

## Configuration Summaries

Level	Base		Base with Options		Description	Cameras	Initial Level Diff		Upgrade Costs from previous level		Variance	
	Low	High	Low	High			Low	High	Low	High	Low	High
What Passes	\$450	\$450				1						
Basic	\$750	\$950	\$750	\$950	Minimum quality	1-2	\$300	\$500	\$550	\$550	\$250	\$50
Basic +	\$1,030	\$1,480	\$1,290	\$1,850	Good quality	1-2	\$280	\$530	\$430	\$830	\$150	\$300
Intermediate - 1	\$1,150	\$1,720	\$1,410	\$2,090	Hi-def	1-2	\$120	\$240	\$200	\$400	\$80	\$160
Intermediate - 2	\$1,750	\$2,770	\$2,010	\$3,140	Internal monitoring, recording service	1-2	\$600	\$1,050	\$650	\$1,100	\$50	\$50
Advanced	\$3,690	\$4,710	\$4,220	\$5,240	Hi-def, internal monitoring, recording service	3-4	\$1,940	\$1,940	NA	NA		

Add a nursery (or additional internal displays) \$480 Intermediate -2 and above  
*This is the amount for each additional display*

### Recurring Monthly

	Low	High
Streamhost	\$15	\$50

## Streaming Levels and Alternatives

### What Passes for Streaming for most churches

#### Recurring Monthly

	<u>Low</u>	<u>High</u>
Streamhost	\$15	\$50

#### One Time

##### Basic Hardware

Cameras	\$100	1	\$100	Logitech 910 USB Webcam
Tripod	\$50	1	\$50	
Computer	\$300	1	\$300	I3 laptop, 2GB of memory
Software	\$0	1	\$0	Adobe Encoder
			<u>\$450</u>	

##### Services required:

Broadband internet with at least 10mb bandwidth. Can use 4LTE over phone hotspot, if available  
Aux feed from soundboard. If splitter is needed, add \$150 for audio patches.

##### Personnel Required

Streaming computer operator  
Camera operator

Can be the same person, if camera can be located at same location as streaming computer.

##### What you have

Live service (no recorded or archived services)  
Minimal quality - no lighting adjustments, grainy and pixelated on pan and tilt shots  
Can remotely zoom, pan and tilt one camera, but quality is compromised

##### Commentary

You could eliminate the tripod, and attach the camera to something and point it at the front of the church. You could turn it on at the start of the service, leave it unattended, and turn it off at the end. You will have many shots where a person is partially in it (top, bottom and sides) and not in it at all. If you go with a wide shot so that no matter where the speaker or singer is that they are in the picture (assuming that you can get that far back in your facility) you'll have the speaker as a faceless image at a distance. The result is that you will be sending an image of your service with barely recognizable participants, when they are in the image at all. The only people who will be watching it will be those who are very devoted and determined to watch the service, usually accepting it as audio with a loosely related image attached. This may be acceptable for your needs and desires. Be aware, however, that in 2014, television has been widely available in the US for almost 70 years (that is, most people have experienced it throughout their entire life). There are minimal expectations, if only unconsciously, of what constitutes acceptable video, let alone what rates as engaging video. If your goal is to be able to say, 'we have streaming', this will accomplish that goal. If your goal is to reach existing members who, for whatever reason, can't attend but would like to at least hear the service, it will accomplish that goal. If you want an image and sound that is as engaging as your live service, you really must use one of the other options listed here.

Final point: I beseech you, if you choose this option, to at least commit to having someone who operates the camera to keep it on whoever the speaker is. It is a minimum courtesy to the viewer. Unfortunately, it is widely disregarded by churches whose only goal is to be able to say, 'we have streaming'.

A P.S. Request for the consideration of your viewer/listener: please use sound from your sound board and not the camera sound. If you chose to use camera sound, your sound will be very poor (probably matching your image).

## Streaming Levels and Alternatives

### Basic Configuration

#### Recurring

	<u>Low</u>	<u>High</u>
Streamhost	\$15	\$50

#### One Time

##### Basic Hardware

Cameras	\$100	1	\$100	2	\$200	Logitech 900 USB Webcams
Camera signal cabling	\$50	1	\$50	2	\$100	USB Extender cabling
Tripods	\$50	1	\$50	2	\$100	
Computer	\$500	1	\$500	1	\$500	At least i5 processor, 4gb of memory, Windows 7,4 PCIe slots,USB 3 connections
Software	\$50	1	\$50	1	\$50	Manycam
			<u>\$750</u>		<u>\$950</u>	

#### Services required:

Broadband internet with at least 10mb bandwidth. Can use 4LTE over phone hotspot, if available  
 Aux feed from soundboard. If splitter is needed, add \$150 for audio patches.

#### Personnel Required

Streaming computer operator

Camera operator

Can be the same person, if camera can be located at same location as streaming computer.

#### What you have

Live service (no recorded or archived services)

Minimal quality - no lighting adjustments, grainy and pixelated on pan and tilt shots

Can remotely zoom, pan and tilt one camera, but quality is compromised

Strongly recommend two camera option to vary the shoots to keep viewer engaged

#### No Cost Enhancements

Recommend recording segments to be used during visually poor sections (greet your neighbor!), and during times when privacy is desired. The stream operator cues these segments.

## Streaming Levels and Alternatives

### **Basic+ Configuration**

Recurring	Low	High
Streamhost	\$15	\$50

### One Time

#### Basic Hardware

Cameras	\$200	1	\$200	2	\$400	Sony HDX-210 with LANC
Camera signal cabling	\$50	1	\$50	2	\$100	50' HDMI
HDMI to USB converter	\$30	1	\$30	2	\$60	
USB Composite Converter	\$50	1	\$50	2	\$100	
Zoom control	\$30	1	\$30	2	\$60	LANC Controller
Camera Control cabling	\$40	1	\$40	2	\$80	50' LANC cable
White balance target	\$30	1	\$30	1	\$30	BH Photo collapsible 14"
Tripods	\$50	1	\$50	2	\$100	
Computer	\$500	1	\$500	1	\$500	At least i5 processor, 4gb of memory, Windows 7,4 PCIe slots,USB 3 connections
Software	\$50	1	\$50	1	\$50	Manycam
			<u>\$1,030</u>		<u>\$1,480</u>	

#### Services required:

Broadband internet with at least 10mb bandwidth. Can use 4LTE over phone hotspot, if available  
Aux feed from soundboard. If splitter is needed, add \$150 for audio patches.

#### Personnel Required

Streaming computer operator

Camera operator

Can be the same person, if camera can be located at same location as streaming computer.

#### What you have

Live service (no recorded or archived services)

Consistent picture quality between cameras

Higher quality camera helps reduce lighting issues

Can remotely zoom cameras

Strongly recommend two camera option to vary the shoots to keep viewer engaged

Solid equipment basis for upgrade to other levels.

*Low Cost Enhancements*

Pan and Tilt controls	\$60	1	\$60	2	\$120
Pan and Tilt wiring	\$50	1	\$50	2	\$100
Soft lighting	\$150	1	\$150	1	\$150
			<u>\$260</u>		<u>\$370</u>
<i>Total with Options</i>			<u>\$1,290</u>		<u>\$1,850</u>

## Streaming Levels and Alternatives

### Intermediate 1 Configuration

Recurring	Low	High
Streamhost	\$15	\$50

#### One Time

##### Basic Hardware

Cameras	\$200	1	\$200	2	\$400	Sony HDX-210 with LANC
Camera signal cabling	\$50	1	\$50	2	\$100	50' HDMI
Video capture cards	\$200	1	\$200	2	\$400	Blackmagic Intensity Plus
Zoom control	\$30	1	\$30	2	\$60	LANC Controller
Camera Control cabling	\$40	1	\$40	2	\$80	50' LANC cable
White balance target	\$30	1	\$30	1	\$30	BH Photo collapsible 14"
Tripods	\$50	1	\$50	2	\$100	
Computer	\$500	1	\$500	1	\$500	At least i5 processor, 4gb of memory, Windows 7,4 PCIe slots,USB 3 connections
Software	\$50	1	\$50	1	\$50	Manycam
			<u>\$1,150</u>		<u>\$1,720</u>	

##### Services required:

Broadband internet with at least 10mb bandwidth. Can use 4LTE over phone hotspot, if available  
Aux feed from soundboard. If splitter is needed, add \$150 for audio patches.

##### Personnel Required

Streaming computer operator

Camera operator

Can be the same person, if camera can be located at same location as streaming computer.

##### What you have

Live service (no recorded or archived services)

High Definition output - most flexible and excellent quality

Less technical issues with in-computer capture cards

Consistent picture quality between cameras  
 Higher quality camera helps reduce lighting issues  
 Can remotely zoom cameras  
 Strongly recommend two camera option to vary the shoots to keep viewer engaged  
 Solid equipment basis for upgrade to other levels.

*Low Cost Enhancements*

Pan and Tilt controls	\$60	1	\$60	2	\$120
Pan and Tilt wiring	\$50	1	\$50	2	\$100
Soft lighting	\$150	1	<u>\$150</u>	1	<u>\$150</u>
			<u>\$260</u>		<u>\$370</u>
<i>Total with Options</i>			<u><u>\$1,410</u></u>		<u><u>\$2,090</u></u>

## Streaming Levels and Alternatives

### Intermediate 2 Configuration

#### Recurring

	Low	High
Streamhost	\$15	\$50

#### One Time

##### Basic Hardware

Cameras	\$200	1	\$200	2	\$400	Sony HDX-210 with LANC
Camera signal cabling	\$50	1	\$50	2	\$100	50' HDMI
Video capture cards	\$200	1	\$200	2	\$400	Blackmagic Intensity Plus
Zoom control	\$30	1	\$30	2	\$60	LANC Controller
Camera Control cabling	\$40	1	\$40	2	\$80	50' LANC cable
White balance target	\$30	1	\$30	1	\$30	BH Photo collapsible 14"
Tripods	\$50	1	\$50	2	\$100	
Computer	\$500	1	\$500	1	\$500	At least i5 processor, 4gb of memory, Windows 7,4 PCIe slots,USB 3 connections
AGP video card	\$150	1	\$150	1	\$600	Quadro class card
Software	\$500	1	\$500	1	\$500	Wirecast Studio
			\$1,750		\$2,770	

#### Services required:

Broadband internet with at least 10mb bandwidth. Can use 4LTE over phone hotspot, if available

Aux feed from soundboard. If splitter is needed, add \$150 for audio patches.

#### Personnel Required

Streaming computer operator

Camera operator

Can be the same person, if camera can be located at same location as streaming computer.

#### What you have

Live and recorded services (affects streaming plan price)

Capacity to add internal broadcast (nursery) - see below



High Definition output - most flexible and excellent quality  
 Less technical issues with in-computer capture cards  
 Consistent picture quality between cameras  
 Higher quality camera helps reduce lighting issues  
 Can remotely zoom cameras  
 Strongly recommend two camera option to vary the shoots to keep viewer engaged  
 Solid equipment basis for upgrade to other levels.

*Low Cost Enhancements*

Pan and Tilt controls	\$60	1	\$60	2	\$120
Pan and Tilt wiring	\$50	1	\$50	2	\$100
Soft lighting	\$150	1	<u>\$150</u>	1	<u>\$150</u>
			<u>\$260</u>		<u>\$370</u>
<i>Total with Options</i>			<u><u>\$2,010</u></u>		<u><u>\$3,140</u></u>

*Nursery option*

HDMI USB 3 output	\$60
HDMI over lan converter	\$120
Lan cabling (if not present)	\$150
Nursery display	<u>\$150</u>
	<u><u>\$480</u></u>

## Streaming Levels and Alternatives

### Advanced Configuration

Recurring	Low	High
Streamhost	\$15	\$50

### One Time

#### Basic Hardware

Cameras	\$200	3	\$600	4	\$800	Sony HDX-210 with LANC
Camera signal cabling	\$50	3	\$150	4	\$200	50' HDMI
Video capture cards	\$200	3	\$600	4	\$800	Blackmagic Intensity Plus
Zoom control	\$30	3	\$90	4	\$120	LANC Controller
Camera Control cabling	\$40	3	\$120	4	\$160	50' LANC cable
White balance target	\$30	1	\$30	1	\$30	BH Photo collapsible 14"
Tripods	\$50	3	\$150	4	\$200	
Computer	\$1,300	1	\$1,300	1	\$1,300	At least i7 processor, 4gb of memory, Windows 7,5 PCIe slots,USB 3 connections, AGP video card,additional 240GB SSD drive
AGP video card	\$150	1	\$150	1	\$600	Quadro class card
Software	\$500	1	\$500	1	\$500	Wirecast Studio
			<u>\$3,690</u>		<u>\$4,710</u>	

#### Services required:

Broadband internet with at least 10mb bandwidth. Can use 4LTE over phone hotspot, if available

Aux feed from soundboard. If splitter is needed, add \$150 for audio patches.

#### Personnel Required

Streaming computer operator

Camera operator

Can be the same person, if camera can be located at same location as streaming computer.

#### What you have

Live and recorded services (affects streaming plan price)

Capacity to add internal broadcast (nursery) - see below  
 High Definition output - most flexible and excellent quality  
 Less technical issues with in-computer capture cards  
 Consistent picture quality between cameras  
 Higher quality camera helps reduce lighting issues  
 Can remotely zoom cameras  
 Strongly recommend two camera option to vary the shoots to keep viewer engaged  
 Solid equipment basis for upgrade to other levels.

*Low Cost Enhancements*

Pan and Tilt controls	\$60	3	\$180	3	\$180
Pan and Tilt wiring	\$50	4	\$200	4	\$200
Soft lighting	\$150	1	\$150	1	\$150
			<u>\$530</u>		<u>\$530</u>
<i>Total with Options</i>			<u>\$4,220</u>		<u>\$5,240</u>

*Nursery option*

HDMI USB 3 output	\$60
HDMI over lan converter	\$120
Lan cabling (if not present)	\$150
Nursery display	\$150
	<u>\$480</u>