

Using Datagate with MADRIX



+



The Perfect match

The Datagate is a perfect match for the range of the MADRIX lighting control software, as it enables you to take full advantage of the 8.192DMX channels in the basic, 32.768 DMX channels in the professional and more on request in the unlimited version of MADRIX. MADRIX supports Art-Net. The Datagate fully supports the Art-Net protocol, and can be configured to output anywhere between 1 and 8 DMX Universes. It also has the added advantage of isolation between its 8 DMX outputs (up to 1500 Volts). If a dangerous voltage were to get onto a DMX line, the Datagate will protect the rest of your equipment on the other lines, and keep working.

How do I configure the Datagate?

You can use the software "Node Management Utility (NMU)" from ENTTEC to configure the Datagate with your computer in an easy way.

4-Port DMX

To set the Datagate to output 4 Universes of DMX, hit the 'Menu' button next to the LCD display on the Datagate's front panel until it displays "1-Activate Profile". Hit 'Enter' then 'Scroll' until the Art-Net profile is displayed. Hit 'Enter' to select, and the Datagate will display "Profile Activate". The Art-Net profile configures ports 1- 4 as Outputs for DMX Universe 1-4, and ports 5-8 as DMX Inputs.

8-Port DMX

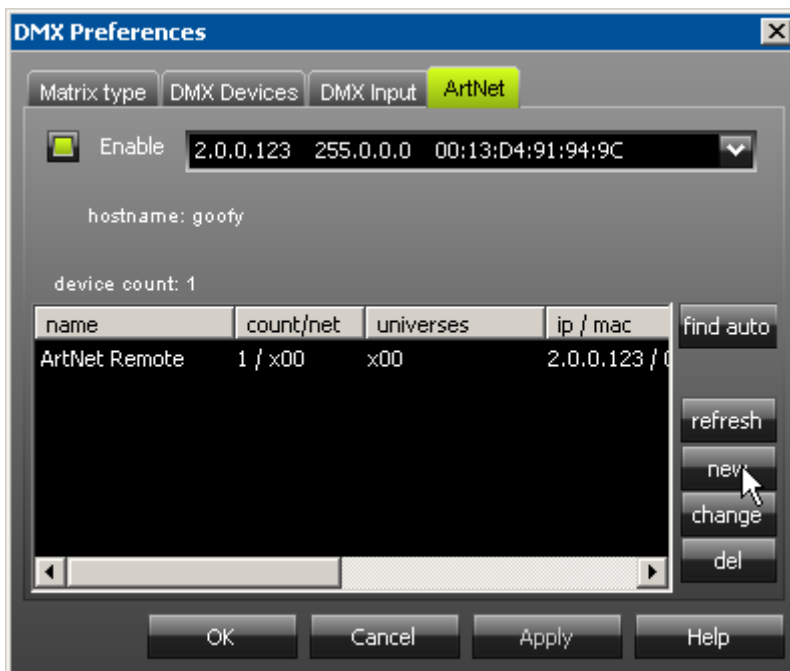
To set the Datagate to output 8 Universes of DMX, follow the instructions above to access the "1-Activate Profile" menu on the Datagate. Select the "Enet -> DMX" profile, then change the protocol type on each of the 8 channels to Art-Net instead of the default ESP. This will give you 8 output ports. To change the protocol type, hit the 'Menu' button until it displays "2-Edit Profile", hit 'Enter' then 'Scroll' until the display reads "2-3 EthernetConfig". Hit 'Enter' again, then 'Scroll' until "2-3-2 Protocol" is displayed. Hit 'Enter', then 'Scroll' until the display reads "Art-Net", then hit 'Enter' once more. This will set the Datagate to output DMX Universes 1-8 on Ports 1-8.

Broadcast OR direct ip mode (Unicast)?

The ArtNet protocol used in **broadcast mode** means every packet sent from a single transmitter (MADRIX) will be received by all receivers in the network. This can be very useful if e.g. you wish universes 1 and 2 to be available on several points of the set up. The disadvantage is that by broadcasting a potentially huge number of packages over the network there is a limit of 40 DMX universes. To reduce traffic in the network we suggest using the **direct ip mode** (Unicast).

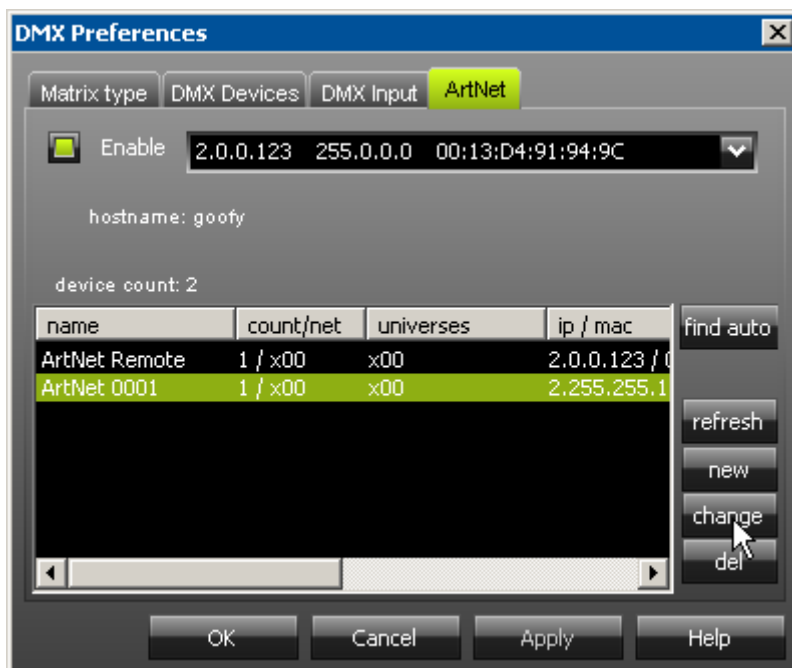
In the next example we configure one Datagate with ports 1 – 8 to use DMX universe 1 – 8 with the broadcast mode.

How do I configure MADRIX?



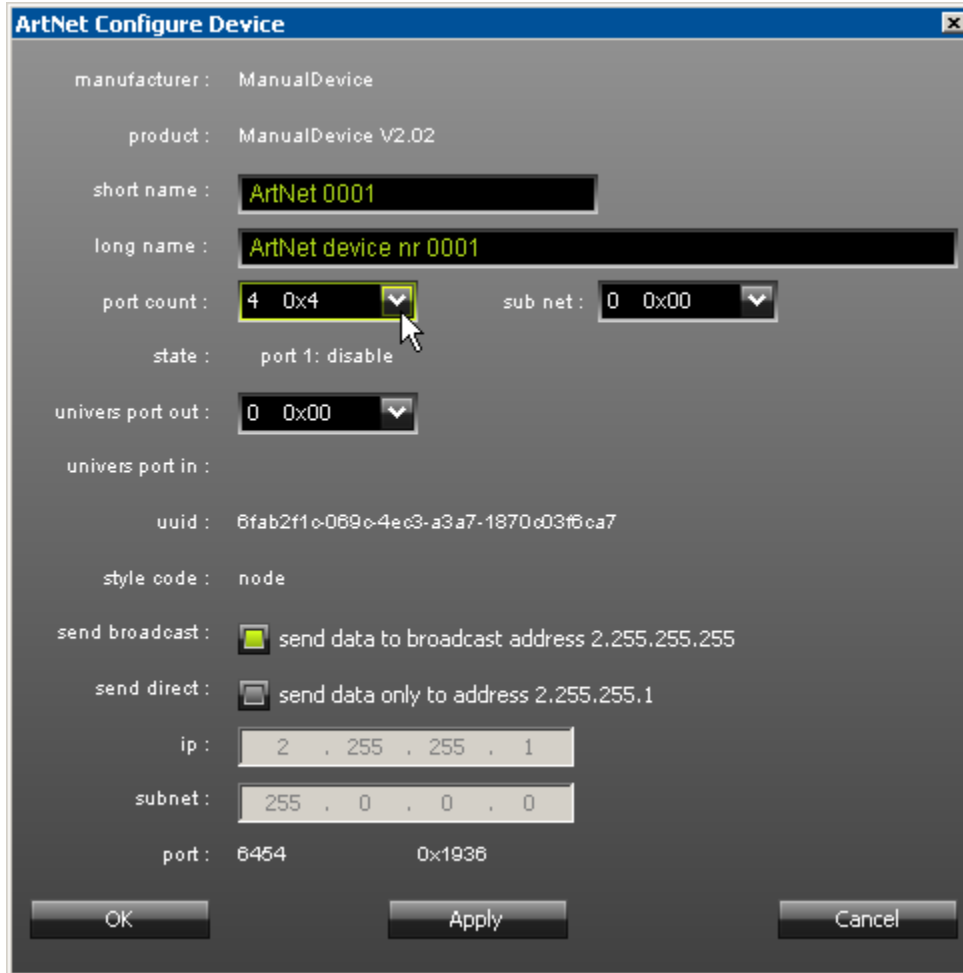
Please go to the MADRIX menu "**Preferences** → **Matrix / DMX**".

Click at the "**ArtNet**" tab and **enable Artnet**. Press the "**new**" button to add a new ArtNet device.



After you have pressed the "**new**" button you will see a new ArtNet device inside this screen called ArtNet 0001.

Press "change" to configure this ArtNet device.

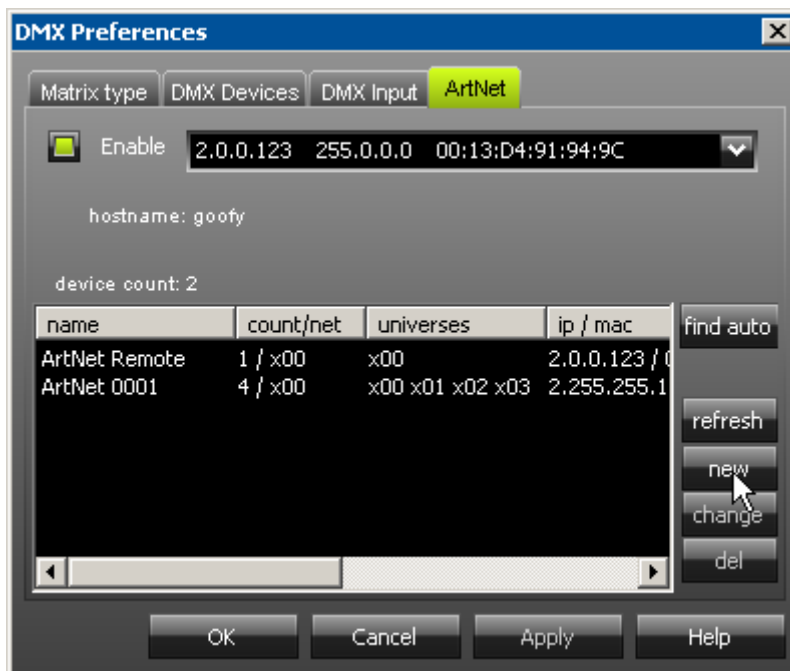


In this dialog you can set up your ArtNet device.

Please click first at the **"port count"** and select the port count **"4 0x4"**.

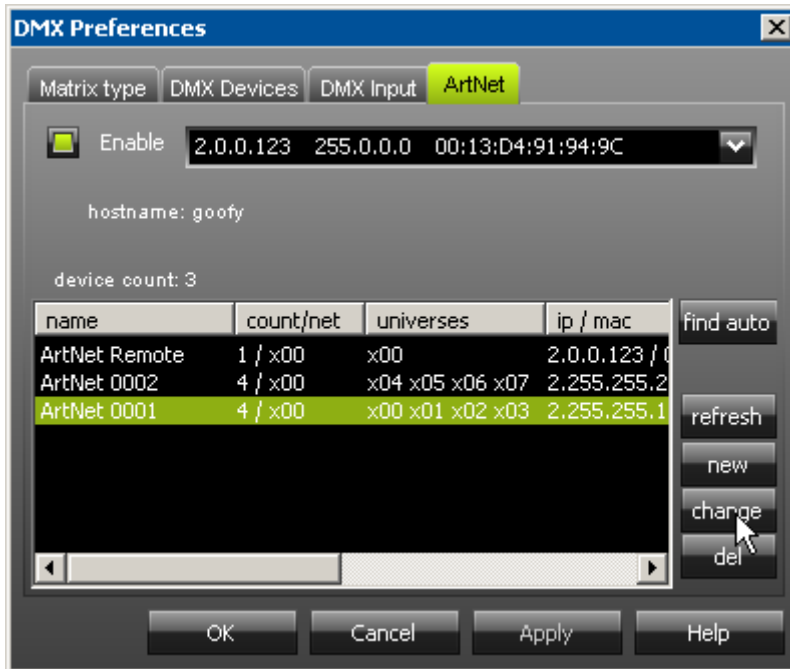
In this example we have used the **broadcast option**.

Hint: You can also use the **direct ip mode** by activating the switch **"send direct"**. In that case you have to type in the ip address of your Datagate.



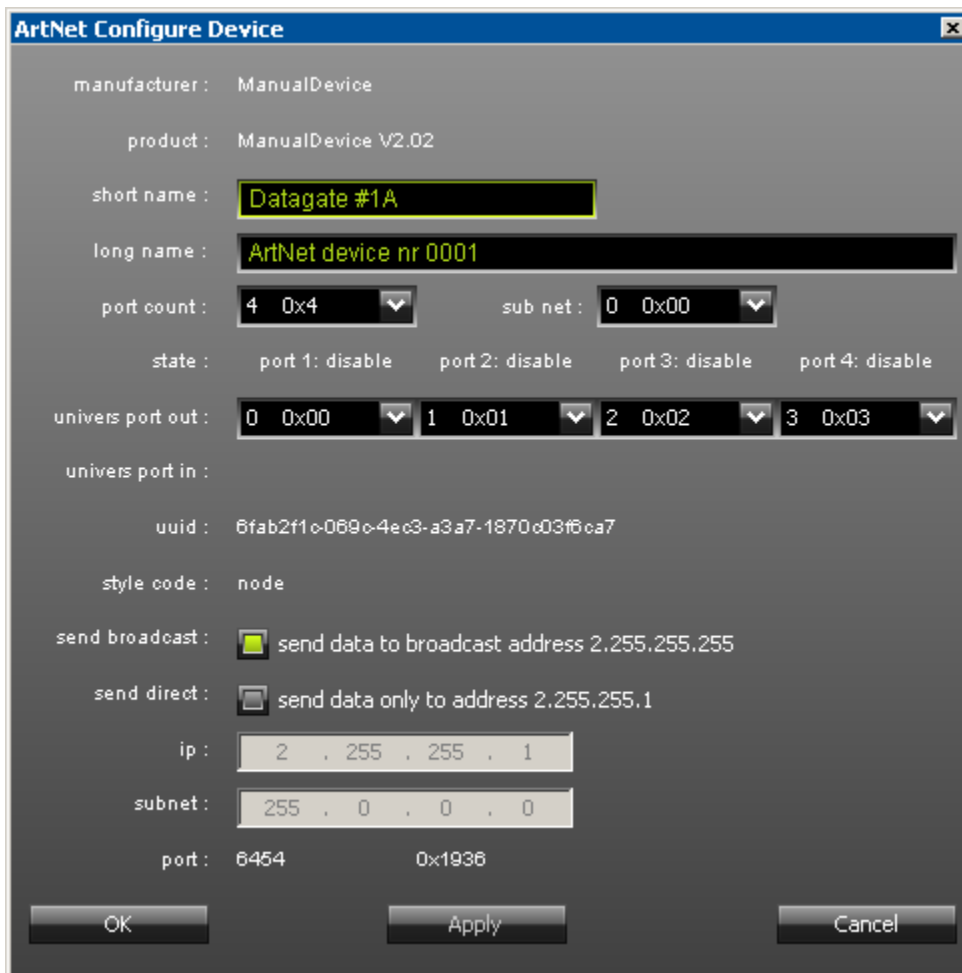
Now you see your new **ArtNet 0001** device inside the list with 4 ports.

Repeat this step and create a new ArtNet device by clicking at the **"new" button**.

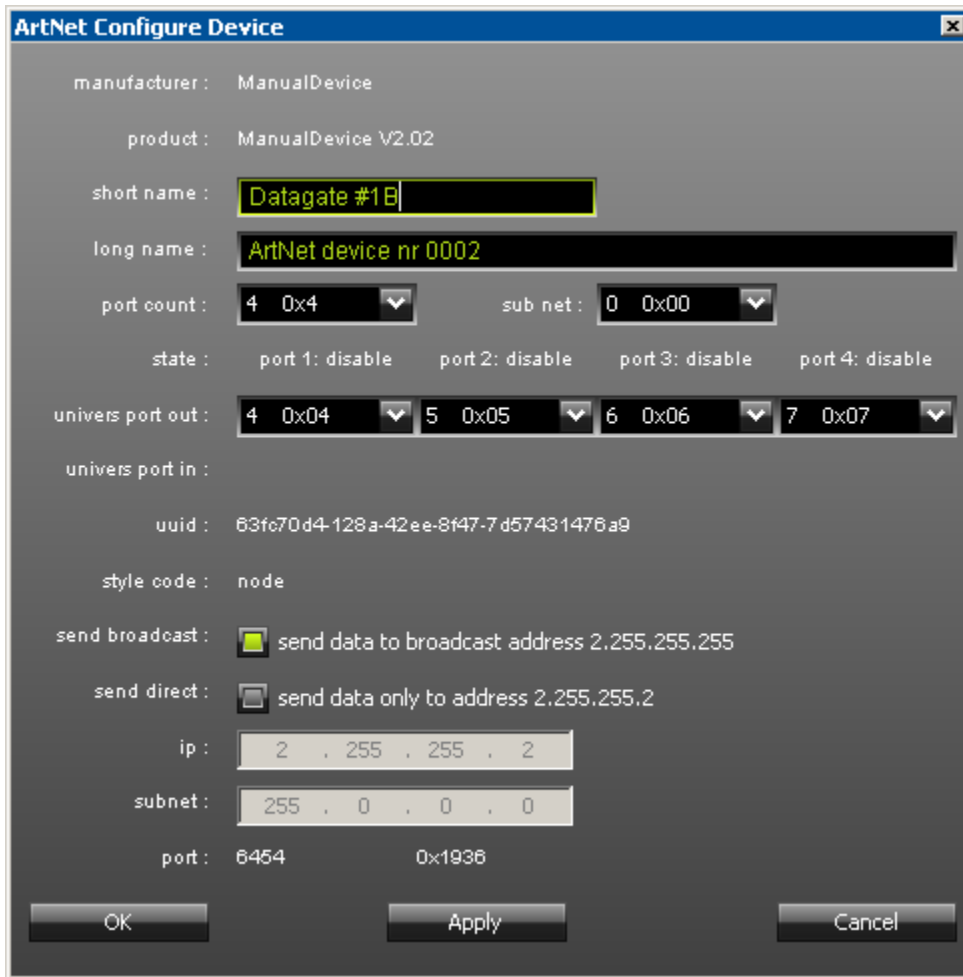


If you repeated the step you see two ArtNet devices (ArtNet 0001 and ArtNet 0002) inside the list.

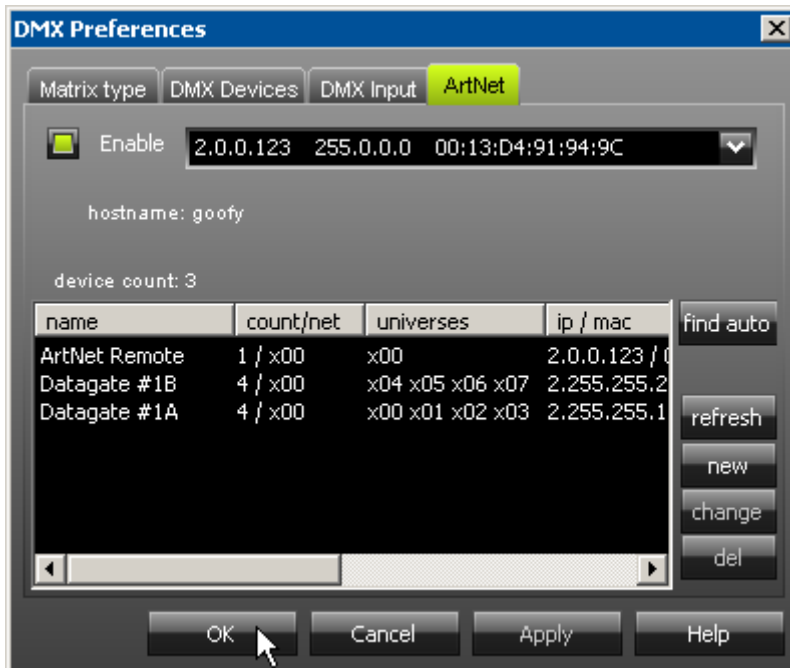
Now you can **modify** these ArtNet devices by **selecting first the ArtNet device** and clicking next the **“change” button**.



In this example we have **modified the short name** from ArtNet 0001 to Datagate #1A.



Repeat this for the ArtNet 0002 device and **modify the short name** from ArtNet 0002 to Datagate #1B.



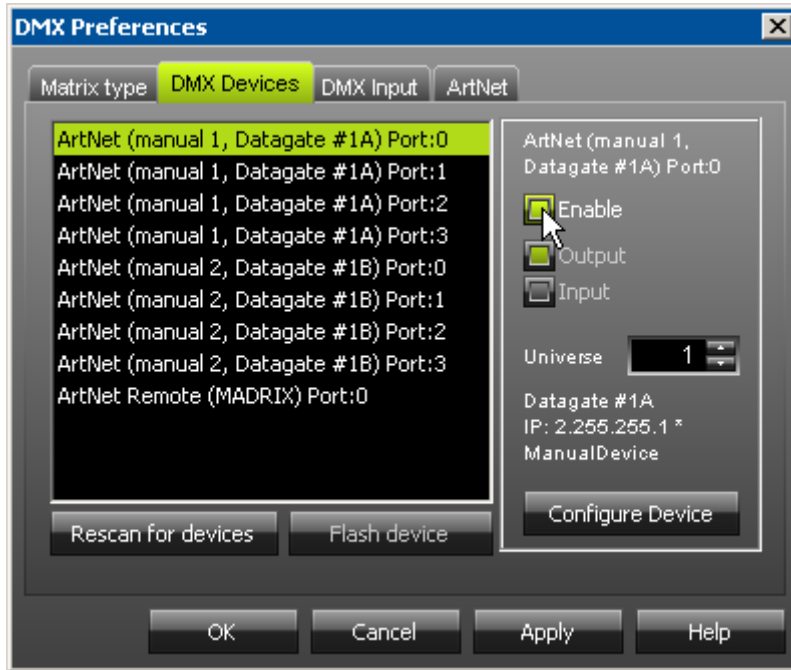
Now you see the two created ArtNet devices **Datagate #1A** and **Datagate #1B** inside the list.

Result:

Datagate #1A with the first 4 DMX universes

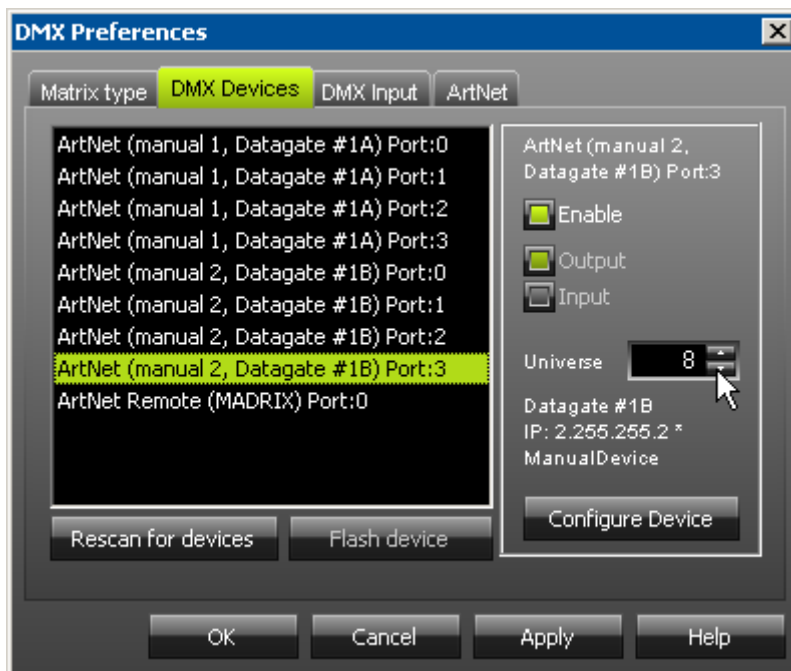
and

Datagate #1B with the next 4 DMX universes.



Next click at the second tab called **"DMX Devices"**.

You have to enable the ArtNet devices by **activating** the **Enable switch** and you have to **set up** the **DMX universe**.



In this example we have all 8 ports of the Datagate used and activated for output.

Datagate #1A Port:0 is the first DMX universe
Datagate #1A Port:1 is the second DMX universe
 ...
Datagate #1B Port:3 is the last DMX universe 8.

