

Timewave DSP-59Y Operation Reference Card

All Modes

Feature	Required Actions	Description/Notes
Change Primary Operating Mode (Voice, CW, Data)	Press [Mode]	Each time [Mode] is press, the DSP-59Y the operating mode changes to the next mode.
Select Setup modes	Press [Shift+Mode]	Press [Shift+Mode] for Setup mode.
Cancel [Shift] action	Press [Shift] or wait three seconds	Pressing [Shift] twice in a row with no other button pressed cancels [Shift] . By waiting three second without any other action, [Shift] will time out.
Store a setting in memory	Press [Shift+Rcl/Sto+{#}] # = memory number (1 - 6)	Stores a common operating configuration to memory for easy recall. Stores every setting except audio gain control position. Six memories available.
Recall a stored setting	Press [Rcl/Sto+{#}] # = memory number (1 - 6)	Recalls a common operating configuration from memory. Recalls all settings except audio gain control position. Six memories available.
Restore previous setting	Press [Rcl/Sto+Rcl/Sto]	Recalls previous setting before the memory recall. Allows quick toggling between two operating settings.
Change power-up mode	Press [Shift+Rcl/Sto+Mode]	Stores the operating mode and channel that you wish to power up with. Can be changed at any time by repeating process.
Bypass all settings	Press [Byp/AGC]	Actual operation varies with mode of operation. Generally routes signal past all signal processing.
Turn AGC on/off	Press [Shift+Byp/AGC]	Optimizes signal levels for best filter performance and enhances listening by minimizing audible signal level variation.
Enable random noise reduction	Press [NR]	An adaptive multi-tone filter that can remove multiple tones simultaneously.

Voice Mode

Feature	Required Actions	Description/Notes
Adjust high pass filter	Press Tune knob to set Tune knob indicator pointing left. Turn Tune knob to select value.	By turning the Tune knob with the tune indicator pointing left, you can adjust the high pass filter from 100 Hz to 1000 Hz
Adjust low pass filter	Press Tune knob to set Tune knob indicator pointing right. Turn Tune knob to select value.	By turning the middle knob with the tune indicator pointing right, you can adjust the low pass filter from 1000 Hz to 5000 Hz
Enable random noise reduction	Press [NR]	Can be very effective in reducing offending background noise.
Adjust aggressiveness of noise reduction	Press [Shift+NR] , turn left knob to adjust. Press left knob to accept.	The aggressiveness can be adjusted from one to nine with default value of five. The higher the value, the greater the noise reduction.
Turn AM line noise filter on/off	Press [Function] . LED illuminated indicates on.	This does not work on SSB signals. It is designed primarily for AM signals.
Eliminate heterodyne tones	Press [Tone] . LED illuminated indicates on.	The automatic filter can virtually eliminate multiple heterodynes and reduce CW and FSK data signals.
Turn on/adjust notch filter	Press [Shift+Tone] . Turn Tune knob to change Notch Center Frequency. Press Tune knob to change indicated function of knob. Rotate Tune knob to adjust Notch Bandwidth. Accept by pressing [Ent/Clr] .	Rotate Tune knob until unwanted signal disappears. Press Tune knob to change indicated function. Rotate Tune knob to adjust width of filter. The lower the value the narrower the filter. Filter widths 1 - 5 are single notch filters. Filter widths 6 - 9 are dual notch filters for data signals. As a reminder, a S or D will be displayed.
Turn off notch filter	Press [Shift+Tone] or press [Shift+Ent/Clr] .	Removes notch filter after it is no longer needed.
Change freq of AM line noise filter	Press [Shift+Mode] . Turn Tune knob until Voice appears. Press [Ent/Clr] to accept. Turn Tune knob until AM Line Noise appears. Press [Ent/Clr] to accept. Turn Tune knob until desired value is viewed. Press [Ent/Clr] to accept, press [Shift+Ent/Clr] to cancel and escape.	You can select between 50 and 60 cycles. Your choice will depend upon the frequency of the local AC electrical power.

CW Mode

Feature	Required Actions	Description/Notes
Adjust center frequency	Press Tune knob to set Tune knob indicator pointing left. Turn Tune knob to select value.	By turning the Tune knob with the tune indicator pointing left, you can adjust the center frequency from 200 to 2100 Hz.
Adjust CW bandwidth	Press Tune knob to set Tune knob indicator pointing right. Turn Tune knob to select value.	By turning the middle knob with the tune indicator pointing right, you can adjust the CW bandwidth from 10 Hz to 600 Hz.
Enable random noise reduction	Press [NR]	Can be very effective in reducing offending background noise.
Turn on/adjust notch filter	Press [Shift+Tone] . Turn Tune knob to change Notch Center Frequency. Press Tune knob to set Tune knob indicator pointing right. Rotate Tune knob to adjust notch bandwidth. Accept by pressing [Ent/Clr] .	Rotate left knob until unwanted signal disappears. Rotate middle knob to adjust bandwidth of filter. The lower the value the narrower the filter.
Turn off notch filter	Press [Shift+Tone] or press [Shift+Ent/Clr] .	Removes notch filter after it is no longer needed.
Turn CW marker tone on/off	Press [Tone] . Turn Tune knob to adjust marker tone frequency.	The tone is generated at the bandpass filter center frequency. Use the marker to center a wide bandpass filter (300-600 Hz) on a signal by matching the marker tone pitch to the signal pitch by ear.
Enable CW tone pitch shift	Press [Shift+Function] . Rotate Tune knob to shift output CW pitch you hear. Press Tune knob to set Tune Knob indicator pointing right. Turn the Tune knob to adjust the incoming CW pitch. Press [Shift+Function] or press [Ent/Clr] to accept the pitch shift..	Shift CW tone pitch to another frequency. Works well with receivers that have non-adjustable, relatively high pitch CW tones.
Disable CW tone pitch shift	Press [Shift+Function] . Press [Shift+Ent/Clr] to disable the pitch shift..	Return CW tone pitch to received tone.

Data Mode

Feature	Required Actions	Description/Notes
Select Data tuning display	Press [Shift+Function] .	
Adjust data carrier detect (DCD)	Press [Shift+Function] to turn data tuning display on. Press Tune knob to set Tune knob pointing right. Turn Tune knob [DCD] to clean error free copy.	DCD value is displayed in the lower left of the data tuning display. Range is 0 - 9. The greater the value, the higher the DCD threshold. Setting the DCD to "0" (zero) turns DCD off.
Enable random noise reduction	Press [NR]	Not designed for data but does work for some conditions.
Enable RTTY FSK test signals	Press [Tone] .	If baud rate in non burst data mode is 75 baud or less, a diddle tone is activated. If baud rate is 100 baud or higher, a space-mark reference calibration tone is enabled.
Enable RTTY FSK test signals	Press [Shift+Tone] .	If baud rate in non burst data mode is 75 baud or less, a "RYRY" test tone is activated. The signal is centered at 2210 Hz with a frequency shift of +/- 85 Hz. Baud rate is determined by RTTY parameter settings. If baud rate is 100 baud or higher, no tone is enabled.
RTTY Modem	Always on in RTTY operation	See <i>Section 1</i> of <i>DSP-59Y Operating Manual</i> for proper connection information.
RTTY Remodulator	Press [Function] in RTTY operation	Sends regenerated RTTY signal to line output. You can still monitor the incoming RTTY tones through the speaker/headphone.