

VAS VIDEO/AUDIO AUTOMATION SYSTEM

OPERATION MANUAL

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*The software is updated periodically.

Screen shots and feature images will change as required.

Introduction

Thank you for trying or buying the new VAS Video/Audio Automation System software from Wintek Software Company of Arlington, Texas.

Wintek is a privately owned company that was formed in 1989. The owner, Alan Freeman, wrote the first digital radio broadcast automation package named "Digital DJ" in 1989 that would run an entire radio station by computer unattended. He has continued his efforts to automate the broadcast industry since then. Seeing that TV needed affordable and easy-to-use digital automation software led him to write VAS in 2009.

VAS is brand-new state-of-the-art digital software that allows managing content that can provide viewing or listening pleasure on closed or open broadcast mediums. In the TV market, it's called "Play-Out". With it, you can create automated or live-assisted video or audio "schedules" (playlists) that can run continuously all day and night with-or-without supervision. The software has a console that runs on a PC screen to give you complete control of the video output. The air output is sent to a second video card or second video output (VGA, composite, or S-Video). We call that the "main or on-air output."



Figure 1 – Main Console Screen

The software requires a dual-monitor type setup with S-Video output. The S-Video output displays the main “On-Air” feed. The S-Video output can then be transmitted, recorded, streamed over the Internet, and/or even displayed on closed circuit TV channels!

This gives anyone the ability to create their own Internet video stream or TV channel for cable, satellite, clubs, restaurants, bars, stores, hotels, motels, doctor/dentist offices, churches, hospitals, health clubs, kiosks, and/or other such uses. Your imagination is the limit!

VAS is currently capable of playing videos in the following formats: **AVI, DAT, MOV, MPEG-1, MPEG-2, MPEG-4, RM, RMVB, VOB, and WMV**. VAS can also play audio in these formats: **MIDI, MP3, MP4, WMA, and WAV**. Not only that, the audio and video can also be mixed in the schedule. When playing uncompressed video, such as VOB files, it is advised to have a computer that meets or exceeds our hardware requirements at the end of this manual.

VAS is capable of being used as an insertion mechanism for satellite feeds. The system can use up to 15 inputs and 24 outputs that can receive external “trigger” signals to play entire breaks or a single video or audio clip. At the end of the cut an “EOM” (End-of-Message) signal can be sent back to the originating equipment to return to the satellite, originating network, or equipment.

The concept is quite simple. You create a schedule manually with Excel or Notepad or automatically with broadcast scheduling software that has a list of video or audio clips to be played. Alternately, the software will automatically load a new schedule at midnight and keep playing automatically unattended! Once the schedule is loaded into VAS, you simply click the PLAY button to the right of the on-screen schedule. The video schedule will then play, item-after-item until it has completed. If the schedule is a full day’s worth of video, at midnight the software will load a new schedule for the next day or replay the same schedule. If it’s a short schedule that you want repeated over-and-over, you simply put a repeat command in the schedule.

You also can assign One-Touch buttons that can play a video instantaneously at the click or touch of a button for times when you want to run with attended operation or have an emergency insert or request. These buttons can optionally be connected to an input so that you can have a remote button to play a particular item.

As each audio or video item plays, it is logged into the daily AUDIT trail stored in the AUDIT folder, so that later you can reconcile the schedule. Then you have proof that the video played at a given time or just see what played while you were gone! This is handy and even necessary if you sell advertising to agencies or customers who want to know the exact time their ads ran.

The VAS system is simple and flexible. There are two small on-screen video displays on the console. (See “Figure 1”). The left display is the “Preview” monitor for previewing videos. You can preview a schedule event or one-touch button by “right-clicking it” and selecting PREVIEW.

The right display is the “On-Air” monitor to show you what is being sent to the on-air or main output. “Figure 4” shows how the video output might look on the “On-Air” output.

Between the two video displays are three panels. The green panel (Figure 2) shows information about the preview audio/ video such as total length, current location, and screen specs, if applicable. The red panel (also Figure 2) shows the same kind of information about the On-Air video/audio.

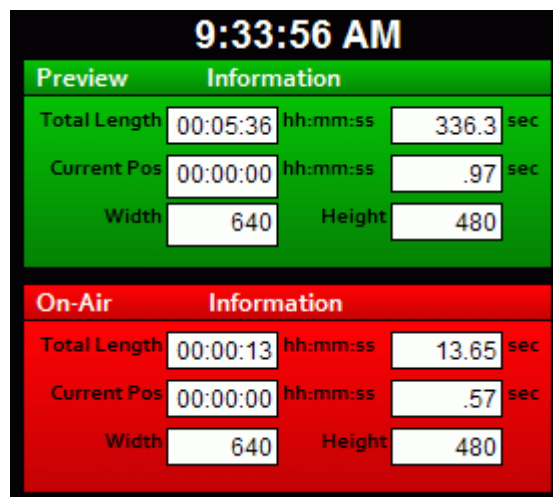


Figure 2 – Video/Audio Clip Information

The blue panel (Figure 3) is the Character/Graphics Generator and allows you to overlay text to either or both the “Preview” monitor or the “On-Air” monitor. This is the type of text that is typically done by a character generator in a TV station which can describe titles, artists, people’s names, emergency messages, and all other types of information.

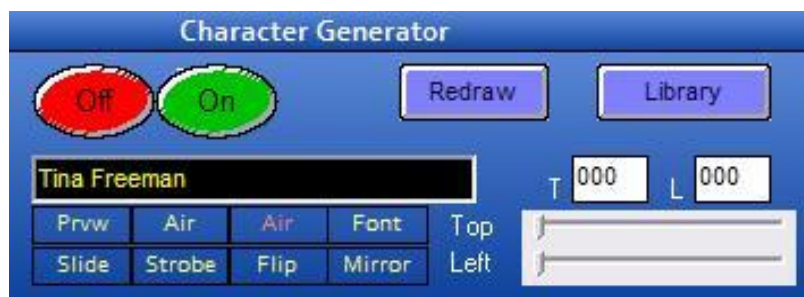


Figure 3 – Character/Graphics Generator

The library button on the character generator allows you to preset up to 48 preset slogans, names, or phrases. Stored with each item is the text, font, font color, font size, and screen position. Please see page 23 for more details and a screen shot of that form page.

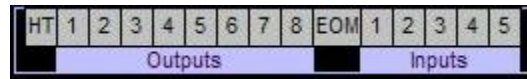


Figure 3a

The Tally panel under the character generator show if Hard Times are “ON” (HT), shows the status of eight outputs, shows when an EOM is sent, and shows when inputs are received.

The main output (Figure 4) carries a full size version of any video to be broadcast so it would fill a TV or PC screen. The image on Figure 4 is what you can see showing on the Console’s “On-Air” monitor is full-size on the main output.

By double clicking the “On-Air” screen on the console, a second screen is launched onto the “On-Air” or second monitor output. (You can drag that screen to the first or second video output with your mouse and it will render itself full-sized or small-sized, if you need to.)

You then have the main full-sized “On-Air” output. You may notice too in Figure 4 that the character generator was used to add a name to the person being shown. The font type, color, size and location of that information can all be customized. You can even make it appear backwards (mirrored) or upside down (flipped). The font selection is dependent on the fonts that are installed on the computer running the VAS software. Many different kinds of fonts can be found on the internet for free or purchased. Simply install the font using the ventors install or Microsoft’s instructions for adding Fonts.



Figure 4 – “On-Air” monitor & Main Output

The bottom left quarter of the console screen (Figure 5) contains the schedule of things to play. There are 19 items showing, but if you use the scroll bar to the right of those items, you can scroll through the entire schedule, which could have hundreds-and-hundreds of audios or videos.

TIME	REF	LEN	DESCRIPTION	
08:00:00	ID001	00:00:12	Legal ID	
08:00:12	ID002	00:00:16	Fishing Show Promo	
08:00:28	ID003	00:00:21	Dinner For Two	
08:00:49	ID004	00:00:14	Colonial Car Wash	Set Next Break
08:01:03	ID005	00:00:23	Phil Collins-But	Preview Event
08:01:26	ID006	00:00:57	Tina Dance Sho	Move Event Up
08:02:23	ID007	00:00:11	Weather	Move Event Down
08:02:34	ID999	00:00:16	AlanSings	Insert Audio/Video File
08:02:50	ID999	00:00:14	Elvis	Change Event
08:03:04	ID008	00:00:16	Sports Scorebo	Edit Event Information
08:03:20	ID009	00:00:35	News Headline	Remove Event
08:03:55	ID010	00:00:06	Office Max	

Figure 5 – Editing the Schedule

By right-clicking on an item in the schedule (Figure 5), audio or video items can be previewed, moved up or down, inserted, removed, or changed. By double-clicking an item in the schedule, it can be immediately played.

When you right-click, a mouse-menu pops up that has these choices:

- Set Next Break
- Preview Event
- Move Event Up
- Move Event Down
- Insert Audio/Video File
- Change Event
- Edit Event Information
- Remove Event

Set Next Break – sets the location in the schedule that you want to play from when pressing PLAY or receiving a closure to trigger the PLAY event.

Preview Event – allows you to look at the video on the “Preview” monitor or listen to the audio. (You must switch the audio out of the chain to keep it from going over the air.)

Move Event Up – allows you to move the audio or video back one position in the schedule or so it will play earlier.

Move Event Down – allows you to move the audio or video forward one position in the schedule or so it will play later.

Insert Audio/Video File – allows you to insert an audio or video that is not currently in the schedule from your audio/video inventory above the current item.

Change Event – allows you to change an existing audio or video or item to a different audio or video from your inventory.

Edit Event Information – allows you to edit the Time, Reference ID, Length, or Description of the event or to edit or change special control codes. Editing Event Information, you can add, change or edit control codes. Control codes allow your schedule to perform operations other than play audio or video events such as turn on switcher channels or send or receive EOM's. A list of control codes are provided in Figure 5a.

Remove Event – removes the current item from the schedule.

CONTROL CODES or REFERENCE IDs

ID9701-to-ID9732 – are video switcher control codes. ID9701 is switcher channel 1, ID9702 is switcher channel 2, and so on up to ID9732 which is switcher channel 32. Contact support if you need help controlling an external video switcher.

ID9801-ID9824 – Turns ON watching for these inputs. No EOM is sent. 9801 is input 1; 9824 is input 24.

ID9825-ID9849 – Turns OFF watching for these inputs. No EOM is sent. 9825 is input 1; 9849 is input 24.

ID9900 – Stop Schedule. This code stops execution of the schedule after the current video or audio ends. No EOM is sent.

ID9901 – End of Break. Sends EOM and Pauses until ESCAPE KEY or contract closure programmed for F5 or START is received.

ID9902 – Pauses execution of the schedule for the amount of time in the LEN field (hh:mm:ss) then resumes playing.

ID9903 – Go to the line in the schedule this is held in the the Description field and resumes playing the schedule there.

ID9904 – End of Break. Pauses until ESCAPE KEY or contract closure programmed for F5 or START is received. No EOM will be sent.

ID9905 – Hourly Sync or Anchor allows the schedule to skip past events to stay on schedule. No EOM is sent and no event is played. (See code ID9990 if a trigger is needed).

ID9906 – Send EOM and Turn OFF Hard Break Timing. No EOM is sent.

ID9907 – Send EOM and Turn ON Hard Break Timing. “Hard Break” means that the system will play by itself when the TIME in the first event after the End of Break is reached. No EOM is sent.

ID9908 – Repeat Schedule from the top. No EOM is sent.

ID9909 – Repeat Schedule from the top. An EOM is sent.

ID9910 – Reserved

ID9911-to-ID9925 - are inputs 1 to 15. These codes cause the schedule to stop and wait on an input from that particular external input closure

ID9931-to-ID9954 - are outputs 1 to 24. These codes cause the schedule to send an external signal out on that output line to trigger some external device

ID9990 – Hourly Sync or Anchor allows the schedule to skip past events to stay on schedule. This code will trigger the next event to play. (See code ID9905 if no trigger is needed).

Figure 5a

To the right of the schedule display is a label titled “Schedule”. Under that is the file name for the current schedule and under that label is seven buttons. These buttons are labeled Play, Pause, Stop, Skip Now!, Home to Top, Load Schedule, Save As, Clear Schedule, Closures, and Options.

Clicking “Play”, “Pause”, “Stop”, or “Skip Now!” buttons affects the current playing “On-Air” schedule and main output. It can start it, pause it, stop it, or skip an event immediately.

The “Home to Top” button positions the item currently playing or next to the top of the schedule display, in case you were browsing the schedule and need to go back to where the current position is.

The “Load Schedule” button allows you to manually load a new schedule. When this is done, the schedule name will change under the Schedule title tag.

The “Save As...” button will save the current schedule under a new name so that you can use it as a template to create another schedule.

The “Clear Schedule” button will allow you to completely create a new schedule from scratch. It is saved as “newschedule.txt” until you save it by another name.

The “Closures” button pops up a screen with buttons that allow you to manually send switcher or output triggers.

The “Option” button allows you to set up paths and options frequently used in the operation of the software. Once these settings are set, it is usually not necessary to go to the options again.

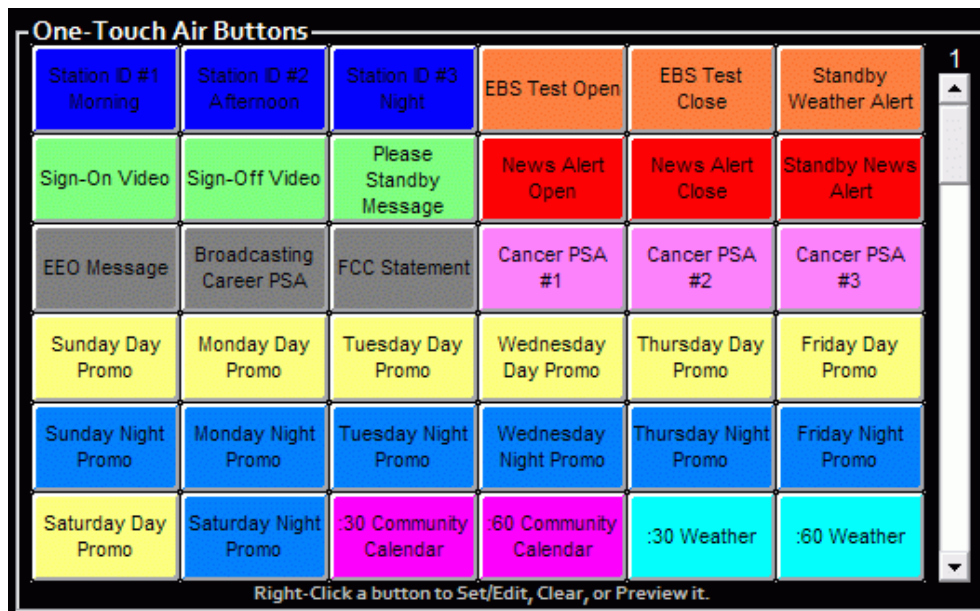


Figure 6

On the bottom right quarter of the Console screen are the “One-Touch” buttons. (Figure 6, previous page). These are 360 buttons that can be assigned to instantly play any video or audio file. To assign them, you simply right click on the button you want to assign.

A pop-up menu will appear that has three options:

Preview 1 (or whatever number that button is)

Set or Edit Button

Clear Button

Preview - will instantly start playing the audio or video attached to that button in the Preview monitor. The button number is listed after the word “Preview” so that that button can be referenced to be played when an external input triggers it as well; more on that later.

Set or Edit Button – will pop up a screen (Figure 6a) asking you to set the Caption (name) of the button. Then you can set the file for that button by browsing to the file. You can set the color of the button by clicking the color box next to the “Color” label and selecting a color from the color dialog box. Lastly, you can check the Protect attribute so that the button cannot be accidentally or easily deleted.

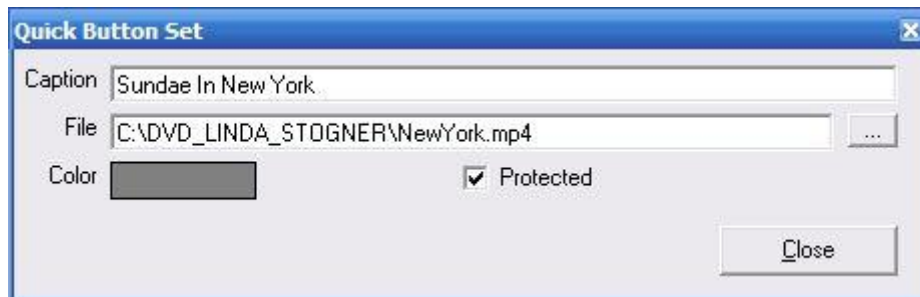


Figure 6a – Set or Edit One-Touch buttons

There are 36 buttons displayed at a time and there are 10 pages of buttons for a total of 360 buttons. You can use the scroll-bar to scroll to more pages of buttons. Each button can be titled, colored, associated with a file and protected.

Operation

Now we will describe each part of the console in detail so that you may learn how to fully use the software and take full advantage of every software feature.

PREVIEW Display



Figure 7 - Preview Monitor

The "Preview" monitor (top left quarter of the Console, Figure 7) is where you preview video or audio files. You can click on the word PREVIEW above the "Preview" monitor to locate and preview any audio or video file on the computer at random.

You can also right-click on any One-Touch button and preview it, OR right-click on a schedule item and preview it. The data for the preview file is displayed in the GREEN box between the "Preview" monitor and the "On-Air" monitor. Be sure the audio does not go over the air either by muting it or by switching it off at your switcher.

Underneath the "Preview" monitor are control buttons (Figure 8). "Stop", "Play", "Pause", "Mute", "Audio", "Flip", "Mirror" and "Push-To-Air".

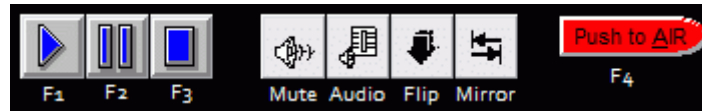


Figure 8- "Preview" controls

Some of the buttons have keyboard function keys, as indicated by the labels under the buttons.

"Stop" – (F1) Stops the Preview of the video or audio file.

"Play" – (F2) Starts to play the Preview video or audio file.

"Pause" – (F3) Pauses the Preview video or audio file.

"Mute" – Toggles the audio on or off for the "Preview" monitor. You can tell if the audio is muted by clicking the "Audio" button and seeing the mute check box status.

"Audio" – Allows you to adjust the balance and volume levels of the "Preview" monitor or to mute and un-mute it.

"Flip" – Toggles the "Preview" monitor to turn up-side down and right-side up.

"Mirror" – Toggles the "Preview" monitor to a mirror image.

"Push-To-Air" – (F4) Sends the file in the "Preview" monitor to the "On-Air" monitor. Pressing it will send the video to the monitor at the point that the item is currently located. If you want to play the entire file, be sure the file is stopped before you push it to "On-Air".

ON-AIR Display



Figure 9 – “On-Air” monitor

The “On-Air” Monitor (top right quarter of the Console- Figure 9) is where you see what is shown on the main output. Anything playing “On-Air” plays on the “On-Air” screen and the output is sent to the S-Video” or second monitor output in full-screen mode. The informational data for the “On-Air” file is displayed in the RED box in the middle of the “Preview” monitor and “On-Air” monitor.

Underneath the “Preview” monitor are control buttons. “Stop”, “Play”, “Pause”, “Mute”, “Audio”, “Flip”, and “Mirror”.



Figure 10 – “On-Air” controls

Some of the buttons have keyboard function keys, as indicated by the labels under the buttons.

“Stop” – (F9) Stops the On-Air video or audio file.

“Play” – (F10) Starts and plays the On-Air video or audio file.

“Pause” – (F11) Pauses the On-Air video or audio file.

“Mute” – (F12) Toggles the audio on or off for the On-Air video or audio file.

“Audio” – Allows you to adjust the balance and volume levels of the “On-Air” monitor or check the status of the MUTE button.

“Flip” – Toggles the “On-Air” monitor to turn up-side down and right-side up.

“Mirror” – Toggles the “On-Air” monitor to a mirror image.

Double-clicking the “On-Air” video will bring up a full-screen version of the On-Air screen (Figure 11) on the second display (if attached) that show what video signal is going to the output.



Figure 11 – “On-Air” Main Output

The "On-Air" main screen can be moved or dragged by your mouse to the left or right if you click on it once to minimize it before attempting to move it. Once it is full screen, you can click once to minimize or click to maximize it to full screen. Click it once to make it small again or again to make it take up the entire full screen and remain immobile. Double-click it and a dialog will ask if you want to to close it. You can also close it from the task-bar on the Console PC by right-clicking the taskbar button icon (says, "On Air" and has a check mark) and selecting CLOSE mouse-menu option. You will be prompted to be sure that was what you wanted to do.

The "On-Air" main output is actually a third video player that will normally be synced with the "On-Air" monitor on the Console, but could occasionally be slightly out of sync. Do not worry about that; as it will sync when the next event triggers and the audio output will always follow the "On-Air" main output screen.

THE SCHEDULE

TIME	REF	LEN	DESCRIPTION	
08:00:00	ID001	00:00:12	Legal ID	
08:00:12	ID002	00:00:16	Fishing Show Promo	
08:00:28	ID003	00:00:21	Dinner For Two	
08:00:49	ID004	00:00:14	Colonial Car Wa	Set Next Break
08:01:03	ID005	00:00:23	Phil Collins-But	Preview Event
08:01:26	ID006	00:00:57	Tina Dance Sho	Move Event Up
08:02:23	ID007	00:00:11	Weather	Move Event Down
08:02:34	ID999	00:00:16	AlanSings	Insert Audio/Video File
08:02:50	ID999	00:00:14	Elvis	Change Event
08:03:04	ID008	00:00:16	Sports Scorebo	Edit Event Information
08:03:20	ID009	00:00:35	News Headline	Remove Event
08:03:55	ID010	00:00:06	Office Max	
08:04:01	ID011	00:00:28	Music Video Promo	
08:04:29	ID012	00:00:48	Pink Floyd-Money Video	
08:05:17	ID013	00:00:36	Dell Vostro 220	
08:05:53	ID014	00:02:50	Trigger Fish-Stand By Me Video	
08:08:43	ID015	00:00:13	Tina Fishing Promo	
08:08:56	ID016	00:00:13	Wild Flower Fest PSA #1	
08:09:09	ID017	00:00:16	Tina Turner-What's Love Video	

Schedule
10122009.txt
F5 Play
F6 Pause
F7 Stop
F8 Skip Now!
Hm Home
Load Schedule
Save As...
Clear Schedule
Closures
Options

Figure – 12 The schedule and buttons

The schedule (Figure 12) is for a 24-hour period. There can be 1000 events a day. That is about 41 items per hour. The number of events per day can be changed in the setup.

At five seconds after midnight (12:00:05 AM), based on the computer clock, the next day's schedule will automatically load, if the option has

been set. The schedule grid (Figure 12) displays 19 items that will or have already played. The scroll-bar to the right of schedule allows you to scroll through the entire day's schedule. The red bar indicated the current item playing if the schedule is "rolling" or it indicates the item that will play next if you press the schedule PLAY button.

The button to the right of schedule called Load Schedule allows you to load a new schedule. Under the Schedule label above the PLAY button, you will see the current schedule name. The label can be clicked and has the same functionality as the Load Schedule button.

The functions of the buttons to the right of the schedule:

"Play" – (F5) starts playing the schedule from the RED highlighted event.

"Pause" – (F6) will pause the schedule play.

"Stop" – (F7) will stop the schedule from playing.

"Skip Now!" – (F8) will immediately skip the event playing.

"Hm Home" – This will reset the current playing event to the top of the schedule. Use this is you scroll through the schedule to look at upcoming events and then want to get back to where the schedule currently is. Pressing the "Home" button on the keyboard will home the schedule too.

"Load Schedule" – Allows you to pick and load a different schedule.

"Save As..." – Allows you to save the current schedule either as the name that it is, or as another schedule name. Schedules should be named in the format "mmddyyyy.txt" where mm is the month, and dd is the day, and yyyy is the year: 10222009.txt would be for October 22nd, 2009. At midnight when the schedule changes, the software will look for the next schedule in the format above.

"Clear Schedule" – will clear the current schedule completely. You will be prompted twice! Be sure that you save any changes that you have made to the schedule before you clear it, if you want them saved.

The schedule usually displays the time that each item is projected to play, a reference ID from your traffic software (if one is included), the length time for the item, and a description of the item. All this information (except the expected play time) is pulled from the schedule file.

The schedule is created from the Console Screen, from your Traffic and Billing software, from Excel, or from Notepad or Textpad. Changes are saved to the file as they are made.

A Sample Schedule file:

Filename: 12092011.txt (formatted mmddyyyy.txt)

```
;ScheduleTime, CutReference, CutLength, Description, Path
"10:00:00","ID9905","0:00","Hourly Schedule Sync",""
"10:15:57","ID9932","0:00","Start Break",""
"10:15:59","ID004","0:03","Legal ID","c:\video_storage\tv22idone003_004.mpg"
"10:16:02","ID535","1:00","Consolidated Credit","c:\video_storage\CCredit0100_535.mpg"
"10:17:02","ID155","0:30","Homefront Promo","c:\video_storage\HFPromoOne030_155.mpg"
"10:17:32","ID528","0:60","Progene","c:\video_storage\ProgeneBHD060_528.mpg"
"10:18:35","ID9901","0:00","End of Break",""
"10:42:35","ID9932","0:00","Start Break",""
"10:42:41","ID004","0:03","Legal ID","c:\video_storage\tv22idone003_004.mpg"
"10:42:42","ID067","0:60","PSA Collage Access","c:\video_storage\PSACoAces060_067.mpg"
"10:43:12","ID154","0:30","FBI Files Promo One","c:\video_storage\FBIFProm030_154.mpg"
"10:44:34","ID065","0:60","PSA Perspectives","c:\video_storage\PSAPersps060_065.mpg"
"10:45:35","ID9901","0:00","End of Break",""
"11:00:00","ID9905","0:00","Hourly Schedule Sync",""
"11:15:35","ID9932","0:00","Start Break",""
"11:15:35","ID004","0:03","Legal ID","c:\video_storage\tv22idone003_004.mpg"
"11:18:35","ID513","0:30","Tax Relief","c:\video_storage\TaxRelief030_513.mpg"
"11:19:05","ID524","0:60","Bare Essentials","c:\video_storage\BareEssentials060_524.mpg"
"11:20:05","ID065","0:60","PSA Perspectives","c:\video_storage\PSAPersps060_065.mpg"
"11:21:05","ID9901","0:00","End of Break",""
... and so on ...
```

Figure 13 – A Sample schedule file

The schedule is a comma-delimited text file with five items per line. Each of the five items has quotes around them, separated by and commas. The items are the start time in 24-hour time format (00:00:00 is midnight, 13:00:00 is 1 PM and 23:59:59 is 11:59:59 PM), reference id (IDnnnn), file time length (hh:mm:ss, mm:ss, or m:ss), title/description, and full filename. Each new line is a different item to play. Schedules can be made from within the VAS software by right-clicking and adding events or they can be generated by any number of currently available radio or TV traffic and billing software programs or even in a spreadsheet program like Microsoft Excel. Lines with a "semi-colon" (";") in front of them are ignored.

A schedule file can have the file extension of either .txt, .skd, or .log. The default is .txt. The system will look first for .txt, then .log, then .skd on automatically loaded schedules. If two exists for the same day with different file extensions, the order of selection is the order stated above.

They are stored in the "C:\Program Files\Wintek Software Company\VAS\Schedule" folder by default, but the schedule path can be changed in the options.

The first 'start time' line on the first line in a schedule is the only time that is actually important. When the software loads the schedule, it automatically calculates out the air time for each remaining item, so the 'start time' on subsequent lines in the schedule is ignored. If you insert, delete, move, or change an item in the schedule on the Console screen, the times are automatically and instantly recalculated. Also the schedule file is saved to reflect the changes. You can turn this feature off in setup, if you don't want VAS to calculate the times automatically.

You can create an item in the schedule to make it repeat. This might be handy if you want to repeat a short schedule over-and-over again. This item would cause the schedule to repeat.

```
"08:08:39","ID903","0:00","100 Repeat the schedule at line 100 ","no path"
```

The 100 must be the first text in the description. Since this is not an video/audio cut you must either put "no path" or just empty double quotes ("").

TIME ANCHORS or SCHEDULE SYNCs (ID9905 and ID9990)

ID codes ID9905 and ID9990 can be used to keep the schedule synched with the computer clock. By turning on the Hourly Anchor feature in Setup, you can keep the schedule synchronized if you miss breaks. Just add a line with the top of the hour time in it, the anchor code and when the top of the hour comes, it will search for the anchor point and set the schedule to play from that event.

```
"08:00:00","ID9905","0:00","Hourly Schedule Sync","nothing here"
```

ID9905 is a standard sync where the schedule will sync and wait. If you are in Hard Time mode or need to force an event to play, like a legal station ID, then use the code ID9990; which forces the next event to play.

THE AUDIT TRAIL

The audit trail (Figure 14) is just like a schedule file except that it can only be generated by the VAS software. It shows the date and time of every item that plays, either from the schedule, the One-Touch or anything that was manually loaded and played. If you have agency sponsors and/or sell advertising, this is a very important file that helps you reconcile with your sponsors when you bill them for their commercial time.

A sample Audit Trail file:

Filename: 12192011.txt (formatted mmddyyyy.txt)

```
12:03:10,11:31:44,ID9932,0:00,Start Break Sent Closure.,
12:03:12,11:31:45,ID004,0:03,Legal ID,c:\video_storage\tv22idone003_004.mpg
12:03:16,11:31:48,ID154,00:30,FBI Files Promo One,c:\video_storage\FbiFilesPromoOne030_154.mpg
12:03:48,11:32:48,ID528,0:60,Progene,c:\video_storage\ProgeneBHD060_528.mpg
12:04:49,11:33:48,ID901,0:60,Easy Reach,c:\video_storage\EasyReach060_901.mpg
12:05:50,11:34:12,ID9901,0:00,End of Break MPaused,
12:38:28,12:13:00,ID9932,0:00,Start Break Sent Closure.,
12:38:30,12:13:00,ID004,0:03,Legal ID,c:\video_storage\tv22idone003_004.mpg
12:38:34,12:13:04,ID499,0:60,Shouting Down kill_926,c:\video_storage\ShoutingDownAisles060_499.mpg
12:39:36,12:14:06,ID068,0:30,PSA Adoption,c:\video_storage\PsaAdoption030_068.mpg
12:40:07,12:15:08,ID496,0:60,AmMed Direct,c:\video_storage\AmMedDirect060_496.mpg
12:41:08,12:15:34,ID9901,0:00,End of Break MPaused,
```

Figure 14 – Sample audit trail file

Some traffic and billing software even allows you to pull the audit trail file in (import) and to reconcile it against the original schedule.

Each audit trail is named numerically after the day it is created in the format mmddyyyy.txt and stored in the audit trail folder. That folder location can be set in the Setup.

CLOSURE OUTPUTS AND SWITCHER CONTROL

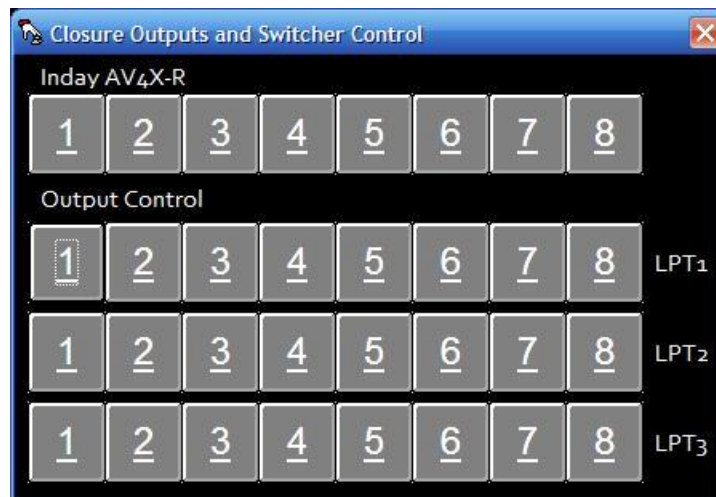


Figure 15

The Closure Outputs and Switcher Control panel can be accessed by clicking the CLOSURES button to the right of the schedule. This allows you to send outputs to control your switcher or other hardwired equipment. The closures must be activated in the OPTIONS (Setup) control panel to work and additional equipment must be installed. Check with our support team for supported control hardware.

CHARACTER GENERATOR

The blue box in the center upper screen is the Character Generator.

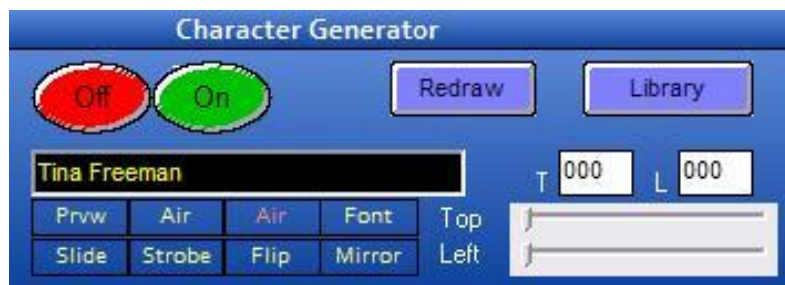


Figure 16 – Character Generator controls

Simply type some text in the text box, or pick a slogan or phrase from the library by clicking the LIBRARY button.

Clicking the ON or OFF button will put a label on the “On-Air” screen in the color, font, font size, and location selected.

Clicking Redraw redraws or redraws the text or graphic after you have changed the text characteristics or moved it on screen using the location sliders.

Clicking the Library button allows you to pick from 48 preset labels from the Character Generator (CG) library screen.

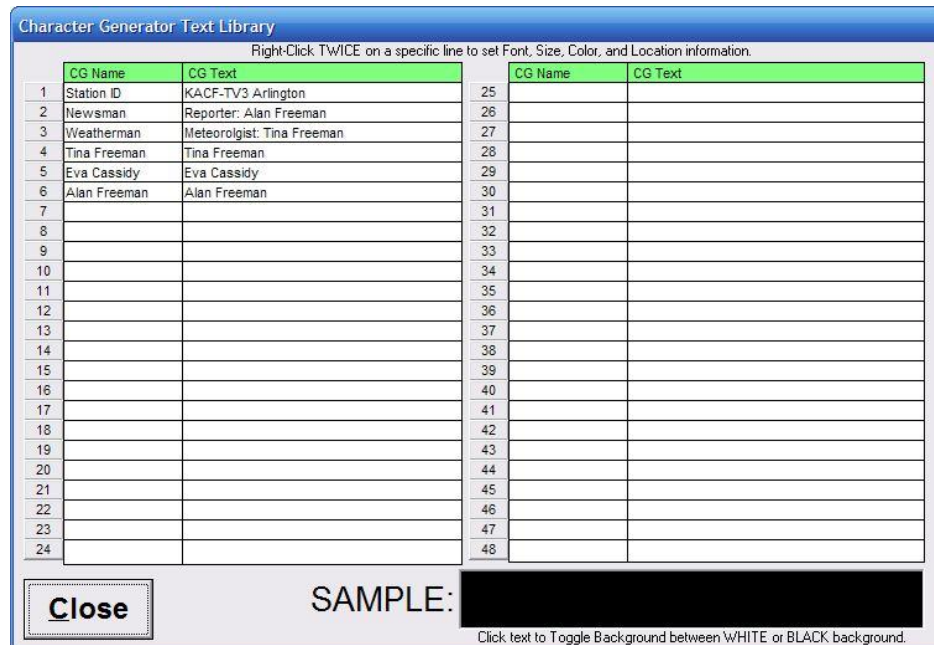


Figure 17 – Character Generator library screen

By right clicking twice on the CG Text item you wish to edit on the CG Text Library Screen you can bring up the CG Text Location screen (see Figure 18).

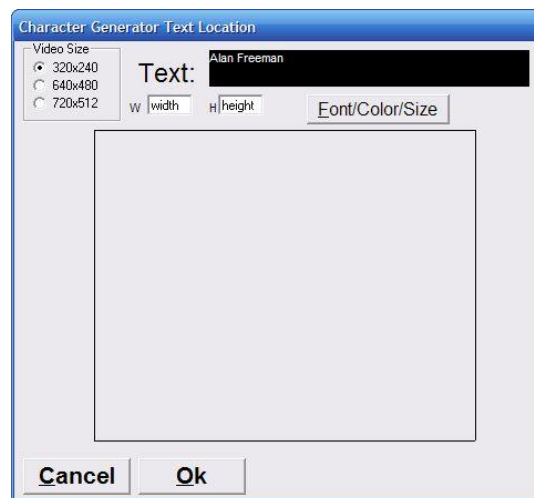


Figure 18 – The Character Generator text location screen

On the Character Generator Text Location screen, simply click the mouse where you want the text to be located on the screen. To change or set the font, font color, or font size, click on the Font/Color/Size button. (See Figure 19)

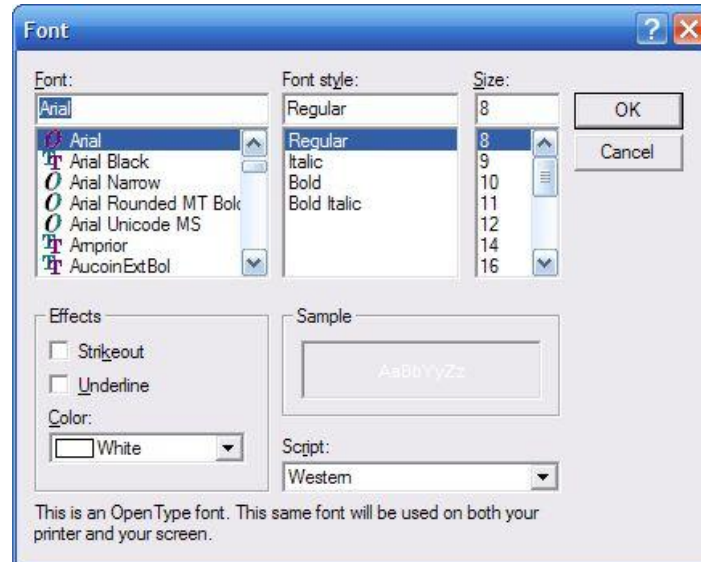


Figure 19 – The Set Font screen

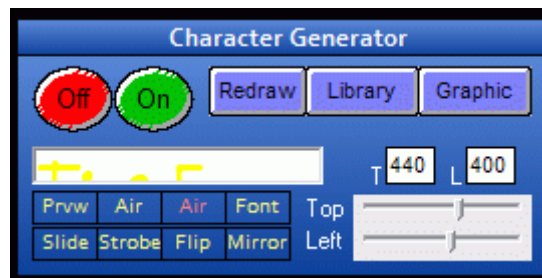


Figure 21 – Character Generator Controls

The small labels are buttons (see Figure 21) that say Prvw, Air, Font, Slide, Strobe, Flip, and Mirror allow you to adjust the text font type, size, color, and to send it to the "Preview" screen or the "On-Air" screen.

By clicking the Prvw button, the text will go to the "Preview" screen. By clicking the "Air" button, the text will go to the "On-Air" screen. By clicking the red "Air" or button, you can toggle the selection instead of pressing the yellow "Prvw" or "Air" buttons. By clicking the Font button you can change the Font attributes of your character generator text quickly. By clicking Slide, Strobe, Flip, or Mirror buttons, you either enable or disable that effect, depending on each effects current state.

One you change the text size or color you may not be able to see it in the text box, so you might need to highlight it by dragging your mouse over it to expose it.

ONE-TOUCH BUTTONS

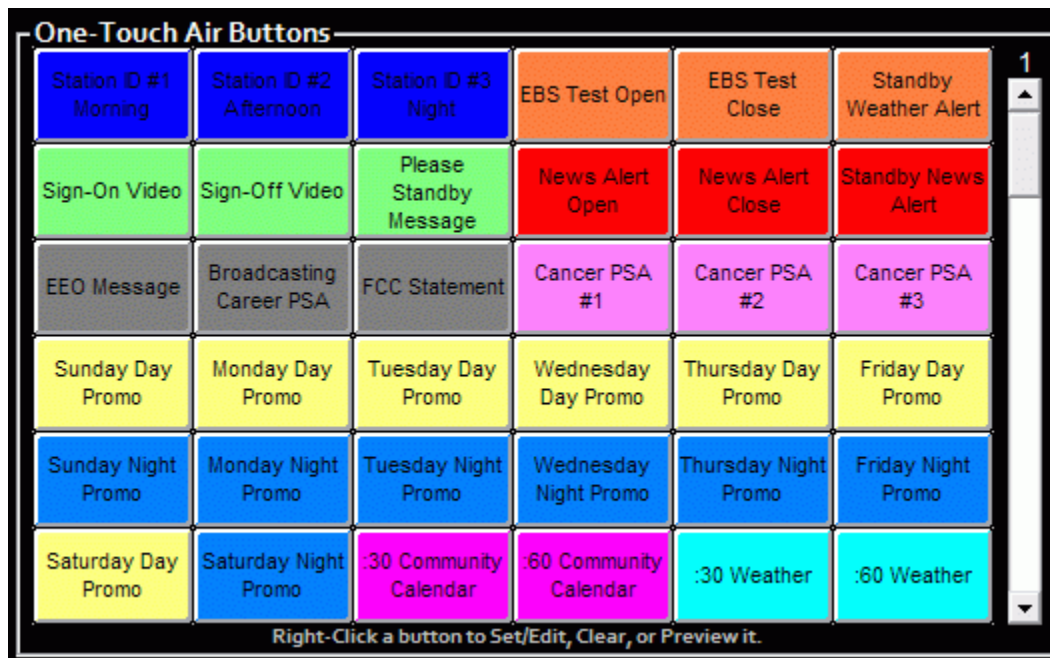


Figure 22 – One-Touch Buttons

The One-Touch buttons (Figure 22) put something “On Air” immediately; AKA “live assist”. There are 360 One-Touch buttons. The scroll bar to the right of the buttons allows you to display ten pages of 36 buttons on each page.

You can set the caption and color each button (Figure 23) and group them by colored categories by right-clicking on a button and choosing Set or Edit Button. Right clicking a button also allows you to preview or clear the button (if the Protect option is not set for that button).



Figure 23 – One-Touch Setup

Audio/Video File names:

The title is automatically taken from the file name. The time is also taken from the file name (in minutes and seconds (mmss or mss)), and a reference number taken from anything after the "_" underscore. The reference number is not required.

Example: "Sears_Home_Improvement115_0078.avi" would be titled "Sears Home Improvement", it is 1 minutes 15 seconds long with a Reference ID of ID0078.

SETUP OPTIONS:

The screenshot shows the 'Options' dialog box with the 'General' tab selected. The 'General' section contains fields for 'Station Call Sign' (KACF-TV3), 'Contact Email Address' (alan@freeman.com), 'Schedule File Path' (C:\Program Files\Wintek Software Company\VAS\Schedule), 'Audit File Path' (C:\Program Files\Wintek Software Company\VAS\Audit), 'Early Overlap' (0), 'LPT Input Scan' (200), 'Input Debounce' (200), 'Daily Schedule Events' (1000), 'LPT Output Hold' (1000), 'Auto Load Schedule' (unchecked), 'Schedule Load Time' (00:00:05), 'Hourly Anchor (ID9905)' (checked), 'Auto Log Time Calc' (unchecked), 'Replay Same Schedule if new one not found' (checked), and 'Hard Time Anchors' (unchecked). The 'Input Signals from LPT ports' section has three columns: 'LPT1 & H378', 'LPT2 & H278', and 'LPT3 & H3BC', each with a 'TASK' column. The 'Output Signals to LPT ports' section has three columns: 'LPT1 & H378', 'LPT2 & H278', and 'LPT3 & H3BC', each with a 'TASK' column. The 'Switcher 1' section has fields for 'Switcher Name', 'Switcher Type Code' (0), 'Switcher Comport' (0), 'Comport Settings', 'Switcher Status Code', 'Switcher Address Code', 'Switcher Terminator Code', and 'Channel 1' (0). At the bottom are 'Save', 'Save & Close', and 'Close' buttons.

Figure 24 – Setup Screen

The setup screen allows you to set the schedule file path, the audit file path, early overlap, number of schedule events, auto load, and schedule load time. Most of these are self explanatory.

The Early Overlap will cause a video or audio file to end X number of seconds before the actual end of the file.

The Auto Load Schedule will turn on and off the auto load feature. If that feature is turned on then the Schedule Load time is used as the time to load the schedule. The time must be in military or 24 hour mode format. 23:00:00 is 11 PM for instance. Anything after 12 noon, you add 12 to it. Midnight is 00:00:00. Noon is 12:00:00, 4 PM is 16:00:00.

INPUT SIGNALS:

The input/output signals use a standard LPT port set in bi-directional mode (SPP mode). The inputs are simply wired from the respective input pin to a switching mechanism and to ground (pins 18-25) on the LPT card. A 10k pull-up resistor should be used.

The Input Signals from LPT allow you to control functions in VAS from external automation systems or trigger signals. You must install a standard LPT card for each set of signals. If you are using an input signal, then you must turn on the LPT card address that you are using, wire the signal to the correct pin, and then enter a control code in the TASK field.

Input signals are:

{START} – This starts playing the schedule when a signal is received. The schedule play events and will stop when it reaches an ID901 control item in the schedule.

Additionally, some keyboard keystrokes can be emulated:

F1 {F1} – Preview Play
F2 {F2} – Preview Pause
F3 {F3} – Preview Stop
F4 {F4} – Push to AIR
F5 {F5} – Play Schedule
F6 {F6} – Pause Schedule
F7 {F7} – Stop Schedule
F8 {F8} – Skip Now! on schedule
F9 {F9} – On-Air Play
F10 {F10} – On-Air Pause
F11 {F11} – On-Air Stop
F12 {F12} – On-Air Mute/Unmute

Other keys:

BACKSPACE {BACKSPACE}, {BS}, or {BKSP} , BREAK {BREAK} , CAPS LOCK {CAPSLOCK}
DEL or DELETE {DELETE} or {DEL}
DOWN ARROW {DOWN}, END {END}, ENTER {ENTER} or ~
ESC {ESC} , HELP {HELP} , HOME {HOME}
INS or INSERT {INSERT} or {INS}
LEFT ARROW {LEFT}
NUM LOCK {NUMLOCK}
PAGE DOWN {PGDN}
PAGE UP {PGUP}
RIGHT ARROW {RIGHT}
SCROLL LOCK {SCROLLLOCK}
SPACEBAR {SPACE}
TAB {TAB}
UP ARROW {UP}

Figure 25

In addition to that, One-Touch buttons can be triggered from closures!

(55) will trigger One-Touch key 55. (360) will trigger One-Touch key 360. You can assign cuts that aren't set to a One-Touch key as well. Please contact support on information on how to do that.

OUTPUT SIGNALS:

The outputs can supply about 100ma to ground. They should be used in conjunction with opto-isolator or electronic relays to provide closures for external equipment. To keep them from floating, you should use 10k resistors in parallel with the output.

The Output Signals to LPT allow you to send control functions from VAS to external automation systems or switchers. You must install a standard LPT card for each set of signals. If you are using an output signal, then you must turn on the LPT card address that you are using, wire the signal to the correct pin, and then enter a control code in the TASK field.

Output signals are:

{EOM} – Send an EOM at then end of a video/audio cut OR end of a schedule played sequence.

The remaining output signals do not require codes at this time and may be access from the schedule by using codes ID931 to ID954 for outputs 1 to 24 respectively. If you need to know more about this feature, please contact support.

VIDEO/AUDIO SWITCHER CONTROL - To control an external serial port controlled video/audio switcher fill in the switcher data on the setup screen where prompted. This will add the following section to the VAS.INI file.

```
[Switchers]
SwitcherCode=1
Sw1Name=Inday AV4X-R
Sw1Comport=1
Sw1Address=64
Sw1Settings=9600,N,8,1
Sw1Status=S
Sw1Terminator=13
```

The above settings are for an Inday AV4X-R 4-channel video/audio switcher. If you have a VIS4x4 switcher, change the settings to:

```
SwitcherCode=0
Sw1Terminator=0
```

On your schedule you must add an ID9701 anywhere you wish to switch to input 1. Add ID9702 for input 2, and so on.

If you have any other kind of switcher, please contact our support to help you configure these settings to work with your switcher.

SOFTWARE INSTALLATION INSTRUCTIONS

Download the VAS installation files from our website at :
<http://www.cdcontrol.com/ftp/VAS> or our download page.

Also download the K-Lite Codec package as well. Install the K-Lite Codec package first by following the installation instructions and accepting all the defaults.

Run the file VAS-Setup.exe. It will begin an 'InstallShield Wizard' with instructions or comments. Please read each page as you go along, to be sure you understand each step or to watch for installation issues.



Click the NEXT button.



If you accept the license agreement, select that option then click the NEXT button.



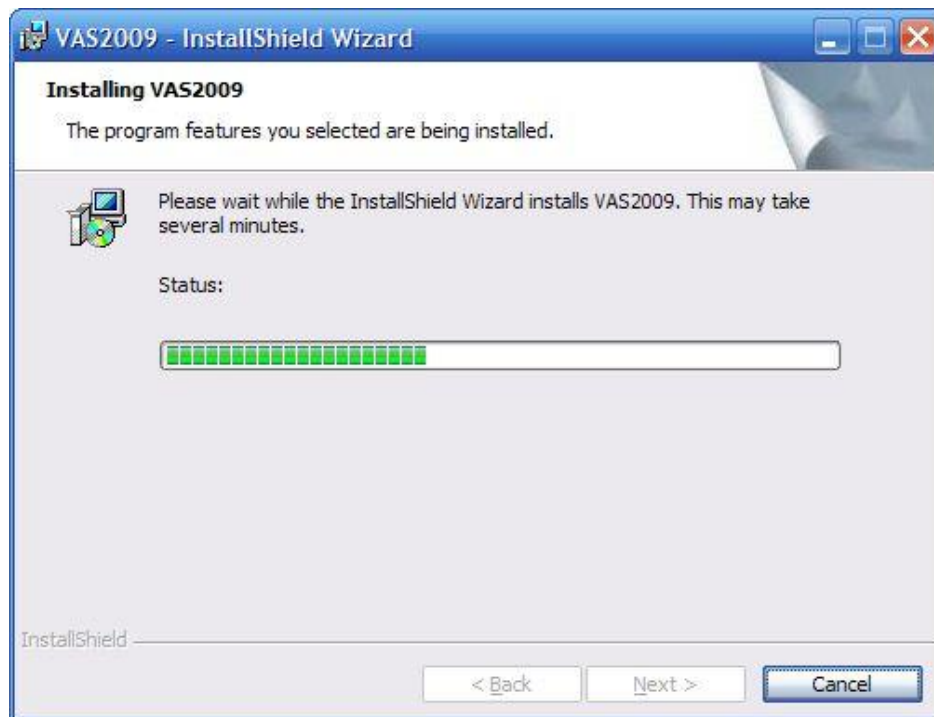
Enter your name and company name on the above screen and select Anyone who uses this computer (all users). Then click the NEXT button.



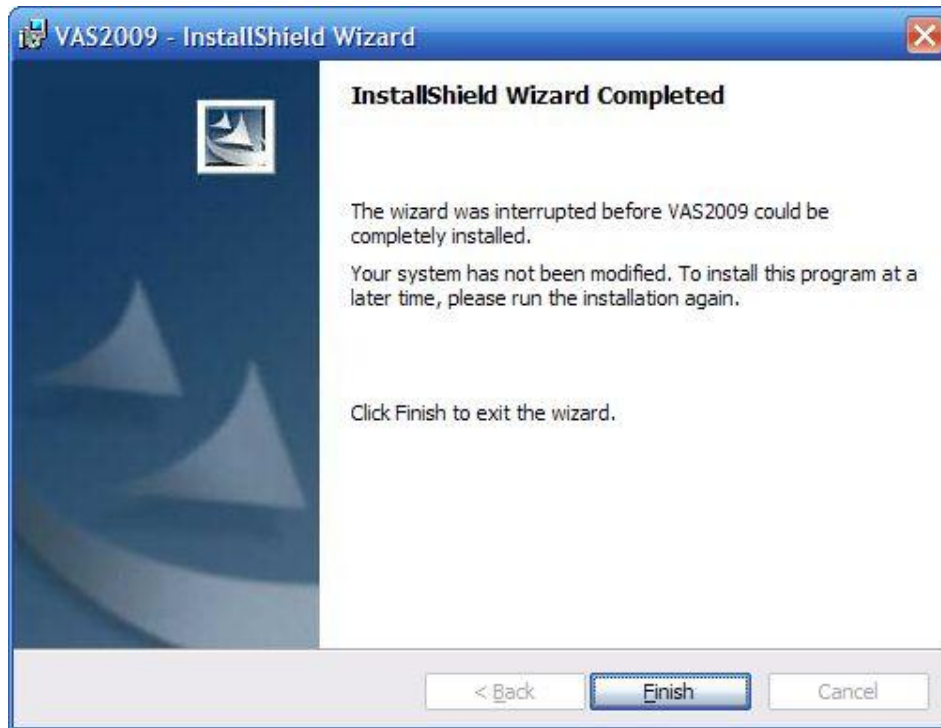
Accept the default installation path in most cases. It is best to install VAS on your main drive, but if you are out of drive space, you can obviously select a different drive. Click the NEXT button.



Click the Install button.



Please wait patiently as the software installs. Installation time varies from PC to PC.



Once the software has completed installing, you will get this final screen. Click the Finish button after noting either the success or failure of the installation. If the install failed, please take the noted recommendations on the screen to correct the issue or contact our support department. Click the Finish button.

HARDWARE REQUIREMENTS

Dual-Core or Quad-Core Pentium 4 Processor running at 2 gigahertz or faster.
2 gigabytes of RAM memory or more.

Dual output Video Card with at least one S-Video Output (or a VGA-to-NTSC converter). Alternately you can use HDMI or other types if you have a converter.

500 giga-byte hard drive is recommended, but can be as large or small as needed to handle the video content that your station needs to air.

VIDEO SETUP TIPS

The Console monitor should be connected to your video output that does not have S-Video output.

The main “On-Air” output is the S-Video output. Connect the S-Video and audio from your PC to your video in source; transmitter, recorder, web encoder, etc.