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ASTi
Axis Local Distribution Module
Technical & User Guide

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Product Name: Axis

ASTi Axis Local Distribution Module Technical & User Guide

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Axis General Information

Description

The Axis provides connection and distribution for ASTi USB-based peripheral devices local to the Telestra platform. The Axis may support up to eight (8) Iris devices.

Features

- Four (4) Type A USB connections
- One (1) Type mini-B USB connection to Telestra

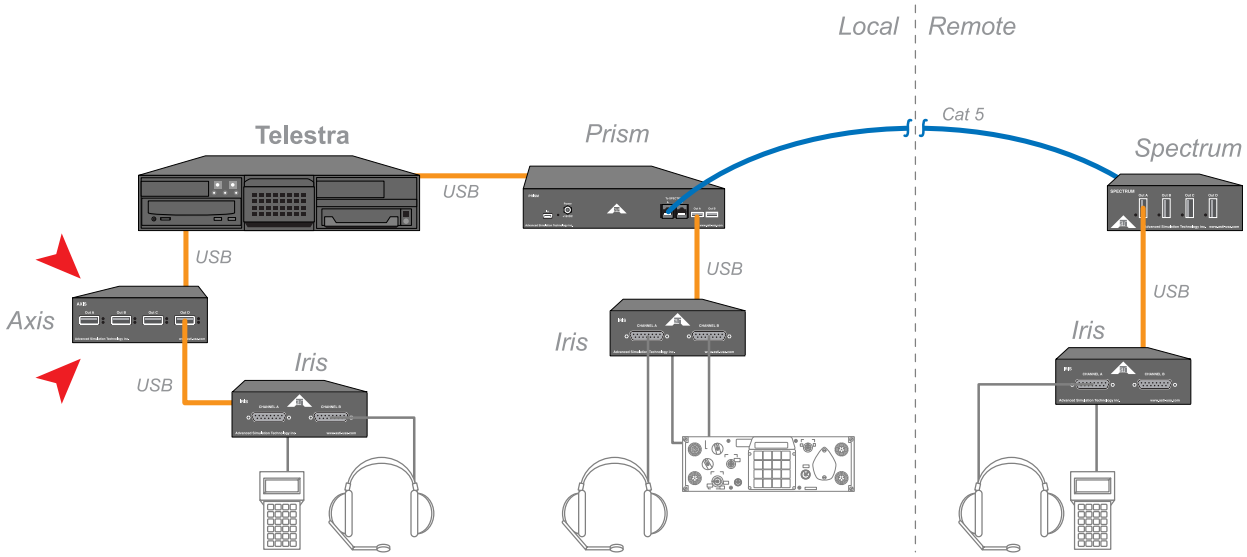

Figure 1: Telestra Hardware Connection and Functionality Diagram

Physical Specifications

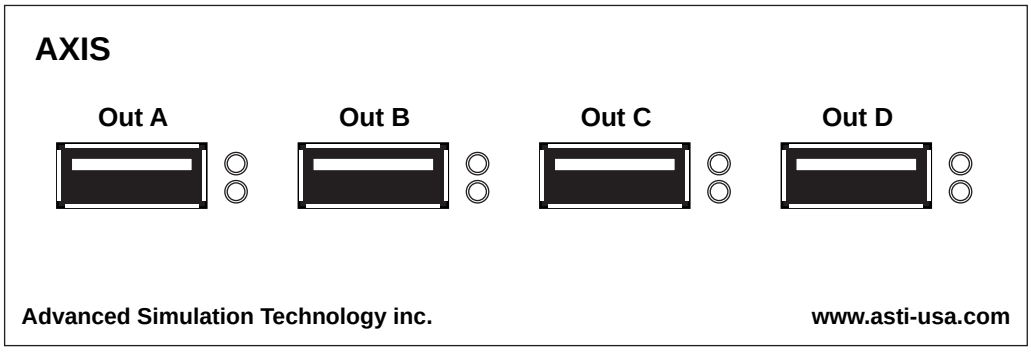

Figure 2: Axis Front Panel

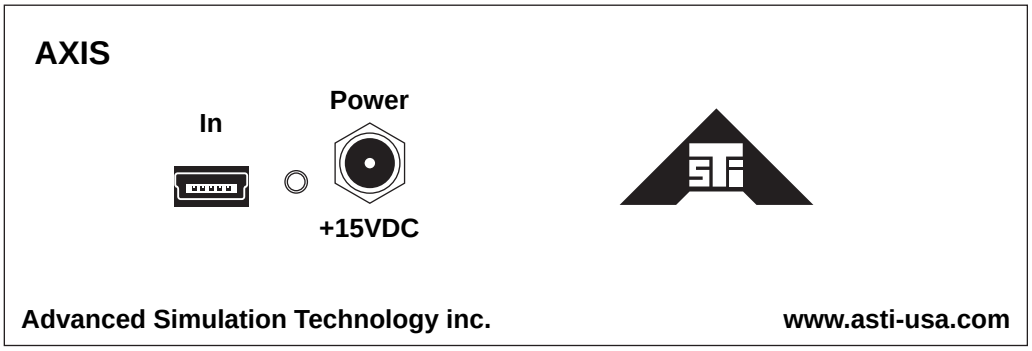

Figure 3: Axis Rear Panel

Dimensions

5.5” wide x 1.53” high x 6.0” deep

Allow at least 2” or more of space to the front and rear of module for cable access and clearance.

For detailed dimensions, refer to drawing CDHW-AU-001.

Weight

Axis only: 1.5 lbs.

Axis with power supply: 2.25 lbs.

Module and Cabling Requirements

Power Requirements

Input to PSL-UM-001	100-240 VAC, 50-60 Hz, 1.5Arms (120VAC), 0.75Arms (240VAC)
Output of PSL-UM-001	15 VDC at 2.5A max, < +/- 5% voltage regulation, < 150 mV max voltage ripple
Power connector	Inside Diameter 0.100", Outside Diameter 0.218", bushing 0.219", locking, center positive

The Axis module can be powered by an individual power supply (included at shipment), or by ASTi's Power Distribution Module (sold separately).

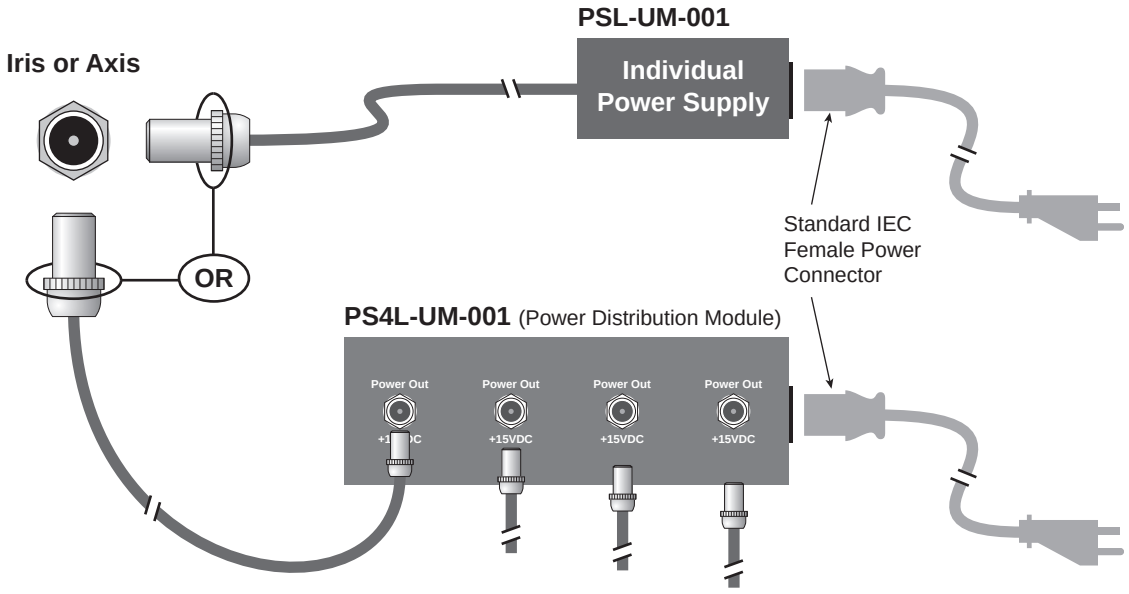

Figure 4: Axis Power Supply Options

The power adapter inlet connector is an IEC320 type C14 or C8, requiring a matching cordset equipped with an IEC320 C13 or C7 connector (female line cord). Country-specific power connectors must be acquired separately for international use.

Other types of power supplies may be used, given that the power output is 15 VDC, 800mA, with the properly fitting power connector.

Temperature & Humidity Ranges

Operating temperature range	+10°C to +40°C (50°F to 104°F)
Operating max. temperature gradient	20°C (68°F) per hour
Operating humidity range	10% to 90% non-condensing
Storage temperature range	-10°C to +70°C (14°F to 158°F)
Storage max. temperature gradient	30°C (86°F) per hour
Storage humidity range	5% to 95%

Power-On Ordering Requirements and Lost USB Devices

The USB audio distribution architecture has specific requirements regarding the power on sequencing of devices in order to achieve a working system. The Telestra processor system must perform a discovery process in order to find all the devices that are connected, and hence this system is started last in the sequence of elements. The discovery process runs as part of the system framework boot process, or it is manually initiated from RMS, by clicking the “Hardware” tab, and then the “Reset USB network” link. Prior to this all other elements of the USB sub-system must be connected, and powered on. **Note** that the Prism/Spectrum extender architecture should be powered on before or simultaneously with the Iris audio interface units.

If any element of the USB sub-system is powered off and then back on again without rebooting the Telestra processor, or initiating a manual USB discovery, then the result will be that those devices are “lost” to the system, and will no longer process audio. The most effective way to check for this condition is to look at the RMS system, select the “Hardware” tab, and then the “Layout” tab. Any Iris units that were connected at the time of system boot and have been subsequently powered off will show up with a red ‘X’ through the device. If profiling is turned on (see Telestra 3 User Guide for details), then any device that is not active on the USB sub-system will be reported with a red ‘X’. To recover from this situation, power on the required USB devices (Prism devices first, Iris devices last), and then either reboot the Telestra, or initiate a manual USB re-discovery using RMS. If using RMS, once the re-discovery process has completed, it will be necessary to reload the model.

Installation USB Cabling & USB Ports

For complete information on connecting Telestra USB devices, see the “Telestra USB Device Connections Matrix” document (ASSY-01-UMCX-IN-1).

Axis Indicator LEDs

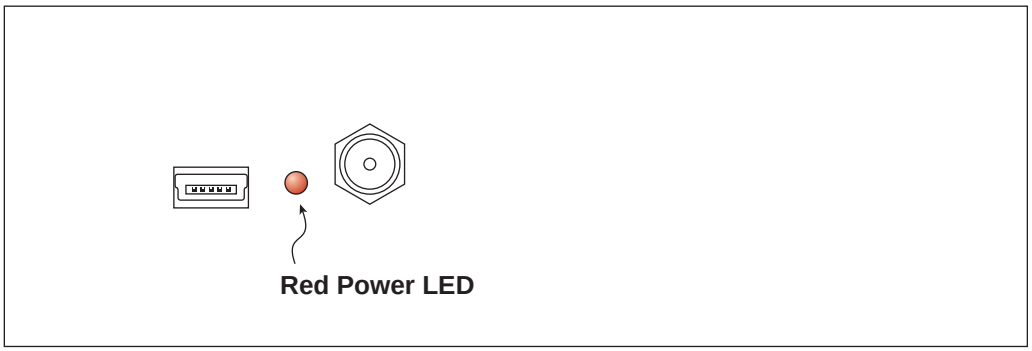

Figure 5: Axis Rear Panel Indicator Light

The red LED on the rear panel of the Axis module will light when power is applied to the unit.

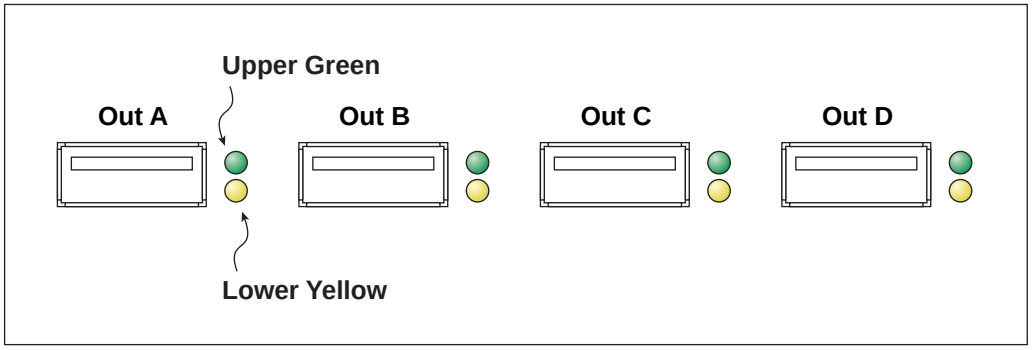

Figure 6: Axis Front Panel Indicator Lights

The upper green LED will light when the connected USB device (usually an Iris) has been properly identified by the software on the Telestra platform.

The lower yellow LED will light when there is a USB-related problem.

Memory Devices

- Micro controller internal RAM
- EEPROM

Mounting Options

- Flush mounting to a flat surface is possible.þ Refer to the full sized template below.

  The three hole pattern on the mounting plate is compatible with NS-35 DIN rail mounting hardware adapter (sold separately).

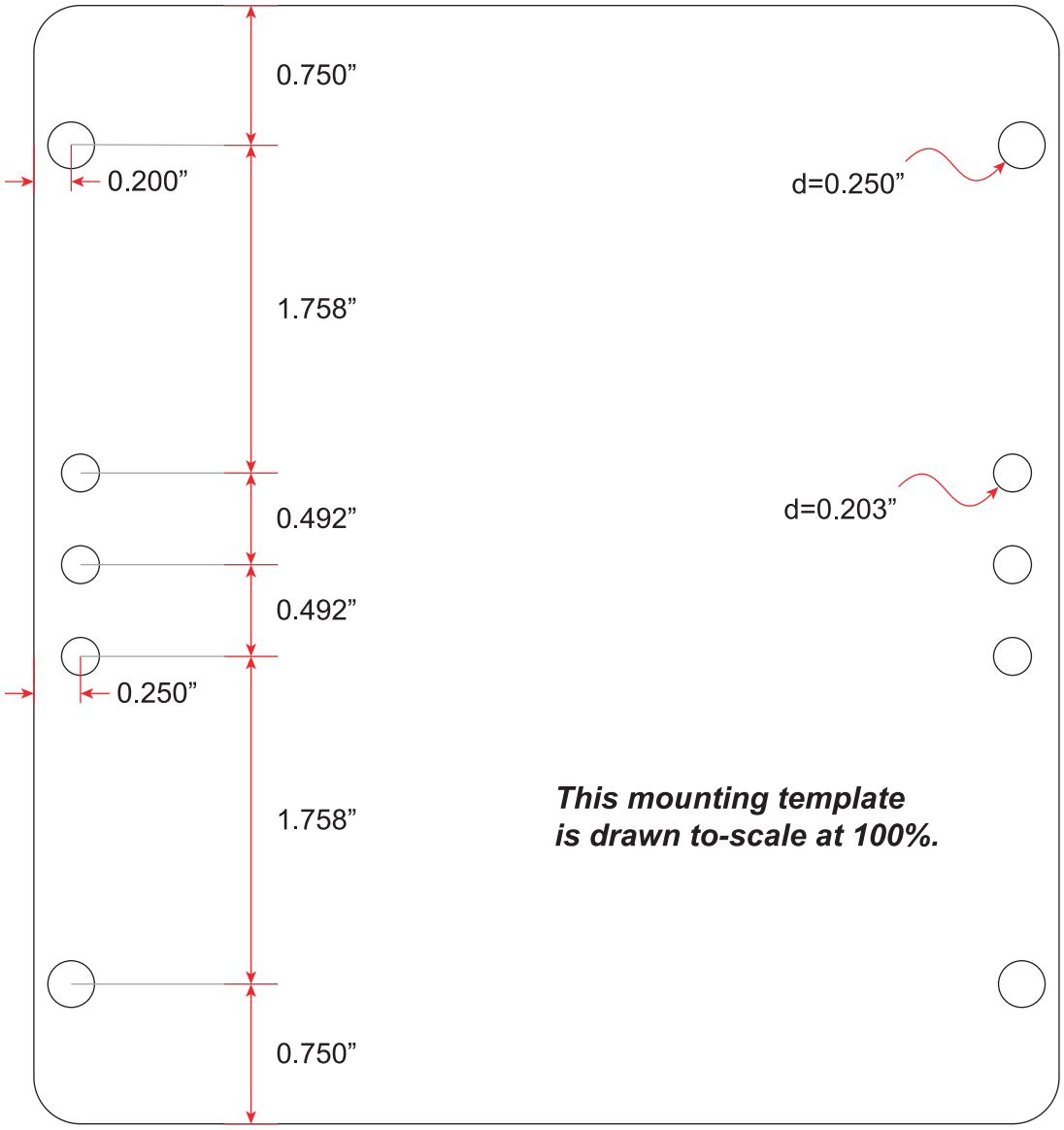

Figure 7: Axis Mounting Template

- 1U 19” shelf rack mount kit (for up to 3 units), ASTi part number RMK-UM-001.

Troubleshooting

All USB devices require ASTi cable "CA-UA-UMB-X", where X stands for length, for correct operation. For more information on connections refer to “Telestra USB Device Connections Matrix” document (ASSY-01-UMCX-IN-1).

***Symptom*:** All LEDs are off.

Possible Cause: No power applied to unit.

Remedy:

1. Check that power cable is connected to Axis.
2. Check that power supply unit is plugged in.

***Symptom*:** An Iris is connected to the Axis, and the corresponding device LED is off, or the ASTi USB device fails.

Possible Causes:

1. The software is not running.
2. The Iris is malfunctioning.
3. The Axis is malfunctioning.
4. The cable between the Axis and Iris is faulty or not fully connected.

Remedy:

1. Make sure the Model is running on the Telestra system, and the Iris device has been detected. If not, reset all devices in software.
2. Unplug the Iris device from the Axis and reconnect.
3. Connect the Iris to a different Axis (or Prism/Spectrum, if possible).
4. Restart the Telestra system. If the device does not become operational, use another USB cable and restart again. If the device continues to fail, contact ASTi.

Warranty Information

The equipment is warranted for a period of one (1) year following purchase.

Repairs and Returns

If it becomes necessary to return equipment to ASTi please observe the following instructions:

1. Obtain an RMA number through ASTi's website: http://www.asti-usa.com/support/
2. When packaging the equipment in question, make sure it is well protected. The device should be properly enclosed in an antistatic bag to prevent possible ESD damage. Failure to properly package the equipment during shipping could void the warranty.
3. Do not include accessory pieces such as rack mount kits, power supplies or software. Only send items that do not work.
4. The shipping label must include the RMA number.
5. Include a description of the problem, point of contact, phone number, return address and unit serial number(s). Failure to include this information could extensively delay the return of the equipment.
6. If an RMA number is not used within sixty (60) days of issuing date, the request data and number issued will be closed and designated as unused.
7. Any items received from customers without RMA numbers or appropriate contact information included with shipment will not be tested. After sixty (60) days, ASTi reserves the right to scrap all hardware received in this condition.
8. If the equipment is not under warranty a Purchase Order will be required to cover the cost of any repairs. ASTi will provide a quote for all non-warranty repair items.
9. Equipment will be shipped back using Federal Express, unless otherwise directed. If the repair is non-warranty then shipping charges will be billed.

Disclaimer and Warnings

- Connect only ASTi-approved devices to the USB ports. Attempted use of non-ASTi USB devices may result in equipment damage.
- Do not use commercial extender cables with ASTi USB devices.
- There are NO user serviceable components in this device. Opening the chassis will void the warranty.

