

**SPORTSOUND® 500HD GEN II
AUDIO SYSTEM**

INSTALLATION MANUAL

P1561

DD5106171
Rev 01
11 March 2024

FCC Statement

Supplier Declaration of Conformity (SDoC)

This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

Warning: The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.

Industry Canada Regulatory Information

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

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1 Introduction

This manual explains the installation, maintenance, and troubleshooting of a Sportsound® 500HD Audio System. For additional information regarding safety, installation, operation, or service, refer to the telephone numbers listed in **Section 7: Daktronics Exchange and Repair & Return Programs (p.20)**. This manual is not specific to a particular installation.

Important Safeguards

- **Read and understand all instructions before beginning the installation process.**
- **Disconnect system power when not in use or when servicing.**
- **Disconnect system power before servicing power supplies to avoid electrical shock. Power supplies run on high voltage and may cause physical injury if touched while powered. Several disconnect switches may be required to de-energize the equipment.**
- **Do not modify the cabinet structure or attach any panels or coverings without the express written consent of Daktronics.**
- **Do not disassemble control equipment or electronic controls of the system; failure to follow this safeguard will make the warranty null and void.**
- **Do not drop the control equipment or allow it to get wet.**
- **Always turn off and/or unplug the control equipment when it is not in use. This keeps equipment protected from power spikes and lightning.**
- **Inspect equipment for shipping damage such as rattles and dents, and verify that all equipment is included as itemized on the packing slip. Immediately report any problems to Daktronics; save all packing materials if exchange is necessary.**

Resources

Figure 1 illustrates a Daktronics drawing label. The drawing number is located in the lower-right corner of a drawing. This manual refers to drawings by listing the last set of digits. In the example, the drawing would be referred to as **DWG-1007804**. All references to drawing numbers, appendices, figures, or other manuals are presented in bold typeface. Any drawings referenced in a particular section are listed at the beginning of it as shown below:

		DAKTRONICS, INC.		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.	
BROOKINGS, SD 57006		DO NOT SCALE DRAWING			
PROJ: DAKTRONICS					
TITLE: SYSTEM RISER DIAGRAM					
DESIGN:		DRAWN: APAGE		DATE: 11 MAY 10	
SCALE: NONE					
SHEET	REV	JOB NO:	FUNC-TYPE-SIZE	1007804	
200	02	C17581	F-01-D		

Drawing Number

Figure 1: Drawing Label

Reference Drawing:

System Riser Diagram **DWG-1007804**

Daktronics identifies manuals by the DD or ED number located on the cover page.

Daktronics has a searchable knowledgebase of common questions and troubleshooting tips: www.daktronics.com/support.

Visit the Daktronics Support YouTube channel to learn how to properly operate Sportsound systems: www.youtube.com/DaktronicsSupport.



Project-specific information takes precedence over any other general information found in this manual. Such information may include:

- **Schematic Drawings:** describe internal power and signal wiring
- **Shop Drawings:** describe mounting methods to structural elements, access method (front or rear), and power and signal entrance points
- **System Riser Diagrams:** describe power and signal connections between system components and the control location; may also include control room layout and schematic
- **Final Assembly Drawings:** describe internal component locations and detailed product appearance with part numbers and quantities

Ensure all applicable material has been gathered before beginning the installation. Contact a Daktronics sales coordinator or project manager.

Daktronics Nomenclature

Most components have a white label that lists the part number in bold as shown in **Figure 2**. Part numbers may also appear on illustrations and reference drawings as well as in the Bill of Materials (BOM) for the project. If a component is not found in the **Replacement Parts (p.19)**, use the label to order a replacement.

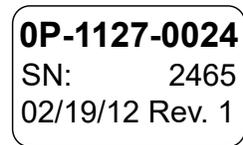


Figure 2: Part Label

Refer to **Section 7: Daktronics Exchange and Repair & Return Programs (p.20)** if replacing or repairing any component.

Main Component Labels	
Part Type	Part Number
Individual circuit board	0P-XXXX-XXXX
Assembly; a collection of circuit boards	0A-XXXX-XXXX
Wire or cable	W-XXXX
Fuse	F-XXXX
Transformer	T-XXXX
Metal part	0M-XXXXXXXX
Fabricated metal assembly	0S-XXXXXXXX
Specially ordered part	PR-XXXXX-X

Accessory Labels	
Component	Label
Termination block for power or signal cable	TBXX
Grounding point	EXX
Power or signal jack	JXX
Power or signal plug for the opposite jack	PXX

2 Sound System Components

Equipment Overview

The Sportsound 500HD audio system consists of the following elements:

- Sound Cabinet
- Control Enclosure
- Fiber Conversion Box
- Audio Control Rack
- Signal Cables

Note: All products in this system are tested individually for product safety approval.

Sound Cabinet

Figure 3 illustrates a Sportsound 500HD sound system cabinet. The cabinet is 3'-0" (914 mm) high, 8'-0" (2438 mm) wide, and 3'-6" (1067 mm) deep. It is composed of a steel skeleton sheeted in custom aluminum paneling with two rear access doors. The cabinet is powder coat black with a wrinkle finish.

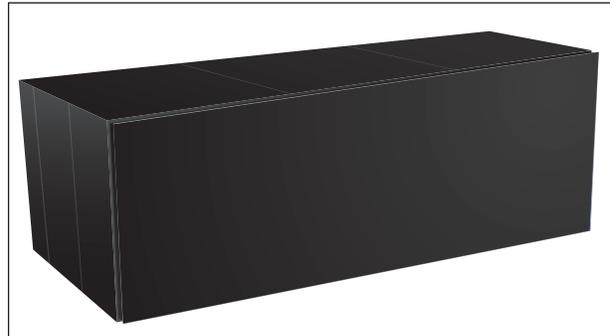


Figure 3: 500HD Sound Cabinet with Grille

Grille

Reference Drawing:

Mesh Layout; SS500HD **DWG-983398**

The grille of the cabinet consists of a woven flame resistant acoustical mesh. The mesh can be printed in a variety of colors to display advertising, sponsors, or logo designs. The printable area is 2'-9" (838 mm) high by 8'-0" (2438 mm) wide.

Drivers

Figure 4 illustrates the three different types of drivers (also known as speakers) used in the sound cabinet. The number of drivers will vary based on whether the cabinet is a dual- (500HD-D) or single-sided (500HD-SL/-SR) model.

- 15" (381 mm) low frequency drivers: Daktronics part # A-1903
- 8" (203 mm) mid-range drivers: Daktronics part # A-2305
- 1.4" (36 mm) high frequency drivers: Daktronics part # A-2302

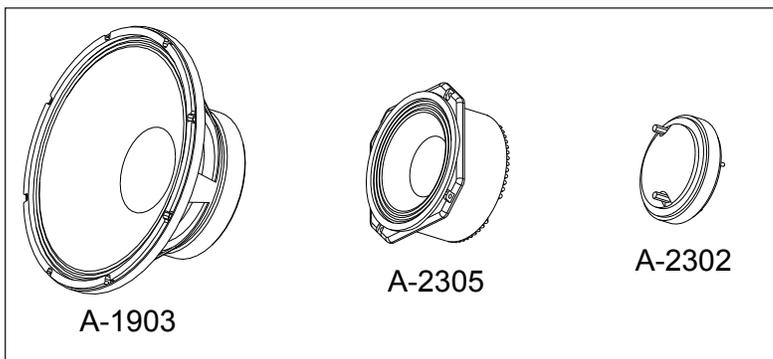


Figure 4: 500HD Drivers

Control Enclosure

Figure 5 illustrates the thermostatically controlled and NEMA3R control enclosure that houses the amplifiers. In sound systems, the amplifier is the last component before the drivers. It receives a signal from the source equipment and amplifies it to power the drivers. The Sportsound 500HD sound system utilizes one amplifier with built-in Digital Signal Processor (DSP), which manages equalization, limiting, compression, and crossover functions.

The DSP program is set at the factory and is not user-adjustable.

Refer to **Mounting the Control Enclosure (p.7)** and **Power/Signal Connections (p.8)** for more information about the control enclosure.

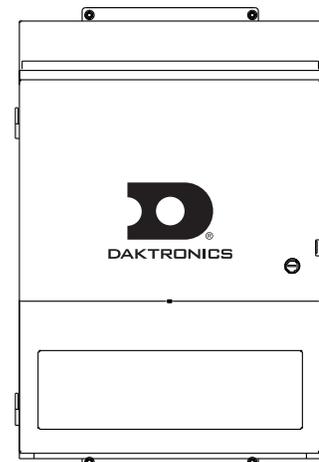


Figure 5: Control Enclosure

Fiber Conversion Box

Note: A fiber conversion box is not always provided. In those systems, analog signal routes from an XLR junction box to the control enclosure.

Figure 6 illustrates the fiber conversion box that converts the analog audio signal from the audio control rack into fiber optic signal that goes out to the control enclosure. The box is typically permanently wall-mounted near the source equipment location. Adjustable brackets also allow for rack mounting.

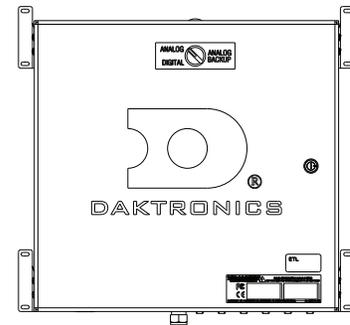


Figure 6: Fiber Conversion Box

The fiber conversion box includes an analog backup signal. This provides a redundant safety, in case the fiber link to the sound cabinet is lost. To go into analog backup mode, simply turn the switch to the **ANALOG** position.

Refer to **Fiber Conversion Box Connections (p.10)** for more information about the fiber conversion box.

Audio Control Rack

The Sportsound 500HD audio system is compatible with all Daktronics standard control racks. Refer to the manual provided with the control rack for proper operation.

Signal Cables

Cable specifications are as follows:

- Minimum 2-core, multimode 50-micron fiber optic cable from fiber conversion box to control enclosure. If included with a Daktronics scoreboard or display, the sound system may share a fiber optic cable run, requiring additional cores.
- 1 pair, 22 AWG audio cable from fiber conversion box to control enclosure for analog backup (part # W-1615)
- 50' (15.2 m) speaker cable (located inside audio cabinet) that routes to the control enclosure (part # W-2317)

3 Mechanical Installation

A qualified technician must install the Sportsound 500HD cabinet and control enclosure. It is the customer's responsibility to ensure that a qualified structural engineer approves the mounting structure and any additional hardware needed to secure the cabinet.

The cabinet must be installed no farther than 50' (15.2 m) behind the goal post and 40' (12.2 m) above grade for optimal audio coverage.

Note: Daktronics assumes no responsibility for the structure's integrity. The engineer responsible for the attached-to base structure shall evaluate the adequacy of their structure to support the gravity loads imparted by the cabinet at each attachment point in combination with other associated loading conditions. Daktronics assumes no responsibility for system damage or injury resulting from installation methods that deviate from attachment details specified on shop drawings. Daktronics also assumes no liability for system damage or injury resulting from incorrect setup or lifting methods performed by non-Daktronics employees.

Cabinet Installation

Mechanical installation consists of lifting and mounting the Sportsound 500HD cabinet onto an existing support structure.

Lift the Cabinet

The Sportsound 500HD cabinet may be shipped with two shipping brackets attached to the top as shown in **Figure 7**.

Each bracket is attached to the cabinet with two 1/2" lift eyes. Refer to **Figure 8**. Remove the shipping brackets, and reinstall all four 1/2" lift eyes in the holes prior to installing the cabinet.

Whenever possible, use a spreader bar, or lifting bar, to lift the cabinet. Spreader bars ensure the force on the eyebolts remains straight up, minimizing lifting stress.

Figure 9 illustrates the preferred lifting method on the left and an acceptable alternative lifting method on the right. When lifting the cabinet:

- Use a spreader bar if possible.
- Use every lifting point provided.



Figure 7: Shipping Bracket



Figure 8: Lift Eyes

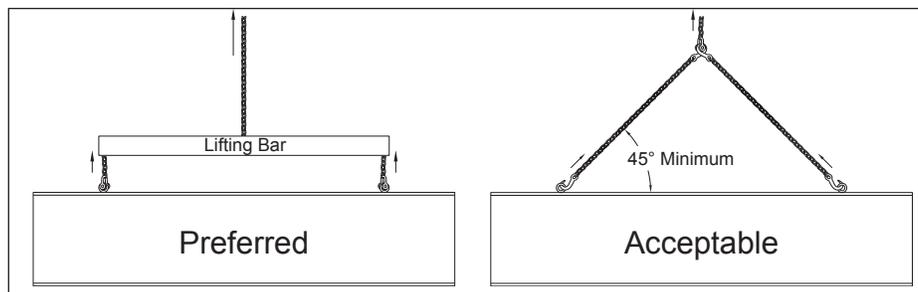


Figure 9: Lifting Methods

Cables and chains attached to the eyebolts and directly to a center lifting point, as shown in the "Acceptable" example in **Figure 9**, can create a dangerous lateral force on the eyebolts and may cause the eyebolts to fail. The smaller the angle between the cable and the top of the cabinet, the lighter the cabinet must be to safely lift it. If this method must be used, ensure a minimum angle between the chain and cabinet of at least 45°.

Do NOT attempt to lift the cabinet if the angle is less than 45°. Exceeding load angles or weight limits could cause the bolts in the cabinet to buckle, resulting in serious damage to the equipment or injury to personnel. Also, loads should be applied directly in the plane of the eyebolt as shown in **Figure 10**.

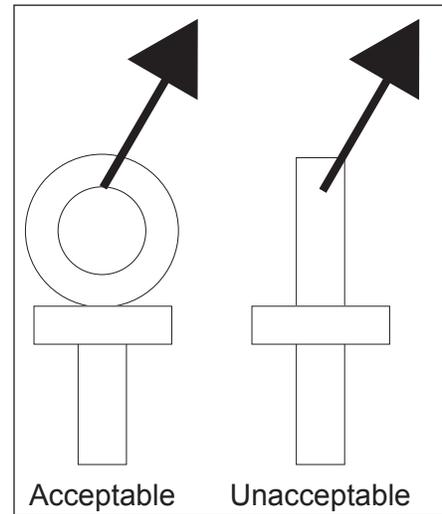


Figure 10: Eyebolt Plane Load

Note: Daktronics assumes no liability for damages resulting from incorrect setup or lifting methods. Eyebolts are intended for lifting only. Do not attempt to permanently support the cabinet by the eyebolts or eyebolt holes.

If installers remove the eyebolts, use 1/2" bolts to plug the holes.

Mount the Cabinet

Reference Drawings:

SS500HD Mounting; w/ Stringer Mounted Displays	DWG-992093
Engineering Specification; Sportsound 500HD	DWG-969776
Side Panel Mounting Details w/ SS500HD	DWG-992088
SS500HD Mounting w/ Pole Clamp Displays.....	DWG-982267
Single Column Install Specs; SS500HD	DWG-100534

The sound cabinet will be mounted atop a frame that must be certified by a structural engineer. To mount the system in place, position the cabinet on the structure where it is to be mounted. Several mounting methods are available. Weld the cabinet's bottom members to the structure at the locations indicated on the appropriate drawing listed above.

Aim the Speakers

Reference Drawings:

Mid/High Speaker Adjustment Chart; 500HD	DWG-1108053
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Tools Required: 9/16" wrench/socket

Once the cabinet has been mounted in place, it may be necessary to adjust the direction of the speakers for the individual facility. **DWG-1108053** in **Appendix A** provides speaker aiming instructions as well as recommended angles to position the speakers, based on the cabinet's location in relation to the seating area(s).

Mounting the Control Enclosure

Reference Drawings:

Mtg Detail; SS Control Encl Beam Clamp **DWG-1131068**

Tools Required: 1/2" & wrench/socket, 3/4" wrench/socket

Note: Installation described below requires I-beams with 3/16" to 3/4" thick beam flanges. If an alternate mounting option for control enclosure is preferred, it is the responsibility of the installer to adequately secure the enclosure to the base structure.

The Sportsound control enclosure (shown in **Figure 5**) mounts toward the base of the display structure. The enclosure typically mounts on the backside of the support column(s) within 50' (15.2 m) of the sound cabinet. Refer to the drawings listed under **Mount the Cabinet (p.6)** for suggested control enclosure mounting locations.

Attach horizontal Unistrut pieces to the top and bottom rear flanges of the control enclosure with provided 5/16" hardware through the existing holes. Raise the enclosure to the desired height, using side lift eyes or lifting straps if necessary, and then secure with provided spring nuts and 1/2" hardware. Refer to **DWG-1131068** in **Appendix A** for complete hardware assembly and mounting instructions.

4 Electrical Installation

CAUTION – RISK OF ELECTRIC SHOCK: Only qualified individuals should perform power routing and termination to the system. It is the responsibility of the electrical contractors to ensure that all electrical work meets or exceeds local and national codes. Failure to follow installation guidelines will result in audible noise on the sound system and possible damage to internal components.

Note: This product is not provided with mains disconnect. Customer shall provide disconnect at base of sound system location that meets or exceeds local and national electrical codes.

Power/Signal Connections

Reference Drawings:

System Riser; Electrical & Audio Notes	DWG-985713
Schematic; Cntrl Encl SS-500HD Gen2, Dual, 120VAC	DWG-5105340
System Riser; 500HD Gen2	DWG-5118566
Schematic; Cntrl Encl SS-500HD Gen2, Single 120VAC	DWG-5125144
System Riser; 500HD, Copper Signal Only	DWG-5130474

DWG-5118566 in **Appendix A** details power and signal connections between the fiber box, control enclosure, and sound cabinet. For installations without a fiber box, refer instead to **DWG-5130474**. Refer to **Figure 11** for component and connection locations within the control enclosure and **DWG-5105340** and **DWG-5125144** in **Appendix A** for detailed wiring schematics.

Notes:

- Use a flathead screwdriver to unlock the latch on the enclosure door. A padlock is provided with the control enclosure that may need to be removed.
- Power/signal connections should not be drilled through the top of the enclosure. If this is unavoidable, a weather-sealed connection is required.

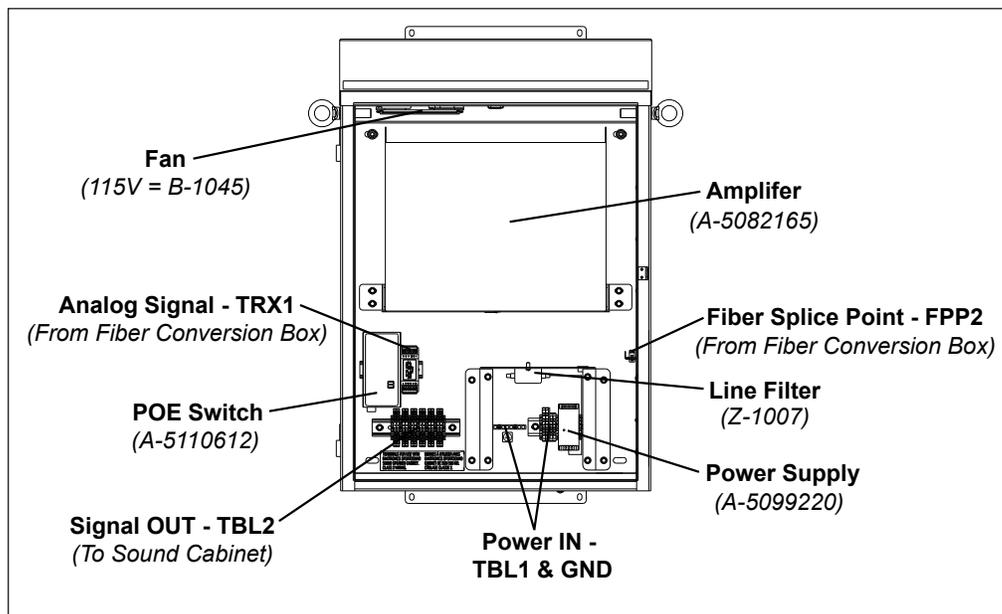


Figure 11: Control Enclosure Components & Connections (Covers Removed)

Power IN

The system requires one 20 amp, 120 VAC circuit for connection to international voltages; 2 wires + GND, 1800W max. Power wiring must be run in conduit up into the bottom of the control enclosure and terminated at TBL1. Refer to Detail "A" of **DWG-5118566**.

A voltage surge protector (part # A-1129) is provided (shipped inside the control enclosure) for additional protection at the main breaker panel. Refer to **Figure 12** and Detail "B" of **DWG-5118566**.



Figure 12: Surge Protector

Signal IN (Fiber)

A minimum of 2-core, multimode 50-micron fiber optic cable must be run in conduit from the fiber conversion box location to the sound cabinet control enclosure (FPP2). Refer to Detail "D" of **DWG-5118566**. If included with a Daktronics scoreboard or display, the sound system may share a fiber optic cable run, requiring additional cores.

For analog backup signal, route 1 pair, 22 AWG cable (part # W-1615) in conduit from the fiber conversion box location to the control enclosure, and terminate to TRX1. Refer to Detail "E" of **DWG-5118566**.

Signal IN (Analog Only)

Route 1 pair, 22 AWG cable (part # W-1615) in conduit from the XLR junction box location to the control enclosure, and terminate to TRX1. For XLR junction box termination, refer to Detail "C" of **DWG-5130474**; for TRX1 termination, refer to Detail "D".

Speaker OUT

IMPORTANT: Improper wiring will result in damage to the internal circuitry of the product, and pose a potential fire hazard!

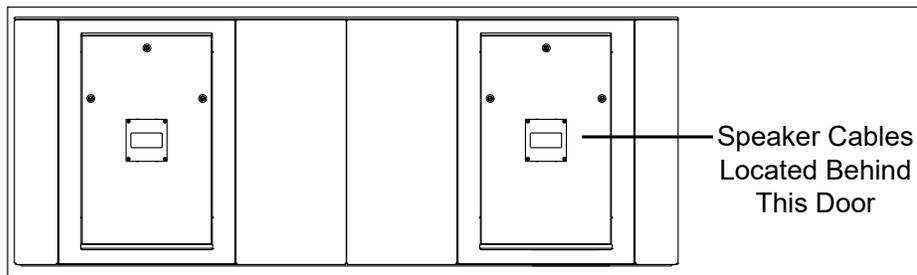


Figure 13: Sound Cabinet Access Doors, Rear View

1. Open the far right rear access door of the sound cabinet. Refer to **Figure 13**. Turn all latches a 1/4 turn using a flathead screwdriver. Tilt the top of the door away from the cabinet. With the door tilted, use the handle to lift it up and out of the door frame.
2. Inside the sound cabinet is a coiled 50' (15.2 m) speaker cable. Run this cable in conduit out the bottom of the sound cabinet and up into the bottom of the control enclosure.
3. Connect each speaker cable to its designated terminal on TBL2, noting the proper polarity when wiring them. Confirm the proper connections by referring to Detail "A" of **DWG-5118566**.

Note: To prevent the possibility of short circuits, strip each wire 8 mm and tighten the screw connection terminal to a minimum torque of 0.6 Nm.

Grounding

All components of an audio system – including but not limited to control equipment, and connected peripheral equipment – must be electrically grounded. Only qualified individuals may perform electrical work, including verification of ground resistance. Daktronics is not responsible for improper grounding or damage incurred as a result of improper grounding.

Grounding methods must meet the provisions of all applicable local and national codes. Inspect and verify all grounding methods meet the provisions of all applicable local and national codes.

Proper grounding is necessary for reliable equipment operation and general electrical safety. Failure to properly ground the sound system may void the warranty, disrupt operation, damage equipment, and cause bodily harm or death.

Lightning Protection

The use of a disconnect near the system to completely cut all current-carrying lines significantly protects the circuits against lightning damage. In order for this device to provide protection, the power must be disconnected when the system is not in use.

Fiber Conversion Box Connections

Reference Drawings:

Audio; Sportsound, Fiber Box Schematic..... **DWG-5099139**
System Riser; 500HD Gen2 **DWG-5118566**

IMPORTANT NOTES:

- The fiber box shall not be exposed to dripping or splashing, and no objects filled with liquid shall be placed on the fiber box.
- The fiber box consists of Class 1 construction and shall be connected to a mains socket outlet with a protective earth-ground connection.
- The fiber box utilizes a power cord with wiring inlet as a means for disconnection from power. This means of disconnection shall remain readily operable in all cases.

For systems that include a fiber box, refer to **Figure 14** for external fiber conversion box connections and **Figure 15** for internal connections and component locations.

Refer to Detail "C" in **DWG-5118566** for analog backup connection and Detail "D" for fiber connection. **DWG-5099139** provides a detailed wiring schematic.

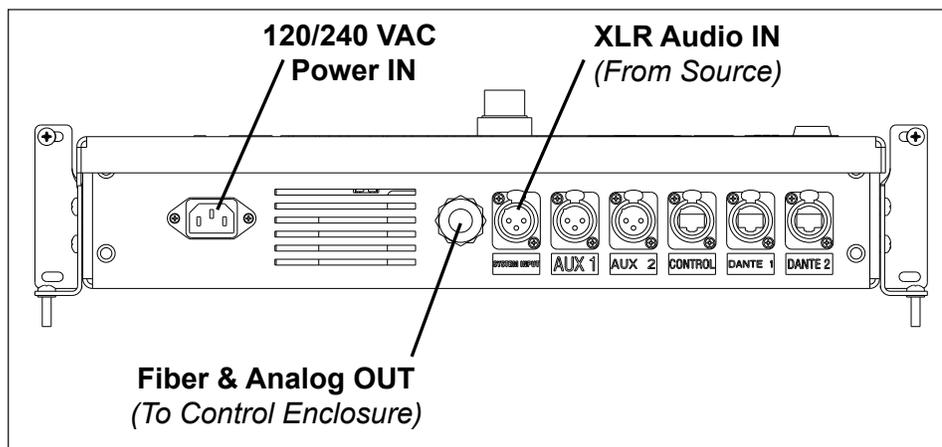


Figure 14: External Fiber Conversion Box Connections

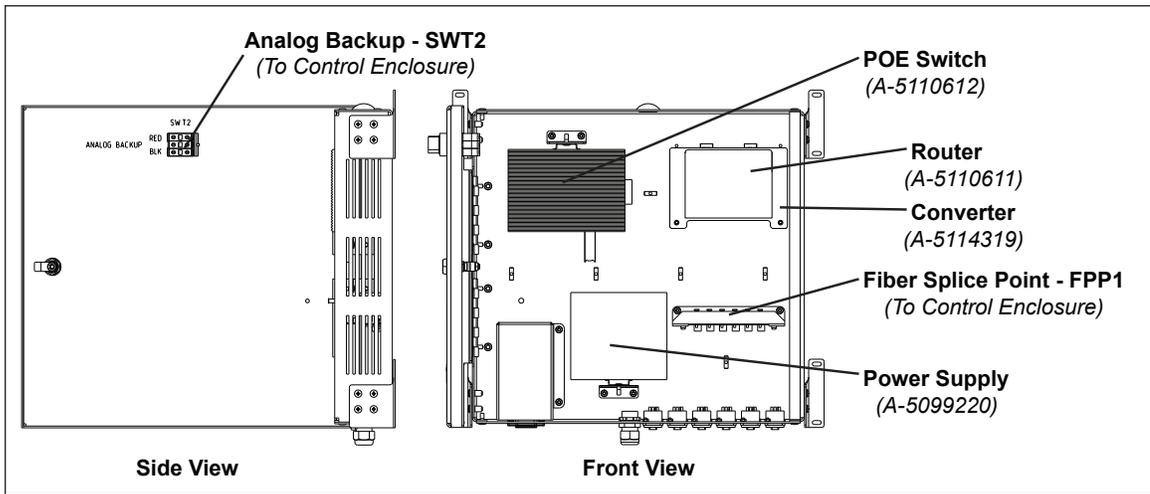


Figure 15: Internal Fiber Conversion Box Connections & Components (Cover Open)

5 Maintenance

Grille Maintenance and Cleaning

To allow maximum acoustic transparency, the front of the cabinet contains a PVC mesh grille. Do not apply anything to the surface that may obstruct the holes in the material. To maintain the brightness of the colors and prolong the life of the grille, periodic cleaning is necessary. Failure to clean periodically may result in permanent discoloration or staining. When cleaning, use a mild soapy solution (Dove®, Ivory®, etc.) and a very soft brush, moving in a circular motion. Rinse with clean water using normal faucet pressure.

Do not use a power washer.

Grille Mesh Replacement

Reference Drawings:

Mesh Layout; SS500HD **DWG-983398**

If the grille mesh fades or tears over time, or if new graphics/logos are desired, it may be replaced. Only qualified sign companies should be used to replace the grille mesh. Refer to **DWG-983398** for mesh layout. Contact Daktronics for mesh reordering.

1. Remove Mesh Frame

The front of the sound cabinet has a removable aluminum frame that secures the grille mesh. This frame is attached to the sound cabinet with a total of eight (8) 3/8" hardware sets, with four (4) sets at both the top and bottom of the frame.

a. Carefully remove all mounting hardware and safely lower mesh frame to the ground. Set the frame on a level surface large enough so that the weight is supported by the aluminum frame and not on the mesh.

b. Loosen the cover screws using a square driver and remove the cover.

2. Remove Tension Clips

Insert the tip of a standard flathead screwdriver into the recess located at the backside of the tension clip. Refer to **Figure 16**. Rotate or tilt the screwdriver to separate the tension clip teeth away from the frame. This will allow the tension clip to be removed from the frame by prying or pulling it up and out.

Slide the mandrel out of the tension clip to release the mesh.

3. Attach New Mesh

When ordered through Daktronics, the mesh has a line with a series of tick marks printed on the front as shown in **Figure 17**. These tick marks indicate the location of the tension clips and mandrels.

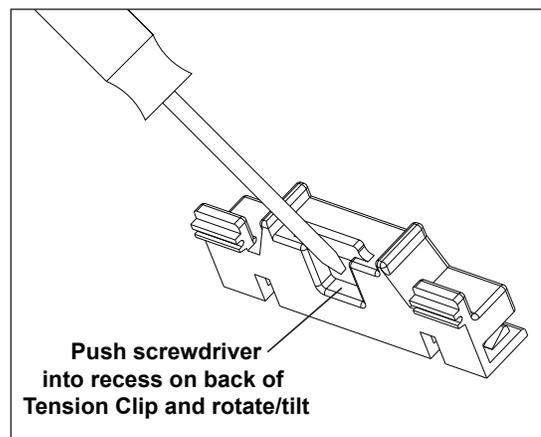


Figure 16: Removing Tension Clips



Figure 17: Tick Marks on Mesh

- a. Place a mandrel, smooth side up, centered on the tick mark.
- b. Fold the mesh around the mandrel. Ensure the groove in the mandrel is towards the inside of the mesh. Refer to **Figure 18**.
- c. Snap a tension clip over the mandrel and mesh. Refer to **Figure 19**. Do not try to drive both ends of the clip down onto the mandrel and fabric at the same time; snap one end down and then the other.
- d. Continue to place a mandrel and tension clip on every tick mark.
- e. Lay the mesh across the frame and snap each clip into the tension channels. Refer to **Figure 20**.
- f. Pull on the corners of the mesh to remove any wrinkles. When pulling on the fabric, do not pull directly on the fabric flap or tension clip, or the clip may pop off. When pulling on the face, grasp the fold and pull the face into place.
- g. Use the tensioning tool provided with the mesh replacement kit (part # 0A-1561-0028) to drive the tension clips into the tension channels. Refer to **Figure 21**. Start with one or two clicks.
- h. Work around the frame, tightening down all the tension clips until all the wrinkles are removed and the mesh is properly taut. **Do not over-tension!** This may cause damage to mesh graphics. Apply just enough tension to achieve a smooth, flat surface.
- i. Place the radius covers on the end of the mesh frame and tighten the set screws on the radius cover.

4. Reattach Mesh Frame

Safely lift mesh frame back in place on the front of the sound cabinet and attach with the eight (8) 3/8" hardware sets. Ensure the frame is snug tight against the cabinet.

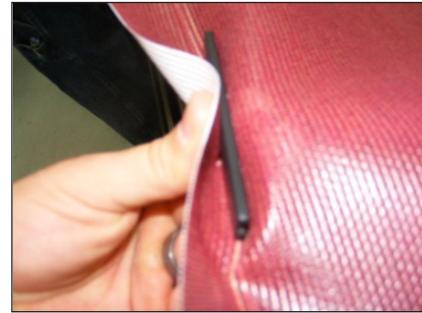


Figure 18: Folding Mesh



Figure 19: Attach Tension Clip



Figure 20: Clips in Channels

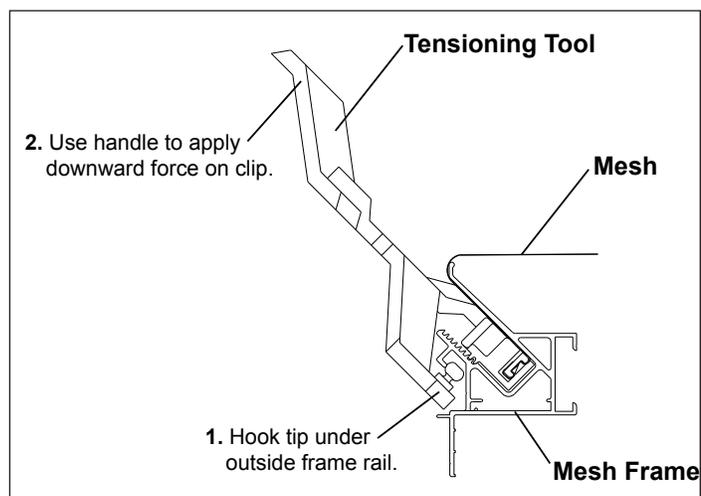


Figure 21: How to Use Tensioning Tool

Control Enclosure Maintenance

Performing preventative maintenance will ensure proper air circulation to internal components. How much maintenance is required depends on the surrounding environment.

Filters

One filter is located on the inside bottom door panel, as shown in **Figure 22**, and another filter is located in the hood above the door panel. Remove the filters and clean with warm, soapy water and dry gently. Check the filters for signs of damage such as tears, cuts, and excessive wear from the environment. If necessary, order a new filter (Hoffman® part # WFF1 – www.hoffmanonline.com).



Figure 22: Filter inside Door Panel

Fan

A fan is located inside the top of the enclosure. Refer to **Figure 23**. When checking the filters, clean the fan blades with compressed air. If the fan is making excessive noise or squealing after cleaning, replace it.



Figure 23: Fan & Thermostat

Thermostat

A thermostat next to the fan controls when to turn it on. Refer to **Figure 23**. To test the thermostat, rotate the temperature dial to the current air temperature and verify the fan starts. If the fan does not start, replace it and the thermostat. After checking/replacing the thermostat, be sure to set the temperature dial back to 85–95° F (29–35° C).

6 Troubleshooting

This section lists potential problems with the system, indicates possible causes, and suggests corrective action. This list does not include every possible problem, but it does represent some of the more common situations that may occur.

Note: Be sure to power on the audio control rack, fiber conversion box, and cabinet breakers. Make sure all connections from source to the cabinet are intact.

Symptom/Condition	Possible Cause	Solution/Items to Check
No power to audio cabinet; green indicator light is off on bottom of control enclosure	Breaker is off at sign	Turn breaker ON.
	Bad power supply	Order a new power supply (part # A-5099220).
No audio from cabinet, but signal can be heard through headphones or a monitor speaker	No power at cabinet	Turn breaker ON.
	Fiber conversion box is unplugged from wall outlet or cable to audio control rack	Plug in fiber conversion box power/signal.
	Analog signal out of the mixer is not being correctly converted to a digital signal	Set the fiber box ANALOG BACKUP switch to ANALOG and see if problem goes away.
	No fiber connection to cabinet; fiber link down	Verify the fiber port on the network switch/media converter LINK light is orange and ACT light blinks green.
		Swap TX-RX fibers to fix link.
Replace fiber splice, repair fiber termination/cable.		
Isolation transformer failure (ANALOG BACKUP enabled)	Check the isolation transformer in the control enclosure. Refer to the Isolation Transformer Troubleshooting Guide (DD3417357) , located online at www.daktronics.com/manuals .	
Muffled audio from cabinet (but clear through headphones or a monitor speaker)	Bad digital connection	Open Dante controller and check for errors.
	Bad driver or amplifier	Replace driver or amplifier.
Weak (low level) audio from cabinet	Low level source	Ensure output from the mixer is professional line level.
	Analog signal out of the mixer is not being correctly converted to a digital signal	Set the fiber box ANALOG BACKUP switch to ANALOG and see if problem goes away.

Symptom/Condition	Possible Cause	Solution/Items to Check
Poor sound quality from audio cabinet (distortion)	Poor source material (CD or MP3 with heavy compression or distorted material)	Use high quality audio files (.wav).
	Clipping audio at source (audio control rack) output	Bring source level down below clip.
	Bad driver or amplifier	Replace driver or amplifier.
Intermittent audio from audio cabinet	Bad fiber connection	Set the fiber box ANALOG BACKUP switch to ANALOG and see if problem goes away.
	Amplifier modules are over driven into protect mode	Reduce source output level.
	Bad amplifier module	Replace amplifier.
	Analog to Digital Converter (in fiber box) failure	Replace analog to digital converter.
	Low level (-20dB) (ANALOG BACKUP enabled)	Increase source output level above -20dB.
Humming/buzzing from audio cabinet	Ground loop	Disconnect ground at isolation transformer in the control enclosure. Refer to Audio System Humming Troubleshooting (DD3448287) , located online at www.daktronics.com/manuals .

For more troubleshooting steps, refer to the appropriate audio control rack manual.

Indicator Lights

Control Enclosure

There is a green LED power indicator on the bottom of the control enclosure as shown in **Figure 24**. This indicates whether there is power feeding the control enclosure properly. The indicator stays lit when there is power; otherwise, it will be off.

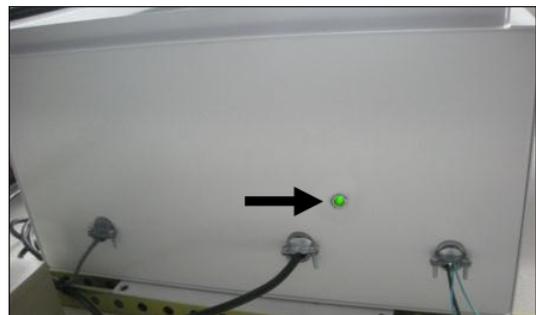


Figure 24: Control Enclosure Power Indicator

Audio Control Rack

Refer to the troubleshooting section of a specific audio control rack manual for more information about the indicator lights that show signal output to the audio cabinet.

Fiber Conversion Box

Within the fiber conversion box, if included, indicator lights on the equipment help verify proper connection with the sound cabinet.

Driver Troubleshooting

Tools Required: flathead screwdriver, Multi-meter, 9V battery

Remove the rear access door on the side of the cabinet being serviced using the flathead screwdriver.

Before removing the driver, verify correct DC resistance of the driver using a multi-meter. Refer to **Figure 25**. Check the DC resistance of each driver separately, or check the DC resistance at the harness. Connect each lead of the multi-meter to the terminals of the driver (or proper pins on the harness), and make sure the multi-meter is set to measure the DC resistance.



Figure 25: Mid-Frequency Driver & Meter

Driver Part Number	Resistance
A-2302 (High Frequency)	8.5 Ω
A-2305 (Mid Frequency)	6.6 Ω
A-1903 (Low Frequency)	6.5 Ω

Depending on site conditions, the measurements may fluctuate up and down slightly so don't be alarmed; figure out an average. If the resistance is showing near 0 or open, this indicates the coil of the driver is bad and needs to be replaced.

It's possible that the coil is perfectly fine on cone drivers (mids and lows), but the spider, diaphragm, or surround is damaged, eliminating or restricting the cone from moving in and out. Visually check the surround and make sure it is in good condition. It may be necessary to remove the driver from the speaker assembly. Carefully push on the diaphragm and see if it can move in and out to verify the driver is not seized. Apply a 9V battery to the driver terminals and listen for any rubbing or stuck coils.

If the driver checks out fine, further troubleshooting of the system is required.

Driver Replacement

High-Frequency Driver (A-2302)

Tools Required: flathead screwdriver, 10mm wrench, silicone

1. Remove the rear access door on the side of the cabinet being serviced using the flathead screwdriver.
2. Identify bad driver(s) by following **Driver Troubleshooting (p.17)**.
3. Remove the bad driver(s):
 - a. Disconnect wires, if not already done.
 - b. Remove 4 threaded studs with the 10mm wrench.
 - c. Pull off the bad driver. Refer to **Figure 26**.
4. Install replacement driver:

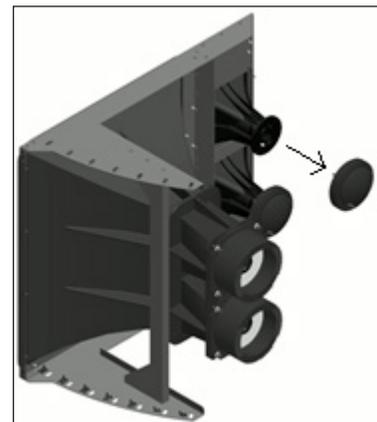


Figure 26: A-2302 Removal

- a. Hand tighten shorter threaded end of studs into the driver.
 - b. Align driver with screw holes.
 - c. Fasten nuts to 4 threaded studs with 10mm wrench.
 - d. Reconnect wires, making sure positive and negative go to correct terminals.
Apply silicone to terminals.
5. Reinstall rear access door.
 6. Test the system to verify it is operating correctly.

Mid-Frequency Driver (A-2305)

Tools Required: flathead screwdriver, 7/16 wrench (@2), silicone

1. Remove the rear access door on the side of the cabinet being serviced using the flathead screwdriver.
2. Identify bad driver(s) by following **Driver Troubleshooting (p.17)**.
3. Remove bad driver(s):
 - a. Disconnect wires, if not already done, taking note of positive and negative wire location.
 - b. Remove 4 bolts with 7/16 wrenches.
 - c. Pull off bad driver. Refer to **Figure 27**.
4. Install replacement driver:
 - a. Align driver with screw holes.
 - b. Fasten 4 bolts with 7/16 wrenches.
 - c. Reconnect wires, making sure positive and negative go to correct terminals. Apply silicone to terminals.
5. Reinstall rear access door.
6. Test the system to verify it is operating correctly.

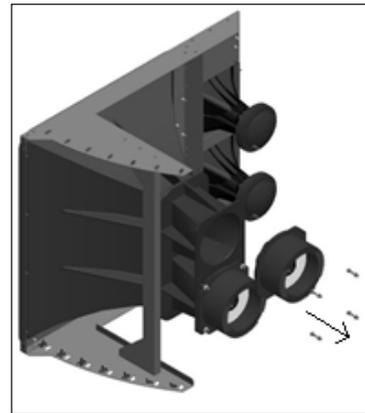


Figure 27: A-2305 Removal

Low-Frequency Driver (A-1903)

Tools Required: 9/16 wrench, #2 Phillips screwdriver, 3/16 Allen wrench, silicone

1. Remove the front mesh assembly (45 lb [20 kg]):
 - a. Remove 8 bolts (4 top, 4 bottom) with 9/16 wrench.
 - b. Pull the mesh assembly off.
2. Remove suspected bad driver(s):
 - a. Remove 8 screws with 3/16 Allen wrench.
 - b. Pull off driver, taking note of positive and negative wire location.
 - c. Test the driver(s) by following **Driver Troubleshooting (p.17)**.
 - d. If bad, remove driver. Refer to **Figure 28**.
3. Install replacement driver:

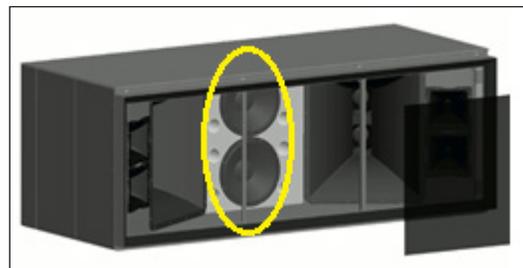


Figure 28: A-1903 Removal

- a. Reconnect wires, making sure positive and negative go to correct terminals. Apply silicone to terminals.
 - b. Align driver with screw holes.
 - c. Fasten 8 screws with 3/16 Allen wrench.
4. Reinstall the front mesh assembly.
 5. Test the system to verify it is operating correctly.

Replacement Parts

Sound Cabinet

Description	Part Number
15" 600 W Low Frequency Driver	A-1903
1.4" Compression Driver	A-2302
8" Midrange Driver	A-2305
500HD Mesh Replacement Kit	0A-1561-0028
Tension Clip w/ Mandrel	HS-1613
Tensioning Tool	TH-1175

Control Enclosure

Description	Part Number
Voltage Surge Protector	A-1129
Power Amplifier; 2800W, 4CH, Dante	A-5082165
48 VDC Power Supply	A-5099220
POE Switch	A-5110612
Fan (115 VAC)	B-1045
Padlock (order if keys are lost)	HS-1701
Thermostat	S-1247
Transformer; Audio Input, 1 Channel	T-1130
RFI Line Filter, 20 Amp	Z-1007

Fiber Conversion Box

Description	Part Number
48 VDC Power Supply	A-5099220
Router	A-5110611
POE Switch	A-5110612
SFP Transceiver	A-5110614
Converter; Analog to Dante	A-5114319

Refer to **Section 7: Daktronics Exchange and Repair & Return Programs (p.20)** for information on exchanging or returning parts.

7 Daktronics Exchange and Repair & Return Programs

Exchange Program

The Daktronics Exchange Program is a service for quickly replacing key components in need of repair. If a component fails, Daktronics sends a replacement part to the customer who, in turn, returns the failed component to Daktronics. This decreases equipment downtime. Customers who follow the program guidelines explained below will receive this service.

Before contacting Daktronics, identify these important numbers:

Model Number: _____

Job/Contract Number: _____

Date Manufactured/Installed: _____

Daktronics Customer ID Number: _____

To participate in the Exchange Program, follow these steps:

1. Call Daktronics Customer Service.

United States & Canada: 1-800-DAK-TRON (325-8766)

Outside the U.S. & Canada: +1-605-275-1040

2. When the new exchange part is received, mail the old part to Daktronics.

If the replacement part fixes the problem, send in the problem part being replaced.

- a. Package the old part in the same shipping materials in which the replacement part arrived.
- b. Fill out and attach the enclosed UPS shipping document.
- c. Ship the part to Daktronics.

3. The defective or unused parts must be returned to Daktronics within 5 weeks of initial order shipment.

If any part is not returned within five (5) weeks, a non-refundable invoice will be presented to the customer for the costs of replenishing the exchange parts inventory with a new part. Daktronics reserves the right to refuse parts that have been damaged due to acts of nature or causes other than normal wear and tear.

Repair & Return Program

For items not subject to exchange, Daktronics offers a Repair & Return Program. To send a part for repair, follow these steps:

1. Call Daktronics Customer Service.

United States & Canada: 1-800-DAK-TRON (325-8766)

Outside the U.S. & Canada: +1-605-275-1040

2. Receive a case number before shipping.

This expedites repair of the part.

3. Package and pad the item carefully to prevent damage during shipment.

Electronic components, such as printed circuit boards, should be placed in an antistatic bag before boxing. Daktronics does not recommend using packing peanuts when shipping.

4. Enclose:

- name
- address
- phone number
- the case number
- a clear description of symptoms

5. Ship to:

Daktronics Customer Service

[Case #]

201 Daktronics Drive, Dock E

Brookings, SD 57006

Daktronics Warranty & Limitation of Liability

The Daktronics Warranty & Limitation of Liability is located at the end of this manual. The Warranty is independent of Extended Service agreements and is the authority in matters of service, repair, and operation.

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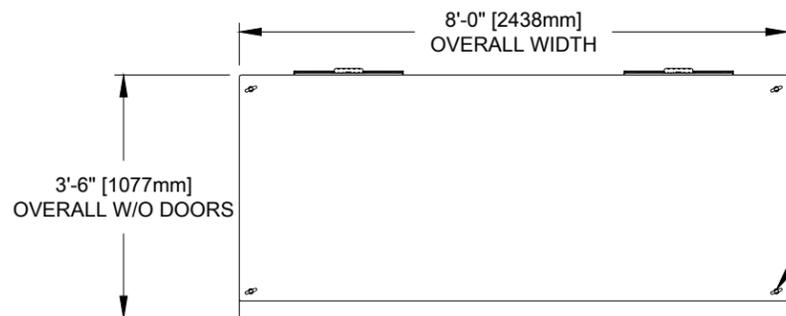
A Reference Drawings

Refer to **Resources (p.1)** for information regarding how to read the drawing number. Any contract-specific drawings take precedence over the general drawings.

Reference Drawings:

Engineering Specification; Sportsound 500HD	DWG-969776
SS500HD Mounting w/ Pole Clamp Displays.....	DWG-982267
Mesh Layout; SS500HD	DWG-983398
System Riser; Electrical & Audio Notes	DWG-985713
Side Panel Mounting Details w/ SS500HD	DWG-992088
SS500HD Mounting; w/ Stringer Mounted Displays	DWG-992093
Single Column Install Specs; SS500HD	DWG-1005534
Mid/High Speaker Adjustment Chart; 500HD	DWG-1108053
Mtg Detail; SS Control Encl Beam Clamp	DWG-1131068
Audio; Sportsound, Fiber Box Schematic.....	DWG-5099139
Schematic; Cntrl Encl SS-500HD Gen2, Dual, 120VAC	DWG-5105340
System Riser; 500HD Gen2	DWG-5118566
Schematic; Cntrl Encl SS-500HD Gen2, Single 120VAC.....	DWG-5125144
System Riser; 500HD, Copper Signal Only	DWG-5130474

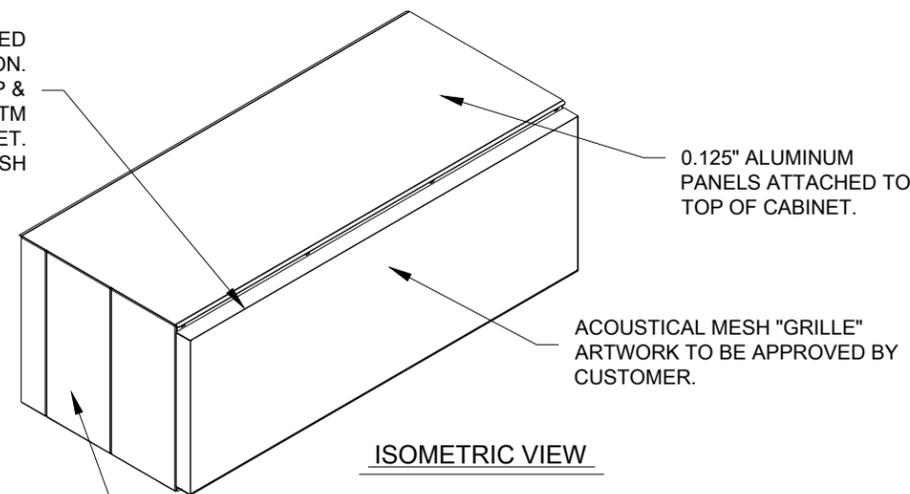
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TOP VIEW

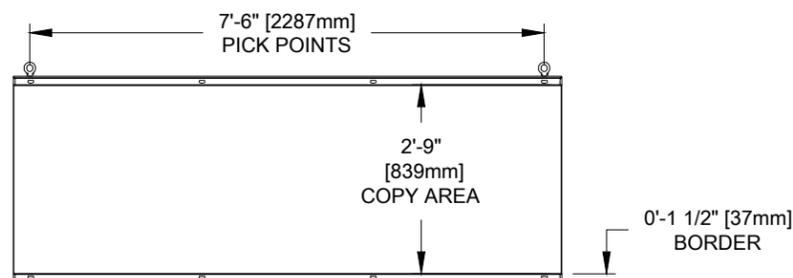
(4) 1/2" REMOVEABLE LIFT EYES. DESIGNED FOR MAX. 45° SLING ANGLE. WHEN POSSIBLE USE A PROPERLY SIZED SPREADER BEAM WHEN LIFTING SOUND SYSTEM. ALIGN LIFT EYES TO BE INLINE WITH CABLES.

FRONT "GRILLE" FRAME CAN BE REMOVED FOR SPEAKER MESH RE-INSTALLATION.
 (4) 3/8" HARDWARE SETS ON TOP &
 (4) 3/8" HARDWARE SETS ON BTM SECURE FRAME TO STEEL CABINET.
 "GRILLE" FRAME 45 LBS. W/ MESH

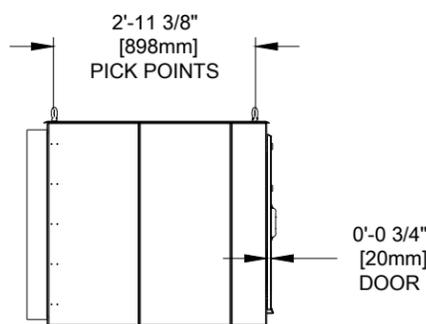


ISOMETRIC VIEW

CONCEALED FASTENER 0.063" ALUMINUM PANELS ATTACHED ON SIDES AND BACK.

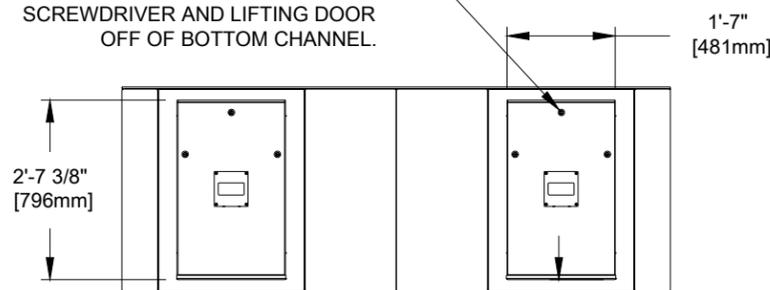


FRONT VIEW

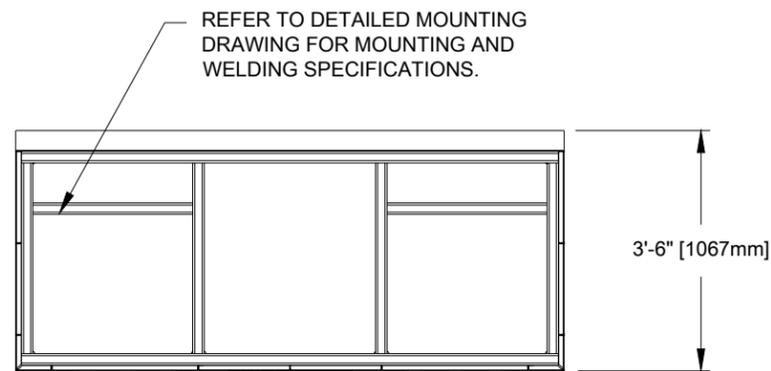


RIGHT SIDE

(2) REAR ACCESS DOORS FOR SERVICE OF INTERNAL COMPONENTS IN CABINET. DOORS CAN BE REMOVED BY TURNING LATCHES WITH A STRAIGHT EDGE SCREWDRIVER AND LIFTING DOOR OFF OF BOTTOM CHANNEL.



REAR VIEW



BOTTOM VIEW

WEIGHTS:

SS500HD-D:	850 LBS
SS500HD-SL:	775 LBS
SS500HD-SR:	775 LBS

NOTES:

- 1.0 REFERENCE
- 1.1 REFER TO DAKTRONICS DRAWING: 1561-E10C-982267 FOR SPORTSOUND 500HD MOUNTING W/ POLE CLAMPED DISPLAYS.
- 1.2 REFER TO DAKTRONICS DRAWING: 1561-E10B-992088 FOR SIDE PANEL MOUNTING DETAILS W/ SS500HD.
- 1.3 REFER TO DAKTRONICS DRAWING: 1561-E10B-992093 FOR SPORTSOUND 500HD MOUNTING W/ STRINGER MOUNTED DISPLAYS.
- 1.4 REFER TO DAKTRONICS RISER DIAGRAM FOR ALL ELECTRICAL POWER AND DATA SPECIFICATIONS.

2.0 GENERAL NOTES

- 2.1 ALL DIMENSIONS ARE IN FEET AND INCHES.
- 2.2 REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.

3.0 SOUND CABINET NOTES

- 3.1 DAKTRONICS SOUND CABINET IS STEEL CONSTRUCTED SKELETON WITH ALUMINUM PANELING FASTENED TO ITS EXTERIOR.
- 3.2 LIFTING POINTS ARE PROVIDED BY DAKTRONICS. WHEN LIFTING USE 45° OR GREATER, FROM THE HORIZON, CABLE SYSTEM.
- 3.3 PAINT COLOR: SPEAKER CABINET COLOR: POWDER COAT BLACK.

4.0 STRUCTURAL NOTES

- 4.1 THE SPORTSOUND 500HD CABINET WILL WITHSTAND A 150 MPH (3-SEC GUST) DESIGN WIND SPEED WITH OVERALL DESIGN PRESSURE OF 78 PSF ACCORDING TO ASCE 7-05 (EXPOSURE C).
- 4.2 THE DESIGN WIND PRESSURES WERE SHIFTED AND ADJUSTED TO ACCOUNT FOR ASCE 7 PRESCRIBED OFFSET EFFECTS.
- 4.3 THE SPORTSOUND CABINET HAS BEEN DESIGNED TO SUPPORT A DESIGN ROOF SNOW LOAD OF 60 PSF.
- 4.4 ALL STRUCTURAL STEEL SHALL BE ASTM A36 (36 KSI) EXCEPT:
 - WIDE FLANGE SHALL BE A992 (50 KSI) STEEL
 - TUBING SHALL BE A500-B (46 KSI)
- 4.5 THE SPORTSOUND CABINET HAS BEEN DESIGNED TO SUPPORT LATERAL SEISMIC LOADING EQUAL TO 2.0 TIMES GRAVITY.

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TITLE: ENGINEERING SPECIFICATION; SPORTSOUND 500HD			
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SCALE: 3/8" = 1'			
SHEET: 001	REV: 03	JOB NO: P1561	FUNC - TYPE - SIZE: E - 10 - B
			969776

REV	DATE	DESCRIPTION	BY
03	12 JUL 13	UPDATED 500HD VIEWS WITH NEW LATCHES AND HANDEL	KCS
02	7 JUN 11	UPDATED TOP, FRONT, BOTTOM & RIGHT VIEWS	MBJ
01	12 JAN 10	UPDATED DRAWING PER REAR ACCESS DOOR UPDATE	JLR

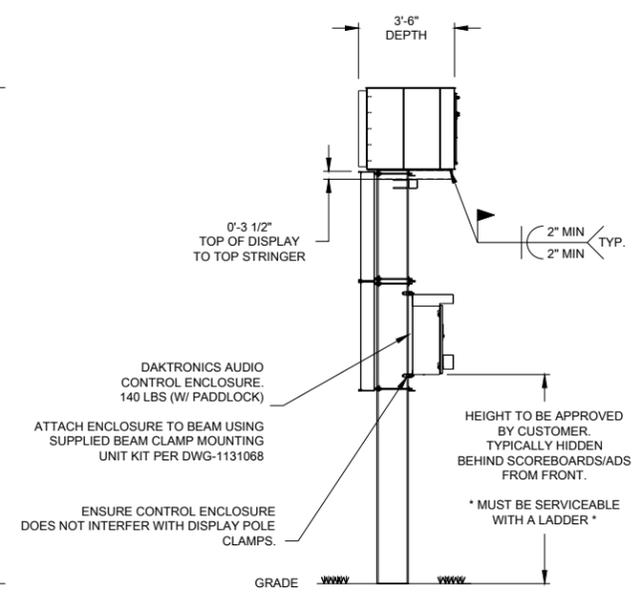
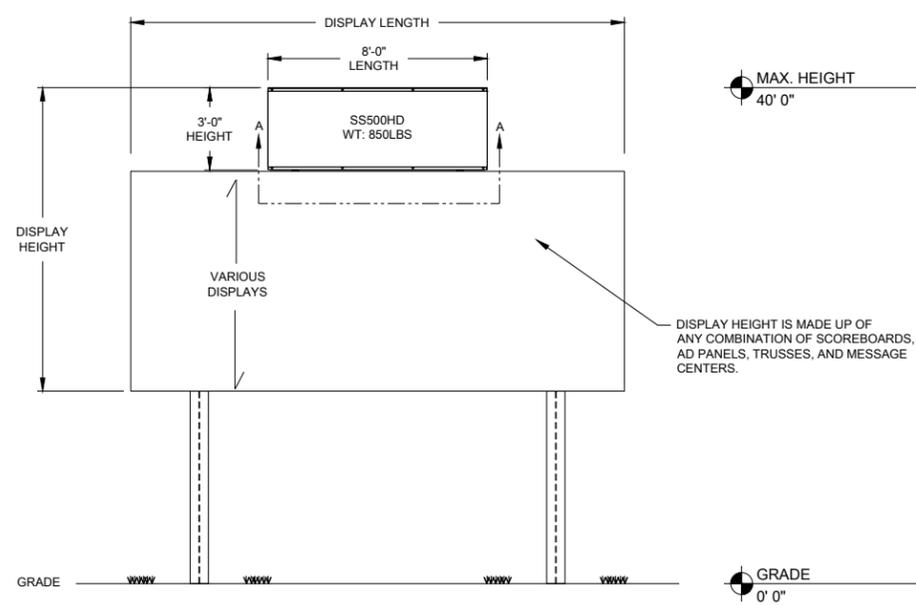
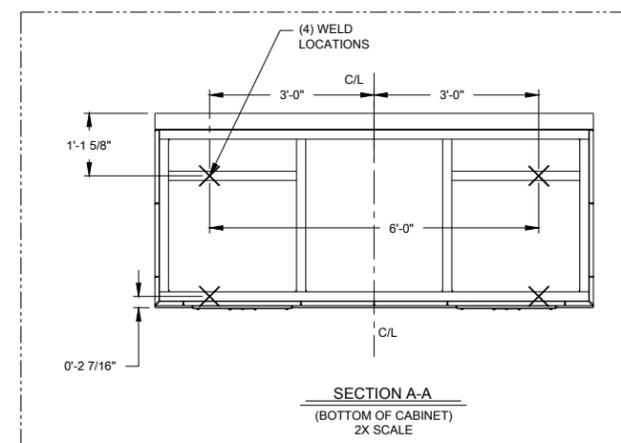
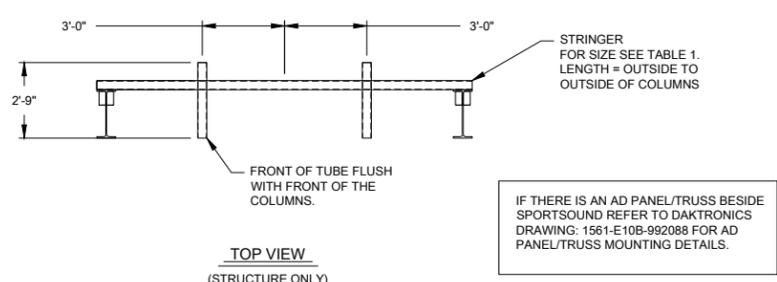
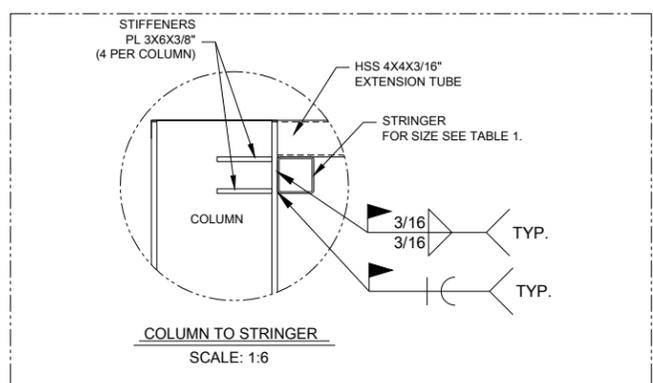
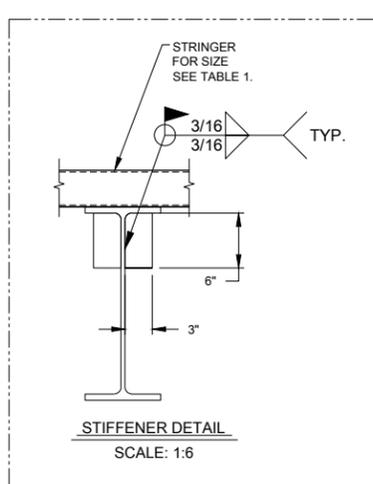
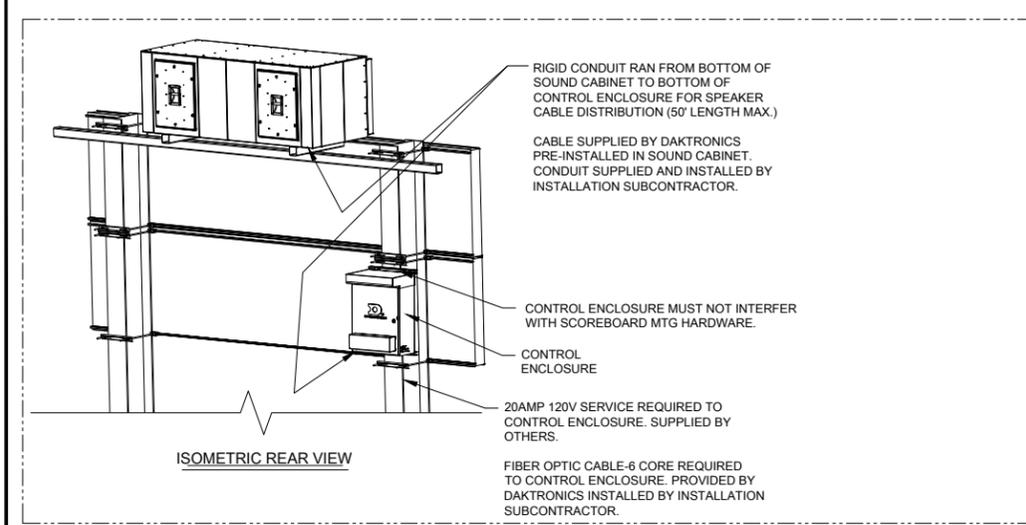


TABLE 1

DISPLAY LENGTH (FT.)	NUMBER OF COLUMNS	COLUMN SPACING (FT.)	STRINGER SIZE			
			DESIGN WIND VELOCITY			
			90 MPH	110 MPH	130 MPH	150 MPH
14	2	9'-0"-11'-0"	HSS4X4X3/16	HSS4X4X3/16	HSS4X4X3/16	HSS4X4X3/16
16	2	8'-0"-10'-0"	HSS4X4X3/16	HSS4X4X3/16	HSS4X4X3/16	HSS4X4X3/16
18	2	11'-0"-13'-0"	HSS4X4X3/16	HSS4X4X3/16	HSS5X5X3/16	HSS5X5X3/16
20	2	12'-0"-14'-0"	HSS4X4X3/16	HSS5X5X3/16	HSS5X5X3/16	HSS5X5X3/16
25	2	14'-0"-16'-0"	HSS4X4X3/16	HSS5X5X3/16	HSS5X5X3/16	HSS5X5X3/16
27	2	14'-6"-16'-6"	HSS4X4X3/16	HSS5X5X3/16	HSS5X5X3/16	HSS6X6X3/16
28	3	9'-6"-11'-6"	HSS4X4X3/16	HSS4X4X3/16	HSS5X5X3/16	HSS5X5X3/16
32	3	10'-6"-12'-6"	HSS4X4X3/16	HSS4X4X3/16	HSS5X5X3/16	HSS5X5X3/16
36	3	12'-0"-14'-0"	HSS4X4X3/16	HSS4X4X3/16	HSS5X5X3/16	HSS6X6X3/16

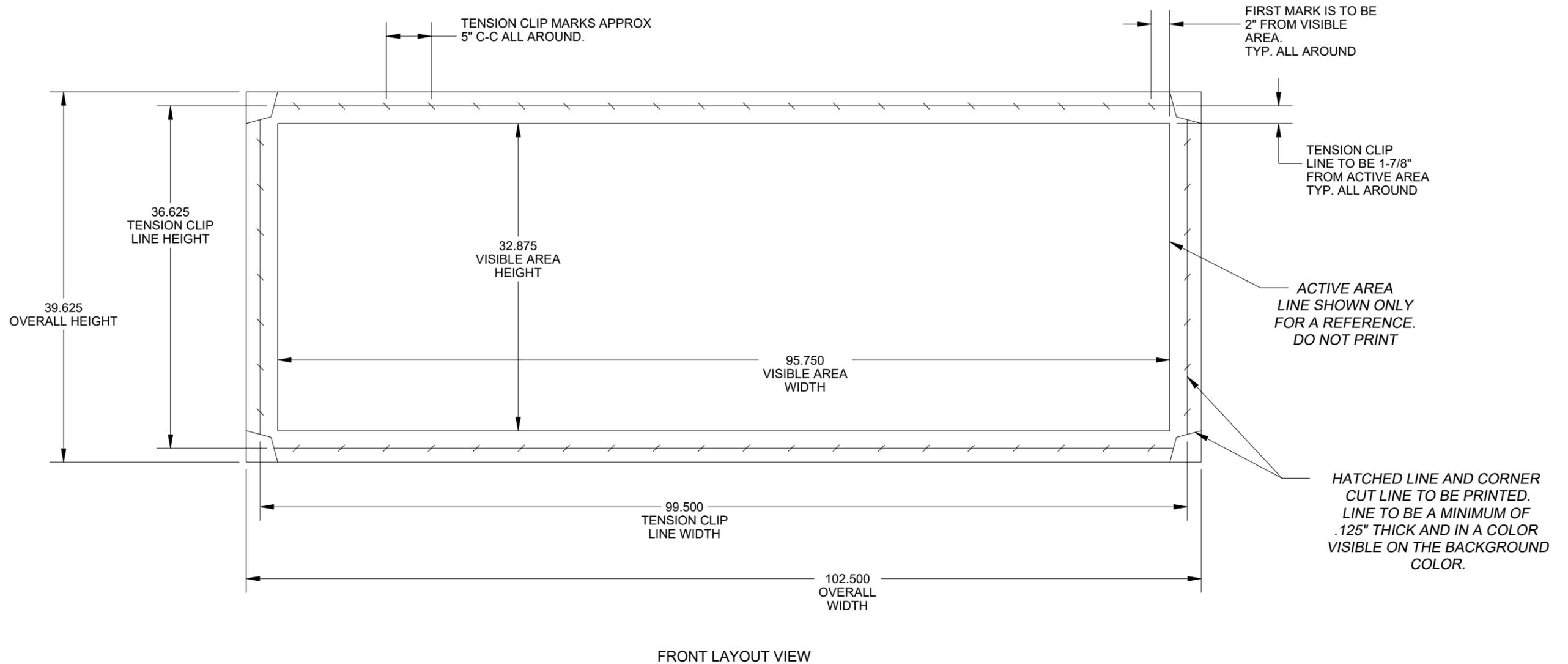


- NOTES:
- 1.0 REFERENCE
 - 1.1 REFER TO DAKTRONICS DRAWING: 1561-E10B-969776 FOR SPORTSOUND 500HD ENGINEERING SPECIFICATIONS.
 - 1.2 REFER TO DAKTRONICS DRAWING: 1561-E10B-992088 FOR SIDE PANEL/TRUSS MOUNTING DETAILS.
 - 1.3 REFER TO DAKTRONICS RISER DIAGRAM FOR ALL ELECTRICAL POWER AND DATA SPECIFICATIONS.
 - 1.4 THE SHOWN SYSTEM IS PROVIDED TO ASSIST WITH ESTIMATING INSTALLATION COSTS AND ARE NOT INTENDED FOR CONSTRUCTION PURPOSES. THE DESIGN MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE INSTALLATION BEFORE THEY CAN BE USED FOR FABRICATION OR ERECTION.
 - 2.0 GENERAL NOTES
 - 2.1 ALL DIMENSIONS ARE IN FEET AND INCHES.
 - 2.2 REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.
 - 3.0 SOUND CABINET NOTES
 - 3.1 DAKTRONICS SOUND CABINET IS STEEL CONSTRUCTED SKELETON WITH ALUMINUM PANELING FASTENED TO ITS EXTERIOR.
 - 3.2 LIFTING POINTS ARE PROVIDED BY DAKTRONICS. WHEN LIFTING USE 45° OR GREATER, FROM THE HORIZON, CABLE SYSTEM. ALIGN LIFT EYES WITH CABLES.
 - 3.3 REMOVE SHIPPING BRACKETS FROM TOP OF CABINET.
 - 3.4 PAINT COLOR: SPEAKER CABINET COLOR: POWDER COAT BLACK.
 - 4.0 STRUCTURAL NOTES
 - 4.1 FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF AISC SPECIFICATIONS.
 - 4.2 ALL WELDING (SHOP AND FIELD) SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1-LATEST EDITION SPECIFICATIONS BY A CERTIFIED WELDER USING E70XX ELECTRODES.
 - 4.3 INTERNATIONAL BUILDING CODE 2006 USED IN DESIGN OF SPORTSOUND CABINET SUPPORT MEMBERS WITH IMPORTANCE FACTOR=1, Kz1=1.0, Kd=0.85, G=0.85, Cf=1.8, z=40ft AND EXPOSURE C. SEISMIC DESIGN WAS NOT CONSIDERED.
 - 4.4 THE DESIGN WIND PRESSURES WERE SHIFTED AND ADJUSTED TO ACCOUNT FOR ASCE 7 PRESCRIBED OFFSET EFFECTS.
 - 4.5 ALL STRUCTURAL STEEL SHALL BE ASTM A36 (36 KSI) EXCEPT:
 - WIDE FLANGE SHALL BE A992 (50 KSI) STEEL
 - TUBING SHALL BE A500-B (46 KSI)
 - 4.6 ALL OPEN TUBE ENDS SHALL BE CAPPED AND WELDED ALL AROUND.



REV	DATE	DESCRIPTION	BY
04	10 APR 13	UPDATED VIEW WITH CONTROL ENCLOSURE TO SHOW UPDATED MOUNTING	LMS
03	12 MAR 12	ADDED 27" DISPLAY TO TABLE 1	KCS
02	7 JUN 11	UPDATED SIDE VIEW	MBJ
01	21 DEC 10	CHANGED 2 STRAND FIBER TO 6 STRAND FIBER	CAB

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DO NOT SCALE DRAWING			
PROJ: DAKTRONICS AUDIO SYSTEMS - SPORTSOUND 500HD			
TITLE: SS500HD MOUNTING W/POLE CLAMP DISPLAYS			
DESIGN: MSHRESTHA	DRAWN: DTREML	DATE: 22 MAR 10	
SCALE: 1/4"=1'			
SHEET	REV	JOB NO.	FUNC-TYPE-SIZE
	04	P1561	E-10-C
			982267



NOTES:

1. OVERALL DIMENSIONS ARE CRITICAL TO +/- 1/8"
2. ALL DIMENSIONS ARE IN INCHES.
3. ACOUSTICAL MESH TO BE SEAMLESS
4. BACKGROUND COLOR SHALL BE PRINTED ON ENTIRE MESH LENGTH AND HEIGHT.
5. ACOUSTICAL MESH TO BE SHIPPED IN TUBE. (DO NOT FOLD MESH)

ACCOUSTICAL MESH SPECIFICATIONS

MATERIAL:	POLYESTER
TENSILE STRENGTH:	270 X 170 LBS/IN (MIN)
FLAME RESISTANCE:	NFPA 701
FINISH:	ACRYLIC OR PVC
OPEN AREA:	30 TO 35%
UV RESISTANCE:	UV RESISTANT INK OR CLEAR COAT

06	11 JAN 23	PER CN-150905; ADDED ACCOUSTICAL MESH SPECIFICATIONS TABLE	SRL
05	11 JUNE 13	MOVED HATCH LINES 1.125" CLOSER TO THE CORNERS PER EC-10967	KCS
04	20 SEP 12	UPDATED NOTES WITH UV COATING AND SEAMLESS REQUIREMENTS.	KCS
03	4 JUN 12	ADDED MESH PART NUMBER AND REV TO DRAWING CHANGED MESH SPEC TO ULTRAMESH SUPREME	KCS
02	27 SEP 10	ADDED CORNER CUT LINES. INCREASED CORNER TICK MARK START DISTANCE FROM 3" TO 5". CHANGED HATCH SPACING TO 5" C-C.	KCS
01	19 APR 10	CHANGED ACTIVE AREA TO HATCH LINE. DISTANCE FROM 1.5 TO 1.25. DECREASED OVERALL SIZE .5" ALL AROUND.	KCS
REV	DATE:		BY:

DAK PART NUMBER: EN-2689

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THIRD ANGLE PROJECTION

PROJECT: **DAKTRONICS AUDIO SYSTEMS**
 TITLE: **MESH LAYOUT; SS500HD**

DATE: 11-JAN-23	DIM UNITS: INCHES [MILLIMETERS]	SHEET 1	REV 06
SCALE: 1/12	DO NOT SCALE DRAWING		
DESIGN: KSCHNABEL	JOB NO. P1561	FUNC - TYPE - SIZE E - 10 - B	983398
DRAWN: KSCHNABEL			

POWER DISTRIBUTION SYSTEM LEGEND

FEEDER TABLE - 2 CONDUCTORS+GND (SEE SPECIFICATIONS FOR INSULATION TYPE)					FEEDER TABLE - 3 CONDUCTORS+GND (SEE SPECIFICATIONS FOR INSULATION TYPE)					FEEDER TABLE - 4 CONDUCTORS+GND (SEE SPECIFICATIONS FOR INSULATION TYPE)				
OVER CURRENT PROTECTION AMPACITY	2 WIRES				OVER CURRENT PROTECTION AMPACITY	3 WIRES				OVER CURRENT PROTECTION AMPACITY	4 WIRES			
	FDR REF	COPPER WIRE AWG-KCML	COPPER GND WIRE AWG	MIN. CONDUIT SIZE		FDR REF	COPPER WIRE AWG-KCML	COPPER GND WIRE AWG	MIN. CONDUIT SIZE		FDR REF	COPPER WIRE AWG-KCML	COPPER GND WIRE AWG	MIN. CONDUIT SIZE
15	A15	(2)14	14	1/2"	15	B15	(3)14	14	1/2"	15	C15	(4)14	14	1/2"
20	A20	(2)12	12	1/2"	20	B20	(3)12	12	1/2"	20	C20	(4)12	12	1/2"
25	A25	(2)10	10	1/2"	25	B25	(3)10	10	1/2"	25	C25	(4)10	10	1/2"
30	A30	(2)10	10	1/2"	30	B30	(3)10	10	1/2"	30	C30	(4)10	10	1/2"
35	A35	(2)8	10	1/2"	35	B35	(3)8	10	3/4"	35	C35	(4)8	10	3/4"
40	A40	(2)8	10	1/2"	40	B40	(3)8	10	3/4"	40	C40	(4)8	10	3/4"
45	A45	(2)8	10	1/2"	45	B45	(3)8	10	3/4"	45	C45	(4)8	10	3/4"
50	A50	(2)8	10	1/2"	50	B50	(3)8	10	3/4"	50	C50	(4)8	10	3/4"
60	A60	(2)6	10	3/4"	60	B60	(3)6	10	3/4"	60	C60	(4)6	10	1"
70	A70	(2)4	8	3/4"	70	B70	(3)4	8	1"	70	C70	(4)4	8	1 1/4"
80	A80	(2)4	8	3/4"	80	B80	(3)4	8	1"	80	C80	(4)4	8	1 1/4"
90	A90	(2)3	8	1"	90	B90	(3)3	8	1"	90	C90	(4)3	8	1 1/4"
100	A100	(2)3	8	1"	100	B100	(3)3	8	1"	100	C100	(4)3	8	1 1/4"
110	A110	(2)2	6	1"	110	B110	(3)2	6	1 1/4"	110	C110	(4)2	6	1 1/4"
125	A125	(2)1	6	1 1/4"	125	B125	(3)1	6	1 1/4"	125	C125	(4)1	6	1 1/2"
150	A150	(2)1/0	6	1 1/4"	150	B150	(3)1/0	6	1 1/2"	150	C150	(4)1/0	6	1 1/2"
175	A175	(2)2/0	6	1 1/4"	175	B175	(3)2/0	6	1 1/2"	175	C175	(4)2/0	6	2"
200	A200	(2)3/0	6	1 1/2"	200	B200	(3)3/0	6	2"	200	C200	(4)3/0	6	2"
					225	B225	(3)4/0	4	2"	225	C225	(4)4/0	4	2 1/2"
					250	B250	(3)250	4	2"	250	C250	(4)250	4	2 1/2"
					300	B300	(3)350	4	2 1/2"	300	C300	(4)350	4	3"
					350	B350	(3)400	3	2 1/2"	350	C350	(4)400	3	3"
					400	B400	(3)600	3	3"	400	C400	(4)600	3	3 1/2"
										450	C450	(8)4/0	(2)2	(2) 2 1/2"
										500	C500	(8)250	(2)2	(2) 2 1/2"
										600	C600	(8)350	(2)1	(2) 3"
										800	C800	(8)600	(2)1/0	(2) 3 1/2"
										1000	C1000	(16)250	(4)2/0	(4) 2 1/2"
										1200	C1200	(12)600	(3)3/0	(3) 3 1/2"
										1600	C1600	(16)600	(4)4/0	(4) 3 1/2"
										2000	C2000	(20)600	(5)250	(5) 3 1/2"
										2500	C2500	(40)250	(10)350	(10)3"
										3000	C3000	(48)250	(12)400	(12)3"
										4000	C4000	(40)600	(10)500	(10) 4"

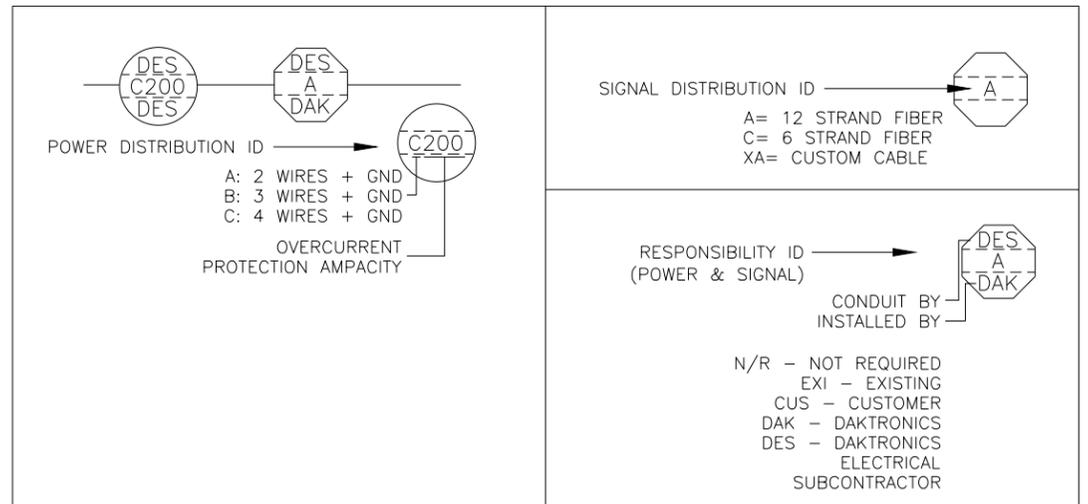
- NOTES:
- A. CONDUIT SIZES ARE MINIMUM; INCREASE FOR LONG OR DIFFICULT RUNS.
 - B. ABOVE 86 F AMBIENT INCREASE WIRE SIZE PER NEC.
 - C. CONDUIT AND CONDUCTOR SIZES ARE BASED ON 90° TYPE THHN COPPER CURRENT CARRYING CONDUCTORS IN RIGID PVC (SCH. 40) CONDUIT, TERMINATING TO 75°C TERMINALS. CONDUIT AND CONDUCTOR SIZES MAY NEED TO BE INCREASED PER LOCAL AND NATIONAL ELECTRIC CODES IF OTHER CONDUCTOR OR CONDUIT TYPES ARE USED.
 - D. IF WIRE OR CONDUIT SIZES OTHER THAN THOSE SHOWN IN THESE CHARTS ARE TO BE USED, CONTACT A DAKTRONICS ELECTRICAL ENGINEERING REPRESENTATIVE.

- NOTES:
- THE FOLLOWING 200 SERIES ARE NOT SCALED DRAWINGS AND SHOULD BE USED FOR POWER AND SIGNAL REQUIREMENTS ONLY.
 - IT IS THE RESPONSIBILITY OF DAKTRONICS ELECTRICAL INSTALLATION CONTRACTOR TO ENSURE THAT ALL ELECTRICAL WORK PERFORMED ON SITE MEETS OR EXCEEDS ALL LOCAL AND NATIONAL ELECTRICAL CODES.
 - ALL SIGNAL CABLE RUNS SHOULD BE LABELED WITH THEIR ORIGIN AND DESTINATION ON EACH END.
 - FIBER OPTIC CABLE RUNS MUST BE CONTINUOUS WITH A MINIMUM BEND RADIUS OF 15XO.D. OF THE FIBER CABLE.
 - IF A SHIELDED SIGNAL CABLE IS UTILIZED IN YOUR SYSTEM, ENSURE THAT THE CABLES SHIELD IS GROUNDED ON THE DISPLAY END ONLY, AND TO THE SHIELD TERMINAL AT THE SIGNAL CABLE SURGE ARRESTER CARD WHEN AVAILABLE.
 - ALL DISPLAYS MUST BE GROUNDED PER ARTICLE 250 AND 600 OF THE NATIONAL ELECTRICAL CODE WITH NO MORE THAN 10 OHMS GROUND RESISTANCE.
 - POWER CONTROL FOR DAKTRONICS SUPPLIED EQUIPMENT IS NOT PROVIDED BY DAKTRONICS UNLESS IT IS SPECIFICALLY NOTED IN THE CONTRACTUAL AGREEMENT.
 - THE OVER CURRENT PROTECTION DEVICE MUST BE MATCHED TO THE FAULT CURRENT THAT IS AVAILABLE IN THE POWER DELIVERY CIRCUIT. TO DETERMINE THE AVAILABLE FAULT CURRENT OF A SITE, AN ONSITE FAULT CURRENT SURVEY MAY NEED TO BE PERFORMED BY QUALIFIED PERSONNEL. IF THE AVAILABLE FAULT CURRENT IN THE ELECTRICAL SYSTEM EXCEEDS 10,000 AMPS, A DAKTRONICS REPRESENTATIVE SHOULD BE CONTACTED.
 - DUE TO THE INRUSH CURRENT (MOMENTARY SURGE) CREATED BY THE DISPLAY EQUIPMENT ON STARTUP, THE OVER CURRENT PROTECTION DEVICE(S) MAY HAVE TO BE OVERSIZED.
 - DAKTRONICS UTILIZES BOTH STANDARD AND SUPPLEMENTARY CIRCUIT BREAKERS IN THE DISPLAY ASSEMBLY PROCESS. IT IS DAKTRONICS ELECTRICAL INSTALLATION CONTRACTORS RESPONSIBILITY TO ENSURE THAT ALL PRIMARY FEEDER CIRCUIT BREAKERS TO EACH DISPLAY/DISPLAY SECTION ARE UL 489 LISTED.
 - DAKTRONICS IS NOT RESPONSIBLE FOR THE QUALITY OF THE POWER DELIVERY SYSTEM TO THE DISPLAY SYSTEM.
 - BECAUSE EACH INSTALLATION IS UNIQUE, DAKTRONICS OFFERS THESE INSTRUCTIONS AS GUIDELINES ONLY. DAKTRONICS, INC. ASSUMES NO LIABILITY IF INSTALLATION STEPS HAVE BEEN OMITTED OR OTHER NECESSARY PROCEDURES ARE NOT INCLUDED IN THIS SYSTEM RISER DIAGRAM.
 - POWER AND SIGNAL REQUIREMENTS ARE SPECIFIED TO THE EQUIPMENT AND SETUP SHOWN. ANY CHANGES MADE TO EQUIPMENT OR THEIR SETUP SHOULD BE DISCUSSED WITH DAKTRONICS DESIGN PERSONNEL AND WILL REQUIRE AN UPDATED RISER DIAGRAM DRAWING.
 - THE CONTRACTUAL AGREEMENT WILL DETERMINE THE PARTY OR PARTIES RESPONSIBLE FOR ITEMS LISTED AS FIELD INSTALLED. THIS DRAWING IS NOT INTENDED TO DETERMINE RESPONSIBILITIES AND SHOULD BE USED FOR REFERENCES ONLY.
 - ACTUAL PLACEMENT OF ELECTRICAL COMPONENTS, SUCH AS PANEL BOARDS, A/C'S, AND SPLICE PANELS, MAY VARY. PLEASE REFERENCE THE SYSTEM SHOP DRAWING FOR THIS DETAIL. THIS DRAWING REPRESENTS A GENERAL MOUNTING LOCATION ONLY.

EXTERNALLY MOUNTED HARDWARE
INTERNALLY MOUNTED HARDWARE

SIGNAL DISTRIBUTION SYSTEM LEGEND

ID TAG	CABLE TYPE	SIZE (O.D.)	DAKTRONICS PART NUMBER	CONDUIT PROVIDED & INSTALLED BY	CABLE			USED ON
					PROVIDED BY	INSTALLED BY	TERMINATED BY	
A	12 STRAND, 50µm DX FIBER	0.26"	W-1490	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
B	12 STRAND, 50µm DX PLEN FBR	0.29"	W-2033	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
C	6 STRAND, 50µm DX FIBER	0.22"	W-1489	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
D	6 STRAND, 50µm PLEN DX FBR	0.24"	W-2032	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
E	4 STRAND, 50µm DX FIBER	0.20"	W-2121	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
F	4 STRAND, 50µm BX FIBER	0.31"	W-1494	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
G	2 STRAND, 50µm DX FIBER	0.18"	W-2120	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
H	6 STRAND, 62.5µm DX FIBER	0.22"	W-1456	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
J	6 PAIR, 22 AWG W/SHIELD	0.362"	W-1245	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
K	6 PAIR, 22 AWG PLENUM	0.30"	W-2035	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
L	2 PAIR, 22 AWG W/SHIELD	0.168"	W-1234	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
M	2 PAIR, 22 AWG PLENUM	0.14"	W-2034	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
N	AUDIO; 2 PAIR, 22 AWG	0.22"	W-1614	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
P	AUDIO; 1 PAIR, 22 AWG	0.17"	W-1615	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
R	2 PAIR, 18 AWG W/SHIELD	0.38"	W-1852	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
S	4 PAIR, 24 AWG CAT5E	0.21"	W-1384	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
T	4 PAIR, 24 AWG CAT5	0.26"	W-1467	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
U	1 PAIR 22 AWG W/SHIELD	0.138"	W-1077	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
XA	RG59 LOW LOSS ANT CABLE	-	W-2476	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	NOT USED
XB	25' MICROPHONE CABLE	-	W-1560	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	
XC	500HD SPEAKER HARNESS	-	W-2317	SEE TAG	DAKTRONICS	SEE TAG	DES	
XD	25' MIXER HARNESS	-	W-1950	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	
XE	50' MIXER HARNESS	-	W-1951	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	
XF	50' FIBER PATCH CORD	-	W-1512	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	
XG	6' 1/4" TRS TO MALE XLR	-	W-2296	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	
XA-Z	OTHER W OR PR CABLES	-	W OR PR	SEE TAG	DAKTRONICS	SEE TAG	DAKTRONICS	



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PROJ:SPORTSOUND SYSTEMS;
TITLE:SYSTEM RISER; ELECTRICAL & AUDIO NOTES
DESIGN:ALICHT DRAWN:ALICHT DATE: 10 MAR 10
SCALE:NONE

REV 03	DATE: 06 JUN 12	ADDED ID TAG XF-XG	BY: JWC
REV 02	DATE: 28 JAN 11	UPDATE DWG TO NEW TITLE BLOCK	BY: AMS
REV 01	DATE: 24 JAN 11	UPDATE PART NUMBER FOR 500HD HARNESS	BY: AMS

SHEET	REV	JOB NO:	FUNC-TYPE-SIZE
	03	P1561	F-01-B

985713

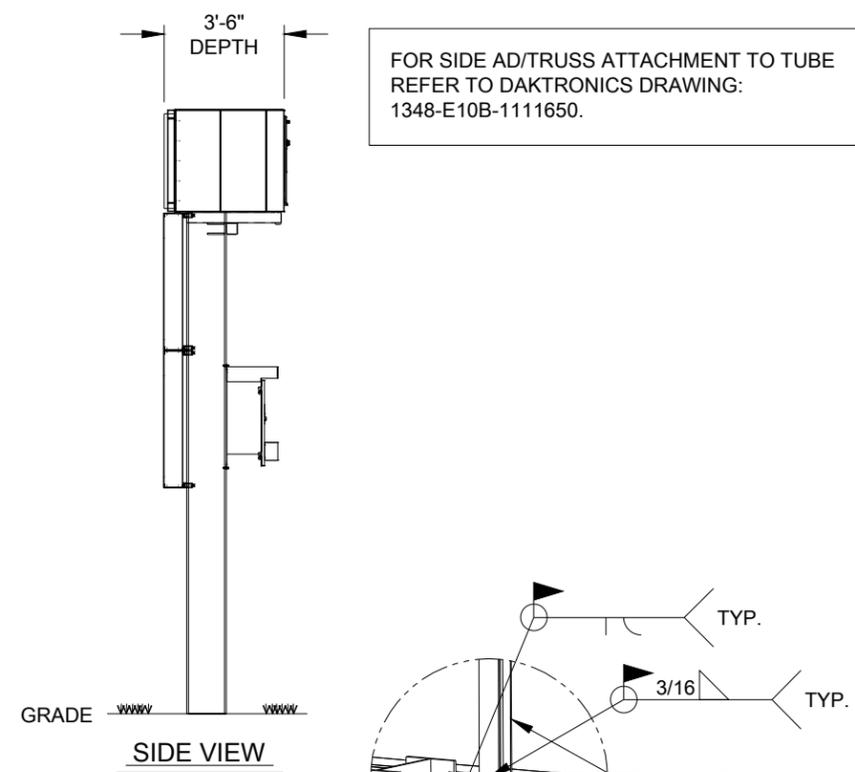
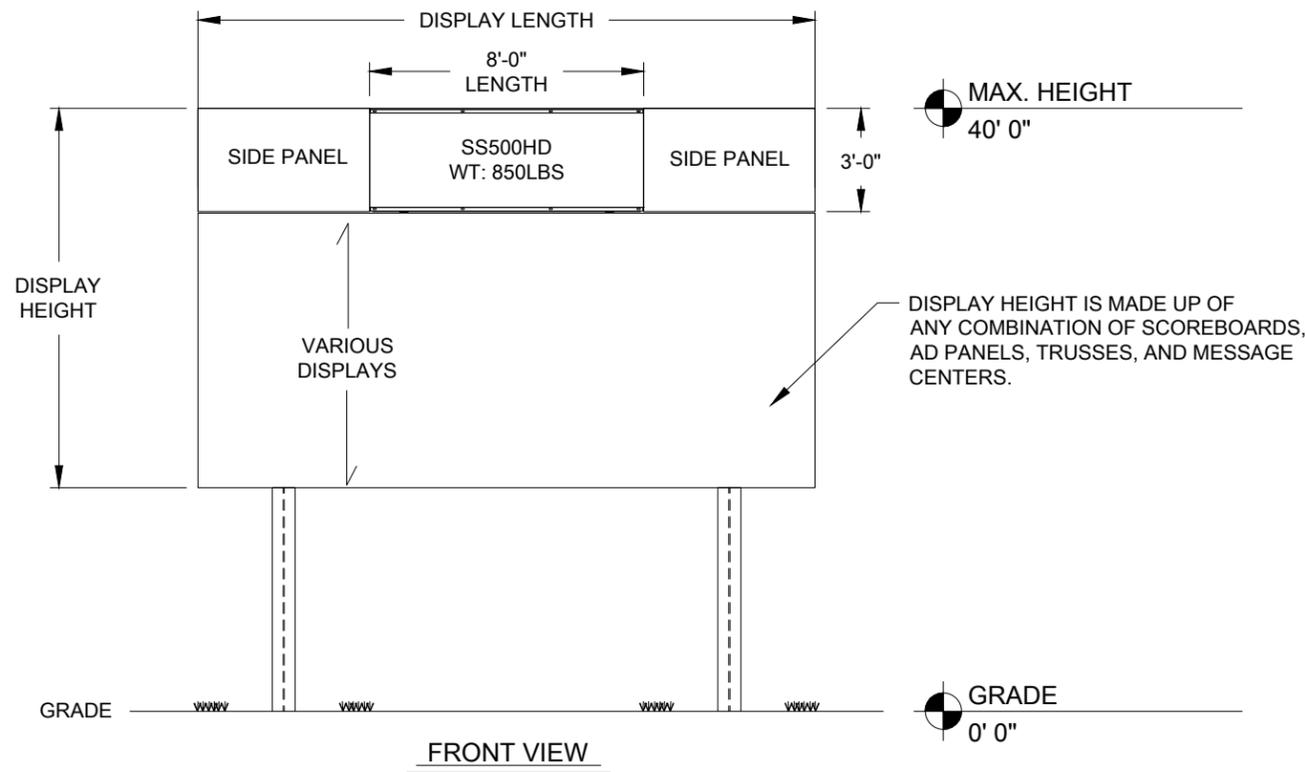
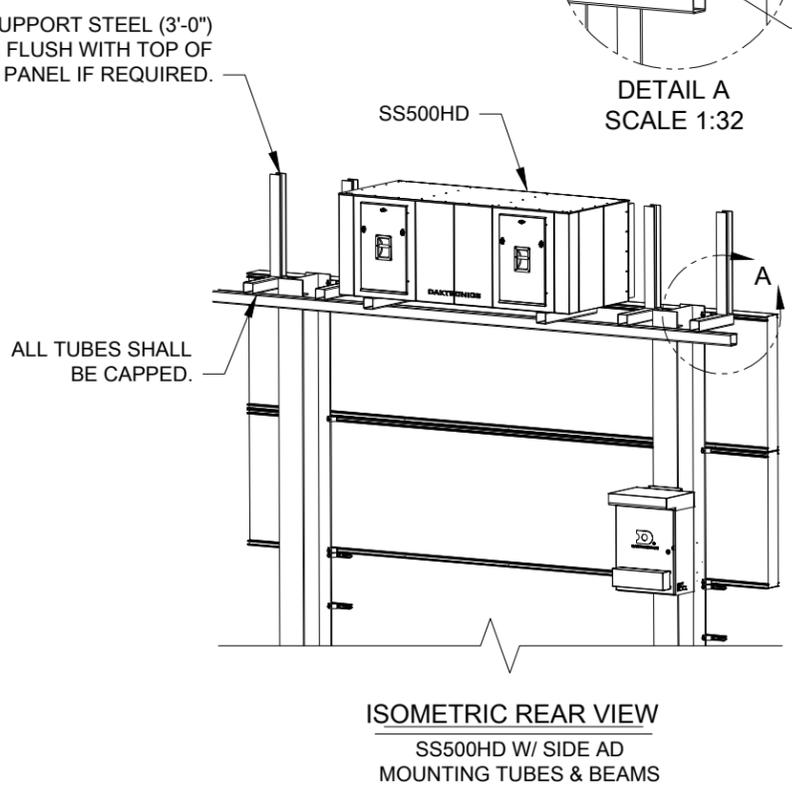
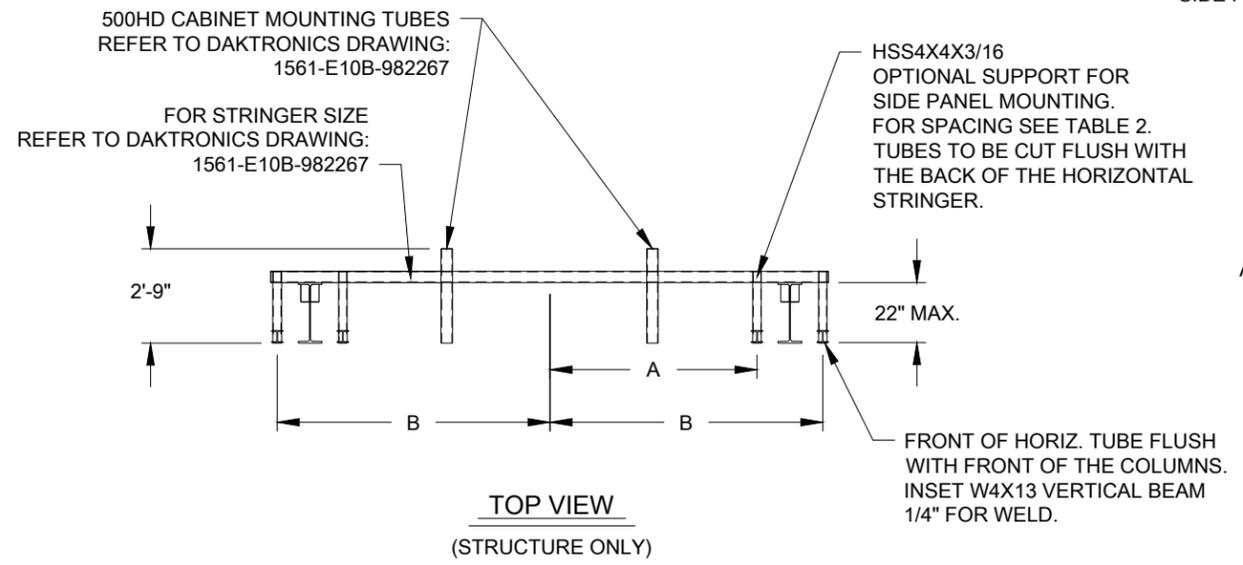


TABLE 2

DISPLAY LENGTH (FT.)	A (FT)	B (FT)	STRINGER LENGTH
14	4'-9"	6'-3"	12'-11"
16	5'-0"	7'-0"	14'-5"
18	5'-3"	7'-9"	15'-11"
20	5'-6"	8'-6"	17'-5"
25	6'-10"	9'-8"	19'-9"
27	7'-2"	10'-4"	21'-1"
28	7'-4"	10'-8"	21'-9"
32	7'-0"	13'-0"	26'-5"
36	6'-10"	15'-4"	31'-1"

- NOTES:
- REFERENCE
 - REFER TO DAKTRONICS DRAWING: 1561-E10B-969776 FOR SPORTSOUND 500HD ENGINEERING SPECIFICATIONS.
 - REFER TO DAKTRONICS DRAWING: 1561-E10C-982267 FOR SPORTSOUND 500HD MOUNTING DETAILS AND RECOMMENDED STRINGER SIZE.
 - REFER TO DAKTRONICS RISER DIAGRAM FOR ALL ELECTRICAL POWER AND DATA SPECIFICATIONS.
 - THE SHOWN SYSTEM IS PROVIDED TO ASSIST WITH ESTIMATING INSTALLATION COSTS AND ARE NOT INTENDED FOR CONSTRUCTION PURPOSES. THE DESIGN MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE INSTALLATION BEFORE THEY CAN BE USED FOR FABRICATION OR ERECTION.
- 2.0 GENERAL NOTES
- ALL DIMENSIONS ARE IN FEET AND INCHES.
 - REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.
- 3.0 SOUND CABINET NOTES
- DAKTRONICS SOUND CABINET IS STEEL CONSTRUCTED SKELETON WITH ALUMINUM PANELING FASTENED TO ITS EXTERIOR.
 - LIFTING POINTS ARE PROVIDED BY DAKTRONICS. WHEN LIFTING USE 45° OR GREATER, FROM THE HORIZON, CABLE SYSTEM. ALIGN LIFT EYES WITH CABLES.
 - REMOVE SHIPPING BRACKETS FROM TOP OF CABINET. 3.4 PAINT COLOR: SPEAKER CABINET COLOR: POWDER COAT BLACK.
- 4.0 STRUCTURAL NOTES
- FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF AISC SPECIFICATIONS.
 - ALL WELDING (SHOP AND FIELD) SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1-LATEST EDITION SPECIFICATIONS BY A CERTIFIED WELDER USING E70XX ELECTRODES.
 - INTERNATIONAL BUILDING CODE 2006 USED IN DESIGN OF SPORTSOUND CABINET SUPPORT MEMBERS WITH, IMPORTANCE FACTOR=1, Kzt=1.0, Kd=0.85, G=0.85, Cf=1.8, z=40ft AND EXPOSURE C. SEISMIC DESIGN WAS NOT CONSIDERED.
 - THE DESIGN WIND PRESSURES WERE SHIFTED AND ADJUSTED TO ACCOUNT FOR ASCE 7 PRESCRIBED OFFSET EFFECTS.
 - ALL STRUCTURAL STEEL SHALL BE ASTM A36 (36 KSI) EXCEPT:
 - WIDE FLANGE SHALL BE A992 (50 KSI) STEEL
 - TUBING SHALL BE A500-B (46 KSI)
 - ALL OPEN TUBE ENDS SHALL BE CAPPED AND WELDED ALL AROUND.



REV	DATE	DESCRIPTION	BY
04	23 JAN 13	MADE OPTIONAL SUPPORT TUBES FOR AD PANELS FLUSH WITH THE REAR OF THE HORIZ STRINGER	KCS
03	23 APR 12	REPLACED HSS VERT TUBES WITH W4X13 FOR AD PANEL MOUNTING	JLR
02	10 FEB 12	ADDED 27' DISPLAY TO TABLE	KCS
01	9 JUN 11	UPDATED SIDE VIEW	MBJ

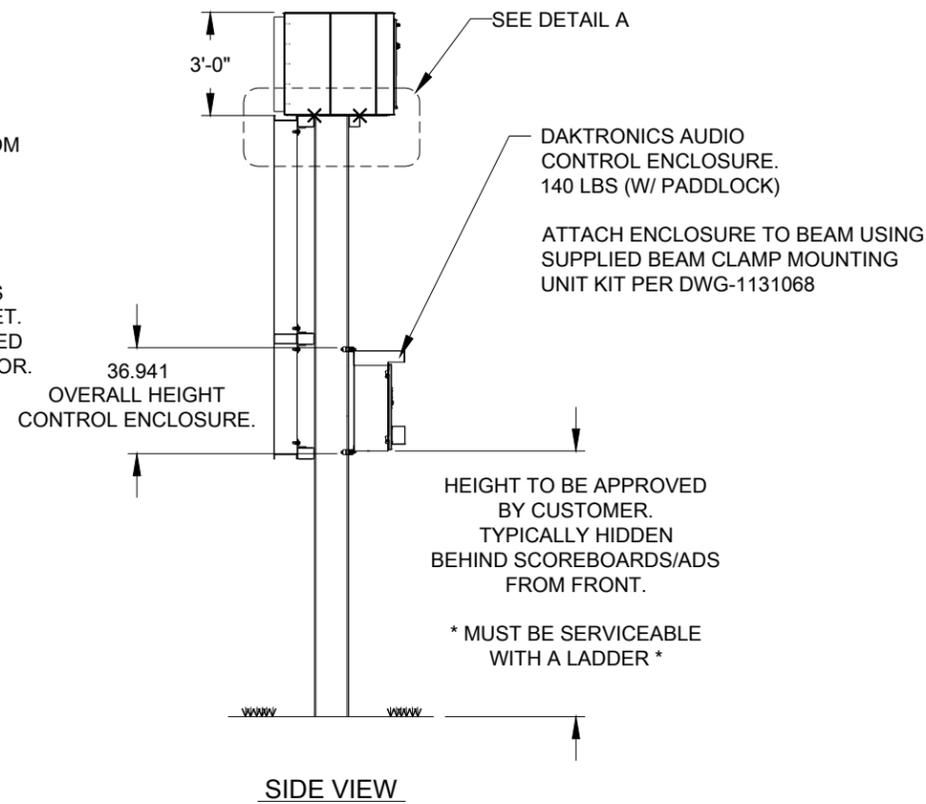
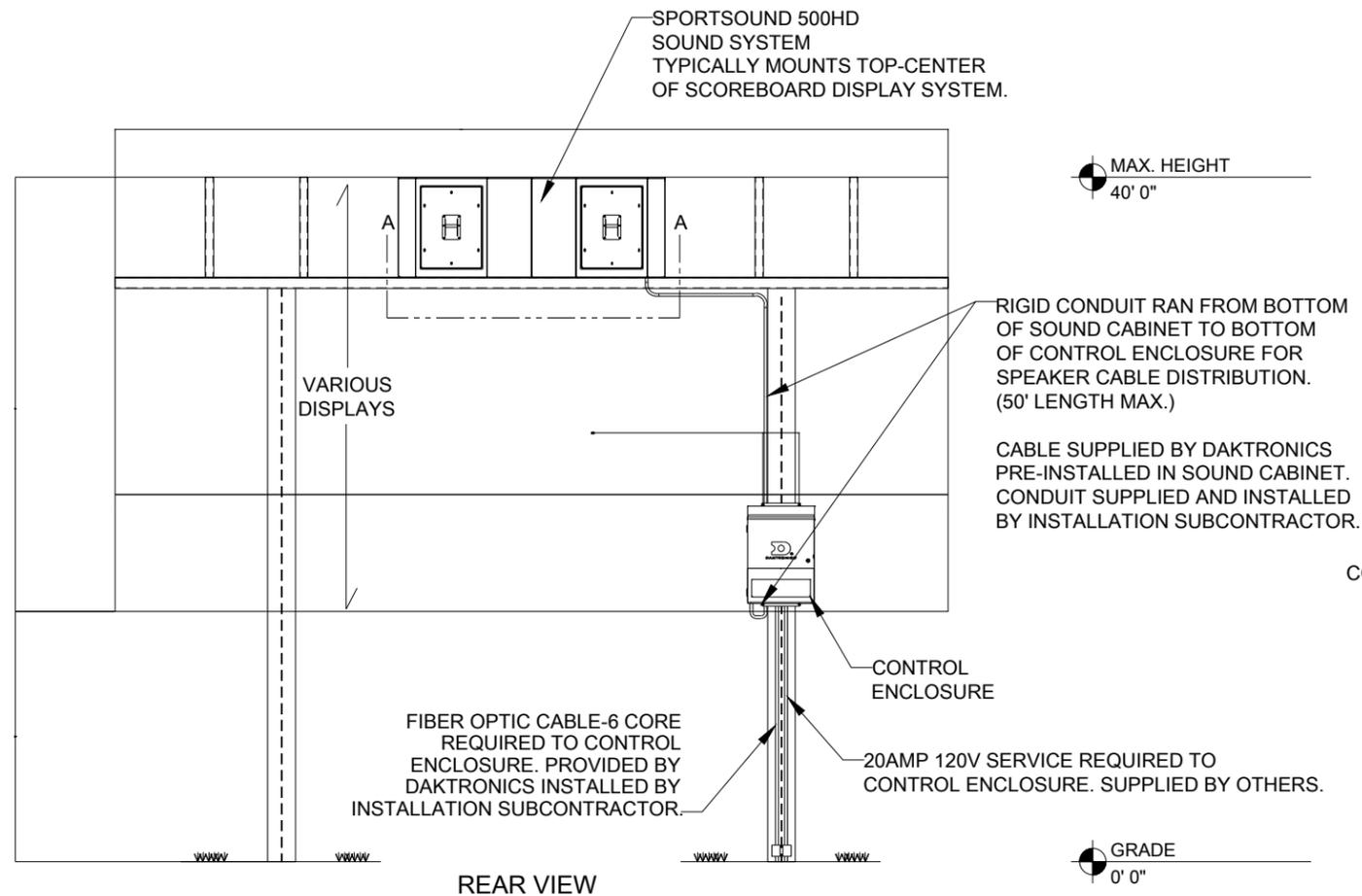
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PROJ: DAKTRONICS AUDIO SYSTEMS - SPORTSOUND 500HD
TITLE: SIDE PANEL MOUNTING DETAILS W/ SS500HD
DESIGN: MSHRESTHA DRAWN: DTREML DATE: 22 MAR 10
SCALE: 3/16"=1'

SHEET	REV	JOB NO.	FUNC - TYPE - SIZE
	04	P1561	E - 10 - B

992088



NOTES:

1.0 REFERENCE

- 1.1 REFER TO DAKTRONICS DRAWING: 1561-E10B-969776 FOR SPORTSOUND 500HD ENGINEERING SPECIFICATIONS.
- 1.2 REFER TO DAKTRONICS RISER DIAGRAM FOR ALL ELECTRICAL POWER AND DATA SPECIFICATIONS.
- 1.3 THE SHOWN SYSTEM IS PROVIDED TO ASSIST WITH ESTIMATING INSTALLATION COSTS AND ARE NOT INTENDED FOR CONSTRUCTION PURPOSES. THE DESIGN MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE INSTALLATION BEFORE THEY CAN BE USED FOR FABRICATION OR ERECTION.

2.0 GENERAL NOTES

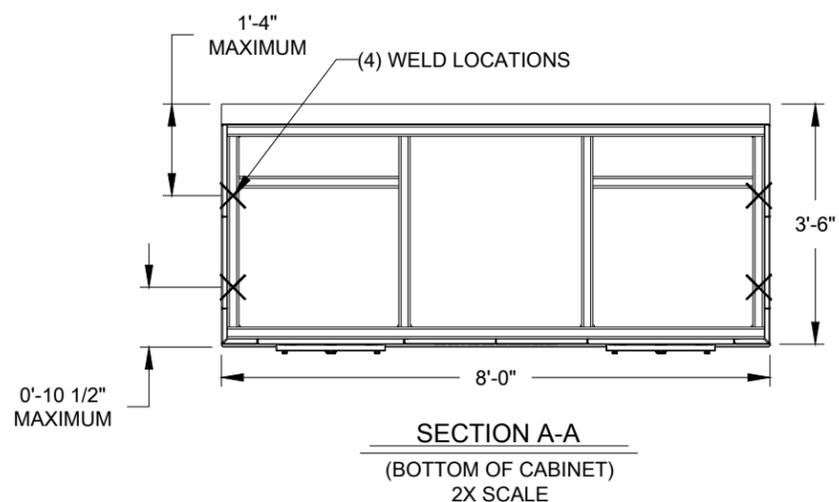
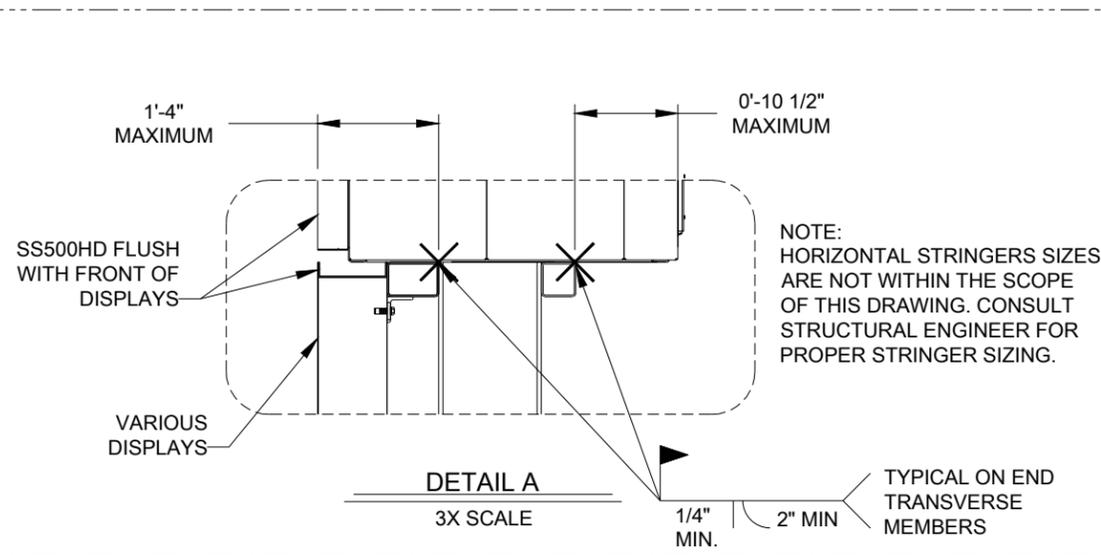
- 2.1 ALL DIMENSIONS ARE IN FEET AND INCHES.
- 2.2 REFER TO INSTALLATION AND MAINTENANCE MANUAL FOR COMPLETE INSTALLATION INSTRUCTIONS.

3.0 SOUND CABINET NOTES

- 3.1 DAKTRONICS SOUND CABINET IS STEEL CONSTRUCTED SKELETON WITH ALUMINUM PANELING FASTENED TO ITS EXTERIOR.
- 3.2 LIFTING POINTS ARE PROVIDED BY DAKTRONICS. WHEN LIFTING USE 45° OR GREATER, FROM THE HORIZON, CABLE SYSTEM. ALIGN LIFT EYES WITH CABLES.
- 3.3 REMOVE SHIPPING BRACKETS FROM TOP OF CABINET.
- 3.4 PAINT COLOR: SPEAKER CABINET COLOR: POWDER COAT BLACK.

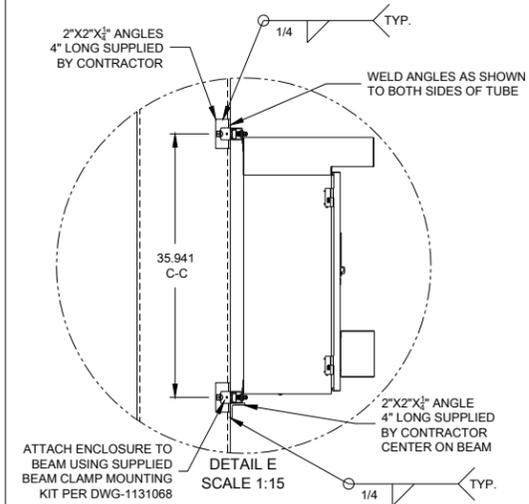
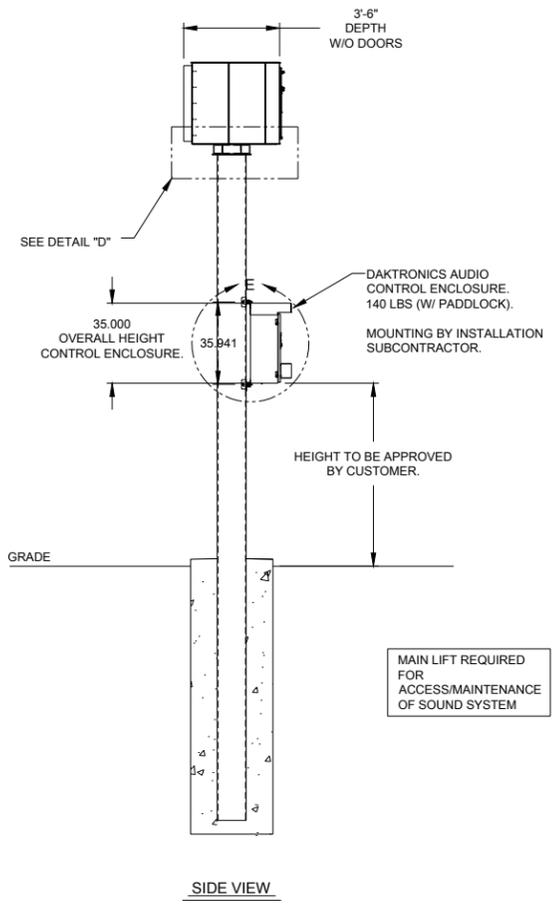
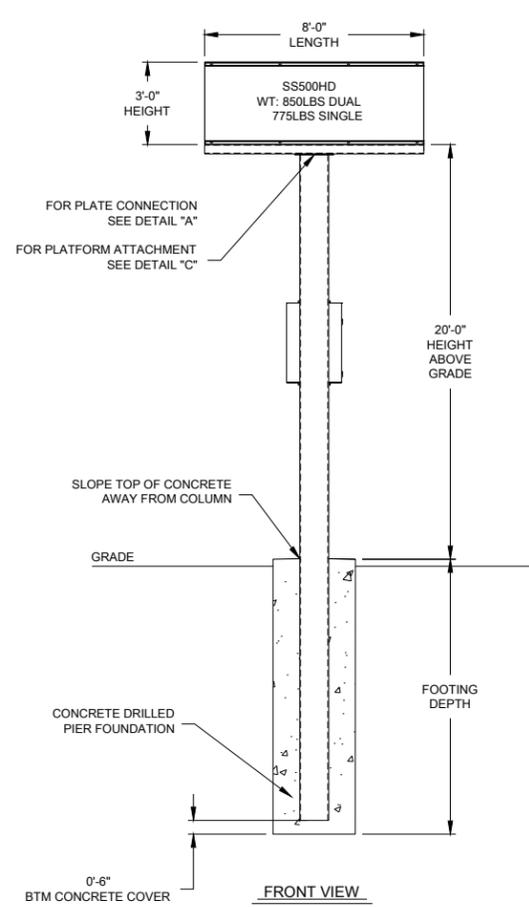
4.0 STRUCTURAL NOTES

- 4.1 FABRICATION AND ERECTION SHALL CONFORM TO THE LATEST EDITION OF AISC SPECIFICATIONS.
- 4.2 ALL WELDING (SHOP AND FIELD) SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1-LATEST EDITION SPECIFICATIONS BY A CERTIFIED WELDER USING E70XX ELECTRODES.
- 4.3 ALL STRUCTURAL STEEL SHALL BE ASTM A36 (36 KSI) EXCEPT:
 - WIDE FLANGE SHALL BE A992 (50 KSI) STEEL
 - TUBING SHALL BE A500-B (46 KSI)
- 4.4 ALL OPEN TUBE ENDS SHALL BE CAPPED AND WELDED ALL AROUND.



DAKTRONICS, INC. BROOKINGS, SD 57006 DO NOT SCALE DRAWING		THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN CONSENT OF DAKTRONICS, INC. COPYRIGHT 2010 DAKTRONICS, INC.	
PROJ: DAKTRONICS AUDIO SYSTEMS - SPORTSOUND 500HD			
TITLE: SS500HD MOUNTING; W/ STRINGER MOUNTED DISPLAYS			
DESIGN: DTREML	DRAWN: DTREML	DATE: 22 MAR 10	
SCALE: 3/16"=1'			
SHEET	REV	JOB NO:	FUNC - TYPE - SIZE
	03	P1561	E - 10 - B
			992093

REV	DATE	DESCRIPTION	BY
03	10 APR 13	UPDATED VIEW WITH CONTROL ENCLOSURE TO SHOW UPDATED MOUNTING	LMG
02	9 JUN 11	UPDATED SIDE & BTM VIEWS	MBJ
01	3 JAN 11	CHANGED FIBER CORE COUNT FROM 2 TO 6	DCS



FINISH:
PRIME ALL STEEL WITH EPOXY BASE PRIMER.

PAINT ALL STEEL PER PROJECT SPECIFICATION. CONTACT DAKTRONICS PROJECT MANAGER FOR PAINT SPECIFICATION.

COLUMN LENGTH CALCULATION	
HEIGHT ABOVE GRADE	+
FOOTING DEPTH	+
BTM CONCRETE COVER	- 0.5'
STEEL PLATFORM	- .33'
TOTAL COLUMN LENGTH	

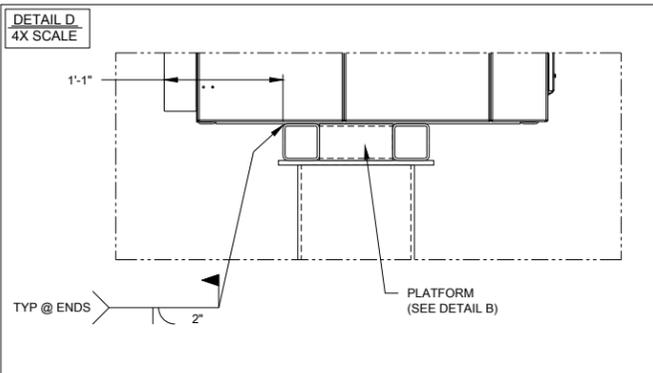
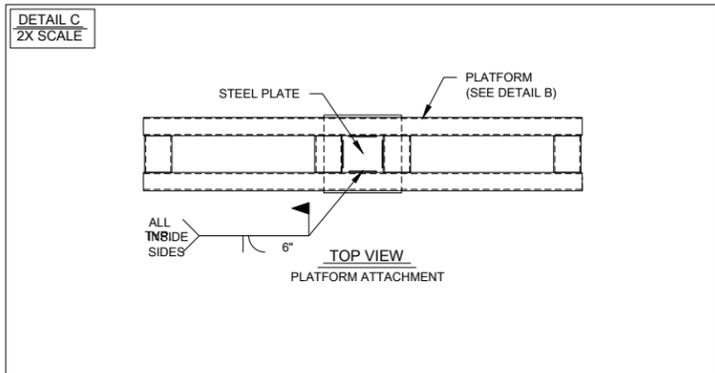
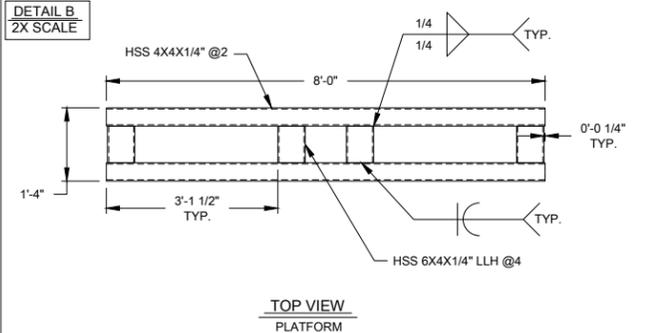
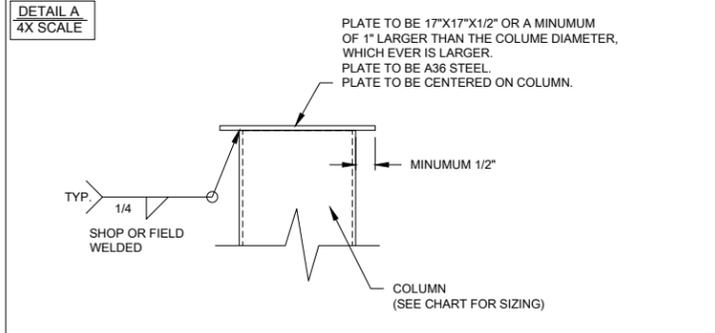
NOTE:
REFER TO NOTE 1.6 FOR EXPOSURE CATEGORY DEFINITIONS.

EXPOSURE B HEIGHT ABOVE GRADE (FT)	DESIGN WIND VELOCITY			
	WIND SPEED (MPH)	COLUMN (PIPE)	FOOTING SIZE (FT)	WIND PRESSURE (PSF)
20	90	STD. 8	3' X 5'-6"	17.71
	110	STD. 8	3' X 6"	26.45
	130	STD. 8	3' X 7"	36.94
	150	STD. 10	3' X 7'-6"	49.18
30	90	STD. 8	3' X 6"	19.63
	110	STD. 10	3' X 7'-6"	29.32
	130	STD. 10	3' X 8"	40.96
	150	STD. 12	3' X 9"	54.53
40	90	STD. 10	3' X 7"	21.17
	110	STD. 10	3' X 8'-6"	31.63
	130	STD. 12	3' X 9'-6"	44.17
	150	16 X 3/8"	3' X 10'-6"	58.81

EXPOSURE C HEIGHT ABOVE GRADE (FT)	DESIGN WIND VELOCITY			
	WIND SPEED (MPH)	COLUMN (PIPE)	FOOTING SIZE (FT)	WIND PRESSURE (PSF)
20	90	STD. 8	3' X 6"	25.3
	110	STD. 8	3' X 7"	37.8
	130	STD. 10	3' X 8"	52.8
	150	STD. 10	3' X 8'-6"	70.4
30	90	STD. 10	3' X 7"	27.3
	110	STD. 10	3' X 8'-6"	40.8
	130	STD. 12	3' X 9'-6"	57.0
	150	14 X 3/8"	3' X 10'-6"	75.9
40	90	STD. 10	3' X 8"	28.9
	110	STD. 12	3' X 9'-6"	43.2
	130	16 X 3/8"	3' X 11"	60.3
	150	18 X 3/8"	3' X 12'-6"	80.3

COLUMN DIMENSIONS = DIAMETER X THICKNESS
FOOTING DIMENSIONS = DIAMETER X DEPTH

- NOTES:**
- 1.0 STRUCTURAL NOTES
 - 1.1 FOOTING AND COLUMN SIZES ARE SUGGESTIONS ONLY. PROVIDED TO ASSIST WITH ESTIMATING INSTALLATION COSTS AND ARE NOT INTENDED FOR FINAL CONSTRUCTION PLANS. THE DESIGN MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE INSTALLATION BEFORE THEY CAN BE USED FOR FABRICATION OR ERECTION. REFER TO SCOPE OF WORK FOR SUBCONTRACTOR RESPONSIBILITIES.
 - 1.2 INTERNATIONAL BUILDING CODE 2006 USED IN DESIGN OF COLUMNS AND FOOTINGS WITH IMPORTANCE FACTOR=1, Kz=1.0, Kd=0.85, G=0.85. SEISMIC DESIGN WAS NOT CONSIDERED.
 - 1.3 FOOTING DIMENSIONS ARE BASED ON ASSUMED SOIL CLASS 4 (ALLOWABLE LATERAL BEARING PRESSURE OF 150 psf).
 - 1.4 ALL STRUCTURAL STEEL SHALL BE ASTM A36 (36KSI) EXCEPT:
 - ROUND PIPE SHALL BE GRADE A53 (35 KSI) STEEL
 - TUBING SHALL BE A500-B (46 KSI)
 - 1.5 CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2500 psi.
 - 1.6 LOCAL BUILDING OFFICIALS SHOULD BE CONTACTED TO DETERMINE THE WIND SPEED AND EXPOSURE CATEGORY FOR THE PROPOSED SIGN LOCATION. THE EXPOSURE CATEGORIES B AND C ARE DEFINED AS:
 - EXPOSURE B - URBAN AND SUBURBAN AREAS, WOODED AREAS, OR OTHER TERRAIN WITH NUMEROUS CLOSELY SPACED OBSTRUCTIONS HAVING THE SIZE OF SINGLE-FAMILY DWELLINGS OR LARGER. THESE CONDITIONS MUST PREVAIL FOR A DISTANCE FROM THE SIGN OF AT LEAST 2,600 FT OR 20 TIMES THE SIGN HEIGHT, WHICHEVER IS GREATER
 - EXPOSURE C - OPEN TERRAIN WITH SCATTERED OBSTRUCTIONS HAVING HEIGHTS GENERALLY LESS THAN 30 FT. THIS CATEGORY INCLUDES FLAT OPEN COUNTRY, GRASSLANDS, AND ALL WATER SURFACES IN HURRICANE PRONE REGIONS.
 - 1.7 REFER TO THE FOLLOWING DRAWINGS FOR FUTHER DETAILS:
 - DWG-969776 500HD SHOP DRAWING
 - DWG-980598 500HD SYSTEM RISER
 - 2.0 WELDING NOTES
 - 2.1 ALL WELDING (SHOP AND FIELD) SHALL BE PERFORMED IN ACCORDANCE WITH AWS D1.1 - LATEST EDITIONS. WELDERS SHALL BE QUALIFIED IN ACCORDANCE WITH D1.1 - LATEST EDITIONS.
 - 2.2 MINIMUM ELECTRODE STRENGTH IS 70 KSI.
 - 2.3 DIMENSIONS AND SQUARENESS IS CRITICAL WITH TOLERANCE OF +/- 1/16".
 - 2.4 MAXIMUM ALLOWABLE GAP BETWEEN MATING COMPONENTS OF 1/16".
 - 2.5 WELD ALL AROUND UNLESS OTHERWISE NOTED.
 - 2.6 CAP ALL OPEN TUBE ENDS.



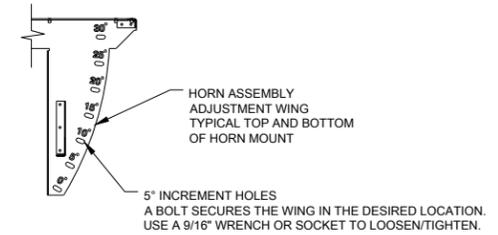
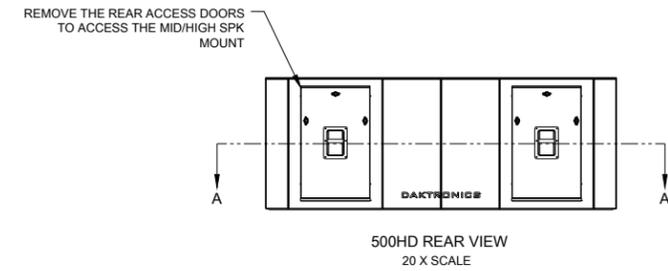
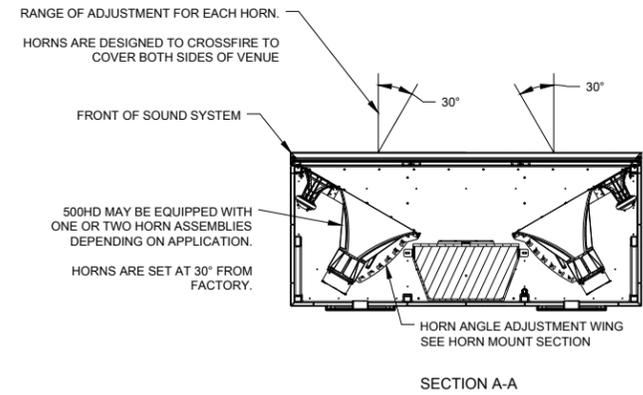
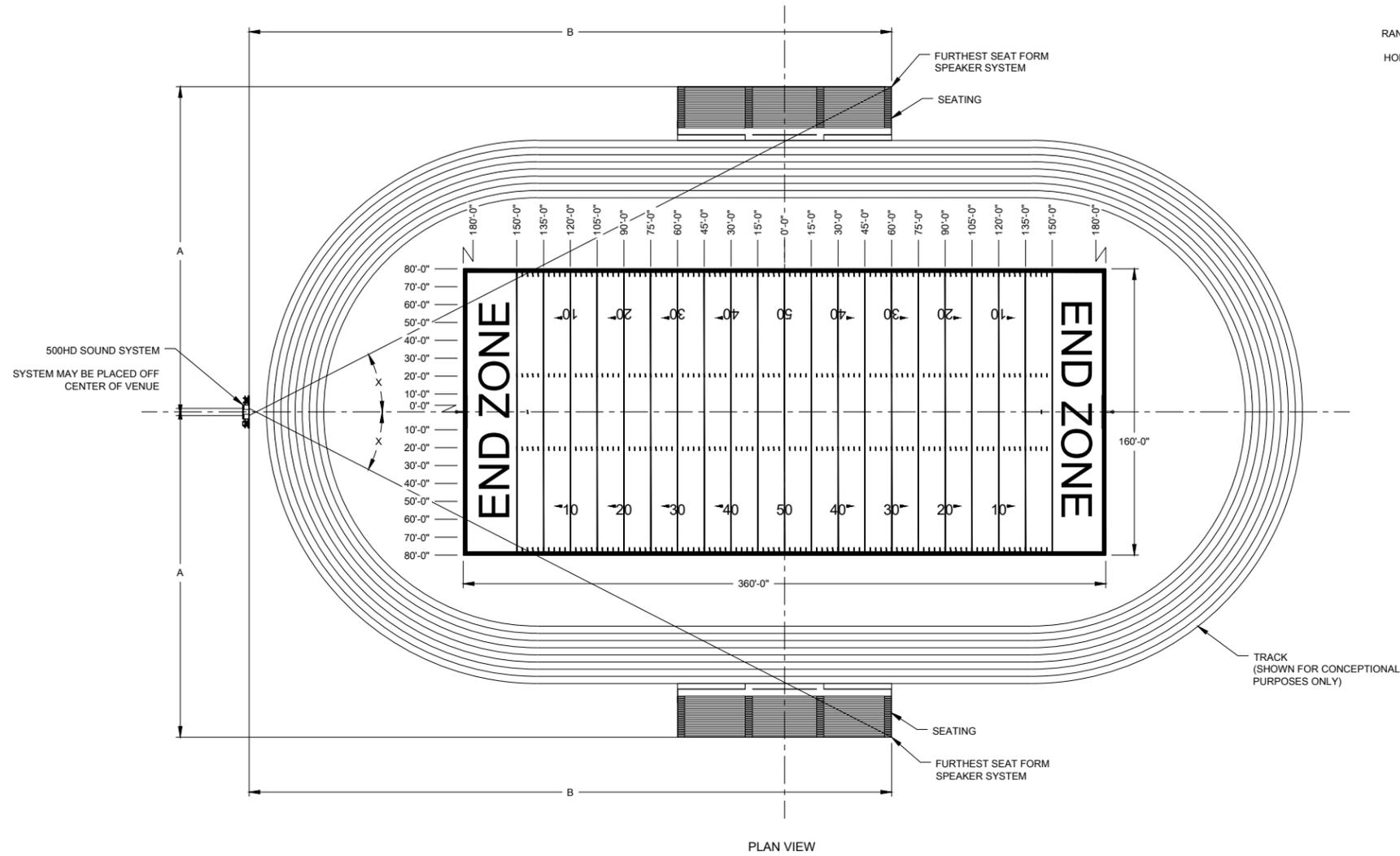
REV	DATE	DESCRIPTION	BY
02	11 APR 13	UPDATE SIDE VIEW TO SHOW NEW MOUNTING SCHEME	AJH
01	9 JUN 11	ADDED DETAIL VIEW E	MBJ
		UPDATED SIDE VIEW	

DAKTRONICS, INC.
BROOKINGS, SD 57008
DO NOT SCALE DRAWING

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PROJ: DAKTRONICS AUDIO SYSTEMS
TITLE: SINGLE COLUMN INSTALL SPECS, SS500HD
DESIGN: DTREML
DRAWN: KSCHNAB
DATE: 3 MAY 10
SCALE: 1/4" = 1'

SHEET 02
REV P1561
JOB NO. E-10-C
FUNC-TYPE-SIZE
1005534



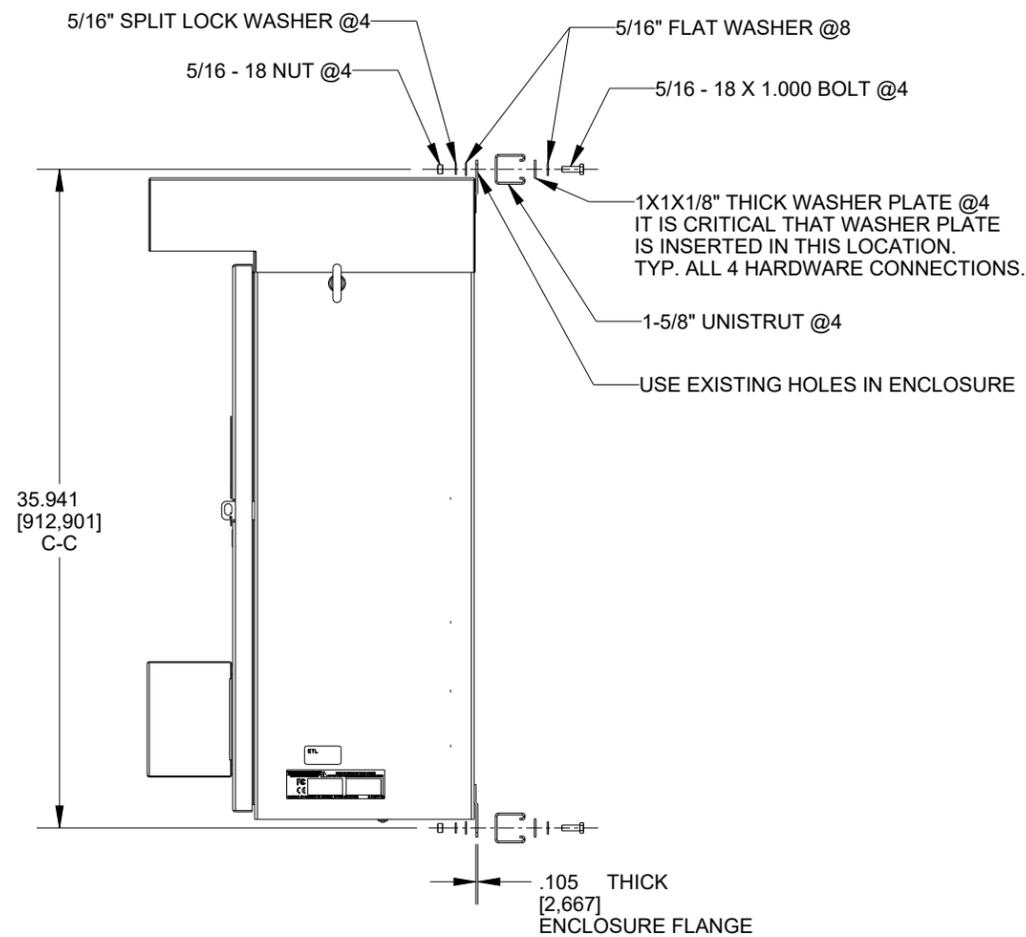
HORN MOUNT SECTION

DISTANCE A	SPEAKER AIMING CHART											
	ANGLE X VALUE X IS IN DEGREES											
250'										30		
240'										30		
220'									30	30		
210'									30	30		
200'								30	30	25		
190'							30	30	25	25		
170'						30	30	25	25	25		
160'					30	30	25	25	25	20		
150'					30	30	25	25	25	20		
140'					30	25	25	25	20	20		
130'			30	30	25	25	25	20	20	20		
120'		30	30	25	25	25	20	20	20	15		
110'	30	30	25	25	25	20	20	20	15	15		
100'	30	25	25	25	20	20	15	15	15	15		
90'	25	25	20	20	20	20	15	15	15	15		
80'	25	20	20	20	15	15	15	15	15	10		
70'	20	20	20	15	15	15	15	10	10	10		
60'	20	15	15	15	15	10	10	10	10	10		
50'	15	15	15	10	10	10	10	10	10	5		
40'	15	10	10	10	10	10	5	5	5	5		
30'	10	10	10	5	5	5	5	5	5	5		
20'	5	5	5	5	5	5	5	5	5	5		
10'	5	5	5	0	0	0	0	0	0	0		
0'	0	0	0	0	0	0	0	0	0	0		
DISTANCE B	180'	200'	220'	240'	260'	280'	300'	320'	340'	360'	380'	400'

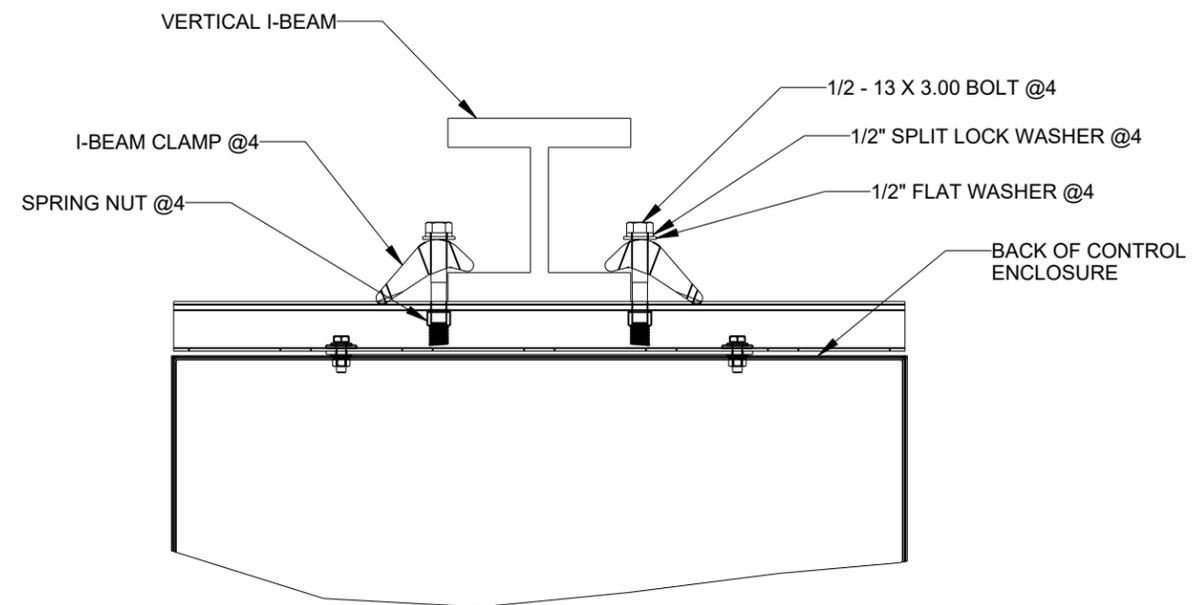
NOTES:

- THE MID/HIGH FREQUENCY HORN MOUNT IS ADJUSTABLE FROM 0° TO 30° IN 5° INCREMENTS.
- USE THE CHART TO DETERMINE WHAT ANGLE THE INTERNAL HORN(S) SHOULD BE SET TO.
- IF THE 500HD SOUND SYSTEM IS NOT ORIENTED PERPENDICULAR TO THE FIELD THE ANGLE OF THE INTERNAL MOUNTS WILL HAVE TO BE ADJUSTED TO COMPENSATE FOR THE ANGLE THE SYSTEM IS PLACED ON THE FIELD.
- IF THE 500HD IS EQUIPPED WITH TWO HORN ASSEMBLIES TREAT EACH AS A INDEPENDENT ASSEMBLY AND AIM EACH ACCORDING TO PROVIDE THE BEST SOUND COVERAGE.
- THE SUBWOOFER REQUIRES NO ADJUSTMENT.
- ALL LINEAR DIMENSIONS ARE IN FEET AND INCHES
- ALL ANGLE DIMENSIONS ARE IN DEGREES

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DO NOT SCALE DRAWING			
PROD: DAKTRONICS AUDIO			
TITLE: MID/HIGH SPEAKER ADJUSTMENT CHART; 500HD			
DESIGN: KSCHNABEL	DRAWN: KSCHNABEL	DATE: 31 JUL 12	
SCALE: 1/50" = 1'			
SHEET	REV	JOB NO.	FUNC-TYPE-SIZE
	00	P1561	F-10-C
			1108053



EXPLODED SIDE VIEW
UNISTRUT ATTACHMENT



TOP VIEW
CTRL ENCL ATTACHMENT
SCALE 1/6

STRUCTURAL NOTES:

ALLOWABLE LOADS PER CONNECTION:

CONTROL ENCLOSURE WEIGHT W/ MOUNTING HARDWARE: 145 LBS
BOLT TORQUE: 50 FT-LB
MIN-MAX I-BEAM FLANGE THICKNESS: .1875" - 0.75"

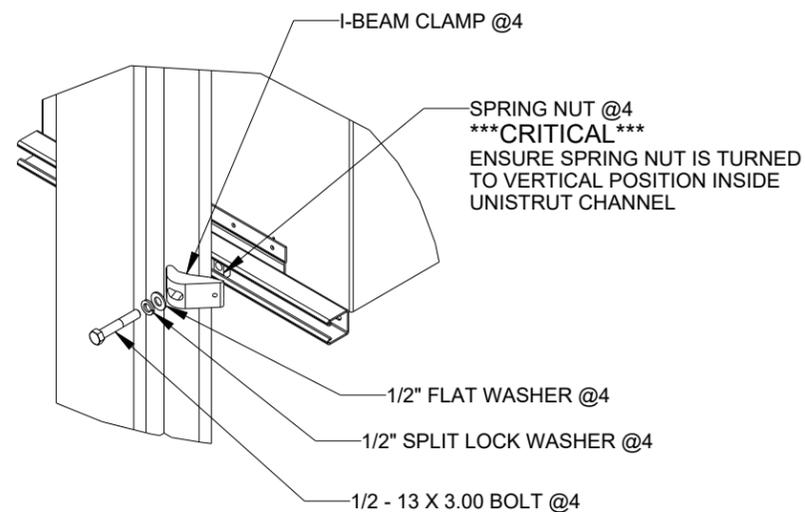
*****CRITICAL***
DO NOT USE ANY LUBRICANT
ON ANY MOUNTING HARDWARE
OR WARRANTY WILL BE VOIDED**

MOUNTING INSTRUCTIONS:

1. ATTACH UNISTRUT TO CONTROL ENCLOSURE THROUGH EXISTING HOLES IN REAR FLANGES OF CONTROL ENCLOSURE AS SHOWN IN UNISTRUT ATTACHMENT SIDE VIEW
2. PLACE SPRING NUTS INTO UNISTRUT
3. LIFT CONTROL ENCLOSURE INTO POSITION
4. ATTACH I-BEAM CLAMPS WITH 1/2" HARDWARE AS SHOWN IN TOP AND REAR ISOMETRIC VIEW CONTROL ENCLOSURE ATTACHMENT
5. MAKE SURE THE 1/2-13 BOLTS ARE AS CLOSE TO THE I-BEAM FLANGES AS POSSIBLE
6. WHEN CONTROL ENCLOSURE IS ADJUSTED TO FINAL DESIRED POSITION, TIGHTEN BOLTS FIRMLY

NOTE:

CONTROL ENCLOSURE MUST BE MOUNTED WITHIN 50' OF THE SOUND SYSTEM FOR SIGNAL CABLE TO REACH.

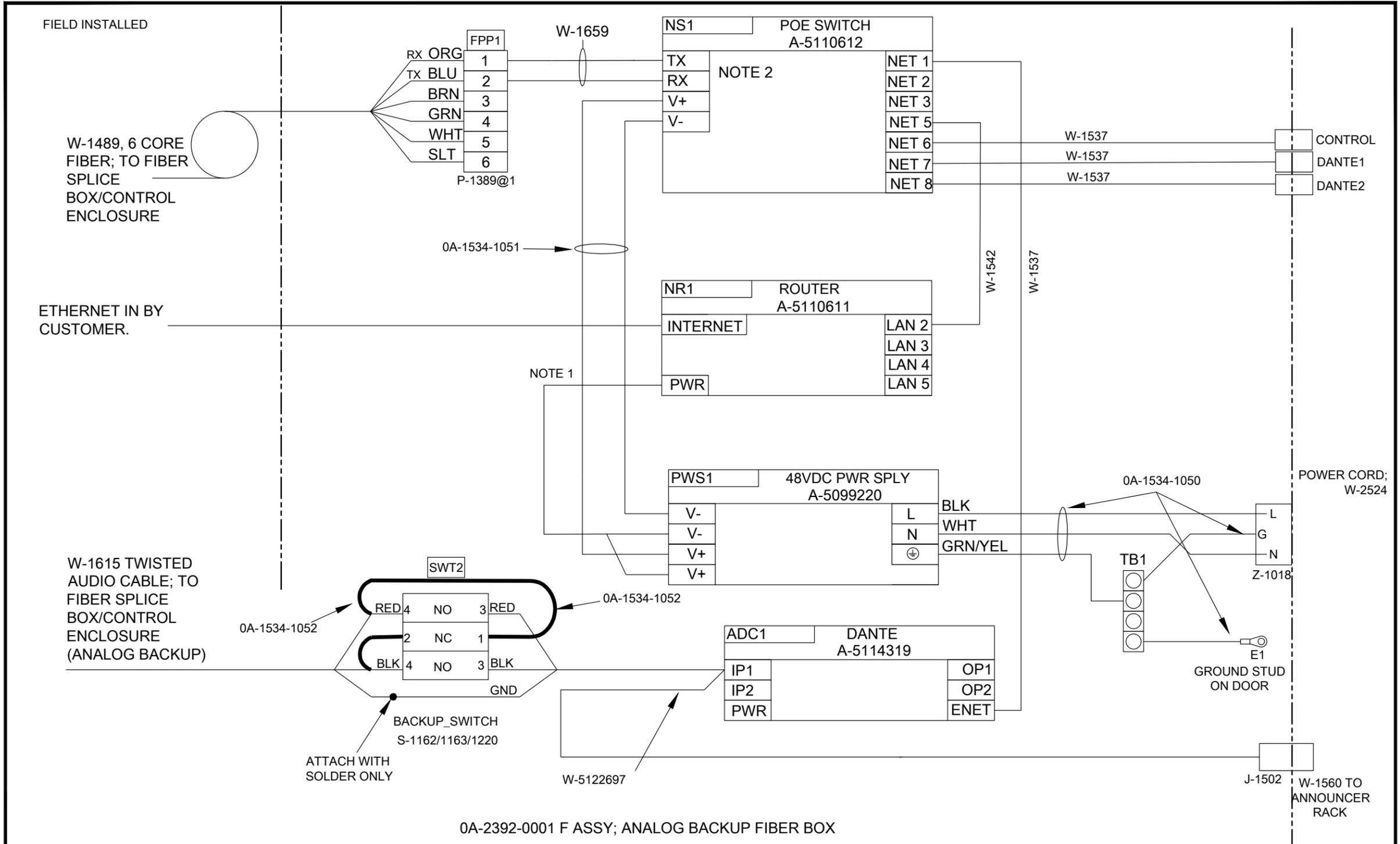


EXPLODED REAR ISOMETRIC VIEW
I-BEAM ATTACHMENT

REFERENCE PACKET: 0A-1561-0049

02	19 SEP 22	PER CN-147415; REMOVED 500HD REFERENCE TO KEEP DRAWING MORE GENERIC.	NAW
01	22 DEC 15	PER EC-22871; ADDED LUBRICANT WARNING	PJS 18704
REV	DATE:		BY:

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PROJECT: DAKTRONICS AUDIO					
TITLE: MTG DETAIL; SS CONTROL ENCL BEAM CLAMP					
DATE: 19-SEP-22		DIM UNITS: INCHES [MILLIMETERS]		SHEET 1 OF 1	
SCALE: 1/10		DO NOT SCALE DRAWING		REV 02	
DESIGN: KSCHNABEL		JOB NO. P1561		FUNC - TYPE - SIZE F - 10 - B	
DRAWN: KSCHNABEL		1131068			



- NOTES:
- CUT ADAPTER END OFF INCLUDED POWER SUPPLY SO THAT THERE IS A 1' WHIP AND STRIP .25". INSTALL WIRE WITH WHITE LINE OR DASHES INTO "-" OF PWS 1 AND THE UNMARKED BLACK WIRE INTO "+" OF PWS1.
 - INSTALL A-5110614 IN SFP SLOT AND CONNECT FIBER CABLE.
 - DAKTRONICS PART NUMBER IS 0G-5099139

REV 02	DATE: 11 SEP 23	ADDING 0G PART NUMBER TO NOTES PER CN-166303	BY: TBS
REV 01	DATE: 30 MAY 23	CHANGED TO W-1542 BETWEEN SWITCH AND ROUTER	BY: TBS

DAKTRONICS

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THIRD ANGLE PROJECTION

PROJECT: SPORTSOUND SYSTEMS

TITLE: AUDIO; SPORTSOUND, FIBER BOX SCHEMATIC

DATE: 29 JUN 22

SCALE: NTS

DESIGN: TSPRACK

DRAWN: TSPRACK

DIM UNITS: INCHES [MILLIMETERS]

DO NOT SCALE DRAWING

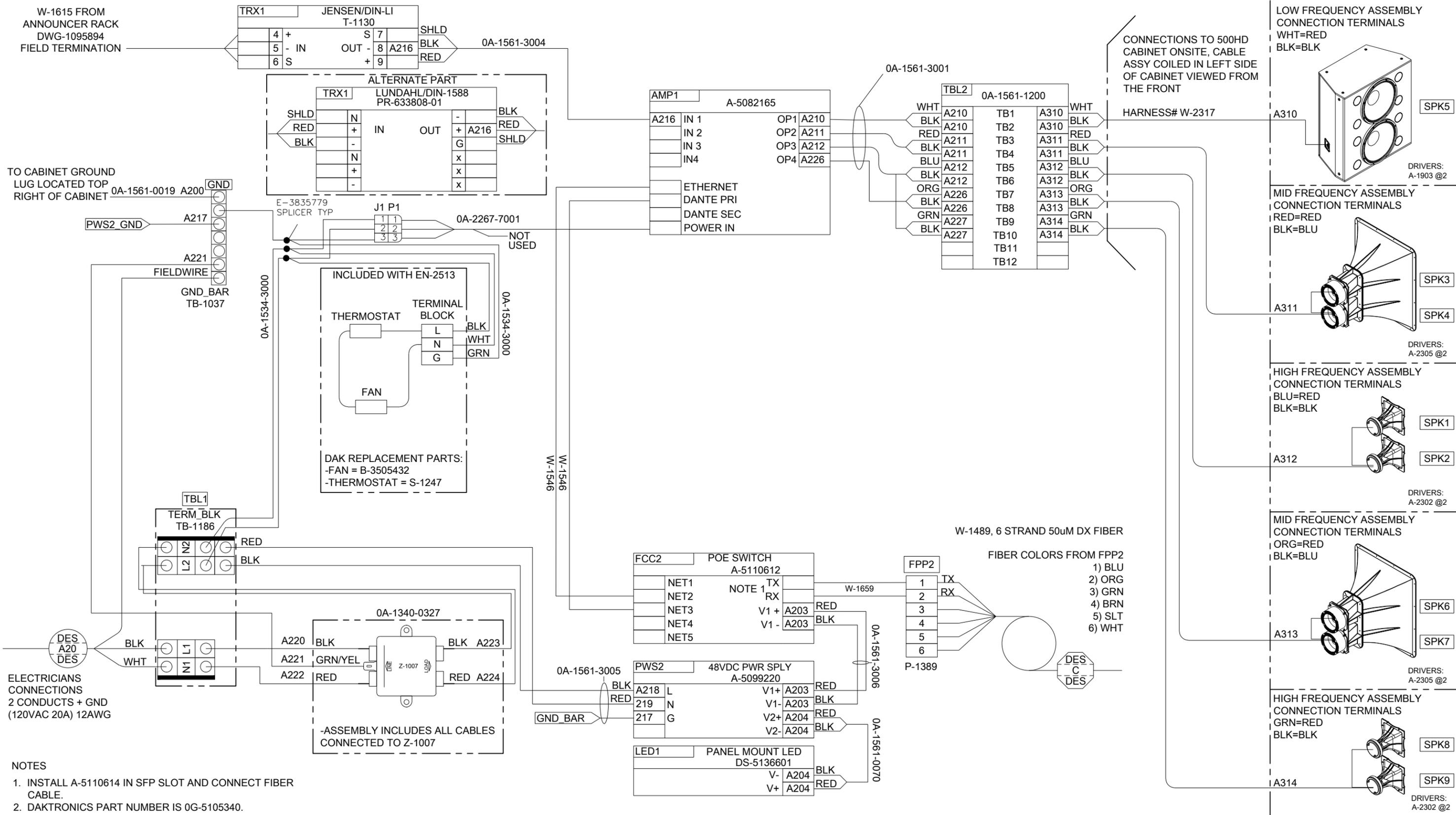
JOB NO. P2392

FUNC - TYPE - SIZE R - 01 - A

SHEET 02

REV 02

5099139



NOTES

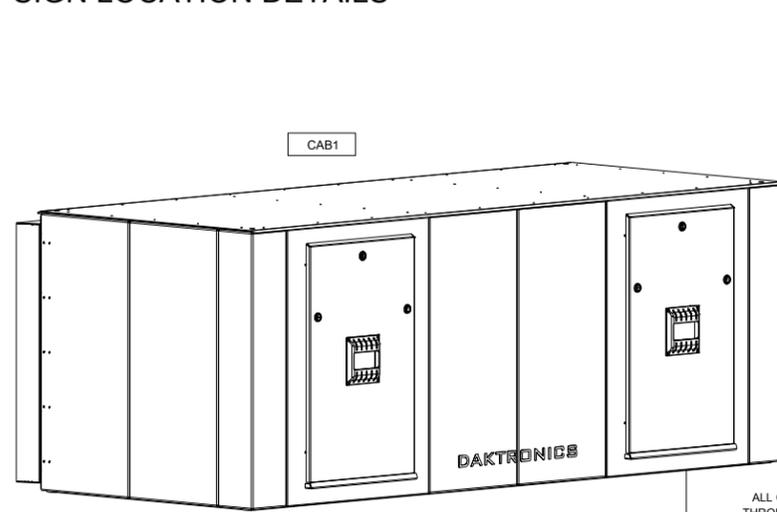
1. INSTALL A-5110614 IN SFP SLOT AND CONNECT FIBER CABLE.
2. DAKTRONICS PART NUMBER IS 0G-5105340.

SYSTEM RISER; ELECTRICAL & AUDIO NOTES - DWG-00985713
 REFERENCE PACKET 0A-1561-1001
 LABELS ADD-4425

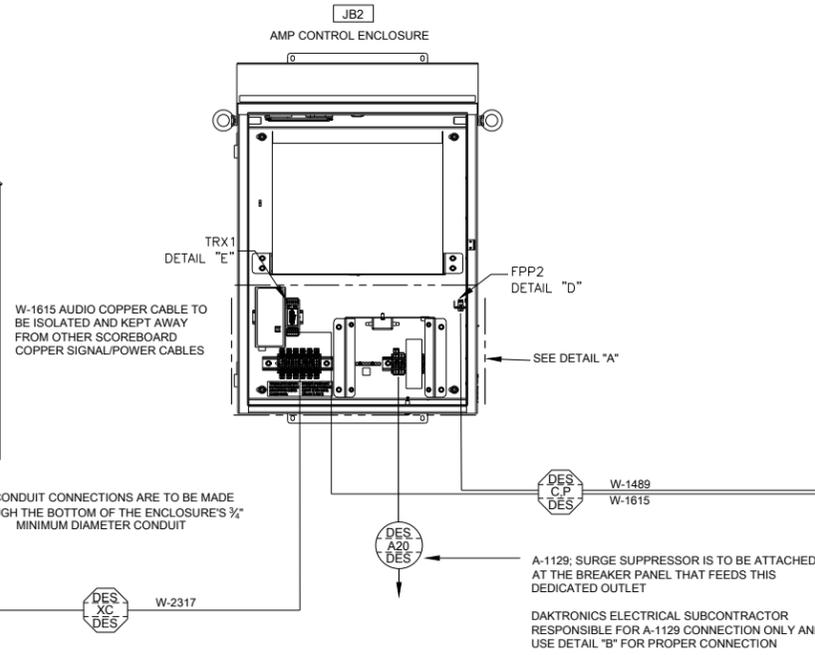
REV	DATE	DESCRIPTION	BY
05	08 JAN 24	ADDED 2ND TRANSFORMER MFG OPTION PER CN-171696	TBS
04	11 SEP 23	ADDED DAKTRONICS PART NUMBER TO NOTES PER CN-166304	TBS
03	31 OCT 22	CHANGED FIBER PATCH AND CABLE.	TBS
02	19 SEP 22	UPDATED SWITCH, POWER SUPPLY, AND LED INDICATOR PART NUMBERS.	TBS

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PROJECT: SPORTSOUND SYSTEMS					
TITLE: SCHEMATIC; CNTRL ENCL SS-500HD GEN2, DUAL, 120VAC					
DATE: 10 JUL 22		DIM UNITS: INCHES [MILLIMETERS]		SHEET 05	
SCALE: NONE		DO NOT SCALE DRAWING			
DESIGN: TSPRACK		JOB NO. P1561		FUNC - TYPE - SIZE R - 03 - B	
DRAWN: TSPRACK		5105340			

SIGN LOCATION DETAILS



THIS CABLE WILL BE PRE-TERMINATED TO THE SPEAKERS AND COILED UP INSIDE THE REAR RIGHT SIDE OF THE CABINET WITH A 50' WHIP FOR TERMINATION TO THE CONTROL ENCLOSURE, CUT TO LENGTH AND USE DETAIL "A" FOR PROPER CONNECTION

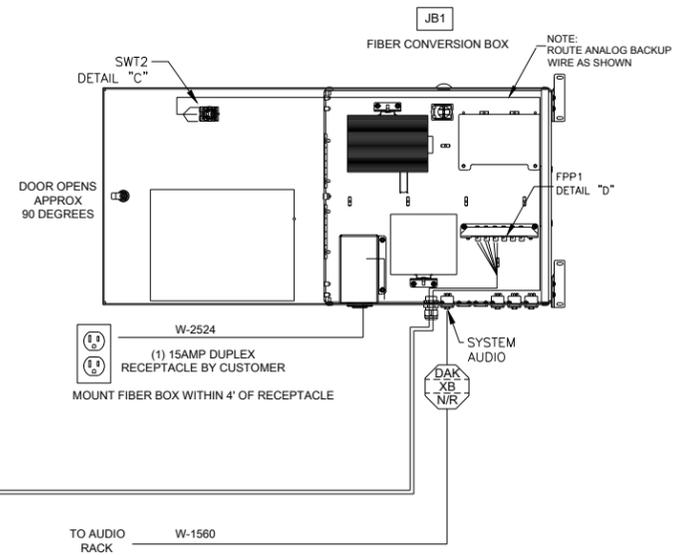


W-1615 AUDIO COPPER CABLE TO BE ISOLATED AND KEPT AWAY FROM OTHER SCOREBOARD COPPER SIGNAL/POWER CABLES

ALL CONDUIT CONNECTIONS ARE TO BE MADE THROUGH THE BOTTOM OF THE ENCLOSURE'S 3/4" MINIMUM DIAMETER CONDUIT

A-1129; SURGE SUPPRESSOR IS TO BE ATTACHED AT THE BREAKER PANEL THAT FEEDS THIS DEDICATED OUTLET
DAKTRONICS ELECTRICAL SUBCONTRACTOR RESPONSIBLE FOR A-1129 CONNECTION ONLY AND USE DETAIL "B" FOR PROPER CONNECTION

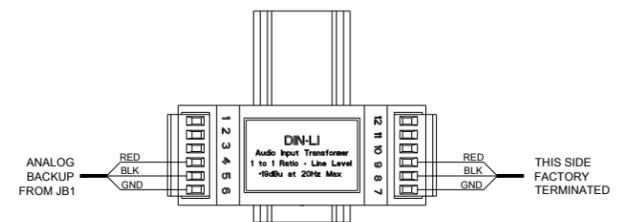
ANNOUNCER LOCATION DETAILS



DOOR OPENS APPROX 90 DEGREES

W-2524 (1) 15AMP DUPLEX RECEPTACLE BY CUSTOMER MOUNT FIBER BOX WITHIN 4' OF RECEPTACLE

DETAIL "E" T-1130 ANALOG BACKUP TRANSFORMER



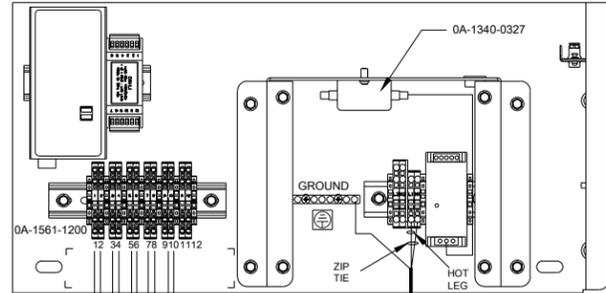
COMPONENT IDENTIFICATION LEGEND				
COMPONENT	DESCRIPTION	MANUFACTURE'S #	PROVIDED BY	INSTALLED BY
JB1	DANTE AUDIO FIBER BOX, ANNCR'S ROOM	0A-2392-0001	DAKTRONICS	OTHERS
CAB1	500HD SERIES CABINET	0A-1561-1001	DAKTRONICS	OTHERS
JB2*	CONTROL ENCLOSURE, 500 HD-DUAL, 120V	0A-1561-1000	DAKTRONICS	OTHERS
JB2*	CONTROL ENCLOSURE, 500 HD-SINGLE, 120V	0A-1561-1007	DAKTRONICS	OTHERS
WIRE TAGS	DETAILS FOR WIRE TAGS	DWG-985713	DAKTRONICS	-

*NOTE: ONLY ONE ASSEMBLY WILL BE PRESENT

0A-1561-1000 CIRCUIT 1 TOTAL POWER REQUIREMENTS:	
SYSTEM VOLTAGE	120 2 WIRES + GND
NUMBER OF POLES	1
MAXIMUM WATTS	1800W
AMPERES PER LINE	15A

0A-1561-1007 CIRCUIT 1 TOTAL POWER REQUIREMENTS:	
SYSTEM VOLTAGE	120 2 WIRES + GND
NUMBER OF POLES	1
MAXIMUM WATTS	1200W
AMPERES PER LINE	11A

DETAIL "A" CONTROL ENCLOSURE

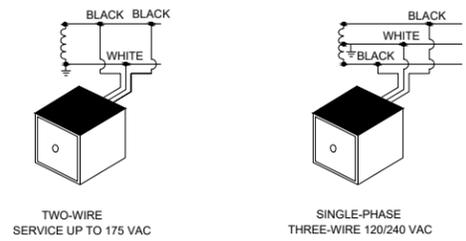


- THESE ARE 12AWG WIRES
- AMP1 LF1+ WHT A310
 - AMP1 LF1- BLK A310
 - AMP1 MF1+ RED A311
 - AMP1 MF1- BLK A311
 - AMP1 HF1+ BLU A312
 - AMP1 HF1- BLK A312
 - AMP2 MF2+ ORG A313
 - AMP2 MF2- BLK A313
 - AMP2 LF2+ GRN A314
 - AMP2 LF2- BLK A314
 - NOT USED
 - NOT USED

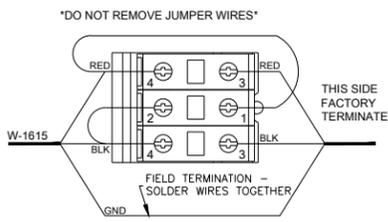
FROM ELECTRICAL SERVICE

NOTE: IF OTHER SURGE SUPPRESSION IS PROTECTING THE NECESSARY CIRCUITS, THE A-1129 IS OPTIONAL

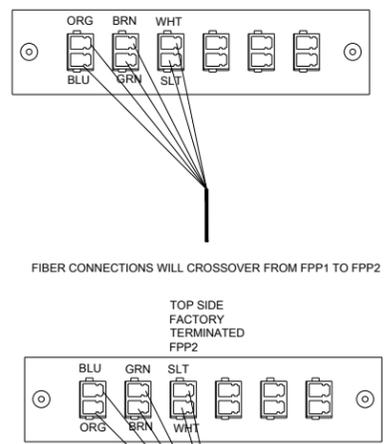
DETAIL "B" A-1129 SURGE SUPPRESSOR



DETAIL "C" ANALOG BACKUP SWITCH TERMINATION



DETAIL "D" FIBER PATCH PANEL TERMINATION

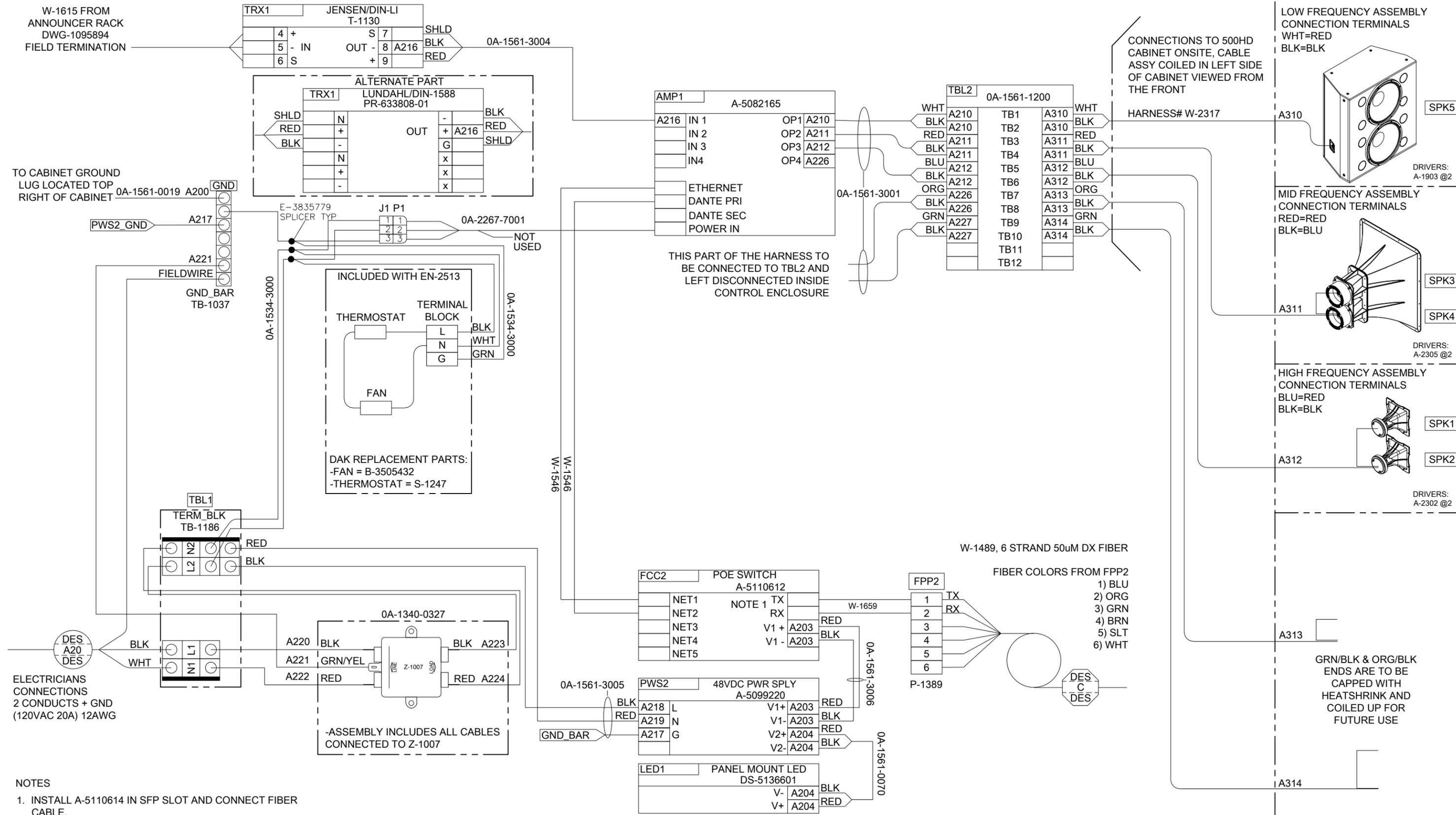


FIBER CONNECTIONS WILL CROSSOVER FROM FPP1 TO FPP2

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REV 02	DATE 09 DEC 22	REMOVED 230V OPTIONS AND CORRECTED FIBER BOX PART NUMBER	BY: TBS
REV 01	DATE 03 NOV 22	UPDATED FIBER TERMINATIONS	BY: TBS

PROJECT: SPORTSOUND SYSTEMS	TITLE: SYSTEM RISER, 500HD GEN2	DIM UNITS: INCHES [MILLIMETERS]	SHEET: 02
DATE: 08 AUG 22	SCALE: NONE	DO NOT SCALE DRAWING	REV: 02
DESIGN: TSPRACK	JOB NO. P1561	FUNC - TYPE - SIZE: F - 03 - C	5118566
DRAWN: TSPRACK			



- NOTES
1. INSTALL A-5110614 IN SFP SLOT AND CONNECT FIBER CABLE.
 2. DAKTRONICS PART NUMBER IS 0G-5125144.

SYSTEM RISER; ELECTRICAL & AUDIO NOTES - DWG-00985713
 REFERENCE PACKET 0A-1561-1007
 LABELS ADD-4425

REV	DATE	DESCRIPTION	BY
03	08 JAN 24	ADDED 2ND TRANSFORMER MFG OPTION PER CN-171696	TBS
02	11 SEP 23	ADDED DAKTRONICS PART NUMBER TO NOTES PER CN-166304	TBS
01	31 OCT 22	CHANGED FIBER PATCH AND CABLE.	TBS

DAKTRONICS

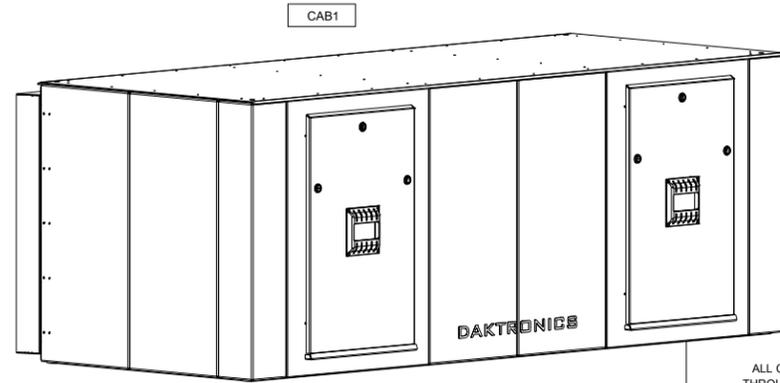
THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. OR ITS WHOLLY OWNED SUBSIDIARIES. COPYRIGHT 2022 DAKTRONICS, INC. (USA)

THIRD ANGLE PROJECTION

PROJECT: SPORTSOUND SYSTEMS
 TITLE: SCHEMATIC; CNTRL ENCL SS-500HD GEN2, SINGLE 120VAC
 DATE: 10 JUL 22 DIM UNITS: INCHES [MILLIMETERS] SHEET 03
 SCALE: NONE DO NOT SCALE DRAWING
 DESIGN: TSPRACK JOB NO. P1561 FUNC - TYPE - SIZE R - 03 - B
 DRAWN: TSPRACK

5125144

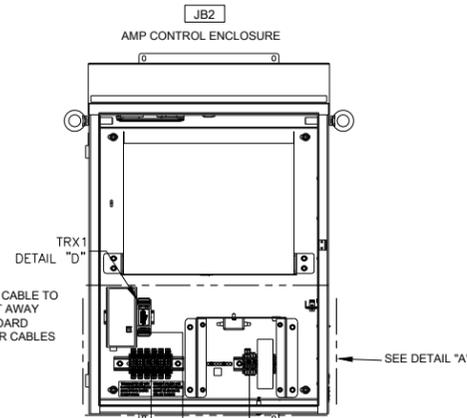
SIGN LOCATION DETAILS



THIS CABLE WILL BE PRE-TERMINATED TO THE SPEAKERS AND COILED UP INSIDE THE REAR RIGHT SIDE OF THE CABINET WITH A 50' WHIP FOR TERMINATION TO THE CONTROL ENCLOSURE. CUT TO LENGTH AND USE DETAIL "A" FOR PROPER CONNECTION

W-1615 AUDIO COPPER CABLE TO BE ISOLATED AND KEPT AWAY FROM OTHER SCOREBOARD COPPER SIGNAL/POWER CABLES

ALL CONDUIT CONNECTIONS ARE TO BE MADE THROUGH THE BOTTOM OF THE ENCLOSURE'S 3/4" MINIMUM DIAMETER CONDUIT



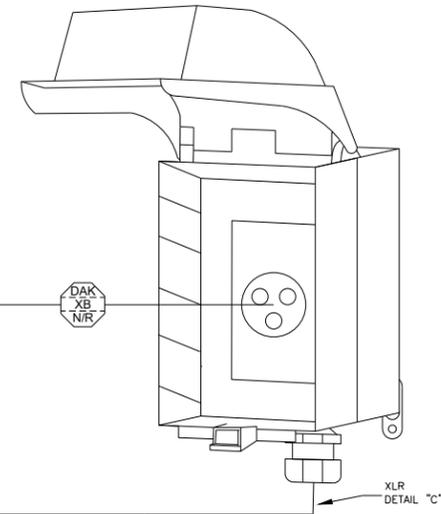
SEE DETAIL "A"

A-1129; SURGE SUPPRESSOR IS TO BE ATTACHED AT THE BREAKER PANEL THAT FEEDS THIS DEDICATED OUTLET

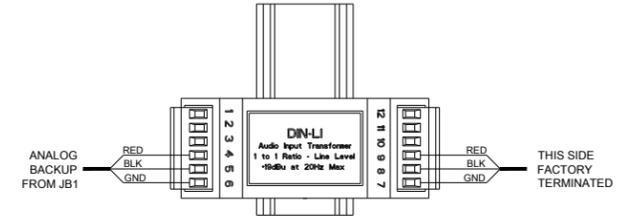
DAKTRONICS ELECTRICAL SUBCONTRACTOR RESPONSIBLE FOR A-1129 CONNECTION ONLY AND USE DETAIL "B" FOR PROPER CONNECTION

ANNOUNCER LOCATION DETAILS

JB1
3 PIN XLR JUNCTION BOX,
EC-3339265



DETAIL "D"
T-1130
ANALOG BACKUP TRANSFORMER



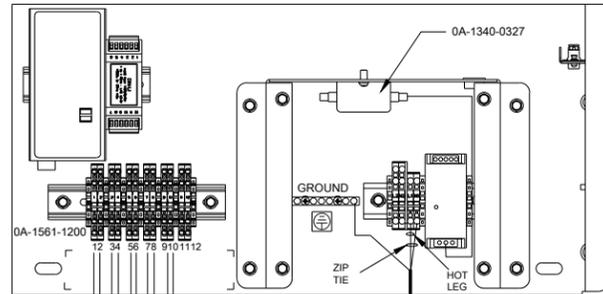
COMPONENT IDENTIFICATION LEGEND				
COMPONENT	DESCRIPTION	MANUFACTURE'S #	PROVIDED BY	INSTALLED BY
JB1	JUNCTION BOX W/FEMALE 3-PIN XLR	EC-3339265	DAKTRONICS	OTHERS
CAB1	500HD SERIES CABINET	0A-1561-1001	DAKTRONICS	OTHERS
JB2*	CONTROL ENCLOSURE, 500 HD-DUAL, 120V	0A-1561-1000	DAKTRONICS	OTHERS
JB2*	CONTROL ENCLOSURE, 500 HD-SINGLE, 120V	0A-1561-1007	DAKTRONICS	OTHERS
WIRE TAGS	DETAILS FOR WIRE TAGS	DWG-985713	DAKTRONICS	-

*NOTE: ONLY ONE ASSEMBLY WILL BE PRESENT

0A-1561-1000 CIRCUIT 1 TOTAL POWER REQUIREMENTS:	
SYSTEM VOLTAGE	120
NUMBER OF POLES	2 WIRES + GND
MAXIMUM WATTS	1800W
AMPERES PER LINE	15A

0A-1561-1007 CIRCUIT 1 TOTAL POWER REQUIREMENTS:	
SYSTEM VOLTAGE	120
NUMBER OF POLES	2 WIRES + GND
MAXIMUM WATTS	1200W
AMPERES PER LINE	11A

DETAIL "A"
CONTROL ENCLOSURE

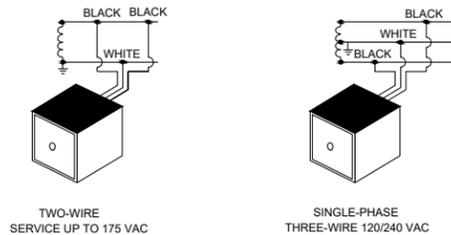


- THESE ARE 12AWG WIRES
- 1: AMP1 LF1+ WHT A310
 - 2: AMP1 LF1- BLK A310
 - 3: AMP1 MF1+ RED A311
 - 4: AMP1 MF1- BLK A311
 - 5: AMP1 HF1+ BLU A312
 - 6: AMP1 HF1- BLK A312
 - 7: AMP2 MF2+ ORG A313
 - 8: AMP2 MF2- BLK A313
 - 9: AMP2 LF2+ GRN A314
 - 10: AMP2 LF2- BLK A314
 - 11: NOT USED
 - 12: NOT USED

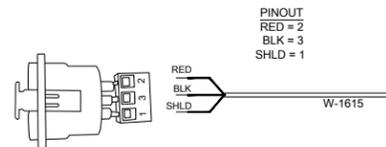
FROM ELECTRICAL SERVICE

NOTE:
IF OTHER SURGE SUPPRESSION IS PROTECTING THE NECESSARY CIRCUITS, THE A-1129 IS OPTIONAL

DETAIL "B"
A-1129
SURGE SUPPRESSOR



DETAIL "C"
(J-3794845) FEMALE XLR JACK; FIELD CABLE
TERMINATION DETAIL



PINOUT
RED = 2
BLK = 3
SHLD = 1

		<small>THE CONCEPTS EXPRESSED AND DETAILS SHOWN ON THIS DRAWING ARE CONFIDENTIAL AND PROPRIETARY. DO NOT REPRODUCE BY ANY MEANS WITHOUT THE EXPRESS WRITTEN CONSENT OF DAKTRONICS, INC. OR ITS WHOLLY OWNED SUBSIDIARIES. © COPYRIGHT 2022 DAKTRONICS, INC. (USA)</small>			
PROJECT:	SPORTSOUND SYSTEMS	TITLE:	SYSTEM RISER, 500HD, COPPER SIGNAL ONLY	SHEET:	02
DATE:	01 SEP 22	DIM UNITS:	INCHES (MILLIMETERS)	REV:	02
SCALE:	NONE	DO NOT SCALE DRAWING			
DESIGN:	TSPRACK	JOB NO.:	P1561	FUNC. - TYPE - SIZE:	F - 03 - C
DRAWN:	TSPRACK				5130474

REV 02	DATE: 09 DEC 22	REMOVED 230V OPTIONS	BY: TBS
REV 01	DATE: 03 NOV 22	UPDATED CONTROL ENCLOSURE IMAGES.	BY: TBS

B Daktronics Warranty & Limitation of Liability

This section includes the Daktronics Warranty & Limitation of Liability statement (SL-02374).

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DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

This Warranty and Limitation of Liability (the "Warranty") sets forth the warranty provided by Daktronics with respect to the Equipment. By accepting delivery of the Equipment, Purchaser and End User agree to be bound by and accept these terms and conditions. Unless otherwise defined herein, all terms within the Warranty shall have the same meaning and definition as provided elsewhere in the Agreement.

DAKTRONICS WILL ONLY BE OBLIGATED TO HONOR THE WARRANTY SET FORTH IN THESE TERMS AND CONDITIONS UPON RECEIPT OF FULL PAYMENT FOR THE EQUIPMENT

1. Warranty Coverage.

- A. Daktronics warrants to the original end user (the "End User", which may also be the Purchaser) that the Equipment will be free from Defects (as defined below) in materials and workmanship for a period of one (1) year (the "Warranty Period"). The Warranty Period shall commence on the earlier of: (i) four weeks from the date that the Equipment leaves Daktronics' facility; or (ii) Substantial Completion as defined herein. The Warranty Period shall expire on the first anniversary of the commencement date.

"Substantial Completion" means the operational availability of the Equipment to the End User in accordance with the Equipment's specifications, without regard to punch-list items, or other non-substantial items which do not affect the operation of the Equipment

- B. Daktronics' obligation under this Warranty is limited to, at Daktronics' option, replacing or repairing, any Equipment or part thereof that is found by Daktronics not to conform to the Equipment's specifications. Unless otherwise directed by Daktronics, any defective part or component shall be returned to Daktronics for repair or replacement. This Warranty does not include on-site labor charges to remove or install these components. Daktronics may, at its option, provide on-site warranty service. Daktronics shall have a reasonable period of time to make such replacements or repairs and all labor associated therewith shall be performed during regular working hours. Regular working hours are Monday through Friday between 8:00 a.m. and 5:00 p.m. at the location where labor is performed, excluding any holidays observed by Daktronics.
- C. Daktronics shall pay ground transportation charges for the return of any defective component of the Equipment. All such items shall be shipped by End User DDP Daktronics designated facility per Incoterms® 2020. If returned Equipment is repaired or replaced under the terms of this Warranty, Daktronics will prepay ground transportation charges back to End User and shall ship such items DDP End User's designated facility per Incoterms® 2020; otherwise, End User shall pay transportation charges to return the Equipment back to the End User and such Equipment shall be shipped Ex Works Daktronics designated facility per Incoterms® 2020. All returns must be pre-approved by Daktronics before shipment. Daktronics shall not be obligated to pay freight for any unapproved return. End User shall pay any upgraded or expedited transportation charges
- D. Any replacement parts or Equipment will be new or serviceably used, comparable in function and performance to the original part or Equipment and warranted for the remainder of the Warranty Period. Purchasing additional parts or Equipment from the Seller does not extend the Warranty Period.
- E. Defects shall be defined as follows. With regard to the Equipment (excepting LEDs), a "Defect" shall refer to a material variance from the design specifications that prohibit the Equipment from operating for its intended use. With respect to LEDs, "Defects" are defined as LED pixels that cease to emit light. Unless otherwise expressly provided, this Warranty does not impose any duty or liability upon Daktronics for partial LED pixel degradation. Notwithstanding the foregoing, in no event does this Warranty include LED pixel degradation caused by UV light. This Warranty does not provide for the replacement or installation of communication methods including but not limited to, wire, fiber optic cable, conduit, trenching, or for the purpose of overcoming local site interference radio equipment substitutions.

EXCEPT AS OTHERWISE EXPRESSLY SET FORTH IN THIS WARRANTY, TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, DAKTRONICS DISCLAIMS ANY AND ALL OTHER PROMISES, REPRESENTATIONS AND WARRANTIES APPLICABLE TO THE EQUIPMENT AND REPLACES ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ACCURACY OR QUALITY OF DATA. OTHER ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY DAKTRONICS, ITS AGENTS OR EMPLOYEES, SHALL NOT CREATE A WARRANTY OR IN ANY WAY INCREASE THE SCOPE OF THIS LIMITED WARRANTY.

THIS LIMITED WARRANTY IS NOT TRANSFERABLE.

2. Exclusion from Warranty Coverage

This Warranty does not impose any duty or liability upon Daktronics for any:

- A. damage occurring at any time, during shipment of Equipment unless otherwise provided for in the Agreement. When returning Equipment to Daktronics for repair or replacement, End User assumes all risk of loss or damage, agrees to use any shipping containers that might be provided by Daktronics, and to ship the Equipment in the manner prescribed by Daktronics;
- B. damage caused by: (i) the improper handling, installation, adjustment, use, repair, or service of the Equipment, or (ii) any physical damage which includes, but is not limited to, missing, broken, or cracked components resulting from non-electrical causes;

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

altered, scratched, or fractured electronic traces; missing or gauged solder pads; cuts or clipped wires; crushed, cracked, punctured, or bent circuit boards; or tampering with any electronic connections, provided that such damage is not caused by personnel of Daktronics or its authorized repair agents;

- C. damage caused by the failure to provide a continuously suitable environment, including, but not limited to: (i) neglect or misuse; (ii) improper power including, without limitation, a failure or sudden surge of electrical power; (iii) improper air conditioning, humidity control, or other environmental conditions outside of the Equipment's technical specifications such as extreme temperatures, corrosives and metallic pollutants; or (iv) any other cause other than ordinary use;
- D. damage caused by fire, flood, earthquake, water, wind, lightning or other natural disaster, strike, inability to obtain materials or utilities, war, terrorism, civil disturbance, or any other cause beyond Daktronics' reasonable control;
- E. failure to adjust, repair or replace any item of Equipment if it would be impractical for Daktronics personnel to do so because of connection of the Equipment by mechanical or electrical means to another device not supplied by Daktronics, or the existence of general environmental conditions at the site that pose a danger to Daktronics personnel;
- F. statements made about the product by any salesperson, dealer, distributor or agent, unless such statements are in a written document signed by an officer of Daktronics. Such statements as are not included in a signed writing do not constitute warranties, shall not be relied upon by End User and are not part of the contract of sale;
- G. damage arising from the use of Daktronics products in any application other than the commercial and industrial applications for which they are intended, unless, upon request, such use is specifically approved in writing by Daktronics;
- H. replenishment of spare parts. In the event the Equipment was purchased with a spare parts package, the parties acknowledge and agree that the spare parts package is designed to exhaust over the life of the Equipment, and as such, the replenishment of the spare parts package is not included in the scope of this Warranty;
- I. security or functionality of the End User's network or systems, or anti-virus software updates;
- J. performance of preventive maintenance;
- K. third-party systems and other ancillary equipment, including without limitation front-end video control systems, audio systems, video processors and players, HVAC equipment, batteries and LCD screens;
- L. incorporation of accessories, attachments, software or other devices not furnished by Daktronics; or
- M. paint or refinishing the Equipment or furnishing material for this purpose.

3. Limitation of Liability

- A. Daktronics shall be under no obligation to furnish continued service under this Warranty if alterations are made to the Equipment without the prior written approval of Daktronics.
- B. It is specifically agreed that the price of the Equipment is based upon the following limitation of liability. In no event shall Daktronics (including its subsidiaries, affiliates, officers, directors, employees, or agents) be liable for any claims asserting or based on (a) loss of use of the facility or equipment; lost business, revenues, or profits; loss of goodwill; failure or increased cost of operations; loss, damage or corruption of data; loss resulting from system or service failure, malfunction, incompatibility, or breaches in system security; or (b) any special, consequential, incidental or exemplary damages arising out of or in any way connected with the Equipment or otherwise, including but not limited to damages for lost profits, cost of substitute or replacement equipment, down time, injury to property or any damages or sums paid to third parties, even if Daktronics has been advised of the possibility of such damages. The foregoing limitation of liability shall apply whether any claim is based upon principles of contract, tort or statutory duty, principles of indemnity or contribution, or otherwise
- C. In no event shall Daktronics be liable for loss, damage, or injury of any kind or nature arising out of or in connection with this Warranty in excess of the Purchase Price of the Equipment. The End User's remedy in any dispute under this Warranty shall be ultimately limited to the Purchase Price of the Equipment to the extent the Purchase Price has been paid.

4. Assignment of Rights

- A. The Warranty contained herein extends only to the End User (which may be the Purchaser) of the Equipment and no attempt to extend the Warranty to any subsequent user-transferee of the Equipment shall be valid or enforceable without the express written consent of Daktronics.

5. Governing Law; Election of Remedies

- A. The rights and obligations of the parties under this Warranty shall not be governed by the provisions of the United Nations Convention on Contracts for the International Sales of Goods of 1980. The parties consent to the application of the laws of the State of South Dakota to govern, interpret, and enforce each of the parties' rights, duties, and obligations arising from, or relating in any manner to, the subject matter of this Warranty, without regard to conflict of law principles.
- B. Any dispute, controversy or claim arising from or related to this Warranty, the parties shall first attempt to settle through negotiations. In the event that no resolution is reached, then such dispute, controversy, or claim shall be resolved by final and binding arbitration under the Rules of Arbitration of the International Chamber of Commerce. The language of the arbitration

DAKTRONICS WARRANTY & LIMITATION OF LIABILITY

shall be English. The place of the arbitration shall be Sioux Falls, SD. A single arbitrator selected by the parties shall preside over the proceeding. If a single arbitrator cannot be agreed upon by the parties, each party shall select an arbitrator, and those arbitrators shall confer and agree on the appointed arbitrator to adjudicate the arbitration. The arbitrator shall have the power to grant any provisional or final remedy or relief that it deems appropriate, including conservatory measures and an award of attorneys' fees. The arbitrator shall make its decisions in accordance with applicable law. By agreeing to arbitration, the Parties do not intend to deprive any court of its jurisdiction to issue a pre-arbitral injunction, pre-arbitral attachment, or other order in aid of arbitration proceedings and the enforcement of any award. Without prejudice to such provisional remedies as may be available under the jurisdiction of a court, the arbitrator shall have full authority to grant provisional remedies and to direct the Parties to request that any court modify or vacate any temporary or preliminary relief issued by such court, and to award damages for the failure of any Party to respect the arbitrator's orders to that effect.

6. Availability of Extended Service Agreement

- A. For End User's protection, in addition to that afforded by the warranties set forth herein, End User may purchase extended warranty services to cover the Equipment. The Extended Service Agreement, available from Daktronics, provides for electronic parts repair and/or on-site labor for an extended period from the date of expiration of this warranty. Alternatively, an Extended Service Agreement may be purchased in conjunction with this Warranty for extended additional services. For further information, contact Daktronics Customer Service at 1-800-DAKTRONics (1-800-325-8766).

Additional Terms applicable to sales outside of the United States

The following additional terms apply **only** where the installation site of the Equipment is located outside of the United States of America.

1. In the event that the installation site of the Equipment is in a country other than the U.S.A., then, notwithstanding Section 5 of the Warranty, where the selling entity is the entity listed in Column 1, then the governing law of this Warranty is the law of the jurisdiction listed in the corresponding row in Column 2 without regard to its conflict of law principles. Furthermore, if the selling entity is an entity listed in Column 1, then the place of arbitration is listed in the corresponding row in Column 3.

Column 1 (Selling Entity)	Column 2 (Governing Law)	Column 3 (Location of Arbitration)
Daktronics, Inc.	The state of Illinois	Chicago, IL, U.S.A.
Daktronics Canada, Inc.	The Province of Ontario, Canada	Toronto, Ontario, Canada
Daktronics UK Ltd.	England and Wales	Bristol, UK
Daktronics GmbH	The Federal Republic of Germany	Wiesbaden, Germany
Daktronics Hong Kong Limited	Hong Kong, Special Administrative Region of the P.R.C.	Hong Kong SAR
Daktronics Shanghai Co., Ltd.	The Peoples Republic of China	Shanghai, P.R.C.
Daktronics France, SARL	France	Paris, France
Daktronics Japan, Inc.	Japan	Tokyo, Japan
Daktronics International Limited	Macau, Special Administrative Region of the P.R.C.	Macau SAR
Daktronics Australia Pad Ltd	Australia	Sydney, Australia
Daktronics Singapore Pte. Ltd	Singapore	Singapore
Daktronics Brazil LTDA	Brazil	São Paulo, Brazil
Daktronics Spain S.L.U.	Spain	Madrid, Spain
Daktronics Belgium N. V	Belgium	Kruikeke, Belgium
Daktronics Ireland Co. Ltd.	Ireland	Dublin, Ireland

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