

## 4-Port USB Hub Light Industrial

### 4. Troubleshooting (Continued)

**Question:** How can I be sure the hub has been installed?

**Answer:** The new hub will be listed in your Device Manager.

**Question:** Can I use USB 1.1 and USB 2.0 devices together?

**Answer:** Yes. USB 2.0 is backwards-compatible with USB 1.0 and USB 1.1.



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ICI104A Quick Start Guide, rev. 1



ICI104A

### 4-Port USB Hub Light Industrial

**Provides true USB 2.0 data transmission through each port, even during heavy load applications.**



## 1. Specifications

### Technical Specifications

Enclosure	IP 30, polycarbonate plastic
ESD	15 kV air, 8 kV contact
High Retention	USB ports require 15 N (3.4 lb. force) withdrawal force using standard USB cable
MTBF	552,747 hours; MTBF calculation method: MIL 217F Parts Count Reliability
Standards	USB 2.0
Speed	480 Mbps on each port
Connectors	(4) USB 2.0 Type A female downstream ports; (1) USB Type B female upstream port
Environment	Operating temperature: -40 to +176° F (-40 to +80° C); Storage temperature: -40 to +185° F (-40 to +85° C); Operating humidity: 0 to 96%, noncondensing
Power	Source: 5 VDC from USB bus; Downstream power: 100 mA per port
Dimensions	1.75"H x 2.4"W x 1.1"D (4.45 x 6.1 x 2.79 cm)
Weight	0.11 lb. (0.05 kg)

## 2. Introduction

The 4-Port USB Hub Light Industrial is a compact, industrial-grade 4-port USB 2.0 hub. It has high-retention USB connectors that work with standard USB cables to ensure a tight connection in high-vibration applications—requiring up to 3.4 pounds of force to disconnect them. It provides true USB 2.0 data transmission through each port, even during heavy load applications. The ICI104A is a plug-and-play device, so there are no additional drivers to load.

### 2.1 Features

- Bus-powered by your high-power USB port.
- Provides 100 mA of power to downstream peripherals.

- Includes brackets to mount to a panel, countertop, or other flat surface.
- Complies with industrial EMI specifications, so it's more robust than other office-grade hubs.

### 2.2 What's Included

- 4-Port USB Hub Light Industrial (ICI104A)
- This quick start guide

### 2.3 Additional Items You Will Need

- (1) standard USB cable (connects the hub to your PC).

### 2.4 Hardware Description

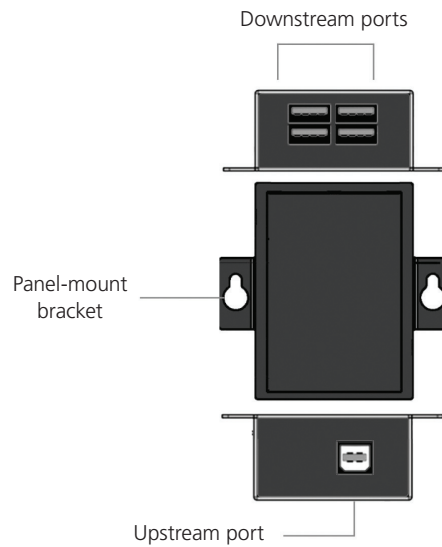


Figure 2-1. ICI104A hub.

## 3. Installation

*NOTE: The ICI104A can be used as a freestanding device, but it also features built-in brackets for easy DIN-rail or panel mounting.*

1. Connect your USB cables.
2. The USB hub is powered by the upstream 5-VDC USB bus. It provides a maximum of 100 mA to each of the downstream ports.
3. Plug in the ICI104A, and the operating system will install the necessary drivers.

The hub is ready for operation.

## 4. Troubleshooting

**Question:** The ICI104A hub is installed, but a downstream device doesn't seem to be working.

**Answer:** Some USB devices get their power from the USB cable. The ICI104A will only provide 100 mA to the downstream ports. If your downstream devices need more than 100 mA, you should use a powered USB hub, such as the ICI200A from Black Box. The ICI200A powered USB hub will provide 500 mA to the downstream ports.

**Question:** Do I need drivers for a USB hub?

**Answer:** No, the operating system will detect the ICI104A and install the drivers automatically.