

AB Express Overview

AB Express is an automatic service for sending SoundWave™ and Target CI fitting software files safely, securely and automatically to AB.

The purpose of AB Express is to streamline the processing of Repair Requests from patients who have problems with their Cochlear Implant Processor. AB Express provides device configuration data so that AB can provide patients with replacement Cochlear Implant Processors from the factory that are pre-programmed to the last settings made by Audiologists during their last visit to the hospital.

The key benefit of this is that it saves time by removing the need for the Audiologist having to locate patient files and upload those files manually to AB when patients request a repair.

AB Express operates as a windows service in the background. When it is properly configured, whenever a patient file is saved in SoundWave, the patient's file is automatically transmitted to AB. Later when a patient calls AB for a repair, AB Customer Service staff are able to locate the patient file and request a replacement processor that is pre-programmed.

Note that it is standard policy at AB to default to a 12-month maximum age of a patient fitting. Files older than that will not be used. To request an alternative date range please contact AB Customer Service.

Installation Details

Download location	www.abproportal.com (audiologist or IT Admin account login required)
Download File Format	Zip
Zip file contents	Installation file (MSI 3.8 MB)
Installer Format	MSI
Installer File Size	3.8 MB
Typical Installation Time (per install)	2 min
Default installation path	C:\Program Files\Advanced Bionics\AB Express\
Activation Code Required?	Yes (Each hospital/center has a unique center code in order to activate the software. The code can be re-used within the same hospital)
Activation Code Location	www.abproportal.com (audiologist or approved IT account login required)

NOTE: When installing on stations with AB Express 1.0, please uninstall 1.0 first before installing AB Express 2.0.

IT Configuration

Does the software require any ports to be opened?	Yes. The software is a one-way outbound push to AB using TCP/IP (Port 443): and requires egress on <ul style="list-style-type: none">• https://dx-api.ironbox.app (REST server V1)• https://abexpress-api.advancedbionics.com (REST server V2)• https://*.core.windows.net (backend cloud storage)
Does the system require any changes to firewall settings?	No.
Does the system require any software to be installed on the server?	No.

SoundWave Configuration

What is SoundWave?	SoundWave is the fitting software used by Audiologists to configure Cochlear Implants.
What configuration is required on SoundWave?	By default, transmission of patient data is disabled and must be activated by the Audiologist in SoundWave. <ul style="list-style-type: none">• Open SoundWave• Open the Configuration menu and select Preferences• Enable or disable Automatic Patient Export• Press OK Audiology staff can enable or disable the transmission of patient files to AB on a patient-by-patient basis if required by changing the Automatic Patient Export setting in SoundWave.

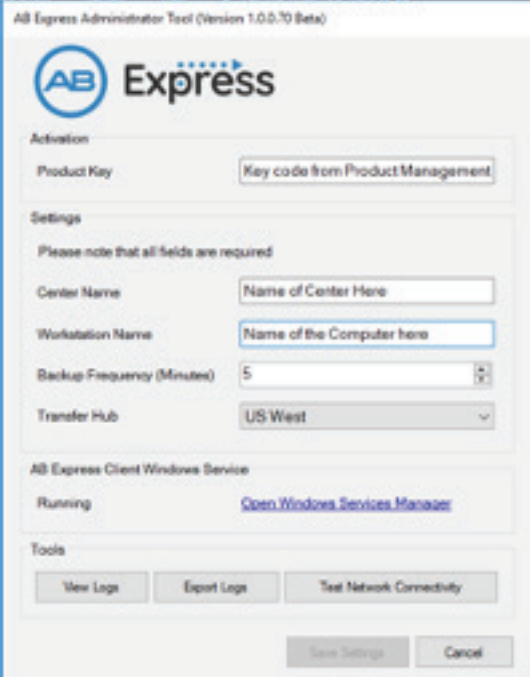
Data Migration

What is required for Data Migration?	In order for AB to process RMA requests, it is important to have a copy of historical patient data. There is a one-time migration step required after all systems are configured and AB Express is installed with SoundWave. (as detailed in the installation guide) Inside SoundWave <ul style="list-style-type: none">• Select all patients• Press Export• View "The patient was successfully exported to your SoundWave Folder"• Press "Open Folder"• Select all .xml files• Move the selected files to C:\ProgramData\Advanced Bionics\SoundWave 3.X\AutomaticExports
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Target CI Configuration

What is Target CI?	Target CI is the fitting software used by Audiologists to configure Cochlear Implants
What configuration is required on Target CI?	<p>By default, Target CI works automatically with AB Express and does not require configuration.</p> <p>Audiology staff can enable or disable the transmission of patient files to AB on a patient-by-patient basis if required by changing the Automatic Patient Export setting in Target CI.</p>

AB Express Details and Operation

Programs installed during installation	<ol style="list-style-type: none"> 1. Windows Service 2. Administrative Control Panel (to interact with service)
Does AB Express start up automatically?	AB Express runs automatically as a Windows Service and does not require any day-to-day operation.
Does the Audiologist need to interact with AB Express or require training?	Generally no. Audiologists will just use SoundWave or Target CI as they normally do. The only thing they need to do is enable Automatic Backups in the configuration for SoundWave.
What does the Administrative Control Panel look like?	

AB Express Details and Operation

<p>AB Express Service Standard operation</p>	<p>The AB Express Service sleeps for the “Backup Frequency” Upon wake up it checks for the existence of XML files in: C:\ProgramData\AdvancedBionics\Soundwave3.1\Automatic Exports And C:\ProgramData\Advanced Bionics\Target CI\Target CI\RMA-Exports If no file is found, it goes back to sleep. If files are found, it opens a secure HTTPS connection to AB, encrypts the files into ZIP files with additional meta data to identify the Activation Code and transmits. After transmission, the connection is closed and the local files are deleted from the directory.</p>
<p>Error Handling</p>	<p>In the event that a connection is not successful, the original patient files will remain in the Automatic Export Folder until the connection is restored. AB Express will continue to automatically poll the folder until the connection is restored.</p>
<p>How to check the connection to AB?</p>	<p>Press the Test Network Connectivity button in the Administration program to check the status.</p>

Transmission of Patient Data

<p>Does AB Express transmit patient information</p>	<p>Yes</p>
<p>What information is stored?</p>	<p>First Name Last Name ID Birth Date Gender Test Patient Vaccinated Photo Vaccination Notes Patient Notes Full List of Devices Serial Numbers for Devices Visit History and device configurations Audiologist Center</p>
<p>What format are actual patient files?</p>	<p>SoundWave. (Proprietary Encrypted XML) Target CI. (Proprietary Encrypted Binary Serialized Data)</p>

Transmission of Patient Data

<p>What is actually transmitted between the hospital and AB?</p>	<p>The files that are transmitted are encrypted Zip files which contain the original Fitting file (already encrypted by Fitting Software) and a separate file with meta information identifying the hospital/center.</p>
<p>What protocol is used for the transfer?</p>	<p>HTTPS Multi-layer end-to-end data encryption Minimum 2048-bit RSA asymmetric cryptographic keys</p>
<p>Are appropriate technical controls implemented to treat risks related to data security appropriately, such as pseudonymization / anonymization, encryption, access controls, etc.?</p>	<p>Yes. Encryption and access controls are in place. We do not use pseudonymization or anonymization. Files exported from Fitting Software are encrypted, files are re-encrypted before transmission. The transmission tunnel (HTTPS) is further encrypted. All received files are automatically integrity checked with CRC to ensure data is correct, Automatic at-rest and in-transit protection. Multi-layer end-to-end data encryption Minimum 2048-bit RSA asymmetric cryptographic keys Unique per-file client-side generated Advanced Encryption Standard (AES) 128/256 bit symmetric keys</p>
<p>What other files can be transmitted?</p>	<p>Only XML file formatted files can be transmitted by AB Express. All other file types are ignored</p>
<p>Are appropriate measures implemented to minimize the risks of unauthorized access to data, unwanted change of data or loss of data?</p>	<p>Yes. The AB Express database is backed up as part of IT. The system is tested thoroughly to ensure the data integrity of the system when ingesting files. Files are checked and validated when they arrive to ensure no corruption of data. The AB Express database is stored within the existing secure Sonova / AB Firewall.</p>

Storage of Patient Information

Does AB Express process and store patient information?	AB Express does process personal data on the AB Side by opening the patient files received from a center and storing that data into a secure SQL database.
What information is stored?	<p>First Name</p> <p>Last Name</p> <p>ID</p> <p>Birth Date</p> <p>Gender</p> <p>Test Patient</p> <p>Vaccinated</p> <p>Photo</p> <p>Vaccination Notes</p> <p>Patient Notes</p> <p>Full List of Devices</p> <p>Serial Numbers for Devices</p> <p>Visit History and device configurations</p> <p>Audiologist</p> <p>Center</p>
Does AB Express store patient information in the cloud?	No.
Where does AB Express store patient data?	Patient data is stored in a SQL Server Database within the AB IT Intranet in a physically secure location.
Who has physical access to the database system where the patient data is stored?	Only qualified IT departmental staff have access to the physical servers.
Who has administrative access to the database where the patient data is stored?	Only qualified IT departmental staff have access to the database.
Who has access to the Patient Information?	<p>Only qualified and trained Customer Service staff are able to access Patient Information.</p> <p>During a customer phone call for a repair request, AB Customer Service staff are able to query the SQL Database using an in house database search utility and view and confirm patient details before sending a replacement processor.</p>
Is the SQL database encrypted?	Yes. The database is a standard Microsoft SQL Server database. Access is provided via an encrypted connection string.
Are appropriate organizational controls implemented to govern the processing of personal data, such as responsibilities for data protection, policies, data breach management, third party management, etc.?	<p>Yes. We do have policies to train employees to protect Recipient confidential information who deals with the data.</p> <p>We have a data breach policy.</p> <p>We limit access to the database to specific users within the company who need to be able to access it to fulfil customer RMA requests.</p>

Storage of Patient Information

Can a hospital opt out of using AB Express?	Yes. This involves removing the software from servers and workstations and notifying AB Customer Service. All existing data files will then be deleted from our database. The Activation Code is used as a primary key to identify records belonging to the hospital.
Are appropriate measures implemented to minimize the risks of unauthorized access to data, unwanted change of data or loss of data?	Yes. The AB Express database is backed up as part of IT. The system is tested thoroughly to ensure the data integrity of the system when ingesting files. Files are checked and validated when they arrive to ensure no corruption of data. The AB Express database is stored within the existing secure Sonova / AB Firewall.

Server installation

Due to the existing complexity of different server configurations with SoundWave and Target CI, AB does not support Server Based deployments of AB Express. Installations are on a Per Workstation basis only.

Best Practices

- Your product key is unique to your center. Do not share it with any institution.
- Ensure that all Audiology staff are informed that they can enable or disable AB Express for each patient.

Customer Support

Customer Support for AB Express is provided by AB Audiology on Call and through your Clinical Specialist

