



Solution Requirements and Installation Procedure





Broadcast Solution for Curling

Solution Equipment List

Item Type	Manufacturer	Model
PTZ Camera	Aida	PTZ-NDI-X20
Static POV Camera	Aida	ND-NDI-200
Decoder (for TVs)	BirdDog	Play
10GB POE Switch 24 Port	Ubiquiti	USW-Pro-24-POE
Network Controller	Ubiquiti	Dream Machine Pro
PTZ Wall Mount	Aida	WM
Overhead Mounting Clamp	Camvate	C2171
Windows 10-OBS-NDI	Custom PC	Custom PC



Broadcast Solution for Curling

Solution Requirements

Wide Area Network (WAN / Internet)

- Dedicated Trunk
- Separate Router from existing network
- Minimum 40 MB Upload Speed

New Local Area Network (LAN)

- Minimum 1GB
- Minimum Shielded Cat 6e Ethernet Cable

Power

- 2x AC power in Arena near proposed **new POE Switch** locations

Physical

- Dedicated secure space for Windows 10-OBS-NDI Computer(s)
- Located near new WAN router if possible.

General

- In-house displays should have one available HDMI port
- In-house display locations should have access to new LAN connections to POE switches.
- In-house displays should have space available behind or near to mount BirdDog Play devices.

Installation Tools

- You will need a Windows-based device (laptop preferred) for the setup and configuration of Curling Stadium Hardware.
- You will need the FREE NDI Tools for Windows to view NDI signals when positioning cameras and testing. Please download here: <https://www.ndi.tv/tools/>

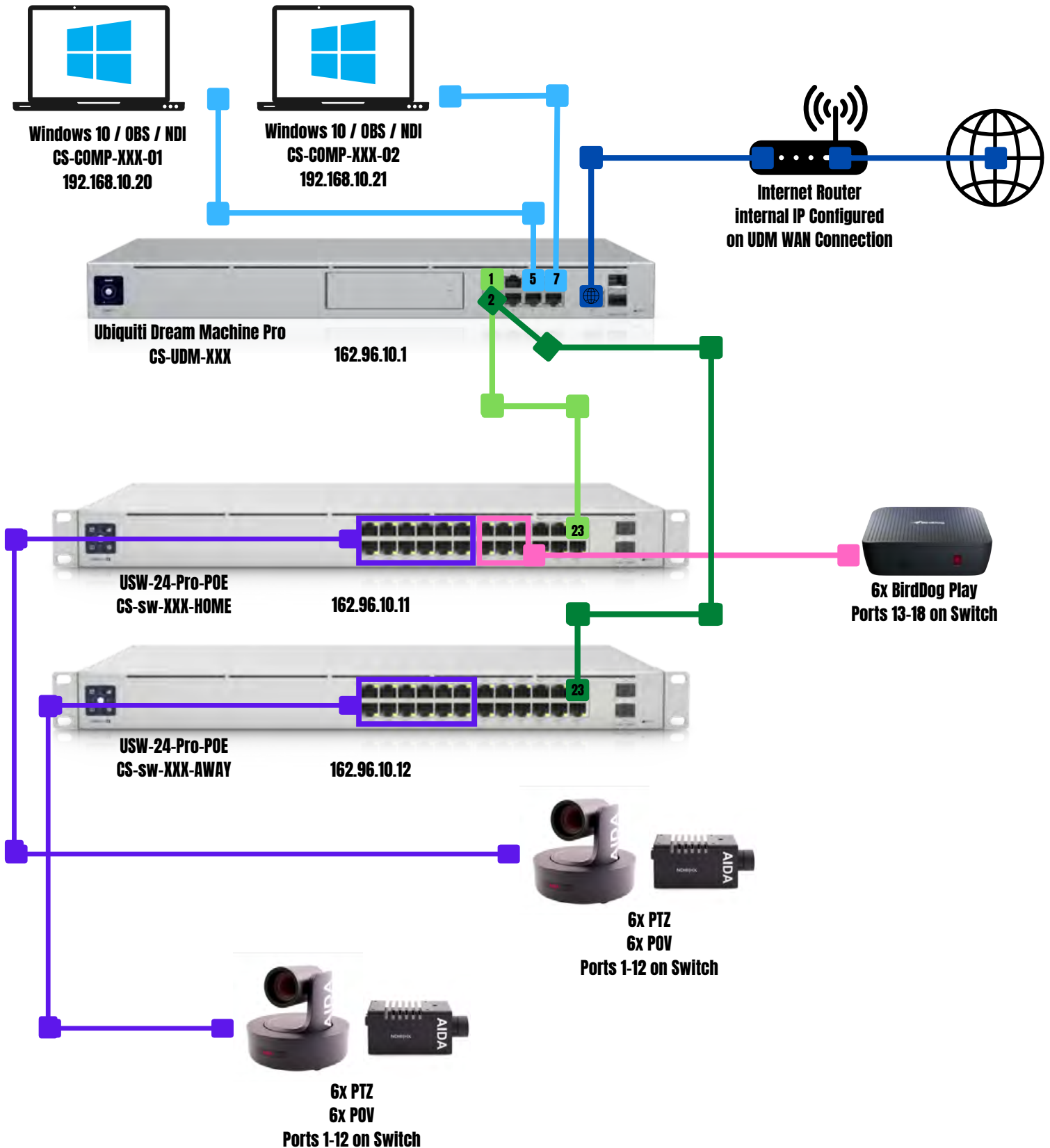
Terms

- "Home End" refers to the end of the arena that is nearest the club room and viewing area.
- "Away End" refers to the end of the arena that is furthest away from the club room and typically where the scoreboards are located.
- "Centerline" refers to the line that runs directly down the middle of each sheet of curling ice.
- "Tee Line" refers to the line that is perpendicular to the Centerline and runs through the middle of the scoring area at each end of the arena.



Broadcast Solution for Curling

Equipment installation



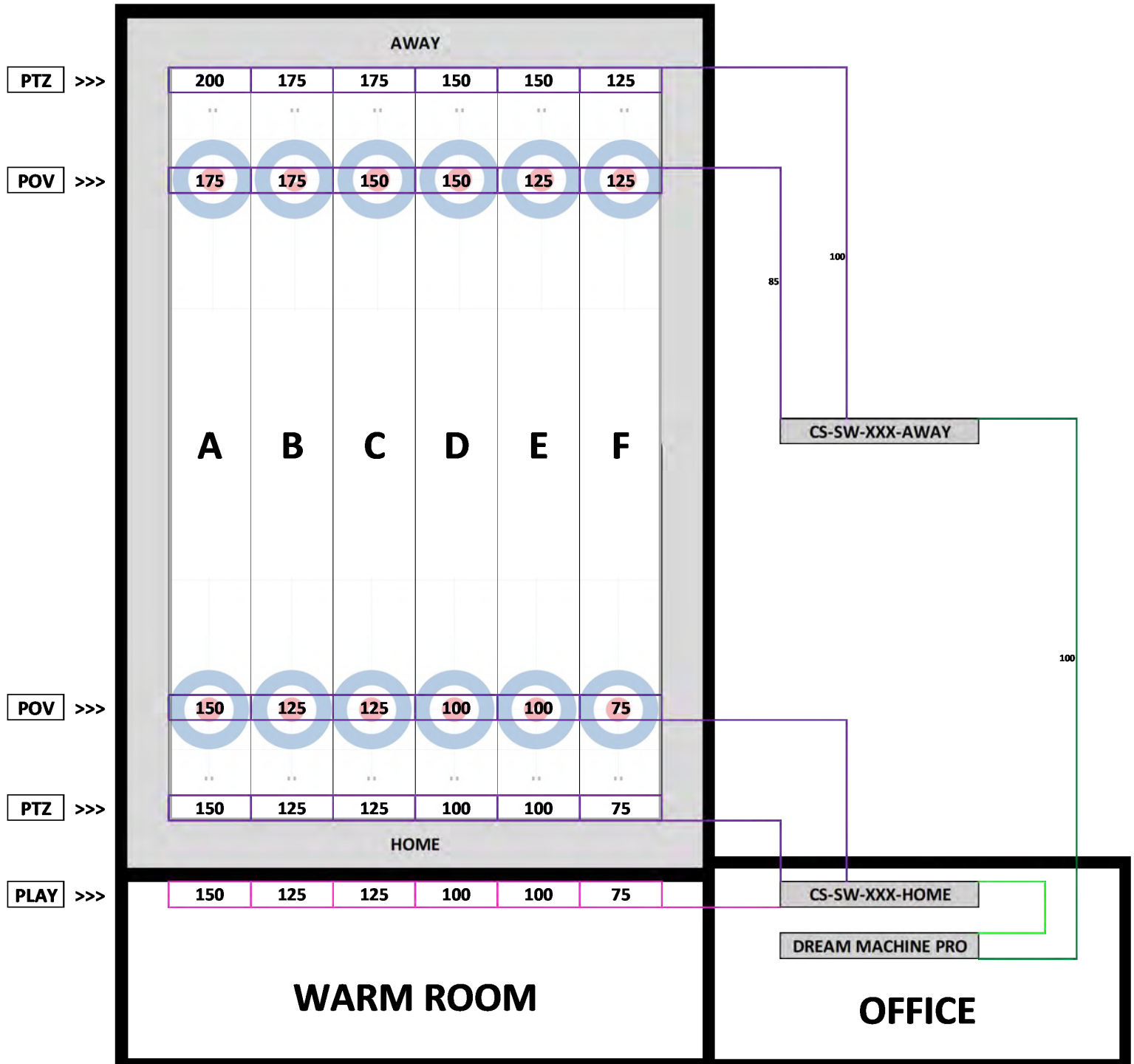


Broadcast Solution for Curling

Cabling Ideal Plan (6 Sheet)

Camera cabling lengths include:

- 25 ft per cable from the ceiling down to switch height
- 6ft End Walkways
- 6 ft Side Walkways
- Single cable from CS-SW-XXX-AWAY to reach Office Location



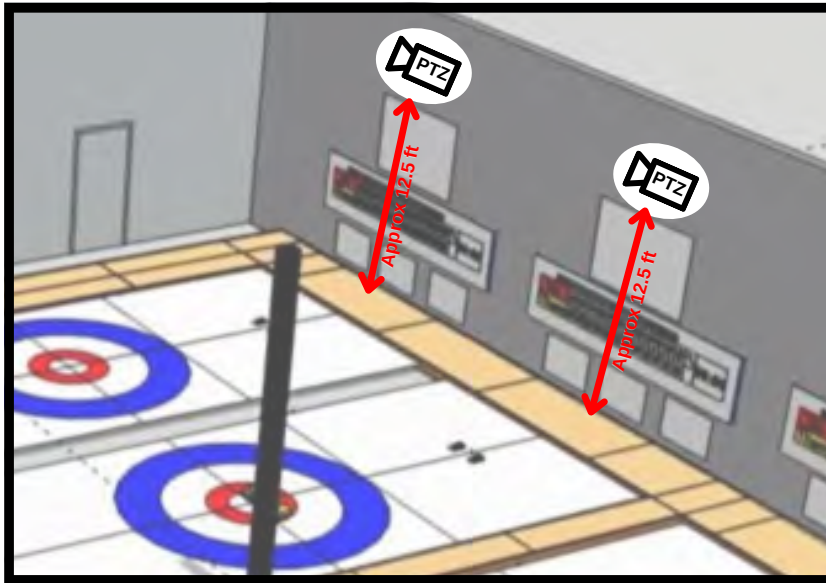


Broadcast Solution for Curling

Installation - Cameras

PTZ

- Mount at approx. 12.5 feet high
- Aligned to exact center of each sheet.
- Run CAT6e cable from each camera and connect to the nearest POE switch.



PTZ Camera
AIDA PTZ-NDI-X20



PTZ Wall Mount
AIDA WM



CAT 6e
Network Cable

POV

- Mount over the center of each house.
- Approx 18 inches behind the t-line.
- Run CAT6e cable from each camera and connect to the nearest POE switch.
- ***NOTE: Mounting struts may need to be installed**



POV Camera
AIDA ND-NDI-200



POV Clamp Mount
CAMVATE C2171



CAT 6e
Network Cable



Broadcast Solution for Curling

Installation - Overhead Camera Mounting



Overhead Camera Positioning

- Mount POV cam to mounting strut using Camvate Clamp.
- Position directly over the Centerline and roughly 18 inches behind the T-line position.
- Camera should be mounted so that the view is similar to the view on the left.





Broadcast Solution for Curling

Installation - in-House Displays

IN-HOUSE DISPLAYS

- Mount BirdDog Play devices behind or near every display.
- Connect the HDMI port from the BirdDog play devices to an HDMI port on each display.
- Run CAT6e cable from each Bird Dog device and connect to the nearest POE switch.



**BIRDDOG PLAY
NDI Decoder**



**CAT 6e
Network Cable**

