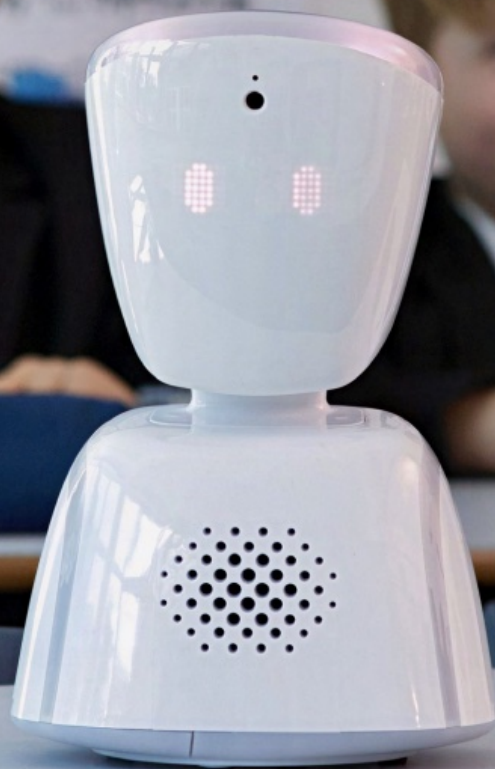


 **AV1**

Onboarding Guide

Your guide for introducing AV1
at school and getting set up.





AV1 in the classroom



AV1 being livestreamed from home

The AV1 Onboarding Guide

This onboarding guide is designed to support you throughout the AV1 setup process – from understanding its purpose, to configuring it within your school's IT systems, and completing your first lesson.

→ **Technical set up of AV1**

- Technical set up

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- WiFi Guide and network requirements

→ **Preparing your school for AV1**

- What is AV1?

- Privacy and safeguarding

- Lesson plan – Introducing AV1

- Practicalities of having AV1 at school

- Resources available for download

- Celebrate your first lesson with this print-out certificate

Technical setup of AV1

This step-by-step guide is designed to help teachers and IT staff set up AV1 in a school setting. It walks you through everything you need to get the robot up and running, so your student can start using it as quickly and smoothly as possible.

1. Download the AV1 app

Install the AV1 app on any phone or tablet via the App Store (Apple) or Play Store (Android). This does not need to be the student's device – the connection can be made later.

2. Turn on the AV1

Press the power button to switch on the AV1. The shoulders will start flashing white while the device searches for a WiFi/4G connection. Once a stable connection is found, the lights will turn solid white.

3. Enter the keyword

In the AV1 app, enter the keyword provided to you. You will then be asked to create a memorable PIN code for testing purposes and accept the Terms & Conditions.

What is a keyword?

A keyword is a single-use code that securely links a device to an AV1 using end-to-end encryption. You should receive the keyword during onboarding or access it via the AV1 Admin portal.



4. Connect to AV1

Open the AV1 app and connect to the robot. If you are in the same room as the AV1, tap the mute button to avoid audio feedback. Next, test the stream in the areas of the school AV1 will be used to ensure there is sufficient network coverage. Check the following:

- ✓ **Signal strength:** At least 3 out of 5 blue lights are visible on the back of the AV1 (left of the on/off button).
 - ✓ **Video quality:** The stream is clear and responsive.
 - ✓ **Connection status:** The AV1's shoulder lights remain solid white (indicating stable WiFi or 4G connection).
- If all tests are successful, skip to Step 7.

5. Connect to WiFi

We recommend connecting your AV1 to your WiFi network as the default setting, as this typically provides the most stable connection. You can connect AV1 to the school's WiFi via the AV1 Admin Portal (see page 8 for instructions). Your AV1 also comes with a 4G SIM card, ensuring reliable connectivity if the WiFi is unavailable or if you wish to use AV1 while on the move.

6. Test the connection again

Many schools use secure WiFi networks that can interfere with stable AV1 streaming. If this is the case, share our network requirements (see page 9) with the person responsible for managing the school's WiFi. Ask them to follow the provided guidance. Once the necessary adjustments have been made, test the connection again to confirm stability.

7. Arrange a test connection

Once everything is set up at school, you can arrange a test connection with the pupil. Since the single-use keyword was already used during setup, you will need to request a new keyword to provide to the pupil.

Generating keywords

You can generate keywords directly in the AV1 Admin portal, or request one via 'Support' in AV1 Admin (please include the AV1 serial number in your request).

AV1 Admin portal

The AV1 Admin portal is a web-based platform that allows you to manage your AV1 devices. Through the portal you can:

- ✓ View the status and connectivity of your assigned AV1(s)
- ✓ Receive keywords
- ✓ Regenerate keywords (if you have the necessary permissions)
- ✓ Add WiFi networks
- ✓ Restart your AV1
- ✓ Access the school resource page



Accessing the AV1 Admin portal

If your AV1 has been provided by a local authority or another organisation, you may be invited to join as a school assistant. During onboarding, you will receive an email to register for the portal.

→ If your school has rented or purchased AV1(s) directly, a separate admin account can be created for your school. To request access, please contact us via 'Support' in AV1 Admin.

For a full overview of the AV1 Admin portal – including key features and a glossary of terms – please visit the AV1 Academy.

WiFi guide

We recommend connecting your AV1 to your WiFi network as the default setting, as this typically provides the most stable connection. However, your AV1 also comes with a 4G SIM card, ensuring reliable connectivity if the WiFi is unavailable or if you wish to use AV1 while on the move.

School networks are often highly secure, so we recommend sharing the network requirements on the next page of this document with your IT or WiFi administrator to ensure AV1 can connect successfully.

You can add a WiFi network through the AV1 Admin portal.

Simply navigate to the AV1 page, select the relevant AV1 unit, and choose 'Add a WiFi network' under Actions – or scroll down to the WiFi Networks section in the left-hand menu.

Ensure your AV1 is running the latest software

We continuously improve AV1 through regular software updates. If your AV1 hasn't been used for a while, it may need an upgrade. AV1 updates automatically overnight when it is plugged in and charging. If needed, you can also contact us to initiate the update manually - it typically takes 5-10 minutes, depending on your network connection.

✓ Need further assistance?

If you have any questions or need support, don't hesitate to contact us via 'Support' in AV1 Admin.

Network requirements

Which wireless standards does AV1 support?

AV1 supports most wireless routers that are in use today. It specifically supports 802.11 ac/a/b/g/n

Which network security mechanisms does AV1 support?

AV1 supports open networks, and WEP, WPA, WPA2, 802.1x. EAP/PEAP. We do not support the use of proxy-server or certificates for security and privacy reasons. If your network requires this, an exception has to be made for the AV1.

What if our network uses MAC address filtering or a captive portal?

School networks and other public networks are often protected by captive portals or other security features where a device needs to be pre-approved by whitelisting the MAC address. Please reach out to us via 'Support' in AV1 Admin if you need AV1s MAC (it can also be found in the AV1 Admin portal) or have any questions regarding this.

What is the minimum required access to the internet?

The following access is required. Traffic is initiated from the AV1.

TCP port 80:

date.noisolation.com

TCP port 443:

gateway.noisolation.com

av-grpc.noisolation.com

upgradesrv.noisolation.com

upgradesrv1.noisolation.com

*.kinesisvideo.eu-central-1.amazonaws.com

UDP port 443:

*.kinesisvideo.eu-central-1.amazonaws.com

UDP port 123:

0.europe.pool.ntp.org

1.europe.pool.ntp.org

2.europe.pool.ntp.org

3.europe.pool.ntp.org

And if possible: Any high port number out to the internet using UDP, as that will often allow the WebRTC protocol use of peer-to-peer communication, which gives better performance, and less delay.

Preparing your school for AV1

What is AV1?

The AV1 robot is a telepresence solution that enables children and young people to access school and classroom life from another location. It bridges the gap between physical absence and classroom presence – whether the student is at home, in a care facility, in an inclusion room at school, or elsewhere – offering continued access to learning and helping to support both academic progress and social connection.

AV1 features a built-in camera and microphone that stream lessons back to the student. From their current location, the student can control AV1 and actively take part in class discussions and activities.

What the student can do with AV1:

1. Move the AV1 using the touchscreen – rotating 360° horizontally and tilting 70° vertically.
2. Speak to the class with their voice projected through AV1, or choose to mute themselves. They can also use Whisper Mode to speak quietly with nearby classmates.
3. Signal how they are feeling by turning the AV1's head blue when they are unwell or prefer to participate less actively.
4. Ask a question by tapping the hand icon, which makes the AV1's head flash to get the teacher's attention.
5. Change the AV1's facial expression to show emotions like happy, sad, or confused – helping the student engage with the class as if they were physically present.

One of the great things about AV1 is that it's not limited to the classroom. With its integrated 4G SIM card, AV1 can go wherever the class goes – whether that's out to the playground, on school trips, or even home for special occasions like birthday parties!

Privacy and safeguarding

We understand that privacy – for both teachers and students – is incredibly important. AV1 is an innovative tool, and the idea of introducing a device with a camera into the classroom may naturally feel daunting. That is why AV1 has been designed with privacy and safeguarding at its core, incorporating multiple layers of built-in security from the very beginning. AV1 fleets are already used highly successfully by councils and local authorities across the country with stringent data protection policies.

It cannot record

AV1 transmits a live video stream from the robot to the AV1 user's tablet. The stream is end-to-end encrypted, meaning it cannot be accessed by anyone – including No Isolation. No data is stored or recorded, and screenshots are strictly forbidden.

Screenshot and screen recording protection

The AV1 app is designed to prevent screenshots and screen recordings.

Independently tested for security

AV1 uses encrypted connections to prevent unauthorised access, similar to how online banking operates, and unlike other video conferencing tools, nobody else can access the live stream. We also invite the external consultancy PwC to attempt to hack and penetration test our systems, confirming that AV1 is the highly secure system we know it is.

Clearly visible when active

You will always know when AV1 is active – its head lifts and its eyes light up. The video stream is one-way: the student can see and hear the classroom, but no one can see them. This is a deliberate design choice, shaped by feedback from young users – especially those with long-term illness or emotionally based school non-attendance who want to stay connected without feeling exposed. As the teacher in the room, you can simply turn the robot off if ever the need arises.

Consent requirements

Schools are not legally required to obtain consent from parents of other children to allow AV1 use. However, schools may choose to do so based on their own policies.

One user per AV1

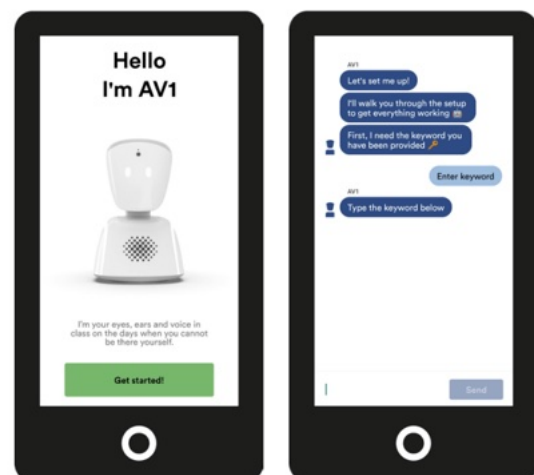
Each AV1 can be connected to by only one user at a time. Before first use, the app is synced to the AV1 using a single-use keyword, and every session is then protected by a personal 4-digit PIN. Users must agree to No Isolation's Terms & Conditions, which explicitly state that only the intended user may operate the device.

Addressing concerns

Concerns from staff or parents are often based on unfamiliarity with the technology. We provide editable letter templates that schools can use to inform and reassure their communities about how AV1 works.

GDPR compliance

No Isolation does not collect or store any personal data about the AV1 user. We only store limited customer data (such as the name and contact details of the school or local authority) for order and payment purposes.



Lesson plan: Introducing AV1

Lesson Title	Introducing AV1 – Your Classmate from Afar
Learning Objectives	• To build empathy for students unable to attend school physically • To understand how AV1 works and how to make it feel included in the classroom
Resources	• AV1 robot and charger • Tablet or phone with AV1 app • AV1 colouring sheet (for younger students) • Parent letter template • Printed discussion prompts • Optional: Photos or clips from real AV1 stories



Lesson plan: Introducing AV1

Time (55 mins)	Teacher	Students
Starter – What if you Couldn’t Come to School (10 mins)	Pose the starter question: “What would you miss most if you couldn’t come to school for a long time?” Lead a short class discussion. Draw a spider diagram on the board to visualise student input. Explain why some children may not be able to attend school (illness, anxiety, etc.) Introduce the concept of school connection and social isolation.	Think individually and contribute ideas to the discussion. Share answers for the spider diagram. Reflect on how school shapes daily life.
Empathy Exercise – Step into Their Shoes (10 mins)	Assign one empathy prompt per pair/small group: “Imagine you’re in hospital for weeks...” / “Imagine feeling too anxious to enter school...” Guide the discussion and encourage emotional reflection. Ask follow-up questions to deepen understanding.	Discuss their given scenario with a partner or group. Describe what it might feel like to be separated from school life. Share thoughts with the class.
Meet AV1 – The Classroom Companion (10 mins)	Introduce AV1 to the class (show the robot and the tablet/app). Explain the purpose of AV1. Define new vocabulary: social isolation, inclusion, encryption. Demonstrate key features: camera, microphone, passive mode (blue head), hand raise (flashing light). Invite predictions about what each feature might be for.	Watch and listen attentively. Ask questions. Guess or reflect on the function of each AV1 feature. Share which features they think are most important and why.
AV1 in Action – Let’s Try It! (15 mins)	Divide the class into small groups. Organise a rotation where each group leaves the classroom with the tablet to control AV1. Supervise groups and ensure each student gets a chance to try AV1.	One group at a time connects to AV1 from outside the room. Use AV1 to say hello, ask a question, or tell a joke to the class. Observe how AV1 looks and feels from both inside and outside the classroom.
Reflect & Discuss (5 mins)	Ask reflective questions: “How did it feel to talk through AV1?” / “What would it feel like if that were your only way to attend school?” Share a real AV1 story, photo, or short clip (if available). Take questions. Nominate 1-2 AV1 Buddies to help care for the robot.	Share how it felt to use AV1 and to interact with it. Ask remaining questions. Volunteer to be an AV1 Buddy.
Plenary & Take-Home (5 mins)	Run a quick recap quiz (e.g. “What colour is AV1 when in passive mode?”). Hand out the AV1 parent letter and colouring sheet (for younger pupils). Thank students and close the session.	Answer quiz questions. Take home materials. Pack up and reflect on the session.

Practicalities of having AV1 at school

To ease the transition, we recommend starting with just a few lessons, giving both teachers and students time to get used to AV1. You might begin with the lesson plan on page 13, followed by some of the child's favourite subjects.

✓ **Primary schools**

In primary settings, AV1 will likely remain in one classroom throughout the day. You can leave it on standby on the pupil's desk, ready for them to join lessons as and when they feel able.

✓ **Secondary schools: AV1 buddies**

In secondary schools, where classes take place in different rooms, you may want to assign AV1 buddies. These students are responsible for helping move AV1 between classrooms. Ideally, an AV1 buddy is a close friend of the user or someone who shares the same timetable.



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We held an introductory lesson to classmates so they could familiarise themselves with AV1, and from this, two of the users' friends were appointed 'AV1 buddies', responsible for transporting it from class to class.

Gregg Morrison, Headteacher at Preston School, a primary school in Somerset

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The school day

→ Starting the day

Place the AV1 on the student's desk and switch it on, ready for the first lesson. For teacher-led sessions, we recommend positioning AV1 near the front of the classroom. Be sure to move it as needed so the student can stay included during group work or classroom activities.

→ Break times

AV1 should be part of the fun, too! Feel free to bring it along to the playground during breaks. Don't worry – AV1 is covered by an accidental damage warranty.

→ Charging during the day

If AV1 has had a busy morning, we suggest topping up the battery during lunch. AV1 can still be used while charging, so there's no need to disconnect during lessons if the battery runs low.

→ End of the day routine

At the end of the school day, press and hold the button on the back to turn AV1 off. Leave it plugged in to charge overnight – this is completely safe and ensures AV1 is fully charged and ready for the next day.

→ Timetable lanyard

An AV1 timetable lanyard can be placed around AV1's neck, so AV1 buddies and classmates always know where it needs to be throughout the day.

Have a question or need help? We are here for you: contact us via 'Support' in AV1 Admin.

→ When contacting us, please include your AV1 serial number, which can be found on the base of the device.