

1722.1 Use Cases

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Simple Use Case: Theatrical Venue



Components:

- 24 microphones on stage
- 24 speakers overhead
- Front-of-house mixer
- System word clock

AVB Endpoint Locations



AVB Components:

- “Stage-1”: 3 x 8-channel stream sources
- “Ceiling Speakers”: 3 x 8-channel stream sinks
- “Front Of House Mixer”:
- System word clock

AVB Network View

"Stage-1"

8-ch src: "Guitars & Keys"
8-ch src: "Drum Mics"
8-ch src: "Vocals"

1 ch snk: "Clock"

"Front of House Mixer"

X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"

:
:

X-ch snk: "AD"
X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"

:
:

X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

"Ceiling Speakers"

8-ch snk: "Line Array Left"
8-ch snk: "Center"
8-ch snk: "Line Array Right"

1-ch snk: "Clock"

"Word Clock Receiver"

1-ch src: "Word Clock"

Device Discovery & Enumeration

"Stage-1"

8-ch src: "Guitars & Keys"

8-ch src: "Drum Mics"

8-ch src: "Vocals"

1 ch snk: "Clock"

Device Discovery & Enumeration

"Stage-1"

8-ch src: "Guitars & Keys"

8-ch src: "Drum Mics"

8-ch src: "Vocals"

1 ch snk: "Clock"

System Controller

Device Response

Device Discovery & Enumeration

"Stage-1"

8-ch src: "Guitars & Keys"
8-ch src: "Drum Mics"
8-ch src: "Vocals"

1 ch snk: "Clock"

System Controller	Device Response
/device/name	/device/name ,s "Stage-1"

Device Discovery & Enumeration

"Stage-1"

8-ch src: "Guitars & Keys"
8-ch src: "Drum Mics"
8-ch src: "Vocals"

1 ch snk: "Clock"

System Controller	Device Response
/device/name	/device/name ,s "Stage-1"
/avb/sources	/avb/sources ,i 3

Device Discovery & Enumeration

"Stage-1"

8-ch src: "Guitars & Keys"
8-ch src: "Drum Mics"
8-ch src: "Vocals"

1 ch snk: "Clock"

System Controller	Device Response
/device/name	/device/name ,s "Stage-1"
/avb/sources	/avb/sources ,i 3
/avb/source/channels	/avb/source/channels ,ii 0 8 /avb/source/channels ,ii 1 8 /avb/source/channels ,ii 2 8

Device Control

"Stage-1"

8-ch src: "Guitars & Keys"

8-ch src: "Drum Mics"

8-ch src: "Vocals"

1 ch snk: "Clock"

Device Control

"Stage-1"

8-ch src: "Guitars & Keys"

8-ch src: "Drum Mics"

8-ch src: "Vocals"

1 ch snk: "Clock"

System Controller

Device Response

Device Control

"Stage-1"

8-ch src: "Guitars & Keys"
8-ch src: "Drum Mics"
8-ch src: "Vocals"

1 ch snk: "Clock"

System Controller	Device Response
/avb/source/name ,i 2 "Vocals"	/avb/source/name ,is 2 "Vocals"

Device Control

"Stage-1"

8-ch src: "Guitars & Keys"
8-ch src: "Drum Mics"
8-ch src: "Vocals"

1 ch snk: "Clock"

System Controller	Device Response
/avb/source/name ,i 2 "Vocals"	/avb/source/name ,is 2 "Vocals"
/avb/source/sync ,is 0 "Word Clock"	/avb/source/sync ,is 0 "Word Clock"

Device Discovery & Enumeration

"Front of House Mixer"

X-ch snk: "A"

X-ch snk: "B"

X-ch snk: "C"

: :

X-ch snk: "AD"

X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"

X-ch src: "B"

X-ch src: "C"

: :

X-ch src: "AD"

X-ch src: "AE"

X-ch src: "AF"

Device Discovery & Enumeration

"Front of House Mixer"

X-ch snk: "A"	X-ch src: "A"
X-ch snk: "B"	X-ch src: "B"
X-ch snk: "C"	X-ch src: "C"
: :	: :
X-ch snk: "AD"	X-ch src: "AD"
X-ch snk: "AE"	X-ch src: "AE"
	X-ch src: "AF"
1 ch snk: "Clock"	

System Controller

Device Response

Device Discovery & Enumeration

"Front of House Mixer"

X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"
: :
X-ch snk: "AD"
X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"
: :
X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

System Controller	Device Response
/device/name	/device/name ,s "Front of House Mixer"

Device Discovery & Enumeration

"Front of House Mixer"

X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"
: :
X-ch snk: "AD"
X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"
: :
X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

System Controller	Device Response
/device/name	/device/name ,s "Front of House Mixer"
/avb/sources	/avb/sources ,i 32

Device Discovery & Enumeration

"Front of House Mixer"

X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"
: :
X-ch snk: "AD"
X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"
: :
X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

System Controller	Device Response
/device/name	/device/name ,s "Front of House Mixer"
/avb/sources	/avb/sources ,i 32
/avb/sinks	/avb/sinks ,i 32

Device Discovery & Enumeration

"Front of House Mixer"

X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"
: :
X-ch snk: "AD"
X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"
: :
X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

System Controller	Device Response
/device/name	/device/name ,s "Front of House Mixer"
/avb/sources	/avb/sources ,i 32
/avb/sinks	/avb/sinks ,i 32
/avb/source/channels	/avb/source/channels ,ii 0 8 /avb/source/channels ,ii 1 8 /avb/source/channels ,ii 2 8 ...

Device Control

"Front of House Mixer"

X-ch snk: "A"

X-ch snk: "B"

X-ch snk: "C"

: :

X-ch snk: "AD"

X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"

X-ch src: "B"

X-ch src: "C"

: :

X-ch src: "AD"

X-ch src: "AE"

X-ch src: "AF"

Device Control

"Front of House Mixer"

X-ch snk: "A"	X-ch src: "A"
X-ch snk: "B"	X-ch src: "B"
X-ch snk: "C"	X-ch src: "C"
: :	: :
X-ch snk: "AD"	X-ch src: "AD"
X-ch snk: "AE"	X-ch src: "AE"
	X-ch src: "AF"
1 ch snk: "Clock"	

System Controller

Device Response

Device Control

"Front of House Mixer"

X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"
: :
X-ch snk: "AD"
X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"
: :
X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

System Controller	Device Response
/avb/sink/name ,is 0 "A" /avb/sink/name ,is 1 "B"	/avb/sink/name ,is 0 "A" /avb/sink/name ,is 1 "B"

Device Control

"Front of House Mixer"

X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"
: :
X-ch snk: "AD"
X-ch snk: "AE"

1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"
: :
X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

System Controller	Device Response
/avb/sink/name ,is 0 "A" /avb/sink/name ,is 1 "B"	/avb/sink/name ,is 0 "A" /avb/sink/name ,is 1 "B"
/avb/source/sync ,is 0 "Word Clock"	/avb/source/sync ,is 0 "Word Clock"

Device Control

"Front of House Mixer"

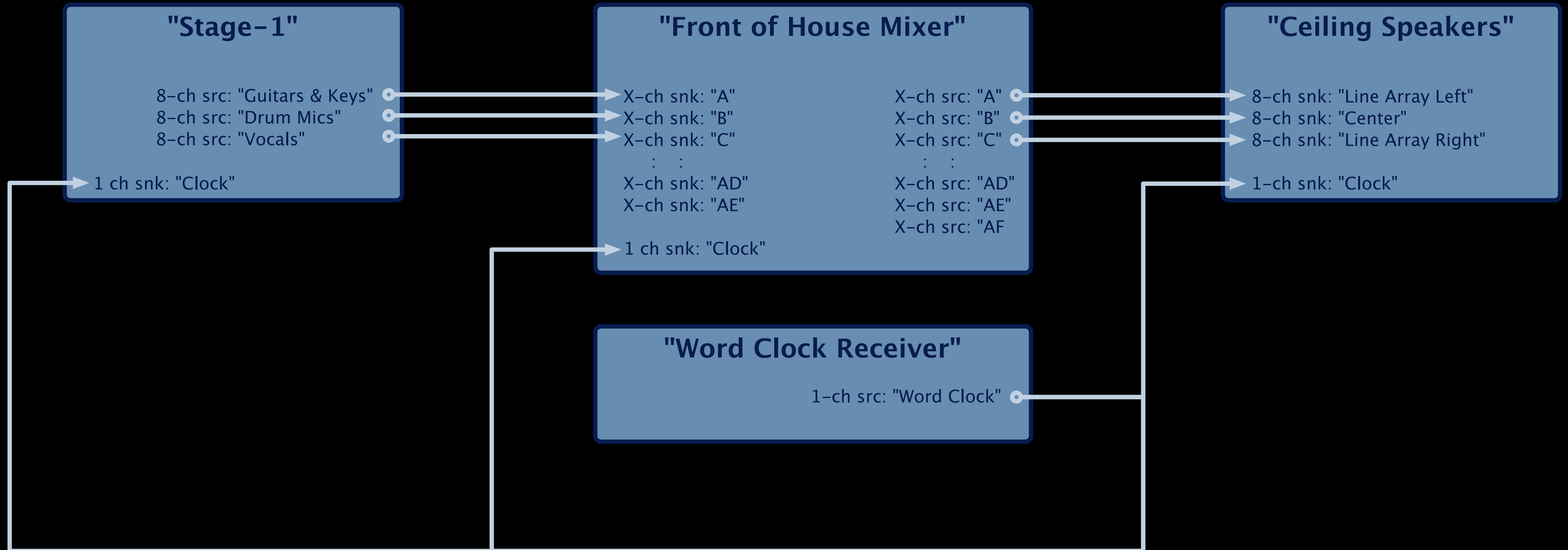
X-ch snk: "A"
X-ch snk: "B"
X-ch snk: "C"
: :
X-ch snk: "AD"
X-ch snk: "AE"

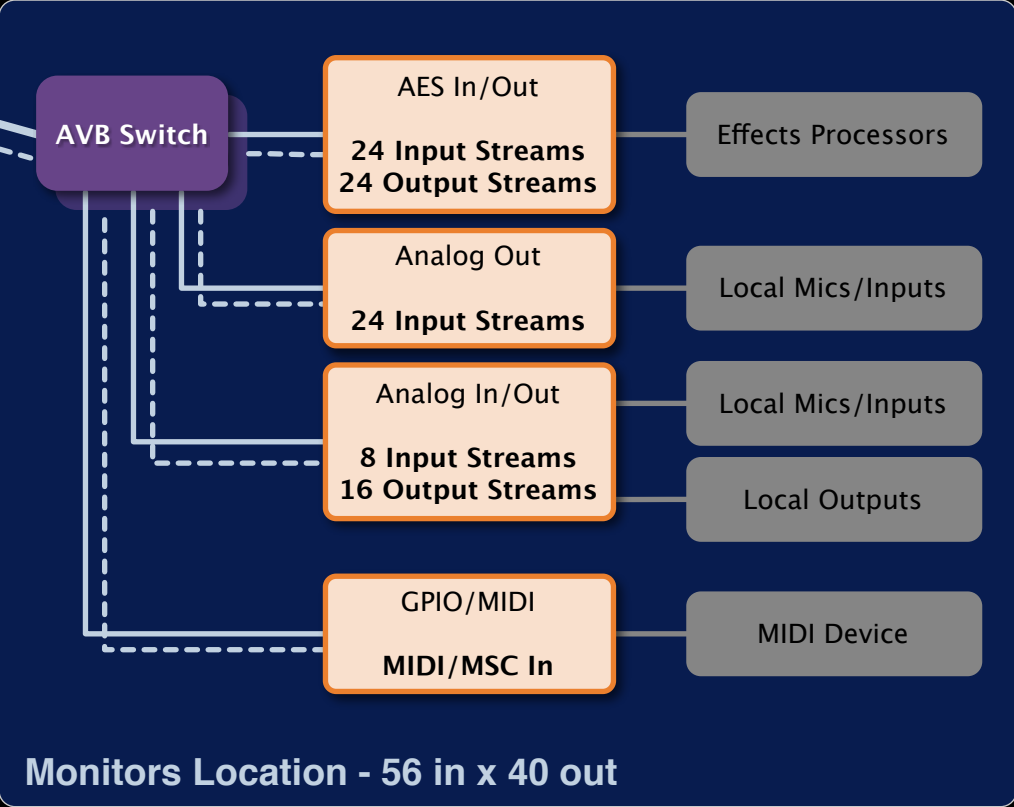
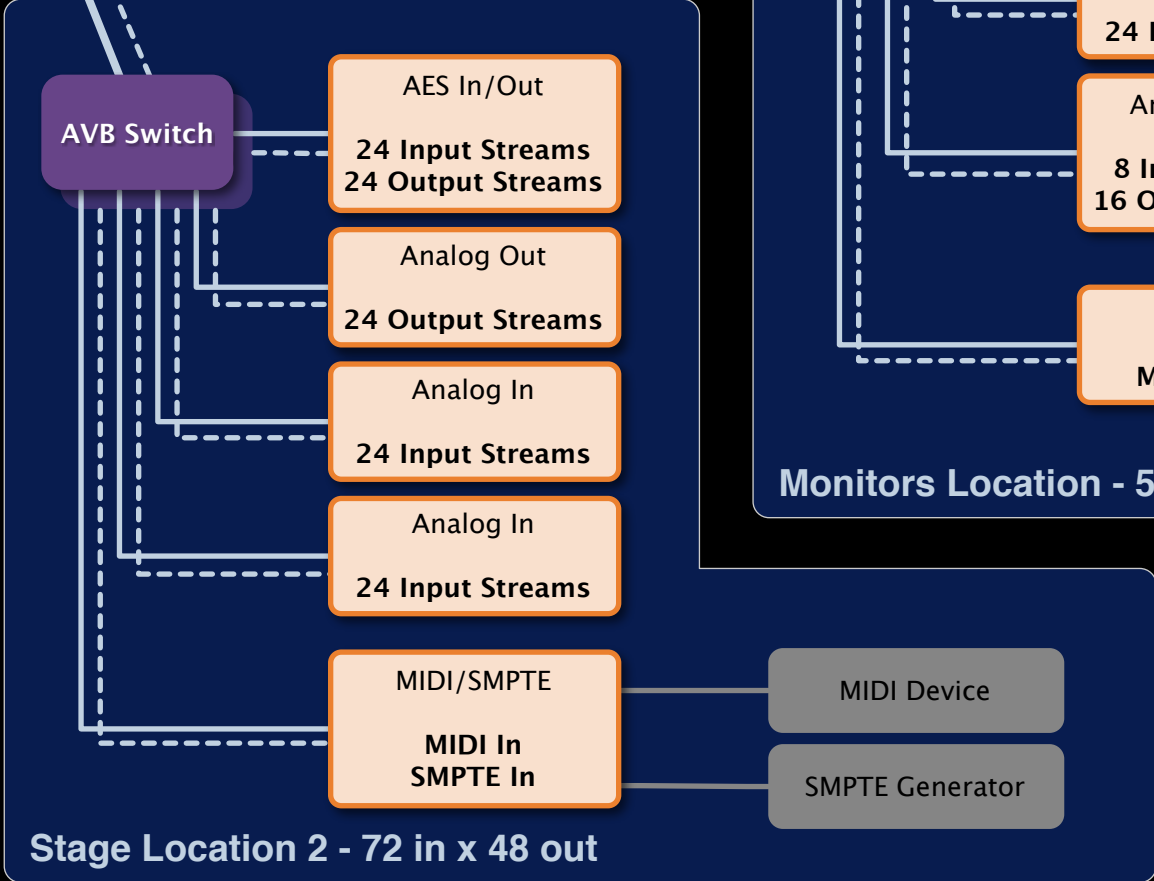
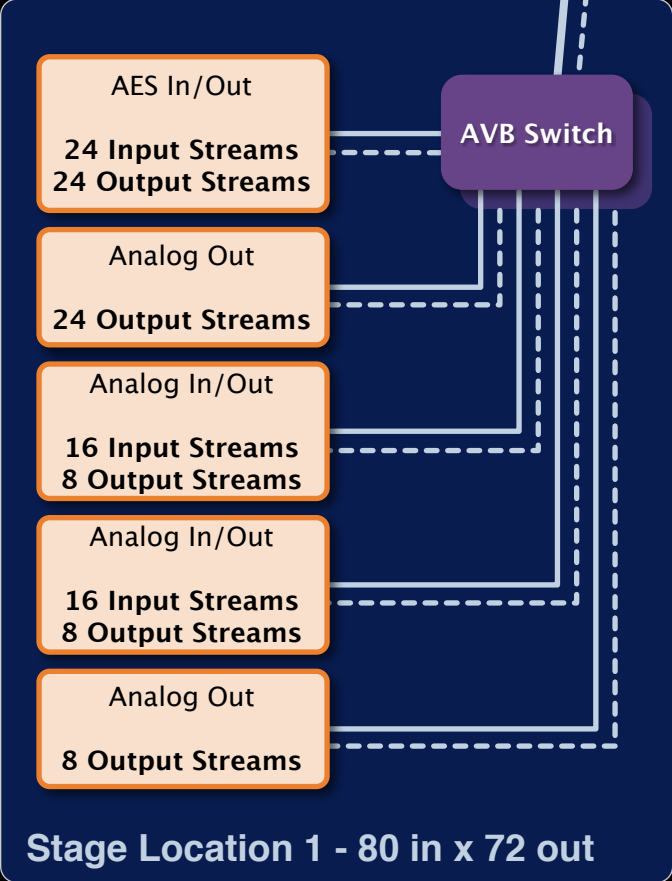
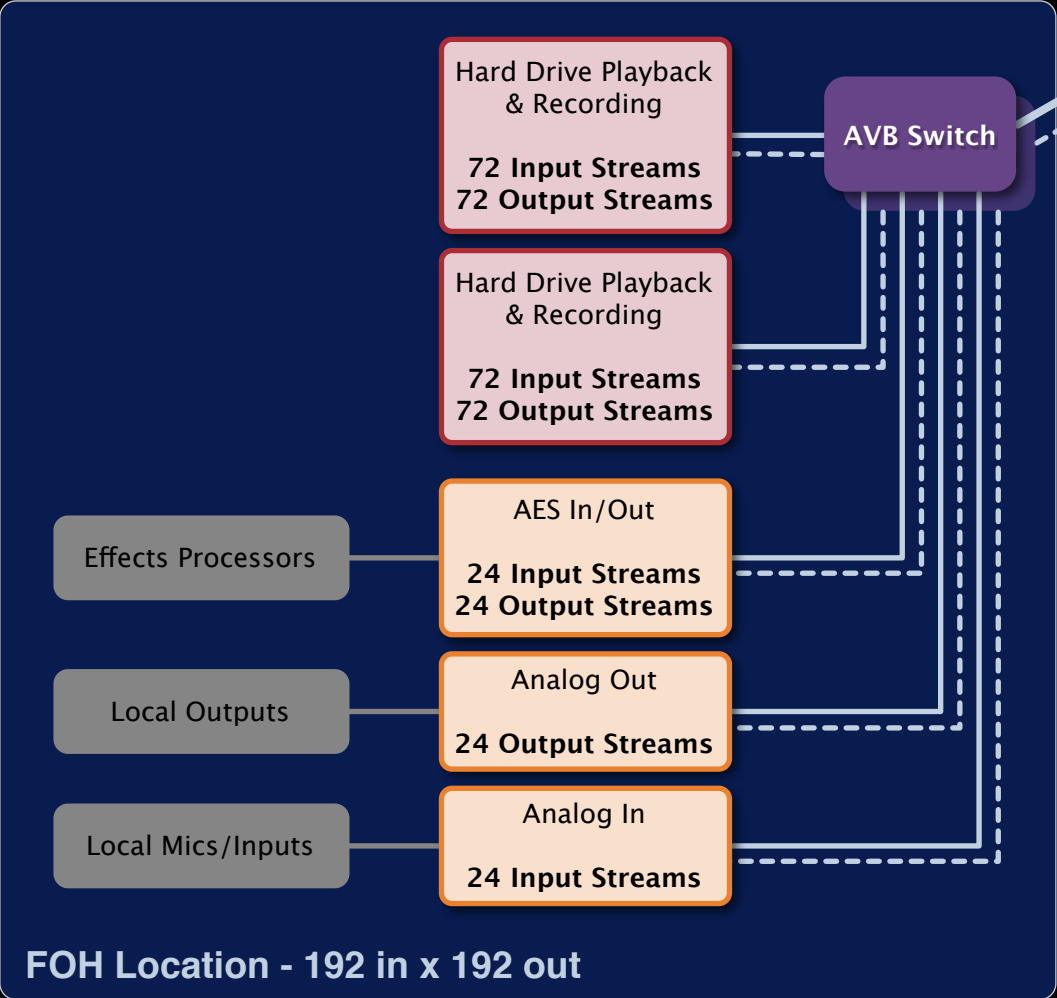
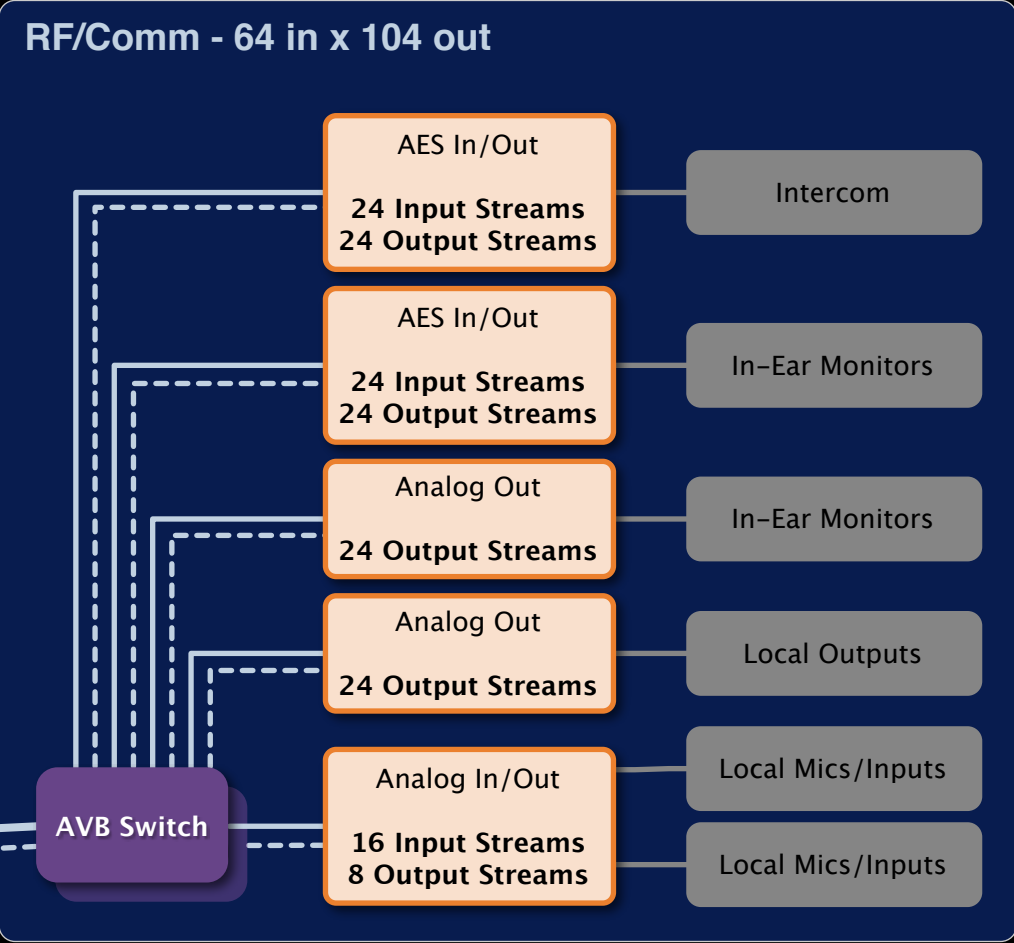
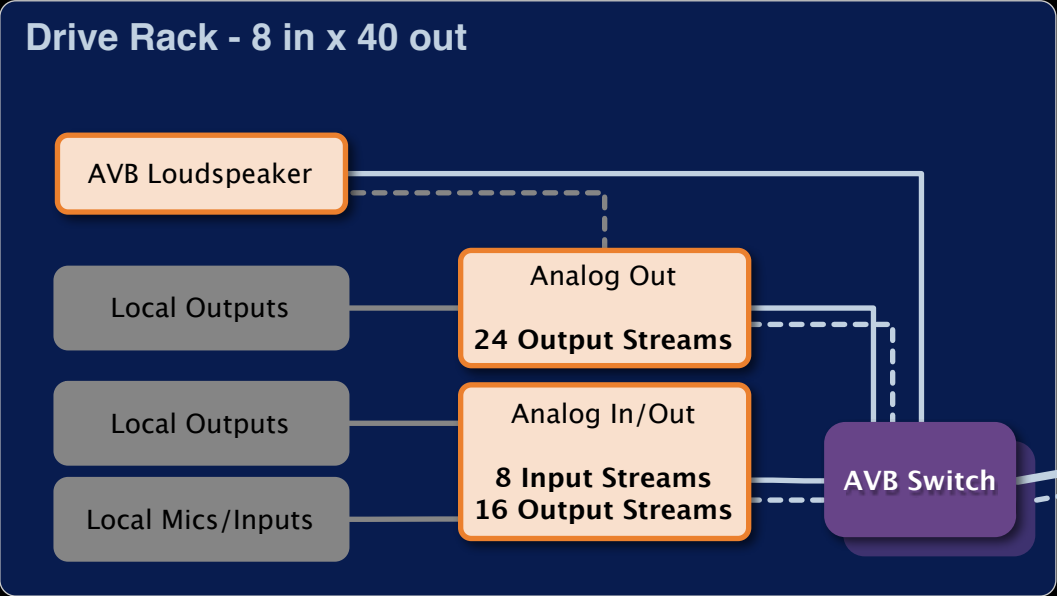
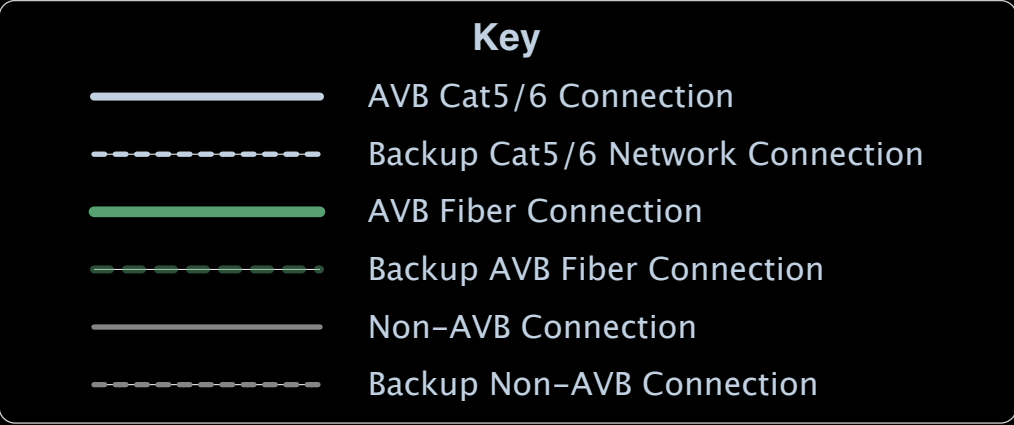
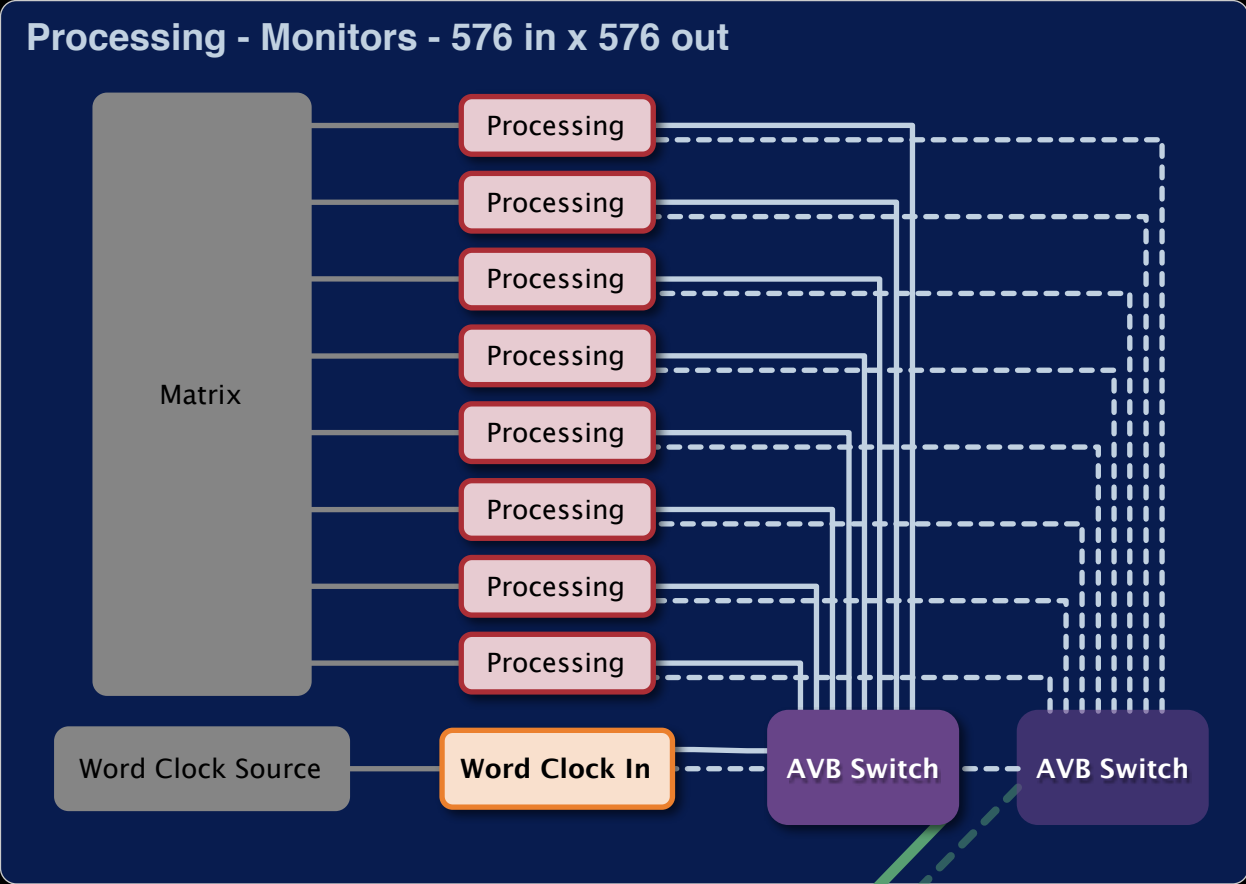
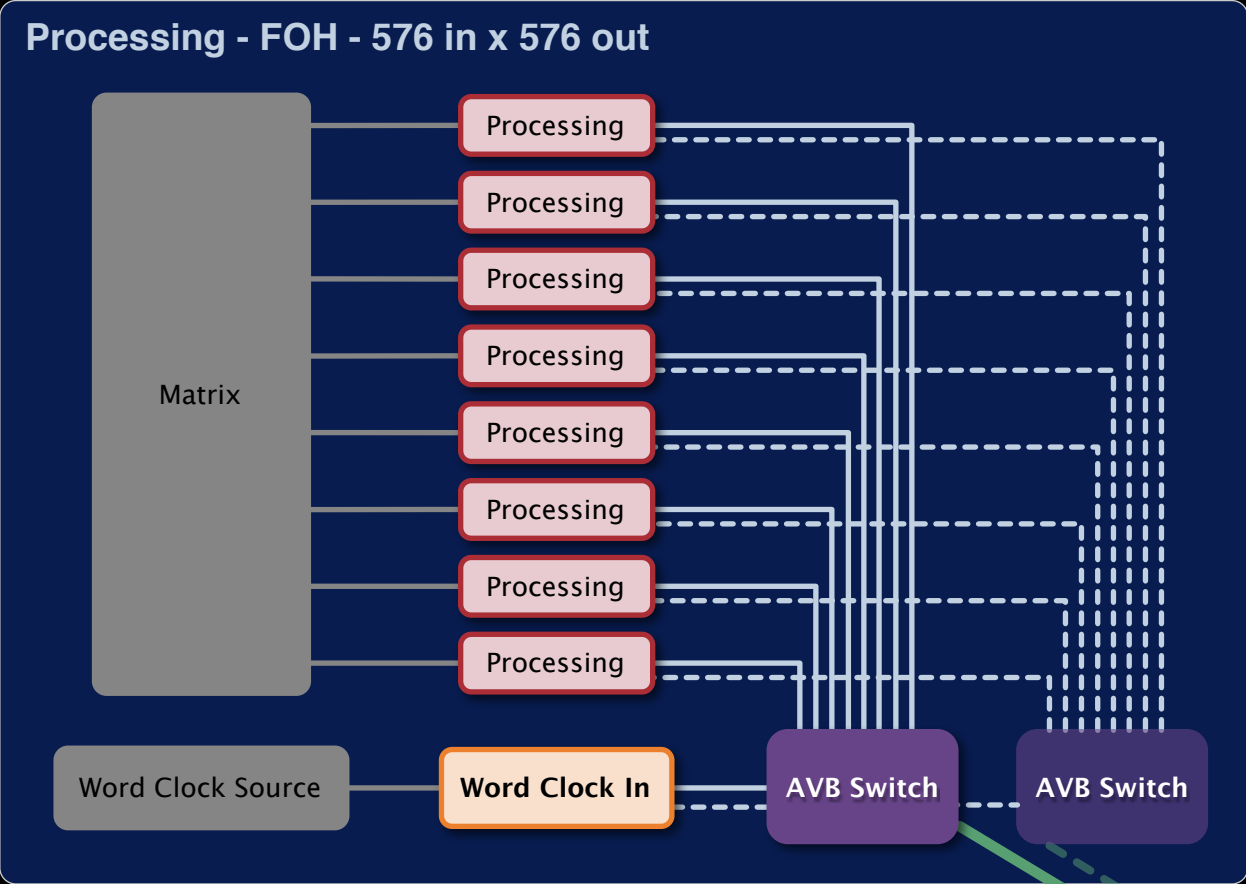
1 ch snk: "Clock"

X-ch src: "A"
X-ch src: "B"
X-ch src: "C"
: :
X-ch src: "AD"
X-ch src: "AE"
X-ch src: "AF"

System Controller	Device Response
/avb/sink/name ,is 0 "A" /avb/sink/name ,is 1 "B"	/avb/sink/name ,is 0 "A" /avb/sink/name ,is 1 "B"
/avb/source/sync ,is 0 "Word Clock"	/avb/source/sync ,is 0 "Word Clock"
/avb/sink/source ,is 2 "Vocals"	/avb/sink/source ,is 2 "Vocals"

AVB Network View





Questions...?