INFINITYLINK IL6000 CHASSIS

Installation and Operations Manual
CLASS I LASER CAUTIONS

The optical transmission system on some optical transmitter models is a Class I laser product. When the optical transmission system is installed in accordance with the procedures of this manual, the laser radiation is restricted to the optical cable, thus preventing human access. User modification to the system may alter the product classification and create a radiation hazard.

DO NOT, UNDER ANY CIRCUMSTANCES, stare directly into a fiber optic connector or use instruments to inspect fiber ends unless they have been confirmed to be unenergized. Although the light used in most fiber optic transmissions is not visible to the naked eye, potentially harmful levels of optical laser radiation may be present at the optical output ports and unconnected receive fiber ends. Prior to applying system power, connect fiber cables to either another InfinityLink unit or to an optical power meter.

ESD CAUTIONS

The InfinityLink media transport platform contains components that can be damaged by electrical static discharge. Ensure that you connect an approved anti-static wrist strap to your wrist and then to an electrical ground that is reliably connected to electrical ground before installing or removing the InfinityLink media transport platform and sub-assemblies.

CAUTION

This manual is intended for use by trained service personnel. The use of controls, adjustments, or performance of procedures other than those specified herein may result in hazardous exposure to optical radiation.

SAFETY LISTING

CAN/CSA-C22.2 NO. 60950
EN 60950: International Safety Standards
FEDERAL COMMUNICATIONS COMMISSIONS NOTICE

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 instructions in this 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 must correct the interference at the user’s own expense.

Compliance with applicable regulations depends on the use of shielded I/O cables. The user is responsible for procuring the appropriate cables.

CANADIAN EMISSIONS REQUIREMENTS

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe A prescrites dans la norme sur le matériel brouilleur: “Appareils Numériques”, NMB-003 édictée par le Ministère des Communications.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled “Digital Apparatus”, ICES-003 of the Department of Communications.

INTERNATIONAL EMC REQUIREMENTS

This equipment has been tested and found to comply with the limits of the following international standards.

- EN55 022 Radiated & Conducted Emissions
- CISPR 22 Class A
- EN50 082-1
  - Immunity IEC 801-2 ESD
  - EC 801-3 Immunity
  - EC 801-4 EFT
  - AS/NZ 3548
  - VCCI

Disposal and Recycling Information

Based on our customer requests, the InfinityLink media transport platform and sub-assemblies contain lead solder that will avoid potentially unreliable solder connections when lead-free solder is used. When the product reaches its end of life, dispose of the product in accordance with state and local environmental laws and guidelines.

1. Shielded Cat 5e STP cabling is required. All specifications provided in this manual are based on the use of shielded Cat 5e STP cable with properly shielded RJ45 connectors.
2. For all DC Power Supply Units (PSU), the return connection must be reliably connected to earth meet all compliance and certifications.
Declaration of Conformity

We,
Artel Video Systems Corporation
Located at
5B Lyberty Way
Westford, MA 01886

declare under our sole responsibility that the following InfinityLink media platform products:
IL6000

to which this declaration relates, is in conformity with the following standards and other normative documents:

**Product Safety:** EN 60950  
**EMC:** EN55 022, EN 50 082-1


Name: Michael LaFleur  
Title: Vice President of Production  
Date: August, 2016
Revision history for the *IL6000 Chassis Installation and Operations Manual*.

**Table 0-1. Manual Revision History**

<table>
<thead>
<tr>
<th>Revision</th>
<th>Document Number</th>
<th>Date</th>
<th>Reason for Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>AR200-006000-00_A</td>
<td>December, 2016</td>
<td>Initial release.</td>
</tr>
</tbody>
</table>
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About This Manual

This manual provides instructions for installing, configuring, and operating the IL6000 chassis.

Audience

This manual is intended for the following trained and qualified service personnel who are responsible for installing and operating the IL6000 chassis:

- System installer
- Hardware technician
- Artel Customer Support

Related Documentation

The following documentation contains material related to the IL6000 chassis:

<table>
<thead>
<tr>
<th>Document</th>
<th>Provides ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>InfinityLink Media Transport Solution Data Sheet</td>
<td>Product operating and environmental specifications, and regulatory conformance information for the chassis.</td>
</tr>
<tr>
<td>InfinityLink Manager Setup and Operations Manual</td>
<td>Information about accessing and using InfinityLink Manager to configure and monitor function modules.</td>
</tr>
<tr>
<td>Function Module Installation and Operations Manuals</td>
<td>Module-specific manuals that provide module overview, configuration, and operation information.</td>
</tr>
<tr>
<td>Function Module Quick Start Guides</td>
<td>Module-specific quick start guides that provide module configuration and operation information.</td>
</tr>
<tr>
<td>Function Module Data Sheets</td>
<td>Module-specific documents that provide module operating and environmental specifications, and regulatory conformance information.</td>
</tr>
</tbody>
</table>
Symbols and Conventions

This manual uses the following symbols and conventions.

**Caution**

A caution means that a specific action you take or fail to take could cause harm to the equipment or to the data transmission.

**Warning**

A warning describes an action you take or fail to take that could result in death, serious physical injury, or destruction of property.

**Note:** Important related information, reminders, and recommendations.

*Italics*—used for emphasis, for indicating the first occurrence of a new term, and for book titles

1. Numbered list—where the order of the items is important
   - Bulleted list—where the items are of equal importance and their order is unimportant

Artel Customer Service

You can reach Customer Service by e-mail at customercare@artel.com or by telephone:

In the US call (800) 225-0228, then select 1 for technical support.

Outside the US call (978) 263-5775, then select 1 for technical support.

When requesting assistance, please be ready to provide the following information:

- Your name and telephone number
- Product model and serial number
- Brief description of the problem
- List of symptoms
- Steps you have already taken to try to resolve the problem

If the product is damaged

If any portion of the unit is damaged, forward an immediate request to the delivering carrier to perform an inspection of the product and to prepare a damage report. Save the container and all packing materials until the contents are verified.

Concurrently, report the nature and extent of the damage to Artel Customer Service so that action can be initiated to either repair or replace the damaged items.

Do not return any items to Artel until you obtain instructions from Customer Service.

Report the problem or deficiency to Customer Service along with the model number and serial number. Upon receipt of this information, Artel will provide service instructions, or a Return Authorization Number and shipping information.
Information About the IL6000 Chassis

This manual introduces the IL6000 chassis and describes how to install and configure it. The IL6000 chassis features four hot swappable function module slots, dual AC power supplies, variable speed cooling fan, and software to provide management and switch functions.

The IL6000 chassis also includes the following features:

- Space-efficient rugged chassis.
- Controller that provides switching capabilities for interconnecting installed modules through the backplane.
- Simple Network Management Protocol (SNMP) management.
- Unlimited, non-spaced installation.

Provision and monitor the IL6000 chassis as follows:

- Provision and monitor the chassis and installed modules remotely using Artel's InfinityLink Manager (IL Manager) element management system. For more information, see the InfinityLink Manager Setup and Operations Manual.
- Monitor the chassis and installed modules locally using the front and rear panel status LEDs.

Note: This manual uses the following terms interchangeably:

- Chassis and shelf when referring to the IL6000.
- InfinityLink Manager and IL Manager when referring to the element management system.
IL6000 Laser Warnings

Function modules with optical transmitters that install into the IL6000 chassis contain Class 1 lasers. You must adhere to the standard safety practices for handling a Class 1 laser product, including the following warning.

⚠️

Warning

Never stare directly into a fiber optic connector.

Although the light used in most fiber optic transmissions is not visible to the naked eye, potentially harmful levels of radiation may be present at the optical output ports and unconnected transmit fiber ends.

Failure to observe this warning could result in personal injury.
IL6000 Power Supply Warning

The chassis can be supplied by more than one power source. All sources must be removed to de-energize the chassis.

Warning
De-energize the chassis before servicing any modules.
This unit has two power supply connections. Both connections must be removed to properly de-energize the system.
Failure to observe this warning could result in personal injury.

United Kingdom: This product must be earthed.
Denmark: Apparatets stikprop skal tilsluttes en stikkontakt med jord, som giver forbindelse til stikproppens jord.
Finland: Laite on liitettävä suojakoskettimilla varustettuun pistorasiaan.
Norway: Apparatet må tilkoples jordet stikkontakt.
Sweden: Apparaten skall anslutas till jordat uttag.

ILM121 Module Warning

The InfinityLink element management modules utilize an internal RTC (Real Time Clock) with battery backup that provides the system software with the time of day on system power up. The backup battery is a socketed lithium battery that lasts the life of the unit when the unit is operating in the specified environmental conditions. The battery is not field replaceable.

Note: If the lithium battery in a unit should fail, you must return the module to Artel Video Systems for repair. Do not replace the battery yourself. Although the battery is not intended to be field replaceable, the safety agencies require that the following warning be included in this document.

Warning
There is a danger of explosion if the battery is replaced incorrectly.
Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries in accordance with the manufacturer’s instructions and local regulations.
Failure to observe this warning could result in personal injury.
Chassis Overview

The IL6000 chassis has four function module slots, two power supplies, fan, status LEDs, and Ethernet management ports required to access IL Manager. The chassis also includes switching functionality and a passive backplane that enables interconnecting of the installed function modules.

Figure 1 shows the chassis front panel components. This sample chassis configuration shows function modules occupying all four function module slots. If needed, a blank module tray is inserted in any unused module slot to cover the slot opening and maintain proper ventilation.

Figure 1. IL6000 Chassis Front Panel View

Table 1 describes the components called out in Figure 1.

Table 1. The IL6000 Chassis Front Panel Elements

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>for details, see...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>IL6000 chassis and product model number</td>
<td>Installing the IL6000 Chassis (page 8)</td>
</tr>
<tr>
<td>2</td>
<td>Status LEDs:</td>
<td>Powering Up and Monitoring the IL6000 (page 14)</td>
</tr>
<tr>
<td></td>
<td>• STATUS—Chassis status indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• PSA—Power supply A status indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• PSB—Power supply B status indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• FAN—Fan status indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• MGMT—IL Manager status indicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• SWITCH—Switch controller status indicator</td>
<td></td>
</tr>
<tr>
<td>Slot 1</td>
<td>Function module Slot 1</td>
<td>Installing a Function Module (page 13)</td>
</tr>
<tr>
<td>Slot 2</td>
<td>Function module Slot 2</td>
<td></td>
</tr>
<tr>
<td>Slot 3</td>
<td>Function module Slot 3</td>
<td></td>
</tr>
<tr>
<td>Slot 4</td>
<td>Function module Slot 4</td>
<td></td>
</tr>
</tbody>
</table>
Figure 2 shows the chassis rear panel components. This sample chassis configuration shows function modules occupying all four function module slots. If needed, a blank module tray is inserted in any unused module slot to cover the slot opening and maintain proper ventilation.

**Figure 2. IL6000 Chassis Rear Panel View**

![IL6000 Chassis Rear Panel View](image)

Table 2 describes the components called out in Figure 2.

**Table 2. The IL6000 Chassis Rear Panel Elements**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>for details, see...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slot 1</td>
<td>Function module Slot 1</td>
<td>Installing a Function Module (page 13)</td>
</tr>
<tr>
<td>Slot 2</td>
<td>Function module Slot 2</td>
<td></td>
</tr>
<tr>
<td>Slot 3</td>
<td>Function module Slot 3</td>
<td></td>
</tr>
<tr>
<td>Slot 4</td>
<td>Function module Slot 4</td>
<td></td>
</tr>
<tr>
<td>ILM121</td>
<td>Integrated assembly that contains the following components:</td>
<td>ILM121 Assembly Overview (page 6)</td>
</tr>
<tr>
<td></td>
<td>• Status LEDs:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• EMS (IL Manager)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• OK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Recessed IL Manager reset (RST) button.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• RJ-45 Ethernet management ports (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AC power supplies A and B</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Fan</td>
<td></td>
</tr>
</tbody>
</table>
ILM121 Assembly Overview

The IL6000 chassis includes the integrated ILM121 assembly, which includes management ports for accessing IL Manager, two AC power supplies, and a ventilation fan. The chassis can function using a single power supply or you can use both power supplies for increased system availability. The power supplies provide limited load sharing when both power connectors are used (see the “Cabling the IL6000 Power Supplies” section on page 12).

The fan provides ventilation for the chassis components and installed function modules (see the “Ventilating the IL6000 Chassis” section on page 7).

The ILM121 assembly includes voltage, temperature, and cooling fan alarms.

Figure 3. ILM121 Assembly Components

Table 3 describes the components called out in Figure 3.

Table 3. ILM121 Assembly Components

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>For details, see . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMS - Status LED for IL Manager.</td>
<td>Powering Up and Monitoring the IL6000 (page 14)</td>
</tr>
<tr>
<td>2</td>
<td>OK - Chassis status LED.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RST - Chassis reset switch.</td>
<td>Using the IL6000 Reset Switch (page 17)</td>
</tr>
<tr>
<td>4</td>
<td>MGMT - Ethernet management ports (2).</td>
<td>Information About Using IL Manager (page 16)</td>
</tr>
<tr>
<td>5</td>
<td>PSB - AC power supply B.</td>
<td>Cabling the IL6000 Power Supplies (page 12)</td>
</tr>
<tr>
<td>6</td>
<td>PSA - AC power supply A.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Chassis ventilation fan.</td>
<td>Ventilating the IL6000 Chassis (page 7)</td>
</tr>
</tbody>
</table>

Required Installation Tools and Equipment

To install the IL6000 as a rack-mounted or wall-mounted unit, you need:

- Phillips head screwdriver to reposition the chassis mounting ears (optional)
- Four rack mounting screws and matching screw driver (not supplied)
Unpacking the IL6000

When unpacking the your IL6000, set aside the packing material in case you need to repack the unit later.

To unpack the IL6000, perform the following steps:

1. Remove the IL6000 chassis and function modules from the shipping cartons.
2. Check the configuration of the unit against the items listed on the packing slip. If you find any discrepancies, report them in accordance with the instruction in “About This Manual”.

Ventilating the IL6000 Chassis

It is important that your IL6000 operates within the specified temperature range as described in the IL6000 data sheet. A single fan provides ventilation for the IL6000 chassis by drawing air in through the ventilation slots located on the side of the chassis near the function module slots. Figure 4 shows how the fan draws air through the side of the chassis and over the function modules when power is applied. The IL6000 uses a variable speed fan to provide quiet operation at normal temperatures. The internal temperature is constantly monitored and the fan speed automatically increases should the temperature increase.

Figure 4. IL6000 Air Flow

To ensure proper ventilation of the chassis and the installed modules, you must adhere to the following requirements when installing and operating your IL6000:

- Maintain at least a 2 inch (5 cm) clearance around the sides and rear of the chassis where the fan and ventilation slots are located. Keep these areas clear of any obstructions that might restrict air flow in or out of the chassis.
- Install the module blank trays in any unused module slots.
- Visually inspect the ventilation fan for proper operation when the power is applied.
Installing the IL6000 Chassis

You can place the IL6000 chassis on a flat surface as a free-standing unit, rack mount it in a standard 19 inch equipment rack, or mount the chassis to a wall. As you position the IL6000 for installation, ensure that there is enough space in the back of the chassis to install and cable the various power supply and function modules.

**Note:** Before installing your IL6000 chassis, see the *InfinityLink Media Transport Platform Data Sheet* for a detailed description of the IL6000 product specifications including environmental requirements that you must adhere to when installing the chassis and power supply modules.

The section contains the following topics:

- Installing the IL6000 as a Free-standing Chassis (page 8)
- Installing the Chassis in a Rack (page 8)
- (page 10)

Installing the IL6000 as a Free-standing Chassis

When installing the IL6000 chassis as a free-standing chassis, follow these requirements:

- The surface must be flat, clean, and in a safe location. The chassis must not be installed on the floor. In addition to increasing the risk of being damaged, placing the chassis on the floor increases the risk of dust building up in the chassis and causing problems related to overheating.
- The area provides a 2 inch (5 cm) clearance on all four sides of the chassis for proper ventilation (see the “Ventilating the IL6000 Chassis” section on page 7) and accessing the power switches, status LEDs, module slots, and cable connections.

Installing the Chassis in a Rack

Flush-mounting the chassis sets the front edge of the unit even with the front edge of the rack. When installing multiple chassis in a rack, no vertical space between the units is required. The only limit to the number of chassis that you can place in a rack is the height of the rack.

**Caution**

If the system is installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment might be greater than the room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature specified for the system.
Caution

Installation of the equipment in a rack should be such that the amount of airflow required for safe operation of the equipment is not compromised.

Caution

Mounting of the equipment in the rack should be such that a hazardous condition is not created due to uneven mechanical loading.

Caution

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 over-current protection and supply wiring. Appropriate consideration of equipment nameplate power ratings should be used when addressing this concern.

Caution

Reliable grounding of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (for example, use of power strips).

This section contains the following topics:

• Flush-Mounting the Chassis (page 10)
Flush-Mounting the Chassis
Artel ships the chassis with the mounting brackets installed for flush-mounting the unit as shown in Figure 5.

1. To flush-mount the IL6000 in an equipment rack, perform the following steps:
2. Raise the unit to the appropriate installation height.
3. Align the screw holes on the mounting brackets with the screw holes on the equipment rack.
4. Install the screws through the chassis mounting brackets into the threaded screw holes on the rack. The chassis requires two screws for each side of the chassis (mounting screws not included).

Mounting the Chassis to a Wall
To install the IL6000 as a wall-mounted unit, perform the following steps:

1. Remove the three screws that secure each of the mounting brackets to the side of the chassis.
2. Rotate the mounting brackets to the desired wall-mounting position (example shown in Figure 6).
3. Secure the mounting brackets to the chassis using the screws that you removed in Step 1.
4. Secure the chassis to the wall with four mounting screws (mounting screws not included).
Figure 6. Wall-Mounted Chassis Bracket
Cabling the IL6000 Power Supplies

After you have installed your IL6000 chassis as described in the “Installing the IL6000 Chassis” section on page 8, you can cable one or both power supplies.

⚠️ **Warning**

To avoid risk of injury or possible equipment damage, ensure that your power source meets the specifications as described in the IL6000 data sheet before applying power to your IL6000.

⚠️ **Caution**

Cable the power supplies before connecting to the power source.

**Note:** A IL6000 chassis with two power supplies connected dissipates more power that a chassis with one power supply connected due to internal power dissipation within the power supplies.

To connect the AC power supplies to a power source, you need the three-prong 320-C13 120/240 required by EN60950 VAC power cord that was shipped with the chassis or an equivalent power cord. Figure 7 shows the power source connectors on the AC power supplies.

**Figure 7. AC Power Supply Power Cord Connectors**

To cable the AC power supplies, perform the following steps:

1. From the rear panel of the IL6000 chassis, attach the AC power cords to the AC connectors on the power supplies (see Figure 7).
2. Attach the other end of the AC power cords to the AC power source.

⚠️ **Caution**

The ILM121 AC supply has double pole\neutral fusing.
Installing a Function Module

You can install up to four function modules in the IL6000. A function module can be installed in any available function module slot. This section contains only the basic instructions for installing a function module in the IL6000. Refer to the appropriate module-specific manual for detailed instructions on installing, configuring, and cabling the module.

To install a function module into the chassis, perform the following steps:

1. (DIP-switch configured modules only) Configure the operation of the function module as described in the appropriate module-specific manual.

   **Note:** Some function modules require that you configure them prior to installing them because they are configured using the DIP switches mounted to the top of the module board. Other function modules must be configured after you install the module by using IL Manager as described in the module’s operation manual.

2. From the rear panel of the IL6000 chassis, remove the two screws that secure one of the module slot covers to the chassis.

3. Slide the function module into the chassis slot using the guide rails on either side of the slot.

4. Push the function module in until it is firmly seated into the backplane and flush with the back of the chassis.

5. Secure the function module to the chassis using the two mounting screws attached to the module.

6. Cable the function module (see the appropriate module-specific manual).

Repeat this procedure for each function module that you plan to install in the IL6000.

**Caution**

To ensure proper module cooling, blank module trays MUST be inserted in all unused module slots.
Powering Up and Monitoring the IL6000

The power supplies provide power to the installed modules through the backplane. The chassis front panel status LEDs shown in Figure 8 indicate if the backplane, power supplies, and installed function modules are operating correctly or if a problem exists.

**Figure 8. IL6000 Front Panel Status LEDs**

To power on and verify proper operation of the IL6000, perform the following steps:

1. From the back of the chassis, turn the power switches for both power supplies to ON (1).
2. From the front of the chassis, observe the status LEDs for proper operation as described in Table 4.

**Table 4. IL6000 Chassis Status LEDs**

<table>
<thead>
<tr>
<th>LED</th>
<th>Description</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Operating status of the chassis backplane and installed function modules.</td>
<td>Off—Power to the chassis is unavailable. Check the power source connection.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Green—Power is applied to the chassis and no alarm condition exists with either of the power supplies, the ILM121, or any function modules.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Yellow—Minor alarm condition exists. Power is applied to the chassis and at least one minor and no major alarm condition exists with one or more of the power supplies, the ILM121, or function modules.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Red—Major alarm condition exists. Power is applied to the chassis and at least one major alarm condition exists with one or more of the power supplies, the ILM121, or function modules.</td>
</tr>
<tr>
<td>LED</td>
<td>Description</td>
<td>State</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| PSA or PSB | Operating status of the corresponding power supply. The IL6000 checks that voltage supplied to the backplane is within specifications. | Off—No power is applied to the corresponding power supply and that power supply alarm is disabled.  
Green—Power is applied to the corresponding power supply and no alarm condition exists.  
Red—Major alarm condition exists with the corresponding power supply. The power supply can no longer provide power to the chassis. You must correct the problem immediately.  
Possible causes are as follows:  
• No input power to the power supply. Check that input voltage is present.  
• Internal failure of the power supply. Replace the chassis. |
| FAN  | Operating status of the fan.                                                | Off—No power is applied to the chassis.  
Green—The fan speed is in the normal range.  
Red—The fan is not operating. |
| MGMT | Operating status of IL Manager.                                            | Off—No power is applied to the chassis  
Green—Normal operation  
Red—Indicates one of the following conditions:  
• EMS is non-functional.  
• EMS software is being updated.  
• Ethernet port alarm exists.  
• Reset switch has been pressed (see the Using the IL6000 Reset Switch (page 17))  
Note: During power up or IL Manager update, the MGMT LED is red until the EMS system has initialized. |
| SWITCH | Operating status of the integrated switch.                               | Off—No power is applied to the chassis  
Green—Normal operation  
Yellow—Minor alarm exists that indicates the temperature is out of range or that there is not adequate inlet and exhaust airflow is available.  
Red—Major alarm exits in the ILM121 other than power supply or fan. |
Information About Using IL Manager

Artel’s IL Manager is a web-based graphical user interface (GUI) that provides a network management interface for the IL6000 chassis. Using IL Manager, you can monitor and configure the operations of the installed function modules and configure backplane connections between the modules. IL Manager includes a real-time preemptive, multitasking operating system, TCP/IP stack, web server, and SNMP master agent.

This section contains the following topics:

• Cabling and Accessing IL Manager (page 16)
• Using the IL6000 Reset Switch (page 17)

Cabling and Accessing IL Manager

Access to IL Manager is made through the ILM121 management ports, which are located next to the AC power connectors (see “ILM121 Assembly Overview” section on page 6).

Artel ships IL Manager with a default IP address (192.168.100.5) that allows you to connect locally to it using a client device. If you are going to connect IL Manager to your management network, you must first configure its network IP address as needed to connect to your network.

The chassis rear panel contains two management port connections, which allows you to daisy chain the management port connections of multiple IL6000 chassis. Figure 9 shows an example of daisy chaining three IL6000 chassis, each with its own unique IP address.

Note: Before you can connect a daisy chain configuration to your management network, you must use a local client device to access the IL Manager instance on each chassis and configure each with a unique IP address (as shown in Figure 9) that will work on your network.

Note: Refer to the following manuals for details about accessing and using IL Manager with the IL6000:

• InfinityLink Manager Setup and Operations Manual
  Provides the following information:
  – Operational considerations
  – Configuring and cabling the client device
  – Accessing the IL Manager home page
• Assorted Function Module Manuals
  You will also need the installation and operation manual associated with each of the installed modules to see how they can be managed using IL Manager.
Using the IL6000 Reset Switch

The IL6000 rear panel includes a recessed, push-button reset switch (RST) that resets the chassis. Resetting the chassis does not erase any user-selected parameters.

To reset the IL6000, press and hold the reset button for more than 5 seconds before releasing it.
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