

Fellow members of Cross of Christ,

I wanted to take this opportunity and give you an update as to where we stand with this new technology, and give you an idea of what to look forward to.

Please recall that as the COVID-19 pandemic hit, we were forced to very abruptly come up with a solution to LIVESTREAM. There were many church that completely CLOSED down and stopped services for a few weeks until they were able to determine how to proceed. Thankfully, we were able to use the resources that we currently owned to temporarily allow us to broadcast, so that there was absolutely NO interruption from Sunday Services. While that took place, we researched the proper equipment needs, proposed to council and were approved to proceed to obtain the permanent equipment to keep this "Ministry" going for a long time. And so was everyone else around the country and world. A lot of the resources that we wanted were either out of stock, or had multiple week lead times and delivery times.

For those of you whom have been watching the LIVESTREAM since March 15th have noticed that we slowly have been improving our streaming service, but we are NO WHERE Done YET!!!!

In respects to some GENERAL comments....

- There have been comments from people watching the LIVESTREAM, and it is freezing. Some of that I can not control as it relies on each individuals' internet service provider and there download speed.
- What we can control... is our UPLOAD speed. We are working with our provider to see if our uploads speeds meet the minimum recommendations for LIVESTREAMING.
- We are also switching the host company that takes our stream, hosts it on their servers, and then broadcast it. The company we use is open to anyone in the world to use. WE are moving to company that is dedicated 100% to hosting houses of worship streaming. They have larger capacity servers, and techs that are monitoring the system during the peak periods of a Sunday and improving as needed.

In respects to VIDEO feed....

- The computer tower that we are currently using was not built for broadcasting, however thankfully it was powerful enough to be able to handle our broadcast. Using this tower has also taken away from some of our contingency planning during services. We have to use multiple external adaptors and capture devices in place to allow the cameras to connect to this computer for broadcast. Well, those adaptors are not always 100% reliable. If you have noticed the video freezing up lately, that is why. We have a new tower that was designed and built SPECIFICALLY for LIVESTREAMING. This tower is arriving this week (week of June 22) and will be put into place very shortly. This new tower, has larger processing video capability, internal capture devices (so we do not have to use all the adaptors).
- We have been (and are still using) using a manually operated camera on a tripod. We have purchased 2 permanent mounted cameras that have been installed on the sanctuary back wall. We have ran over 5 different cable lines from the tech booth, through the underground pipes, up into the drop ceiling that is above the back row of pews to the camera. Once we connect them to the new computer tower we will be transitioning to those cameras. They will have preset shots so that we can be changing to different angles in the room without have to manually zoom out and pan over.

- We have been gutting out the entire Tech Booth, repositioning the equipment to allow for new equipment, as well as cleaning out old and unused equipment and cables.

In respects to AUDIO feed....

- I talked about adaptors before... again... we used WHAT type of audio cables that we had, and added different size convertor/adapters to get the appropriate ends we needed to plug into the sound board and the computer. Along with the new tower, we will be receiving in the next week audio lines that are manufactured with the appropriate ends that we need. The more convertor/adapters you place on any audio or video line... the more of a signal degrade you will experience.
- In my opinion, the biggest hurdle that we have been dealing with was the inability to have rehearsals and sound checks prior to starting the LIVESTREAM in March. Many nights where the Music team, and my Tech Team can simulate STREAMS and work on adjustments.
- As the building is opening back up, and we can start having fuller teams in the building we will be taking some weeknights, probably after the July 4th holiday, and doing these sound checks.
- There are also some different settings in the sound board that we are exploring relating to signal compression, frequency ranges, reverb, etc. to improve on the audio quality.
- Also... another hurdle that we are dealing with... is that we have to replace all of our microphones. This was a project that was approved by the congregation a few years ago to comply with changes in the FEDERAL FCC guidelines. There was a few year rollout period of this, ending in July of 2020. IT was agreed that we would wait until the beginning of this year to make this change... and as we started to order this in March... the COVID pandemic happened. These new systems have been slowly tricking in as they come available, so as we look to EQ (Equalize) the LIVESTREAM, we will be EQ'ing new mics.

One last thing that I would like to comment about is that... We have confirmed that we have people watching people all over the world with our broadcast, sending out the message of Jesus and his teachings. Please continue to pray for this ministry to grow. Please be patient with us as we continue to learn and grow. We are not professionals. We are learning a lot week by week. We are NOT trying to put out a professional broadcast, but to represent who Cross of Christ is, including showing, not only our Pastor, bur our facility and our talented musicians.

I would like to thank all of you for all of the feedback that you have been sharing relating to the NEW LIVESTREAM of service. I know that there have been both Positive and Negative feedback. Please know that we are listening all that you are saying, and encourage you to keep them coming!!!

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