# HERMAN POCKET ENGINEER


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POCKET ENGINEER

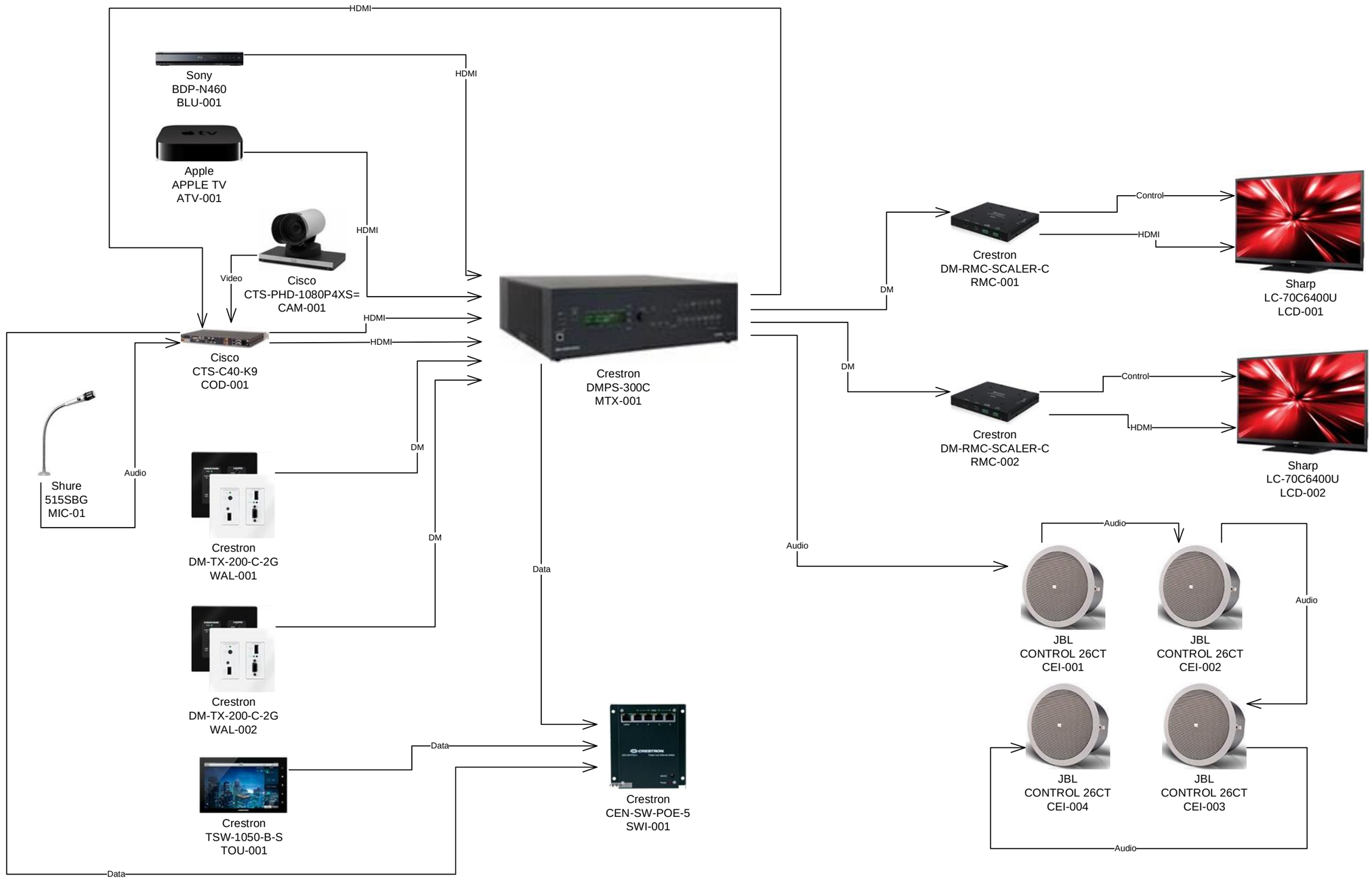
Herman Integration Services
8016 Old County Rd 54

New Port Richey, FL 34653
(727) 372-4891


**Dates:**
Created - 6/9/2014
Modified - 6/11/2014
Printed - 6/11/2014

Conference Room 2345
John Sample
1234 Main Street
Anytown, FL 33756

**Cover Sheet**





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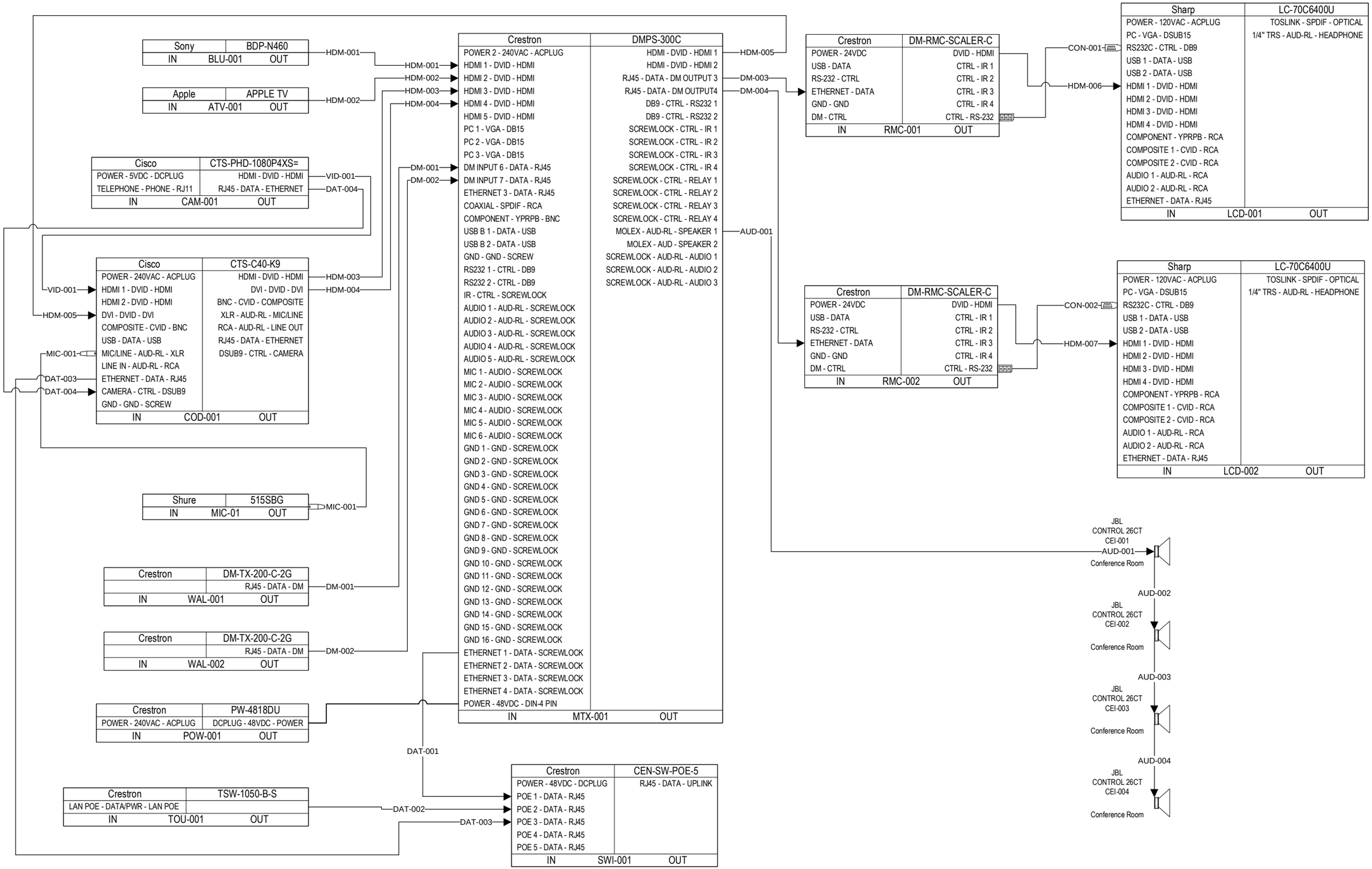
**Line Diagram**

**2**





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**Schematic View**

# Proposal

## Conference Room 2345

### Sample AV INC

1234 Main Street
Anytown, FL 33756 United States
727-555-1234

HERMAN POCKET ENGINEER

**Presented By:**


**Herman Integration Services**
8016 Old County Rd 54
New Port Richey, FL 34653 United States
(727) 372-4891
http://www.hermanelectronics.com


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Revision: 0



## Audio Sources

1 **Shure 515SBG** $105.00

The Shure Models 515SBG and 515SB-GI8 UNIDYNE'? B Microphones are low-impedance units designed specifically for flexible gooseneck application.The microphones are moving coil units providing good reproduction of music and voice.

These microphones are particularly suitable for use in language lab systems, paging applications, and base station communications. They are highly recommended for talkback and cuing from professional control rooms in TV, film, and recording studios, and other uses demanding a customized installation with concealed cables.

**Audio Sources Total: $105.00**

## Conferencing

1 **Cisco CTS-C40-K9** $9,990.00

Codec C40 TelePresence system

1 **Cisco CTS-PHD-1080P4XS=** $8,055.03

The Cisco TelePresence PrecisionHD Camera enables users to fully realize the high-definition experience and provides superior video quality at any bandwidth. Designed specifically for videoconferencing, it provides crystal-clear, true-to-life quality for interaction and collaboration. The PrecisionHD Camera is available in four versions: the Cisco TelePresence PrecisionHD Camera - 720p, Cisco TelePresence PrecisionHD Camera - 1080p 4x, Cisco TelePresence PrecisionHD Camera - 1080p 4xS2 and Cisco TelePresence PrecisionHD Camera - 1080p12x.

**Conferencing Total: $18,045.03**

## Control Systems

2 **Crestron DM-RMC-SCALER-C** $2,800.00

The DM-RMC-SCALER-C provides an advanced one-box interface solution for a single display device as part of a complete Crestron DigitalMedia system. It functions as a DM 8G+ receiver, video scaler, and control interface, providing a single HDMI output along with Ethernet, USB HID, RS-232, and IR control ports. Built-in scaling allows the connected display to handle virtually any video signal regardless of resolution and format. Its compact, low-profile design allows the DM-RMC-SCALER-C to be installed discreetly behind a flat panel display or above a ceiling mounted projector. It connects to the head end or source location using a single CAT5e or Crestron DM 8G cable.[1]

2 **Crestron DM-TX-200-C-2G** $2,800.00

The DM-TX-200-C-2G is a DM 8G+ transmitter and switcher that installs in a double-gang electrical box to provide a convenient interface for computers and high-definition AV sources as part of a complete Crestron DigitalMedia system. In addition to DM 8G+, it is also compatible with HDBaseT specifications, allowing it to be connected directly to the input of an HDBaseT compliant display device. The DM-TX-200-C-2G is ideal for wall, lectern, and floor box applications in a boardroom, classroom, auditorium, or residence. It connects to the head end or display location using a single CAT5e or Crestron DM 8G cable, providing HDMI, VGA, and analog audio inputs, plus a USB HID host port. Standard gang-box mounting allows for installation adjacent to an Ethernet jack Crestron MP-WP183 or equivalent for a total connectivity solution.

1 **Crestron TSW-1050-B-S** $2,400.00

A space-saving wall, lectern or tabletop touch screen featuring a clean, contemporary appearance with edge-to-edge glass and advanced high-definition Smart Graphics. Additional features include high-performance H.264 video, Rava SIP Intercom, PoE and standard gang-box installation.

1 **Crestron TSW-1050-TTK-B-S** $250.00

The TSW-1050-TTK provides a stylish and convenient tabletop enclosure for a TSW-1050 ro TSW-1052 Touch Screen. The touch screen is angled when installed in the enclosure. The complete assembly may be placed on any flat, level surface.

An optional swivel mount accessory (TSW-550/750/1050-SMK) is available separately, providing a means for permanently mounting the enclosure while retaining the ability to rotate it for optimal positioning. The swivel range can be customized using optional limit screws, with a maximum of 330-degree rotation allowed. The swivel mount may be installed on any flat table, desk, or counter top surface with a thickness of 1 inch (25 mm) minimum to 1 3/8 inch (35 mm) maximum.

Wiring may be passed out the rear of the enclosure through a grommet and strain relief, or routed through the bottom for a very clean, cordless appearance. The rear wire opening can accommodate a single cable up to 1/4 inch (6 mm) diameter such as standard CAT5



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**Control Systems Total: $8,250.00**

## Display Devices

2 **Sharp LC-70C6400U** $5,599.98

70" Class LED Smart TV

**Display Devices Total: $5,599.98**

## Labor

1 **Herman Integration Services Engineering and Drafting** $450.00

1 **Herman Integration Services Installation Technician** $1,255.00

1 **Herman Integration Services Lead Technician** $1,500.00

1 **Herman Integration Services Programming** $1,615.00

**Labor Total: $4,820.00**

## Network

1 **Crestron CEN-SW-POE-5** $400.00

The CEN-SW-POE-5 is a 5-port unmanaged Gigabit Ethernet switch that provides Power over Ethernet (PoE) from four of its ports. Power over Ethernet affords a one-wire solution for connecting Crestron touch screens, gateways, and other devices, delivering power and data over a single CAT5/6 network cable. All 5 ports are Gigabit capable to ensure maximum bandwidth for multimedia and critical control data.

**Network Total: $400.00**

## Power and Protection

| | | |
|---|---|---|
| 1 | **Crestron PW-4818DU**<br>The PW-4818DU is an optional accessory for any DMPS Series DigitalMedia Presentation System. It supplies up to 90 Watts of power to enable PoDM (Power over DigitalMedia) sourcing capability through the DM 8G+ ports on the DMPS. | $250.00 |

**Power and Protection Total: $250.00**

## Speakers



| | | |
|---|---|---|
| 4 | **JBL CONTROL 26CT**<br>6" Ceiling speaker, 150 Watt | $748.00 |

**Speakers Total: $748.00**

## Switchers



| | | |
|---|---|---|
| 1 | **Crestron DMPS-300C**<br>The DMPS-300-C from Crestron is a complete, high-definition presentation control and signal routing solution for boardrooms, lecture halls, and videoconference rooms. Integrating the control system, multimedia matrix switcher, mic mixer, audio DSP, and amplifier all into one 3-space rack mount package, the DMPS-300-C affords extensive signal routing flexibility and high-performance signal processing without the need for separate components. Auto-configuring inputs enable plug-and-play compatibility with a wide range of digital and analog sources. Built-in DigitalMedia connectivity affords a streamlined wiring solution for interfacing with remote AV sources, computers, and display devices. | $8,000.00 |

**Switchers Total: $8,000.00**



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## Video Sources

| | | |
|---|---|---|
| 1 | **Apple APPLE TV**<br>1080P Full high definition set top box | $99.00 |

| | | |
|---|---|---|
| 1 | **Sony BDP-N460**<br>The BDP-N460 allows you to instantly stream thousands of movies, videos and music from the largest selection of leading content providers including Netflix, Amazon Video On Demand, YouTube, Slacker Radio and many, many more. Plus, enjoy the ultimate in high-definition entertainment and watch Blu-ray Disc movies in Full HD 1080p quality with HD audio.<br>It supports Dolby TrueHD and dts-HD audio codecs for up to 7.1 channels of high-definition sound, and there's even quick start-up mode which begins operating your Blu-ray Disc player in approximately six seconds from the time it is powered on.<br>You can also play and upscale your standard DVDs to near high definition. And navigation of the player's menus is a breeze thanks to the icon-based Xross Media Bar (XMB) menu system. | $199.00 |

**Video Sources Total: $298.00**

## Wire and Cable

| | | | |
|---|---|---|---|
| 620 | **Belden shielded Cat6 Plenum**<br>DataTwist 2400, Nonbonded-Pair, 4-pair, 23 AWG, CMP, Category 6, F/UTP cable, Blue, 1000 ft | | $620.00 |
| 250 | **BTX 16/2 plenum**<br>2 Conductor Round Jck Spk Cbl 2x16 AWG | | $62.50 |
| 1 | **Cables To Go 40318**<br>16.4'/5 meters, for high-definition DVD players, HDTV receivers, TV sets, projectors, A/V receivers, and other HDMI-equipped devices, up to 1080p resolution at 60Hz refresh rate, lossless multi-channel digital audio for full 7.1 surround, high band width (340 MHz / 10.2 Gbps) for high-speed data transfer, HDMI-CEC system control compatibility, ultra-flexible blue jacket. | | $44.99 |
| 7 | **Cables To Go 6 'HDMI**<br>The C2G High Speed HDMI with Ethernet Mini Cable is perfect for a hand-held mobile or cell phone connectivity for home theater or desktop applications requiring high speed HDMI features and video resolutions of up to 1080p. The Ethernet capabilities of the cable allow a user to connect multiple Ethernet enabled HDMI devices through a single Ethernet connection. This cable supports bandwidth applications up to 340MHz/10.2 Gbps as well as high speed HDMI features; including, 3D, Deep Color, x.v.Color, Dolby True HD, and DTS-HD Master Audio.. This fully-functional, high bandwidth cable is tested to perform at industry standards and is backed by a lifetime warranty. | | $90.93 |
| 100 | **West Penn Wire-cdt 22ga/ 2conductor**<br>4 cond. 2sh.-2 unsh. 22 (7x30) bare CMP | | $11.00 |

**Wire and Cable Total:** **$829.42**

**Project Subtotal: $47,345.43**



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## Project Summary

| | |
|---|---|
| **Equipment:** | **$42,525.43** |
| **Labor:** | **$4,820.00** |
| **Grand Total:** | **$47,345.43** |

**Client:** **John Sample** **Date**

**Contractor:** **Herman Integration Services** **Date**

# Scope of Work

Custom Video Conferencing Room

The system included in this proposal will allow the customer to select from a number of different sources and send them to either display along with having the option to send content to the far end.

Details:

Wall Plates:
Each Crestron Digital media wall plate will allow the customer to use a VGA device with Audio, or HDMI source. Wall plates come in black or white and will need to be specified before ordering.

BluRay DVD Player:
The BluRay player will allow the customer to load BluRay DVDs along with standard DVDs and display on the monitors

AppleTV:
The AppleTV is a Mainly used as a Internet Streaming Device but will also allow any Apple Device to wirelessly transmit a video and audio signal to the display using "AirPlay"

Video Conferencing:
A Cisco C40 will be installed which will allow the customer to conduct and participate in Video Conferencing meetings. There will be a Precision HD camera installed in the front of the room. This camera will have the ability to PAN, TILT, and Zoom. There will be a goose-neck microphone installed in the table. The customer will have the ability to send any source to the far end for presentation purposes.

Displays:
There will be (2) 70" Displays installed in the front of the room. During a video conference the left display will show the far end and the right display will show the near end or content.

Control:
The entire system will be controlled via a Crestron touch panel. The panel will have a splash screen that will allow a number of preset configurations. The panel will have transport functions for the DVD, VTC and AppleTV. The routing page will allow the customer to send any source to either display. There will be a volume control that will control all the speakers in the ceiling. There will be a microphone mute button that will allow privacy when needed during a VTC.

# Conference Room 2345

## Wire Checklist

Modified: 6/11/2014
Revision: 0

**Sample AV INC**
1234 Main Street
Anytown, FL 33756 United States
727-555-1234

| | FROM | TO | | | | |
|---|---|---|---|---|---|---|
| OK | Device - Head | Location - Device | Manufacturer - Model | Wire Number | Type | Comments |
| **AV Closet** | | | | | | |
| ☐ | MTX-001 - Audio Video Control | Conference Room - CEI-001 | BTX 16/2 plenum | AUD-001 | Audio | |
| ☐ | MTX-001 - Audio Video Control | AV Closet - SWI-001 | Belden shielded Cat6 Plenum | DAT-001 | Data | |
| ☐ | TOU-001 - Audio Video Control | AV Closet - SWI-001 | Belden shielded Cat6 Plenum | DAT-002 | Data | |
| ☐ | COD-001 - Audio Video Control | AV Closet - SWI-001 | Belden shielded Cat6 Plenum | DAT-003 | Data | |
| ☐ | CAM-001 - Audio Video Control | (no device) | Belden shielded Cat6 Plenum | DAT-004 | Data | |
| ☐ | WAL-001 - Audio Video Control | AV Closet - MTX-001 | Belden Shielded Cat6 Plenum | DM-001 | DM | |
| ☐ | WAL-002 - Audio Video Control | AV Closet - MTX-001 | Belden Shielded Cat6 Plenum | DM-002 | DM | |
| ☐ | MTX-001 - Audio Video Control | Conference Room - RMC-001 | Belden Shielded Cat6 Plenum | DM-003 | DM | |
| ☐ | MTX-001 - Audio Video Control | Conference Room - RMC-002 | Belden Shielded Cat6 Plenum | DM-004 | DM | |
| ☐ | BLU-001 - Audio Video Control | AV Closet - MTX-001 | Cables To Go 6 'HDMI | HDM-001 | HDMI | |
| ☐ | ATV-001 - Audio Video Control | AV Closet - MTX-001 | Cables To Go 6 'HDMI | HDM-002 | HDMI | |
| ☐ | COD-001 - Audio Video Control | AV Closet - MTX-001 | Cables To Go 6 'HDMI | HDM-003 | HDMI | |
| ☐ | COD-001 - Audio Video Control | AV Closet - MTX-001 | Cables To Go 6 'HDMI | HDM-004 | HDMI | |
| ☐ | MTX-001 - Audio Video Control | AV Closet - COD-001 | Cables To Go 6 'HDMI | HDM-005 | HDMI | |

| | FROM | TO | | | | |
|---|---|---|---|---|---|---|
| **OK** | **Device - Head** | **Location - Device** | **Manufacturer - Model** | **Wire Number** | **Type** | **Comments** |
| ☐ | MIC-01 - Audio Video Control | AV Closet - COD-001 | West Penn Wire-cdt 22ga/ 2conductor | MIC-001 | Audio | |
| ☐ | CAM-001 - Audio Video Control | (no device) | Cables To Go 40318 | VID-001 | Video | |

## Conference Room

| | | | | | | |
|---|---|---|---|---|---|---|
| ☐ | CEI-001 - Audio Video Control | Conference Room - CEI-002 | BTX 16/2 plenum | AUD-002 | Audio | |
| ☐ | CEI-002 - Audio Video Control | Conference Room - CEI-003 | BTX 16/2 plenum | AUD-003 | Audio | |
| ☐ | CEI-003 - Audio Video Control | Conference Room - CEI-004 | BTX 16/2 plenum | AUD-004 | Audio | |
| ☐ | RMC-001 - Audio Video Control | Conference Room - LCD-001 | West Penn Wire-cdt 22ga/ 2conductor | CON-001 | Control | |
| ☐ | RMC-002 - Audio Video Control | Conference Room - LCD-002 | West Penn Wire-cdt 22ga/ 2conductor | CON-002 | Control | |
| ☐ | RMC-001 - Audio Video Control | Conference Room - LCD-001 | Cables To Go 6 'HDMI | HDM-006 | HDMI | |
| ☐ | RMC-002 - Audio Video Control | Conference Room - LCD-002 | Cables To Go 6 'HDMI | HDM-007 | HDMI | |