

# **v-VSCS User Guide**

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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 is vVSCS?

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 → 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

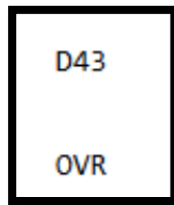
*\*this feature is not yet implemented*

*\*\*this feature is toggleable in the A/G 1 page. See “Setup” section*

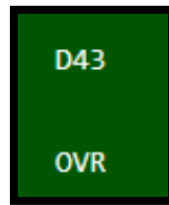
- Here are what the overrides look like in v-VSCS



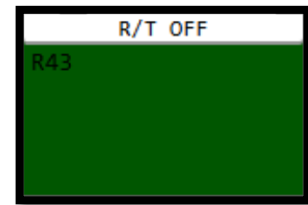
*Position  
offline*



*Position  
online*



*Overriding a  
position  
(as initiator)*



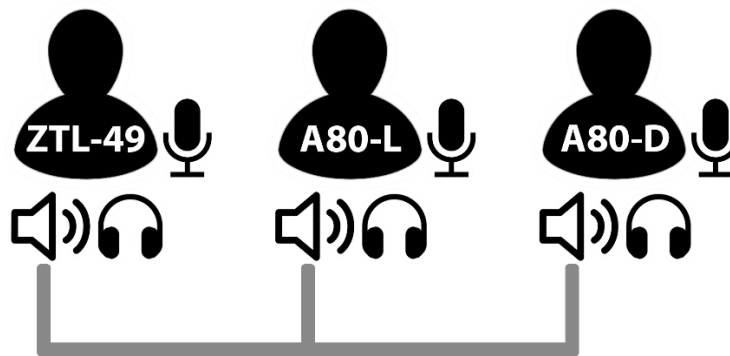
*Being overridden  
by another  
position and their  
position ID*

## Shoutlines

Are used for **INTERfacility** coordination

*i.e. ZTL → CLT TRACON*

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

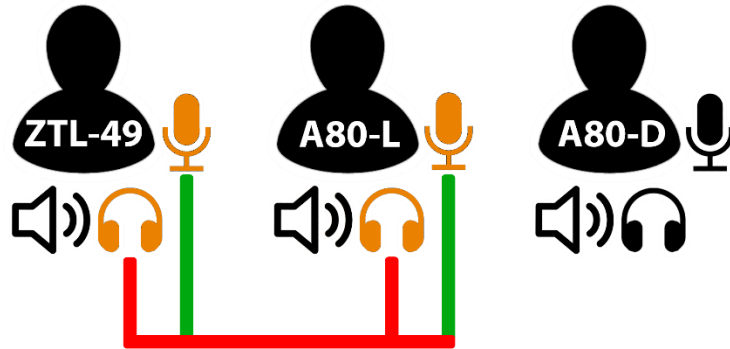


- The INITATING controller makes a call on the line that can be heard by every user that has that line enabled. Note that PTT must be used.
  - If another ZTL user was on this line, they would NOT hear ZTL-49 over the speakers since they are both in the same facility





- 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



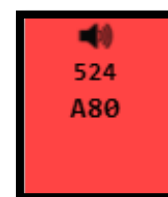
*Inactive*



*In use*

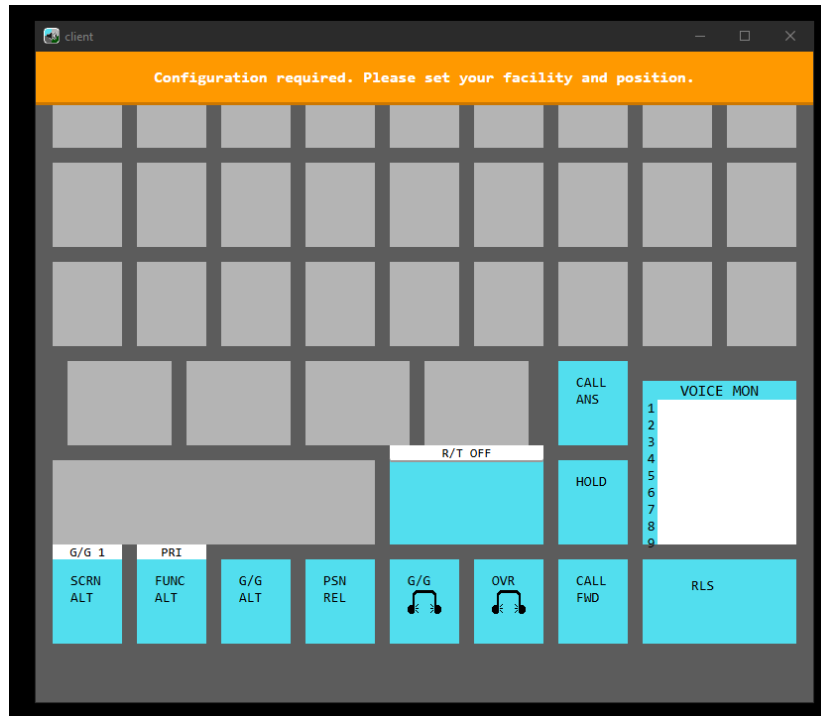


*In line  
(in headphones)*



*Line call  
(over speakers)*

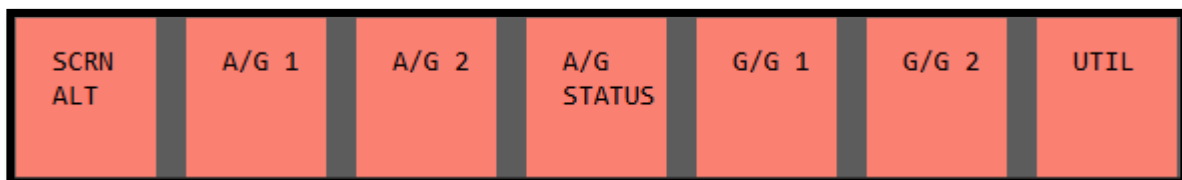
# Setup



Press



to open:



- A/G 1\* – Audio device and PTT setup
- A/G 2\* – Position and coordination setup

*\*these buttons are placeholders; this is not how they perform in real world use*

## Audio Device Setup (A/G 1)

MICROPHONE INPUT  
Select device... ▼

HEADSET OUTPUT  
Select device... ▼

SPEAKER OUTPUT  
Select device... ▼

PUSH-TO-TALK KEY  
CapsLock CHANGE

INPUT LEVEL TEST AUDIO

☐ AUTO HOT-MIC WHEN OVERRIDDEN  
Automatically transmit when being overridden (without pressing PTT).

☐ CAPTURE SYSTEM AUDIO (WHEN BEING OVERRIDDEN)  
Captures audio from a selected application window.

CANCEL SAVE

- Select your microphone, headset, and speaker
  - If you do not have a speaker, set “speaker” as your headset
- Select a PTT key
  - Make sure you do not have TeamSpeak as the active window when coordinating with PTT
  - Do not set this PTT to be the same as your CRC PTT
- Input level may not work sometimes; Known bug
- Select auto hot-mic if you desire your mic to be active without needing to use PTT
  - Being overridden is the ONLY time you DO NOT have to use your PTT if you have this setting enabled

## Position and Coordination Setup (A/G 2)

Profiles

SAVE CURRENT AS NEW PROFILE

FACILITY POSITION

ZTL R20

POSITIONS COMBINED TO YOU (CALL FORWARDING)

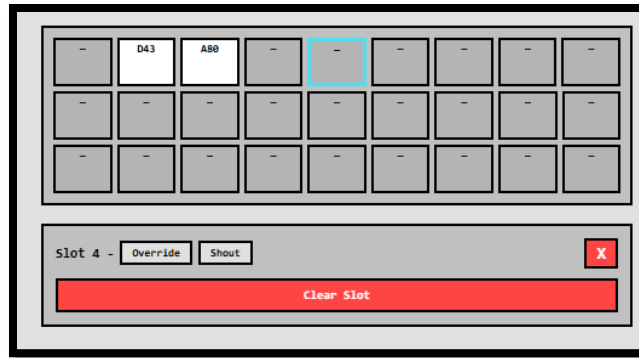
Position to assume (e.g., D02) +

SAVE POSITION SETTINGS

|    |     |     |    |    |    |    |    |    |
|----|-----|-----|----|----|----|----|----|----|
| -- | D43 | A00 | -- | -- | -- | -- | -- | -- |
| -- | --  | --  | -- | -- | -- | -- | -- | -- |
| -- | --  | --  | -- | -- | -- | -- | -- | -- |

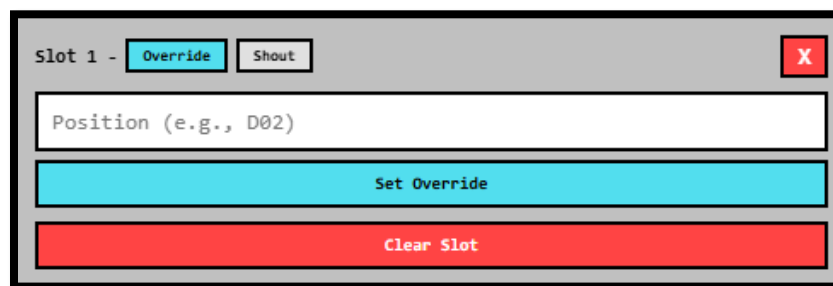
CLOSE

- Facility (usually) three letter ID that you are controlling
  - Can be numbers and/or letters
- Specific position you are controlling
  - Can be numbers and/or letters
- You may chose which positions you also are controlling for override call forwarding
  - For example, R-side (R20)  
assumes D-side (D20)
- Make sure to press “Save Position Settings” after editing Facility, Position, and/or Call Forwarding



- 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:

The screenshot shows a window titled 'Slot 4' with a grey header bar. In the header bar, there are two buttons: 'Override' (grey) and 'Shout' (cyan), and a red close button with a white 'X' on the right. Below the header bar are three text input fields: 'Line ID (e.g., 15)', 'Label (e.g., ZHU/HI)', and 'Remote Facility (e.g., ZHU)'. Below these fields are two large buttons: a cyan button labeled 'Set Shout Line' and a red button labeled 'Clear Slot'.

- 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](#)