WILLIAMSAV

Convey Video
Real-time Translation Hardware TL S20

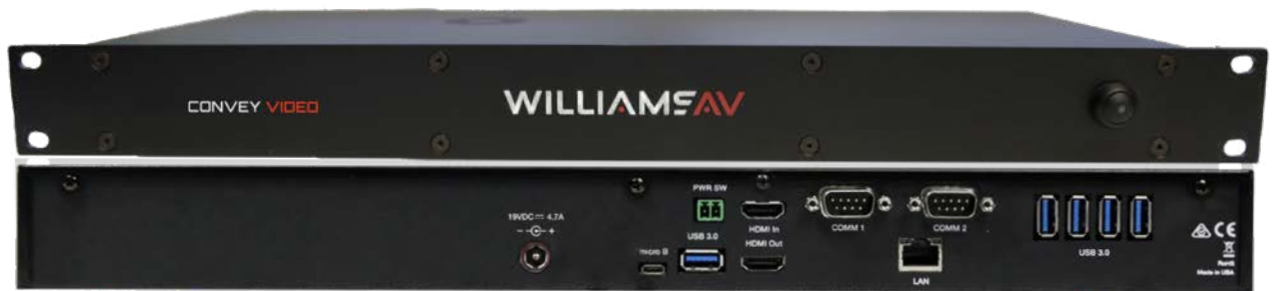# Table of Contents

Safety Warnings and Instructions

WARNING! TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION! TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

POWER CORD NOTICE FOR INTERNATIONAL OPERATION - Please call Williams AV Customer Service at 800.328.6190 to order the appropriate power cord for the country of use.

Important Safety Instructions:

1. Read these instructions
2. Keep these instructions
3. Heed all warnings
4. Follow all instructions
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel.
14. The apparatus shall not be exposed to liquids.
15. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force and uneven surfaces may cause the appliance and cart combination to overturn.
16. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
17. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through the openings.
18. Servicing - The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

Precautions:

1. Power – WARNING, BEFORE TURNING ON THE POWER FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY. The unit is designed for use only with the line cord of the region in which it will be operated.
2. Voltage Label (Rear Panel) – A label located at the rear panel power connection indicates the power input for the unit.
3. Do Not Plug in the HDMI input, output, Comm 1, Comm 2, Ethernet, or USB connections while the power switch is switched to the ON position.
4. Do Not Touch any part of the Convey Video with wet hands. Do not handle any part of system, including the power cord, when your hands are wet or damp. If water or any other liquid enters the Convey Video or Convey Video's location, take the device to qualified service personnel for inspection.
5. Place all components of the Convey Video in a well ventilated location. Take special care to provide plenty of ventilation on all sides of the system components, especially when it is placed in a small location, such as a rack. If ventilation is blocked, the system may over heat and malfunction.
6. Do not expose the Convey Video to direct sun light or heating units as the system's internal components temperature may rise and shorten the life of the components. Avoid damp and dusty places.
7. Care – From time to time you should wipe off the front and side panels and the cabinet with a soft cloth. Do not use rough material, thinners, alcohol or other chemical solvents or cloths since this may damage the finish or remove the panel graphics.

Maintenance and Recycling Instructions
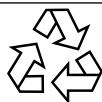
Help Williams AV protect the environment. Please take the time to dispose of your equipment properly.

Product Recycling:

Please do NOT dispose of your equipment in the household trash. Take the equipment to a electronics recycling center.

Servicing or attempting to service this device will void the warranty

Refer servicing to qualified personnel. Servicing is required when the system has been damaged in any way: if liquid has been spilled or objects have fallen into the unit, if the unit has been exposed to moisture, if the unit does not operate normally, or if the unit has been dropped.

Do not block any ventilation openings. Install in accordance with manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produces heat.

Use only attachments/accessories specified by the manufacturer.

Unplug the transmitter during lightning storms or when unused for long periods of time.

Be advised that different operating voltages require the use of different types of line cord and attachment plugs. Check the voltage in your area and use the correct type.

Use only the power supply provided by Williams AV. Other power supplies may have similar specifications, but may not be equivalent in emissions ratings, in-rush current, etc. Use of an unapproved power supply may leave the device partially or completely inoperable, and will void the warranty.

This apparatus has been designed with class-1 construction and must be connected to a main socket outlet with a protective ground connection (the third grounding prong).

Protect the power cord from being walked on or pinched, particularly at plugs, receptacles, and near the power jack on the transmitter.

The MAINS plug or an appliance coupler is used as the disconnect device, so the disconnect device should remain readily operable.

Overview

Williams AV is making inclusion easier for all with the new real-time Language Translation System, Convey Video. Convey Video has the ability to translate in many languages and even more dialects and display subtitles over a video feed. The system can also provide open captioning.

Network Connection Required

An internet connection to the Convey Video is required in order to receive its translation data.

Understanding the Translation Process

Convey Video takes the audio spoken, sends it to the cloud which provides captioning of what it understood in the original spoken language and can also translate it into a selected language. Subtitles created using the translation are then overlaid on the video output so they can be read by the viewing audience. Captions for the original spoken language may optionally be displayed at the same time.

Billing for Translation

Convey Video requires a monthly fee for translation in order to be used. Translations will be unable to start if no billing information is linked to the Convey Video on the Billing Portal. The Billing Portal is located online at **portal.williamsav.com**.

For information on setting up billing for the device, see "Using the Billing Portal" on page 24.

Language Selection

Two languages will need to be selected: one for the language the Presenter is speaking and one for the language that the audio will be translated into. Several dialects of a the same language may be available (such as American English vs South African English).

More languages can be translated into than can be spoken by the presenter. As more languages are available, they will be added into the system.

Languages are selected from the main menu. To learn more about language selection, see "Centered Menu" on page 9.

Starting and Stopping Translation

Once your languages are selected, tap START. The translation (and billing for translation) will begin, and any audio sent through the audio input will begin to be translated.

Tap STOP to pause or end the translation. The device is still considered translating even if the audio is silent. If there is a long pause in the audio being translated, you may wish to stop translation and resume when it is needed again, or set the Auto Off feature to turn off translation after a set period of time.

If you need to switch languages or formatting during a translation session, click the bottom of the screen to access the Full Menu. Translations will not be viewable while the full menu is open.

Capturing Content

Video of your translation session can be saved to a MP4 video output of the session can also be saved. For configuring capture settings, see "Capture Menu" on page 18.

Encryption settings do not affect the capture. The maximum file size stored will be 4GB. The amount of footage will depend on the bitrate of the video and other quality factors, with a maximum of 9 hours and 30 minutes for a target bitrate of 1 and 1 hour and 12 minutes for a target bitrate of 8.

Wiring and Connections

Front Panel of Convey Video
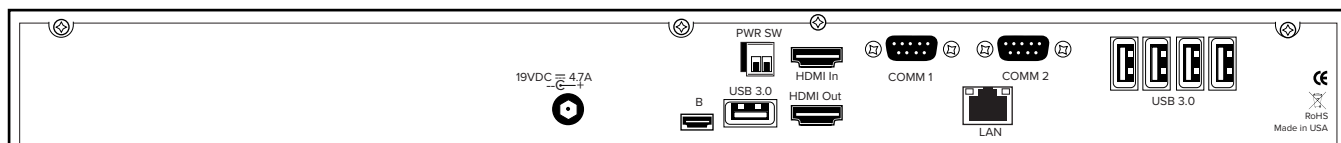
Back Panel of Convey Video

Connecting the Video Source and Outputs

Note: Convey Video is not HDCP compatible. Some movie players and streaming services cannot be used with the device for copyright protection purposes.

HDMI Connectors

To connect HDMI video and audio:

HDMI Input into Convey Video: Using HDMI video cable, connect the cable to the HDMI In port on the back panel of the Convey Video.

HDMI Output from Convey Video: Using HDMI video cable, connect the cable to the HDMI Out port on the back of the Convey Video to HDMI In on a HDMI display.

Connecting Devices

IMPORTANT: Be sure to power down the Convey Video before connecting or disconnecting any controllers. The Convey Video will automatically detect installed controllers upon turning the power on. If you change controllers or add a new controller, you need to turn power off, install the new controller(s), then turn the power on.

Connecting the Keyboard, or other USB Devices

Connect the device(s) to any USB port on the Convey Video. The system supports up to 5 USB 3.0 devices.

Connecting External Power Control

Connect the wires from your power controller (or other device) to the Convey Video's Phoenix-style connector (labeled on the back of the device as PWR SW). When the relay is thrown, the Convey Video will power on or off, as a toggle.

Connecting a 3rd Party Controller - COMM Port Wiring Issues

Customers sometimes encounter issues with the wiring of controllers. The following information may be helpful in resolving any issues.

- **COMM 2 is the default control port.**

- Convey Video's COMM ports sometimes use pin 9 to supply power to the RS-232 line drivers. Pin 9 was selected because it's specification is seldom used. If you are connecting a device other than a line driver to a COMM port, the voltage may cause unexpected issues with the device.

- COMM 1 and COMM 2 have jumpers for power on pin 9, and are set to OFF when shipped from the factory. If you require power from either or both of these COMM ports, please contact technical support.

Connecting USB Devices

A USB Mouse or Keyboard, Video Device, or other USB devices can be connected via the USB ports on the back panel.

NOTE: The micro USB cannot be used for connecting consumer devices. It is for Williams AV's usage only.

Connecting Audio Input

Analog audio input cannot be directly connected to the Convey Video. However, an XLR to USB cable is included with the device to help convert the analog input connections to USB. You may be able to use other similar cables if a XLR connection does not work for your audio setup.

NOTE: The captioning and translation of audio without a video feed can only be provided for audio sent over USB.

Connecting Storage Devices

Storage devices, such as a external hard drive, can be connected for capturing data and uploading new firmware. These devices must be FAT formatted. When capturing, the maximum file size stored will be 4GB.

Note: exFAT formatting is not supported. All other types of FAT formatting are supported.

Networking Information

An Ethernet cable must be connected to the back of the device and an internet-accessible network connection must be available.

The device must be able to access the following URLs over Port 80:

- speech.google.com:443

- translate.google.com:443

- Portal.williamsav.com

Power On

To power on the Convey Video:

1. Plug the power cord into the back of the Convey Video and then into any grounded outlet.
2. Plug the power cords from any video source(s), controller(s), and display(s) into any grounded outlet.
3. Turn on each of the connected units, and then press the power button on the front panel of the Convey Video.

NOTE: In order for the Convey Video to properly sync with the video signals, the sources should be turned on first.

After a moment, a Convey Video splash screen will appear. After the startup process, the default input source will be shown.

If this process is different for you, recheck your installation and power on again. Call Williams AV for support if it is still unsuccessful.

HDMI Interface Quick Start Menu

A quick start menu is available to adjust some settings of the Convey Video. This menu is available when starting the device, or by connecting a mouse to the Convey Video. Moving the mouse will display the menu.

Top Menu Information
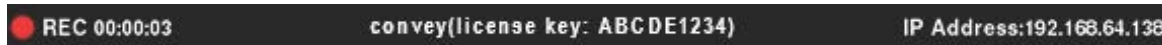
Information is available on the top of the menu screen. You can instantly see how long you've been recording, the name of the Convey Video system, and (if not optionally hidden) the IP address of the device. If desired, the license key can be replaced by a time stamp with Court Archiving Mode (see "Court Archiving" on page 19 for details).

Centered Menu

The centered menu is used for features that may be accessed during a presentation. Many of these options are similar to options available in the full menu system. For more information, see "Language Settings" on page 15 for language selection, and "Video Source Options" on page 13 for video setup.

Any language selection will be grouped into alphabetical categories based on the English language name for the language. For instance, Japanese would be found in the J section.

Speaker Selection

The speaker's language is the spoken language that will be captioned and/or translated. Speaker languages have dialects available so that the speaker's accent or choice of words can be understood by the translation software.
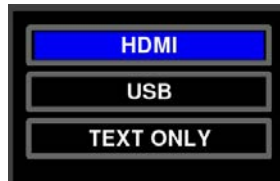

Translator Selection

The translator's language is the language of the translation. Unlike speaker languages, dialects are not available for translated languages.

Video Source

Video can be provided through a USB connection, through a HDMI connection or a static background overlay (Text Only mode). Use the Video Source menu to toggle between sources, if necessary. For more information on video sources, see "Video Source Options" on page 13.

Mic Volume

The microphone volume can be adjusted from this screen, which may be required to get accurate, fast translations. For details on adjusting your microphone level, see "Input Volume" on page 17.

Bottom Buttons

In the two corners at the bottom of the menu screen, there are two buttons. The red circle button is the **capture button**. When the button is selected, the session will be captured and stored according to the capture settings configuration (see "Capture Menu" on page 18).

The other button is the **start or stop button**. This begins or ends a translation session. You will be billed while the translation session is running. See for more details on translations sessions.

Full Menu

The full menu can be accessed by using a mouse connected to the USB ports on the Convey Video to click the bottom center of the output display. No physical button is visible. Pressing the Print Screen button on a USB keyboard connected to the Convey Video will also open the menu.

Click or use the arrow keys or mouse to navigate the menu system.

Main Menu

Menu Conventions

Once the menu system is displayed, you can make selections from it to navigate to the option(s) you wish to change. Each menu selection has the appearance of a rounded-corner button.

Not Selected: If a button is not selected, it has a black background.

Selected: When a button is selected, it changes to a blue background.

Hovering: As you move over a button (hovering), it will either turn blue behind or turn the text in the menu to white.

Submenus: A selection from the Main Menu causes a submenu to appear alongside it. A selection from the submenu sometimes displays a second submenu of choices based on the selection you make.

Outline Format: The entire menu system is an outline format that allows you to drill down to the specific option you wish to change. Whenever the Main Menu is visible, you can select directly from it to activate a different branch of submenus.

Exiting Menus

Exit a submenu by selecting any option in the Main Menu. Exit the menu system by selecting **Exit**.

Detecting and Assigning Devices

Devices connected to any ports will often be auto-detected by the Convey Video. However, sometimes these devices will need to be manually added or need additional configuration.

Setting COMM Port Parameters

If you are assigning a port for communicating with another system, you must select **Control Port** as your device type. The Convey Video supports assigning only one port for each type.

Control Port: Choose this option if the Convey Video is being used as an AV remote control command station, if it is being controlled remotely using RS-232 commands, or if it is being connected to a PC.

Note: COMM 2 is the default port.

1. Select the appropriate device type in the Device Select menu for the port where you are connecting the other system. Where a question mark is usually found, you will instead see an arrow.

NOTE: Only one of the two COMM ports may be set to Control Port. Either COMM port may be set to Control Port, but only one at a time may be assigned as Control Port. If the device type you desire for connecting to other systems is unavailable, check to see if it is assigned to another port.

2. Activate the arrow next to the device type to set its communication parameters. The corresponding submenu appears. Select the desired baud rate, parity, and stop bits.

NOTE: Factory settings are 9600 baud, no parity, 1 stop bit. Data bits, which cannot be manually set, are 8 data bits.

3. Exit the menu system and cycle the power on the Convey Video. The Convey Video implements the new settings.

Preparing Video Sources and Outputs

The display menu provides various video settings.
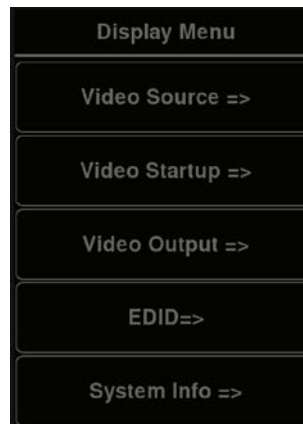
Display Menu

Setting Video Output

The Convey Video gives you a wide range of video parameters for fine tuning your video output.

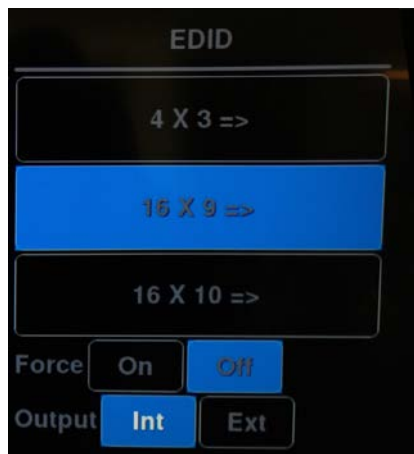1. Activate the menu system. The Main Menu appears.
2. Select **Display.** The Display menu appears.
3. Select **Video Output**. The Video Output dialog appears next to the Main Menu.
4. Select an **output ratio**. The associated Video Output Aspect Formats dialog appears next to the Main Menu.
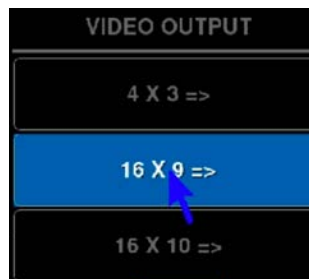
Video Output Formats Dialog

5. Select a **format**. The Convey Video will immediately switch to the output format selected.
6. Exit the menu system.

EDID

EDID Menu

This dialog allows you to set the Convey Video's preferred EDID resolution which tells the video source what resolution to send.

1. Activate the menu system. The Main Menu appears.
2. Select **Display**. The Display menu appears.
3. Select **EDID.** The EDID menu appears.
4. Turn **Force On or Off**. When off, the Convey Video will not try to set the incoming source resolution. When on, select your desired resolution and the Convey Video will force your device to output the set resolution.
5. Select an **EDID format.** The associated EDID Format submenu appears.
6. Set **Output** to Int (for Internal) to broadcast in 1080p video. If the Convey Video cannot send a 1080p signal, it will send s 1024 x 768 resolution video instead. Set Output to Ext (For External) to use the optimal resolution for connected, external devices.
7. Select a resolution.
8. Exit the menu system.

Default Video Source

Each time the Convey Video starts, a specific video source can be selected as the default source to show. If the video source changes often, the last selected source used may be the desired default. These options are selected via the Video Source Start menu.

Text only mode shows only text. This mode can be used to send the speaker's text, translator text, or both texts to a 3rd party video overlay system, if desired. Check the instructions of the 3rd party overlay system for how to best configure this setup.
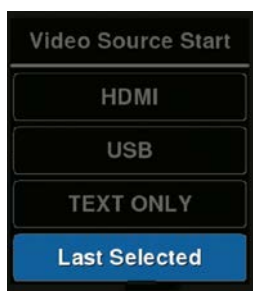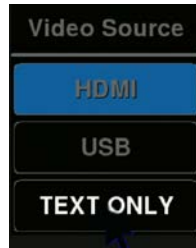

Video Source Start Menu

Video Source Options

The Video Source menu allows you to select between your current Source Video or the Chalkboard background.

1. Activate the menu system. The Main Menu appears.
2. Select **Display**. The Display menu appears.

3. Select **Video Source.**

Video Source Menu

4. Choose from your desired video source.
5. Exit the menu system.

Networking

There are various networking capabilities built into the Convey Video, such as the ability to stream or update.

Network Setup

1. Activate the menu system. The Main Menu appears. Select the **Network** option. The Network Menu appears.
2. Select **Network Setup.**

Example of Network Setup menu

The Network Setup menu appears. This dialog prepares the Convey Video for communicating on your network.

3. Select DHCP or STATIC.

- If **DHCP** is selected, IP Address, Netmask, Gateway and Nameserver are assigned automatically.

- If **STATIC** is selected, you must make entries for IP Address, Netmask, Gateway and Nameserver. (*This is the default setting.)*

Consult with your IT administrator if you need help with these entries.

4. Select **Apply Settings** to finish the network configuration.
5. Exit the menu system.

Caption Appearance and Settings

The appearance of the captions can be edited to make them as legible as possible. The caption language and speaker settings can also be set from the Caption menu, as well as the Microphone Volume.

Caption Settings

The Caption setting controls whether the captions are displayed or not. It can be turned on or off directly on the caption menu.

The height of the captions can be selected, as well as the number of lines that can be displayed.
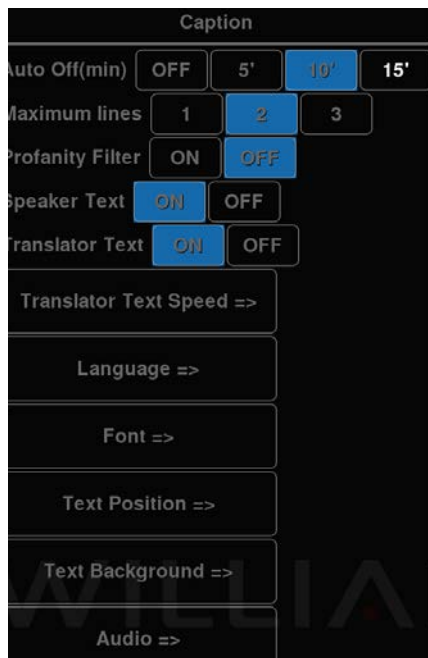
Main Caption Menu

Auto Off

The device can end a translation session when audio is silent for a certain amount of time. If enabled, the Auto Off will end sessions after 5, 10 or 15 minutes of audio silence.

Profanity Filter

Profanity can be censored, if desired. Set the Profanity Filter to On to censor captioning and translation of profanity.

Translator Text Speed

Convey Video receives the translation of audio in real-time and displays it to the screen. However, a translation may have been created and displayed on the screen before a full sentence or phrase was completely spoken and sent to be translated. The original translation received may need to be corrected to display the full meaning of the entire spoken sentence or phrase.

Translations displayed to the screen can change occasionally as the translation is corrected to be as accurate as possible. The frequency in which the translation is updated can be set with the Translator Text Speed.

The three speed settings are **Steady, Normal,** and **Fast**. Steady will have the slowest updates and should be selected if rapidly updating translations will be distracting for the audience, while Fast is the fastest update, but may cause the translated text to be changed often. Normal speed is between Steady and Fast.

Only the finalized, most accurate translation will be saved if text capturing is enabled. See "Capture Menu" on page 18 for more information.

Language Settings

The language and dialect of the audio that is being spoken or heard and the language the audio will be translated into must be selected.

Selecting the correct dialect is important. For example, English in South Africa sounds drastically different from English in Canada. Not all languages have dialects.

In the Language Selection menu, find the language first and then look at the two character code next to the language. Each letter will be in a small box. These boxed letters indicate the dialect. For a full lists of languages and dialect codes, see "Bottom Buttons" on page 10.

Setting Caption Appearance

**Captions with a larger font and a blue background.**

The caption appearance can be adjusted using several features to be as clear as possible on the background of your video content.

Maximum Lines
Captions can take up 1, 2 or 3 lines of text. Less lines will be desirable if the audience is concentrating on video footage or another image.

Speaker and Translator Text
While the translation AI will always be running when a session is started, the results do not need to be displayed on the screen. The device can display just the translated text, just the direct captioning of the spoken text, or even nothing at all.
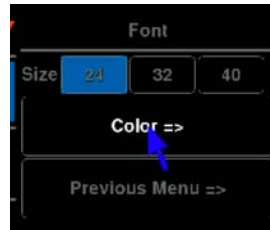
Font Menu

Font Size
From the font menu, the size of the font can be set.

Font Color
Select Color from the font menu to choose a font color. This is the color of the text on the screen.

Text Position
The text position menu lets you set the location of the text on the screen.

Use the **Speaker Text and Translator Text** options to set whether the text appears at the top of the screen or at the bottom. It is best if the speaker text is not in the same position as the translator text if both are being displayed.

Use the **Alignment** option to set whether the text appears against the left or right sides of the screen, or in the center.

Text Position Menu

Background Transparency

The background of the text can be transparent (completely clear), translucent (see-through color) or opaque (a solid color).
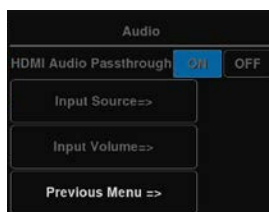

Transparency Menu

Background Color

The background color can be set, but will not appear if the background is set to be transparent.

Audio

Audio Menu

HDMI Audio Passthrough

Audio from an HDMI video source can be played through the display that the Convey Video is connected to. For example, the audio from a movie played on a laptop can be played through the speakers of the TV that is used to display the Convey Video's translation. The HDMI cable for the laptop would be connected to Convey Video, and Convey Video would then be connected to the TV. When the HDMI Audio Passthrough feature is on, the audio from the laptop will still play out the TV.

Input Sources

The input source for audio can be a connected microphone or an HDMI source. Note that most USB microphones will work with Convey Video, but other types may not work.

Input Volume

Clear audio must be sent to translation AI in order to get the most accurate translations. Having an appropriate volume level is necessary for a speedy and accurate translation. Translations will take longer if the audio is not loud enough or clear. What is an appropriate volume will vary based on your microphone or HDMI source and any additional audio equipment.

Input volume can be tested using the Input Volume menu. The volume will be adjusted for the selected input source.

Speak or play other audio into the microphone. Volume that is too close to the max, or below the default may not be easily translated. Click on the input level (or use the arrow keys on a keyboard) to adjust the gain/microphone volume. A range close to 100% is a good starting point, but may not be the correct volume for certain microphones. If no audio is appearing or the gain settings are extremely high or low, a different audio source will need to be selected.
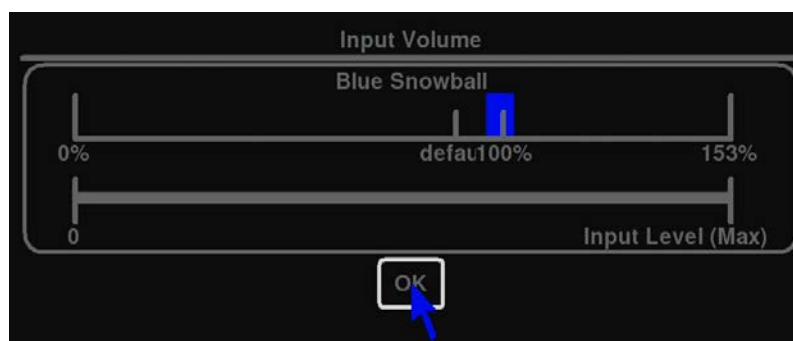


Verifying the Microphone Volume

Capture Menu

The capture menu configures how captures, or recordings, of the settings are saved. Sessions can be captured by pressing the red circle button on the main menu toolbar (see "Bottom Buttons" on page 10).

NOTE: Captures will show the menu when it is used, including when the capture button is pressed to start or stop a recording.

Selecting What is Captured

Toggle the ON or OFF switches next to Video Capture, Audio Capture, Caption Capture, and Translated Text to set what will be saved when the session is captured.

Video capture will capture any transmitted video without audio as an .MP4. Audio capture will capture the audio as an .MP3 without video. Caption capture will capture the captions of the speaker's audio captions and store them in a .txt file. Translated text will store the translated text in a .txt file. The stored translated text will be the finalized, most translated text.
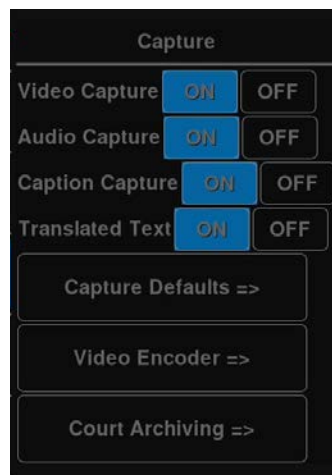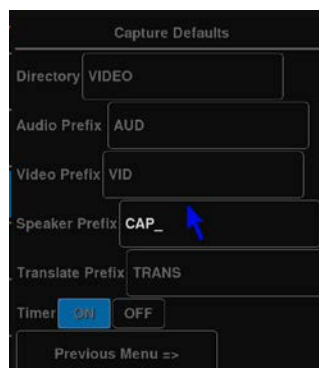

Capture Menu

Capture Defaults

Set the directory where you prefer to save the archived data on a USB storage device. The system will create the directory if it does not exist on the USB drive. Each session recorded will have its own folder containing the selected media captured. This folder will have a timestamp in its name. This folder name is affected by whether the system's time setting is 12-hour or 24-hour. See "Date/Time Setup" on page 19 under Court Archiving mode to adjust the date/time settings, if necessary.

The prefix is used in the file name for the media or text that is captured. The prefix will appear at the start of a filename, followed by a timestamp of when the capture was created.

Be sure your cursor is over the text box when editing text or changes may not appear.


Capture Defaults Menu

Video Encoder

The video encoder settings set the configuration used for captured video footage. The bitrate and video size can be set. The video will be resized to fit in the specified resolution, which may result in changed quality. A high bitrate will result in a better quality video, but the video will not be able to record for as long compared to a lower bitrate. Captures are limited to 4GB.
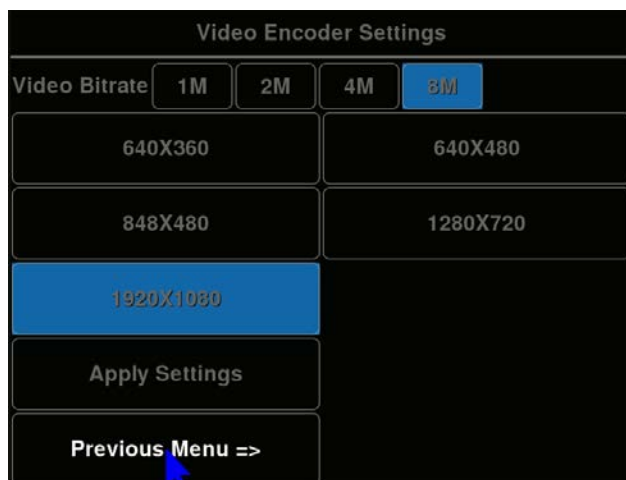
**Video Encoder Settings**

Court Archiving

The Top Menu Information typically includes the identification information for the specific Convey Video device, including the device name (see "Top Menu Information" on page 9 for details).
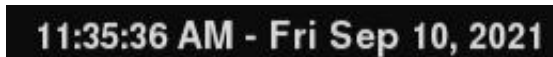
Clock Display at top of Screen

Turn the Clock Display setting to ON to replace the license key and device information in the top menu bar with time and date information.

Date/Time Setup
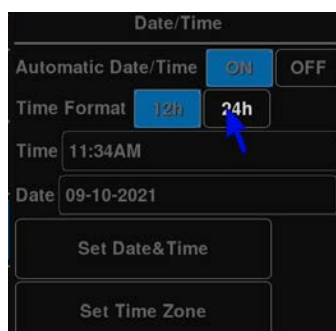
Date/Time Setup Menu

The Date/Time Setup menu is used to customize the current time and how it is displayed. Automatic updates to the date and time can be turned off and set manually. Time can be displayed in a 12 hour or 24 hours format.

The time and date are displayed on the main Date/Time Setup menu, and can be adjusted using the **Set Date & Time** menu.

The time zone is used for accurate automatic updates to the time and can be updated using the **Set Time Zone** menu.

Note: Adjusting these settings may affect the folder names used for storing captured content.
    Network Time Protocol (NTP) is not supported.

Devices Menu

The devices menu is where you can manage the settings of attached devices, as well as perform scheduled power cycles.
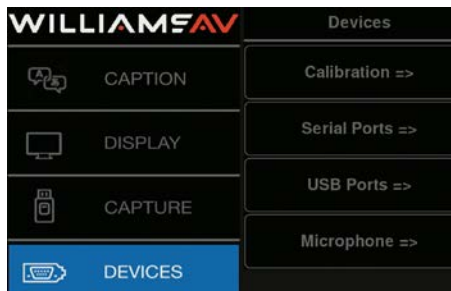
The Devices Menu

Calibrating Touch Screen Controllers

Touch screens need to be calibrated on their first installation. Calibration ensures an intuitive and precise feel to drawing.

Calibrations are automatically saved for each video port. If you have a touch screen display with multiple video inputs, you should calibrate the touch screen for each input.
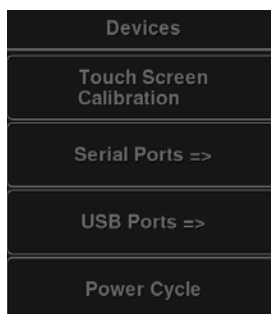
If you move a touch screen to a different port, run the calibration again.

All calibrations are stored in battery backed-up memory. The most recent calibration will be recalled any time power is cycled off and on.

Calibration

From the Menu System

1. Activate the menu system. The Main Menu appears.
2. Select **Devices**. The Devices menu appears

Devices menu

3. Select **Touch Screen Calibration.** The Calibration Menu appears.

Example of calibration screen.

Note: The calibration screen may be a bright blue depending on your device.

4. Follow the calibration instructions displayed on-screen. As you touch the target, it will disappear and the next target will appear. Repeat until all 12 targets have been calibrated. After you perform final calibration procedures, the Calibration dialog automatically disappears, and you return to the menu system.
5. Exit the menu system. Repeat this process for each video input on your touch screen display.

Driver Management for USB Devices

When using a touch screen, the correct driver may need to be assigned for a touch screen to function properly. Other USB devices should work automatically.

To check the driver installed for your device:

1. Activate the menu system. The Main Menu appears.
2. Select **Devices.** The Devices menu appears.
3. Select **USB Ports**. The USB Devices menu appears.
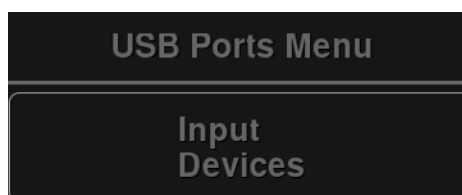
USB Devices menu

4. Select **Input Devices**. The USB Devices menu appears. 5 USB devices can be connected.
5. The detected USB devices installed on your Convey Video system will be listed by port number, with the device type displayed to the right of each number. If the device type is in blue, it has been assigned a type automatically.

NOTE: This menu will not display USB audio or most video devices. It will display the drivers for Touch Screens, as well as keyboards, mice, and flash drives.

6. To check the correct drivers are being used, select the **?** button. The vendor and product ID assigned will be shown.
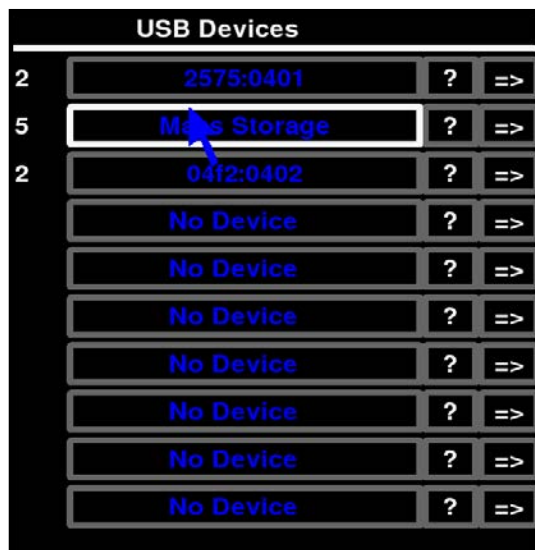
Example of USB Devices menu

If the device appears to be assigned incorrectly and is not functioning, contact Tech Blue, Williams AV's technical support for assistance in getting your device working.

Serial Ports

If using the communication ports for remote control, you can configure which port will be used. Port 2 is used by default.
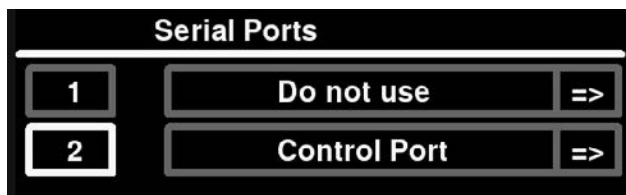
Serial Ports Menu

Manually Installing a Driver for a USB Device

WARNING: The following process should only be performed when your Williams AV rep has directed you to do so. Doing so without guidance can corrupt your system and may require repair.

Convey Video can also attempt to manually assign a device. This depends on the system having the correct driver installed on it; having the wrong driver may corrupt your system. **Do not do this process without the guidance of Tech Blue, Williams AV's Tech Support.**

1. Select the device type you wish to have permanently assigned. The text color then changes from blue to black.
For USB Devices, autodetect immediately detects and recognizes devices, even when their position on the hub changes. You might want to permanently assign a device type to a port if the device was marketed after your Convey Video system was manufactured, or if the system misidentifies the device.

2. *(optional)* To manually change the device type, select the arrow to the right of the device type you wish to change. The Device Select menu appears.
This menu shows a scrolling list of all device types currently supported by the Convey Video in alphabetical order. The Page Up and Page Down buttons allow you to quickly scroll through the names until you find the device type you desire. When you locate and select the name you wish to assign, it will move to the center of the list, where it will be highlighted. The new device type is now assigned.

When a **?** button is selected, a screen with further information about that device type will be displayed.

3. Select the **Return** button to view the Device Select dialog.

Microphones

Multiple USB microphones can be connected to the Convey Video, but only one may be used at a time. The Microphone's menu will let you select from the connected microphones and adjust the microphone volume.

Updating the Convey Video

The Convey Video firmware can be updated through USB or via a remote server update to provide new features, improve functionality or fix bugs.

NOTE: The Convey Video must be connected to the internet to update, even when updating from a USB device.

Before activating the Update command, the update file must be copied on a flash drive location called **BIIUPG**. Create this directory directly under the main (Root) directory. It cannot be inside any other folder. Ensure there is an internet connection to the Convey Video before starting the update.

1. Before activating the Update command, the update file must be copied into a directory on a USB flash drive location named BIIUPG. You must **create the BIIUPG directory in the root directory.**
2. Insert the flash drive into a USB port on the Convey Video.
3. Activate the menu system. The Main Menu appears.
4. Select **Update.** The Update dialog appears.
5. Select **USB.** The screen will display various information as the update takes place. Then it will request that you cycle the power.

NOTE: Do not shut off the device, remove the update file, or restrict access to the update file until the update is finished.

6. Turn the Convey Video off, then turn it back on. The system will start up using the new firmware.

The Update Menu

Saving and Loading Settings

The current device settings can be saved or loaded from a USB drive. This may be useful when ensuring multiple devices all have the same settings.

Factory Reset

To restore system settings to the factory default, select Factory Reset. This setting will reboot the device.

The factory reset can also be triggered manually by using a keyboard and pressing **ctrl+alt+end.**

Using the Billing Portal

The billing portal is used to manage your device's payments for use of the translation AI. You must link your device to a payment method before you can begin translating anything.

To access the billing portal, navigate to **portal.williamsav.com** in your browser of choice.

How Billing Works

Convey Video translates by sending data to a cloud-based translation AI. This service is not free, and necessitates a monthly payment plan.

Monthly plans have a set amount of maximum hours a single Convey Video system can use. Once a device has used over that amount of hours, there is a per-hour charge for translation. Hours when the device has started translating are counted (even if the audio may be silent), and time will not be counted when the device has stopped translating. For information on starting and stopping translation, see "Starting and Stopping Translation" on page 6.

Certain use cases will require more hours of translation than other uses. For instance, a courtroom may see daily use while a house of worship sees weekly use. Billing Tiers allow each individual device to be billed at a rate appropriate for its expected rate of usage.

Billing Tiers are set for each individual device. Multiple devices can be managed under one organization's account, as well as multiple credit cards to be used for payment. Only one credit card can be used per device, but multiple credit cards can be used across all of an organization's devices. For instance, one credit card may belong to the Science department at a university and be used on all of their devices, while a different credit card is used for the Music department's devices.
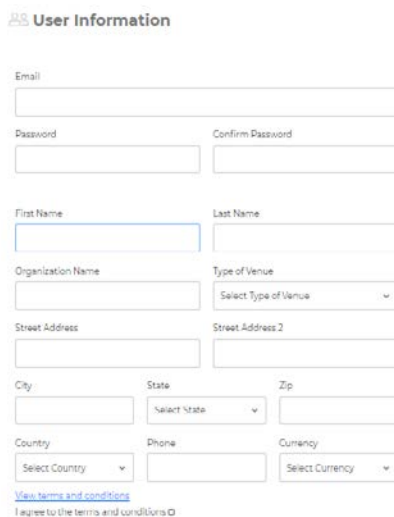
A billing tier will apply for the whole month of usage. If a billing tier needs to change, that change will take affect in the next billing cycle. If a device is not used at all during a month, the monthly fee will still be charged. If a device is not going to be used again, call customer service to cancel your payment plan.

See "Managing Devices" on page 27 for more information on managing a device's billing tier, credit card used for payment and status.

Creating an Account

A login account will need to be created for your organization. This account can be used to manage multiple Williams AV devices and payment methods.

When creating an account, you will select a currency to be billed in. This currency is for all devices. If you need your organization's various devices billed in different currencies, please create a second account and add devices to the account with the correct currency for that device.

The User Information Page

Logging In

Once an account has been created, you may use the credentials to log in. The username is the e-mail address linked to the account.

If you have forgotten the account's password, the password reset process can be started by clicking the Forgot Your Password link.

Editing Account Information

After the account has been created, most information can be edited by clicking on the user's name in the top navigation, or using the hamburger menu and selecting Account Info. This page is nearly identical to when an account is created.

The password cannot be reset from this screen. Log out and use the Forgot Password link on the login screen to change your password.

Managing Credit Card Information

At least one credit card will need to be on file before any systems can be added to the portal. This should be your first step after logging into your account for the first time.

To add a credit card, click the Add a Credit Card button and fill in your card's details in the pop-up window. Click Save when you are done.

To delete a credit card, find it in the Manage Credit Card list and click Delete.

If you need to edit your credit card information, please Add a Card with the correct information. You will need to assign the new credit card to any device that will be using it for payment by editing the devices information (see "Managing Credit Card Information" on page 25). Once there are no devices using the old credit card, you can delete the old card.

Adding and Managing Credit Cards

Billing Tiers

A billing tier can be set per device. A billing tier should be selected based on how often a device will be actively translating.

Please see the billing website for the most up-to-date information on available billing tiers. For more information on how the billing process works, see "How Billing Works" on page 24.

Adding your Device

To add a Device to your account, you must first have at least one credit card on file. See "Managing Credit Card Information" on page 25 for more details.

At the top of your dashboard is the Manage My Devices area. To add a device, click the Add Device button at the bottom of this section.

A 9-character license key is required to register your system. This key is available on the outside of the shipping box, on a card inside the box, and at the top of the HDMI quick start menu on the device.

NOTE: If a device is already added to another account, it cannot be added again.

The Add Device Pop-Up

Managing Devices

Device that have already been added to your account can be edited under the Manage My Devices section.

The Last Invoice will link to the invoice from the last billing cycle, if available. To view other invoices, see "Billing History" on page 27.

To edit device information, click the Edit link. The Device Name can be adjusted to describe the device or how the device is used. Devices can be set to 'Service Lock' to prevent translation hours from being added to the device, which may be desired if it is approaching its quota. If the device is being used more or less than expected on a regular basis, the Billing Tier can be adjusted; this change will not fully take affect until the next billing cycle. The credit card billed can also be changed.

To delete a device, click the Delete link in the Action column.

Device Name		License Key	Tier	Current Usage (HH:mm)		Active	Credit Card	Last Invoice	Action
Dustin's Convey Video	▲	aBmzzR78z	Tier 1	2:33 / 30:00	9%	Yes	Testing	No Invoices	Edit Delete
NewTest		Md5QYPjWL	Tier 160	9:12 / 160:00	6%	Yes	Dustin	No Invoices	Edit Delete

Add Device

A list of devices under Manage my Devices

Billing History

Previous invoices are available on this page. Click the View link to view a PDF of the invoice.

Use the buttons and search in the header of the table to sort through billing and device information to find specific invoices.

Invoice Date	Invoice Amount	Device Name	Invoice Description	Credit Card	Action
Search Invoice Date	Search Invoice Amount	Search Device Name	Search Invoice Description	Search Credit Card	
03/01/2021	$25.00	Box 1	February, 2021	Test	View
03/01/2021	$25.00	Box 1	February, 2021	Test	View

Table of Invoices

Log Out

To log out, click the hamburger icon in the top navigation and select Log Out.

Troubleshooting Guide

The following table describes common problems and their solutions. If, after referring to this table, a problem still exists, call Williams AV and ask for technical assistance.

There are no user serviceable parts in the Convey Video. Do not open the cabinet.

The Convey Video can be soft booted/power cycled by pressing CTRL + ALT + DEL. Factory default settings are restored by pressing CTRL + ALT + END.

WARNING: executing a factory reset will erase all user settings including calibrations, COMM port settings, etc.

SYMPTOMS	POSSIBLE SOLUTIONS
The green indicator light on the front of the Convey Video does not light up.	Check that the Convey Video is plugged into a live outlet.
Monitor does not light up.	Check that the monitor is plugged into a live outlet. Check that the monitor is switched on. Check that the monitor brightness and contrast controls are properly adjusted.
Monitor lights up but does not display a picture.	Check that the video source and Convey Video are plugged into a live outlet. Check that the video source and Convey Video are both switched on. Reboot the Convey Video using CTRL + ALT + DEL or by pressing the power button. Check that the proper cables are connected to the proper connectors on the video source, the Convey Video, and the monitor. Some sources and monitors have multiple output and input connectors. Consult your video or computer manuals for correct connection information. Bypass the Convey Video by connecting the monitor directly to the video source. If the video image still does not appear, have the video source and monitor checked.
Monitor displays a scrambled picture.	Check the horizontal hold control on the video monitor for proper adjustment. Monitor is not compatible with video source. Use compatible system. Check to be sure that the video in and out connectors on the Convey Video are secure.
Mouse will not operate properly.	Refer to the specific section in this manual that describes installation of your controller.

SYMPTOMS	POSSIBLE SOLUTIONS
PC display scrolls.	You may need to adjust your computer's Display or Monitor Type setting for a video scan rate compatible with the Convey Video. **For display utilities that permit the user to change the horizontal scan rate or vertical refresh rate**: Select a resolution, maximum horizontal scan rate, and a maximum vertical scan rate that are compatible with the computer hardware, the Convey Video, and the display monitor/projector. You will need to restart the computer before changes can be activated. **For Windows 7/8/10 Display Settings that permit a change in monitor type:** If an independent display utility or video driver was not installed, you may want to change the display type by using the settings commands in Windows 7/8/10. 1. Go to the Display settings for your system. 2. In the Display window find the Screen Resolution listing. 3. Select the desired resolution. 4. With some operating systems you may need to click Apply for the change in resolution to take effect. Some operating systems update automatically.
Translation slow.	Check network connection and speed. Check that microphone audio quality is clear and loud.
ERROR: This device is unregistered.	The device has not been linked to an account on the Billing Portal. To learn how to use the billing portal, see "Using the Billing Portal" on page 24.
Translation Service Interrupted. Restarting.	The remote translation AI has terminated the connection from Convey Video. The Convey Video is re-connecting to the AI. This typically takes 30-60 seconds. No translation data is being sent at this time. This does not necessarily indicate a problem with the network or internet connection.
System Unstable After Update.	Settings are carried over between updates; however, this can cause issues if the update affects the relevant settings. Perform a factory reset (Ctrl + Alt + End) to remove any old settings. Update the unit again with the latest firmware.

Remote Control and Telnet Connections

For documentation on setting up remote control for the Convey Video, please read the **Convey Programmer's Guide** which is available on the Williams AV website.

Specifications

Video Input	HDMI up to 3840 x 2160 @ 24/25/30 fps
Video Output	HDMI up to 3840 x 2160 @ 60 fps
Power Supply	TFP 060 – 100-240VAC 50/60Hz Input
Power Source	19VDC, 4.7A, center positive
Power Indicator	Green LED
Remote Power	2-pole Phoenix-style connector (Euroblock)
Network	LAN port for printing and saving images and third-party remote control
USB	5 USB 3.0 ports, plus one USB B-Micro port
Operating Temperature	Approximately 32° F to 122° F (0° C to 50° C)
Comm Ports	2
Dimensions	1 RU - 19" (W) x 1.75" (H) x 8.2" (D) (48.26 cm x 4.45 cm x 20.8 cm)
Weight	5 lbs. (2.3 kg)
Warranty	Two (2) year, parts and labor
Approvals	CE, FCC, Industry Canada, WEEE, RoHS, CB Scheme, RCM, PSE

NOTE: SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

2-Year Warranty

Williams AV products are engineered, designed, and manufactured under carefully controlled conditions to provide you with many years of reliable service.

Williams AV warrants Convey Video transmitters against defects in materials and workmanship under normal use and conditions for the 2-years from the product from date of purchase.

This warranty is available to the original end purchaser of the product and can be transferred to subsequent purchasers of the product.

Microphones, earphones, headphones, batteries, chargers, cables, carry cases, and most other accessory products carry a 90-day warranty.

Williams AV has no control over the conditions under which this product is used. Williams AV, therefore, disclaims all warranties not set forth above, both express and implied, with respect to Convey Video, including but not limited to, any implied warranty of merchantability or fitness of use of such equipment including, without limitation, any warranty that the use of such equipment for any purpose will comply with applicable laws and regulations. Williams AV shall not be liable to any person or entity for any medical expenses or any direct, incidental or consequential damages caused by any use, defect, failure or malfunctioning of the product, whether a claim for such damages is based upon warranty, contract, tort or otherwise, the sole remedy for any defect, failure or malfunction of the products is replacement of the product. No person has any authority to bind Williams AV to any representation or warranty with respect to Convey Video System. Unauthorized repairs or modifications will void the warranty. This warranty is void if damage occurred because of misuse, or if the product has been repaired or modified by anyone other than a factory authorized service technician. Warranty does not cover normal wear and tear on the product or any other physical damage unless the damage was the result of a manufacturing defect. Williams AV is not liable for consequential damages due to any failure of equipment to perform as intended. Williams AV shall bear no responsibility or obligation with respect to the manner of use of any equipment sold by it.

This warranty does not cover reimbursement for your costs of removing and transporting the product for warranty service evaluation or installation of any replacement product provided under this warranty.

The exclusions and limitations set out above are not intended to, and should not be construed so as to contravene mandatory provisions of applicable law. If any part or term of this Disclaimer of Warranty is held to be illegal, unenforceable, or in conflict with applicable law by a court of competent jurisdiction, the validity of the remaining portions of this Disclaimer of Warranty shall not be affected, and all rights and obligations shall be construed and enforced as if this warranty did not contain the particular part or term held to be invalid. The terms of the warranty are governed by the laws of the State of Minnesota.

Prices and the specifications of the products are subject to change without notice. For Complete Warranty Statement go to: www.williamsav.com/warranty-statement

NOTICE: Williams AV products are NOT designed for use in extreme temperature, humidity or chemical environments. The introduction of chemicals such as chlorine, salt water or human sweat into the product will cause damage to the circuitry. Damage due to these causes is NOT covered under the Product Warranty.

If you experience difficulty with your system, call Toll-Free for Customer Assistance 1-800-843-3544 (U.S.A.) or +1 952 943 2252 (Outside the U.S.A.)

If it is necessary to return the system for service, your Customer Service Representative will give you a Return Authorization Number (RA) and shipping instructions.

Regulatory Statements

FCC

FCC Compliance Statement
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.
Caution: Any changes or modifications to the equipment not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

ISED

Innovation, Science and Economic Development Canada Statement
This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment.

Operation is subject to the following two conditions:

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

Cet équipement est conforme aux limites d'exposition de rayonnement d'IC RSS-102 déterminées pour un environnement non contrôlé. Cet

Son utilisation est soumise aux deux conditions suivantes:

1. Cet appareil ne doit pas causer d'interférences et
2. il doit accepter toutes interférences reçues, y compris celles susceptibles d'avoir des effets indésirables sur son fonctionnement.