



CUSTOMER SUPPORT BULLETIN

Telos Zephyr - CCS Prima Compatibility

12 March, 1998

Many times Zephyr owners find they need to communicate with other codecs. This is generally not a problem. However, when needing to communicate with a CCS Prima codec, there are frequently questions as to how the Prima should be configured. The following should help you explain this to the Prima user.

Note: The exact order of options will depend on the Prima model and firmware version, however the basic settings are the same. The following directions are for Rev 23. Three-DSP Zephyr models (9100, 9101, and 9102) do not support the L2 or L3 stereo modes nor do they support the L2 2 line mono mode (Mono-128). Contact Telos Systems for information on upgrading to the 5 DSP configuration should you need these modes. Older Zephyrs may not support Layer 2. If yours does not, and you would like information on upgrading it to do so, call Telos Systems Customer Support.

Older Primas may not support Layer 3. Those that do have serial numbers beginning with "2". Prima presets for both Layer 3 and Layer 2 use 48kHz. Telos recommends 32kHz sample rate for Layer 3.

Procedure

- 1) Turn on the Prima
- 2) Repeatedly press the -> button until you see "Decoder"
- 3) Press <enter>
- 4) Select each decoder menu and set as follows (Use the information from the Zephyr's settings to determine how these are to be set):

"Indep" — Set to "yes" and press <enter>

"Line fmt" — Set to "1 Ln" for single line "L2 Mono" or "L3 Dual/Mono" modes (enter <1> then <enter> when prompted "enter lines"). Set to "CCS 2 Ln" for other modes (Enter <1> <2> then <enter> when prompted to "enter lines").

"Bit rate" — (Choose one of the following):

Set to "56" for single call @ 56Kbps connection to Z (Zephyr transmit mode set to "L2 Mono" or "L3 Dual/Mono")

Set to "64" for single call @ 64Kbps connection to Z (Zephyr transmit mode set to "L2 Mono" or "L3 Dual/Mono")

Set to "112" for 2 calls @ 56 Kbps connection to Z (Zephyr transmit set to any other mode)

Set to "128" for 2 calls @ 64 Kbps connection to Z (Zephyr transmit set to any other mode)
Press <Enter>

Choose "More" and press <enter> and then set the following:

"Algo Mode" — Set to "ISO" and press <enter> NOTE: "Algo Mode" may be called "Mode", and may be located in another menu
"Algorithm" — Set to "MPEGL2" and press <enter>
Push <^> repeatedly until you get to the main menu.

6) Push <- > button and then choose "Encoder" and set each option as follows:

"Bit rate" (Choose from one of the following):
Set to "56" for single call @ 56kbps connection to Z (For Prima's 1 line encoder modes)
Set to "64" for single call @ 64kbps connection to Z (For Prima's 1 line encoder modes)
Set to "112" for 2 calls @ 56 kbps connection to Z (For Prima's 2 line encoder modes)
Set to "128" for 2 calls @ 64 kbps connection to Z (For Prima's 2 line encoder modes)
Push <enter>

"Algorithm" — Set to "MPEGL2" or "MPEG3" and press <enter>

"Algo Mode" Choose from the following based on your application, then push <enter>: Zephyr supports all choices. For best fidelity Telos Recommends using Mono (2 line) or L3 Joint stereo or L2 Joint Stereo.

- "Mono"
- "Dual Mono"
- "Joint Stereo"
- "Stereo"

"Line fmt" — Set to "1 Ln" for single line "L2 Mono" or "L3 Dual/Mono" modes. Enter <1> then <enter> when prompted "enter lines". Set to "CCS 2 Ln" for other modes. Enter <1> <2> then <enter> when prompted to "enter lines".

"Sample rate" — Set to "48" for Layer 2, "32" for Layer 3 or "16" for G.722 then press <enter>

SHORTCUTS

Prima's Rev 23 or later have the following "Quick Start" options, which can be used when communicating with the Zephyr:

- Entry 6 G.722_56:QS — G.722 Transmit and Receive at 56kbps. Zephyr should be set to Xmt G.722; Rcv G.722; Rate 56kbps (32 or 48 kHz sample rate)
- Entry 7 G.722_64:QS — G.722 Transmit and Receive at 64kbps. Zephyr should be set to Xmt G.722; Rcv G.722; Rate 64kbps (32 or 48 kHz sample rate)

- Entry 24 Zephyr/56K:QS — MPEG Layer 2 Transmit and Receive; one line at 56kbps; 48kHz sample rate; Independent. Zephyr should be set to Xmt L2 Mono; Rcv L2; Rate 56kbps; Sample rate 48 kHz
- Entry 25 Zephyr/64K:QS — MPEG Layer 2 Transmit and Receive; One line at 64kbps; 48kHz sample rate; independent. Zephyr should be set to Xmt L2 Mono; Rcv L2; Rate 64kbps; Sample rate 48 kHz
- Entry 26 Zephyr/112K:QS — MPEG Layer 2 J-Stereo Transmit and Layer 2 Receive; Two lines @ 56kbps each; 48kHz sample rate; independent. Zephyr should be set to Xmt L2 Mono-128, L2 J-Stereo, or L2 Dual ; Rcv L2; Rate 56kbps; Sample rate 48 kHz
- Entry 27 Zephyr/128K:QS — MPEG Layer 2 J-Stereo Transmit and Layer 2 Receive; Two lines @ 64kbps each; 48kHz sample rate. Zephyr should be set to Xmt L2 Mono-128, L2 J-Stereo, or L2 Dual ; Rcv L2; Rate 56kbps; Sample rate 48 kHz
- Entry 30 Layer 3/56:QS — MPEG Layer 3 Mono Transmit and Receive; 1 line at 56kbps; 48kHz. Zephyr should be set to Xmt L3 Dual/Mono; Rcv L3 Mono; Rate 56kbps; Sample rate 48kHz
- Entry 31 Layer 3/64:QS — MPEG Layer 3 Mono Transmit and Receive; 1 line at 64kbps; 48kHz. Zephyr should be set to Xmt L3 Dual/Mono; Rcv L3 Mono; Rate 64kbps; Sample rate 48kHz

NOTE: There are no Prima Quick Starts for 32kHz operation in Layer 3. For the best fidelity in Layer 3, Telos Systems recommends that Prima manually be set to 32 kHz after the Quick Start is loaded.

Thank you for your support of Telos Systems. For more information see our web site www.zephyr.com or email support@telos-systems.com, or europe@telos-systems.com.