ETH-GPI Link + Controller Server/Client Combinations

Introduction

With the Device Core "TCP Server" and the Device Core "UniSketch Raw Panel" (Client) you can network SKAARHOJ controllers in unparallelled ways - not just two controllers but whole groups of them if you please. This tutorial will provide various examples on how configurations can be achieved. Some setups build further on existing Default Configurations and therefore mapping of Flag numbers might not be intuitive, but this have been done in order to utilise already exciting Default Configurations.

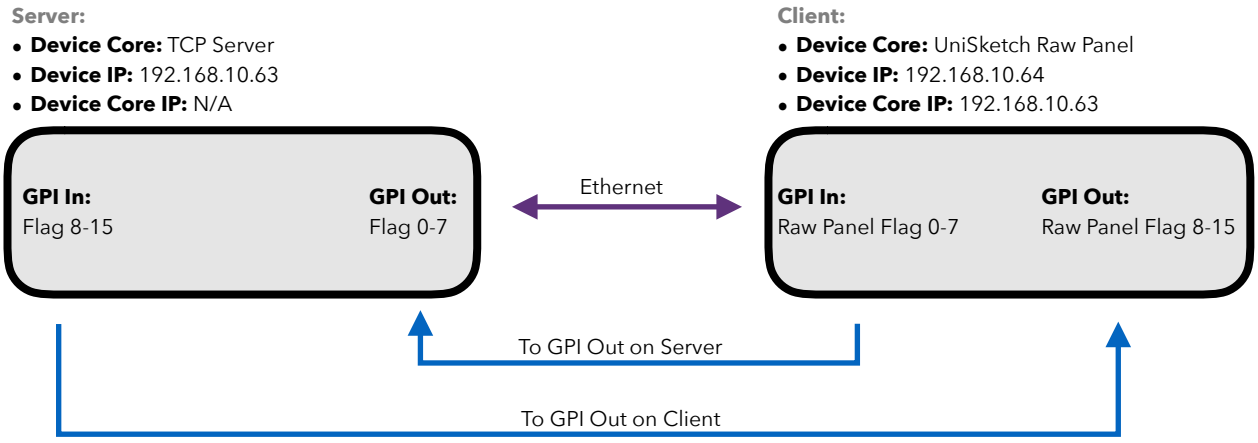
This tutorial uses the Quick Bar as a reference but other controllers can be used as well. Go to cores.skaarhoj.com to see how the various configurations for the Quick Bar are made. In the illustrations on the following pages IP settings are shown. These are simply for illustrative purpose and can be changed. Notice that devices with the UniSketch Raw Panel Device Core installed must have the IP address of the TCP Server.

2 x ETH-GPI Link in Duplex Mode

This setup is duplex. So Inputs/Outputs from each device is replicated on the other device.

- Transport GPI In trigger from Server to GPI Out on Client
- Transport GPI In trigger from Client to GPI Out on Server
- Triggers from Server to Client or from Client to Server can easily be disabled by removing actions thus removing the duplex functionality

- **Video demonstration -** https://github.com/SKAARHOJ/Support/raw/master/Manuals/Videos/ServerClientTutorials/ETH-GPI_Link_ServerClient.mov
- **Default Config Server -** 2x8 GPIO TCP Server
- **Default Config Client -** 2x8 GPIO UniSketch TCP Client

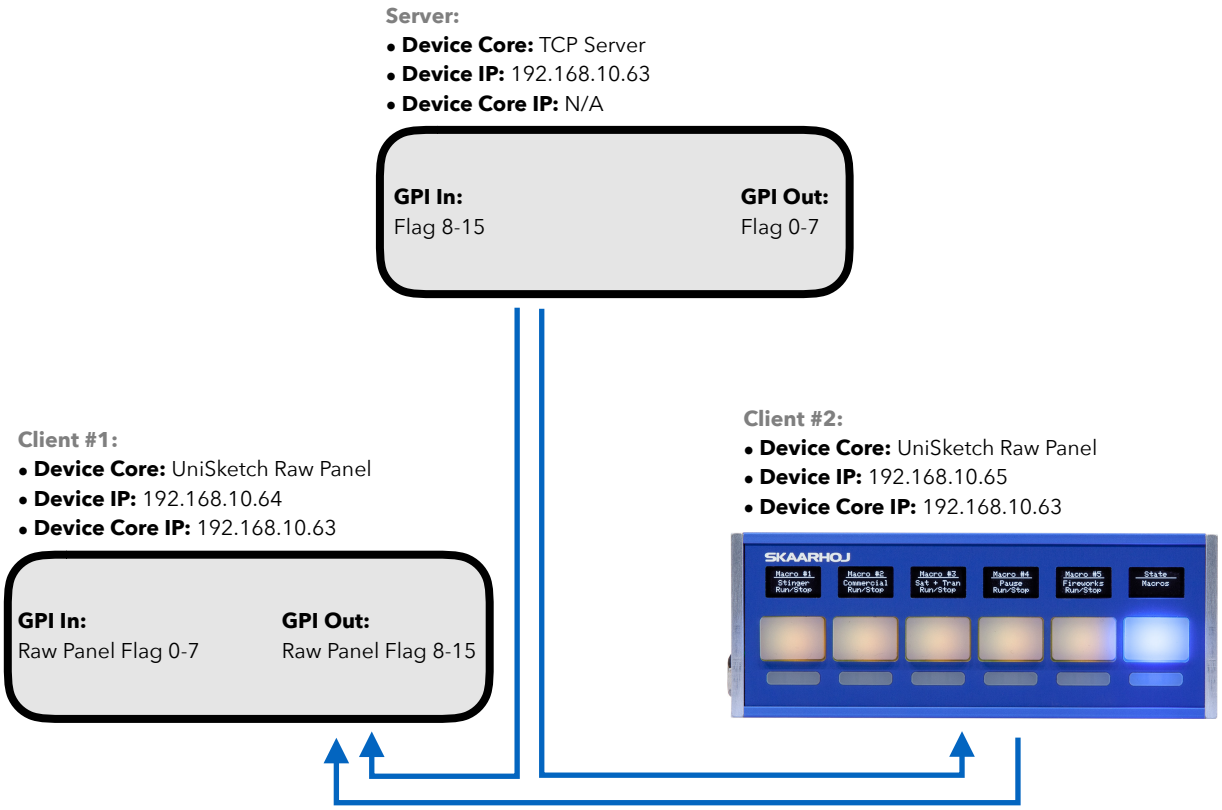


2 x ETH-GPI Link + 1 x Controller

This setup builds on top of the "2 x ETH-GPI Link in Duplex Mode" by having a controller to reflect GPI In from server and set GPI Out on Client #1. Please notice this configuration is not designed to have a controller setting GPI Outs on multiple ETH-GPI Links.

- Transport GPI In trigger from Server to GPI Out on Client #1
- Transport GPI In trigger from Client #1 to GPI Out on Server
- GPI In triggers from Server are reflected on Client #2
- GPI Out on Client #1 can be controlled on Client #2

- **Video demonstration -** https://github.com/SKAARHOJ/Support/raw/master/Manuals/Videos/ServerClientTutorials/ETH-GPI_Server_ETH-GPI_Client_Quickbar_Client.mov
- **Default Config Server -** 2x8 GPIO TCP Server
- **Default Config Client #1 -** 2x8 GPIO UniSketch TCP Client
- **Default Config Client #2 -** ETH-GPI Link GPIO Confidence. TCP Client

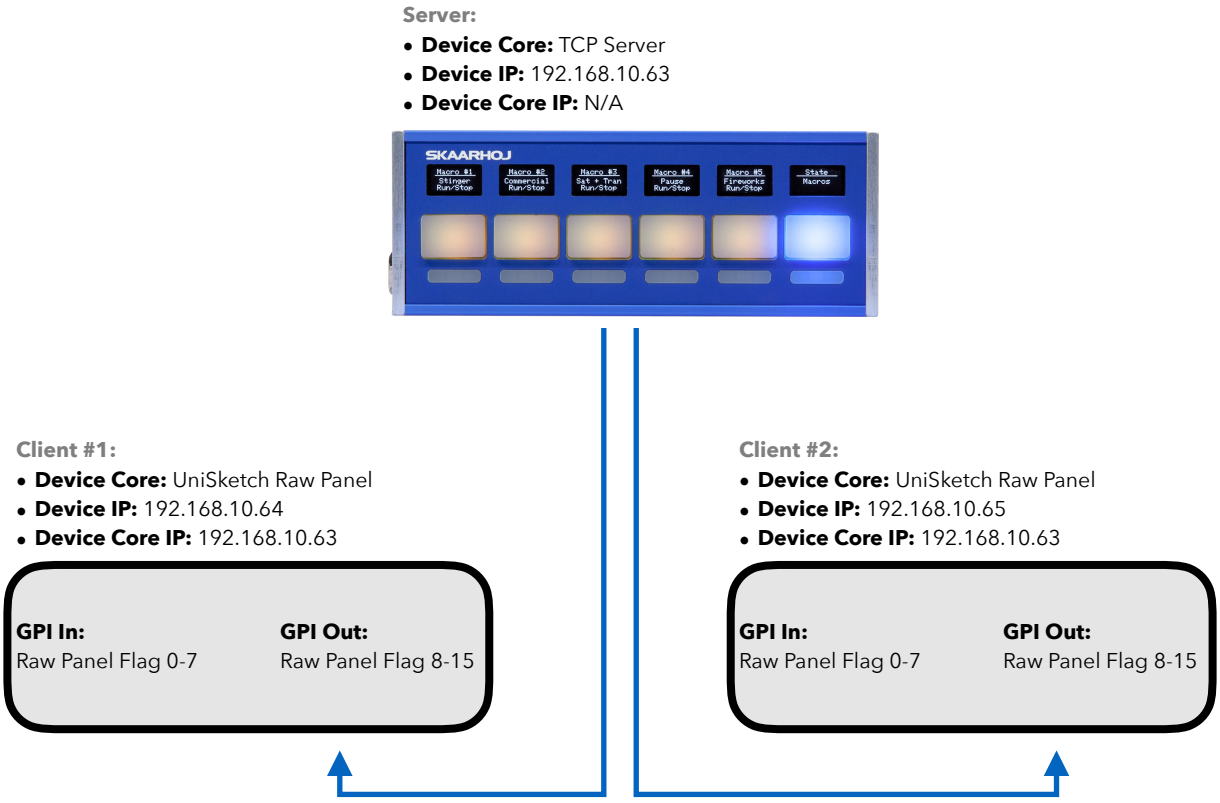


1 x Controller + 2 x ETH-GPI Link

This setup is for setting GPI Outs on Multiple ETH-GPI Links from a single controller

- Sets GPI Out trigger from Server to Client #1 + Client #2

- **Video demonstration -** https://github.com/SKAARHOJ/Support/raw/master/Manuals/Videos/ServerClientTutorials/QuickBar_Server_2x_ETH-GPI_Link_Client.mov
- **Default Config Server -** Multiple ETH-GPI Link Control. TCP Server
- **Default Config Client #1 -** 2x8 GPIO UniSketch TCP Client
- **Default Config Client #2 -** 2x8 GPIO UniSketch TCP Client



2 x Controllers + 1 x ETH-GPI Link

This setup is for having multiple controllers to trigger GPI Out on a single ETH-GPI Link. The configuration is so that if GPI is triggered, it is reflected on all controllers, connected to the ETH-GPI Link.

- Sets GPI Out trigger from Client #1 + Client #2 + Client #x to Server
- If a GPI Out is active on the server it is reflected on the Clients

- **Video demonstration -** https://github.com/SKAARHOJ/Support/raw/master/Manuals/Videos/ServerClientTutorials/ETH-GPI_Link_Server_2x_QuickBar_Client.mov
- **Default Config Server -** 2x8 GPIO TCP Server
- **Default Config Client #1 -** Multiple Controller ETH-GPI Link Management. TCP Client
- **Default Config Client #2 -** Multiple Controller ETH-GPI Link Management. TCP Client