



INSIGHT DLP Appliance

Director 910C & 910F

Hardware Installation Guide



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Introduction

The information contained within this manual is meant to guide you through the process of setting up your INSIGHT DLP Appliance (“Appliance”). Information contained herein is relative to the **910C** (copper) and **910F** (fiber) Appliances. Instructions contained herein will walk you through unpacking, installing, and configuring the Appliance.

For additional information and support for your Appliance(s), you can visit the support portal at: <https://support.insightdlp.com>.

Installation Preparation

The motherboard/system contain numerous delicate electronic circuits and components which can become damaged as a result of electrostatic discharge. InfoLock recommends you read the following carefully prior to installing your Appliance in order to ensure that your Appliance is able to function at peak performance.

- Do not remove or break the motherboard serial number or warranty stickers provided. These stickers are required for warrant validation.
- Always remove the AC power by unplugging the power cord from the power outlet before installing or removing the motherboard or other hardware components.
- Make sure hardware components connected to the motherboard are connected tightly and securely.
- Avoid touching metal leads or connectors when handling the motherboard.
- Wear an electrostatic discharge (ESD) wrist strap when handling electronic components such as a motherboard, CPU, or memory. If you do not have an ESD wrist strap, keep your hands dry and first touch a metal object to eliminate static electricity.
- Place motherboard on an antistatic pad or within an electrostatic shielding container prior to installation.
- Before unplugging the power supply cable from the motherboard, make sure the power supply has been turned off.
- Before turning on the power, make sure the power supply voltage has been set according to the local voltage standard.
- Before using the product, please verify that all cables and power connectors of your hardware components are connected.
- To prevent damage to the motherboard, do not allow screws to come in contact with the motherboard circuit or its components.
- Make sure there are no leftover screws or metal components placed on the motherboard or within the computer casing.
- Do not place the computer system on an uneven surface.

- Do not place the computer system in a high-temperature environment.
- Turning on the computer power during the installation process can lead to damage to system components as well as physical harm to the user.
- If you are uncertain about any installation steps or have a problem related to the use of the product, please consult a certified computer technician.

Site Preparation

When preparing the site for your Appliance, make sure to take the following into consideration.

- **Elevated Operating Ambient Temperature:** If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer. Always keep the rack's front door and all panels and components on the appliances closed when not servicing to maintain proper cooling.
- **Reduced Air Flow:** Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised. Leave enough clearance, approximately 25 inches in the front, and 30 inches in the back of the rack to enable you to access appliance components and allow for sufficient air flow.
- **Mechanical Loading:** Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.
- **Secure Mounting:** *All racks must be mounted securely.* Ensure that all leveling jacks or stabilizers are properly attached to the rack. If installing multiple Appliances in a rack, make sure the overall loading for each branch circuit does not exceed the rated capacity. Do not slide more than one appliance out from the rack at a time. Extending more than one appliance at a time may result in the rack becoming unstable. Install your appliance in the lower part of the rack because of its weight and also for ease in accessing appliance components.
- **Circuit Overloading:** Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.
- **Reliable Earthing:** Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips). Install near appropriate AC outlets, and Ethernet hubs or individual jacks. Be sure to install an AC Power Disconnect for the entire rack assembly. The Power Disconnect must be clearly marked. Ground the rack assembly properly to avoid electrical shock.

Specifications

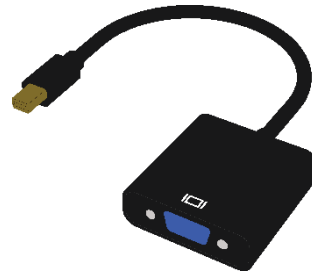
The specifications of the Appliance are outlined in this section for your reference.

Specifications	
V	100 – 127 VAC, 200 – 240 VAC
Hz	50/60
A	100 – 127V ~/10A Max (x2), 200 – 240V ~/5A Max (x2)
Dimensions	17.2in (W) x 1.7in (H) x 32.1in (D) or 438mm (W) x 43.5mm (H) x 815mm (D)
Base Weight	Base Weight is 65lbs. Your appliance may weigh more than the base weight specified herein depending on the addition of devices such as hard disk drives, PCI circuit boards, etc.

Unpacking the Appliance

Make sure your Appliance comes with the following items:

- 1U rack assembly kit with mounting hardware and the rack rail installation instructions
- Two (2) power cords
- One (1) mini-VGA adapter



Rail and Rack Appliance Installation

Follow the steps below to install your slide rails and rack Appliance.

Preparing the Slide Rail Assemblies

The steps below outline how to prepare the rail assemblies

1. Unpack each slide rail assembly. Pull the slide rail assembly out until it cannot extend further.



2. Push back the white latch on the front section of the slide rail assembly while simultaneously withdrawing the front section from the slide rail assembly.



3. Push back the middle section into the slide rail assembly. Then push the latch while pushing the middle section into the slide rail assembly.

Latch on
the middle
section

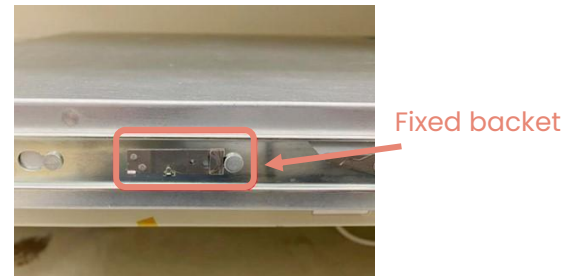


4. Repeat these steps for the other assembly.

Installing the First Section of the Slide Rail

The steps below outline how to install the front section of the slide rail onto the server.

1. Position the front section against the server and make sure the mounting holes are aligned with the locating pins on the side of the server. Assemble the front section onto the server and pull back to lock. Repeat this step for the other slide. For both, make sure the fixed bracket is locked on.



Attaching the Slide Rail Assemblies

1. Position the slide rail assembly in your rack and align the mounting bracket to the rack posts. Then pull the metal clip and place the slide rail assembly onto the rack posts.



2. Unleash the metal clip to lock on the rail assembly.



3. The front and rear side assembly methods are the same. Pull the metal clip and place the slide rail assembly onto the rack posts. After making sure the slide rail assembly is onto the rack posts. After making sure the mounting brackets are fixed, unleash the metal clip to lock on the rail assembly. Do the same for the other side.

Installing the Server onto the Rack

The steps below outline how to install the server onto the rack.

1. Pull the slide rail assembly on your rack until it stops moving.



2. Align the front section of the server with the rail assembly and insert it.



NOTE: You should insert the left and right slides simultaneously to prevent any stuck during the insert process.

3. Pull the latch on the middle section of both sides and push the server back into the rack to complete.

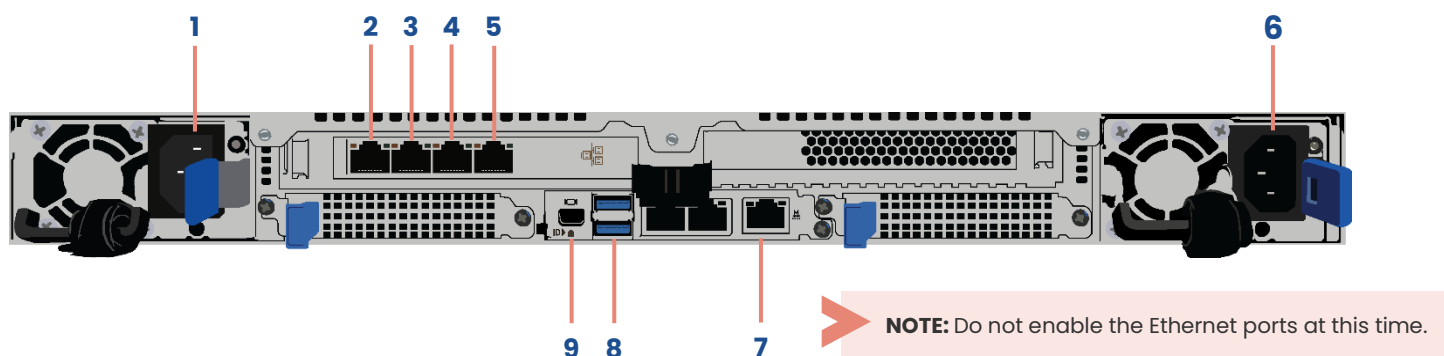


Director Rear Panel Connections

This section provides diagrams for the rear panel connections for both the 910C and 910F Director Appliances.

910C Rear Panel

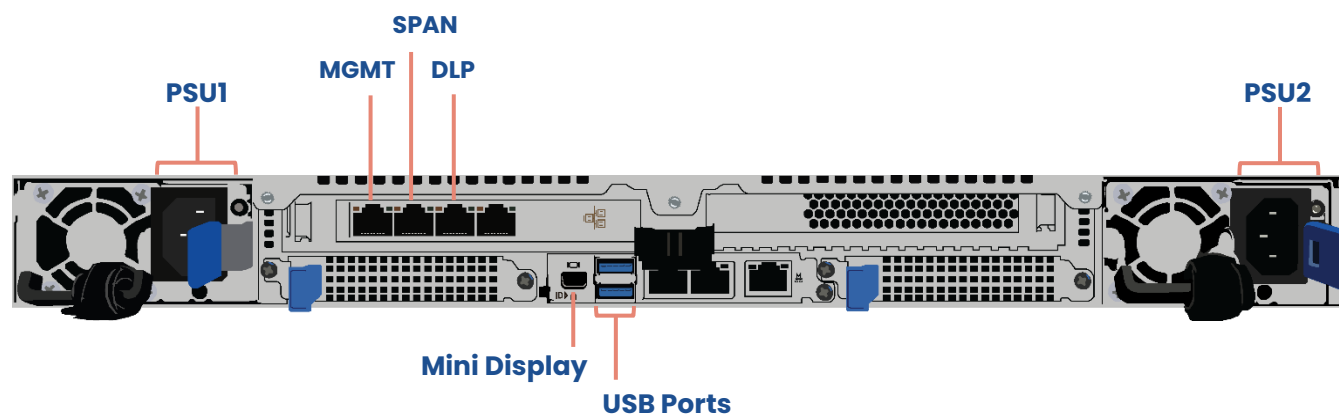
The diagram below outlines the rear panel connections for the 910C Director.



Rear Connections			
No.	Description	No.	Description
1	Power Supply Module #1	6	Power Supply Module #2
2	ETH0 – MGMT Port	7	Remote Management Port* (IPMI/BMC)
3	ETH1 – SPAN Port	8	USB Port
4	ETH2 – DLP Port	9	Mini Display Port
5	ETH3 – Not used		

NOTE: Although IPMI and or Remote Management is available we do not support it. We recommend for the use of KVM with VGA(Mini Display) and USB adaptor.

This diagram outlines the ports and connections necessary to hook up your Appliance.



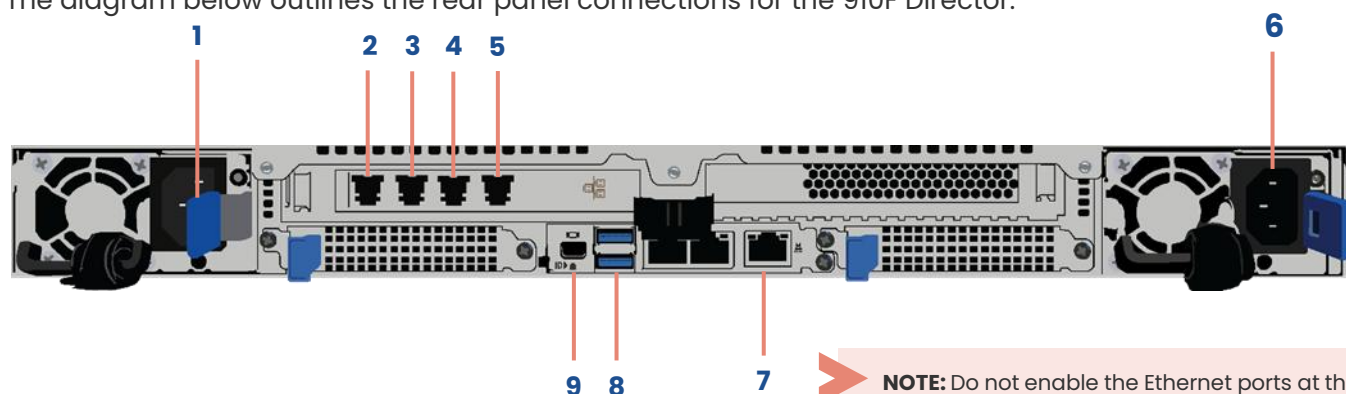
NOTE: The server offers redundant, hot-swap capability. The connections to AC mains should be made in a manner appropriate to local code and consistent with customer power distribution with or without redundant sources.

1. Connect the Ethernet cables for MGMT, DLP, and SPAN (if required).
2. Connect any other required cables.
3. Connect the power cords.

Caution: The power supply is a hot-swappable only when you have a server with redundant power supplies installed. If you only have one power supply installed, before removing or replacing the power supply, you must first take the server out of service, turn off all peripheral devices connected to the server, turn off the server by pressing the power button, and unplug the AC power cord from the server or wall outlet.

910F Rear Panel

The diagram below outlines the rear panel connections for the 910F Director.

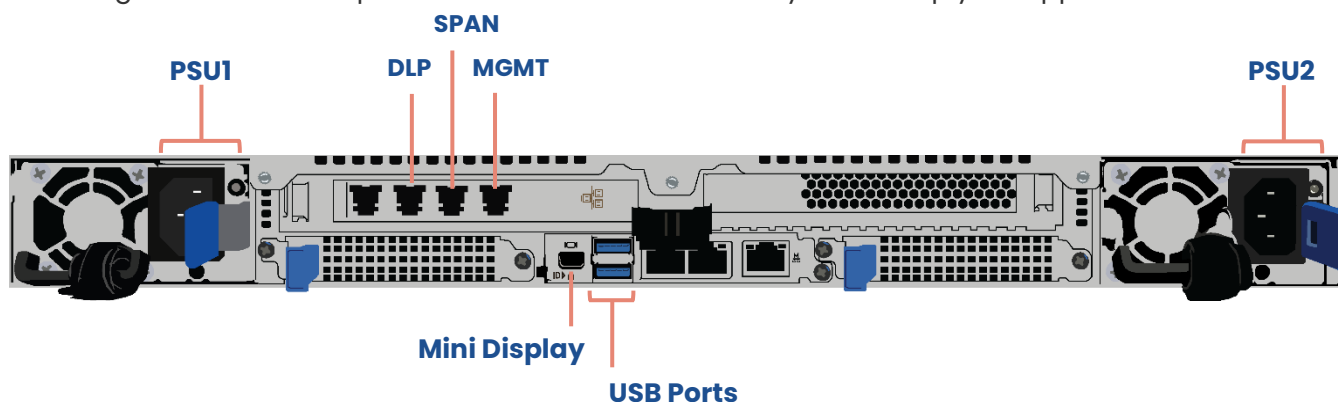


NOTE: Do not enable the Ethernet ports at this time.

Rear Connections

No.	Description	No.	Description
1	Power Supply Module #1	6	Power Supply Module #2
2	ETH3 – Not used	7	Remote Management Port* (IPMI/BMC)
3	ETH2 – DLP Port	8	USB Port
4	ETH1 – SPAN Port	9	Mini Display Port
5	ETH0 – MGMT Port		

This diagram outlines the ports and connections necessary to hook up your Appliance.



NOTE: The server offers redundant, hot-swap capability. The connections to AC mains should be made in a manner appropriate to local code and consistent with customer power distribution with or without redundant sources.

1. Connect the Ethernet cables for MGMT, DLP, and SPAN (if required).
2. Connect any other required cables.
3. Connect the power cords.

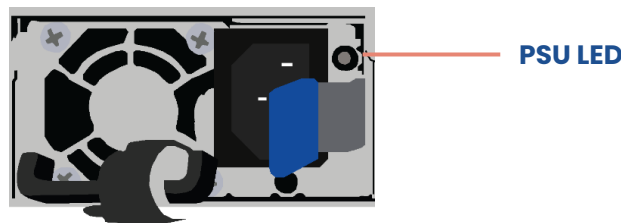
Caution: The power supply is a hot-swappable only when you have a server with redundant power supplies installed. If you only have one power supply installed, before removing or replacing the power supply, you must first take the server out of service, turn off all peripheral devices connected to the server, turn off the server by pressing the power button, and unplug the AC power cord from the server or wall outlet.

Power Supply Unit (PSU)

Your Appliance will come with two power cords and two PSU ports. You will need to connect the power cords to the PSU ports on your Appliance prior to plugging them into the intended wall outlets.

PSU Supply Status LED

The diagram and table below provide information on the different statuses of the PSU LED.



PSU LED	
State	Description
OFF	No AC power to all power supplies
1Hz Green Blinking	AC present / only standby on / Cold redundant mode
2Hz Green Blinking	Power supply firmware updating mode
Amber	AC cord unplugged or AC power lost; with a second power supply in parallel still with AC input power
	Power supply critical event causing shut down: failure, OCP, OVP, fan failure, UVP
1Hz Amber Blinking	Power supply warning events where the power supply continue to operate: high temp, high power, high current, and slow fan

Hard Disk Drive LEDs

The diagram below depicts the hard disk drive LEDs on your Appliance.

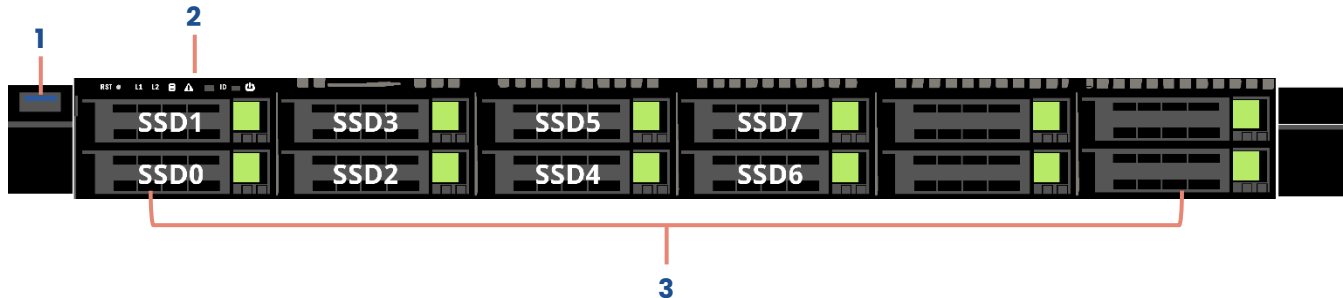


Hard Disk Drive LEDs

RAID SKU		LED1	Locate	HDD Fault	Rebuilding	HDD Access	HDD Present (No Access)
No RAID configuration (via PCH, HBA)	Disk LED (LED on Back Panel)	Green	ON(*1)	OFF		BLINK (*2)	OFF
		Amber	OFF	OFF		OFF	OFF
	Removed HDD Slot (LED on Back Panel)	Green	ON(*1)	OFF		--	--
		Amber	OFF	OFF		--	--
RAID configuration (via HW RAID Card or SW RAID Card)	Disk LED	Green	ON	OFF		BLINK (*2)	OFF
		Amber	OFF	ON	(Low Speed: 2 Hz)	OFF	OFF
	Removed HDD Slot	Green	ON(*1)	OFF	(*3)	--	--
		Amber	OFF	ON	(*3)	--	--

Front Panel Operation

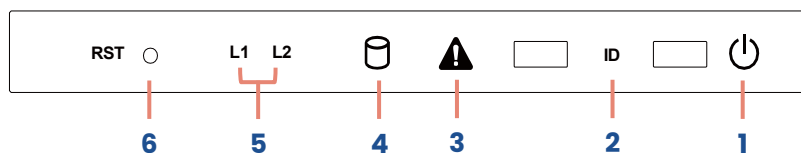
The front panel of the Appliance is depicted in the diagram below.



Front Connections	
No.	Description
1	Front USB 3.2 Gen1 Port
2	Front Panel LEDs and Buttons
3	2.5" Drive Bays

Front Panel LEDs and Buttons

The LEDs and buttons of the front panel are captured in the diagram below, along with information on the meaning of different LED color statuses.



LED Status				
No.	Name	Color	Status	Description
1	Power Button	Green	On	System is powered on
		N/A	Off	System is not powered on or in ACPI S5 state (power is off)
2	ID Button			Press the button to activate system identification
3	System Status LED	Green	Solid	System is operating normally
		Amber	Solid	Critical condition, may indicate: <ul style="list-style-type: none"> System fan failure System temperature
			Blinking	Non-critical condition, may indicate: <ul style="list-style-type: none"> Redundant power module failure Temperature and voltage issue Chassis intrusion

LED Status cont.

		N/A	Off	System is not ready, may indicate: <ul style="list-style-type: none"> POST error NMI error Processor or terminator missing
4	HDD Status LED	Green	Solid	HDD Locate
			Blinking	HDD Access
		Amber	Solid	HDD Fault
		Green/Amber	Blinking	HDD Rebuilding
		N/A	Off	No HDD access or no HDD fault
5	LAN ½ Active/Link LEDs	Green	Solid	Link between system and network or no access
			Blinking	Data transmission or receiving is occurring
		N/A	Off	No data transmission or receiving is occurring
6	Reset Button			Press the button to reset the system

Bootstrap Configuration

The steps below are meant to outline the bootstrap configuration of the Appliance. This method is quicker, and easier, and does not require the special configuration of an additional computer. Before beginning you will need to have a keyboard and monitor available.

1. Plug the keyboard into an available USB port on the back of the Appliance.
2. Connect the VGA adapter to the Appliance and then plug the monitor into the adapter.
3. Power on the Appliance.
 - a. The system will go through basic boot functions.
 - b. After this, the Appliance login prompt will appear. Enter the following:
 - i. **Appuser**
 - ii. **Chang3m3!**
4. Complete the First Boot setup.
5. When prompted, change the password for the appuser. Do not lose this password as you will need it to continue setup.
6. Enter your network information as prompted.
 - a. For DNS and NTP you may provide multiple entries on one line. Separate them with a comma. Ex: 0.pool.ntp.org,time.nist.gov
7. Continue the setup on the Appliance web interface by going to the IP address you set on port 5000 via https. Ex: https://<configured_IP>.5000.

