



# GENIE™ COMMUNICATIONS PLATFORM

Model AAT.580 Specification and Operation

V.10.3 November 2022



**AMBIENT**  
ACTIVITY

# SOCIAL ISOLATION THE CHALLENGE AT HAND



Those who reside in supportive-care have fewer opportunities to maintain connections with family members. Studies reveal how an increasing sense of isolation and deteriorating mood compounds mild cognitive decline that occurs in normal aging.

Communication platforms such as iPads, Facetime, Skype and Zoom are all viable means to stay connected, however Elders who reside in supportive care often have challenges navigating smart technologies as they exist today – relying on assistance from care-providers that may not be available at any given time. Facilitating real-time virtual visitations for Residents with Family can also be challenging.

**GENIE is...** an easy to use communications technology platform designed for Elders-in-care (Residents) to use independently to maintain social connections, nourish independence, and maintain links to memories. It was designed to alleviate the workload care-providers face as they struggle to help Residents remain connected to Family.

**GENIE is...** first and foremost a messaging platform. GENIE provides asynchronous messaging between Family Members and Residents. Family Members send voice and video messages, pictures, and text messages to their Resident using AMBIENT CONNECT mobile app on their smart device. Residents retrieve and reply to messages on their own time and pace, on an easy-to-use Kiosk interface less demanding for a Resident to negotiate.

**GENIE is...** a home for virtual Memory Albums. Residents can independently scroll through curated albums of movies, songs, and pictures created by Family Members. Memory Albums allow Residents to revisit their lived experiences, help to retain precious memories, and enhance family visitations.

**GENIE is...** a Community Announcement Board. Staff can broadcast activity calendars, daily and weekly menus, special events and community picture playlists.

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# PLATFORM DESCRIPTION

The GENIE Platform consists of three parts:

1



**GENIE Kiosk** – where Residents receive/send messages and enjoy Memory Albums.

2



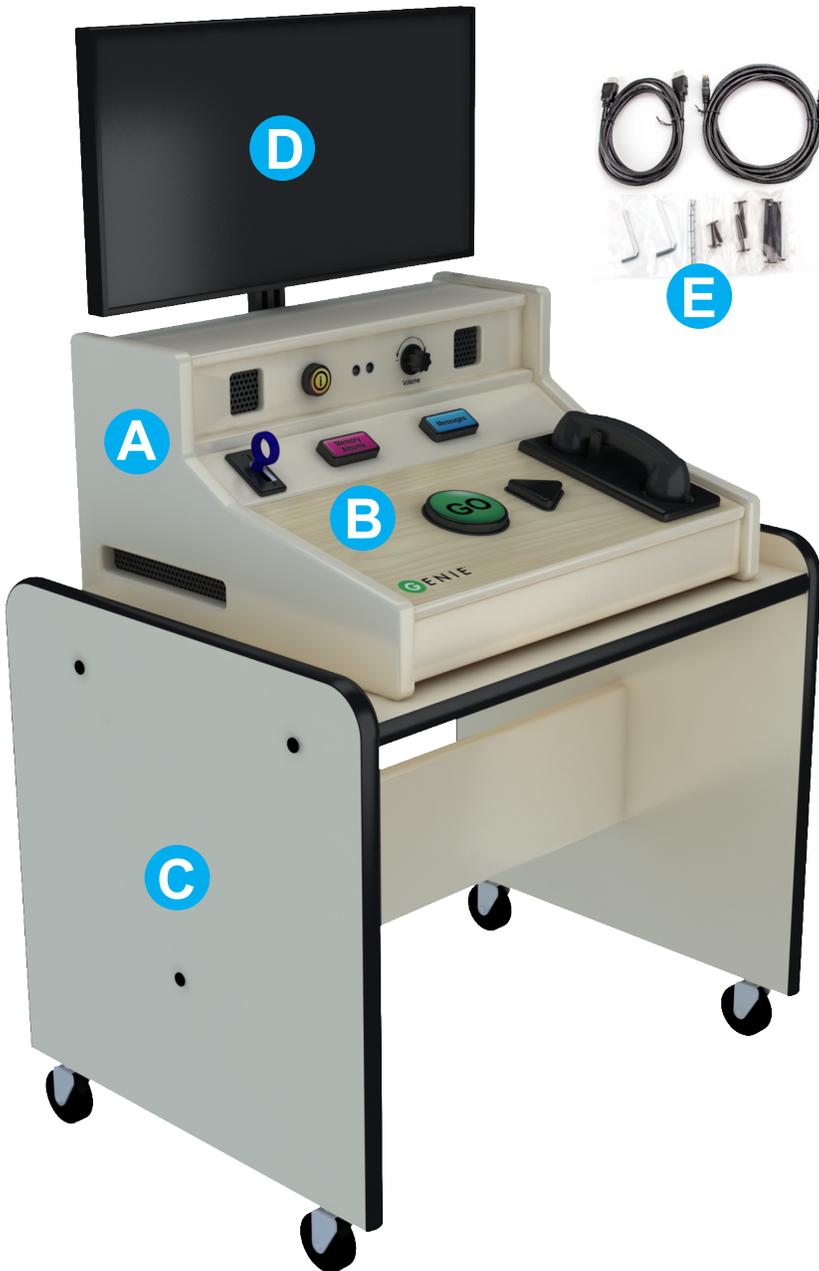
**AMBIENT CONNECT** - A mobile app that Family Members download to their smart device to send messages and media to their Resident. AMBIENT CONNECT is available for both iOS and ANDROID devices.

3

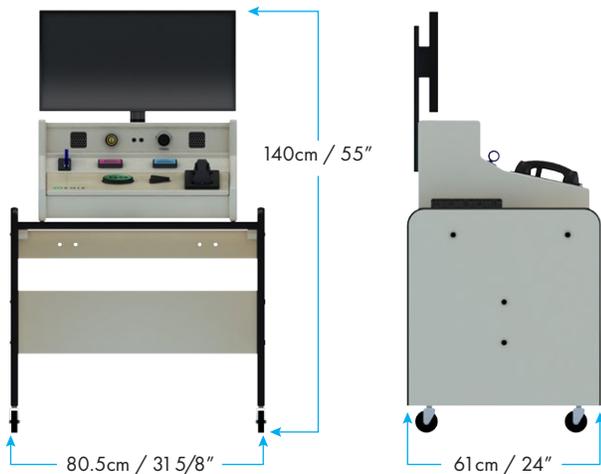


**AMBIENT ACCESS** - An online administrative website used by manager-types to create platform users, assign users to Residents, and manage messages and media. Visit [www.aatadmin.com](http://www.aatadmin.com).

# GENIE™ KIOSK INCLUDES



- A** Kiosk cabinet c/w hardware-firmware build
- B** GENIE application software (See Software and Internet, page 8)
- C** Mobile cart with lockable wheels
- D** 27" video monitor and stand
- E** Assembly instructions c/w hardware and required cabling
- F** 10 – Resident ID keys
- G** 2 – Kiosk Manager keys
- H** 1 – Getting to know GENIE display kit
  - 1 desktop stand
  - 25 info cards



GENIE Kiosk requires 110v power and access to a stable internet connection. GENIE can connect to an internet network via LAN or WIFI. A Common or Public WIFI internet will not provide a reliable internet connection able to facilitate a functional GENIE experience. If access to reliable internet is not available, a strategy to obtain reliable internet should be discussed with the facility IT resource.



# PLATFORM OVERVIEW



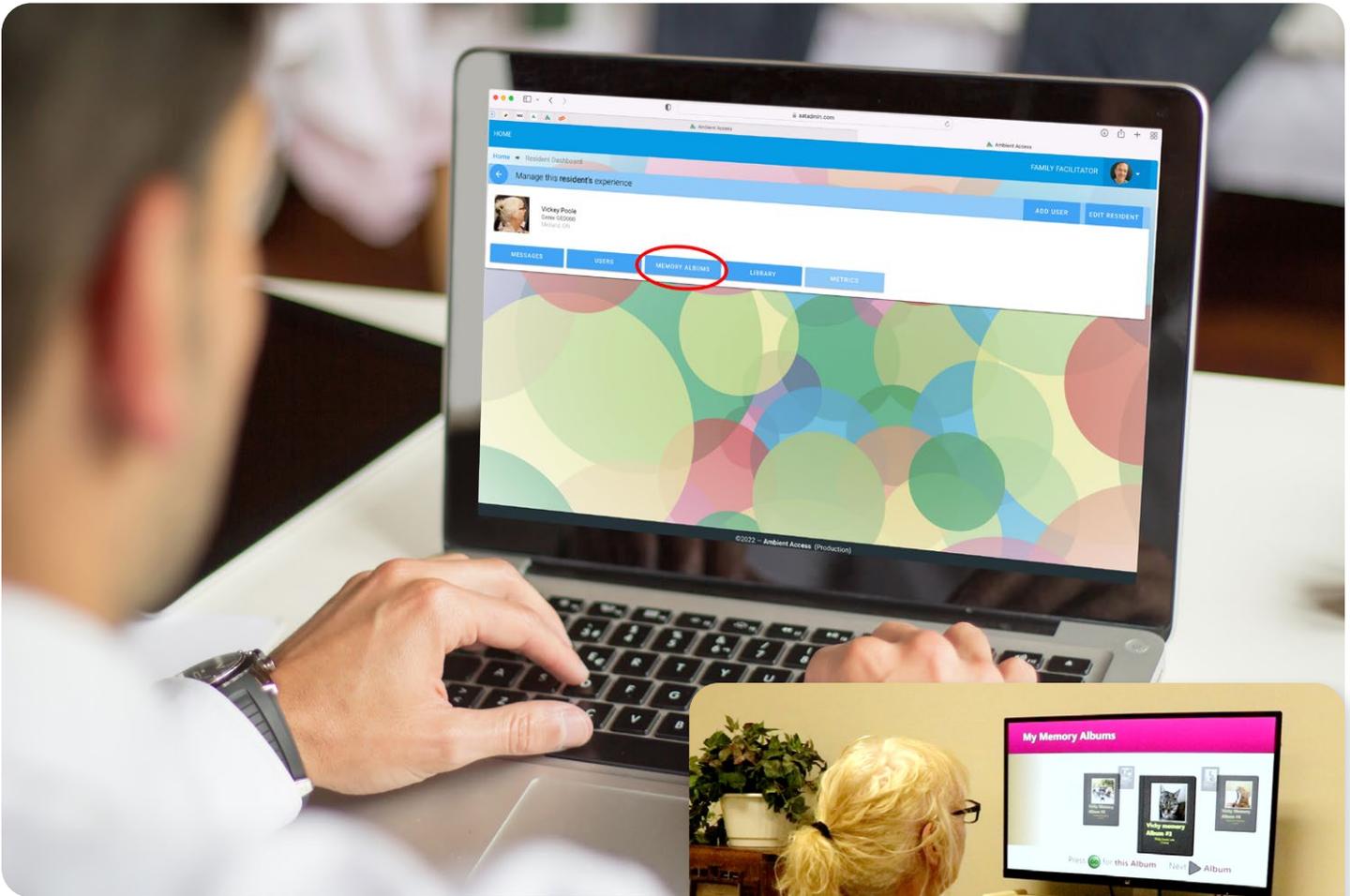
A Resident will insert their assigned key into the key-holder at the Kiosk to access their message notification screen. A notification screen will let the Resident know when new messages are available. Easy-to-follow prompts help to guide the Resident to retrieve messages. A Resident presses the GO button to retrieve each new message. Once viewed, the message is stored for later viewing.



A Resident can reply to a message by picking up the phone, leaving a voice message, and hanging up. The message is automatically sent to assigned Family Members to retrieve on the AMBIENT CONNECT mobile app.



Residents can initiate a voice message by selecting the picture of a Family Member they wish to message, pressing GO, picking-up the phone, leaving a message, then hanging-up when completed.



Using AMBIENT ACCESS website, facility staff create, manage, and broadcast special announcements, messages, and activity-event calendars to the Community.



Using AMBIENT ACCESS website, Family Members create multiple Memory Albums for their Resident to enjoy at the Kiosk. Residents independently scroll through collections of pictures, songs, and movies.



'Getting to know GENIE' instructional videos for Staff and Family members are available at:  
<https://www.ambientactivity.com/genie>



# SOFTWARE and INTERNET

## GENIE KIOSK APPLICATION – INTERNALS

The Genie Kiosk houses a mini-PC running Windows 11. The Kiosk arrives installed with the latest version of the proprietary Genie GUI application and its supporting services. New releases are automatically downloaded and installed. The auto update service can be declined. The PC reboots itself at 3 AM. The HMI elements are limited to 1 monitor, 2 speakers, 5 buttons and 1 handset. There is no keyboard or mouse.

## INTERNET SERVICE REQUIREMENTS

A reliable internet connection is necessary to provide a functional experience for Genie Kiosk Residents. The service does not have to be blazing fast, just readily available and stable. Consistent internet speeds between 5 to 50 Mbps is sufficient. A Genie Kiosk can endure periodic internet outages and continue to perform normally.

## DOWNLOAD & UPLOAD REQUIREMENTS

### Media Synchronization Service (Download)

The Kiosk app is primarily responsible for presenting messages & media. Images, audio tracks, and video clips that are less than 600 MB each. All media items are ultimately stored in a Resident specific private Blob container inside of a secured Microsoft Azure Storage Account. The maximum media size of 600 MB is configurable.

To vastly improve performance, media items are downloaded (or deleted), by a highly optimized, custom synchronization service running in the background. The service regularly reaches out to the AAT Hub API requesting any media changes. The request interval is configurable and is every 2 minutes by default. If there is an internet outage, the service is not affected, it simply resumes after the outage is resolved. Media files will then be available locally and immediately during a Genie Resident session.

**Example:** A Kiosk hosting 10 Residents each with 3 mobile users, could typically result in 0-30 downloads (0-25 MB) spaced out over the day.

### Voice Messages (Upload)

Residents send personal voice messages to their Family Members as responses to their incoming messages and any time they wish to initiate a new conversation. At certain points in the interface workflow, Residents are presented with the opportunity to send a new voice message. They pick up the handset, start talking, then hang up. Their voice is recorded, and the resulting voice message binary is compressed and uploaded to the cloud repository via the AAT Hub API. The maximum voice message length is 3 minutes which would result in a 4 MB upload, where a typical voice message of 15 seconds is 460 KB. The maximum message length is configurable. If an internet connection is not detected, the interface will not present the Resident with the option to send a new message.

**Example:** A Kiosk hosting 10 Residents each with 3 mobile users, could result in 0-30 voice message uploads (0-10 MB) spaced out over the day.

### Resident Activations (Download)

When a Resident inserts their key, the unique RFID embedded in the plastic key is detected and the Resident is identified. The app sends a request to the Hub API for the specific Residents' activation dataset (their users, any messages, and any memory albums). Then the workflow navigates them through their messages or memory albums using the buttons on the Kiosk.

The dataset returned on an activation is small as it is only a limited selection of all their messages to date and does not include media (which is handled by the synchronization service above).

During an internet outage, their most recent on-line activation dataset is used. If there is no internet connection available when a Resident activates, they can not experience any messages arriving after their last on-line activation. They may only re-enjoy their previous messages.

**Example:** A Resident with 3 typical mobile users, would result in approximately a 20KB data download during each activation session.

## Kiosk App Releases (Download)

When Ambient Activity (AAT) makes a new release available, it will be downloaded at 3 AM the following morning. The size of the release depends on the number of modules affected and is typically between 1 and 10 MB. If the entire Genie app were to be downloaded and re installed (rare) the size of the whole application download file is 36 MB.

## TEAMVIEWER

Ambient Activity (AAT) uses TeamViewer to support Genie Kiosks in the field. This remote desktop access application is widely known, secure and well respected for remote control, maintenance, and support.

TeamViewer runs over port 5938 to communicate with its own client which is factory installed on each Kiosk. The TeamViewer client is configured to start when Windows starts, at which point it continuously listens for TeamViewer host connection requests.

## AAT HUB API

As part of normal operations, the Kiosk app issues many requests\* to AAT's backend API. The API is hosted by a Microsoft Azure App Service. All requests are made using HTTPS port 443.

### \*Popular API requests

- Bootstrap: at PC reboot, the app needs detailed information on the Kiosk and its Residents
- Activate: after a Resident inserts their key, the app retrieves new messages
- Send Message: Resident creates a voice message destined for a particular mobile app user
- Get Media: background task requests and stores new media locally

## auth0

The AAT Hub API and the AAT Administration website rely upon the Auth0 platform ([www.auth0.com](http://www.auth0.com)) for authentication and authorization.

## WINDOWS SECURITY

Genie Kiosks rely upon Microsoft Windows Defender. Windows updates are turned off. AAT routinely inspects the Kiosks manually to check operational logs and to verify that Windows has the latest security patches applied.

## PII

Personally identifiable information is limited to a Resident's first name and their language preference. An image avatar of the individual can be provided by family members. Family members consent to having personal messages and media displayed on the Kiosk. The message and memory album content are stored both locally and in a secure cloud repository.

## PHI

No protected health information is collected.



# PACKAGING, SHIPPING and ASSEMBLY



**Width:** 89 cm / 35"  
**Height:** 79 cm / 31"  
**Depth:** 79 cm / 31"  
**Weight:** 83.5 kgs / 184 lbs

## Minor assembly | No tools required | Plug and Play.

Included in the crate - GENIE Kiosk components, assembly instructions, hardware and required cabling.

Assembly can be undertaken by any staff able to unscrew the lid off the crate. Assembly takes 45 minutes for one person.

GENIE Kiosk components are packaged in a palletised crate and shipped to facilities via common carrier. The palletized crate is typically received at the facilities' receiving loading dock area and offloaded from the delivery truck by pallet-jack. If the facility does not have loading dock, pallet-jack capabilities, delivery trucks with 'lift-gate' capability will be required.

For more information check out our informative video on YouTube called –'How to set up your GENIE Kiosk' at:  
<https://www.ambientactivity.com/genie>



# CLEANING INSTRUCTIONS

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## CLEANING AND DISINFECTING

GENIE is designed to be easily cleaned and disinfected

- Easily accessible surfaces.
- Seamless surfaces.

Ambient product coatings are industrial grade two-part urethanes, able to withstand hospital grade disinfectant solutions.

Product coatings contain the antimicrobial treatment Isothiazolinone (2-N-Octyl-4-isothiazolin-3-one), an antibacterial and antifungal additive that reduces the spread of microbial organisms that would otherwise live on the surface of products.

To remove and reduce the spread of microbes from product surfaces, products should be wiped regularly with disinfectant cleaning solutions, as required by frequency of use.

Disinfectant cleaning solutions suitable for / tested on Ambient product surfaces include;

- Clorox HP disinfecting wipes
- Virox HP disinfecting wipes
- AIRX44 disinfecting cleaning solution
- Oxivir Plus cleaning solution
- Perdium cleaning solution
- A solution of 7-parts water to 1-part bleach solution

Do not use a 100% bleach solution directly from the container to disinfect.

Do not use abrasive cleaners.

Do not use boiling water or steam.

# PLATFORM SUPPORT and WARRANTY

## GENIE PLATFORM SUPPORT

Included in the purchase price – remote technical support and functional/feature software updates for a period of three years from the time of purchase. Internet connection is required to provide remote support.

## CONTACT

support@ambientactivity.com | 1.800.563.7740  
Monday to Friday, 9:00am to 4:00pm eastern time

It may be necessary to request assistance from the facility IT resource to facilitate remote access to the GENIE application through the facility internet.

Remote support and functional software updates are available after three years with an annual service plan, or on an as-required basis at competitive rates.

## WARRANTY

Two years from installation

### Includes:

#### Cabinet /Component/ Hardware-firmware

- Mini PC
- Monitor
- Buttons, switches, phone, card reader
- Cabinet-build and cart components

Product warranty is limited to the replacement of component(s) that malfunction or shown to be defective in workmanship and material(s) in the warranty time-frame outlined. Product warranty does not cover damage such as scratching, gouging or chips to the painted or printed surfaces caused by sharp objects, improper handling, or installation. Product warranty does not cover damage caused by abuse, misuse, or acts of vandalism.

Replacement components are available after expired warranty time at competitive pricing.

# PRODUCT SAFETY COMPLIANCE

## SAFE ... AND SAFETY TESTED

Jurisdictions (countries) provide safety requirements for activity products for use in public spaces. These regulations provide standards for finger entrapments, tip over and balance, torque and tension, small parts, sharp points, edges and protrusions, as well as toxicity (heavy metals) and flammability concerns.

Ambient Activity products are safety tested to comply with the relevant regulations for the jurisdiction in which they are to be used.

- In Canada - products conform to CRC.c931 amended
- In the USA - products are compliant to CPSIA act of 2008, and conform to 16CFR and ASTM F963.

## ELECTRICAL COMPLIANCE

GENIE Kiosk model AAT.580 series contains four UL and/or CSA approved low voltage components stored in an indoor, non-metallic type enclosure. Each low-voltage component is individually tested to conform to relevant electrical standards, each component with its own UL and/or CSA approval mark.

GENIE model AAT.580 series is field-tested to comply to SPE-1000 Canadian Model Code. Each system carries an ESAFE label and deemed 'approved' for use in Canada – see sample

**SPE-1000 Code:** Electric shock, energy, fire, mechanical, heat, and radiation are the six main hazards looked at and provided with safety requirements in the SPE-1000 Code. Tests performed range from dielectric voltage withstand, flame, strain relief, input rating, temperature, abnormal test, leakage current, stability, rain, impact, and bonding impedance.

E SAFE is accredited by the Standards Council of Canada (SCC), as an Inspection Body (ISO 17020) and Certification Body (ISO 17065). As an accredited agency, ESAFE is authorized to approve and label equipment for electrical safety in Canada and USA.

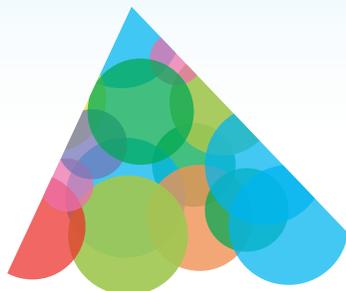
<b>MODEL / MODÈLE</b> AAT580.001	<b>UNIT / UNITÉ</b> GE0001	<b>WARNING / AVERTISSEMENT</b>  DISCONNECT POWER BEFORE WORKING WITHIN DÉBRANCHER LE COURANT AVANT DE TRAVAILLER À L'INTÉRIEUR  <a href="http://www.ambientactivity.com">www.ambientactivity.com</a>  1 800 563-7740 MADE in/FAIT au MIDLAND, ON, CANADA
<b>VOLTS</b> 120	<b>FREQUENCY</b> 60	
<b>AMP</b> 3	<b>PHASE</b> SINGLE	
<b>CONFORMS TO MODEL CODE</b> SPE-1000		

# WHO WE ARE



## A LITTLE ABOUT US.

We are the industry partner of a multi-disciplinary team which includes participation from academia, long-term and supportive care facilities, and care practitioners from across Canada, all committed to improving care to our aging population. Although one-on-one interactions with caregivers trained in Person Centred Care and behaviour management techniques is certainly desirable, given resource constraints, innovative technologies such as GENIE are needed to support our care-providers. By augmenting the care environment, Ambient Activity offers practical, easy-to-access tools that facilitate personalized interactions and family connections in the care-environment, 24/7, without increasing caregiver work load.



# AMBIENT ACTIVITY

ENHANCING QUALITY OF LIFE IN CARE

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