

Yes, the walls run from a console

To a lighting console a LaserWall is an ordinary three-channel RGB fixture. It arrives over Art-Net, which is DMX carried on the network.

01 IN SHORT

The twenty-second answer

Every wall takes three DMX channels: red, green, blue. The console sees it the way it sees a wash or an LED bar, and runs it with the rest of the rig.

The signal travels over Art-Net, which is DMX on the network. Between console and walls you put an Art-Net node (a box with a DMX input and an Ethernet output) and an ordinary Wi-Fi router. If the show already runs from a laptop, no node is needed at all.

QUESTION	ANSWER
Does it need a special console?	No. Any console or software with an Art-Net output will do.
How many channels?	Three per wall: R, G, B.
Does the phone get in the way?	No. The console outranks the phone, and the handover is automatic.
Is internet required?	No. A local network is enough.
How long does setup take?	Minutes: address the walls in the app, point the node at the right universe.



If there is no console

DMX is an extra input, not a requirement. The walls run fully from the phone and play a saved look on their own.

02 CAPABILITY

What is supported

From here on it is the technical half, written for whoever builds the signal path.

ITEM	VALUE
Protocol	Art-Net (ArtDmx), UDP port 6454
Channels per wall	3: R, G, B, 8 bit each

ITEM	VALUE
Universe	0 by default, settable 0...32767
Start address	1 by default, settable 1...510
Frame rate	up to 44 frames per second, verified against a hardware node
Discovery	ArtPoll / ArtPollReply, the wall appears in node lists as LW-XXXX
Firmware	Art-Net since 3.10.0, current release 3.11.1

What is not there

- No sACN (E1.31) and no RDM.
- No 16-bit channels, no dimmer or strobe channel: the master brightness lives in the app and the effects live inside the wall.
- Art-Net renaming of a wall is ignored on purpose: names are set from the app only.

03 HARDWARE

What you need

Minimum kit

- A console with a DMX output (or a laptop running software, in which case skip the node).
- An Art-Net node: DMX in, Ethernet out.
- A Wi-Fi router with a 2.4 GHz band. No internet needed.
- Walls on firmware 3.11.1 or newer.

If the node and router are yours

Any node that puts ArtDmx on the network works: Enttec ODE, CR011R, Luminex, or a console's built-in Art-Net output. The wall asks for only two things: the node and the walls share a subnet, and the universe matches.

A node that sends only to discovered receivers (unicast) works too: the walls answer ArtPoll and land in its list by themselves. A node that broadcasts works with no discovery at all.



Budget nodes

Some nodes stamp every frame with the same sequence number. The firmware accepts that stream in full, deliberately. Verified against a CR011R.

Laptop only, no console and no node

Software with its own Art-Net output (QLC+, MagicQ, Resolume and the like) sends frames straight from the laptop into Wi-Fi. No box in between: you configure the universe and the addresses, nothing else.

About the radio

- The walls are 2.4 GHz only. Leave the router's 5 GHz band to laptops and phones.
 - Keep console and node on cable: only the last hop to the walls goes through the air.
 - Twenty walls on one consumer router is tested and works. On a large site spread access points across channels 1, 6, 11.
 - A VPN on the phone breaks phone control, but does not touch the console's stream.
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04 SETUP

Building the path, step by step

1. Network

01 Bring up the router

One subnet for everything: walls, node, laptop, phone. The router's DHCP hands out addresses, nothing needs to be typed in by hand.

02 Cable the node

The node's DMX input LED must strobe rapidly: that is the proof the console is really sending. Until it does, there is no point looking at the network.

03 Put the walls on the network

The normal way from the several-walls manual: app, Add device, Wi-Fi credentials.

2. Addressing the walls



Without addressing the whole fleet moves as one

Every wall leaves the factory on the same patch: universe 0, address 1. Until the addresses are spread out, one console channel paints every wall at once.

01

Address the fleet in one tap

Settings → DMX / Art-Net → Address the fleet in order. The first wall takes channels 1-3, the second 4-6, the third 7-9, following the order the walls have in your list.

02

Or set them by hand

Expand a wall's card and type the universe and address into the DMX row. The channels it occupies are shown next to it, for example 4-6.

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Or from the console

ArtAddress changes universe and start address over the network. Only fields carrying the programming bit are applied, so a stray packet cannot knock the patch out.

It pays to freeze the order first: switch the Devices tab to Manual sorting, drag the walls into the order they physically stand in, then address the fleet. The patch then matches the room.

3. The Art-Net node

01 Universe

The same one the walls use, 0 out of the box. Many nodes number universes from 1: check their table so you do not end up one apart.

02 Direction

The node's port must run outward: DMX from the console goes onto Art-Net. The reverse direction is not used here.

03 Recipients

Broadcast always works. Unicast works once the node has discovered the walls: they answer ArtPoll themselves, no registration step.

4. Patching in the console

In the console's library take any generic three-channel RGB fixture (often called RGB LED, Generic RGB or Colour Changer) and patch it at the wall's address. Channel order is straightforward: red, green, blue.

A wall with no signal does not fade out by itself. Take it down with channels at zero or with a Blackout: the firmware also answers the Art-Net trigger macro for blackout.

5. Pre-show check

- ✓ The node's DMX LED strobes and Blackout is released on the console.
 - ✓ Every wall answers on its own address, neighbours do not move with it.
 - ✓ All three channels driven one by one: red, green, blue.
 - ✓ Master brightness in the app set to the working level.
 - ✓ Spare phones switched to Observer mode.
 - ✓ Near zones of all walls out of reach of the audience.
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05 CHANNELS

Channel map and commands

Channel map

CHANNEL	FUNCTION	RANGE
Address + 0	Red	0...255
Address + 1	Green	0...255
Address + 2	Blue	0...255

The first accepted frame takes the wall over: it powers the output on and drops into static mode, whatever look was saved in it. There is no dimmer channel: the master brightness in the app scales whatever the console sends.

Art-Net commands

- ArtPoll / ArtPollReply: discovery. The wall answers with the short name LW-XXXX, the long name set in the app, and a status line carrying firmware version, signal level and who currently holds control.
- ArtAddress: universe and start address, plus Locate for identifying a fixture. Renaming a wall over Art-Net is ignored on purpose.
- ArtTrigger: macro 0 blacks the wall out, macro 1 starts Locate.

How many walls fit in a universe

Three channels per wall and 512 channels per universe means up to 170 walls. In practice the limit is the radio and the site's power, not DMX.

06 PRIORITY

Who drives the wall

Console, phone and the saved look can all be present at once. The order resolves itself, with nothing to switch by hand.

Console versus phone

A console frame takes control instantly and keeps it while the stream runs. During that time the phone cannot cut in: its colour, mode and speed commands are silently ignored by the wall.

Three seconds after the console goes quiet the wall is free again and the phone carries on as usual. Nothing has to be switched in either direction.

What the phone can still do under a console

- Power the output off and on: the kill switch always works.
- Set the master brightness: it is a ceiling over the console's signal.
- Save the current look into the wall, update firmware, rename, change network settings.



A useful trick

Build the look on the console, then press Save on device in the app. The wall remembers exactly that picture and shows it on power-up when no console is around.

Two phones on the network

Control belongs to whichever phone started first; the second is dropped silently. To keep a spare phone out of the fight, switch it to Settings → Observer mode: it sees everything and can still update firmware, but sends nothing.

If the console signal stops

The wall holds the last frame it received and does not fade out. That is deliberate: a cable pulled mid-number must not black the stage.

Three seconds later the wall is available to phones again. A phone sitting nearby with the Colours tab open will restore its own look, so during a show keep spare phones in Observer mode.

07 DIAGNOSTICS

If it does not work

SYMPTOM	WHAT TO DO
A wall ignores the console	Compare universe and address: the wall shows both in its card, the node in its own settings. Universes numbered from 1 instead of 0 is the usual culprit.
Every wall shows the same colour	The addresses are still stacked. Settings → DMX / Art-Net → Address the fleet in order.
The wall is in the node list but stays dark	Check the master brightness in the app, and that the console channels really land on its address.
Output is dim	That is the app's master brightness, not the console. Raise it and save.
Colour flickers to a stray look every few seconds	The wall is below firmware 3.11.1 and a phone on the network has the Colours tab open. Update the wall or put that phone in Observer mode.
The node does not find the walls	Node and walls are on different subnets, or the walls are not up yet. Wait until they appear in the app, then re-run discovery on the node.
The picture froze on the last colour	The console went quiet: holding the last frame is intended behaviour. Take it down with channels at zero.
A wall vanished from the show after re-addressing	The address fell outside 1...510 or the universe changed. Restore the patch in the wall's card.