



## Calculate Parameters

Calculating the needed amount of parameters can be a big task depending on the size of the setup.

It is generally true that most modern fixtures use fewer parameters than DMX channels.

The best way to see how many parameters a show needs is to patch all the fixtures and then open the **Details** in the **System Info Window**.

Here the amount of needed (used) parameters can be seen, and the amount of currently available parameters.

Read the [Expand the amount of parameters topic](#) to learn how to get more.

## Parameter Count

Some devices provide parameters:

- **grandMA3 full-size and grandMA3 full-size CRV:**  
20 480 parameters.
- **grandMA3 light and grandMA3 light CRV:**  
16 384 parameters.
- **grandMA3 extension:**  
none parameters.
- **grandMA3 replay unit:**  
8 192 parameters.
- **grandMA3 compact XT:**  
8 192 parameters.
- **grandMA3 compact:**  
8 192 parameters.
- **grandMA3 processing unit XL:**  
16 384 parameters.
- **grandMA3 processing unit L:**  
8 192 parameters.
- **grandMA3 processing unit M:**  
4 096 parameters.
- **grandMA3 8Port Node:**  
none parameters.
- **grandMA3 4Port Node:**  
none parameters.
- **grandMA3 2Port Node:**  
none parameters.
- **grandMA3 8Port Node DIN-Rail:**  
none parameters.
- **grandMA3 4Port Node DIN-Rail:**  
none parameters.



- **grandMA3 2Port Node DIN-Rail:**  
none parameters.
- **grandMA3 onPC rack-unit:**  
4 096 parameters.
- **grandMA3 onPC command wing XT:**  
4 096 parameters.
- **grandMA3 onPC command wing:**  
4 096 parameters.
- **grandMA3 onPC 8Port Node 4k:**  
4 096 parameters (when connected to grandMA2 onPC this node provides only 2 048 parameters).
- **grandMA3 onPC 4Port Node 4k:**  
4 096 parameters (when connected to grandMA2 onPC this node provides only 2 048 parameters).
- **grandMA3 onPC 2Port Node 2k:**  
4 096 parameters (when connected to grandMA2 onPC this node provides only 1 024 parameters).
- **grandMA3 onPC 8Port Node DIN-Rail 4k:**  
4 096 parameters (when connected to grandMA2 onPC this node provides only 2 048 parameters).
- **grandMA3 onPC 4Port Node DIN-Rail 4k:**  
4 096 parameters (when connected to grandMA2 onPC this node provides only 2 048 parameters).
- **grandMA3 onPC 2Port Node DIN-Rail 2k:**  
4 096 parameters (when connected to grandMA2 onPC this node provides only 1 024 parameters).
- **grandMA3 onPC Software:**  
none parameters.