Jim Frazier, KC5RUO, Interpretation of VARA FM PING Response and How to Deal with *No Signal* PING Response

YOUR Station	OTHER Station	Interpretation	Corrective Action
S/N VU	S/N VU	Both stations can establish and sustain VARA FM data communications with each other.	None
S/N VU	S/N VU	**OTHER** Station Audio Input Level is too HIGH.	**Back-off** Audio Input Level to approximately 1 or 2 o'clock position on the **OTHER** Station VU dashboard meter.
S/N VU	S/N VU	**OTHER** Station Audio Input Level is too LOW.	**Increase** Audio Input Level to approximately 1 or 2 o'clock position on the **OTHER** Station VU dashboard meter.
S/N VU	S/N VU	**YOUR** Station Audio Input Level is too HIGH.	**Back-off** Audio Input Level to approximately 1 or 2 o'clock position on **YOUR** Station VU dashboard meter.
S/N VU	S/N VU	**YOUR** Station Audio Input Level is too LOW.	**Increase** Audio Input Level to approximately 1 or 2 o'clock position on **YOUR** Station VU dashboard meter.
S/N VU	S/N VU	The **OTHER** Station is not calibrated.	The **OTHER** Station must initiate an Auto Tune with **YOUR** Station.
S/N VU	S/N VU	**YOUR** Station is not calibrated.	**YOUR** Station must initiate an Auto Tune with the **OTHER** Station.
S/N VU	S/N VU	The **OTHER** Station is not calibrated.	The **OTHER** Station must initiate an Auto Tune with **YOUR** Station.
S/N VU	S/N VU	**YOUR** Station is not calibrated.	**YOUR** Station must initiate an Auto Tune with the **OTHER** Station.

YOUR Station	OTHER Station	Interpretation	Corrective Action
S/N **VU**	**S/N** **VU**	The **OTHER** Station is not calibrated. **OTHER** Station Audio Input Level is too LOW.	The **OTHER** Station must initiate an Auto Tune with **YOUR** Station. **Increase** Audio Input Level to approximately 1 or 2 o'clock position on the **OTHER** Station VU dashboard meter.
S/N **VU**	**S/N** **VU**	**YOUR** Station is not calibrated. **YOUR** Station Audio Input Level is too LOW.	**YOUR** Station must initiate an Auto Tune with the **OTHER** Station. **Increase** Audio Input Level to approximately 1 or 2 o'clock position on **YOUR** Station VU dashboard meter.
S/N **VU**	**S/N** **VU**	The **OTHER** Station is not calibrated. **YOUR** Station Audio Input Level is too LOW.	The **OTHER** Station must initiate an Auto Tune with **YOUR** Station. **Increase** Audio Input Level to approximately 1 or 2 o'clock position on **YOUR** Station VU dashboard meter.*
S/N **VU**	**S/N** **VU**	**YOUR** Station is not calibrated. **OTHER** Station Audio Input Level is too LOW.	**YOUR** Station must initiate an Auto Tune with the **OTHER** Station. **Increase** Audio Input Level to approximately 1 or 2 o'clock position on the **OTHER** Station VU dashboard meter. *

YOUR Station	OTHER Station	Interpretation	Corrective Action
S/N VU	S/N VU	The **OTHER** Station is not calibrated. **YOUR** Station Audio Input Level is too HIGH.	The **OTHER** Station must initiate an Auto Tune with **YOUR** Station. **Back-off** Audio Input Level to approximately 1 or 2 o'clock position on **YOUR** Station VU dashboard meter. *
S/N VU	S/N VU	**YOUR** Station is not calibrated. **OTHER** Station Audio Input Level is too HIGH.	**YOUR** Station must initiate an Auto Tune with the **OTHER** Station. **Back-off** Audio Input Level to approximately 1 or 2 o'clock position on the **OTHER** Station VU dashboard meter. *
S/N VU	S/N VU	The **OTHER** Station is not calibrated. **YOUR** Station Audio Input Level is too LOW.	The **OTHER** Station must initiate an Auto Tune with **YOUR** Station. **Increase** Audio Input Level to approximately 1 or 2 o'clock position on **YOUR** Station VU dashboard meter. *
S/N VU	S/N VU	**YOUR** Station is not calibrated. **OTHER** Station Audio Input Level is too LOW.	**YOUR** Station must initiate an Auto Tune with the **OTHER** Station. **Increase** Audio Input Level to approximately 1 or 2 o'clock position on the **OTHER** Station VU dashboard meter. *

					* Make this audio level adjustment first, and then PING again. An **ALL GREEN** response might be achieved without doing an Auto Tune.
No Signal				How to deal with No Signal PING Response or No Signal Auto Tune Response **SEE BELOW**	

How to deal with ***No Signal*** PING Response or ***No Signal*** Auto Tune Response

Step 1	Verify the Session window indicates you are operating in the VARA FM P2P or VARA FM Winlink mode
Step 2	With your radio configured for OPEN SQUELCH, verify the Audio Input VU dashboard indicator is between 1 and 2 o'clock and then PING again.
Step 3	If ***No Signal*** annunciates again, initiate an Auto Tune with the Other Station
Step 4	If ***No Signal*** still annunciates your VARA FM TNC digital audio drive level and/or your soundcard analog audio drive level may be set too HIGH, or too LOW. If you are using a SignaLink, set the TX DIAL to the 8 o'clock position and the VARA FM TNC Drive level to -6 dB and initiate the Auto Tune again. If you are not using a SignaLink, increase or decrease the VARA FM TNC Drive Level.
Step 5	If ***No Signal*** still annunciates check your Microsoft Windows Sound Settings, i.e., Recording and Playback settings. Then re-initiate Auto Tune.
Step 6	If ***No Signal*** still annunciates verify your radio is tuned to the correct frequency and it is set to SIMPLEX Mode, and then re-initiate Auto Tune.
Step 7	If ***No Signal*** still annunciates increase the radio's transmit output power. Then re-initiate Auto Tune.
Step 8	If ***No Signal*** still annunciates check the antenna system.
Step 9	If ***No Signal*** still annunciates put an RF power meter on the output of your radio to verify you have a carrier coming out of the radio.
Step 10	If ***No Signal*** still annunciates **it is possible the distant-end station is OFF-LINE and not operational.**

IMPORTANT NOTE: If after multiple Auto Tune attempts you cannot achieve an APPROVED state or after multiple PINGs you fail to achieve an ALL GREEN S/N & VU state at both your station and the other station the most likely probable cause is simply poor connectivity between your station and the other station. A poor line-of-sight connection, excessive signal path loss, or perhaps multipath effects are the degrading the receive signal level at your station or the other station.