

v-VSCS User Guide

version 2

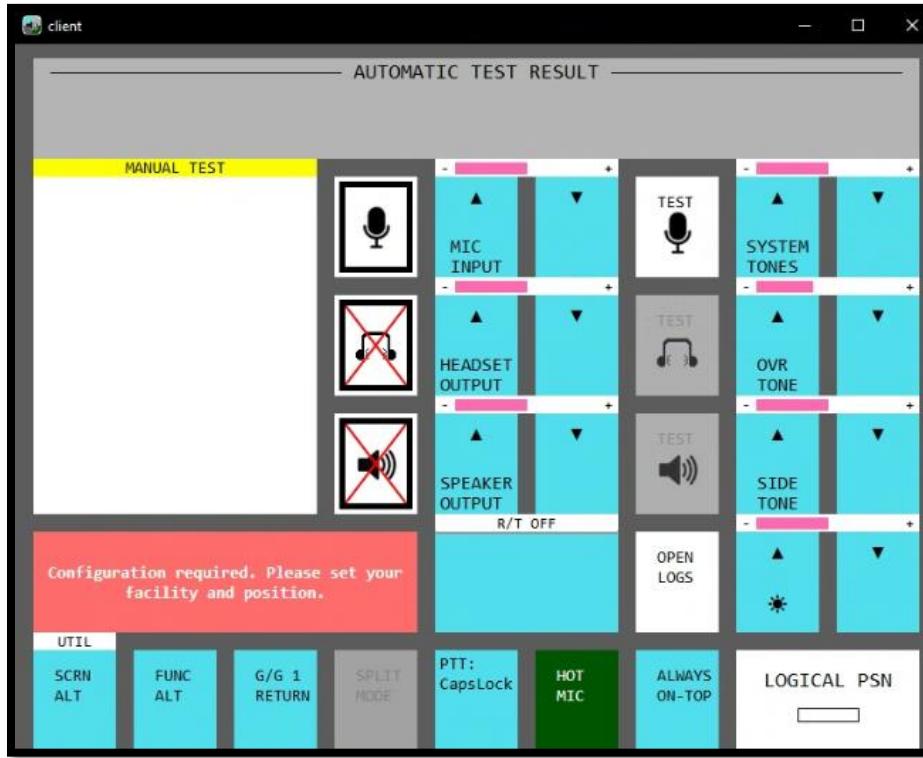
By Tim Mak

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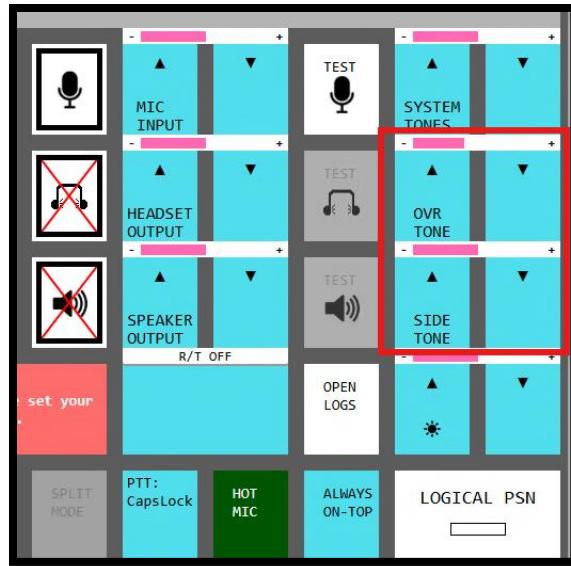
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Quick Setup Guide

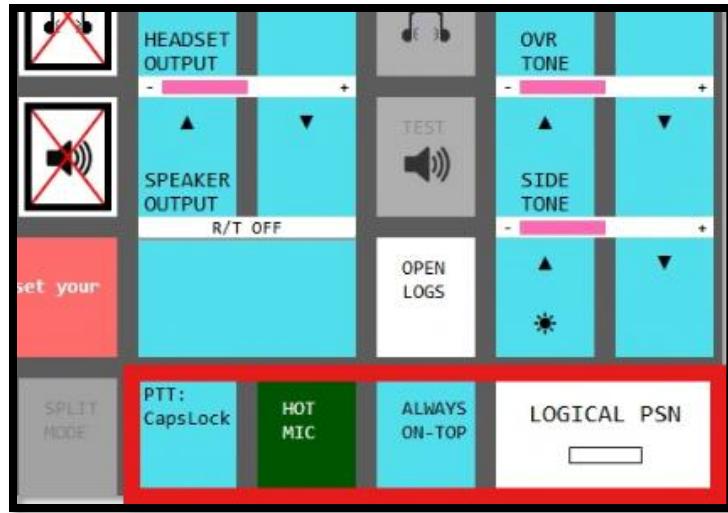
- Every time v-VSCS is opened, this is the page that will be seen



- Click on the microphone, headset, and speaker to set your associated audio devices
 - A red “X” denotes that audio feature has not yet been assigned to an audio device
- You may test and set the volume level of the headset and speaker device. An audible tone should play over the associated device if it is working properly
 - Please note that the microphone test may not work sometimes, and that adjusting microphone volume does not affect microphone volume

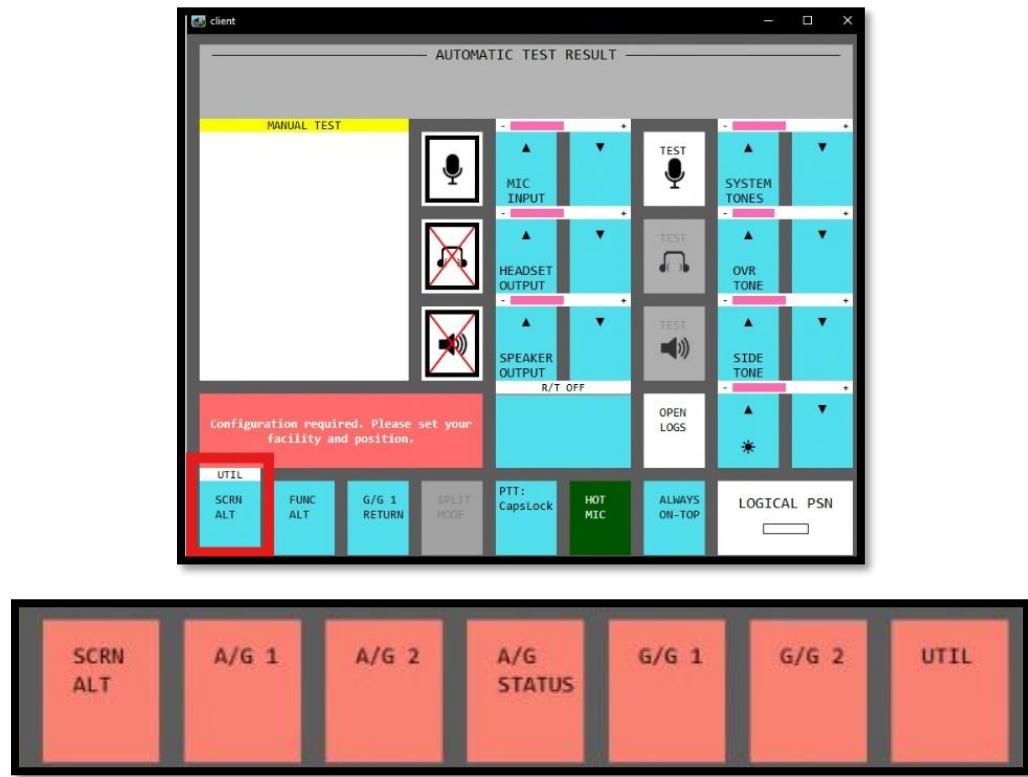


- Set override tone volume (sound played when someone overrides you)
- Set side tone volume (faint sound that plays as a reminder when you are actively coordinating)
- “SYSTEM TONES” and brightness are not yet simulated
- Please note that override tone and side tone volume adjustments are independent of headphone/speaker volume adjustments



- Set your push to talk by pressing “PTT:”
 - Once button turns green, click keyboard key that you want to be PTT
 - To test if your PTT is working, press your PTT AFTER setting it. The PTT button should turn red
- If you want a hotmic when being overridden, the “HOT MIC” button should be green. If you do not want hotmic, the button should be blue
- If you want the v-VSCS window to stay on top of other windows, “ALWAYS ON-TOP” should be in green
- To sign into a v-VSCS position, click on “LOGICAL PSN”
 - Enter your facility ID (i.e. A80, ZTL, CLT)
 - Enter your position (i.e. N, R43, K)
 - Enter any v-VSCS positions you are assuming in YOUR SAME facility, separated by commas (i.e D43, R10, D10)

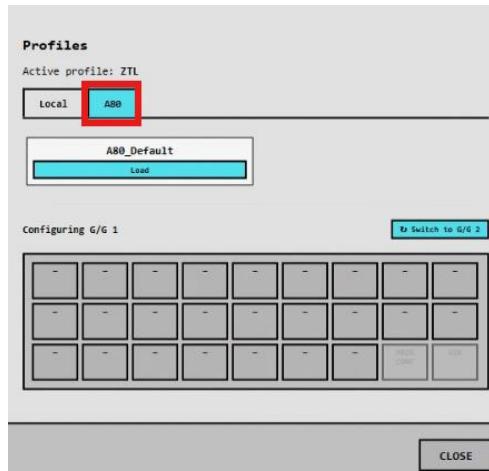
- After configuring your position, press “SCRN ALT” on the bottom left



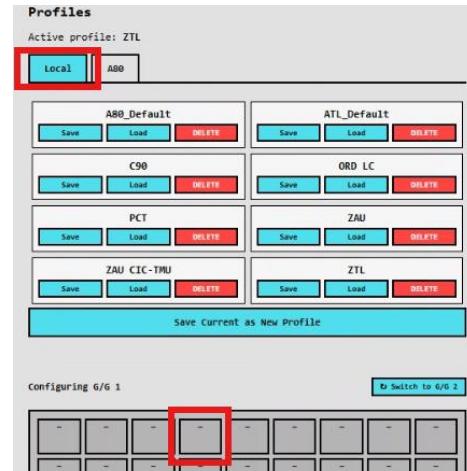
- This will open the selection of different pages. The only buttons that function are:
 - SCRN ALT – Opens/closes page selection
 - G/G 1 – Ground to ground coordination page 1
 - G/G 2 – Ground to ground coordination page 2
 - UTIL – Audio device and facility config



- After entering either G/G page, configure your coordination buttons by pressing “PROG CONF”
 - If a cloud profile for your facility has been uploaded, you may load it by pressing your facility name at the top
 - If no cloud profile has been uploaded, you will have to manually make shout lines and overrides. See “Coordination Setup” section



Pressing on “A80” opens cloud profiles made for the facility “A80”



Pressing on “Local” allows a user to Load/save their own custom profiles

- If ARTCC staff wish to cloud their profiles, please message a v-VSCS team member

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What is Real World VSCS?

VSCS is...

- Voice Switching and Control System
- Explicitly used in the enroute (center) environment
- Used for managing radio transmitters/receivers
- Used for coordination in cases of **INTRAfacility** and **INTERfacility** settings
 - **INTRAfacility** – The SAME facility
 - **INTERfacility** – Two DIFFERENT facilities
 - A ZTL (center) controller calling another ZTL (center) controller will use an **INTRAfacility** method of coordination
 - A ZTL (center) controller calling CLT approach will use an **INTERfacility** method of coordination

What Differs With v-VSCS?

A limitation to v-VSCS is...

- In order to coordinate with the enroute environment, a terminal controller must use VSCS. This is unrealistic because, in real life, terminal controllers use a different program for coordination.
- It is a standalone program
 - v-VSCS does not have the ability to automatically reroute CRC audio to/from speakers/headphones
 - v-VSCS does not have the ability to display CRC transceiver information on the A/G pages
 - v-VSCS does not have the ability to temporarily un-TX your frequency in order to use your CRC PTT as a coordination PTT.

Because of this, a separate PTT key bind that differs from the CRC key bind needs to be assigned

Defining the Forms of Coordination

There are two main forms of coordination:

Overrides and Shoutlines

Overrides

Are used for **INTRAfacility** coordination

i.e. $ZTL \rightarrow ZTL$

- Overrides most of the time, if not always, are routed through the headphones of the initiator and receiving controller
 - The “receiving” controller is the one whom coordination is being started from the “initiating” controller
- The initiating controller can hear the controller speaking AND the pilots* on the receiving controller’s frequency.
 - The receiving controller’s mic is “hot” (active without using PTT). The receiver does not have to use the PTT**
 - The initiator must use the PTT in order to communicate with the receiver
- Only the initiating controller can end the override by either:
 - Clicking on the line to close it or
 - Clicking the **RLS** button on the bottom right

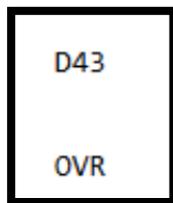
*this feature is not yet implemented

**this feature is toggleable in the UTIL page

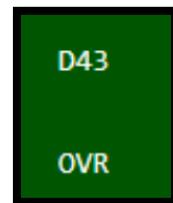
- Here are what the overrides look like in v-VSCS



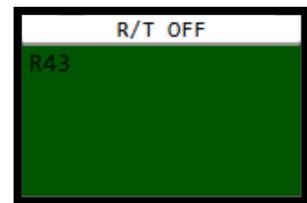
*Position
offline*



*Position
online*



*Overriding a
position
(as initiator)*



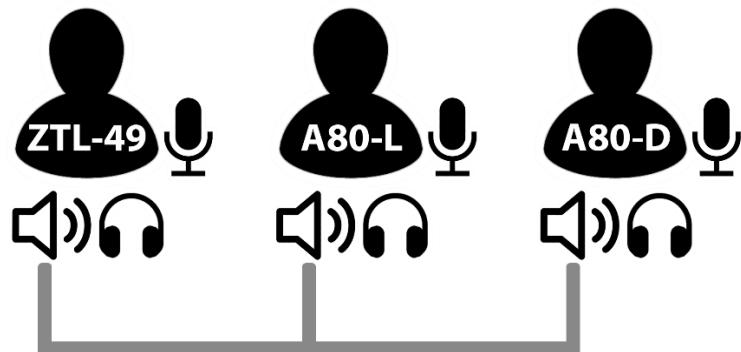
*Being overridden
by another
position and their
position ID*

Shoutlines

Are used for **INTER**facility coordination

i.e. $ZTL \rightarrow A80 \text{ TRACON}$

- At all times, every user is listening to a line



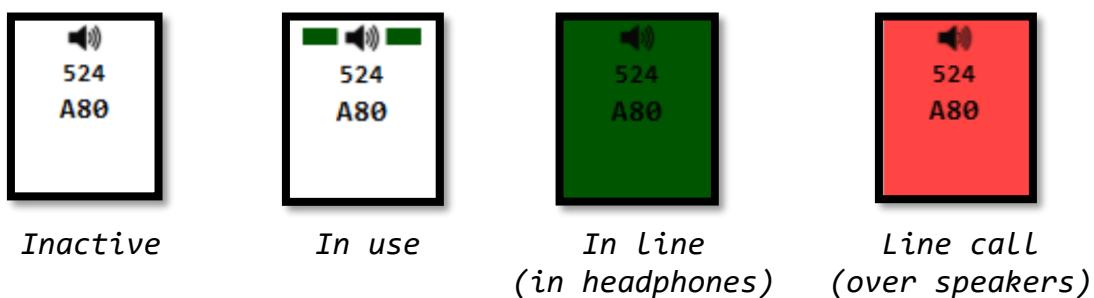
- The **INITIATING** controller makes a call on the line that can be heard by every user that has that line enabled. Note that PTT must be used.
 - If another ZTL user was on this line, they would NOT hear ZTL-49 over the speakers since they are both in the same facility



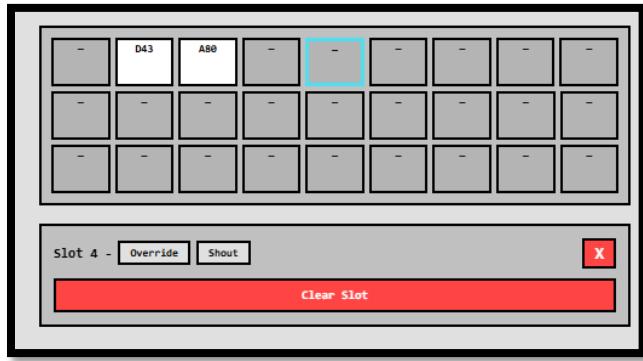
- Once another user joins the line, then all coordination is routed through the headphones. Again, PTT must be used.



- Even if a line is in use, it can still be joined
- To close the shout line, all users must leave it by either:
 - Clicking on the line to close it or
 - Clicking the **RLS** button on the bottom right
- Here are what the shoutlines look like in v-VSCS



Coordination Setup (PROG CONF)



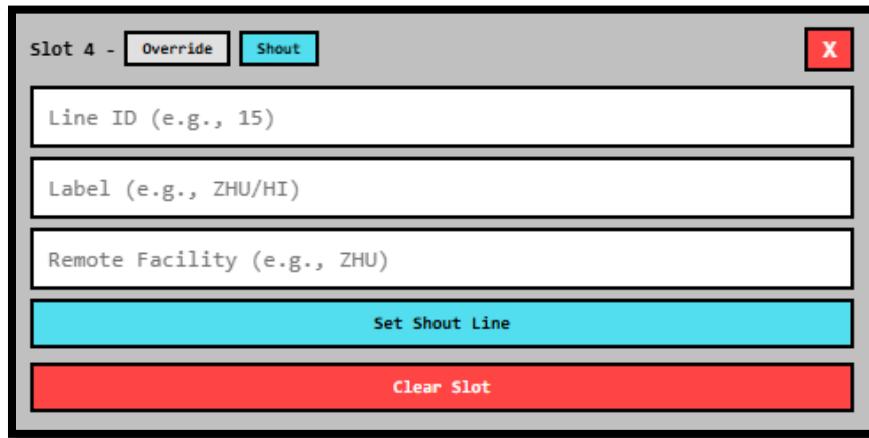
- Click on an empty slot and choose “Override” or “Shout”

For Override:



- Remember overrides are only for **INTRAfacility** coordination
- Input a position in the same facility to override
- Click “Set Override”

For Shoutline:



- Remember that Shoutlines are only for **INTERfacility** coordination
- **Line ID** – Must be the same number that the other facility is using
- **Label** – Custom to you; Label it to your desire
- **Remote Facility** – The other facility you are setting up the line to coordinate with. This has to be the same facility that the other controller(s) set in the previous steps
- Please note that there should only be two facilities on a line. But yes, there can be multiple controllers sharing that line

Bug Reports/Feedback/Feature Requests

We appreciate your support, and you can help us out even more by clicking [this link](#) and joining the Discord.