by 10:45. Mid way through the day of the gig the final delivery of lights arrived, and these were set up by Dave while I was loading in the audio equipment.



The first thing to be loaded in were the desks, racks and speakers; this is my usual order of PA set up. The outputs are the most important parts of the system because it does not matter how good the inputs are if you cannot amplify them. If you do the outputs first and something is not working as required, you have the maximum amount of time to rectify the problem. It is easier and better to make compromises on the input to the system than the output. Once the ground floor speakers were up, I loaded my show files and ran some quiet test tones to ensure that every output was receiving all that was needed.

The rest of the day was spent setting up the microphones on stage, the amps in the isolation room and the IEMs. There were several problems that kept pushing us back. The projector that had been working all day became steadily more temperamental as zero hour approached. I put a couple of people onto fixing this as it was to display a video at the beginning as well as the lyrics for all the songs. In the end, it was too temperamental to use; Jack managed to get it working for just long enough to display the opening video, but it then completely gave up.

I also had to compromise on the cameras booked for the recording of the event. I had planned to position several fixed cameras to film the event as well as have three operated cameras. However, I ran out of time and manpower to position these, so the event was only recorded by the three camera operators and the multitrack recorded from the FOH desk. The redundancy that was planned by recording a multitrack from the monitor desk was left as well on the grounds of time availability.

We were very late to fly cables from the playback laptop on the balcony to FOH for video audio. This however was successfully completed prior to the start of the gig because I prioritised it over some of the other features. This was only completed post sound check, literally in a nick of time.

The sound check itself was a blur. Everything had been line checked but now the pressure was on, and I went into show mode. I asked my monitor engineer to call the sound check so I could carry on responding to other problems as they arose. I made a large number of my key mix decisions at this point. It was at this moment that I pulled the FX from the opening mix, along with a large number of the drum mix. At 18:55 I stopped the sound check to make my final checks and decisions. I sent my

showcaller, Michael Gladstone to change all the batteries on stage and to check the lapel microphone for the speaker. Finally, I gathered the band, and a few close friends to pray. We went into the amp isolation room and asked God for success. We asked that people would hear the message that I wanted to put across and respond to Jesus, that everything would go well on a technical basis, and that I would do well academically.

Live Mixing

The live mixing was a challenge because of the acoustics; however, the effect was as desired. The first two songs were the hardest as they were the fastest. The speed was an issue because of the size of the room. In a large room the first note does not have time to decay before the next one is played, which can result in a build-up of sound. The chord of the previous bar can still be heard in the room while the next one is being played. The effect is to make the sound muddy and unclear. In slower songs this is less of a problem as the audio has more time to decay before the next beat and bar. To make the mixes work as well as possible for these two fast songs I kept them very simple using no FX, and by focusing on vocal clarity, as in the studio.



I kept the drums as far back in the mix as possible as I felt that they were very dominant. They would have been quieter had I removed them from the mix altogether, however, this would have meant sacrificing clarity as the audience would only be hearing the reflected sound from the room, rather than a direct sound. I therefore used the drum mics to reinforce the acoustic sound, adding clarity and presence to the sound that could be heard acoustically.

As the tempo of the songs slowed, I was able to introduce FX and more depth to the instruments as they had more acoustic space. It was in these later songs that the room ceased to be a hinderance, but rather an asset. It was at this point that I was able to fill out the sound a bit more with some more depth from

the piano without compromising the intelligibility of the vocals. I had been worrying much earlier in the process that the selection of songs was weighted too heavily towards the slower, more worshipful songs later in the set, but on the evening it really worked a lot better this way. That style of music worked better with the acoustics of the room, so I believe they would have more effectively communicated the message I wanted to put across.

I was thrilled with the outcome of the event. However, I felt the quality of the sound was not as high as I would have liked. It was the best that I could do in that space with the set up that I had settled on for the evening. If I was able to do it again there would have been very little I would have done differently in terms of the mixing without first having made changes at an earlier stage. Had I have more fully isolated the drums, then I would have pushed them further back in the mix, allowing for the guitars and piano to move slightly forward in the mix, without the overall volume exceeding that which I deemed appropriate.



Glossary

1176	The Universal Audio 1176 is a FET compressor with a very fast attack and release time that delivers a characteristic sound. It has been copied by several other companies, both with hardware and software.
Amp Simulator	A digital version of an amplifier used to emulate the coloration of an amplifier. It often also has a cab simulator as well to emulate the effect that micing up a speaker has on a sound source.
Avalon 747	Classic piece of studio hardware with a compressor, and EQ built into it.
Blumlein	A microphone technique using 2 figure of 8 microphones to capture a stereo image.
Bricasti M7	A high quality outboard FX unit.
Bus	A means of summing multiple channels of sound together in order to process grounds of sound together for playback.
C12	A high quality valve microphone.
Click Track	A (usually) digitally created track consisting of clicks that is used to help musicians keep in time while recording.
Compressor	An audio processing unit that reduced the dynamic range of a signal.
Cubase	A digital audio workstation.
De-essing	A type of multiband compression that reduces sibilant sounds in vocals.
dB	Shorthand for a decibel; a means of comparing two sounds by means of a relative, logarithmic scale.
DI	Direct Inject, a means of inputting a signal with instrument level impedance into a microphone preamp.
DPA 4011	A high quality, cardioid pencil condenser microphone
Fader	A sliding potentiometer control used in mixers and other processors.
FX	Shorthand term for Effects.
IEMs	Shorthand for In Ear Monitors
In Ear Monitors	A specialist type of earphone designed to enable musicians to hear all they need to perform.
In The Box	A term for processing audio in a computer rather than using analogue equipment. The 'box' meaning the computer.
Izotope	An audio plug in manufacturer.
Load In	The process of bringing in equipment in preparation a recording session or gig.

LUFS	Loudness Unit Full Scale - A measurement of perceived loudness calculated by look at the average level over the duration of the piece.
Mastering	Traditionally the sequencing of individual recordings to form a cohesive album of material, and to apply corrective equalisation and dynamics processing to ensure a consistent sound character and to optimise playback on the widest possible range of sound systems. Appropriate signal processing may also be applied to make the mastered material suitable for its intended medium (such as controlling transient peaks and dynamics and mono-ing the bass for vinyl records, etc). (Sound On Sound, 2020)
Neuman M149	A high quality valve microphone.
Peak Level	The maximum instantaneous level of a signal.
Phase	The relative position of a point within a waveform, expressed in degrees where 360 degrees corresponds to one full cycle, and 180 degrees corresponds to half a cycle.
Print	The process of recording a mix bus.
ProTools	A digital audio workstation.
Punch in/out	A phrase from the era of recording to tape, whereby the engineer would play the tape and 'punch in' the erase and recording head at the point where he wished to record.
Retracking	A term for when you record something that you have already done, usually because you were not satisfied with the quality of the original for some reason.
Saturation	A subtle form of distortion that adds harmonics to the audio.
SSL	Solid State Logic – An audio company that is renowned for making hardware audio equipment, specifically their mixing desks.
Tracking	Another term for recording.

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Appendices

- 1 The Good News
- 2 Track List
- 3 Drum Tracking Day Patch
- 4 Drum Tracking Studio Schematic
- 5 Guitar Signal Paths In Studio
- 6 Mixing Process Signal Path
- 7 FOH Live Patch
- 8 Monitors Live Patch
- 9 Lighting Desk Patch and Design
- 10 Live Physical Plan
- 11 Live Power Plan
- 12 Live Crew Plan
- 13 Live Recording Plan
- 14 Live Showcaller Checklist
- 15 Array Calc Plot and Emulation
- 16 Truss Risk Assessment
- 17 Artwork, Posters and Graphic Design
- 18 Gantt Diagram

Appendix 1 - The Good News

From the Greek word εὐαγγέλιον often translated as gospel. This refers to the news that the Saviour of the world has come to redeem His people.

Appendix 2 – Track List

Track 1 – Miracles

Who can now say they are King of all kings
Daily creating amazing thing
Who can say they are Lord of all lords
Overall reigning forevermore

Who conquered death rising up from the grave
Crushing hell proving mighty to save
Who split history to bring us life
Truly only Jesus Christ
Truly only Jesus Christ

*Hallelujah! Praise the LORD
He performs great miracles
Hallelujah! Praise the LORD
He performs great miracles*

All my sin I bear no more
Jesus Christ has paid it all
Heavens mine forevermore
That's the greatest miracle

Track 2 – All The Earth Will Sing Your Praises

You took, you take
Our sins away O God
You give, you gave
Your life away for us

You came down
You saved us through the cross
Our hearts are changed
Because of your great love

*You lived, you died
You said in three days you would rise
You did, you're alive!
You rule, you reign,
You said you're coming back again
I know you will;
And all the earth will sing your praises*

Track 3 – This Is Amazing Grace

Who breaks the power of sin and darkness
Who's love is mighty and so much stronger?
The King of Glory, the King above all Kings
Who shakes the whole earth with holy thunder
Who leaves us breathless, in awe and wonder?
The King of Glory, the King above all Kings

*This is amazing grace
This is unfailing love
That you would take my place
That you would bear my cross
You lay down your life
That I would be set free
Jesus, I sing for
All that you've done for me*

Who brings our chaos back into order
Who makes the orphan a Son and Daughter?
The King of Glory, the King above all Kings
Who rules the nations with truth and justice
Sines like the sun in all of its brilliance?
The King of Glory, The King above all Kings

Worthy is the lamb that was slain
Worthy is the King who conquered the grave
Worthy is the lamb that was slain
Worthy is the King who conquered the grave

Track 4 – When I Survey

When I survey the wonderous cross
On which the Prince of Glory died
My richest gain I count but loss
And pour contempt on all my pride

Forbid it, Lord, that I should boast
Save in the death of Christ my God
All the vain things that charm me most
I sacrifice them to His blood

See from His head, His hands, His feet
Sorrow and love flow mingled down
Did e'er such love and sorrow meet
Or thorns compose so rich a crown?

Were the whole realm of Nature mine
That were an offering far too small
Love so amazing, so divine
Demands my soul, my life, my all!

Track 5 – All The Praise Goes To Jesus

Only one spoke countless stars ablaze
Only one could breathe life into clay
Only one could quiet raging seas
Only one has the power to redeem

*All the praise goes to Jesus
All the praise to him alone
All the glory and honour forevermore
All the praise to him alone
All the praise to him alone*

Only one left heaven for a cross
Only one knows every pain and loss
Only one could die my soul to save
Only one, the name above all names

Only one could crush the curse of sin
Only one was raised to life again
Only one is King of every King
Only one is coming back to me

Track 6 – Goodness Love and Mercy

O LORD, you're my shepherd
You make me lie in fields of green
You lead me by the still waters
You restore righteousness to me

Though I walk through the valley
I will fear no evil thing
For you are with me
You comfort me

*Surely goodness, love and mercy
Will follow wherever I go
Surely goodness, love and mercy
Will follow wherever I go
Surely goodness, love and mercy
Will follow wherever I go*

I'm gonna dwell in the house of the LORD forever
I'm gonna dwell in the house of the LORD forever

Appendix 3 – Drum Tracking Day Patch

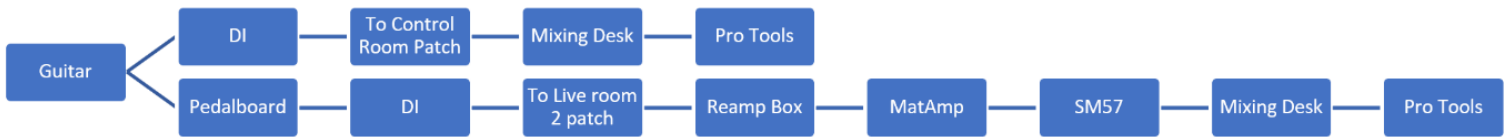
Desk Inputs				
To Protocols (From copy audio)	DiGiCo Channel Name	Desk Input	Patch	Source
Madiface In:1	Kick In	D2 In: 1	From Phipps: 1	Audix D6
Madiface In:2	Kick Out	D2 In: 2	From Phipps: 2	D112
Madiface In:3	Kick Out Out	D2 In: 3	From Phipps: 3	M147
Madiface In:4	Snare Top	D2 In: 4	From Phipps: 4	M201
Madiface In:5	Snare Bottom	D2 In: 5	From Phipps: 5	Beta57
Madiface In:6	Tom 1	D2 In: 6	From Phipps: 6	421
Madiface In:7	Tom 2	D2 In: 7	From Phipps: 7	421
Madiface In:8	Tom 3	D2 In: 8	From Phipps: 8	421
Madiface In:9	Overhead L	D2 In: 9	From Phipps: 9	C414
Madiface In:10	Over head R	D2 In: 10	From Phipps: 10	C414
Madiface In:11	Room 1L	D2 In: 11	From Phipps: 11	R121
Madiface In:12	Room 1R	D2 In: 12	From Phipps: 12	R121
Madiface In:13	Room 2L	D2 In: 13	From Phipps: 13	U49
Madiface In:14	Room 2R	D2 In: 14	From Phipps: 14	U49
Madiface In:15	Mono Room	D2 In: 15	From Phipps: 15	Coles 4038
Madiface In:16	Bass DI	D2 In: 16	From LiveRoom: 1	J48
Madiface In:17	Keys L	D2 In: 17	From LiveRoom: 2	JDI Duplex
Madiface In:18	Keys R	D2 In: 18	From LiveRoom: 3	
Madiface In:19	Acoustic DI	D2 In: 19	From LiveRoom: 4	JDI
Madiface In:20	Electric DI	D2 In: 20	From LiveRoom: 5	JDI
Madiface In:21	Electric Amp	D2 In: 21	From LiveRoom: 6	JDI
Madiface In:22	Vox 1	D2 In: 22	From LiveRoom: 7	U87
Madiface In:23	Vox 2	D2 In: 23	From LiveRoom: 8	U87
Madiface In:24	Vox 3	D2 In: 24	From LiveRoom: 9	U87
	Click	Madiface Out:1		
	MD	Madiface Out:2		
	Playback L	Madiface Out:3		
	Playback R	Madiface Out:4		
	Talkback	D2 In:25		

Appendix 4 – Drum Tracking Studio Schematic

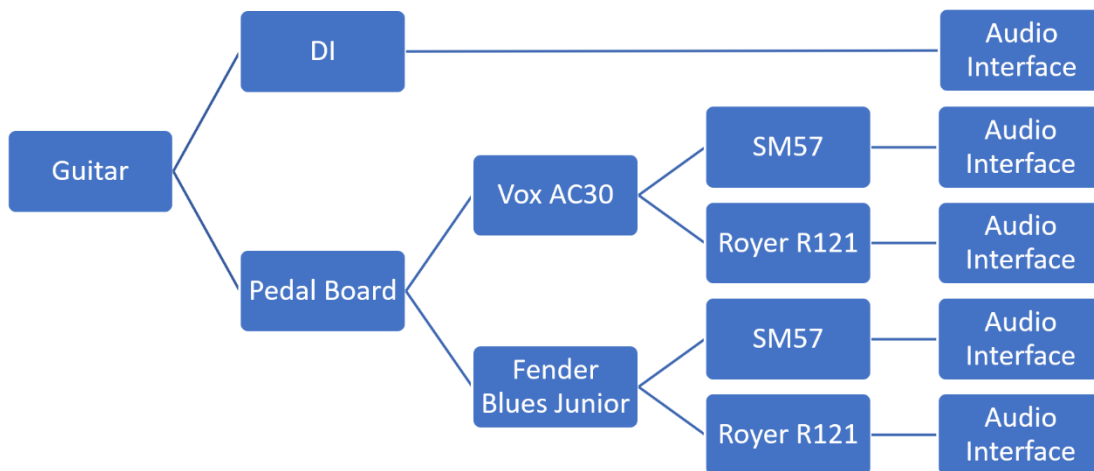


Appendix 5 – Guitar Signal Paths In Studio

1. Drum tracking day



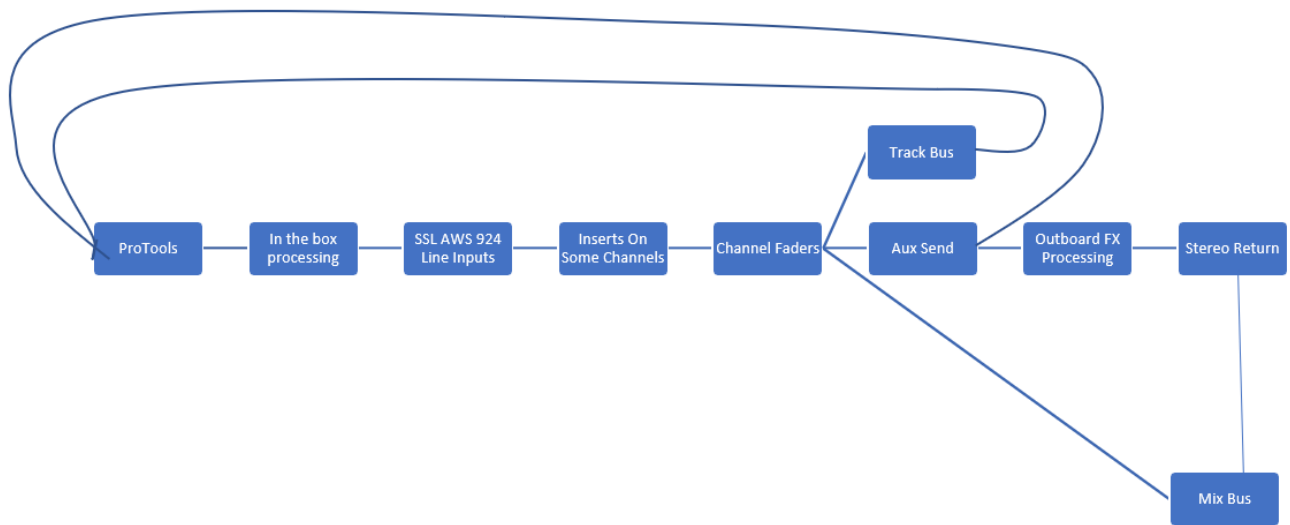
2. Guitar tracking evening



3. Extra guitar tracking



Appendix 6 – Mixing Process Signal Path



As shown above, the routing was not entirely simple. To overcome the lack of separate aux sends on the SSL AWS 924 I routed a secondary vocal reverb using the track bus matrix at the top of every channel strip. The output was patched into protools where it entered a reverb plug in before being sent back out into the desk to be mixed. Similarly, the drum verb was different to the main reverb; this was sent from cue b into pro tools before coming back onto the desk.

Appendix 7 – FOH Live Patch

FOH Inputs								
Channel	Name	Patch	Patch 2	Patch 3	Microphone	Backup	Mic Booked for t	Mic booked for 11-13th
1	Kick In	D2: In1	Radial Passive Split: 1	SBoxA: 1	Beta91		y	y
2	Kick Out	D2: In2	Radial Passive Split: 2	SBoxA: 2	D112	D6	y	y
3	Snare Top	D2: In3	Radial Passive Split: 3	SBoxA: 3	Beyer 201		y	y
4	Snare Bottom	D2: In4	Radial Passive Split: 4	SBoxA: 4	Beta57		y	y
5	Tom 1	D2: In5	Radial Passive Split: 5	SBoxA: 5	518		y	y
6	Tom 2	D2: In6	Radial Passive Split: 6	SBoxA: 6	518		y	y
7	Tom 3	D2: In7	Radial Passive Split: 7	SBoxA: 7	518		y	y
8	HiHats	D2: In8	Radial Passive Split: 8	SBoxA: 8	4011		y	y
9	OHL	D2: In9	Radial Passive Split: 9	SBoxA: 9	4011		y	y
	OHR	D2: In10	Radial Passive Split: 10	SBoxA: 10	4011		y	y
10	Bass DI	D2: In11	Radial Passive Split: 11	SBoxA: 8	J48		y	y
11	Bass Cab	D2: In12	Radial Passive Split: 12	SboxB: 1	RE20		y	y
12	Electric L Dynamic	D2: In13	Radial Passive Split: 13	SboxB: 2	609		y	y
	Electric R Dynamic	D2: In14	Radial Passive Split: 14	SboxB: 3	609		y	y
13	Electric L Ribbon	D2: In15	Radial Passive Split: 15	SboxC: 4	r121		y	y
	Electric R Ribbon	D2: In16	Radial Passive Split: 16	SboxB: 5	r121		y	y
14	Acousitc 1	D2: In17	Radial Passive Split: 17	SboxC: 5	J48		y	y
15	Acoustic 2	D2: In18	Radial Passive Split: 18	SboxC: 6	J48		y	y
16	Keys 1 L	D2: In19	Radial Passive Split: 19	SboxC: 1	JDI Duplex		y	y
	Keys 1 R	D2: In20	Radial Passive Split: 20	SboxC: 2				
17	Keys 2 L	D2: In21	Radial Passive Split: 21	SboxC: 3	JDI Duplex		y	y
	Keys 2 R	D2: In22	Radial Passive Split: 22	SboxC: 4				
18	MD Mic	D2: In23	Radial Passive Split: 23	SboxC: 7	4011		y	y
19	Abi Vocal	D2: In24	Radial Passive Split: 24	WirelessRack: 1	Senheriser Wireless		y	y
20	Obed Vocal	D2: In25	Radial Passive Split: 25	WirelessRack: 2	Senheriser Wireless		y	y
21	Ben Vocal	D2: In26	Radial Passive Split: 26	WirelessRack: 3	Senheriser Wireless		y	y
22	Nathan Vocal	D2: In27	Radial Passive Split: 27	WirelessRack: 4	Senheriser Wireless		y	y
23	Jonny S	D2: In28	Radial Passive Split: 28				y	y
24								
25								
26								
27								
28	Playback L	Local: In1	y split		Shotgun		y	y
	Playback R	Local: In2	y split		Shotgun		y	y
29	Room L	Local: In3			414		y	y
	Room R	Local: In4			414		y	y
30	Audience L	D2: In33	y split		um2		y	y
	Audience R	D2: In34	y split		um2		y	y
31	TB	Local: In5			SM58 with switch		n	

FOH Oututs

Column1	Name	Patch	Column2	Column3	Column4	Delays
1	Main L	Group12: Main	Matrix 1	D2: Out1		5 meters
2	Main R	Group12: Main	Matrix 2	D2: Out 2		5 meters
3	Sub L	Group12: Main	Matrix 3	D2: Out3		5 meters
4	Sub R	Group12: Main	Matrix 4	D2: Out4		5 meters
5	Fill L	Group12: Main	Matrix 5	D2: Out5		
6	Fill R	Group12: Main	Matrix 6	D2: Out6		
7	PB to Mons L	PB Direct Out		D2: Out7	Rio: In 31	
8	PB to Mons R	PB Direct Out		D2: Out8	Rio: In 31	
9	TB to mons	TB Direct Out		D2: Out9	Rio: In30	
10	Lighting trigger	Custom matrix	Matrix 10	Local: Out1	audiobox	
11	Vox to PP	Custom matrix	Matrix 11	Local: Out2		
12	Fill Balcony L	Group12: Main	Matrix 7	Local: Out3		
13	Fill Balcony R	Group12: Main	Matrix 8	Local: Out4		
14	Mono Sub	Group12: Main				

Appendix 8 – Monitors Live Patch

Channel	Name	Patch	Patch2	Patch3	
1	Kick In	Rio: In1	Passive Split: 1	SBoxA: 1	
2	Kick Out	Rio: In2	Passive Split: 2	SBoxA: 2	
3	Snare Top	Rio: In3	Passive Split: 3	SBoxA: 3	
4	Snare Bottom	Rio: In4	Passive Split: 4	SBoxA: 4	
5	Tom 1	Rio: In5	Passive Split: 5	SBoxA: 5	
6	Tom 2	Rio: In6	Passive Split: 6	SBoxA: 6	
7	Tom 3	Rio: In7	Passive Split: 7	SBoxA: 7	
8	HiHats	Rio: In8	Passive Split: 8	SBoxA: 8	
9	OHL	Rio: In9	Passive Split: 9	SBoxA: 9	
	OHR	Rio: In10	Passive Split: 10	SBoxA: 10	
10	Bass DI	Rio: In11	Passive Split: 11	SboxC: 8	
11	Bass Cab	Rio: In12	Passive Split: 12	SboxB: 1	
12	Electric L Dynamic	Rio: In13	Passive Split: 13	SboxB: 2	
	Electric R Dynamic	Rio: In14	Passive Split: 14	SboxB: 3	
13	Electric L Ribbon	Rio: In15	Passive Split: 15	SboxB: 4	
	Electric R Ribbon	Rio: In16	Passive Split: 16	SboxB: 5	
14	Acousitc 1	Rio: In17	Passive Split: 17	SboxC: 5	
15	Acoustic 2	Rio: In18	Passive Split: 18	SboxC: 6	
16	Keys 1 L	Rio: In19	Passive Split: 19	SboxC: 1	
	Keys 1 R	Rio: In20	Passive Split: 20	SboxC: 2	
17	Keys 2 L	Rio: In21	Passive Split: 21	SboxC: 3	
	Keys 2 R	Rio: In22	Passive Split: 22	SboxC: 4	
18	MD Mic	Rio: In23	Passive Split: 23	SboxC: 7	
19	Abi Vocal	Rio: In24	Passive Split: 24	WirelessRack: 1	
20	Obed Vocal	Rio: In25	Passive Split: 25	WirelessRack: 2	
21	Ben Vocal	Rio: In26	Passive Split: 26	WirelessRack: 3	
22	Nathan Vocal	Rio: In27	Passive Split: 27	WirelessRack: 4	
23					
24					
25					
26					
27	Jonny S	Rio: In32	Passive Split: 32	field wireless kit	
28	Audience L	Omni: In1	y split		
29	Audience R	Omni: In2	y split		
30	Monitor TB	Omni: In3			
31					
32	FOH TB	Omni: In4			
33	Playback from FOH L	Omni: In5			
34	Playback from FOH L	Omni: In6			
Channel	Name	Patch	Patch 2	Patch2	booked
1	Drums	Rio: Out1	SBoxA: C	Behringer Mixer	y
2		Rio: Out2	SBoxA: D		
3	Bass	Rio: Out3		Behringer Mixer	y
4		Rio: Out4			
5	Keys	Rio: Out5		Behringer Mixer	y
6		Rio: Out6			
7	Obed	Rio: Out7		Field wireless kit	y
8		Rio: Out8			
9	Ben	Rio: Out9		Behringer P2	y
10		Rio: Out10			
11	Abi	Rio: Out11		Field wireless kit	y
12		Rio: Out12			
13					
14					
15	Me				
16					
Monitor L		Omni: Out1		Field wireless kit	
Monitor R		Omni: Out2			

Appendix 9 – Lighting Desk Patch and Design

24/04/2020 00:34

Chamsys MagicVis

JD FYP LFX : Fixture Patch

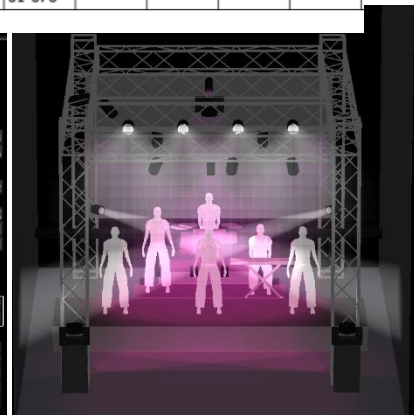
Head No	DMX	Position	Hang	Manufacturer	Model	Mode
1	01-106	Left		Studio Due	ArchiBar150	9ch
1	01-096	Right		Studio Due	ArchiBar150	9ch
2	01-049	Front		Studio Due	ArchiLED150C	5ch
3	01-054	Front		Studio Due	ArchiLED150C	5ch
4	01-059	Front		Studio Due	ArchiLED150C	5ch
5	01-064	Front		Studio Due	ArchiLED150C	5ch
6	01-001			Pulsar Light	ChromaRGB	RGB
7	01-004			Pulsar Light	ChromaRGB	RGB
8	01-007			Pulsar Light	ChromaRGB	RGB
9	01-010			Pulsar Light	ChromaRGB	RGB
25	01-032			Stairville	HLx18QCLFlood	8ch
26	01-229			Stairville	HLx18QCLFlood	8ch
27	01-040			Stairville	Par64RGBA	4ch
28	01-237			Stairville	Par64RGBA	4ch
29	01-044			Stairville	Par64RGBA	4ch
30	01-242			Stairville	Par64RGBA	4ch
31	01-246			Chauvet	FreedomParTri6	9ch
32	01-255			Chauvet	FreedomParTri6	9ch
33	01-264			Chauvet	FreedomParTri6	9ch
34	01-273			Chauvet	FreedomParTri6	9ch
35	01-115			Chauvet	ColBandPix	36ch
36	01-151			Chauvet	ColBandPix	36ch
37	01-187			Chauvet	ColBandPix	36ch
38	01-282			Chauvet	ColBandPix	36ch
50	01-318			Prolights	Diamond7	26ch
51	01-344			Prolights	Diamond7	26ch

24/04/2020 00:34

Chamsys MagicVis

JD FYP LFX : Fixture Patch

Head No	Head Name	Beam Angle	Gel	Position	Hang	DMX	DMX	DMX	DMX	DMX
10	DimmerDrums					01-070				
11	DimmerBass	23°				01-071				
12	DimmerKeys	23°				01-072				
13	DimmerVox 1	23°				01-073				
14	DimmerVox 2	23°				01-074				
15	DimmerVox 3	23°				01-075				
16	Dimmer Drums					01-076				







Creative Arts Building - Ground
 GIA 1417.78 m²
 MA 754.70 m²

SCHOOL OF ART, DESIGN & ARCHITECTURE

SCHOOL OF MUSIC

Entrance

Project: Creative Arts Building

Title: Ground Floor

University of Huddersfield
 E-mail: enquiries@huddersfield.ac.uk
 Tel: +44 (0)1484 754400
 Fax: +44 (0)1484 754401

Appendix 13 – Live Recording Plan

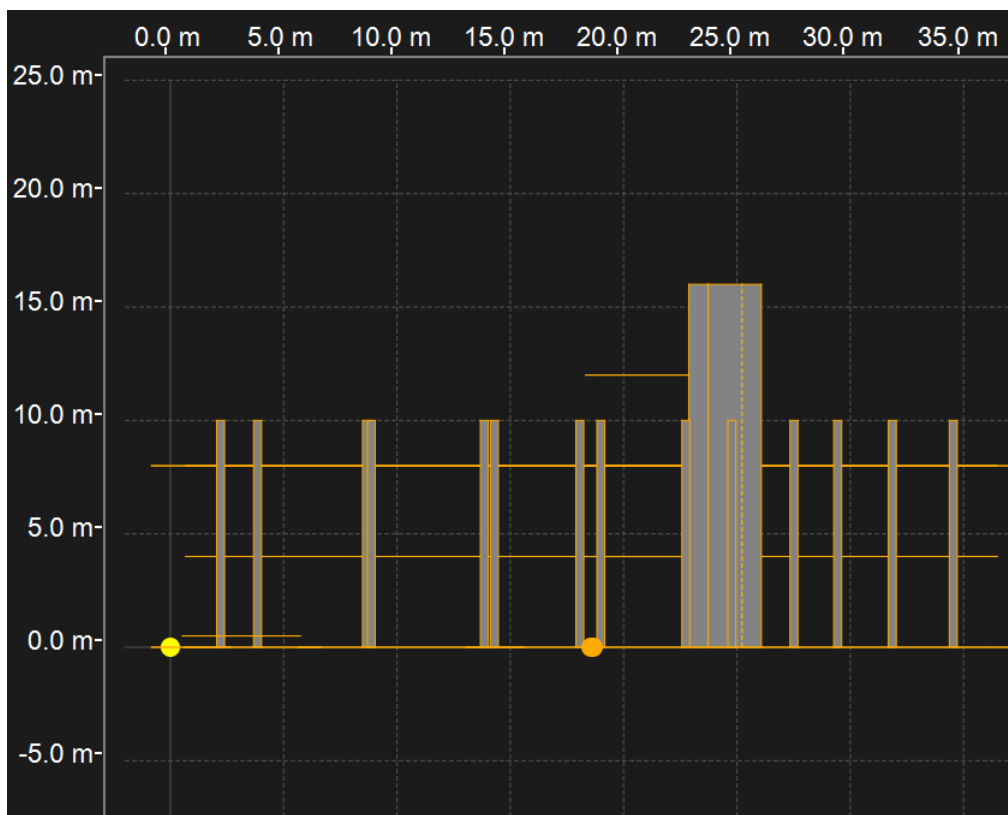
	Camera	Lense	Supplier	Position	Pointing at	Opporator	Booked	Notes
1	C100	wide angle	Store	FOH	Engineers	n/a	y	
2	GoPro		Store	FOH	Desk	n/a	y	
3	C100	standard	Store	FOH	Stage		y	Audio Recording From DiGiCo
4	GoPro		Store	Drums	Drums	n/a	y	
5	JVC 4K		Media Store	Mid Stage Right	Audience and musicians			Annie J
6	JVC 4K		Media Store					Almir
7	XA20		Store	Downstage R	Stage			Only one nikon working
8	Nikon	Telephoto	Store	Balcony	Stage/Audience		y	
9	Panasonic X920		Store	Truss	Choir	n/a	y	
10	Panasonic X920		Store	Mid Stage Left	Audience and musicians	n/a	y	
11	Osmo Pocket Pro		Jon S	Downstage Center	Stage	remote??	y	Find out if you can remote control this camera
	HISS Mac		HISS	FOH		Michael Gladstone		
	ISD mac		Store	Monitors		Michael Bell		

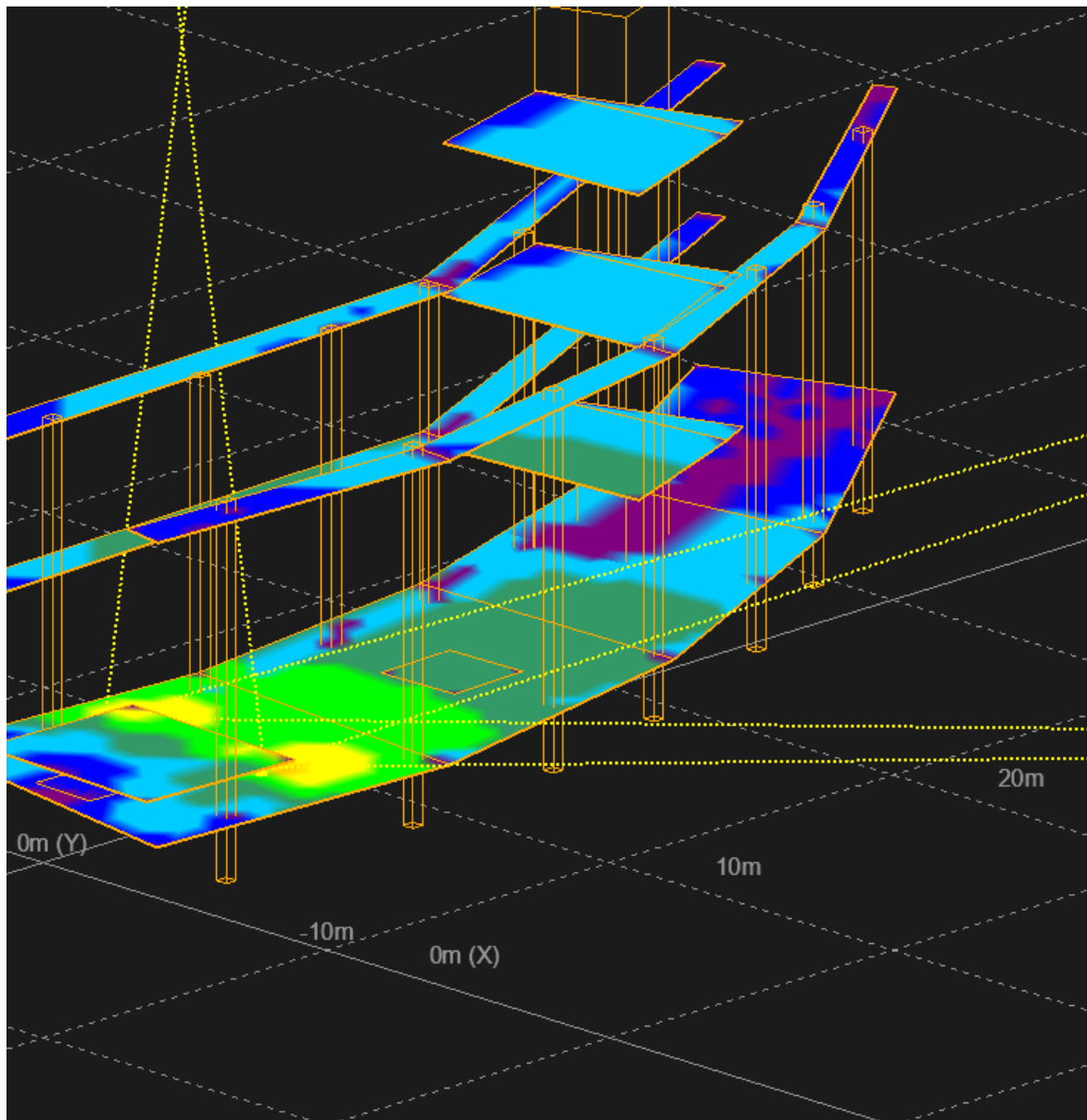
Appendix 14 – Live Showcaller Checklist

Showcaller Checks			
Aprox Real Time	Show Time	Name	Comment
18:30		World Clock?	
18:35		briefing	Jonathan to prep camera opporators
18:45		pray	
18:55	-35:00:00	Batteries	Ask Support to change ALL batteries on stage
19:00	-30:00:00	Begin Music	
19:24	-6:00:00	Multitrack Audio	Michael G to record at FOH and M Bell at mons
19:25	-5:00:00	Begin Intro Video	
19:28	-2:00:00	All Cameras Rolling	
19:29	-1:00:00	Band on stage	
19:30	0:0	Cue Show	Use FOH TB - This to time with lfx
19:30		Video	Roger
19:32		5 Tracks	Band
19:50		Jonny Speaks	Jonny Skinner lapel mic
20:10		Appeal	Jonny
20:25		Last song	Band
20:30		Refreshments	Christian union upstairs

Appendix 15 – Array Calc plot and emulations

A Sample of plots from Array Calc; the findings in this suggested that a greater number of speakers would be more effective in covering this space of such an unusual shape.





Appendix 16 - Truss Risk Assessment

Event: Jonathan Davies Final Year Project			Date: 11th till the 13th of March	
Task/Activity	Hazards Identified	Risks to health and safety	People at risk	Measures to manage the risks
Truss Assembly	Working at height	Injury as a result of a fall or items dropped from height	Staff - Students - Visitors	Construction to be supervised by Stewart Worthy
				Unnessisary people asked to stand at a safe distance
	Large Metal components	Injury as a result of handling components	Staff - Students - Visitors	Construction must adhere to the instructions in the manufacturers manual
	Tower	Injury as a result of improper proceedure	Staff - Students - Visitors	Construction to be supervised by Stewart Worthy
				Foot traffic resticted through use of Hazzard tape
	Chain	Injury to people raiseing the truss related to the chain	Staff - Students - Visitors	Crew to use PPE - Gloves and Hardhats
Truss Usage	Mounted fixtures	Indury as a result of a fall from height	Staff - Students - Visitors	Fixtures mounted while the truss is at head height
		Injury as a result of item dropped from height	Staff - Students - Visitors	Safety cables so ensure nothing falls
Stage Assembly	Large components	Injury as a result of handling components	Staff - Students - Visitors	Construction must adhere to the instructions in the manufacturers manual
Stage useage	height	Falling from stage	Students - Visitors	Stage built to an adiquate size for the people on the stage
				Lip on the back of the stage behind the drummer to prevent the stool slipping off

Appendix 17 – Artwork, Posters and Graphic Design

All artwork for *Goodness, Love and Mercy* was done by Kathryn Smith.

Kathryn is a fantastic artist and a close personal friend. She did three pieces of art called 'Goodness', 'Love' and 'Mercy'; inspired by the same Psalm that inspired this whole project.

The LORD is my shepherd, I shall not want
He makes me lie down in green pastures
He leads me beside still waters
He restores my soul.
He guides me in paths of righteousness
for his name's sake.

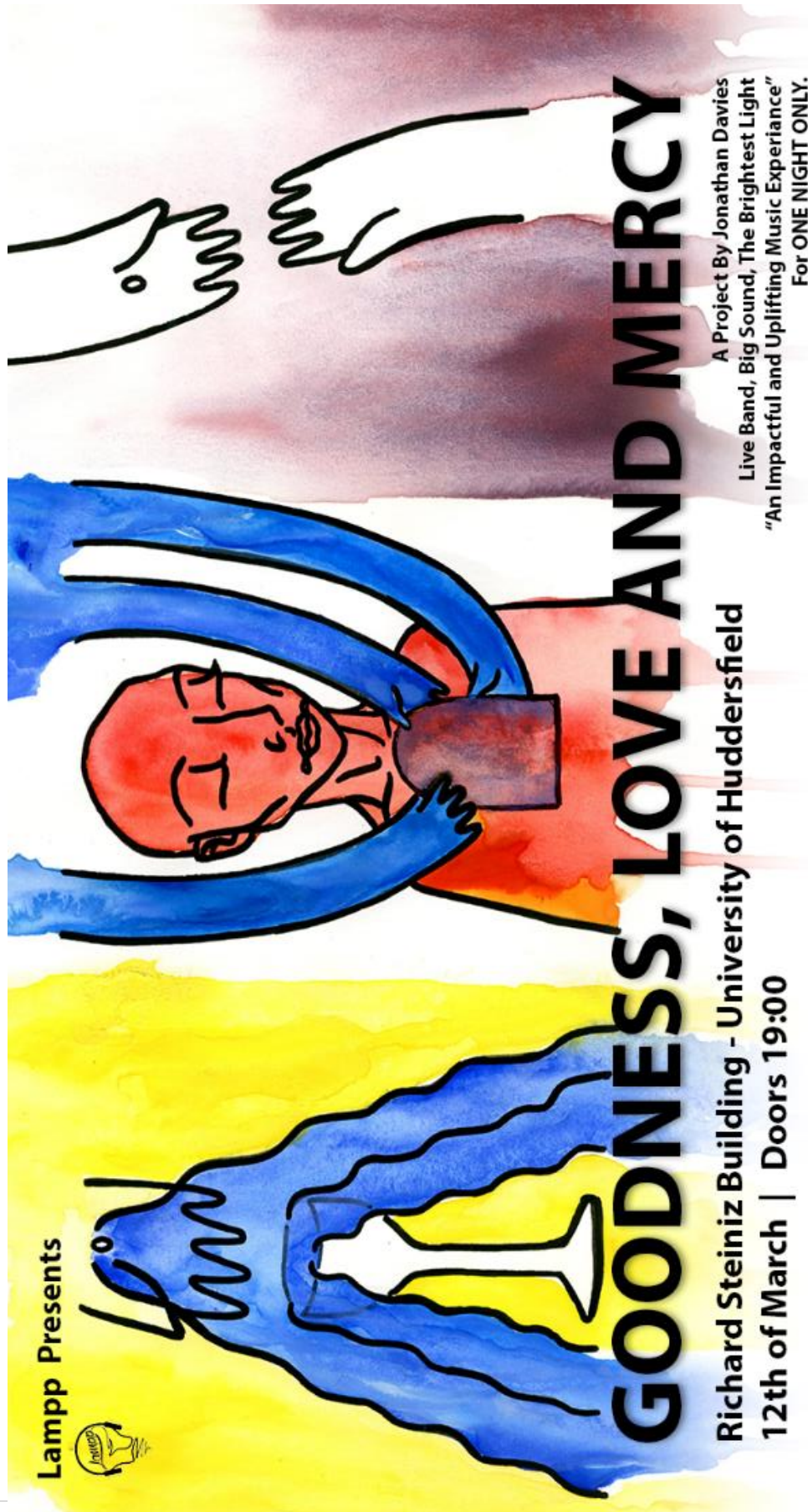
Even though I walk through the valley of the shadow of death,
I will fear no evil for you are with me;
Your rod and staff, they comfort me

You prepare a table before me in the presence of my enemies.
You anoint my head with oil and my cup overflows.
Surely your goodness, love and mercy will follow me all the days of my life,
And I will dwell in the house of the LORD forever.

Psalm 23

The publicity photo used on the poster was taken by Nicoleta Assioti

The graphic design and promotion was done by Joel Felix, co-founder of Lampp



LAMPP PRESENTS

GOODNESS, LOVE AND MERCY

A PROJECT BY JONATHAN DAVIES

AN IMPACTFUL, UPLIFTING
MUSICAL EXPERIENCE
FOR ONE NIGHT ONLY!

SCAN FOR MORE INFO
ABOUT THE EVENT



#FILLTHEATRIUM



RICHARD STEINITZ BUILDING, HUDDERSFIELD
12TH MARCH | 7:00PM DOORS

LAMPP PRESENTS



GOODNESS, LOVE AND MERCY

A PROJECT BY JONATHAN DAVIES
AN IMPACTFUL, UPLIFTING MUSICAL
EXPERIENCE. FOR ONE NIGHT ONLY

SCAN FOR MORE INFO
ABOUT THE EVENT



RICHARD STEINITZ BUILDING, HUDDERSFIELD
12TH MARCH | 7:00PM DOORS

LAMPP PRESENTS



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SCAN FOR MORE INFO
ABOUT THE EVENT



RICHARD STEINITZ BUILDING, HUDDERSFIELD
12TH MARCH | 7:00PM DOORS

LAMPP PRESENTS



GOODNESS, LOVE AND MERCY

A PROJECT BY JONATHAN DAVIES
AN IMPACTFUL, UPLIFTING MUSICAL
EXPERIENCE. FOR ONE NIGHT ONLY

SCAN FOR MORE INFO
ABOUT THE EVENT



RICHARD STEINITZ BUILDING, HUDDERSFIELD
12TH MARCH | 7:00PM DOORS

Each image truly is worth a thousand words.

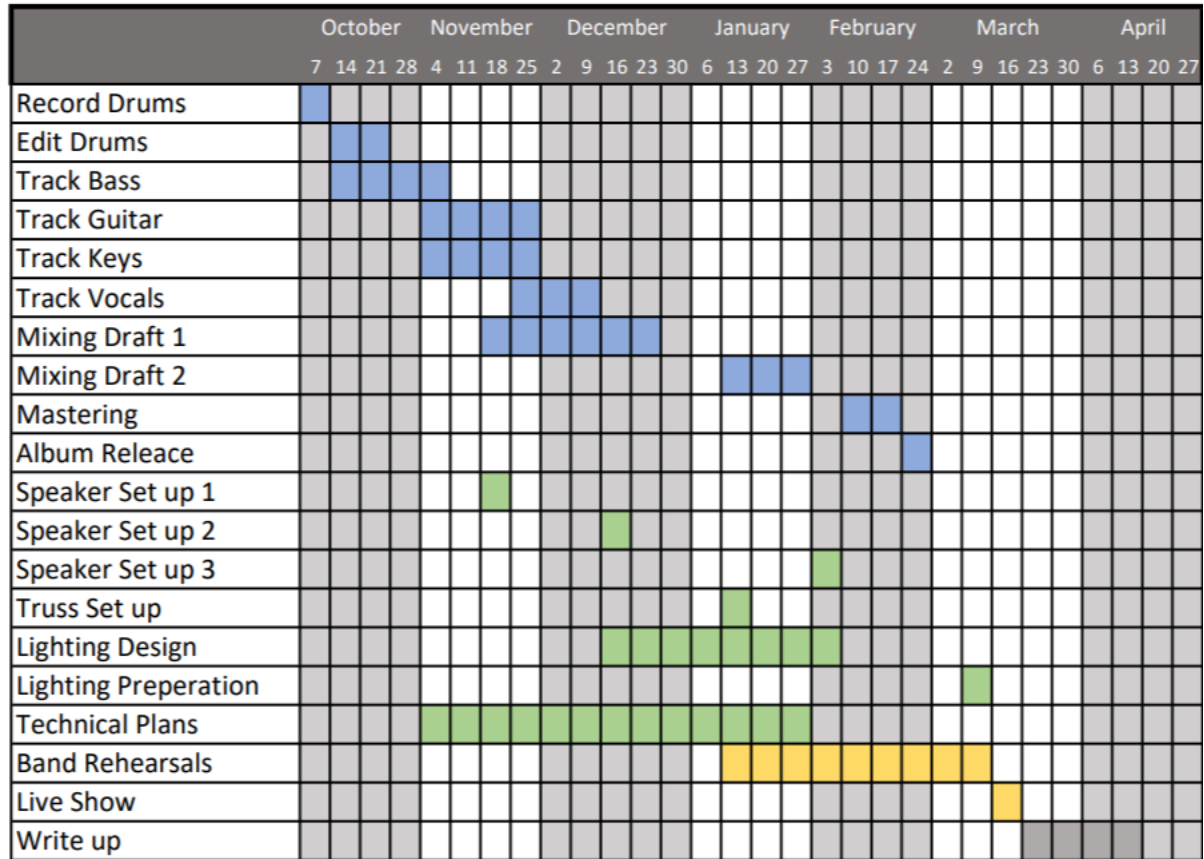
'Goodness' shows the goodness of God through the same image as this very Psalm; one of God's blessing and provision for his people. The water flowing from His hands is the life sustaining water that brings life. The ultimate demonstration of His provision for us was the pouring out of His blood when He was crucified in our place. The overflowing of the cup shows the full extent of this, His provision is more than enough. The LORD is an inexhaustible, infinitely generous source of life and abundance.

'Love' depicts the love of God changing the heart of man. Throughout the Bible it is observed that humanity is not capable of matching up to the perfection of God, no matter what anyone does or how hard they try. Even King David, described as a man after God's own heart, did some awful things. We all fall short of God's glory because our hearts are sick. But God did not abandon us to our own self-destructive fate. He promised to put in us a new heart and a new spirit, a heart that would truly allow us to love God and love each other. This opportunity came when the Son of God came and gave up His own life. When He rose from the dead and ascended to heaven, he sent us His own Holy Spirit and with Him the opportunity for a new life, a new heart and a new spirit, apart from our old destructive nature and fate.

'Mercy' was that moment when, despite all we had done, He reached out to us. God said that He will judge each and every person according to their deeds. The Bible tells us exactly how high God's standards are. The Bible makes clear that anyone who worships idols, murders, commits adultery, lies, steals or envies will not be able to enter God's Kingdom. That is definitely me, and the Bible says it is everyone, for all have sinned and fallen short. Furthermore, the Bible says that the wages of sin are death. There is nothing that any man can do to wipe away their own sin, but God had mercy on us; not by letting people off but by paying the price himself. It cost Jesus His life. He suffered and died despite being the only person to have never earned it.

Now I want to really break free from academic writing. I, Jonathan, the writer of this short paper, just want to ask you to stop for a moment. The perfect God who created you wants to know you. All that I have said is true; we deserve death, every one of us has contributed to the destruction of this beautiful world and to each other. But that does not have to be the end of the story for you. For God so loved the world that he gave His own son; that whoever believes in him will not die but have everlasting life. What a love! That He would have this mercy for us. Changing our own hearts so that we can for the first time not be a slave to sin. This is the goodness of God. If you want to become a Christian, then acknowledge God and what He has done for you. Tell him how sorry you are for all that you have done, then go and sin no more. You can go forward from this day in the goodness, love and mercy of God in the promise that you will dwell in the house of the LORD forever.

Appendix 18 – Gantt Diagram



Thanks and Acknowledgements

Band

Abi Sykes
Ben Ault
Jonathan DeBem
Michael Pounce
Nathan Berwick
Obed Pius

Additional Music

Michael Bell
Josh Sidding
Jonathan Davies

Choir

Ali Bell

Alice Smyrell
Sarah Whiteley
Bethan Coates

Rachel Clarkson
Sarah-Jane Hoggar
Michelle Cookson
Vanessa Finley-Martin

Nathan Berwick
Will Adams

Rauridh Green
Michael Ghatt
Ben Sidding

Photography

Nicoleta Assioti

Artist

Kathryn Smith

Assistant Studio Engineer

Ben Sidding

Promoter

Joel Felix

Monitor Engineer

Michael Bell

Showcaller

Michael Gladstone

Lighting Engineer

David Alcock

Powerpoint

Roger Dumisani

Camera Operators

Almir Viera
Anne Joseph
Sarah-Jane Powell

Monitor Desk Prep

Dave Orridge

Crew

Jack Zissel
Josh Kime
Joel Felix
David Allcock

Refreshments at live event

Huddersfield University Christian Union

Speaker at live event

Jonny Skinner

I want to add a final thanks to my project tutor, Stewart Worthy, who has supported me, helped me and enabled this whole project to happen.