AudioFetch Express Specifications

FetchExpress is an extremely flexible platform suitable for many applications. Do members at your church need assistive listening or translation audio? Are you a tour guide leading guests through a quiet museum? How about a fitness instructor holding classes in a park? Or maybe you're hosting an outdoor movie night and don't want to disturb neighbours? If you want your audience to hear better without distractions (or distracting others), FetchExpress is what you need.

FetchExpress can be used with your existing wireless network, or through its built-in WiFi, turning you into a walking hotspot. Broadcast your voice with a directly connected microphone, or a wireless mic system to a large auditorium or overflow rooms, to students running drills up a hill, to youth groups on a hiking retreat, or anywhere you can imagine!

For a single audio source, your audience only sees a single channel on the app, making it simple and intuitive to connect to the audio. For more channels, FetchExpress can be paired with multiple FetchExpress models (we recommend up to 8 on a network, or the our AudioFetch Signature platform).

FetchExpress is a low-cost, easy-to-install, maintenance-free portable PA system package, allowing you to bring sound to any location!

Product Details

- **USB Powered:** Express is powered from a USB jack.
- **Cables included:** Free analog (RCA and headphone), optical, coax, and USB cables.
- **Flexible WiFi:** Use the integrated AudioFetch WiFi or use your existing facility WiFi.
- **Free App:** Users download App for free.
- **Straightforward pricing:** No monthly fee.
- **Run native advertising:** Includes free advertising portal to deliver custom ads in the app.
- **Analytics dashboard:** view usage/metrics from our portal and gain valuable customer insights.
- **Tour Guide Accessories Kit:** USB battery, battery charger cable, headset microphone, hip pack
- **Free marketing kit:** signs, table tents, cardio clings, entrance stickers, etc.

USE INTEGRATED AUDIOFETCH WIFI OR
CONNECT AS CLIENT OR VIA ETHERNET
JACK TO YOUR OWN WIFI NETWORK

3 AUDIO INPUT OPTIONS: SIMPLE USB POWER FROM TV
- ANALOG
- DIGITAL COAX
- OPTICAL/SPIDF

Technical Specifications

EXTERNAL CONNECTORS

DC POWER (USB Mini-B)	Connect to a powered USB port on TV or USB charger (not included) USB Type A to USB Mini-B cable is included (3' length)
Audio Inputs (3 options for each channel)	Source is auto-detected/selected with this order of priority if multiple cables accidentally plugged in to a single channel: TOSLINK connector for digital optical RCA connector for digital coax 3.5mm Stereo connector for analogue audio

HARDWARE CONFIGURATIONS

Number of Channels	1 (stereo)
Optional Model mono operation	2 mono channels using 3.5mm analogue audio connector only

POWER

DC Power Draw	+5VDC 320mA typical
Power Adapter	No power adapter is included — use an available powered USB port on TV/etc., or use a USB charger (purchased separately)

AUDIO INPUTS

Digital Optical Input	S/PDIF signal format over fibre-optic TOSLINK cable **Encoding:** Uncompressed PCM, interleaved stereo **Sample Rates supported:** 48KHz
Digital Coax Input	S/PDIF signal format over coaxial cable **Input Signal Level:** 0.55 Volts P-P typical **Input Impedance:** 75 Ω **Encoding:** Uncompressed PCM, interleaved stereo **Sample Rates supported:** 48KHz

Analog Input	L/R Stereo Channels into stereo 3.5mm connector, AC-coupled in APB **Input Signal Level:** 2.4 Volts P-P maximum **Input Impedance:** 12 KΩ typical
Audio Gain Adjustment range	+20 to -100 dB in 0.5 dB steps Independent adjustment for each channel available through browser- based configuration pages
MONO operation	Each 3.5mm stereo analogue connector accepts 2 independent mono signals through a provided adapter. Digital coax/optical connectors are present but shouldn't be used. *NOTE: setup via browser*
AUDIO STREAMING	
System Latency	115ms typical *This is based on minimal delays in the network/WiFi and thus represent sum of latencies in the AudioFetch Express, AudioFetch App, and mobile device Operating System only. WiFi, and mobile device performance can affect latency. Some Android devices have increased latency.*
NETWORK CONNECTIVITY	
WiFi	AudioFetch Express contains built-in WiFi adapter
Ethernet	Not available
WiFi	
Frequency Range	2.412 GHz − 2.484 GHz
Wireless Standard	802.11 b/g/n
Transmit Power	802.11b: +20dBm (max) 802.11g: +18dBm (max) 802.11n: +15dBm (max)
Range − Open Air Test (in Access Point Mode)	35m typical
Security	None (default) / WEP / WPA-PSK / WPA2-PSK / WAPI
Encryption	WEP64 / WEP128 / TKIP / AES

NETWORKING CONFIGURATIONS

Networking Configuration	Current version is factory configurable for the supported modes, future versions will be re-configurable in the field
Access Point Mode (default)	AudioFetch Express operates as a self-contained WiFi network with SSID: AudioFetch Express
Client Mode	AudioFetch Express connects as a client to pre-existing WiFi network
Client Mode IP Address	Auto configured via DHCP (default) Can be set to static IP address (using browser-based configuration)
Cooperative Mode	Multiple AudioFetch Express devices connect (Client Mode) into a WiFi network which can be either pre-existing or one of the AudioFetch Express devices operating in Access Point Mode
Cooperative Mode number of AudioFetch Express devices	Current version is factory configurable for up to 4 AudioFetch Express devices operating together (on same network)
Access Point Mode with Internet Access	AudioFetch Express operates simultaneously in Access Point Mode and connected to a pre-existing WiFi network (with Internet Access) in client mode

NETWORK BANDWIDTH

Bandwidth consumed by each audio stream (stereo)	50 UDP packets per second averaging 201 bytes each (includes the IP header but not physical layer header) Therefore, UDP (+ IP header) bandwidth is: 10050 bytes/sec (average) for each audio stream (~80Kbps) Discovery and keep-alive control traffic is negligible compared to this
Bandwidth consumed by each audio stream (mono)	50 UDP packets per second averaging 121 bytes each (includes the IP header but not physical layer header)Therefore, UDP (+ IP header) bandwidth is: 6050 bytes/sec (average) for each audio stream (~48Kbps) Discovery and keep-alive control traffic is negligible

MOBILE APP

Availability	Search for "AudioFetch" in Google Play Store or iTunes App Store Cost: Free
Android Compatibility	3.0 and newer
iOS Compatibility	6.0 and newer

Dimensions	10.79 x 6.35 x 2.54 cm
Warranty	3 years