Crowdbeamer – Clickshare Combination

Material:

- 1 Macbook
- 1 Lenovo laptop
- 2 iPads
- 1 external screen
- 1 Crowdbeamer
- 1 Clickshare with 2 buttons

Situations:

1. Clickshare button connected to USB-port on presenter's laptop. Crowdbeamer is placed in between the Clickshare base unit and the external screen. Crowdbeamer receives input via HDMI from the Clickshare base unit's output. External screen receives input from the Crowdbeamer's output via HDMI.
2. Clickshare button connected to USB-port on presenter's laptop. Crowdbeamer is placed parallel to the external screen and an HDMI-splitter is used. The HDMI-splitter receives input from the Clickshare base unit and gives input to the Crowdbeamer and the external screen.
3. Both Clickshare button and Crowdbeamer are connected to the presenter's laptop, the first one via the USB-port and the second one via HDMI. Clickshare base unit is connected to the external screen using HDMI.

General Conclusions:

➔ When combining the use of both Crowdbeamer and Clickshare during your presentation session we recommend you use the setup as you can see it in Situation 3. If this is not possible for some reason or if this isn't your preferred setup, we would recommend the setup as you can see it in Situation 2.
➔ Situation 3 > Situation 2 > Situation 1
➔ We come to these conclusions after a series of tests. Our findings are based on the number of frame drops and the quality of the image on the external display and the delay on the devices of the audience that are using the Crowdbeamer app.
➔ An important note, is that you should adjust the Wifi channel on your Crowdbeamer device to avoid overlap between the Wifi of the Crowdbeamer and the Wifi of the Clickshare. This is easily done in the Crowdbeamer web-interface.

Macbook:

➔ *PowerPoint:* When running PowerPoints with a Crowdbeamer-Clickshare combination from a Mac computer, some problems might occur. If you want to use PowerPoint's presentation mode and read your notes while presenting you will see that it's not possible in this setup.

➔ *Solution:* It's possible to resolve this issue using a workaround. Don't use the Clickshare button for sharing. In this setup you will have to connect your laptop to the WIFI of the Clickshare base unit and start sharing using the Airplay function. Once you connect to the Clickshare WIFI you will see the Airplay icon appear in the top right corner of your screen and will be able to share to the base unit. Make sure to connect the Clickshare base unit to an external screen before you start doing this because you will be asked to enter a security code before you can start using Airplay.

➔ *Other uses of PowerPoint, other programs and videos:* If you don't need to see your notes or if you don't have to use the presentation mode the classic setup will do. In other words, you can share using the Clickshare button. The same goes for the streaming of (YouTube) video or excel sheets or word documents or….

➔ *Remark:* To increase the number of resolutions one can chose on a Macbook, go to System Preferences -> chose the Displays tab -> you will see the options "Default for display" and "Scaled". Under scaled you will already see a few resolutions. To further increase this number, click on the scaled option while holding the ALT key. You should see the list of resolutions increase.

Windows:

➔ *PowerPoint:* When running PowerPoints with a Crowdbeamer-Clickshare combination from a Windows computer, some problems might occur. If you want to use PowerPoint's presentation mode and read your notes while presenting you will see that it's not possible in this setup.

➔ *Solution:* It's possible to resolve this issue. You will simply need to install an extension pack for Clickshare on you Windows computer. You can find out how to do this on the Clickshare knowledge base on their support website. Please see the links below:
https://www.barco.com/en/support/clickshare-csc-1/knowledge-base/KB1186
https://www.barco.com/en/support/clickshare-csc-1/knowledge-base/KB5036
https://www.barco.com/en/support/clickshare-csc-1/knowledge-base/KB1343

➔ *Other uses of PowerPoint, other programs and videos:* For these situations the classic setup will work just as it is supposed to.

➔ *Remark:* In windows, when working with two or more screens (e.g. a presenter's laptop and an external screen), you have the option to either duplicate or extend your primary screen.

➔ *Remark:* When using this kind of setup and PowerPoints presentation mode, it might happen that you see your notes on the external screen while the images that are meant for the audience appear on the presenter's screen. This is a setting in PowerPoint that can be changed. While in presentation mode, simply go to the button "change display settings" on the top left and select "switch display for the presenter and the slideshow". You will probably have to make this change on the external screen.

EDID Settings for the HDMI Splitter that was used.

EDID stands for Extended Display Identification Data and is used for communication between HDMI sources and screens, enabling you to determine the supported display resolutions and audio formats. The HDMI source requests this information from the screen and determines the best resolution or audio format. When using multiple screens (TVs or projectors), the best resolution and audio format that is supported by all connected screens is determined.

This may cause problems in some situations, for example, when one of the connected sources or screens does not fully support EDID. Using switches at the front, you can manually enter the required video resolution and audio format. See Appendix 1 on page 39 for an overview of the associated settings.

Tip: In standard situations, always use the automatic setting, which will result in sound and image on all connected screens. With manual settings, no image or sound may be displayed on one or more screens if the appropriate setting is not supported.

#	EDID Selector	Description
1	0000	1080p,Stereo Audio 2.0
2	0001	1080p,Dolby/DTS 5.1
3	0010	1080p,HD Audio 7.1
4	0011	1080i,Stereo Audio 2.0
5	0100	1080i,Dolby/DTS 5.1
6	0101	1080i,HD Audio 7.1
7	0110	3D,Stereo Audio 2.0
8	0111	3D,Dolby/DTS 5.1

#	EDID Selector	Description
8	0111	3D,Dolby/DTS 5.1
9	1000	3D,HD Audio 7.1
10	1001	4K2K,Stereo Audio 2.0
11	1010	4K2K,Dolby/DTS 5.1
12	1011	4K2K,HD Audio 7.1
13	1100	N/A
14	1101	N/A
15	1110	N/A
16	1111	Automatic (default)