TOPBYTES LTD
Product brochure · topbytes.net/flight

DESIGNED AND BUILT IN BRITAIN

FlightRadar

The sky overhead, on your desk

A 7-inch touchscreen radar scope of the aircraft around you, with type, operator, route and a photo for any aircraft you tap, and a world map to follow a flight all the way home. It needs only Wi-Fi and USB-C power: no receiver, no antenna, no Raspberry Pi. A complete, ready-to-use unit on the same 7-inch platform as DX Spotter Pro, SatTracker and MeshDisplay, with free over-the-air updates.



The production FlightRadar unit, showing live traffic around London.

Live radar scope

Every aircraft in range on a sweeping scope, 5 to 250 km

Tap for the full story

Type, operator, route, ETA and a photo of the aircraft

Follow flights worldwide

Track up to 15 flights on a world map; alerts for your own list

Aircraft data from adsb.fi, adsbdb.com and planespotters.net, independent services not affiliated with TopBytes.

AT A GLANCE

Plane-spotting without the kit

Seeing what is flying overhead normally means a phone app, or a hobby project: an SDR dongle, an antenna and a Raspberry Pi running ADS-B software. You might enjoy a live view of your own sky without ever wanting to build one, and a phone app is not something you leave running on the desk.

FlightRadar is a complete 7-inch touchscreen unit, supplied ready to use, that shows the aircraft around your home on a green radar scope. Tap any aircraft for its type, operator, route, ETA and a photo; follow it on a world map after it leaves the scope. Positions come over Wi-Fi from the adsb.fi community network, so there is nothing to install or aim.

What you see

- A live view of your local sky, readable across the room
- Who, what and where to for any aircraft, with a photo
- Flights followed all the way home on a world map
- Alerts for the airlines or flights you care about

Easy to own

- No receiver, antenna or computer to set up
- No app or account: everything is set on the touchscreen
- Recovers by itself from Wi-Fi drops and power cuts
- Free over-the-air updates keep it current

Make it yours

- Three colour themes: Classic, Neon and Amber
- Range from 5 km to 250 km
- Night mode switches the screen off overnight
- Up to 20 airlines or flights on your watch list

7"	250 km	15	20
800 × 480 capacitive touch	range, from 5 km zoom	flights followed on the map	flight alerts

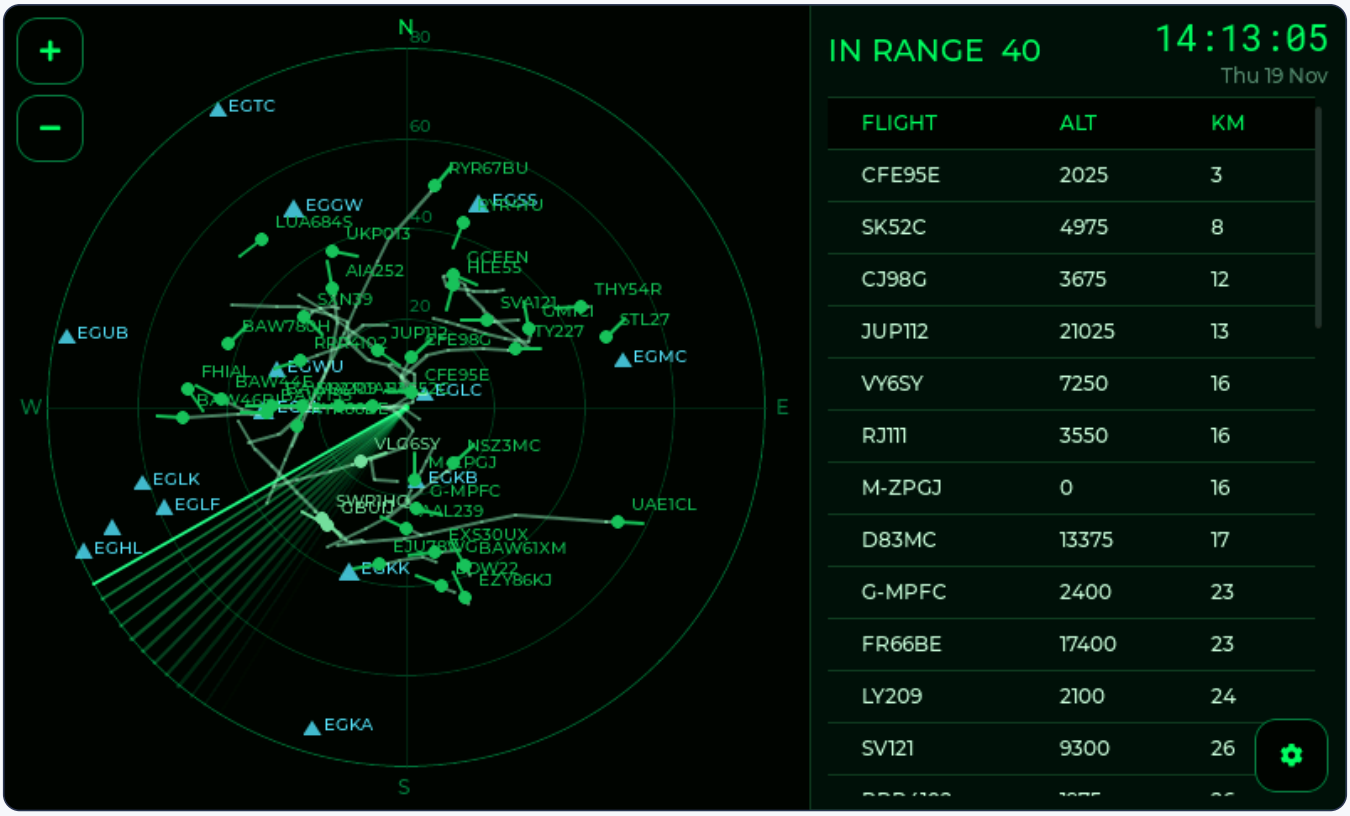
ALWAYS IMPROVING

- Current firmware (version 2.2.1): radar scope, aircraft details and photos, world-map tracking, flight alerts, three themes and night mode.
- Free over-the-air updates from the TopBytes update service, with an opt-in beta channel if you like to try new features early.
- Full user manual online at topbytes.net/flight, with screenshots, a setup guide and troubleshooting.

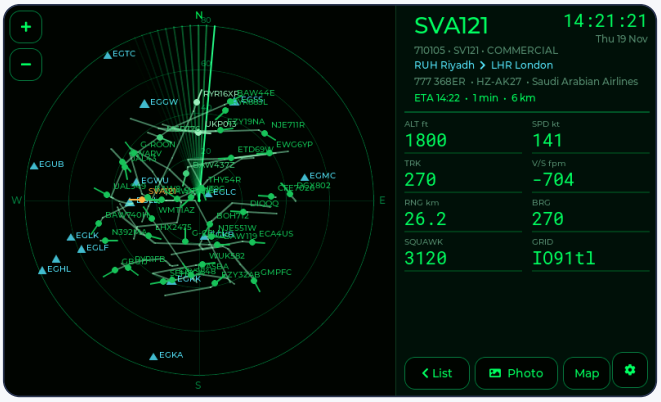
WHAT IT DOES

A radar scope of your own sky

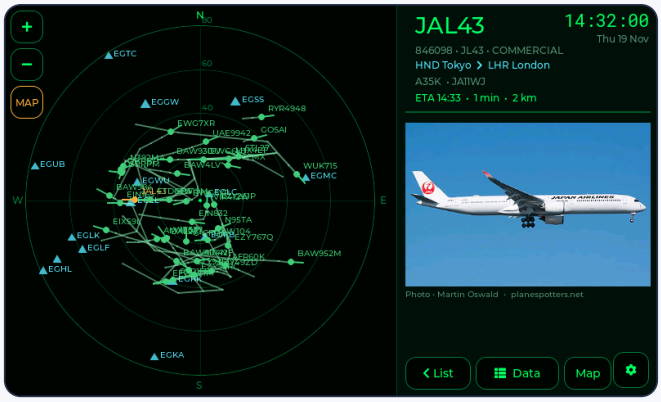
The screen is split in two: a square radar scope centred on your home on the left, and a panel on the right listing every aircraft in range, nearest first. A sweep line turns with a fading afterglow, and contacts brighten as it passes, just like a real scope.



Main screen (Classic theme): 40 aircraft within 80 km of Greenwich, with the in-range list on the right.



Tap an aircraft: flight, type, registration, operator, route and ETA, plus altitude, speed, heading, climb rate, range, bearing, squawk and grid square.



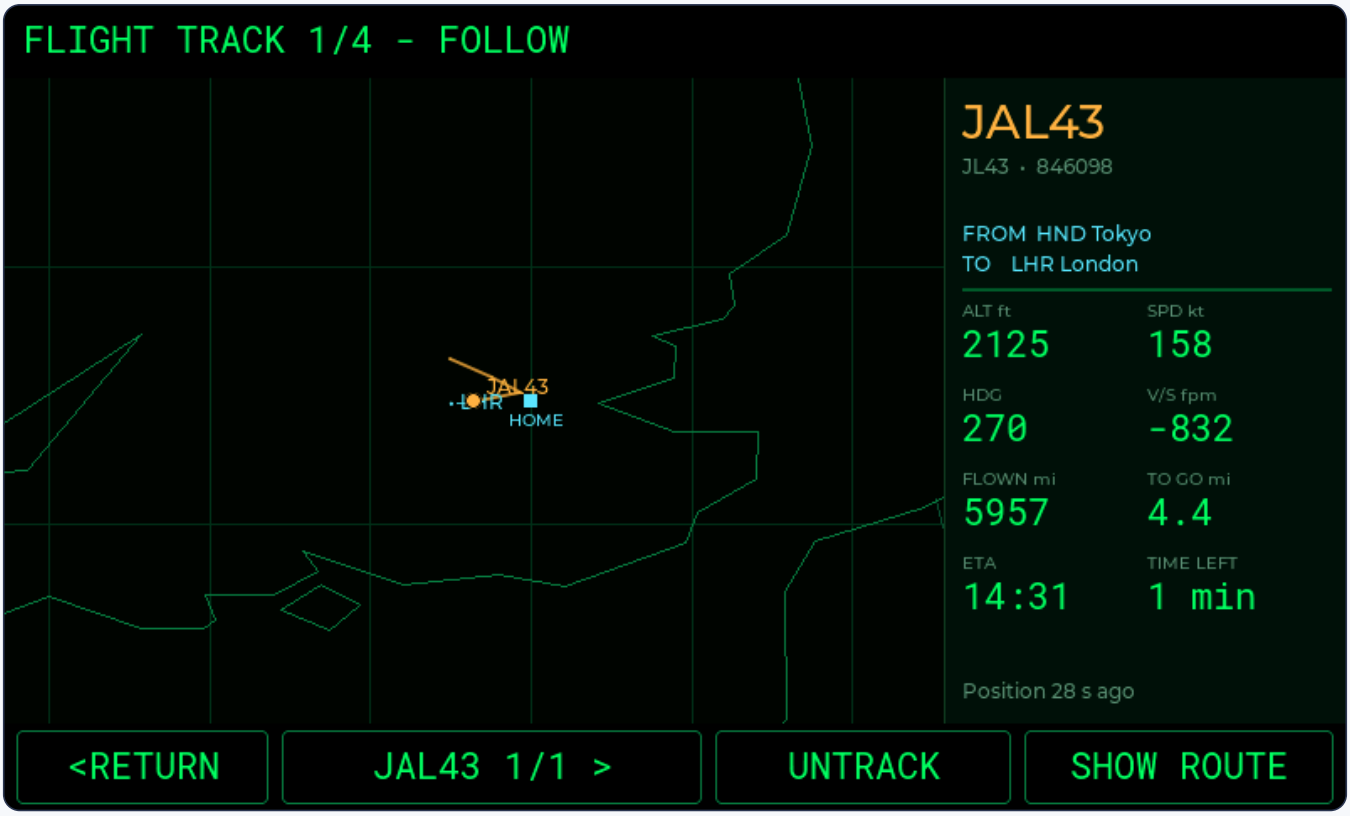
The Photo button shows a picture of that airframe from planespotters.net, with the photographer credited.

- Range from 5 to 250 km with the on-scope + and − buttons
- Path trails behind every aircraft, or only the selected one
- Emergencies: squawk 7500, 7600 or 7700 flashes red and yellow
- Airports marked on the scope; ground traffic can be hidden
- Details looked up automatically for the aircraft you tap
- Clock set over the internet, with the local time zone

WORLD MAP AND ALERTS

Follow a flight all the way home

Seeing an aircraft overhead is only half the story. One tap on Map keeps following it after it leaves the scope: where it has been, where it is now and the great-circle route still to fly, with distance to go, ETA and time left. Up to 15 flights can be followed at once.



Follow view: JAL43 from Tokyo on its final approach to Heathrow, with altitude, speed, heading, climb rate, miles flown and to go, ETA and time left.



Route view frames the whole journey, here Tokyo to London.



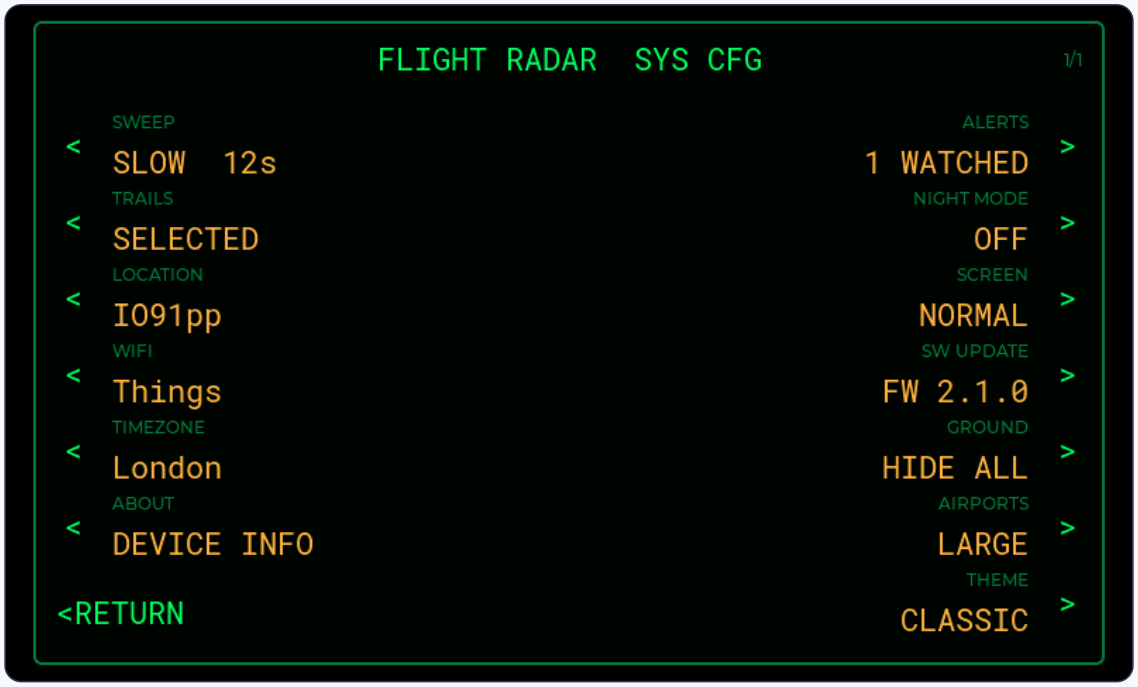
Flight alerts (Neon theme): watch up to 20 airlines, callsigns or flight numbers, and optionally put every match on the world map.

- Alerts highlight matching aircraft on the scope the moment they appear
- Flight numbers from an airport website or boarding pass work as typed (BA117)
- Auto-track: a banner announces each watched flight as it joins the map
- Tracked flights are kept through a restart, update or power cut

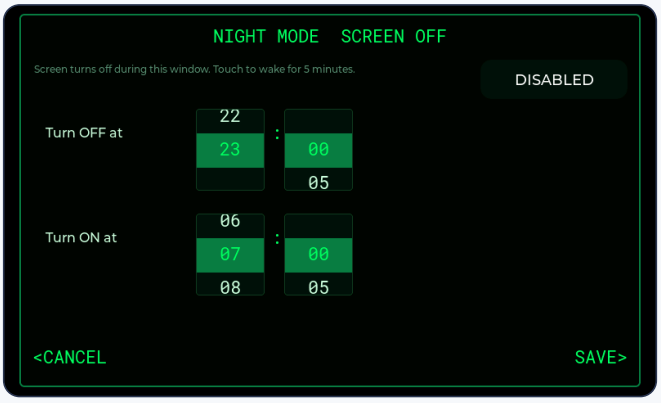
LIVING WITH IT

Set it up once, then leave it running

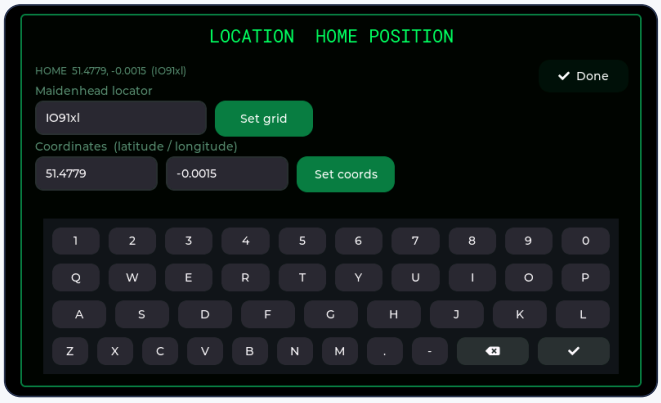
FlightRadar is made to stay on all day on a desk, shelf or windowsill. Everything is set on the touchscreen from one settings page, styled like an aircraft's control-display unit; there is no app, account or computer involved.



The settings page: each row shows its current value and changes with a tap.



Night mode switches the screen off overnight; a touch wakes it for five minutes.



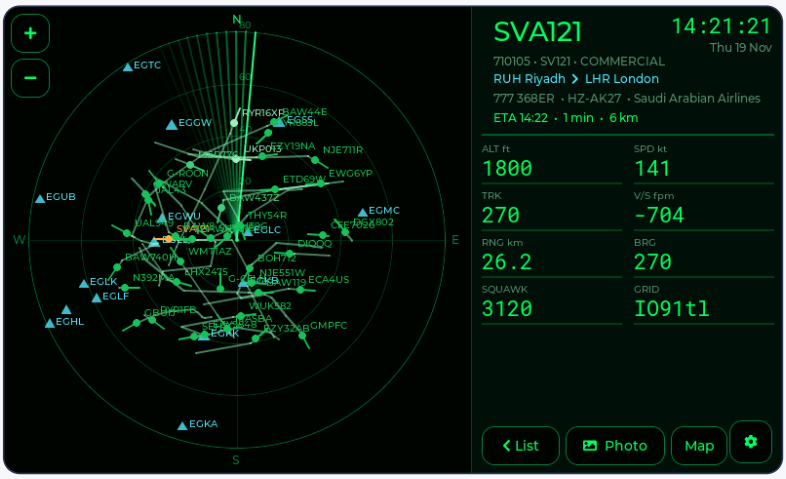
Home location as a Maidenhead locator or latitude and longitude, typed on the screen.

- Recovers by itself from Wi-Fi drops and data-feed hiccups
- Up to three Wi-Fi networks remembered; best one in range used
- 180° screen flip for shelf or upside-down mounting
- Sweep speed, trails, airport markers and ground traffic all adjustable
- Around 18 time zones with automatic summer time
- Updates checked automatically; installs show a full-screen progress page

THREE LOOKS, ONE PRODUCT

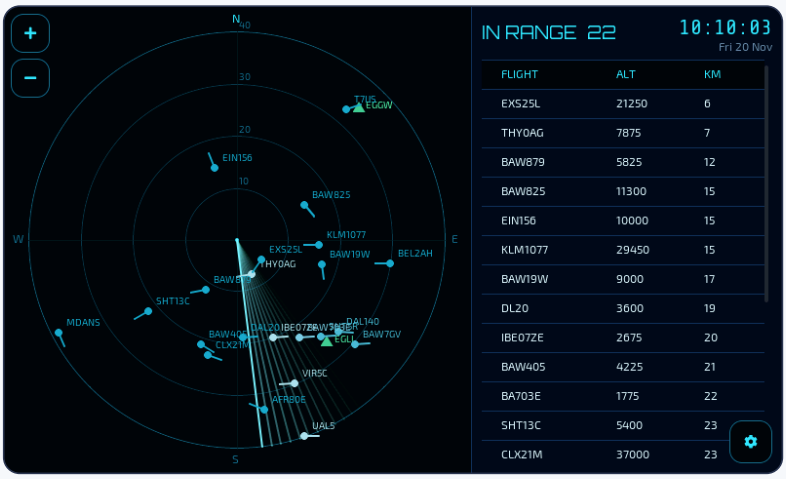
A display people want on their desk

FlightRadar ships with three complete colour themes, chosen in Settings: the same set as DX Spotter Pro, so units on the same desk can match. Pick the one that suits your room, and change it whenever you like.



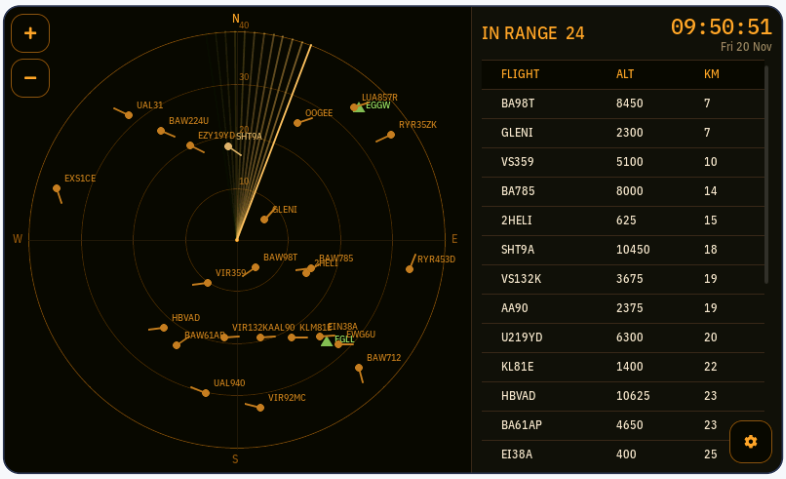
Classic

The original look: a phosphor-green radar scope, the selected aircraft in amber and routes in cyan. The default.



Neon

A holographic display: cyan and magenta neon on blue-black, with square-cornered panels.



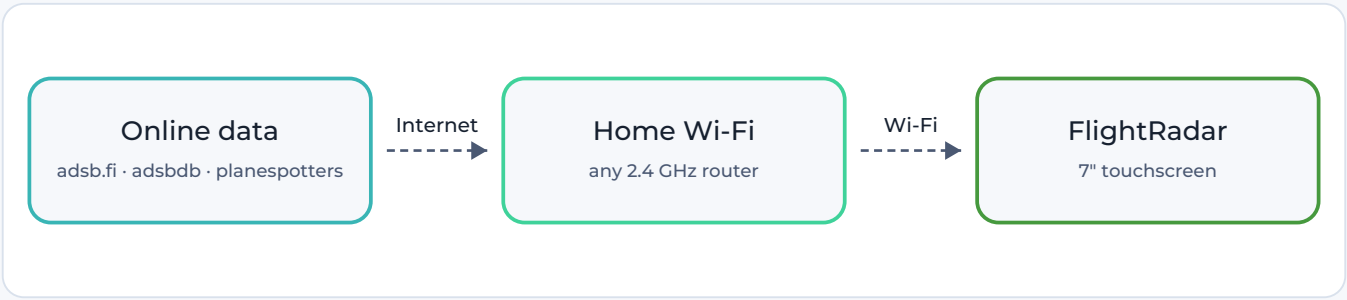
Amber

A vintage radio: an amber scope on a warm dark background, with blue-green accents.

Changing theme restarts the display to apply it.

SETUP AND HOW IT WORKS

No receiver, no antenna, no Pi



1 Power it up

Any 5 V USB-C supply or power bank; the cable is in the box.

2 Join Wi-Fi

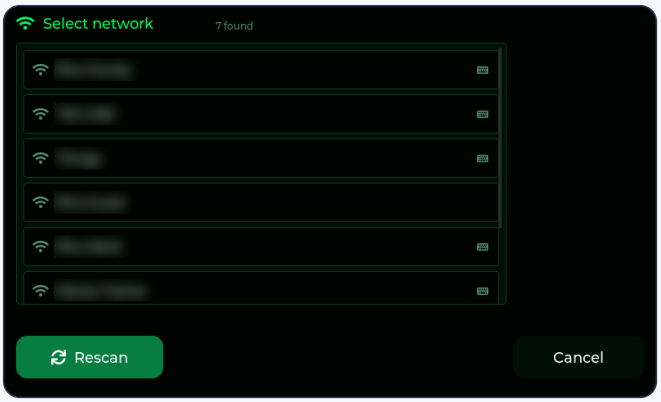
Scan and type the password on the screen, or use the setup hotspot from a phone.

3 Set home

Enter a Maidenhead locator or latitude and longitude.

4 Done

Aircraft appear within seconds. It reconnects by itself after power cuts.



Wi-Fi setup on the touchscreen (network names blurred).



On the shack desk, on top of a transceiver.

WHERE THE DATA COMES FROM

Aircraft positions come from adsb.fi, a community network of volunteer ADS-B receivers, about every 30 seconds. Type, operator and route are looked up from adsbdb.com and photos from planespotters.net, only for the aircraft you tap. Coverage depends on volunteer receivers near you, and is subject to those projects. These are independent services not affiliated with TopBytes.

What you need

- A 2.4 GHz Wi-Fi network with internet access (5 GHz is not supported)
- A 5 V USB-C supply rated 1 A or more, or a USB-C power bank
- That's all: no licence, receiver, antenna or computer

When the internet misbehaves

- If the data feed stops, the last known aircraft stay on the scope and pick up again at the next update
- Wi-Fi drops are retried automatically; a stuck connection is recovered by an automatic restart

WHO IT'S FOR

Not just for radio amateurs

FlightRadar needs no licence and no radio knowledge. It sits just as naturally in the living room as in the radio shack, and it makes an easy gift.

Amateur radio shacks

A companion to DX Spotter Pro and SatTracker on the operating desk, in matching themes. Airband listeners can see what they are hearing.

Spotters and aviation fans

Type, registration, operator and a photo for every aircraft, alerts for favourite airlines, and flights followed across the world.

Under a flight path

People near an airport or a busy corridor: set a short range and watch aircraft line up on final, with the route of each one.

Gifts and learning

A ready-made present for anyone interested in flying, and a hands-on way to see ranges, bearings and how ADS-B works.

PART OF THE TOPBYTES 7-INCH FAMILY



The production FlightRadar unit.

FlightRadar is built on the same 7-inch screen and enclosure as DX Spotter Pro, SatTracker and MeshDisplay and, like them, is sold as a complete unit with its firmware pre-installed. That means:

- the same Classic, Neon and Amber themes as DX Spotter Pro
- the same USB-C power and the same simple setup
- free over-the-air firmware updates, like the rest of the range
- online manuals and web-flasher recovery tools for every product

GOES WELL WITH

- DX Spotter Pro: live DX cluster spots, propagation and DX alerts on the same 7-inch screen.
- SatTracker: amateur satellites on a live world map, with pass times and Doppler-corrected frequencies.
- MeshDisplay: your Meshtastic radio's messages, nodes and map, without the phone.

SPECIFICATION

Product details

Display	7-inch IPS, 800 × 480, capacitive touch; 180° flip; night-mode screen-off schedule
Processor	ESP32-S3 dual-core, 16 MB flash, 8 MB PSRAM
Radar scope	Range 5, 10, 20, 40, 80, 160 or 250 km; up to 40 aircraft; sweep off, 5, 8 or 12 s
Aircraft details	Flight, ICAO24, type, registration, operator, route, ETA, altitude, speed, heading, climb rate, range, bearing, squawk, grid square; photo
World map	Up to 15 flights followed with path, position and great-circle route; kept through restarts
Alerts	Up to 20 callsign, airline or flight-number watches; optional auto-track on the map
Data	adsb.fi (positions), adsbdb.com (type and route), planespotters.net (photos); no receiver or antenna
Wi-Fi	2.4 GHz 802.11 b/g/n, WPA/WPA2; up to 3 networks; on-screen or hotspot setup
Power	5 V USB-C, 2–4 W typical; a 1 A supply or better
Themes	Classic, Neon, Amber
Supplied as	Complete unit: 7-inch screen in the TopBytes enclosure with FlightRadar firmware pre-installed, and a USB-C cable. Plug in, join Wi-Fi, set home, done.
Updates	Free over-the-air (Wi-Fi) firmware updates for new versions, as across the range

IN THE BOX

- FlightRadar unit, firmware installed and ready to go
- USB-C power cable

HELP AND SUPPORT

- User manual, release notes and recovery tools at topbytes.net/flight
- Email support@topbytes.net

Pricing and availability: Martin Lynch & Sons (ML&S)

TopBytes products are sold exclusively through Martin Lynch & Sons Ltd. For current prices and stock, visit hamradio.co.uk/topbytes.

Screenshots are captured directly from the unit's display. Aircraft positions from adsb.fi, details from adsbdb.com, photos from planespotters.net with photographer credit; map data from Natural Earth. These services are independent of TopBytes Ltd.