BASIC STREAMING WITH WORDS
USING A WEBCAM AND PRO PRESENTER 6

There are lots of ways to do live streaming with words on screen. Here are two simple options if you just have a webcam and one Mac…

Basic Tools needed:

1. ProPresenter 6 (or another version), referred to as 'PP' from now on…
2. OBS Studio - https://obsproject.com - install before opening PP
3. Syphon Recorder – http://syphon.v002.info/recorder/ - install before opening PP/OBS
4. An external webcam (set away from your Mac – so you're not in shot while clicking!) **Alternatively,** purchase Pro Remote – see the end of this article (last page)

Option 1 is by using the 'Live Cam' option in PP, outputting the words on top of this (as you'd normally do) and then 'capturing' this inside OBS Studio and then outputting from OBS Studio to live stream. *Read Option 2 info as well as this may help.*
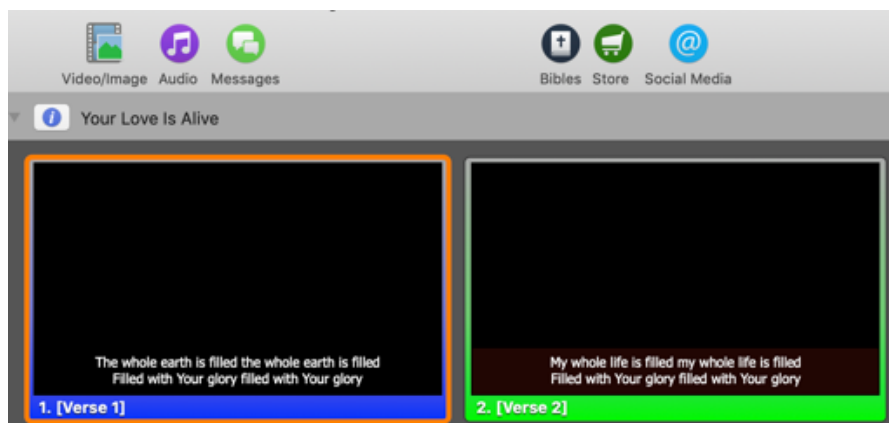
Option 2 is by using the webcam direct from OBS Studio and overlaying the text from PP into OBS Studio. This is possibly slightly easier and less intensive on your Mac. *If you choose Option 2 please read through Option 1 for relevant info on PP.*

Be aware that with both options you may need to re-size the webcam image and the text within OBS Studio (dragging on and moving the red lined box). This is covered below but just be aware of this.

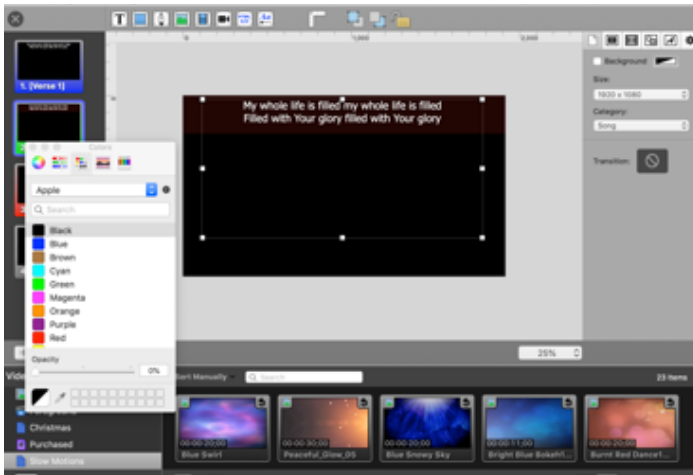# Option 1 – Live Cam in PP with words and sending to OBS

Stage 1 (PP):

Set up your words in PP so you break down your worship songs into slides of two lines only (see example). This is so you can fit your words on-screen to overlay ('sit on top' of) the video from the webcam.

Stage 2 (PP):

When you are setting up your slides, you need to make sure that the background on the images is set to 'transparent' (or to put another way, that the 'opacity' is 0%). This means the black background becomes 'invisible', so you only see the words.
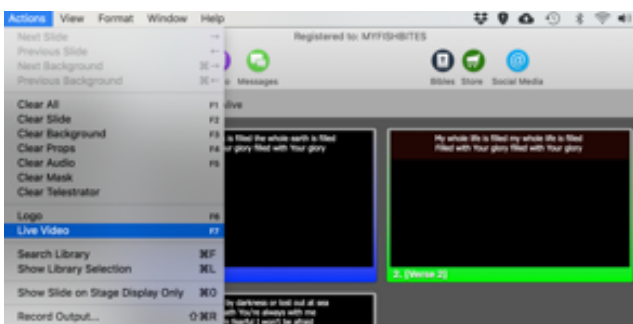

Additionally, you could add a box 'underneath' your text, which will help your words stand out when overlaid on top of your webcam image. In the example below, we've added a dark red box (hard to see) and made it slightly transparent. You then need to make sure that your text is the 'top layer' (on top of the box) – see below (bottom right).
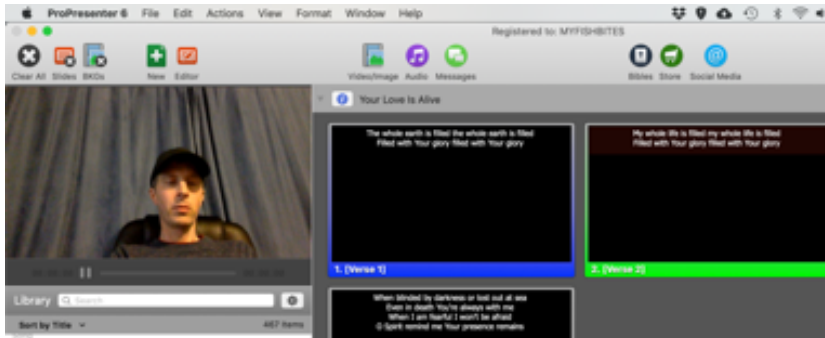

Stage 3 (PP):

On PP6, to activate the live camera within PP, go to the 'Actions' menu (or use the shortcut F7). Other versions may slightly differ. You need to make sure your correct webcam is selected – this may be within PP, within Quicktime, within FaceTime or within your System Prefs (not quite sure as don't have a separate webcam when writing this).

Hopefully your webcam won't be quite as 'terrifying' as what I saw in my webcam!
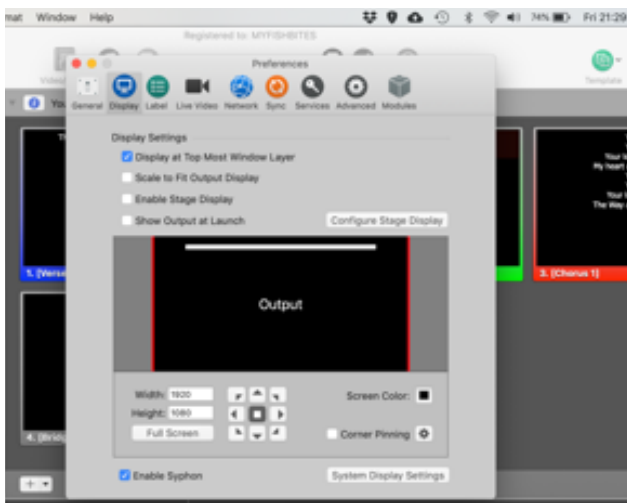

Stage 4 (PP):
Make sure you have downloaded the free software 'Syphon Recorder'. You will need this to communicate between ProPresenter and your streaming software called 'OBS'.

Stage 5 (PP):
The next step within PP is to make sure that 'Syphon' is enabled. You do this in the Preferences > Display menu – see below. Be aware that you can also select 'source colour' here (bottom right of window) and make the display transparent (opacity 0%). Finally, before leaving PP, make sure you select some words (to show up in OBS).
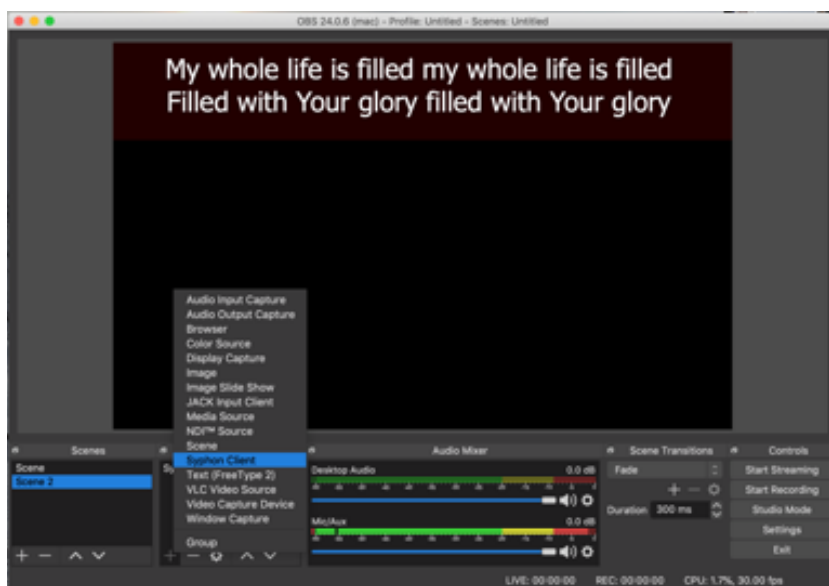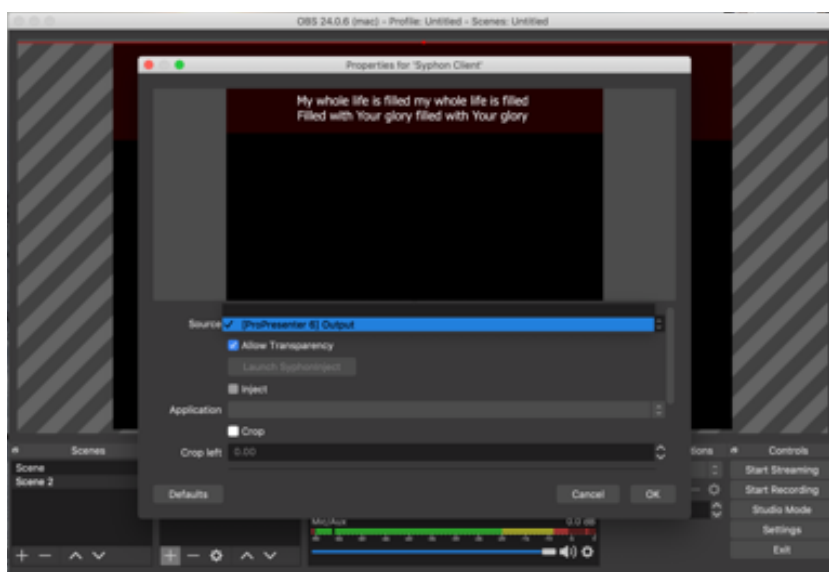

Stage 6 (OBS):
You're now going to open OBS and set this up so it can 'see' ProPresenter and then stream the signal you send into it from PP. When OBS opens, click through and select streaming as the default. Enter your streaming service details if you know them.

First, at the bottom left of the OBS window, you'll see a 'Scenes' box and a 'Sources' box. The Scene is simply what you are going to be showing on your stream – you can create different Scenes and then click on them to show different things – for example an image, or the webcam or a live webpage etc. The Sources box is telling each Scene what kind of input it should have (webcam / image etc) and also what sound source – so your in-built mic or perhaps a separate USB interface you've got plugged in.

With 'Scene' selected, select the '+' icon in the Sources box and then choose 'Syphon Client' (this allows OBS to 'see' other programmes on your Mac).
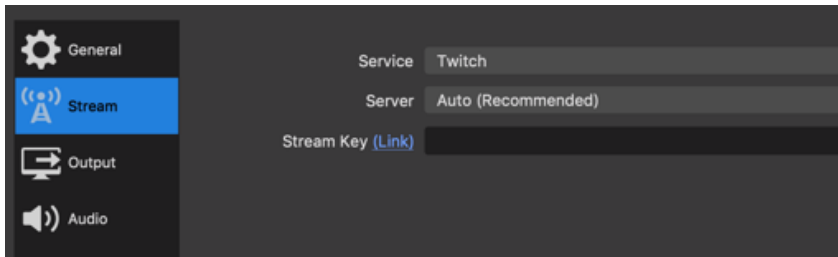

When the window pops up, you'll select 'ProPresenter 6' (or your version of PP) in the 'Source' dropdown menu within the window. Make sure that 'Enable Transparency' is also selected.

(You may want to also select 'Audio Input' capture here if you're using an audio source other than your webcam such as a USB interface – note these won't appear from the options window unless they are plugged in to your Mac).

Stage 7:
You now need to set up your OBS (if you haven't already) to stream your content to an online streaming service – for example YouTube Live, Facebook Live, Twitch etc. If you haven't already set this up when you first opened OBS, you can go to the Preferences of OBS and then choose 'Streaming'

Make sure you're logged into your streaming service provider (e.g. logged into YouTube if you're going to use that). The reason for this is that only you want to stream to your streaming provider (you don't want someone else doing this!) So places like YouTube, Facebook and Twitch provide a unique 'key' that identifies you. In the OBS preferences, it will link to your 'Stream Key'. Click on this, find the key and cut and paste this into OBS. Now you are nearly ready to go live…
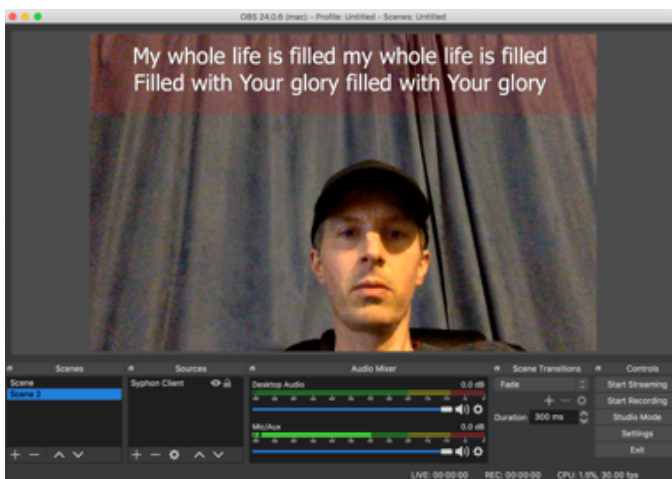
Stage 8:

Now you're ready to go live with your broadcast – with words overlaid on top of your image (example below has the words at the top – but this will reflect whatever you set up in PP before.

As you do your live worship, you then use ProPresenter to do 'live words' just as if you were doing it at a regular Sunday service.

Now all you need to do is hit 'Start Streaming' in the bottom right of OBS and you'll be off. Note that when streaming to YouTube from OBS, you can only go Public – you can't go Unlisted. You can switch to unlisted later in YouTube Studio. If you use another bit of much more user-friendly and helpful software called Ecamm Live, you do have this option to output unlisted – this is $12 a month however.

Hope this all helps – and now for a further terrifying image, the live stream. I just hope your live stream looks a bit better than this…
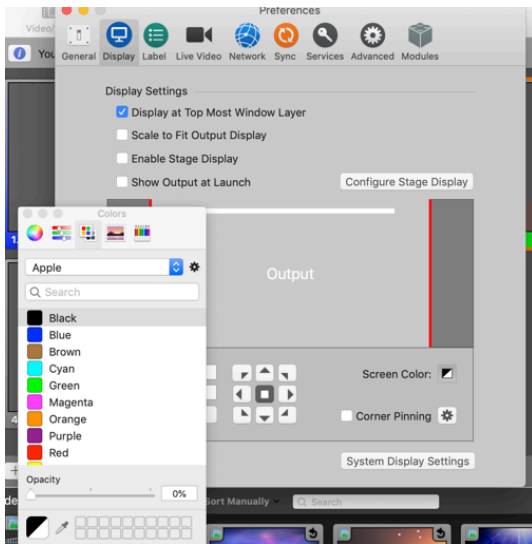
Option 2 – Webcam in OBS with PP overlay

Stage 1 (PP):
Many of the steps in here are similar to those covered above, so please read that info, especially relating to setting up PP slides for your songs, making them 2 lines per slide.

You will also definitely need to make the PP background transparent (0% opacity). This can be done in PP's Preferences > Background and adjust the slider to 0%.
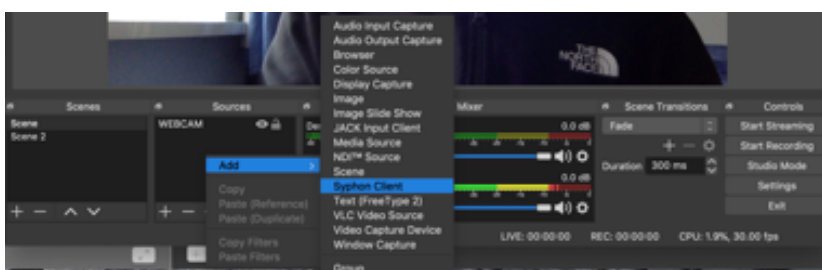

Finally, make sure that a slide is selected within PP (so you can test it in OBS).
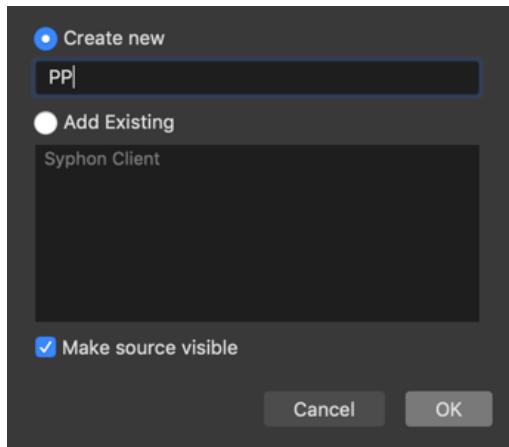
Stage 2 (OBS):
Please read Stages 6 and 7 from Option 1 as they are relevant here. Basically this involves opening OBS, then setting up a 'Scene' and adding a 'Source' by selecting 'Video Capture Device' and then adding your webcam. You need to use an external webcam (which should be connected first) and should select this external webcam here.

Now we're going to add the PP output as a 'layer' within a 'Scene' in OBS. So what you're doing is showing the webcam as the bottom 'layer' and overlaying the words from ProPresenter as a second layer 'on top' of the webcam layer, so you see the webcam with the words on the top. This is why it's essential to make the background of the words transparent – all you want to see is the words without a black background!
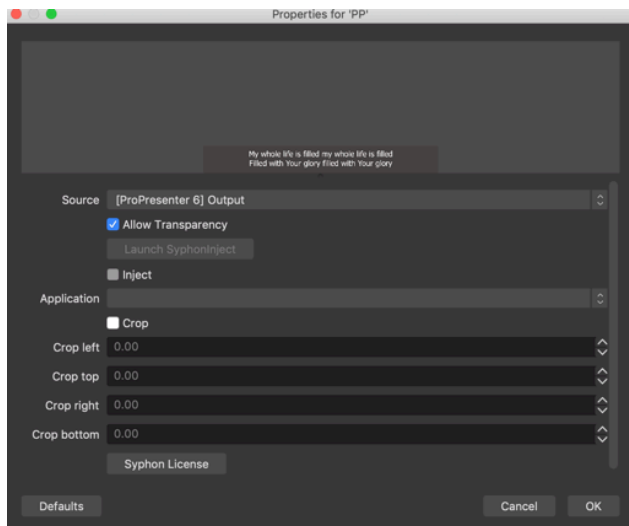
So inside OBS, go to the 'Source' box and right click. Select Add > Syphon Client.
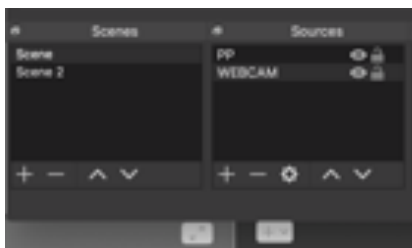
On the next window that pops up, create a new source (I called mine 'PP'). Click OK.

Now select ProPresenter 6 Output. Make sure you select 'Allow Transparency'. Click OK.
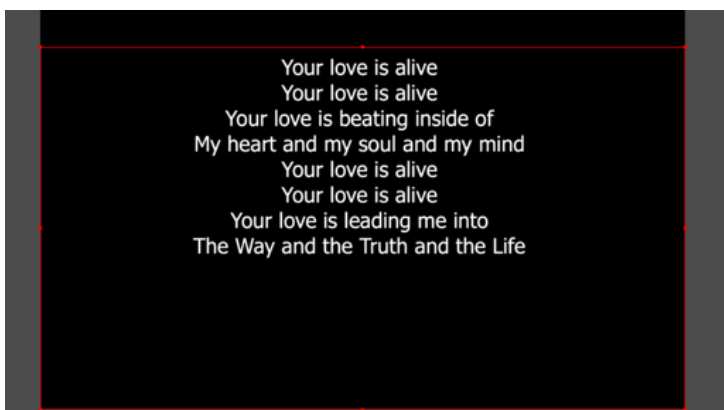

Your 'Sources' window should now have two 'layers' on it, see below. In the example below, we see 'Webcam' as the lower layer and 'PP' as the top layer in the 'Sources' window, all within the same Scene.
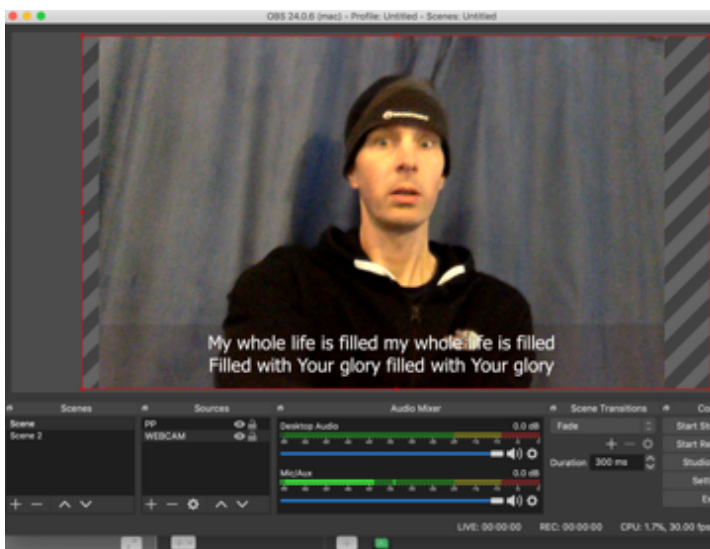

Stage 3 (OBS):
You may have to do a bit of re-jigging the size of the webcam and / or the words coming out from PP / your webcam. In OBS select the 'boxes' (red boxed lines) within the main window on OBS and re-size / drag them until they are in the right place.

You can see the red lines in the picture below (using a slide from PP that I hadn't made into two single lines (naughty me) – see Option 1 and Stage 2 above.
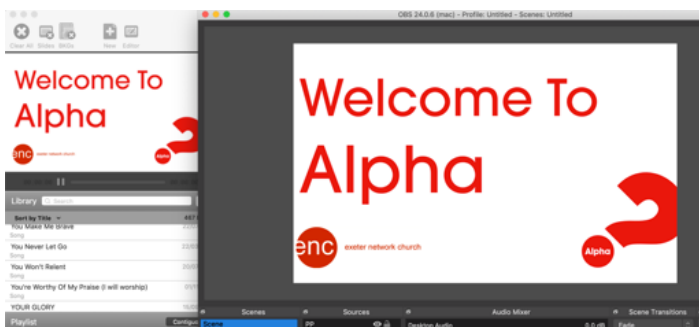

Stage 4 (OBS):

With all this done, consider yourself a techy genius and view your output in the main OBS window. Again, your output will hopefully not look quite as disturbing as the image that greeted me. Now you just need to have sorted your streaming output (see Option 1 Stage 7 if you haven't done this). Now click 'Start Streaming' and you're good to go…

Note that this also means that if you want a Placeholder image to be shown (logo of your church before going live) or to show a video, you can simply add this to your playlist in PP as usual and then output that image from PP – it will then come up in OBS and fill the screen as the 'top layer'. Then 'Clear All' in PP to go back to live webcam.

CCLI Information:

To go live with some worship, you need a CCLI Church Copyright License (https://uk.ccli.com/copyright-licences/#church-licences) - cost depend on the size of your church. This covers you for streaming - but see below…

Note that when going live on YouTube or Facebook, you may find the automated copyright software built in to these platforms may stop your live streaming if it detects 'third-party' content (so say a worship song written by Matt Redman for example). If it does, it may stop the video and audio from your live feed – but restore it again once you stop the song. It probably won't do this, but it is possible – even with a legal CCLI License. You then have to sort out Copyright claims within YouTube Studio after to try to avoid further conflicts. To avoid this, use a paid-for streaming service.

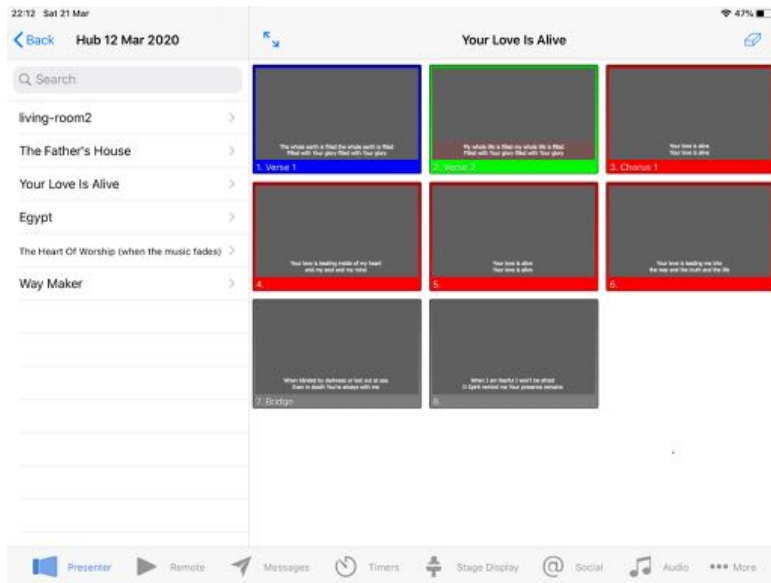## One more thing, in a nod to a Steve Jobs' presentation…

Purchase Pro Remote:

If you don't have an external webcam / don't want one or can't get one / would prefer another solution… enter Pro Remote. In fact you can use this whether you use the Mac internal webcam or an external one.

Download from the App Store, purchase and then set up on the same WiFi network as the Mac you're using to run PP. Inside PP, go to Preferences > Network and Enable Pro Presenter Remote > Controller and put in a password.

On your Pro Remote (e.g. on iPad), enter the same password when prompted. Up will pop your songs and set list. You can now use this either at church or when streaming onto the web as shown above. The advantage is you don't need to be near / in shot of an internal webcam, if this is all you have! Or gives you freedom with an external webcam in the same way any app remote would do!

Pro Remote shown below, linked to a set on my MacBook running Pro Presenter 6.

There are probably a lot of things missed in this guide but this is what we've learned so far! I'll update this as we learn more!