01. Nomad - Courtroom Evidence Presentation System

NOMAD LT

Evidence Presentation System

Evidence Presentation Made Easy

The Nomad LT is an all-in-one audio visual system that centrally stores and seamlessly controls all of the technology attorneys need to present physical and digital evidence in the courtroom.

With a full array of video, audio and control hardware built into a compact lectern, the Nomad LT is the perfect centerpiece in any courtroom technology solution.

Engineered and programmed around the principle of standardization, the Nomad LT is a user-friendly solution that has proven to perform reliably in courtrooms throughout the United States. An extensive list of pre-tested, qualified options allows the Nomad LT to be tailored to the specific needs of your courtroom.

System Features

Control SYSTEM

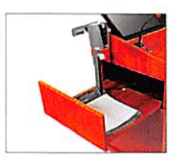
Provides attorneys with a user-friendly interface that is easily accessed and controlled

Confidence MONITOR

Mirrors the selected device so that the attorney does not have to turn his or her back to the audience

Personal DEVICES

Connectivity for personal devices allows attorneys to share content from smart phones, tablets and laptops



Document CAMERA

Allows attorneys to display virtually any type of physical evidence, from documents to 3D objects, in real time

Bose Sound SYSTEM

Provides high fidelity audio that can fill courtrooms of any size

Blu-Ray PLAYER

Plays previously recorded content that is stored on CDs, DVDs and Blu-ray discs

Gooseneck MICROPHONE

Amplifies an attorney's voice throughout the courtroom and can easily feed an audio recording solution

Touch-Screen ANNOTATION

Using the confidence monitor, attorneys can digitally mark images to draw attention to critical details

Popular Courtroom Options

Witness Annotation

A touch-screen monitor at the witness stand allows witnesses to mark and highlight presented evidence so jurors can better understand their point of view through visual reinforcement.

Judge Override

A second touch panel gives the judge or court staff control over the evidence that is presented. Selective blanking for evidence suppression is a common function of a second touch panel.

Video Display Solutions

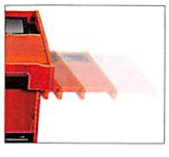
Evidence presentation solutions generally require multiple display devices throughout the courtroom so all parties can simultaneously view presented images and videos.

5-Year Warranty

Full Life-Cycle Support Includes:

- Online training customized for *your* system
- Operational phone support
- Troubleshooting assistance
- On-site repair labor
- Replacement parts as necessary
- Optional 2-year warranty/life-cycle extension available

Furniture Features (exclusively designed and built by NOMAD)



Slow Close Drawer Slides
Prevent damage and noise caused by drawers slamming shut

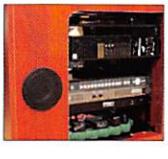
Dual-Sided Service Access
Removeable panels allow access for troubleshooting and service

Tilting Monitor Mount
Allows monitor to be positioned for proper viewing

Doc Cam Auto On/Off
Saves energy and helps prevent heat build-up when drawer is shut

Ample Paper Space
Plenty of workspace for documents, notes and binders

Device Security
Secured components prevent removal and theft



Rack Mounted Components
Minimizes footprint and allows service access

Active Cooling System
Constant airflow protects internal components from overheating

Power & USB Outlets
A convenient location for attorneys to charge personal devices

Permanent
A permanent installation protects against cables being pulled and damaged

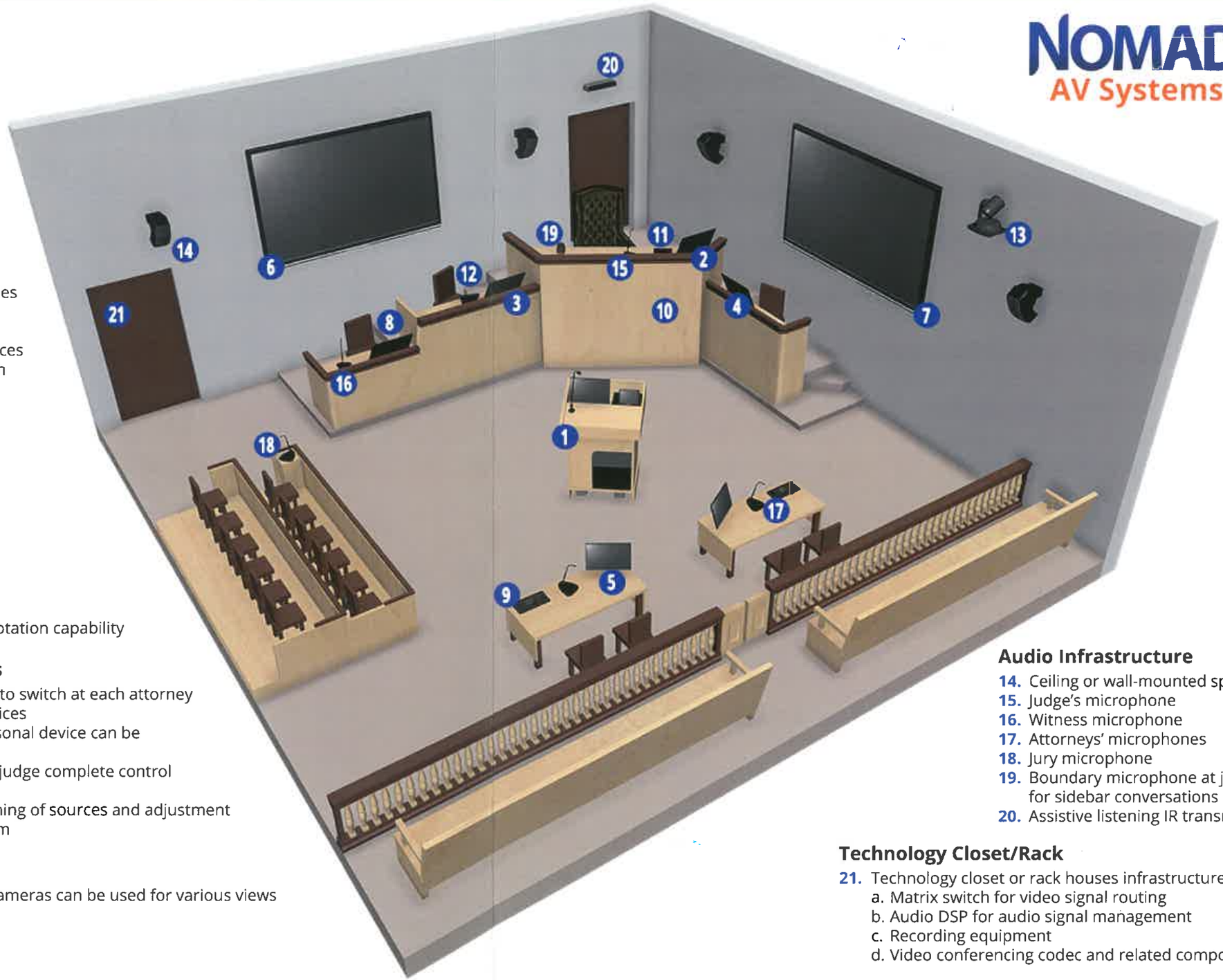
Pivot 180 (Optional)
Quickly and easily rotate the sytem to face the judge, jury or witness

Mobile (Optional)
Share the system between courtrooms or move when not in use

02. Nomad - Typical Courtroom Setup

Common Courtroom AV Options

NOMAD AV Systems



Nomad LT Podium

1. Nomad LT includes:
   a. Document camera
   b. Hard-wired HDMI and VGA/audio cables
   c. Blu-ray player
   d. Built-in computer
   e. Wireless connection for personal devices
   f. Touch-screen confidence monitor with annotation capability
   g. Pre-programmed control system
   h. Built-in sound system
   i. Gooseneck microphone

Video Infrastructure

2. Judge's monitor
3. Clerk's monitor
4. Bailiff's monitor
5. Attorney's monitors
6. Gallery viewing monitor
7. Jury viewing monitor
8. Touch-screen witness monitor with annotation capability

External Inputs and Control Panels

9. Attorney table inputs – an HDMI/VGA auto switch at each attorney table allows wired input of personal devices
10. Judge's input – Judge's private PC or personal device can be displayed on courtroom monitors
11. Judge override control panel – gives the judge complete control over what is presented
12. Clerk's control panel – can control switching of sources and adjustment of audio levels throughout the courtroom

Video Conferencing

13. PTZ (Pan-Tilt-Zoom) camera – multiple cameras can be used for various views

Audio Infrastructure

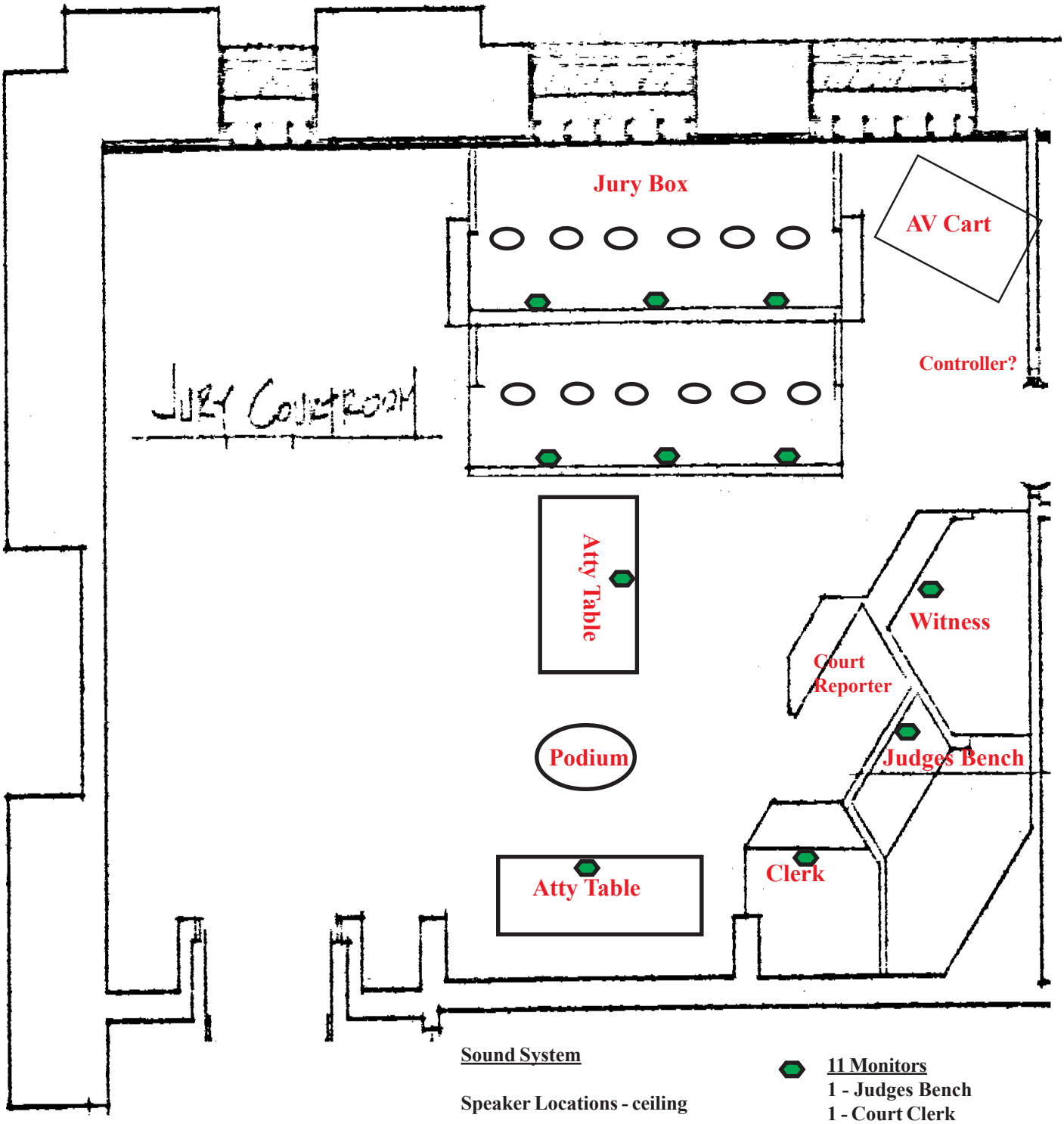
14. Ceiling or wall-mounted speakers
15. Judge's microphone
16. Witness microphone
17. Attorneys' microphones
18. Jury microphone
19. Boundary microphone at judge's bench for sidebar conversations
20. Assistive listening IR transmitter

Technology Closet/Rack

21. Technology closet or rack houses infrastructure equipment
    a. Matrix switch for video signal routing
    b. Audio DSP for audio signal management
    c. Recording equipment
    d. Video conferencing codec and related components

Courtroom 1B

03. Nomad - Courtroom Evidence Presentation System for Courtroom 1B



Sound System

Speaker Locations - ceiling

Microphone Placement
- Judges Bench
- Witness Stand
- 2 Atty Tables
- Podium

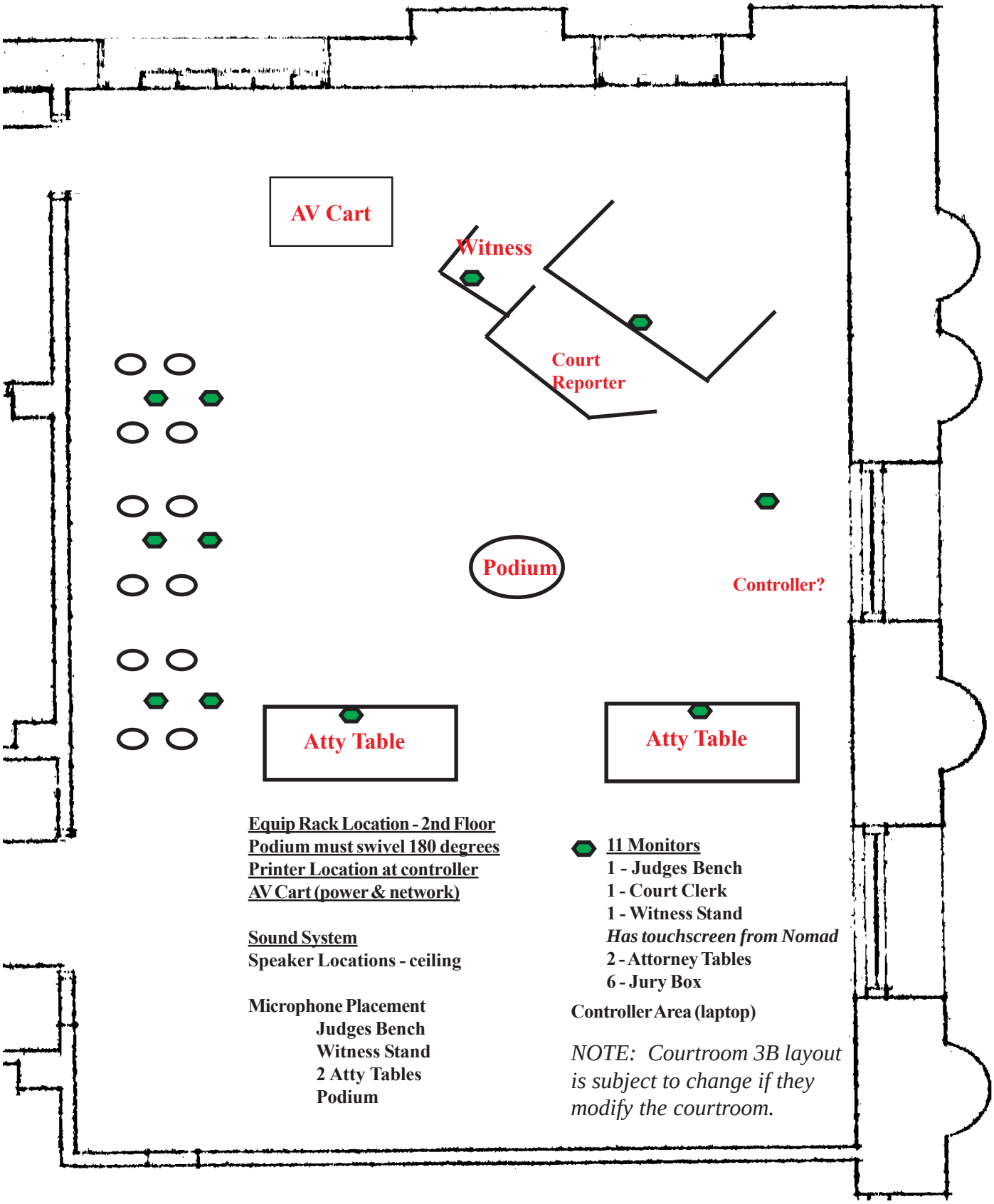
11 Monitors
- 1 - Judges Bench
- 1 - Court Clerk
- 1 - Witness Stand
- *Has touchscreen from Nomad*
- 2 - Attorney Tables
- 6 - Jury Box

Controller Area (laptop)

Equip Rack Location - Basement
Podium must swivel 180 degrees
Printer Location at controller
AV Cart (power & network)

03. Nomad - Courtroom Evidence Presentation System for Courtroom 3B

Courtroom 3B



Equip Rack Location - 2nd Floor
Podium must swivel 180 degrees
Printer Location at controller
AV Cart (power & network)

Sound System
Speaker Locations - ceiling

Microphone Placement
- **Judges Bench**
- **Witness Stand**
- **2 Atty Tables**
- **Podium**

11 Monitors
- **1 - Judges Bench**
- **1 - Court Clerk**
- **1 - Witness Stand**
- ***Has touchscreen from Nomad***
- **2 - Attorney Tables**
- **6 - Jury Box**

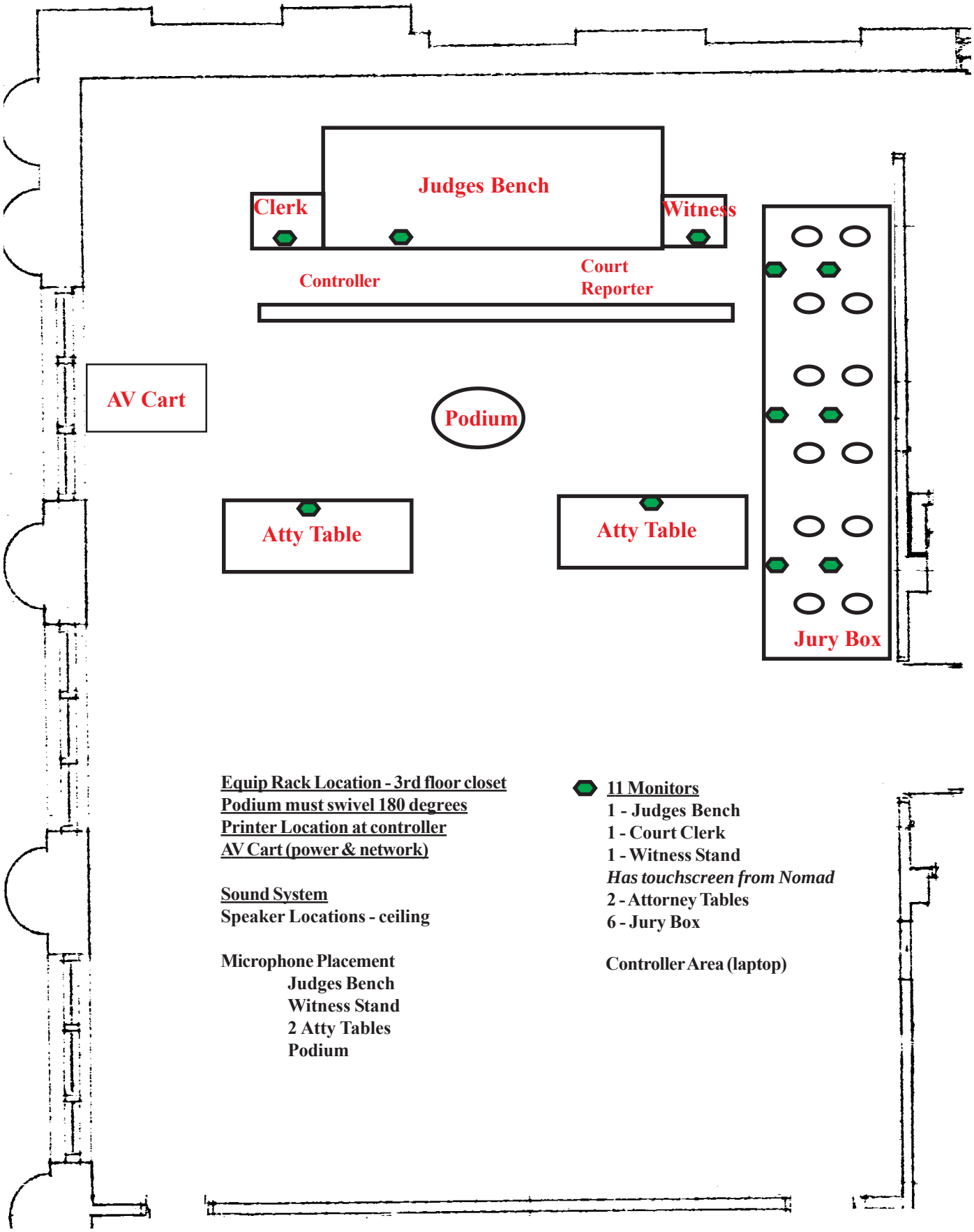
Controller Area (laptop)

NOTE: Courtroom 3B layout is subject to change if they modify the courtroom.

Courtroom 4A

2nd courtroom to be networked

03. Nomad - Courtroom Evidence Presentation System for Courtroom 4A



Equip Rack Location - 3rd floor closet
Podium must swivel 180 degrees
Printer Location at controller
AV Cart (power & network)

Sound System
Speaker Locations - ceiling

Microphone Placement
- **Judges Bench**
- **Witness Stand**
- **2 Atty Tables**
- **Podium**

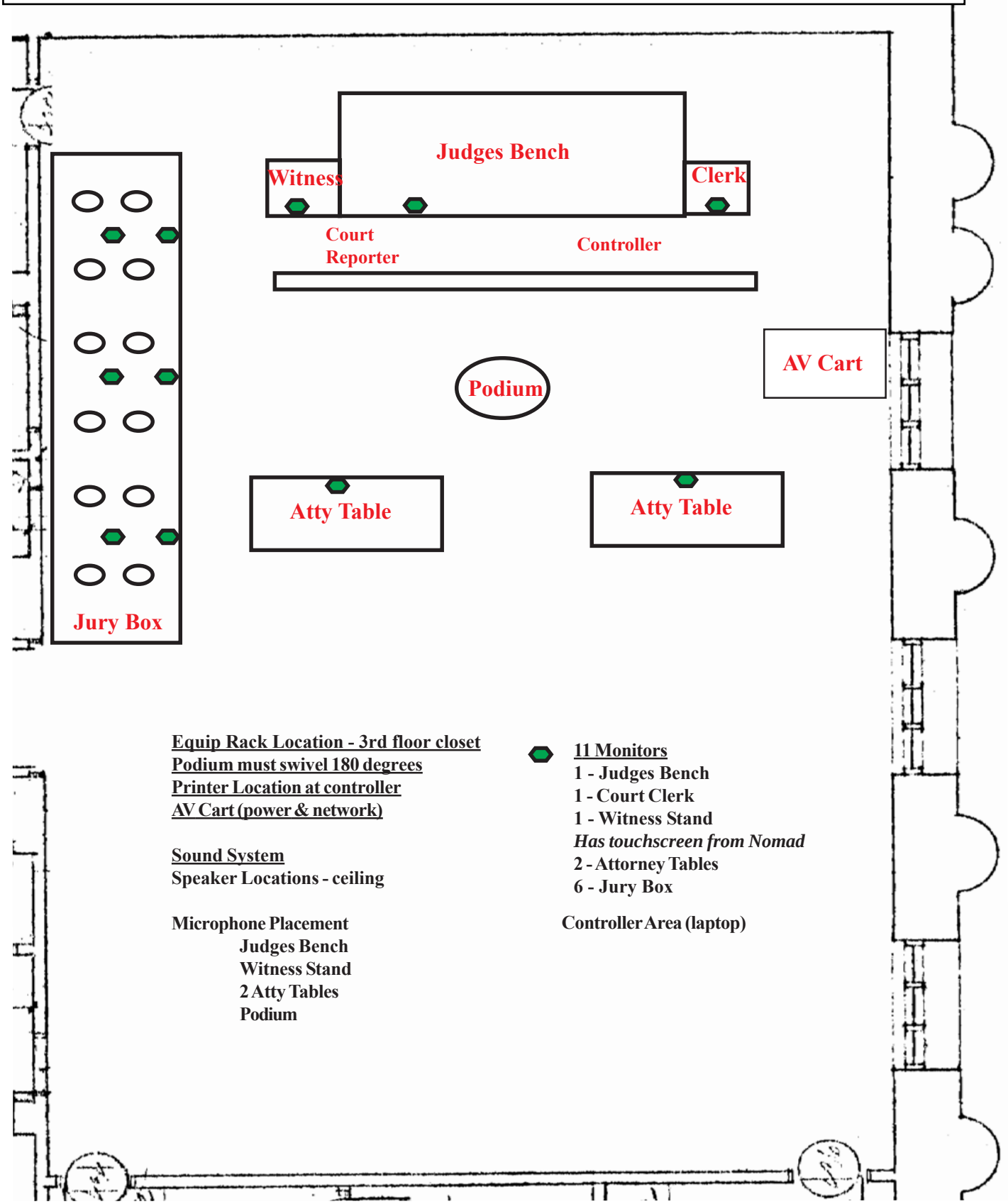
11 Monitors
- **1 - Judges Bench**
- **1 - Court Clerk**
- **1 - Witness Stand**
- ***Has touchscreen from Nomad***
- **2 - Attorney Tables**
- **6 - Jury Box**

Controller Area (laptop)

Courtroom 4B
07/27/2022

1st courtroom to be networked

03. Nomad - Courtroom Evidence Presentation System for Courtroom 4B



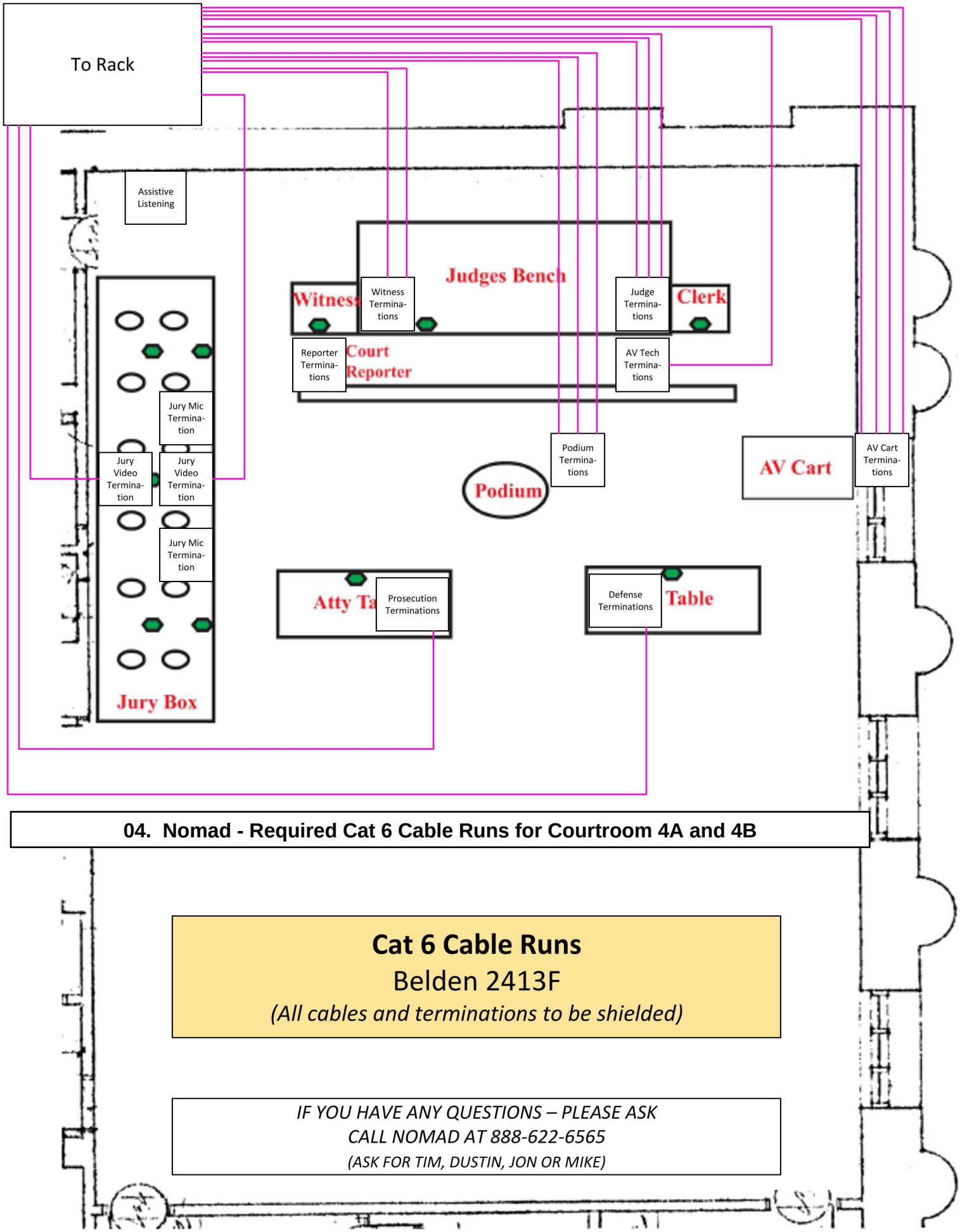
Equip Rack Location - 3rd floor closet
Podium must swivel 180 degrees
Printer Location at controller
AV Cart (power & network)

Sound System
Speaker Locations - ceiling

Microphone Placement
- **Judges Bench**
- **Witness Stand**
- **2 Atty Tables**
- **Podium**

11 Monitors
- **1 - Judges Bench**
- **1 - Court Clerk**
- **1 - Witness Stand**
- ***Has touchscreen from Nomad***
- **2 - Attorney Tables**
- **6 - Jury Box**

Controller Area (laptop)



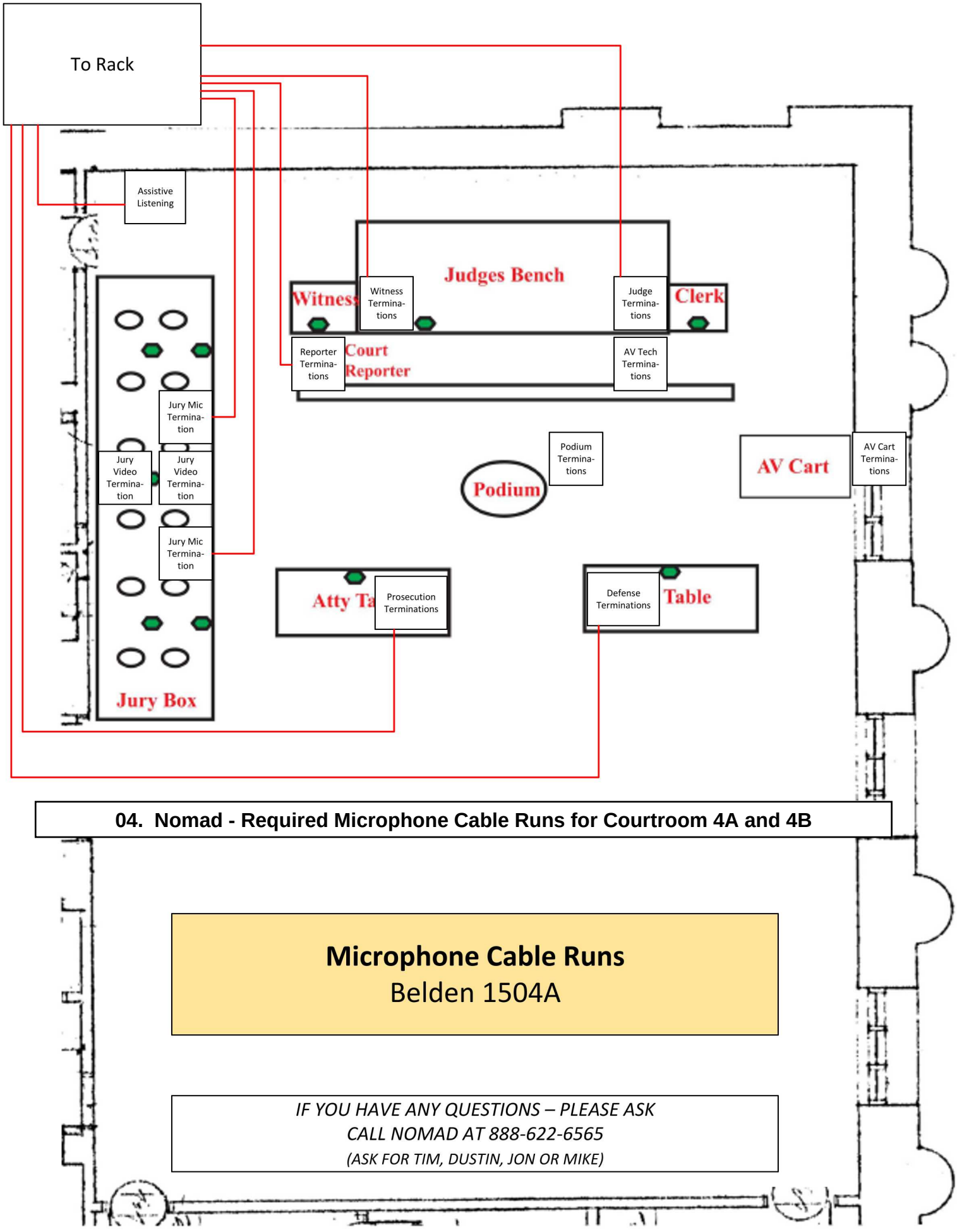
04. Nomad - Required Cat 6 Cable Runs for Courtroom 4A and 4B

Cat 6 Cable Runs

Belden 2413F

(All cables and terminations to be shielded)

IF YOU HAVE ANY QUESTIONS – PLEASE ASK
CALL NOMAD AT 888-622-6565
(ASK FOR TIM, DUSTIN, JON OR MIKE)

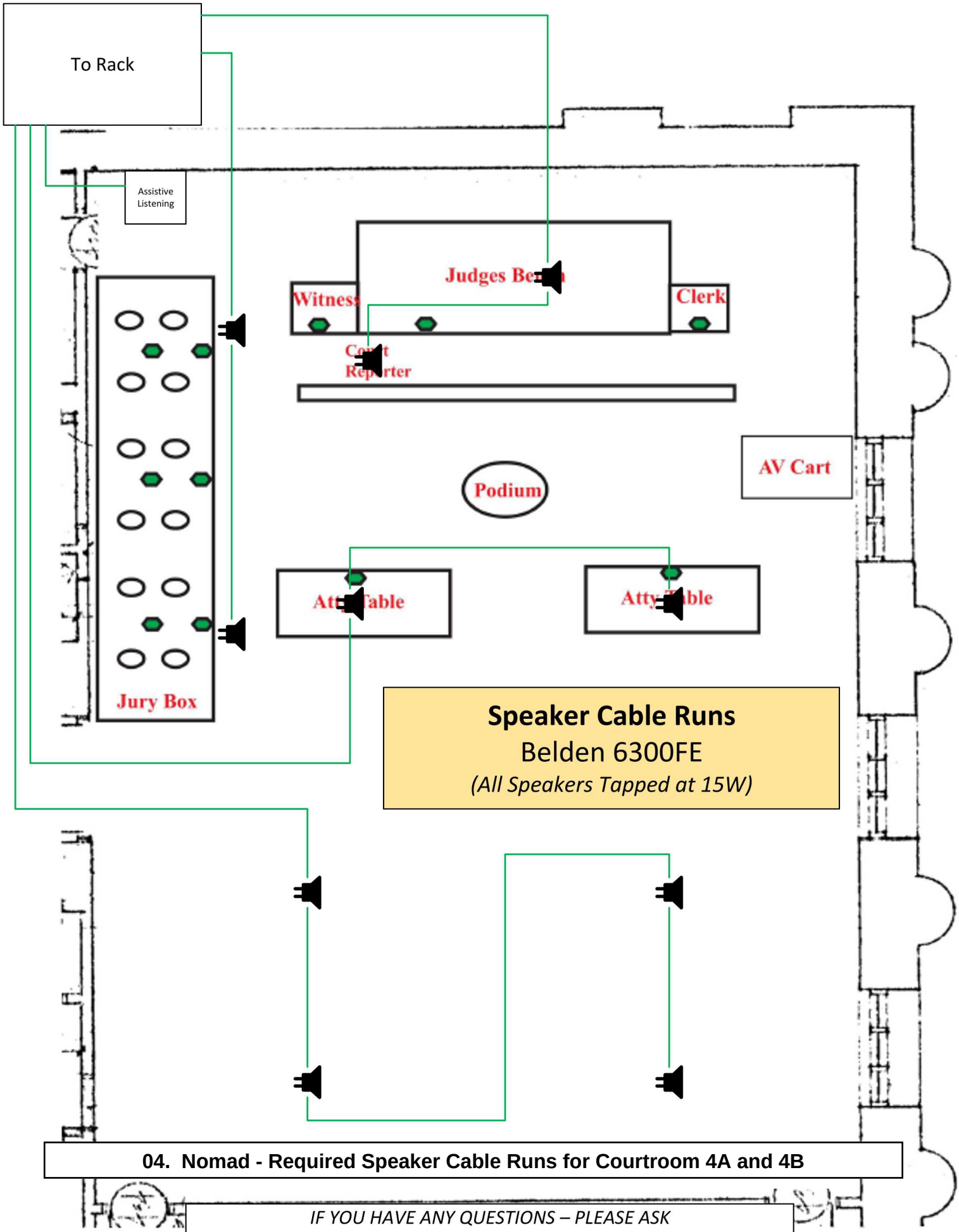


04. Nomad - Required Microphone Cable Runs for Courtroom 4A and 4B

Microphone Cable Runs

Belden 1504A

IF YOU HAVE ANY QUESTIONS – PLEASE ASK
CALL NOMAD AT 888-622-6565
(ASK FOR TIM, DUSTIN, JON OR MIKE)



04. Nomad - Required Speaker Cable Runs for Courtroom 4A and 4B

IF YOU HAVE ANY QUESTIONS – PLEASE ASK
CALL NOMAD AT 888-622-6565
(ASK FOR TIM, DUSTIN, JON OR MIKE)

05. Nomad - Overall Scope of Work for courtroom evidence system

Scope of work:

Nomad AV Systems to provide a Nomad LT system for one of four courtrooms, including:

- Nomad presentation podium, with:
  - Wide screen video format
  - Large work surface area
  - 11U rack space
  - Proprietary Nomad monitor tilt mechanism
  - Wired, bi-directional touch screen control panel, with feedback
  - 22" LED confidence monitor, so attorney can see whatever evidence is being presented from any source
  - Auto doc Cam on/off. Doc cam turns on when drawer is opened, turns off when closed
  - Self-retracting notebook shelf with convenient pre-wired connectivity (tethered cables, HDMI and VGA+a)
  - Professional grade Blu-ray player
  - Configurable master power control
  - Convenient electrical outlet with USB charging ports
  - External audio connectivity, audio output via AV over IP network **(updated 8/10/22)**
  - External HDMI output
  - Soft video switching
  - Convenient I/O access with labeled ports
  - Fully retractable design
  - Secured components and cabling
  - Enhanced service access, front and rear
  - Active cooling
  - Conveniently mounted gooseneck microphone
  - Control touch panel for attorney to select evidence sources and adjust volume levels
  - Yorkshire Cherry, Pionite WC411 standard color (**updated 9/9/22**)
  - 12-foot umbilical cord with Cat6 cable and AC power
  - Dimensions (closed: 26.25"D x 32.625"W x 47.5" H) (open: 34.75"D x 70.625" x 53.25"H)
  - Pivot 180 feature, allows Nomad LT lectern to swivel with a range of motion up to 270 degrees (**updated 9/9/22**)**(9/16/22 – not yet approved by Vermilion County)**
    - Swivel motion is unlocked via the control panel
    - Pivot 180 sits on leveling feet
    - Room to route cables to lectern below Pivot 180 hardware
  - Built-in computer package, to include (**updated 9/12/22**):
    - OFE (owner provided) small form factor PC on racked shelf in LT lectern
    - Standard keyboard/mouse storage on retractable keyboard tray
    - USB extension to convenient location on LT top
    - Network port extension to I/O panel

- Presentation at the Nomad using the following built-in sources:
  - Built-in laptop input (HDMI and VGA)
  - High resolution document camera
  - DVD player
  - Wireless presentation device (iOS, Windows, Android), presentations may also occur from the attorney's desks

        - Wireless presentation device will be connected to customer's network. **(updated 9/20/22)**
    - OFE built-in computer **(updated 9/12/22)**
        - Built-in computer will be connected to customer's network. **(updated 9/20/22)**

- Judge's bench computer input
    - Judge's bench computer will be able to display jury instructions or other content via the wireless presentation device.

- Evidence monitors for witness
    - Witness monitor to include a wall-mounted adjustable monitor stand, which articulates so that the monitor can be mounted on the side wall of the witness stand and pushed against the wall when not in use **(updated 9/9/22)(not approved by county, yet)**

- Annotation at Nomad confidence monitor and witness monitor
    - Ability to annotate over both still and video images using a finger or a capacitive touch stylus (stylus not included)
    - Ability for image capture via a USB device connected to the clerk's computer

- When judge blanks evidence a solid color and an icon identifying that the image is blanked is displayed on the blanked monitor screens, to provide feedback that monitors are still operational **(updated 8/10/22)**
    - Initial proposal was for an "x" to be displayed, but selected encoders have built-in blanking display via a change of color on the blanked monitor, with an icon identifying that blanking is occurring. **(updated 8/10/22)**

- Jury monitors
    - Two 1x4 HDMI distribution amplifiers will be provided for jury monitor use
        - Owner to provide any necessary monitors, mounts and cabling for jury monitors
        - Initial Nomad proposal was for one 1x8 HDMI distribution amplifier. Two 1x4 HDMI distribution amplifiers will allow for easier installation, because jury boxes are in two rows. **(updated 8/10/22)**
        - Owner to provide two rows of three (3) monitors each. Owner is responsible for mounting stands and HDMI cable runs between OFE monitors and HDMI distribution amplifiers **(updated 9/9/22)**

- All needed digital endpoints and switchers so images can be displayed throughout the courtroom on all monitors, from all source devices. The video distribution infrastructure equipment will be housed in the OFE AV rack.

- Audiovisual control system at Nomad podium for attorneys to:
    - Select evidence sources
    - Control of document camera and DVD player
    - Source audio – volume control
    - Control annotation features

- Audiovisual control system at judge's desk **(updated 9/9/22)**:
    - Simple control for blanking of these monitors as a group:
        - Witness monitor
        - Jury monitors
    - Simple control for bench conference
        - Mutes/unmutes all mics except judge's surface mount mic in well
        - Turns pink noise on/off for sound masking in appropriate speaker zones
    - Full control submenu
        - Full control of the Nomad podium
        - Selecting judge laptop and AV cart inputs
        - Volume control of room audio levels
    - Initial Nomad proposal was for a wireless 9" touch panel. Supply chain delivery issues necessitate changing this touch panel to a 7" wired touch panel. **(updated 8/10/22)**
    - Initial Nomad proposal was for Nomad to provide a judge's control panel but owner's bid document of 5/3/22 states on page 9 (01.a.iii) this touch panel shall be at the court clerk's station. In engineering site visit on 9/6/22 it was stated that this panel should be at judge's location. **(updated 9/9/22)**

- Audiovisual control at court AV staff location via OFE laptop and Crestron XPanel control **(updated 9/9/22)(9/16/22 – not yet approved by Vermilion County)**:
    - Provide additional control for court staff employee in charge of AV in courtroom
    - Accomplished with use of OFE laptop and Crestron XPanel software layout
    - 7" judge's panel could be used as backup in the event that XPanel is non-responsive
        - Nomad Cable Schedule to indicate that the wiring to the judge panel terminates in a RJ45 jack, so a long CAT6 patch cable could be used to extend the 7" touch panel to the court AV staff location, if needed

- Audiovisual output at the court staff location, allowing an OFE monitor to be plugged in for evidence viewing **(updated 9/9/22) (9/16/22 – not yet approved by Vermilion County)**

- Audiovisual input and output at existing AV cart. This was not included in Nomad's initial proposal, but is mentioned in owner's bid document of 5/3/22 on page 8, on page 9 (01.a.iv) and on page 10 (01.b). This will allow the court to: **(updated 8/10/22)**
    - Use Zoom webconference from a PC located on the AV cart
        - Video input into distribution solution, display Zoom webconference on all courtroom monitors
        - Audio input into courtroom audio solution
        - USB audio output from courtroom audio solution, back to Zoom PC
        - The current design does not allow courtroom evidence images to be input into the Zoom call. This functionality was not requested in the bid document and would require additional components.
    - Display evidence to the monitor cart monitor, for gallery viewing
    - Nomad to provide 15 foot long umbilical cable for AV cart **(updated 9/9/22)**

Nomad AV Systems to update courtroom audio:

- To be independent of the existing microphones and FTR recording equipment supplied by the Illinois Administrative Office of the Courts

- New (duplicate) gooseneck microphones with red mute rings to provide feedback to all court participants of which microphones are currently active or muted. These microphones will be at the:
    - Judge's bench
    - Both attorney's tables
    - Witness stand
    - Guardian ad Litem table, courtroom 1B only **(updated 9/16/22)**

- Additional microphones (without mute rings):
    - Mounted on the jury box rail (for final attorney arguments)
    - Jury mics have been changed to surface mount microphones, per 9/6/22 engineering site visit **(updated 9/9/22)**
    - Nomad presentation podium

- Bench conferencing audio capabilities, to include:
    - Surface mount microphone at edge of judge's bench for audio pickup of bench conference for the court reporter
    - Pink-noise sound masking through the audio system so other court participants cannot hear bench conference

- High fidelity sound system, to include:
    - New ceiling speakers with back cans for better audio intelligibility. Speakers in courtrooms 4A and 4B will be changed to pendant-style speakers, per 9/6/22 engineering site visit. **(updated 9/9/22**). Audio system shall include:
        - Full coverage in gallery, jury, judge's bench (including witness and court reporter)
        - In courtroom 1B, because of ceiling light grid above judge well area, the ceiling speaker zone #4 has been removed. There are separate audio runs to personal speakers with independent volume adjustment on the speakers, for the judge, court reporter and witness. **(updated 9/16/22)**
        - Improved speaker wattage tapping for improved sound quality
        - Use of a multi-zone amplifier, to segregate audio between different areas of the courtroom
        - The judge's 7" control touch panel and court AV specialist's OFE laptop running XPanel can also be used to control volume levels for different microphones in the courtroom and to initiate bench conference sound masking
            - Initial Nomad proposal was for Nomad to provide a judge's control panel but owner's bid document of 5/3/22 states on page 9 (01.a.iii) this touch panel shall be at the court clerk's station.
            - Initial Nomad proposal was for a wireless 9" touch panel. Supply chain delivery issues necessitate changing this touch panel to a 7" wired touch panel. **(updated 8/10/22)**

- In engineering site visit on 9/6/22 it was stated that the 7" control panel should be at judge's location, instead of the court reporter's station and that the AV specialist would get an OFE laptop running XPanel. **(updated 9/9/22) (9/16/22 – not yet approved by Vermilion County)**

- Audio system for judge and court reporter to provide better audio intelligibility at their work areas
    - These speakers are independent of the ceiling speakers
    - System to include independent volume control.
    - In courtroom 1B, due to lighting panels above the witness box, a speaker will be substituted for ceiling speakers for the witness **(updated 9/9/22)**

    - Assistive listening system (IR) for ADA compliance, including:
        - Four sets of ear buds
        - Four inductive neck loops for hearing aid use

- Managed IP switch designed for audiovisual use
    - Provides PoE power for some audiovisual components
    - Provides interconnectivity of the digital signal processors, audio logic control box and video distribution system
    - Termination point for owner-provided ~~shielded~~ Cat6 cabling for AV network
    - Nomad's updated design does not require shielded Cat6, standard Cat6 is sufficient. However, in a prior conversation with Bernie McCarty, McCarty stated that shielded Cat6 shall be used in the courthouse, therefore it is listed as shielded in the Nomad Cable Schedule. **(updated 8/10/22)**

- Universal Power System power conditioning module (owner provided):
    - Owner's bid document of 5/3/22, page 8, states that there is an existing APC battery backup system. It needs to be determined if the existing APC is adequate for backing up additional Nomad components to be installed in the owner's network rack. **(updated 8/10/22)**

<u>Nomad AV Systems additional services included in this proposal:</u>

- Populating and wiring the AV rack with all equipment to be supplied
    - Pre-test all equipment prepared in Nomad's manufacturing facility
- Commissioning AV equipment for proper operation
    - System installation will take place during normal working hours, Monday through Friday
- Programming the AV control system and touch panels
- Setting up all Nomad supplied equipment in the courtroom, with the exception of ceiling speakers and owner provided equipment
- Soldering microphone cable ends
- Five-year on-site service warranty, including:
    - Online training, specific to the exact functions of your unique system
- Provide Nomad Cable Schedule to guide owner in what cabling infrastructure is needed
    - Nomad Cable Schedule is to be emailed to Bernie McCarty on 9/9/22. **(updated 9/16/22)**
- Provide ~~shielded~~ Cat6 patch cables as needed

  - Nomad's updated design does not require shielded Cat6, standard Cat6 is sufficient. However, in a prior conversation with Bernie McCarty, McCarty stated that shielded Cat6 shall be used in the courthouse, therefore it is listed as shielded in the Nomad Cable Schedule. **(updated 8/10/22)**

Owner responsibilities:

- Provide AC power
  - Dedicated AV circuit to:
    - AV rack (15 amp)
    - Nomad presentation podium (15 amp)
  - Any needed AC power at:
    - Attorney's benches
    - Witness stand
    - Jury box
    - Judge's bench
    - AV cart
    - Court reporter or clerk's bench **(updated 8/10/22)**
    - **Court AV specialist location (updated 9/9/22)(9/16/22 – not yet approved by Vermilion county)**

- Pull, terminate, and test all ~~shielded~~ Cat6 cabling and audio cable, per Nomad LV-EC Guidelines and Nomad Cable Schedule
  - All connectors, hoods and keystones shall be ~~shielded~~ Cat6
  - Nomad's updated design does not require shielded Cat6, standard Cat6 is sufficient. However, in a prior conversation with Bernie McCarty, McCarty stated that shielded Cat6 shall be used in the courthouse, therefore it is listed as shielded in the Nomad Cable Schedule. **(updated 8/10/22)**

- Install speakers, and remove old ones
  - Owner to provide and pull audio wiring to all speaker locations, tap speakers and terminate wiring, per Nomad specifications

- Install microphone mounts in jury rail
  - Nomad to provide microphone mounts
  - Nomad will need access to microphone mount area during system installation
  - Owner to provide and pull audio wiring to all microphone locations
  - Jury mics have been changed to surface mount mics, per 9/6/22 engineering site visit **(updated 9/9/22)**

- Provide and install jury monitors, mounts and Nomad provided HD distribution amplifiers
  - Provide necessary HDMI cables for jury monitors
  - Route and connect HDMI cables to jury monitors
  - Provide any necessary cable management for jury monitors and related infrastructure
  - Provide any needed AC power for jury monitors and HD distribution amplifiers

- Provide all necessary cable paths, including:
  - Floor coring (as needed)
  - Cable passthrough holes in furniture at/around judge's bench
  - Cable passthrough at jury box

- AV racks:
  - Initial Nomad proposal was for Nomad to provide an AV rack, but owner's bid document of 5/3/22 states on page 8 that there are existing network racks in adjoining courtroom closets. 10 RU space needs to be available for Nomad install. **(updated 8/10/22)**
  - Owner shall assemble and position OFE AV racks in AV rack locations on the first, third and basement floor, feed AC power to the rack, provide any needed power conditioning and provide necessary screw hardware for installation of AV equipment into the rack, in preparation of AV installation. **(updated 9/9/22)**

  - Podium mic and source audio at podium is not tied into the IL AOC audio system. Bernie will get an approval of this in writing from Vermilion County. **(updated 9/21/22)**

- Provide and install any needed power strips at/around judge's bench and attorneys' desks, per Nomad's LC-EC Guidelines

Power strip requirements for each "station"

- Bench
  - Monitor Rx Speaker DA4
- Clerk
  - Monitor
- Witness
  - Monitor Usb Rx
- Atty table 1
  - Rx Monitor
- Atty table 2
  - Rx Monitor
- Av Cart
  - Monitor? Rx Tx
- Controller location
  - Monitor? Rx (requested add-on)
- Jury box (may need strips at two separate locations in jury box)
  - Monitors x6 Rx x2 DA x2

- If equipment is to be shipped to any location other than the courthouse, it is the owner's responsibility to transport it to the courthouse so that it is in the courtroom when Nomad arrives to perform installation and commissioning.

P30DT Pendant Loudspeaker

Installation Guide

Models

P30DT-BL
P30DT-W

PRODUCT DESCRIPTION

The P30DT 4.25” two-way, pendant loudspeaker brings an exceptional dispersion to areas and rooms with open ceilings, while offering a clear speech and musical purity. Available in black (P30DT-BL) or white (P30DT-W), the Biamp P30DT is suitable for a wide range of background and foreground sound applications.

The dual Gripple™ wire suspension system, euroblock in/out connector, loudspeaker cables and 70/100 volt power rotary with 16 ohms connectivity can be hidden after installation by the innovatively designed end-cap. The attractive aesthetics and ease-of-installation make this product an industry standard.

NOTES:

- This loudspeaker is designed for indoor use only.
- Operational temperature range: 0° to +35°C (32° to 95°F)

FEATURES

- High performance, attractive aesthetics, and ease of installation
- Installer-friendly end cap with cut-out slot and integrated magnetic fixing, hiding the power selector and cable connections can be installed after the loudspeaker is hung
- Two Gripples and snaphook wire suspension cables are included for a safe and secure, fast and simple installation
- Handy euroblock connector with permanent pass-through allows for a quick install and easy daisy-chaining of multiple loudspeakers
- Easily accessible rotary tap switch to select 70/100 volt power or low impedance (16 ohms) operation
- Tuned bass reflex port for optimised low frequency performance
- High intelligibility while retaining perfect music reproduction quality
- 4.25” LF driver with 1” tweeter
- 50 W dynamic power handling
- Loudspeaker overload protection for 24/7 failsafe operation
- Available in black or white
- Conforms to UL Std.1480A and is certified to CSA C22.2#62368-1

IMPORTANT INSTRUCTIONS

Read and follow the Safety information included in the carton.

IMPORTANT: This loudspeaker is designed for indoor use only, and should not be installed in wet or damp environments, or in locations where moisture or water may enter the loudspeaker.

Refer all servicing to qualified service personnel. Servicing is required when the loudspeaker has been damaged in any way, such as liquid has gotten into the device, the loudspeaker does not operate normally, or has been dropped.

The terms CAUTION, WARNING, and DANGER may be used in this manual to alert the reader to important safety considerations. If you have any questions or do not understand the meaning of these terms, do not proceed with installation. Contact your local dealer, distributor, or call Biamp directly for assistance. These terms are defined as:

CAUTION: describes an operating condition or user action that may expose the equipment or user to potential damage or danger.

WARNING: describes an operating condition or user action that will likely cause damage to the equipment or injury to the user or to others in the vicinity.

DANGER: describes an operating condition or user action that will immediately damage the equipment and/or be extremely dangerous or life threatening to the user or to others in the vicinity.

These installation instructions are for use by qualified personnel only. To reduce the risk of fire or electric shock do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so.

UNPACKING / INSPECTION

The loudspeakers are engineered and manufactured to be rugged and they are carefully packed in sturdy cartons. However, it is recommended to thoroughly inspect each unit after it has been removed from the packaging, as damage could occur during shipping.

Please note that once the shipment has left your dealer or the factory, the responsibility for damage is always borne by the freight company. If damage has occurred during shipping, you must file a claim directly with the freight company. It's very important to contact the freight company as soon as possible after receiving your shipment, as most freight companies have a short time limit within which they will investigate claims. Make sure to save the carton and the packing material, as most claims will be denied if these materials are not retained. Your Biamp dealer and the factory will try to help in any way they can, but it is the responsibility of the party receiving the shipment to file the damage claim.

It is always a good idea to retain the carton and packing materials, if possible, in the event that the unit may need to be returned to your dealer or distributor for repair in the future.

In the Carton

Each carton contains the following:

- Loudspeaker (x1)
- End cap with integrated cable cover (x1)
- Gripple snaphook cable 5m (x2)
- Gripple express locking device (x2)
- Important safety instructions (x1)

Loudspeaker wiring not included

IMPORTANT: Biamp is not responsible for damages resulting from the negligent installation of any loudspeaker.

WARNING: Please make sure that the mounting structure is capable of safely supporting the loudspeaker's weight.

CAUTION: Installation of these loudspeakers should only be performed by trained and qualified personnel. It is strongly recommended that a licensed and certified professional structural engineer approve the mounting. It is essential that all installation work involving the suspension of these loudspeaker products be performed by competent, knowledgeable persons who understand safe rigging practices. Severe injury and/or loss of life may occur if this product is improperly installed.

LOUDSPEAKER INSTALLATION

To install the pendant loudspeaker, do the steps that follow:

1. Thread the snaphook cable through the opening in the locking device (Gripple) in the direction of the arrow shown on the unit (1). See Figure 1a.
2. Loop the snaphook cable over or through a secure structure, and pass the cable back through the Gripple, using the closest opening (2). Pressing the appropriate button will allow the cable to move through that side of the device (Figures 1a & 1b).
3. Repeat steps 1 and 2 for both the primary and secondary suspension cables (Figure 1c).

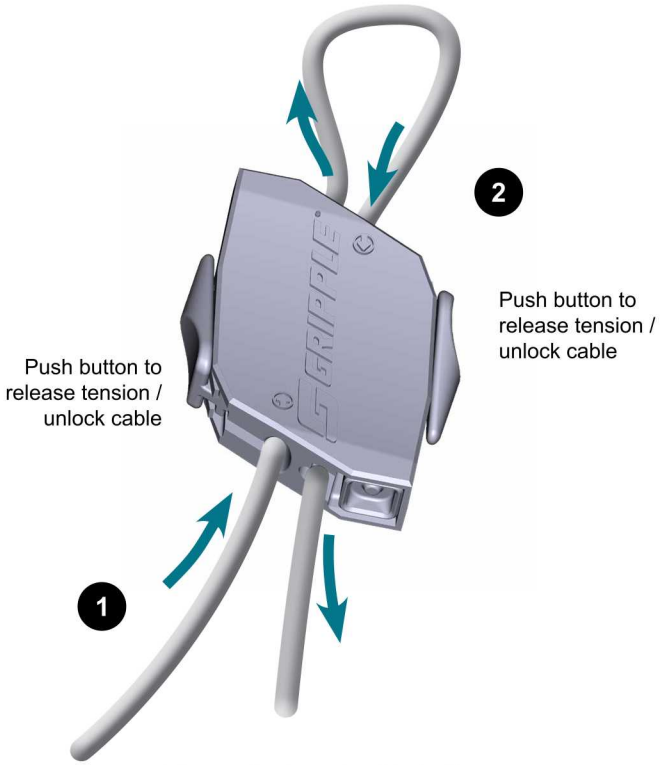


Figure 1a. Insert cable in the Gripple, over or through support and back through Gripple

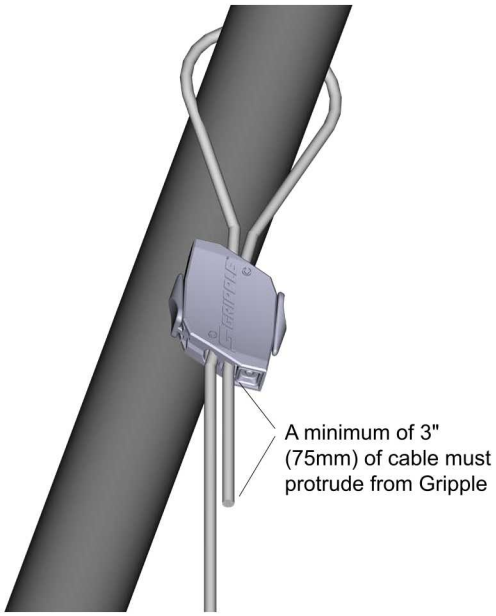


Figure 1b. Support cable with Gripple attached correctly

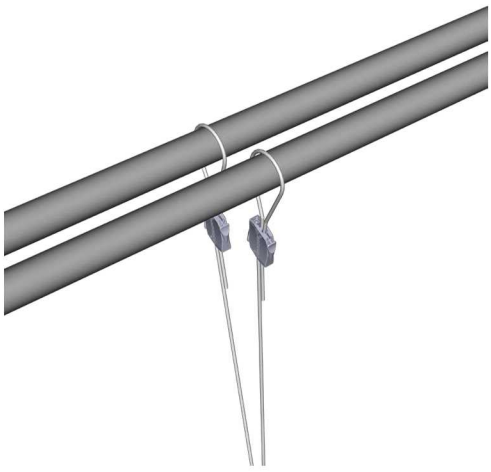


Figure 1c.

INSTALLATION (continued)

4. Connect the snaphook on the primary cable through the central mounting point on the loudspeaker (Figure 2).
5. Connect the snaphook on the secondary safety cable through one of the remaining mounting points (Figure 3).
6. Adjust the length of the primary cable so the loudspeaker hangs at the desired height as shown in Figure 4 (1). Adjust the length of the secondary safety cable, allowing some slack (2) so the loudspeaker hangs straight on the primary cable.

Figure 2. Attach primary cable snaphook in center hole

Figure 3. Attach secondary (safety) cable snaphook in a different bracket hole

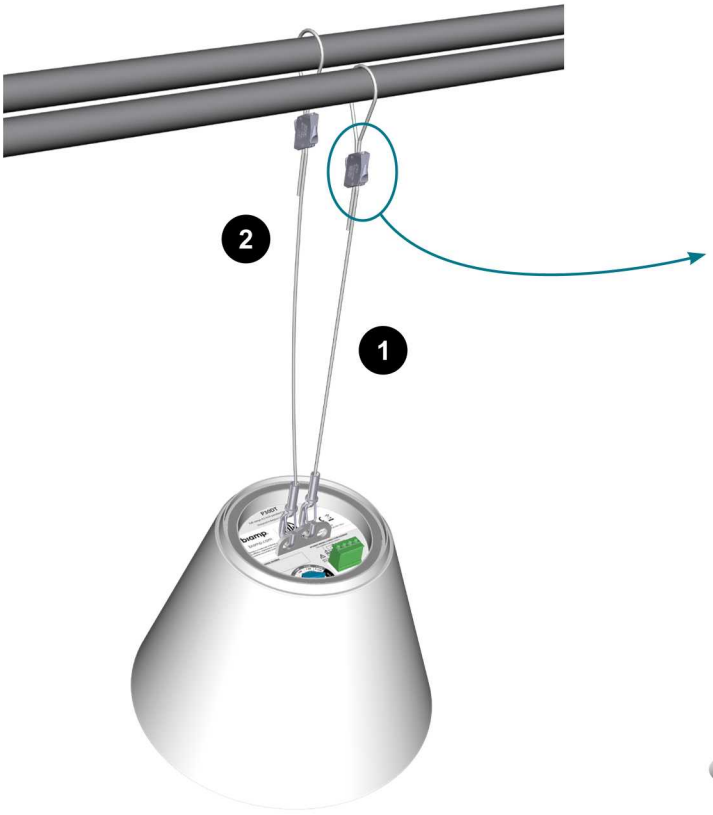
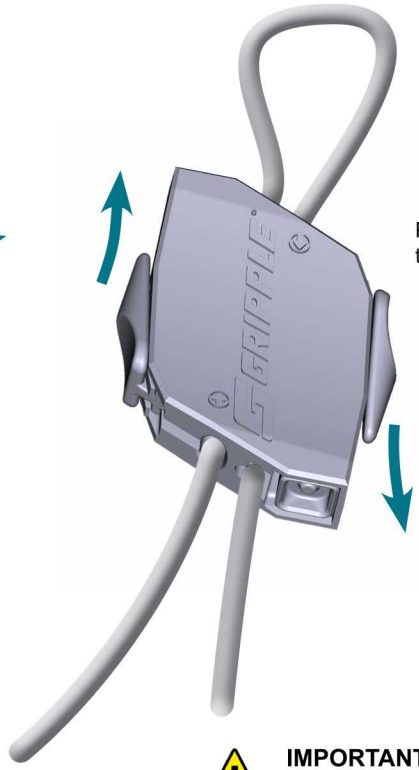


Figure 4. Allow slack in secondary cable (2) so pendant hangs straight



Push buttons to release tension and adjust cable

IMPORTANT: When adjusting the length, always leave a minimum of 3" (75mm) of cable protruding from the locking device.

INSTALLATION (continued)

7. Attach the loudspeaker cables according to whether you are connecting a single loudspeaker (Figure 5a) or daisy chaining more than one (Figure 5b).

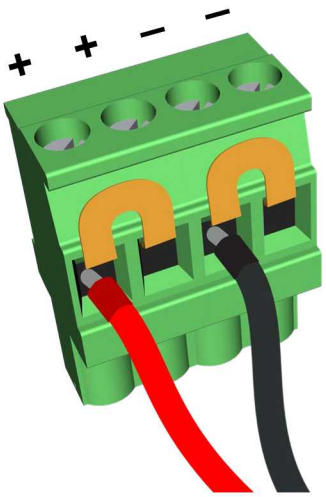


Figure 5a. Wire single loudspeaker

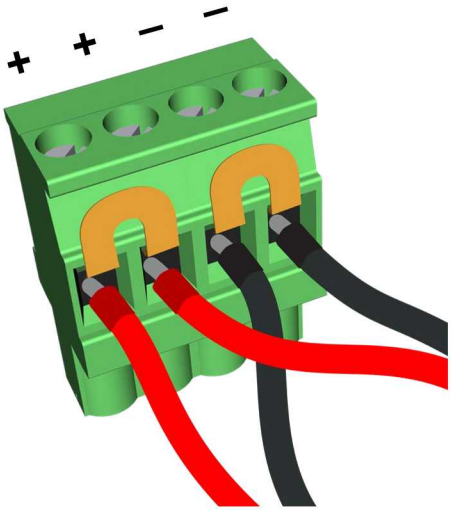


Figure 5b. Daisy chain multiple loudspeakers

Note: It is strongly recommended to use wire ferrules with stranded wire.

Recommended wire size:
0.5 mm^2 - 2.5mm^2
(AWG 20 ga - 10 ga)

Use the appropriate gauge and length of wire to avoid appreciable signal loss based on the number of devices per run.

8. Press the wired euroblock onto the corresponding male euroblock connector on the top of the loudspeaker (Figure 6).

Figure 6.

9. Rotate knob to select the appropriate power tap setting on the top surface of the loudspeaker (Figure 7).

Figure 7.

WARNING: Set the power tap prior to applying audio and only change the setting while the audio amplifier is "OFF" and unplugged from the AC main power supply.

WARNING: The 16 ohm setting is not compatible with 70 volt or 100 volt line amplifiers!

WARNING: The highest 70 volt power setting is not compatible with 100 volt line amplifiers, only with 70 volt line amplifiers.

INSTALLATION (continued)

10. Attach the end cap by placing it around the suspension and loudspeaker cables. Make sure the end cap is held firmly in place with the magnets (Figure 8).

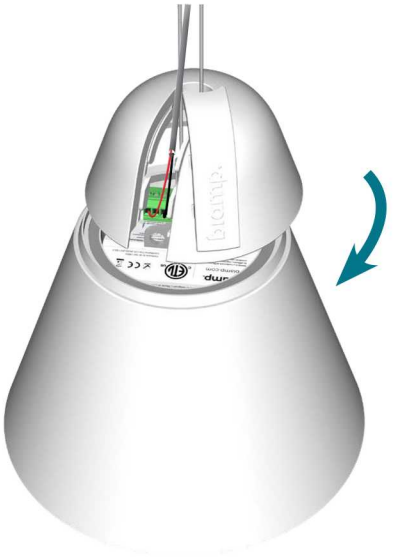


Figure 8.

11. Ensure the tether is securely inserted in the cable cover and end cap sockets (Figure 9a). Clip the cover into the end cap (Figure 9b).

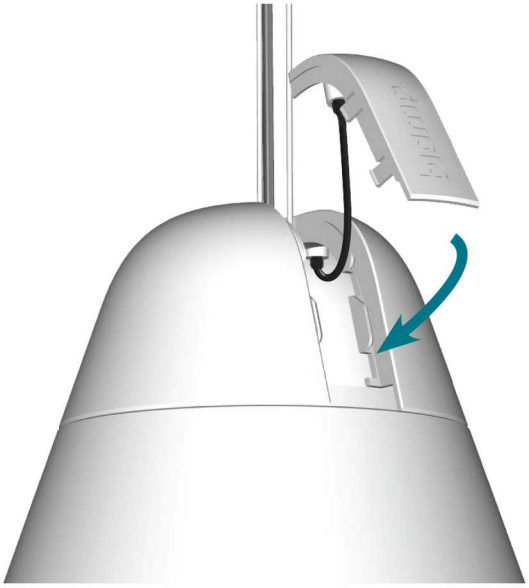


Figure 9a.

Figure 9b.

12. Rotate the end cap so that the secondary cable does not press against the cable cover. There should be enough slack in the secondary cable that it doesn't rub against either the end cap or cable cover (Figure 10).

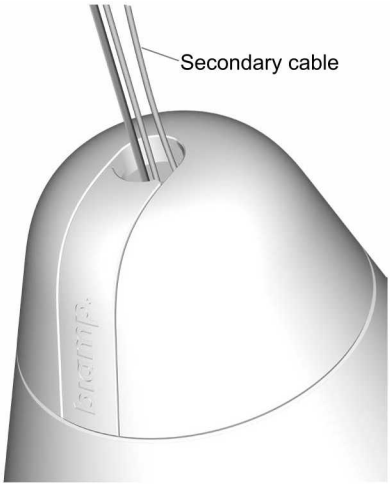
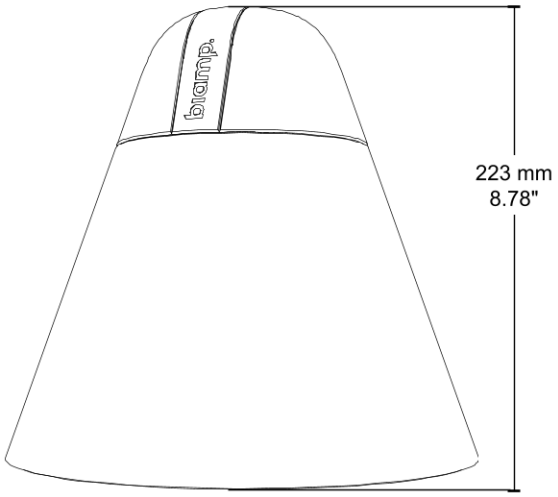
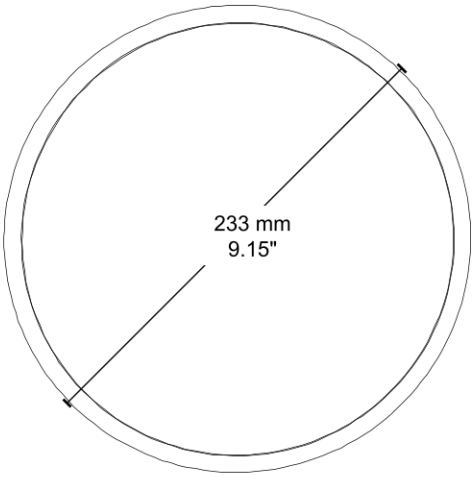


Figure 10.

DIMENSIONS

P30DT





CONTACT US

Email: support@biamp.com

Web: support.biamp.com

Note: *Every effort has been made to ensure that the information contained in this manual was complete and accurate at the time of printing. However, due to ongoing technical advances, changes or modifications may have occurred that are not covered in this manual. The latest version is available at www.biamp.com.*

Biamp Compliance: REG-00012
P30DT Install Guide 26FEB2020

07. Nomad - Speaker Height Requirements

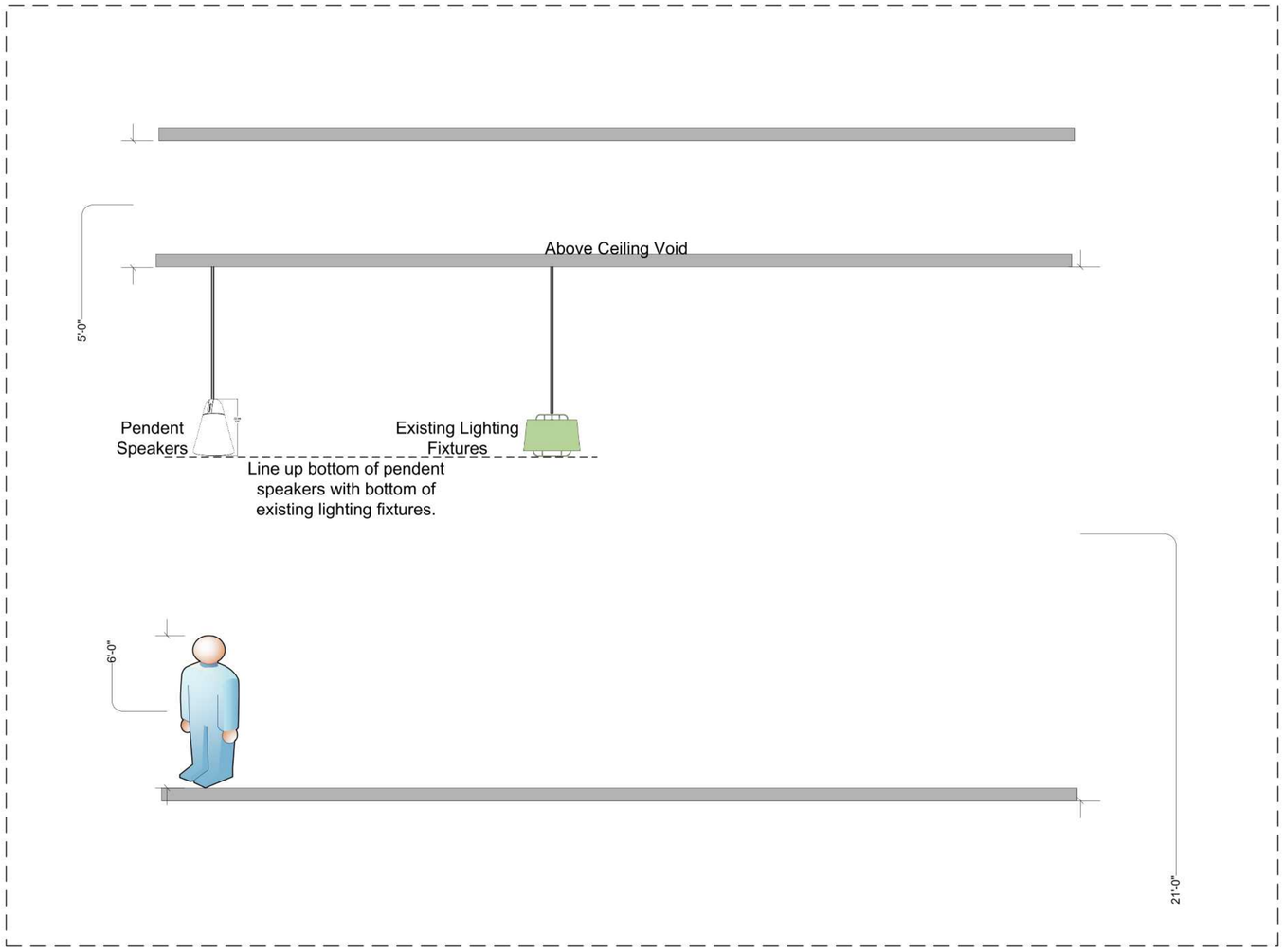
NOMAD AV Systems

Scale: NTS

Created: DLR 09/21/22
Modified: DLR XX/XX/22
Checked: XXX XX/XX/XX

001
Vermillion County
Speaker Height

TITLE PAGE



Nomad AV Systems
14800 Martin Drive
Eden Prairie, MN 55344
888-622-6565

DISCLAIMER:
Nomad provides these drawings for conceptual. Not to be used for "As Builts".

Scale: NTS

Created: DLR	09/21/22
Modified: DLR	XX/XX/22
Checked: XXX	XX/XX/XX

001
Vermillion County
Speaker Height

SPEAKER HEIGHT