Smart pi ECOsystem



Smart Public Information for the smart city.

Smart pi takes information from across the city and delivers it to the people who need it: as an announcement, on a display, through a help point or straight to a hearing aid, the moment it matters.

One ecosystem, designed to look, feel and work as one

Every product works on its own, and better together.

IN

Where information comes from

- RTA
- MIC
- PBX
- SPL
- Fire panel

SMART PI CORE

Decides what to say, where and when

- DVA
- DVA-GTFS
- EYE
- DSP
- SIP
- FSM
- LOG
- NMS

OUT

How it reaches people: hear, see, ask

- NAM
- NAM-HP
- EDC
- EYE-HD
- HLP

Smart pi

The Smart pi ECOsystem

One connected system for announcements, screens, help points and hearing support.



The right information, to everyone, on time

Smart pi is one system for everything a passenger, visitor or worker needs to hear, see or ask, from the timetable feed to the speaker, the screen and the help point.

Live data, live paging and the phone system come in. The Smart pi core decides what to say, where and when. Amplifiers, speakers, screens and help points deliver it, and every device reports back.

Every product works on its own, so you can start with the one you need and add the rest over time. Because they share one design and open standards, they also work with what you already have.

Hear

Automatic and live announcements, zoned to every speaker.

See

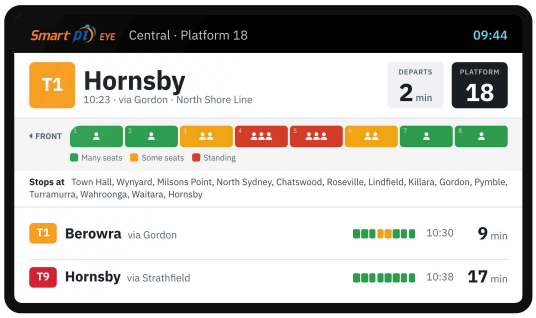
Realtime screens, from one platform to thousands.

Ask

Help points that connect people to an operator.

Watch over

Every device monitored, every page recorded.



SMART PI EYE

Carriage load display

Sydney Trains template with sample times and loads.



SMART PI MIC

Live paging

Choose the zones, press TALK, speak.

17

Products in one ecosystem, from data feed to speaker.

1000+

Zones from one Smart pi DVA interface.

512

Audio channels on one Smart pi SIP or LOG server.

EN 54-16

Smart pi FSM is built to the voice alarm standard.

Screens are the real software with sample data. Figures from the product pages at smart-pi.info.

In, core, out

Information comes in, the Smart pi core decides what to say, where and when, and the outputs deliver it to people: to hear, to see and to ask.

IN · WHERE INFORMATION COMES FROM

- **RTA** — Live timetables and data feeds
- **MIC** — Paging panels and microphones
- **PBX** — Phone system and intercoms
- **SPL** — Sound level measurement
- **Fire panel** — The building's fire alarm system

SMART PI CORE · DECIDES WHAT TO SAY, WHERE AND WHEN

- **DVA** — Automatic announcements
- **DVA-GTFS** — Announcements from GTFS
- **EYE** — Decides what every screen shows
- **DSP** — Audio routing and zones
- **SIP** — Links calls, remote NAMs and Auracast
- **FSM** — Supervises the amplifiers for the fire panel
- **LOG** — Records every page and announcement
- **NMS** — Monitors every device

OUT · HOW IT REACHES PEOPLE

- **NAM** — Speakers, Auracast and noise sensing
- **NAM-HP** — High-power speakers and hearing loops
- **EDC** — Plane array speakers
- **EYE-HD** — Screens and their media players
- **HLP** — Help and information points

Open standards, end to end

Every product uses the same open standards, so it fits alongside what you already run.

Dante · AES67 · AES70 / OCA · SIP · OPUS · GTFS / GTFS-R · LDAP · REST

One look, one way of working

Every product has the same Smart pi web interface, in any browser and on mobile. Learn one, and you know them all.

BETTER TOGETHER

One message, every way at once

Each product works on its own. Together they carry one message from where it starts to everyone who needs it, and keep a record.

Next-train announcement

RTA feeds live service data to DVA and DVA GTFS, which voice the announcement through the speakers and put it on every screen. LOG records it.

RTA → DVA → DSP → NAM → EYE → EYE-HD → LOG

Live page

A page from the microphone goes through the SIP server to the DSP for processing and zoning, then out to the NAM amplifiers. LOG records it.

MIC → SIP → DSP → NAM → LOG

Remote sites and Auracast

SIP carries a page to amplifiers at remote sites, which play it on their speakers and stream it by Auracast to earbuds and hearing aids.

MIC → SIP → NAM → NAM-HP

Help point call

A passenger presses Help and is connected straight to the control room. The PBX monitors every help point and alerts staff when one needs attention.

HLP → PBX → SIP

Fire evacuation

The fire panel's alarm reaches FSM, which starts the evacuation message on every speaker and screen at once. LOG keeps the record.

Fire panel → FSM → DVA → NAM → EYE-HD → LOG

Always monitored

FSM supervises the amplifiers and reports to NMS and the fire panel. NMS watches every device and alerts your team before anyone notices a fault.

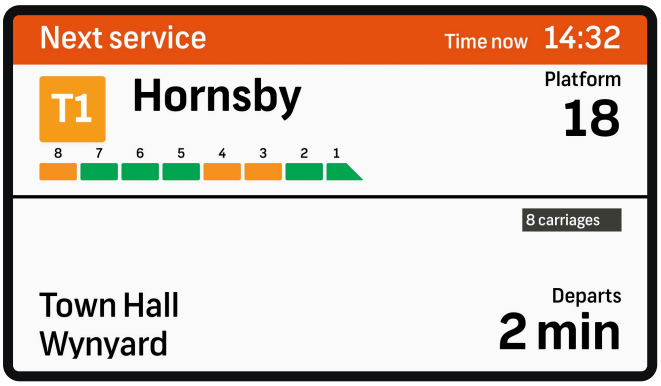
NMS → FSM → NAM → EYE-HD → HLP

Start with one, add the rest

A site can begin with announcements, screens or help points alone. Each product added later joins the same system, the same interface and the same monitoring.

Trusted on busy networks

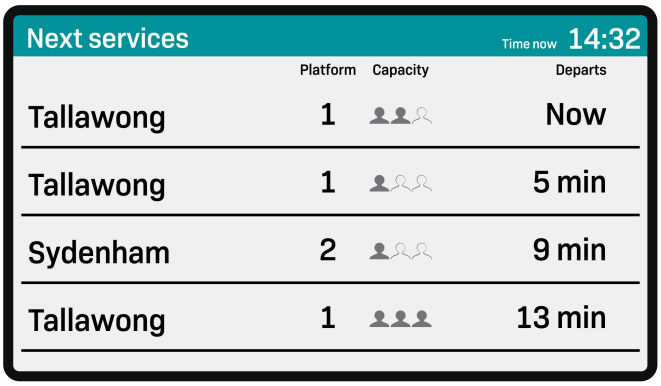
Smart pi runs passenger information for some of Australia's busiest transport networks, from Sydney's rail and metro to river ferries and suburban interchanges.



TRANSPORT FOR NSW

Sydney Trains

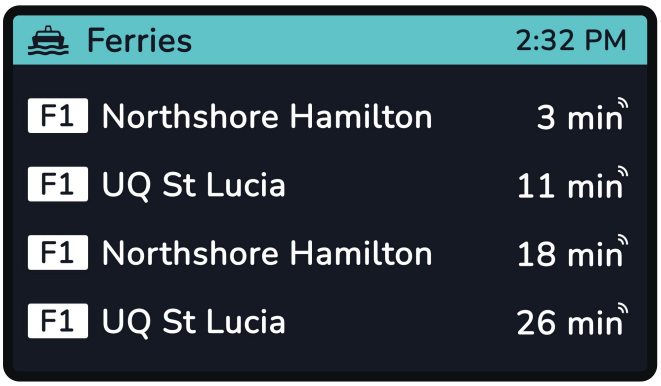
Network-wide PA, automated announcements and displays, run from the Rail Operations Centre since 2011.



TRANSPORT FOR NSW

Sydney Metro

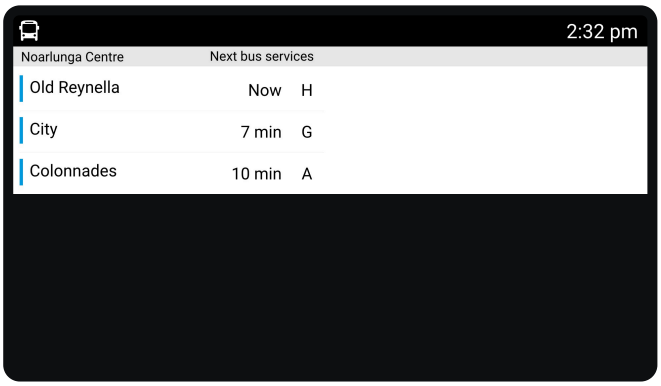
Next services with space on board, for a driverless metro.



QUEENSLAND

Brisbane ferries

Wharf displays in large type, in light and dark versions.



SOUTH AUSTRALIA

Adelaide Metro

Interchange screens with buses, stands and the next trains.

From one platform to a whole network

The same products run a single station or a statewide network. Add servers, nodes and devices as you grow; nothing is replaced.

Beyond transport

Airports, stadiums and venues, campuses and city streets use the same system for announcements, screens, help points and emergency warnings.

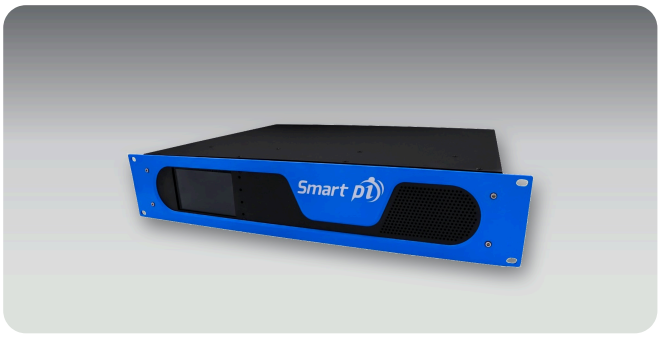
Templates built for these networks, rendered by Smart pi EYE with sample times.

Built to be installed and forgotten

Smart pi hardware sits close to the people it serves, on one network cable where it can, and reports its own health so faults are found before anyone notices.



Smart pi NAM
Amplifiers out in the field



Smart pi DSP
Modular audio processor



Smart pi EYE-HD
A player for every screen



Smart pi HLP
Help and information points

Close to the speakers

- NAM amplifiers sit in the field, indoor or outdoor (IP66)
- Fibre and Ethernet ports link units along the network
- DSP on board in every amplifier

Simple to fit

- MIC runs on one PoE cable
- EYE-HD sets itself up from its name
- EYE-HD rack kit holds nine players in 3RU

Ready for anywhere

- EDC speakers are weatherproof and steerable
- Custom help point housings
- DVA runs on EN 50155 servers on trains

Heard by everyone, watched around the clock

Public information only works if everyone gets it, and if the system is working when it matters. Smart pi is built for both.

Accessible by design

- **Auracast:** announcements stream straight to earbuds and hearing aids from Smart pi NAM, in step with the speakers.
- **Hearing loops:** Smart pi NAM-HP drives up to two hearing loops with the same announcement, and Smart pi HLP help points have one built in.
- **Captions:** Smart pi EYE shows live and DVA announcements as text on screen, in several languages.
- **Many languages:** Smart pi DVA speaks from an audio library or natural text to speech.
- **Read aloud:** help point buttons can read screen content aloud.

Reliable by design

- **Monitoring:** Smart pi NMS shows the status of every device and sends SMS and email alerts.
- **Voice alarm:** Smart pi FSM is built to EN 54-16 and supervises the amplifiers for the fire panel.
- **Self-checking:** NAM monitors its speakers, NAM-HP checks its hearing loops, and the PBX watches every help point.
- **No single point of failure:** DVA runs 1+1 with seamless failover, and DSP cards can be mirrored.
- **A record of everything:** Smart pi LOG keeps every page and announcement.

The same message, every way

One announcement reaches the speakers, the screens, Auracast and the hearing loops at the same time, so nobody misses it.

See what every screen shows

Each Smart pi EYE-HD sends back a screen grab every 60 seconds, so the control room sees what passengers see.

SMART PI ECOSYSTEM

See it working on your site.

Tell us about your network, and we will show you the Smart pi ECOsystem running with your own data.



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Scan to visit smart-pi.info

Smart pi ECOsystem

Smart pi is a T&M Media Pty Ltd brand · ABN 67 612 111 369
Screens are the real software with sample data. Specifications may change without notice.