



Congratulations.

Thank you for purchasing the AfterDark. Constellation Giesemann S1 Duel Ethernet Server Adapter.

You have acquired the best Network Adapter ever made for audiophile and professional uses. Please take some time to read this manual. It may provide you with useful information to make your pleasure of listening to the S1 even higher.

AfterDark. was founded in 2017 and has ever since been dedicated to the accurate reproduction of sound and image.

At AfterDark, we strive to lead in the innovation, development and research of the industry's most advance technologies, including audio, circuit board and high precision OCXO Master Giesemann Master Clock for audiophiles.

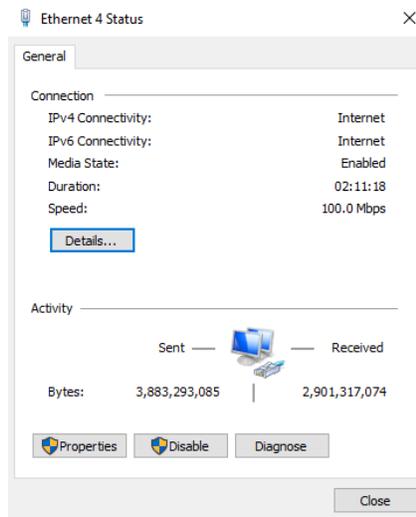
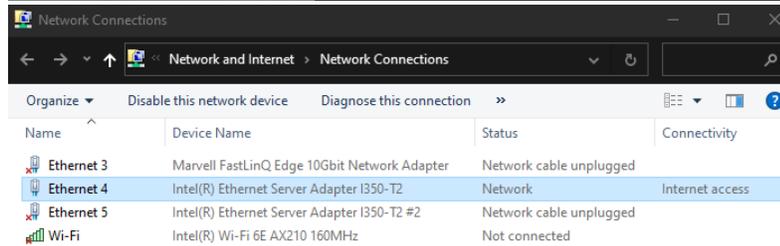
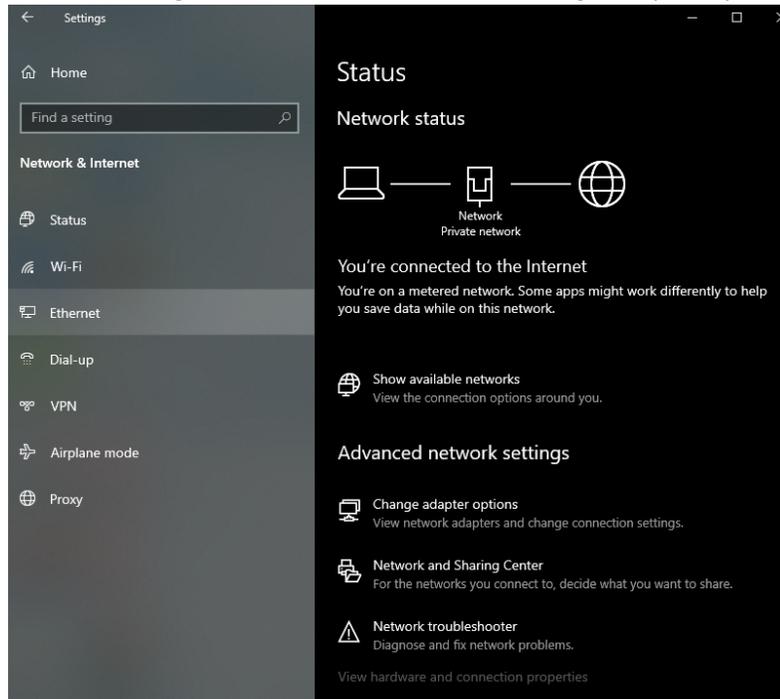
The guiding principle at AfterDark is to produce a precise sound with the latest possible loss of quality through the different stages. AfterDark will adopt a leading technology beforehand and optimized and developed to satisfy the extreme high-quality standards in measurements performed in laboratory environments. This is reasons AfterDark Giesemann OCXO comes with individual measurement, even this process can be very costly to perform and generated.

This guide will help you operate in tweaks at Windows Network Setting and Intel PROset Adapter Config Utilities software levels in an intuitively apparent way, you will find useful information on it's installation and operation in this manual.

In closing, we'd like to welcomemyou to the family of AfterDark owners. We want you to enjoy your AfterDark product to the fullest. To this end, Adrian stands ready to answer any technical questions you may have about the function and application of your S1 with Giesemann Collection, and to provide any needed service both during, and after the warranty period. Our goal is to heighten your enjoyment of streaming music.

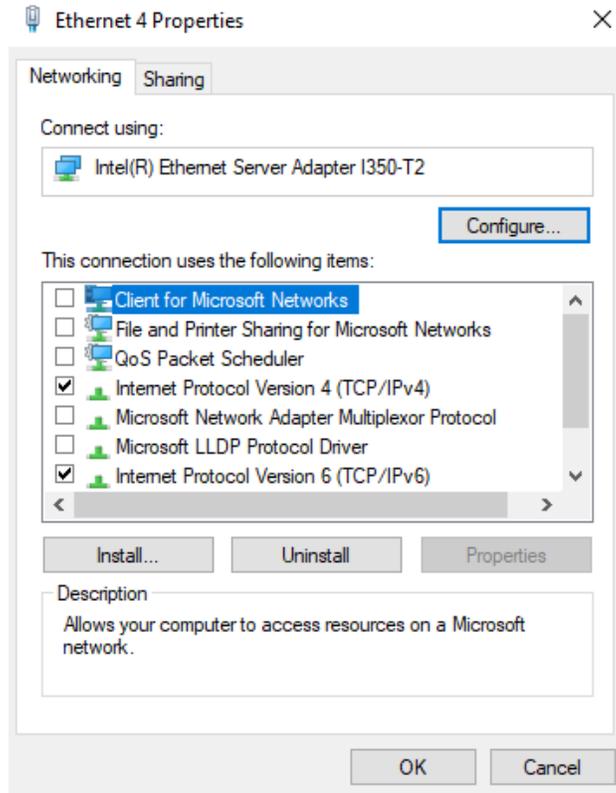
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1. Go to Windows Settings → Network & Internet → Change adapter options

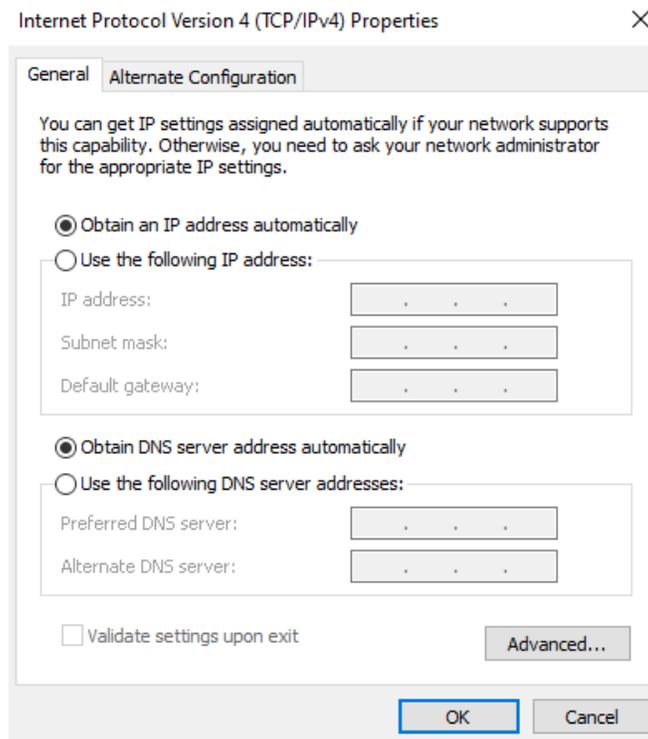


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Click on Properties to open the X1 Card details. Please un-tick all the box except TCP/IPv4 (For Roon Server) and TCP/IPv6 (For Diretta)



Double Click – TCP/IPv4 and Choose Advance at the bottom



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Unclick the Automatic metric and enter 2 at the box. This make sound much smoother then default values, value= 1 is more focus.

Advanced TCP/IP Settings

IP Settings DNS WINS

IP addresses

IP address	Subnet mask
DHCP Enabled	

Add... Edit... Remove

Default gateways:

Gateway	Metric
---------	--------

Add... Edit... Remove

Automatic metric

Interface metric:

OK Cancel

Then goes to TAB – WINS , Untick the Enable LMHOSTS lookup and disable NetBIOS over TCP/IP

Advanced TCP/IP Settings

IP Settings DNS WINS

WINS addresses, in order of use:

Add... Edit... Remove

If LMHOSTS lookup is enabled, it applies to all connections for which TCP/IP is enabled.

Enable LMHOSTS lookup Import LMHOSTS...

NetBIOS setting

Default:
Use NetBIOS setting from the DHCP server. If static IP address is used or the DHCP server does not provide NetBIOS setting, enable NetBIOS over TCP/IP.

Enable NetBIOS over TCP/IP

Disable NetBIOS over TCP/IP

OK Cancel



Download the Intel PROset Apps and install at Windows Server or Windows 11:

<https://www.intel.com/content/www/us/en/download/706171/intel-network-adapter-driver-for-windows-server-2022.html>

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Drivers & Software

Intel® Network Adapter Driver for Windows Server 2022*

ID	Date	Version
706171	12/29/2022	27.8 (Latest)

Introduction

This download record installs version 27.8 of the Intel® Network Adapter using Windows Server 2022*

Documentation

- [Release Notes](#)
(Release_Notes_27.8.pdf)
- [Installation Guides](#) (readme.htm)
- [README Text Files](#)
(readme_27.8.txt)

Available Downloads

Download Wired_driver_27.8_x64.zip	Windows Server 2022 family* Size: 37.5 MB SHA1: 1BEDF51217A2633A60CAA1779B0E 4D94439C1DFA
Download Wired_PROSet_27.8_x64.zip	Windows Server 2022 family* Size: 32.9 MB SHA1: 071E23C1EA6267525245270FDBDC 6712816FDDBD

Intel® PROSet Adapter Configuration Utility

Adapter

Adapter Information	
Speed:	100.00 Mbps Full Duplex
Temperature:	Normal
Bus Type	PCI Express
Driver Name	e1express
Driver Version	12.15.184.0
ETrackID	0x80000CBB
Location	PCI Bus 2, device 0, function 1
Media Type	Copper
Negotiated Link Speed	Not Supported
Negotiated Link Width	x4
Part Number	H47819-001
Permanent Ethernet Address	A0368FE2F76D
Port	B

Adapter Settings	
Direct Cache Access	Enabled
DMA Coalescing	
Energy Efficient Ethernet	
Flow Control	
Gigabit Master/Slave Mode	
Interrupt Moderation	
Interrupt Moderation Rate	
IPv4 Checksum Offload	
Jumbo Packet	
Large Send Offload V2 (IPv4)	
Large Send Offload V2 (IPv6)	
Locally Administered Address	
Log Link State Event	
Low Latency Interrupt Ports	
Low Latency Interrupts	
Maximum number of RSS Processors	
Maximum Number of RSS Queues	
Packet Priority & VLAN	
Preferred NUMA node	
Receive Buffers	
Receive Side Scaling	
RSS Base Processor Number	
RSS load balancing profile	
Speed & Duplex	
SR-IOV	

Apply Changes Discard Changes Identify Adapter

Adapter Information Panel:
This panel displays detailed information about the currently selected adapter.

Adapter Settings Panel:
This panel displays the available settings for the adapter. Settings are dependent on the adapter and operating system. Only settings that are available with your adapter/operating system combination are displayed.

Diagnostics Panel:

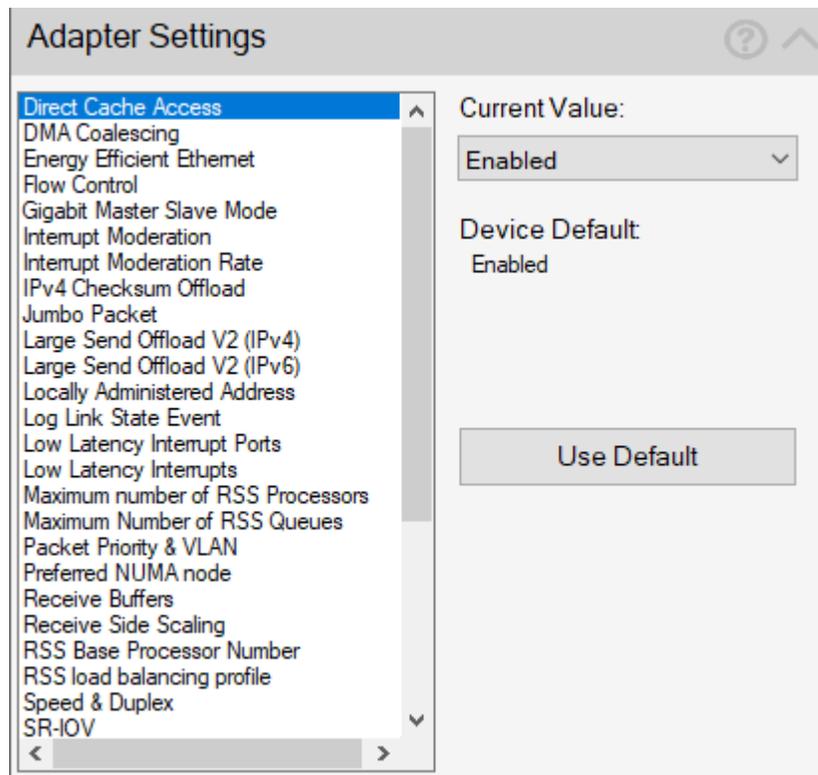
User Guide



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Please **Press “Apply Change”** for each changes and this will ensure it saved after reboots. The guide is from Top to Down for easy reading on changes.

- A. Direct Cache Access – Set to Enabled
- B. DMA Coalescing / Energy Efficient Ethernet / Flow Control – Set to Disabled
- C. Gigabit Master Slave Mode – Set to Force Master Mode
- D. Interrupt Moderation/ Interrupt Moderation Rate – Set to Disable and Off
- E. IPv4 Checksum Offload – Set to Disabled
- F. Jumbo Packet – Set to Disable (for more natural and organic sounding)
- G. Large Send Offload V2 (IPv4) / (IPv6) – Both set to disable
- H. Locally Admin address – no change
- I. Log Link State Event – Set to Disable
- J. Low Latency Interrupt Ports – no change
- K. Low Latency Interrupts - Set to Disable
- L. Max. No. of RSS Processors / Queues – Both Set to 8
- M. Packet Priority & VLAN – Select Packet Priority & VLAN Disable
- N. Preferred NUMA Node – No change
- O. Receive Buffers – Set to 80
- P. Receive Side Scaling – Set to Enable
- Q. RSS Base Processor Number – Set to 8
- R. RSS Load Balancing Profile: - Set to ClosestProcessorStatic
- S. Speed & Duplex – Set to 100Mbps Full Duplex (More Darkness) or 1000Mbps Full Duplex
- T. SR-IOV / Vports– both No Change
- U.



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- V. TCP Checksum Offload (IPv4/ IPv6) – Both set to Disable
- W. Transmit Buffers – Set to 80
- X. UDP Checksum Offload (IPv4/ IPv6) – Both set to Disable
- Y. Virtual Machine Queues – No Change
- Z. VLAN ID / VMQ Vports – No Change
- AA. Wait for Link – Set to off

W

