

Electrician Wire Guide

Pre-Wiring for a Hardwire Webcast System

Summary of wiring requirements:

The acting electrician should have the knowledge and ability to run both high and low voltage electrical outlets and Cat-5 network cables. Installer should be sure to adhere to state and local electrical codes. The wiring requirements are outlined in detail and any questions pertaining to the proper wiring should be clarified prior to using this guide for an installation.

Items Needed for Project:

- *Low voltage electrical single gang boxes
- *Spool of Category 5 Network Cable (Plenum or Non Plenum)
- *New construction or old work electrical outlet boxes
- *Grounded electrical receptacles

The number of items needed above are dependant upon the number of cameras to be installed and the proximity to existing electrical outlets.

Getting Started:

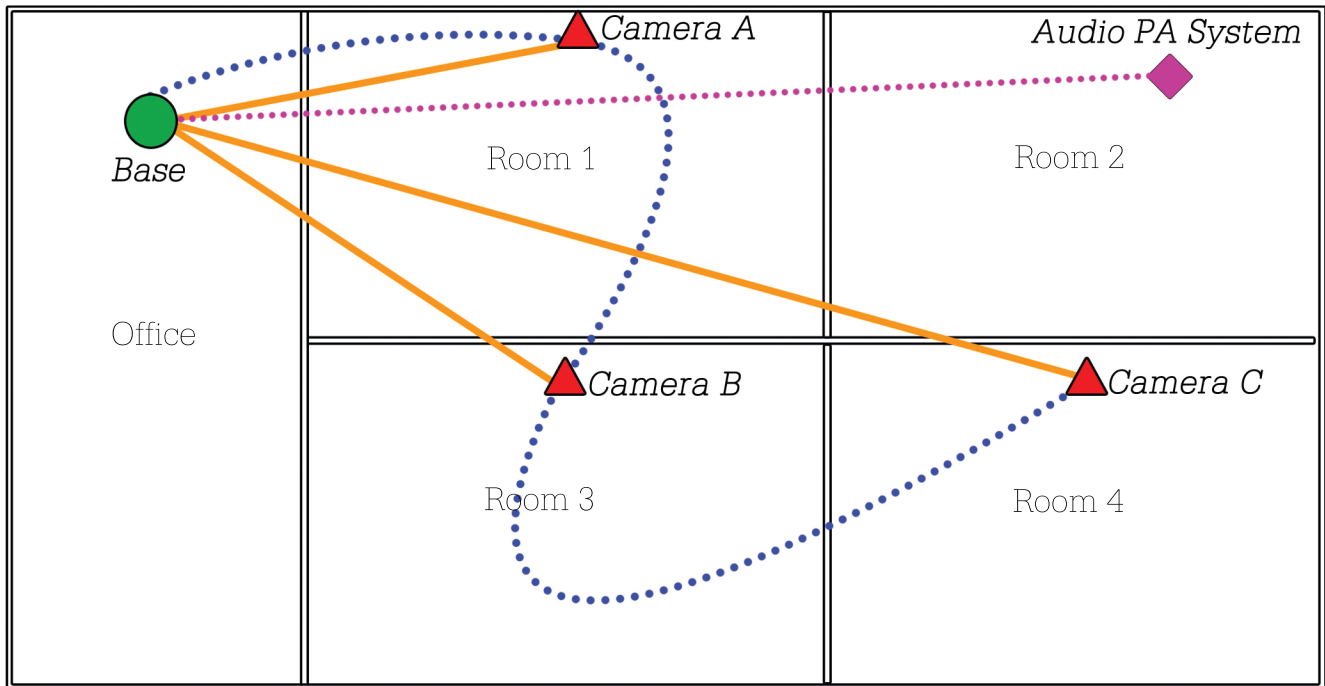
After deciding on the number of cameras you will be installing, (7 maximum) you should establish the location for your encoder equipment and PTZ controller. (Typically an office or media room) For this guide the encoder and controller location will be referred to as Base.

Next, establish the location of each camera and determine if the cameras will be mounted to the ceiling or if they will be placed on a shelf, cabinet, speaker top or a wall mount. For this guide each camera location will be assigned a letter starting with A. A being the camera closest to base and moving further away from the base location will be cameras B, C, D, E, F, G. (Max 7 cameras)

At each camera location, ensure a single gang grounded electrical outlet is within a 3 foot of the camera. For ceiling mounted cameras with access to attic space or drop ceiling space, conceal the outlet above the cameras desired location and provide a single gang low voltage box to the back side of where the camera will be. Leave open the low voltage box or cover with a blank plate, eventually a 12V DC camera power cable will be dropped through at a later date by NationalWebcasts.com. This low voltage box can also accommodate the Cat-5 cable for data and Cat-5 Cable for video.

Wiring for (PTZ) Controller's Data to Camera and Video from Camera to Base:

The video stream from each camera to base, and the data from the controller to each camera will be transmitted over Cat-5 network style cable. A separate cable for video and data is required and data and video cable trace paths are different so please, carefully review the illustration below for proper wire placement.



Please notice that the Cat-5 cable for data from the controller is in a daisy chain configuration. Cat-5 for video and audio is in a straight feed configuration from each camera and audio / PA to base.

Legend for illustration above

Cat-5 Cable for Data
Cat-5 Cable for Video
Cat-5 Cable for Audio
Camera ▲
Base ●
Audio PA System ◆

Final Pre-Wire Specifications:

After running the Cat-5 cable you should not attach any connectors or jacks to the end of the cables. Simply secure the wires so they will not fall back into the wall and leave a minimum of 2 feet of extra cable at each end. Final connections and wall plates will be installed by NationalWebcasts at the time of the system install.

For questions or additional assistance call 1-888-574-2883 EXT. 0