

Assistive Listening Systems

Venture-Express Transmitter

User's Guide



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Introduction

The Venture-Express portable transmitter results from years of surveying audiologists, sound contractors, consultants and end users. It is designed to provide every feature and function with the highest possible audio/RF performance and reliable operation while remaining affordable and easy to use.

The Venture-Express has audio inputs for both microphone and line (i.e. tape or CD player). The two sources can also be mixed. An audio processor shapes the input audio dynamics and frequency response to produce a signal with maximum intelligibility and minimal operator adjustment.

The RF section is crystal-controlled for stability. Its digital frequency-synthesizer circuitry sets the transmitter to 19 of the FCC-approved Assistive Listening Band's channels. Six memory channels can recall frequent-use channels.

Features and Controls **Audio Processing**

To make transmitted sound intelligible to the hearing impaired, making it louder is not enough. The needs of the hearing impaired differ greatly from those with normal hearing. The most common impairments are reduced sensitivity and dynamic

range, and loss of high frequencies.

The Venture-Express uses a system of program-dependent AGC with a proprietary frequency-shaping system to control dynamics and maximize voice intelligibility. This results in a clear, loud sound, and eliminates the need to constantly raise and lower receiver volume.

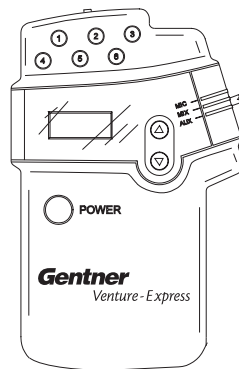


Figure 1. Venture-Express front panel

Controls

Power: Turns on/off the power to the Venture-Express transmitter

Channel Select: Allow the user to scroll up or down through the 19 preprogrammed channels

Memory Recall Buttons: May be programmed to any of the 19 channels for instant recall

Display: LCD display shows the channel the Venture-Express is currently using. If tuned manually, the channel will be prefixed by a C (example: C-07). If tuned using a memorized channel, the channel will be prefixed by the memory-button number (example: 4-07).

Input Selector: Allows the user to broadcast the audio input from a microphone, a line source or a mix of both

Line Input Jack: A standard 1/8-inch/3.5mm jack for an outside audio source (i.e. tape or CD player)

Mic Mute Switch: Allows the user to mute the mic audio input, *not* the auxiliary audio input

Mic Input Jack: A mini XLR-type professional connector with a locking action to prevent the mic plug from being

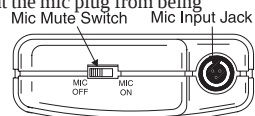
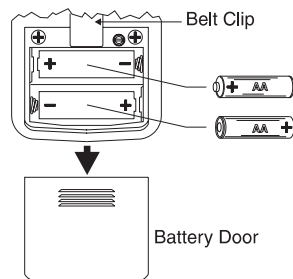


Figure 2. Venture-Express top view

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**Figure 3.** Venture-Express back view

accidentally pulled out

Belt Clip: Securely attaches the Venture-Express to the user's belt for portable operation

Battery Door: Venture-Express uses two AA batteries (alkaline or rechargeable Ni-Cad)

Setup

Antenna/Microphone

The Venture-Express antenna is 2/3 internal to the PTX unit, 1/3 in the microphone cord. With this in mind, it is recommended, although not required, that the microphone be attached before use and that the cord is as fully extended as possible during use.

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Also, ensure that you maintain line-of-sight contact with the receivers, so walls with large amounts of wiring, metal studs or concrete do not block or reduce the signal.

Please Note: Any RF system is susceptible to “dropouts,” where reduced RF energy caused by reflections and cancellations results in a noisy signal. If this happens, try moving the transmitter or receiver around until the signal clears. Sometimes, even a few inches can cause a dramatic difference in performance.

Install Batteries

The Venture-Express uses two AA batteries. For best results, we recommend alkaline types with a minimum of 600 mAHrs each of power. To install the batteries, slide the battery door down and place the two batteries as indicated in the battery compartment.

The Venture-Express can also use the Gentner BC-10A recharging system and Ni-Cad rechargeable batteries.

Caution: Never use standard Alkaline batteries in a recharger. The batteries can explode or leak, severely damaging the transmitter and charger.

Select Audio Input

If a microphone will be used (normal operation), select the MIC position on the input selector. To feed audio from an outside source, select the LINE position and insert the audio cable from the external source into the line jack.

For proper microphone operation, ensure the MUTE switch is positioned in the MIC on position.

Operation

Powering the Venture-Express

Press the POWER button. The LCD display will come on, indicating which of the 19 channels is tuned in.

Selecting a Channel

The transmission channel is selected in two ways: 1) directly using the up and down-arrow push-buttons on the front panel; 2) using one of the six memory buttons.

Setting Memory Channels

To set a memory channel, first use the up/down-arrow tuning buttons to select the desired channel. Next, push and hold the desired memory button until the display blinks (three seconds). Let off the button and the channel is set.

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FREQUENCY CHART

*Frequencies are in MHz

Channel	*Frequency
01	216.025
02	216.075
03	216.125
04	216.175
05	216.225
06	216.275
07	216.325
08	216.375
09	216.425
10	216.525
11	216.575
12	216.625
13	216.675
14	216.725
15	216.775
16	216.825
17	216.875
18	216.925
19	216.975

Check the System

Walk around with the receiver while an audio source is playing and check reception in all parts of the seating area. If there are more than a few dropouts, change broadcast frequency and try again.

Using the Mix Function

To use the mic and line inputs together, set the input selector in the MIX position. The relative levels can be controlled by varying the level into the line input (i.e. adjusting the tape-recorder volume) until the mix of mic and line is satisfactory.

Low-Battery Indication

The Venture-Express operation period is based on the type of batteries used. Typical duration is 4–5 hours. When the batteries are close to depletion, the LCD display will flash “LO.” When the display begins flashing, the Venture-Express will continue to operate for about 15 minutes.

Interference Problems

With any type of RF device, other RF sources can interfere with reception. Interference can take the form of intermittent rising-and-falling audio. To verify on-channel interference,

take the receiver to a place where the signal should be stronger. Since the Venture-Express is frequency-agile, you can set it to another channel and retune the receivers away from the interference.

For multiple Venture-Express's operating in the same location, adjust the channel as far from the other unit(s) as possible. Transmitters should never be set to the same frequency in the same location.

Specifications

Venture-Express

Dimensions:	4 5/8"H x 3"W x 1 1/8"D
Weight:	4 oz. (dry)
Mic Inputs:	>10kOhms (high impedance, varies with frequency), -55dB mic input level, mini XLR connector
Aux Inputs:	>3kOhms (high impedance), -10dB input level, mini jack connector
AGC Range:	40dB
Signal-to-Noise Ratio:	52dB

Transmission Type:	FM modulation
Max. Radiated Power:	11,310uV/m at 30 M
Frequency Control:	Digitally synthesized Crystal controlled
Frequency Stability:	.005%
Frequency Selection:	19 channels, 216MHz
Power Requirements:	2xAA batteries
Current Consumption:	Transmitting 150mA Standby 0.5mA

Notice

This transmitter is authorized by rule under the Low Power Radio Service (47 C.F.R. Part 95) and must not cause harmful interference to TV reception or United States Navy SPASUR installations. You do not need an FCC license to operate this transmitter. This transmitter may only be used to provide: auditory assistance to persons with disabilities, persons who require language translation, or persons in educational settings; health care services to the ill; law enforcement tracking services under agreement with a law enforcement agency; or automated maritime telecommunications system

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(AMTS) network control communications. Two-way voice communications and all other types of uses not mentioned above are expressly prohibited.

This device may not interfere with TV reception or federal government radar, and must accept any interference received, including interference that may cause undesired operation.

The Venture-Express Assistive Listening Transmitter complies with Part 95 of the FCC rules. Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference;
- 2) this device must accept any interference received, including interference that may cause any undesired operation.

This device also complies with the requirements of the Department of Communications (DOC of Canada), as specified in document RSS-210. The device is permitted only on a no-interference basis, that is, it must cease operation if it is causing harmful interference of services authorized by DOC, as listed in the Canadian Table of Frequency Allocations. Also, the operator must accept any radio interference received, including that which causes undesired operation of the device.

Warranty

Gentner Communications Corporation (Manufacturer) warrants that this Assistive Listening System (ALS) product is free of defects in both materials and workmanship. Should any part of this equipment be defective, Manufacturer agrees, at its option, to:

- A. Repair or replace any defective ALS product, free of charge (except transportation charges), for a period of one year from the date of the original purchase, provided the owner returns the equipment to the Manufacturer at the address set forth below. No charge will be made for parts or labor during this period;
- B. Furnish replacement for any defective ALS product parts in the equipment for a period of one year from the date of original purchase. Replacement parts shall be furnished without charge, except labor and transportation;
- C. Repair or replace any defective ALS accessory, free of charge (except transportation charges), for a period of 60 days from the date of the original purchase, provided the owner returns the equipment to the Manufacturer at the address set forth below. No charge will be made for parts or labor during this period.

This Warranty excludes assembled products not manufactured by Manufacturer whether or not they are incorporated in a Manufacturer product or sold under a Manufacturer part or model number.

THIS WARRANTY IS VOID IF:

- A. The equipment has been damaged by negligence, accident, act of God or mishandling, or has not been operated in accordance with the procedures described in the operating and technical instructions; or,
- B. The equipment has been altered or repaired by other than Manufacturer or an authorized service representative of Manufacturer; or,
- C. Adaptations or accessories other than those manufactured or provided by Manufacturer have been made or attached to the equipment which, in the determination of Manufacturer, shall have affected the performance, safety or reliability of the equipment; or,
- D. The equipment's original serial number has been modified or removed.

NO OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE, APPLIES TO THE EQUIPMENT, nor is any person or company authorized to assume any warranty for Manufacturer or any other liability in connection with the sale of Manufacturer's products. Manufacturer does not assume any responsibility for 1) consequential damages, 2) expenses or loss of revenue or property, 3) inconvenience or interruption in operation experienced by the customer due to a malfunction in the purchased equipment. No warranty service performed on any product shall extend the applicable warranty period.

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In case of unsatisfactory operation, the purchaser shall promptly notify Manufacturer at the address set forth below in writing, giving full particulars as to the defects or unsatisfactory operation. Upon receipt of such notice, Manufacturer will give instructions respecting the shipment of the equipment, or such other matters as it elects to honor this warranty as above provided. This warranty does not cover damage to the equipment during shipment and Manufacturer assumes no responsibility for such damage. All shipping costs shall be paid by customer.

This warranty extends only to the original purchaser and is not assignable or transferable.

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