

Art-Net / Ethernet – DMX over the network

DMX-over-UDP · 10/100 Ethernet · RJ45

HOW IT WORKS

Art-Net packs MANY DMX "universes" (512 channels each) into UDP/IP packets and sends them over ordinary Ethernet – so one network cable carries hundreds of channels to many devices. Ethernet is the physical 10/100 layer underneath (what the W5500 chip handles).

THE WIRES

RJ45 (twisted pairs) → magnetics → W5500 → SPI → MCU
Standard network; the 2.x.x.x IP convention for Art-Net

KEY FACTS

Many universes over one cable; wired = rock-solid on stage (vs Wi-Fi).
It's just UDP – the W5500 does the network, firmware reads packets.

WHERE WE USE IT

The modern, scalable control path: Art-Net into the Brain (via the W5500's RJ45) lets a lighting network drive a whole rack of CR units over one cable. Chosen wired (not Wi-Fi) because the stage is no place to drop packets. The Brain decodes it and masters the house bus.