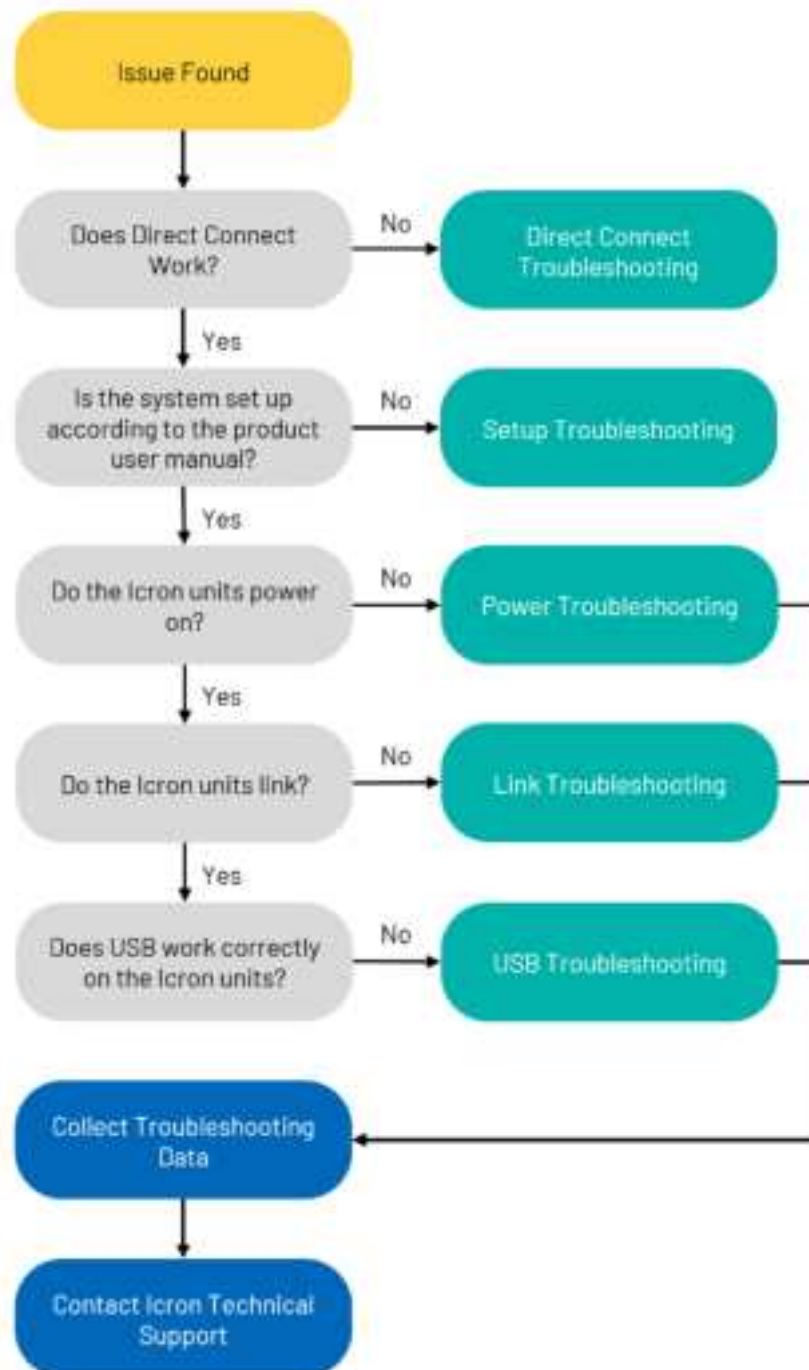


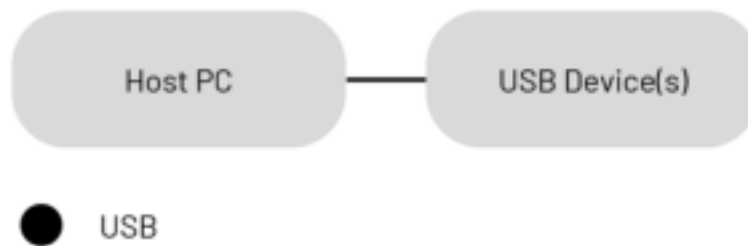
Icron Troubleshooting Overview

The following diagram shows the general flow of troubleshooting steps when an issue is found.



Does Direct Connect Work?

The first thing we can do is to test if the issue occurs when the USB Device(s) is directly connected to the Host PC. This bypasses the Icron extenders/switchers entirely.



Direct Connect Troubleshooting

If Direct Connect does not work, the issue lies with either the Host PC, the USB cable(s) between the Host PC and the USB Device(s), or the USB Device(s) itself. You may have to contact the PC or USB Device manufacturer for support.

This may be resolved with restarting the Host PC, reinstalling USB Device drivers, swapping in new passive USB cables, or swapping in new USB Device(s).

Is the system set up according to the product user manual?

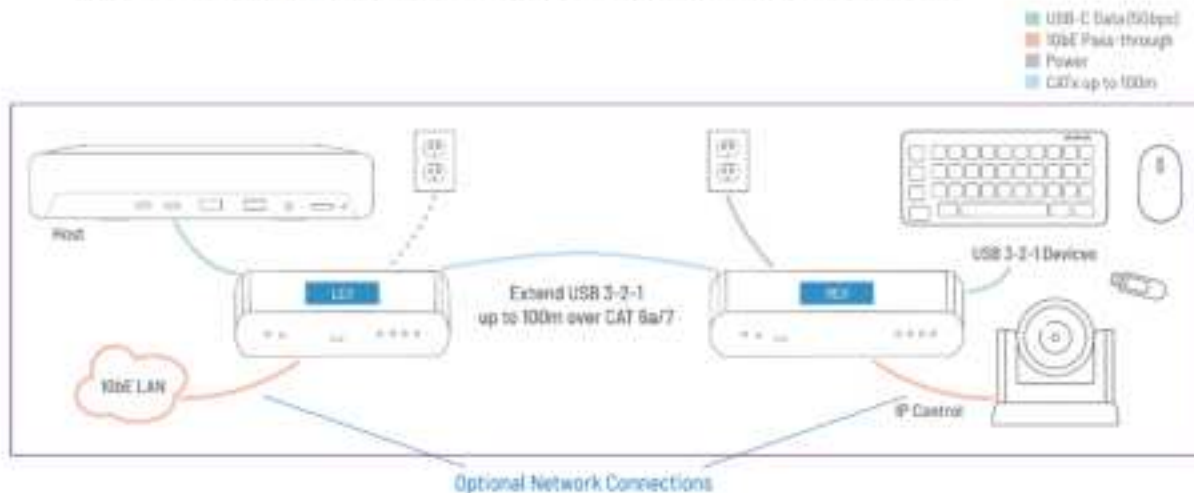
Please consult the user manual for the Icron model used. Ensure that the Requirements section are met, and that the test setup matches the setup diagram in the user manual.

For example, Page 9 of the Raven 3204C user manual shows its Requirements and setup diagram:

Requirements for Installing Raven 3204C System

To complete the installation, you will also require the following items that are not included with this system:

- ▶ USB compatible computer (host computer) with a USB compliant operating system
- ▶ USB compatible device(s)
- ▶ CAT 6a/7 cabling with two information outlets and two CAT 6a/7 patch cords with RJ45 connectors (if using premise cabling), ensuring the total cable length does not exceed 100m.



Setup Troubleshooting

If the system does not meet the Requirements or does not follow the setup diagram in the user manual, please retest the system with those conditions met.

Common setup issues include:

- Missing connections such as the USB cable between the Host PC and the LEX.
- Using lower grade CatX link cabling leading to intermittent or complete link failures.
- Loose connections due to poor cabling.

Do the Icron USB units power on?

Please use the included Icron USB cables and power supplies.

Does the Power LED(s) stay ON after connection of the power supplies?

Power Troubleshooting

Icron units can be either bus-powered or externally powered.

- Bus-powered units mean that it is powered by the USB connection to the Host PC.
- Externally powered units mean that it is powered by an external 5V or 24V power supply.

Please ensure that both the LEX and REX have its power supply connected, whether it be bus-powered or externally powered.

If one of them don't power on, try swapping to a new USB cable (if bus-powered) or a new power supply (if externally powered).

Try swapping to a new set of Icron units using the original power supplies and see if the issue still occurs.

If the Icron units still do not power on, please proceed to the section *Collect Troubleshooting Data*.

Do the Icron units link?

Please link the units using a link cable that meets or exceeds the minimum requirement set in our user manual.

Does the Link LED on the LEX and REX stay ON after power up?

Can skip this section if you are using an Icron Polaris switcher.

Link Troubleshooting

If applicable, please test with a short direct (<2m) patch cable that meets or exceeds the minimum requirement set in our user manual. Please remove any patch panels or switches in between the LEX and REX.

Please check the firmware version on the LEX and REX. Ensure that the LEX and REX are running the same firmware. (Middle number in the serial number is the same between the LEX and REX).

For example:

IC2304AL-12-F12345 and IC2304AR-12-F12345 have the same firmware.

IC2304AL-12-F12345 and IC2304AR-9-F12345 have different firmware.

Try swapping to a new set of Icron units using the original link cabling and see if the issue occurs.

If the extenders still do not link, please proceed to the section *Collect Troubleshooting Data*.

Does USB work correctly on the Icron units?

Please connect the USB Device(s) to the REX using a passive USB cable.

Is the USB Device(s) being detected and does it work correctly on the Host PC?

USB Troubleshooting

Download USB Device Tree Viewer and see if the device enumerated correctly.

Test with a simple USB device such as a wired mouse or keyboard.

Try swapping to another Host PC with the original setup and see if the issue occurs.

Ensure that you are not exceeding the maximum allowed USB hub/tier count of 5 between the Host PC and the USB Device endpoint. This is dictated by the USB specifications.

If the USB Device(s) still does not work correctly, please proceed to the section *Collect Troubleshooting Data*.

Collect Troubleshooting Data

Throughout the troubleshooting process, you would have gathered some of the necessary troubleshooting data. Please enter the information in the table below:

Description of the issue:

LED behavior on the Icron units when the issue occurs:

*Please fill out the appropriate LED table based on your Icron model

Ranger 23XX Series

	Power LED	Link LED	Host LED	Activity LED
LEX				
REX				

Raven 3104 and Raven 3204C Series

	Power LED	Status LED	Link LED	USB2 LED	USB3 LED
LEX					
REX					

Starling 3251C

	Power LED	Link LED
LEX		
REX		

Polaris 7044

Power LED	Status LED	Device 1 LED	Device 2 LED	Device 3 LED	Device 4 LED

EL53XX Series

	Power LED	Link LED	USB LED	Video LED
LEX				
REX				

Maverick 63104

	Power LED	Status LED	Link LED	Video LED	USB2 LED	USB3 LED
LEX						
REX						

Spectra 3022

	Power LED	Status LED	Host LED
LEX			
REX			

Link cabling and link distance: _____

Host OS: _____

Make and model of USB Device(s) connected: _____

Did this issue occur out of the box? _____

Block diagram of your setup: Upload your file at www.icron.com/support

Contact Icron Technical Support

Once all the applicable fields on pages 7-8 are entered, create a new ticket at <http://www.icron.com/support>.

Please provide a description of the problem, at what stage of troubleshooting did the issue occur, and attach any schematics or relevant files.