DMX Lighting for beginners.

Workshop plan.

Slides + Examples.

Connecting to hardware
from your machines.

Your own projects.

DMX Hardware.

DMX Cable.

XLR Cable. (Should not work)

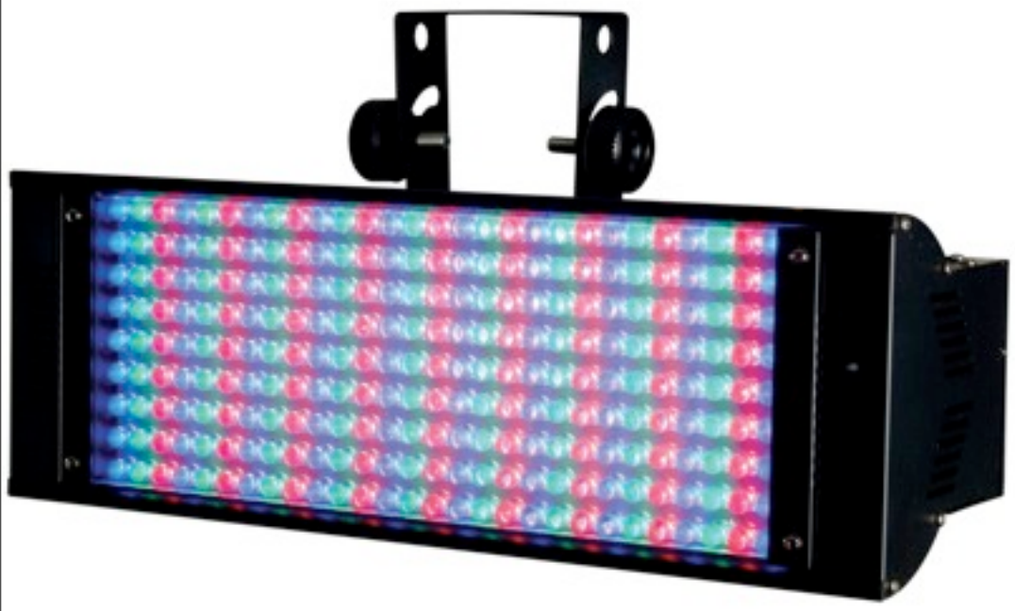
Serial/USB to DMX.

Ethernet to DMX. (Artnet)

Standalone device that outputs DMX. (Like an Arduino)


DANGER
Kam
LIGHTING


LIGHTRONICS




www.dsled.cn
www.dsled.cn

No pyro.

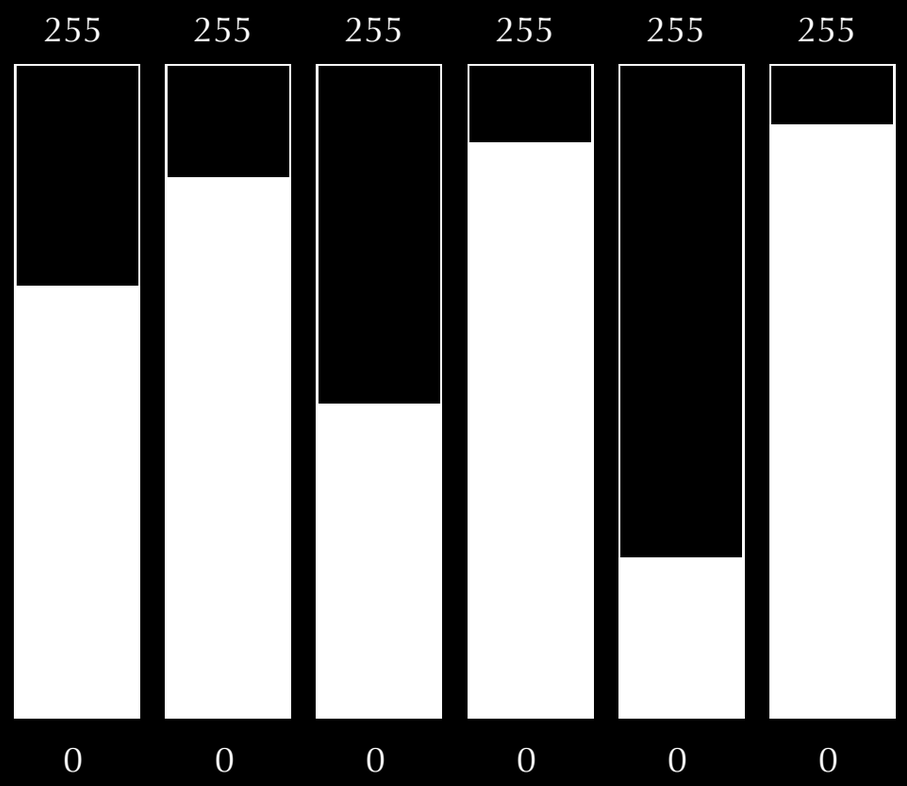
Bytes, bytes, bytes.

0-255


255
172
0

The DMX-512 protocol.

DMX packet



Etc, etc.

512 of them, but you can send fewer.

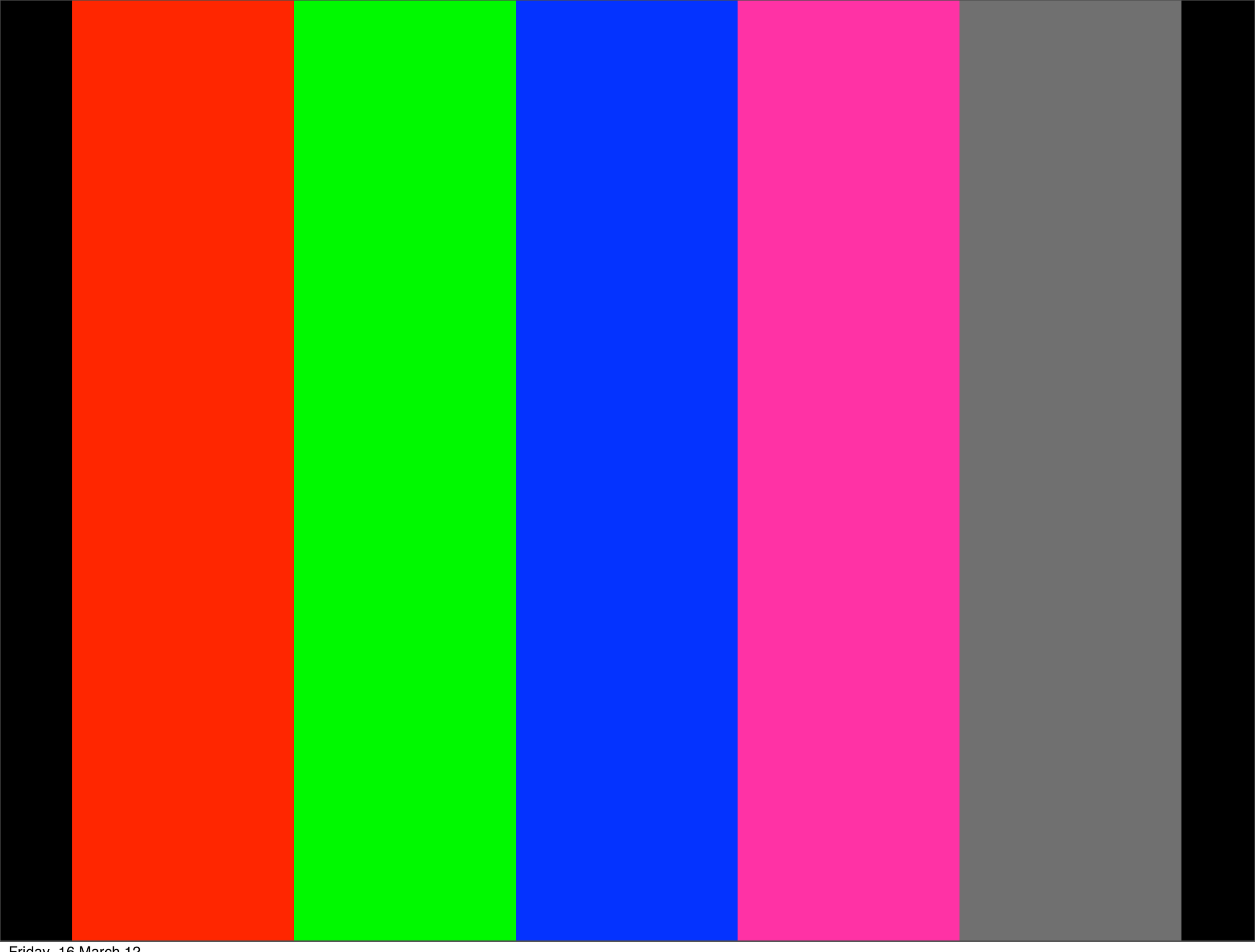
DMX packet

172 215 125 229 64 236 (Etc, etc)

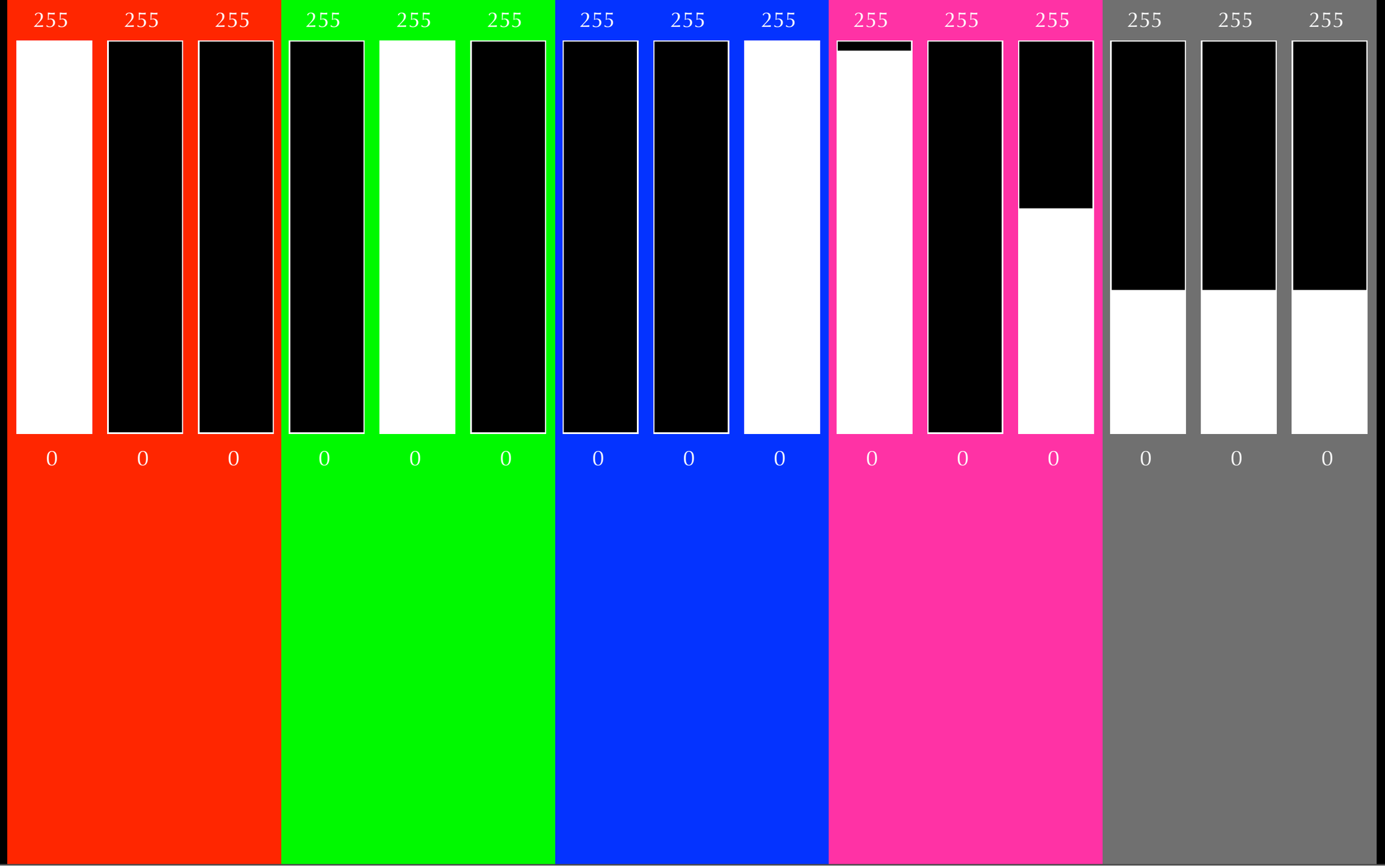
512 of them, but you can send fewer.

Dimmer Example.

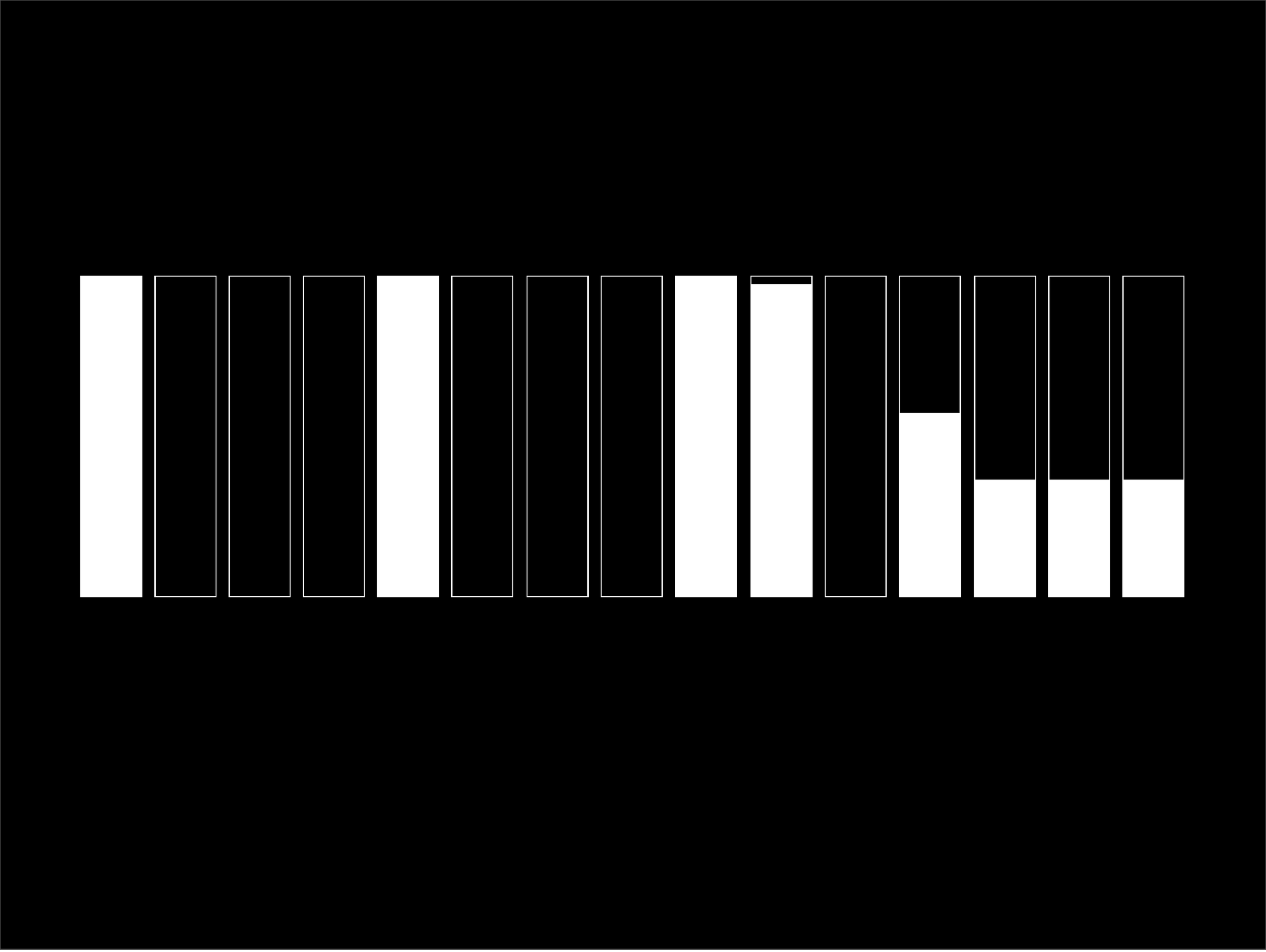
Color



Friday, 16 March 12



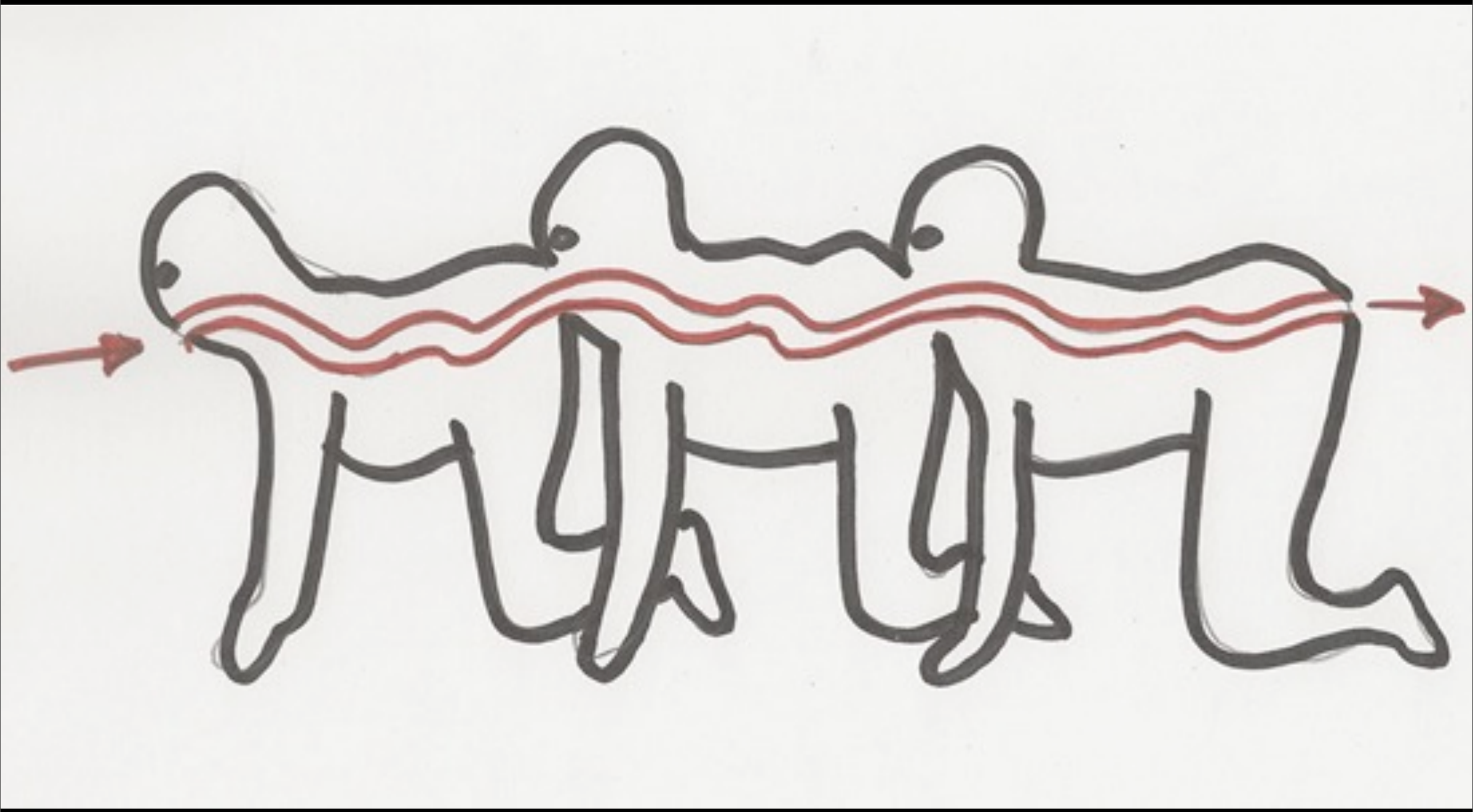
Friday, 16 March 12

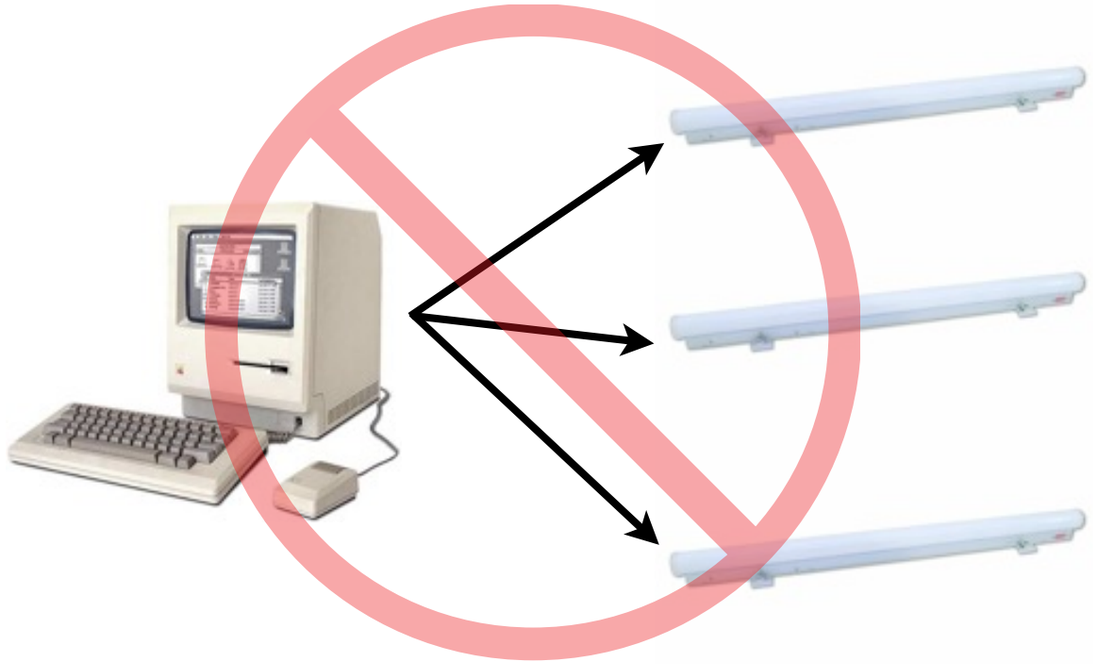


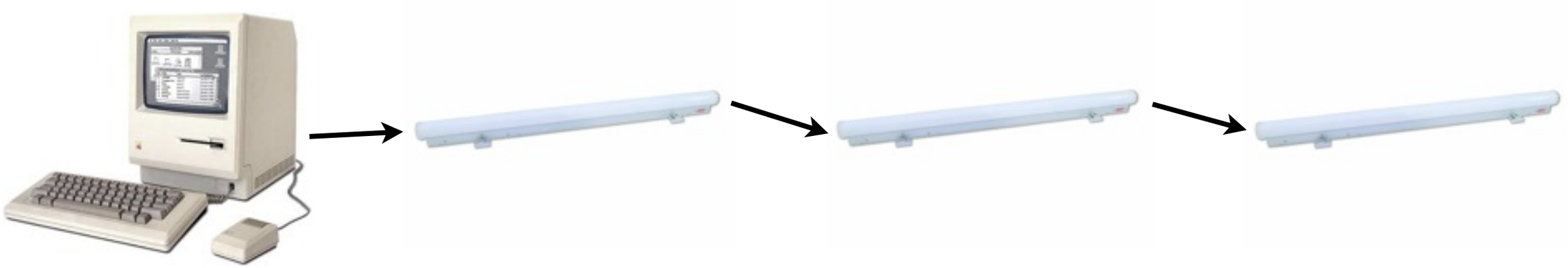
255 0 0 0 255 0 0 0 255 253 0 149 94 94 94

Always check the manual for your fixture, it might have a channel for intensity, for blink-rate, etc.

Daisy Chaining.







So how does each light know which channel(s) to listen to?

The DMX Start Address

Each tube needs 48 channels.

Start Address 1

Channel 1-48

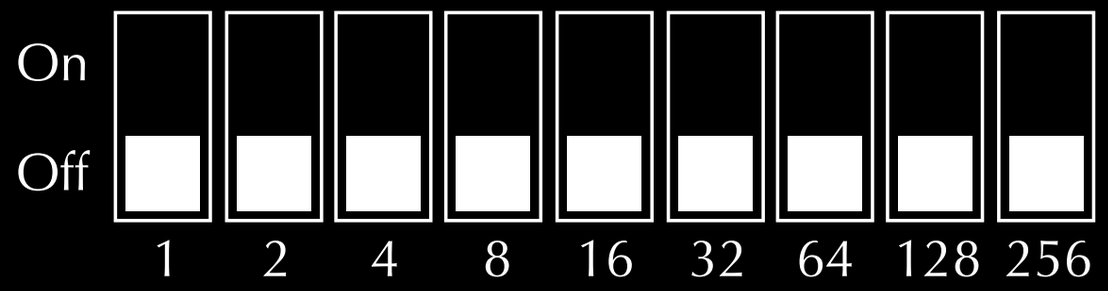
Start Address 49

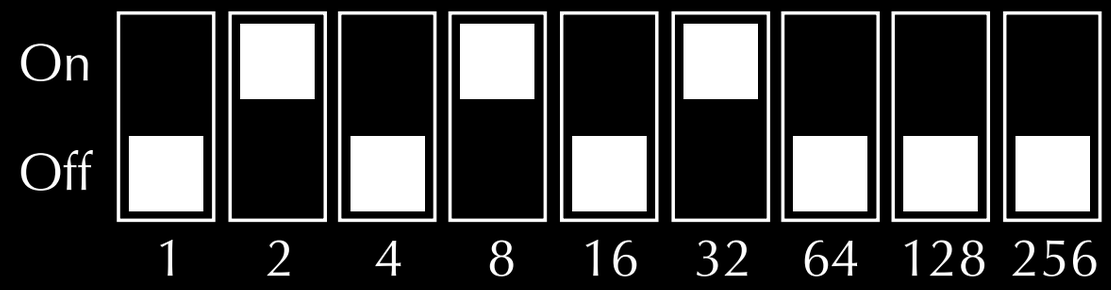
Channel 49-96

Start Address 97

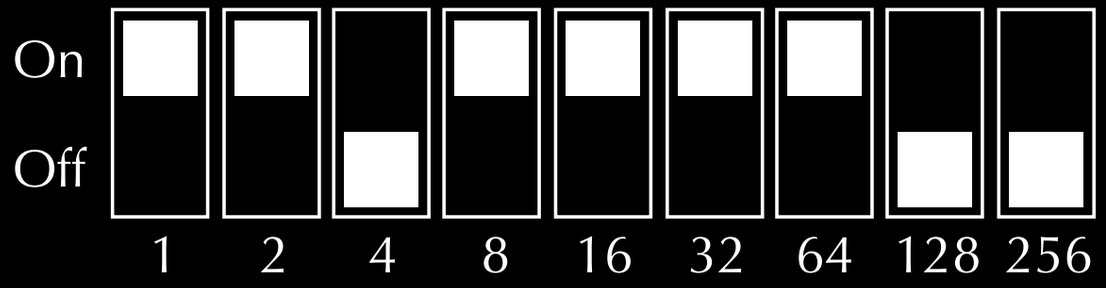
Channel 97-145


DMX ADDRESS
ON
DIP
1 2 3 4 5 6 7 8 9 10
1 2 4 8 16 32 64 128 256
Function


On
Off
1
2
4
8
16
32
64
128
256



$= 2 + 8 + 32 = 42$



$= 1 + 2 + 8 + 16 + 32 + 64 = 123$

DMX Universes

Each DMX-512 Universe has 512 channels. Think:
Universe == DMX output.

Dealing with multiple universes is usually done by using Artnet boxes.
(Ethernet to DMX)

(RGB Tubes Example)

(Strobes Example)

“Each One Teach One.”