

Reroute explained

REROUTE

Reroute is a unique function added to the Ethernet-DMX firmware since version 4.1.5. **Reroute** allows you to convert Art-Net / sACN to Art-Net / sACN. The converter acts now at Ethernet level to convert Ethernet based lighting control protocols.

How to use reroute

Reroute function is reachable from the web interface only. Once on the status page of the converter, click on the node you wish to set on the left hand side menu. **Reroute** function is available in the direction column for each outlet :

	Direction [?]	Protocol [?]	Universe [?]
	Input/output	ArtNet/sACN	-1/+1 -4/+4 -16/+16
1	Output	ArtNet	0
2	Input	ArtNet	1
3	Reroute	ArtNet	2
4	Output	ArtNet	3

Submit Changes Reset

Once selected, the function adds a second row below the original row. Two protocol fields are now available. The top one represents the source protocol, the bottom one represents the destination protocol.

Example: if you wish to convert Art-Net universe 0 to sACN universe 1, simply set the fields as below :

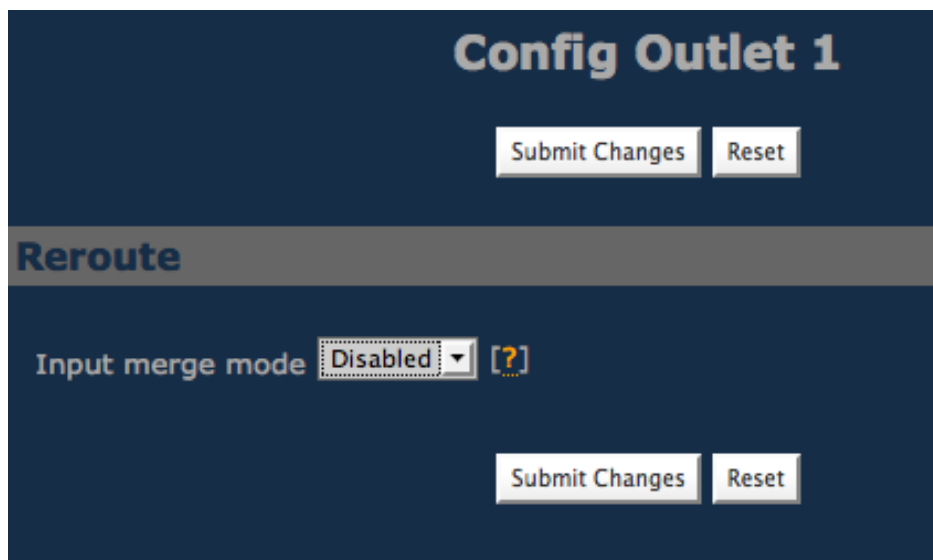
Direction [?]	Protocol [?]	Universe [?]	
Input/output	ArtNet/sACN	-1/+1 -4/+4 -16/+16	
1	Reroute	ArtNet	0
		SACN	1:100

By default, the converted protocol will be also associated to the corresponding outlet. So the converted protocol will be available on the associated DMX output.

However, it can be sometimes useful to use the connector as an input. Reroute also offers the ability to use the outlet as a DMX input. The DMX signal will then be merged with the converted protocol. To use the input function, simply click on the little blue icon, located on the left hand side of the row :

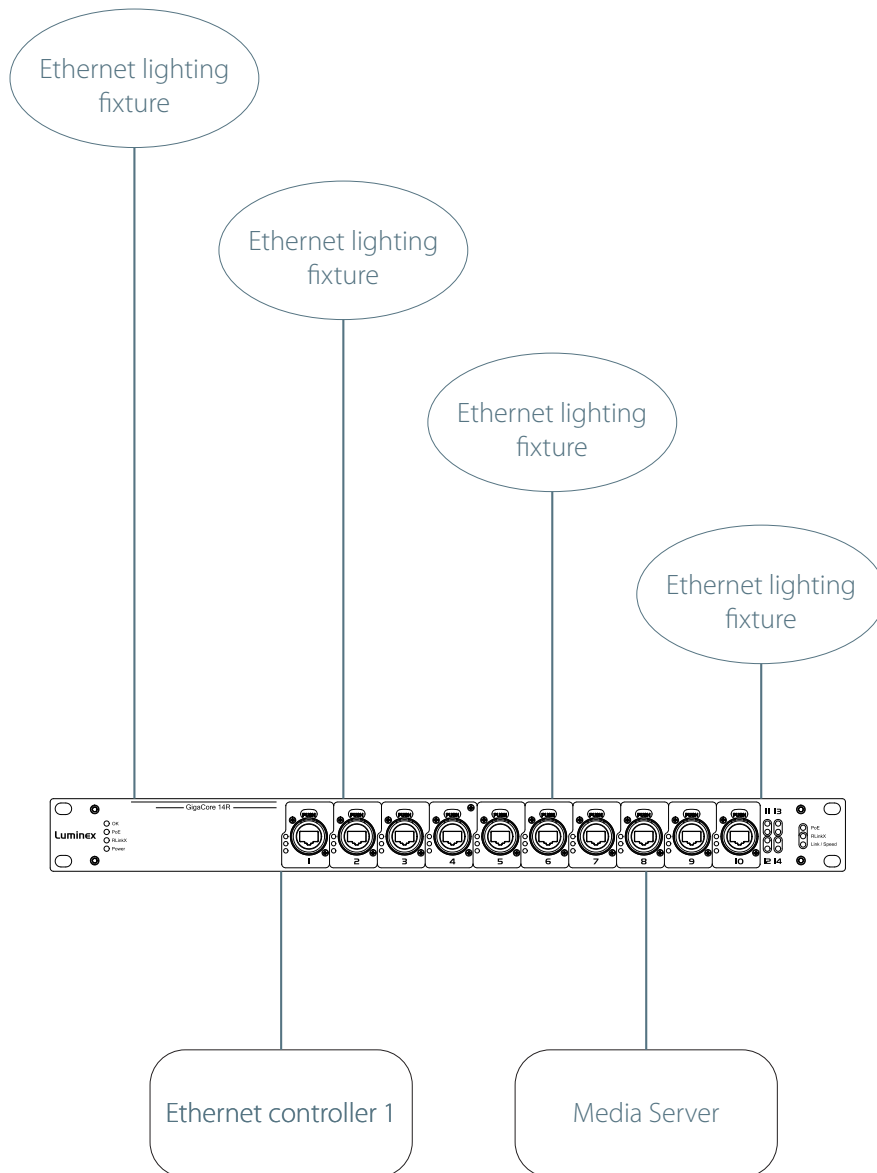


Click here to set the connector in input mode



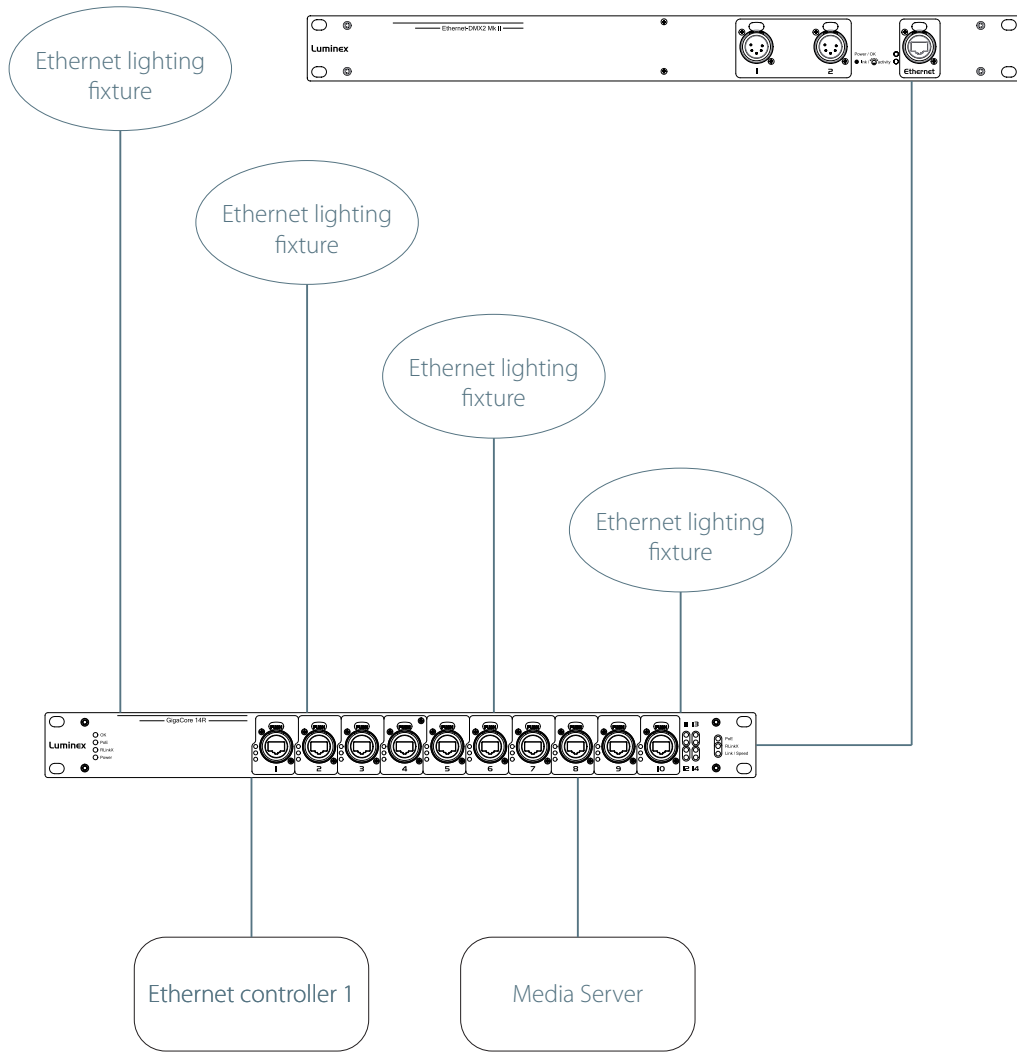
By using the drop down menu, you can select here to merge the incoming DMX with the converted protocol using either HTP or LTP policy. Don't forget to submit changes ! Once all your **reroute** settings are made, don't forget to submit changes on the main page.

The **reroute** function can also be coupled with the merging engine of the node. Here is an example :

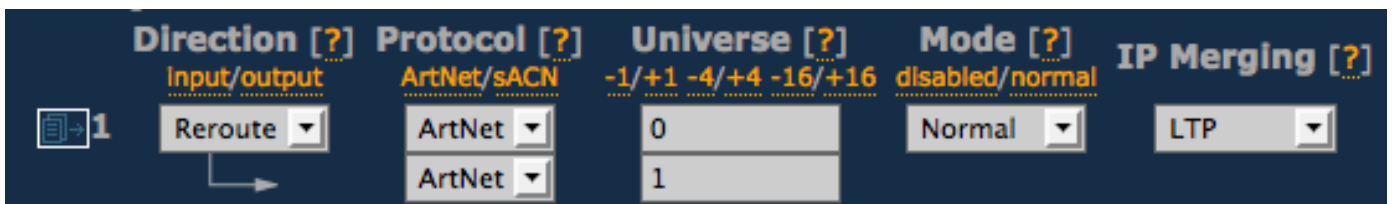


In this example, users wish to control all Ethernet lighting fixtures from both the Ethernet controller and the media server. This means all fixtures will receive two different control streams, such as Art-Net ones. As lighting fixtures are not equipped to merge Art-Net streams, they'll all be confused, resulting in a strange and random behavior.

To avoid this, we'll couple the merging engine of a Luminex converter with the new **reroute** function. So the first step is to add a Luminex converter in the network. As we need to control a single universe only, an Ethernet-DMX2 MkII will be chosen. The converter can be located anywhere on the network.



Let's see now how to set the converter, to control lighting fixtures from both sources.



First, we select **reroute** in the direction field. Then we set the incoming protocol as Art-net, on universe 0. This means both the controller and the media server must use universe 0, to control the fixtures. Then we enable the LTP IP merging. This means all universe 0 coming from the network will be merged following LTP policy. Then, the result of this merge will be converted to Art-Net universe 1.

Now, you need to set all your lighting fixture to listen to Art-Net universe 1. When using the HTP or LTP IP merge mode, up to four sources can control the fixtures. But if you wish a per channel custom merge, then you need to move to the Custom IP merge mode. There you'll be limited to two sources, but you'll get benefit of the powerful soft patch of the converter.