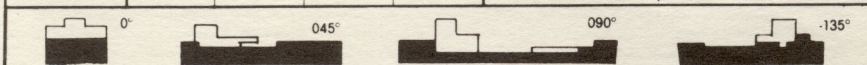


KEYBOARD COMMANDS

COMMAND	C-64	APPLE	ATARI XL / XE	IBM, ATARI ST, AMIGA	DESCRIPTION
LOCATIONS					
CONNING TOWER	SP. BAR	SP. BAR	SP. BAR	SP. BAR	Return to the conning tower menu screen.
MAP	F1	SHIFT 1	SHIFT 1	F1	Select the Maps and Charts battle station. If you are already at Maps and Charts, this will re-center the map on your sub.
BRIDGE	F3	SHIFT 2	SHIFT 2	F2	Select the Bridge battle station (only possible when the sub is on the surface).
SCOPE	F5	SHIFT 3	SHIFT 3	F3	Select the Periscope/Binoculars battle station screen (only possible if sub is at periscope depth or on the surface).
GAUGES	F7	SHIFT 4	SHIFT 4	F4	Select the Gauges and Instruments battle station screen.
DAMAGE	F2	SHIFT 5	SHIFT 5	F5	Select the Damage Reports battle station screen.
LOG	F4	SHIFT 6	SHIFT 6	F6	Display the Quartermaster's Log for the current patrol.
PATROL/END	F8	SHIFT 8	SHIFT 8	F8	Return to the War Patrol Navigation screen to search for another convoy. This ends the game if playing a Convoy Action or Training scenario.
SUBMARINE CONTROLS					
PERISCOPE	P	P	P	P	Raise/Lower periscope. This command also sets the visual bearing to be the same as your sub's heading — you will be looking straight ahead.
THROTTLE	0-4	0-4	0-4	0-4	Throttle settings: all stop, 1/3, 2/3, full, and flank speeds.
REVERSE	R	R	R	R	Reverse the engines. Note that the turning effect of the rudders is reversed if the sub is proceeding in reverse.
DIVE	D	D	D	D	Causes sub to dive. Cancel this command by pressing RETURN.
SURFACE	S	S	S	S	Causes sub to rise toward surface. Cancel this command by pressing RETURN.
LEFT	↓ ↑	←	← *	←	Left rudder. Press again for Full Left Rudder. To cancel press RETURN.
RIGHT	→	→	→ *	→	Right rudder. Press again for Full Right rudder. To cancel press RETURN.
CANCEL	RETURN	RETURN	RETURN	RETURN	Cancel all turn and dive commands.
EMERGENCY	CTRL. E	CTRL. E	SHIFT E	CTRL. E	Blow emergency tanks to halt uncontrolled dive. (Can only be used once per engagement.)
COMBAT CONTROLS					
IDENTIFY	I	I	I	I	Identify target in crosshairs on scope.
TORPEDO	T	T	T	T	Fire torpedo. Bow or aft tubes will be selected automatically depending on which faces the target more directly.
GUN	G	G	G	G	Fire the 4-inch deck gun.
UP 25	+	+	>	+	Add 25 yards to the deck gun range deflection.
DOWN 25	-	-	<	-	Subtract 25 yards from the deck gun range deflection.
ROTATE SCOPE LEFT	JOYSTICK CMND.	JOYSTICK CMND.	JOYSTICK CMND.	< (SHIFT.)	Rotate periscope/binoculars or bridge view to the left.
ROTATE SCOPE RIGHT	NO KEY CMND.	NO KEY CMND.	NO KEY CMND.	> (SHIFT.)	Rotate periscope/binoculars or bridge view to the right.
AOB	A	A	A	A	Enter Angle-on-Bow estimate. AOB is entered in degrees by holding the joystick left or right. Press the fire button to enter the estimate. Use positive numbers for Starboard, negative numbers for Port, e.g., 45 degrees Port is -045.
RELEASE DEBRIS	?	?	?	?	Release debris and oil which may convince the enemy your sub has sunk.
TIME AND SCALE CONTROLS					
WAIT	W	W	W	W	Pause the simulation — press any key to continue. You may also pause by selecting the Conning Tower screen.
FASTER	F	F	F	F	Increase the time scale to cause the simulation to proceed more rapidly.
NORMAL	N	N	N	N	Return to normal time scale.
ZOOM	Z	Z	Z	Z	Expand the situation map display to take a closer look at nearby ships and terrain.
UN-ZOOM	X	X	X	X	Compress the situation map display to get a wider view of ship locations and land areas.
					

*It is not necessary to press control key for Atari.



TIPS TO NEW CAPTAINS

Before you take your boat to sea go over these helpful hints.

Strategic Controls: The War Patrol

When you select a "War Patrol" scenario you start out in a special form of play: the 'patrol' across the Pacific. Your ship is a tiny dot near your starting port of Freemantle on Exmouth Gulf, Brisbane, or Midway (see the map on pages 24 and 25 of the manual).

Joystick (or Cursor Keys) = Patrol Movement: These move your ship around the Pacific ocean.

Fire Button (or Keypress) = Patrol Exit: This exits the war patrol and sends you directly to the Map battle station (you bypass the conning tower and zoom directly to the Navigation Map).

If you exit while an enemy convoy is nearby (red ocean, screen border or text message) but you can't see them on the maps, try scanning the entire horizon yourself using the binoculars or periscope.

If you exit when you're at a home port the scenario is over.

F8 (IBM/C64) or Shift 8 (Atari/Apple) = Return to Patrol: If you are *not* on the war patrol screen, this returns you to it. (Warning: in Practice or Convoy scenarios, which have no strategic war patrol, this key ends the game instead.)

While you're patrolling... Time moves extremely fast — the light and dark blue changes to the ocean (just the border in some versions) represents the change from day to night (exception: in the Apple version a 24-hour clock is displayed instead of color changes).

Finding the enemy: When the ocean turns red (just the screen border in some versions, or just a text message in others) you've spotted a convoy — exit the war patrol if you want to engage in battle.

Getting home: When the ocean turns green (just the screen border in some versions, or just a text message in others), you've touched a friendly port — exit the war patrol if you want to end the patrol and record your score in the Submariners' Hall of Fame.

Important Note: NO OTHER CONTROLS function on the war patrol screen. To make any other controls work you must exit the war patrol.

The Conning Tower

The Conning Tower is a visual reminder of which battle stations you can visit.

Space Bar always sends you to the Conning Tower. (Exception: on the war patrol map you'll bypass the Conning Tower and go directly to the Maps battle station.)

Joystick Controls let you move around the Conning Tower. Pressing the joystick button sends you to that battle station, where you can observe events and perhaps issue orders.

Function Keys (Shift-Number Keys in some versions) immediately send you to a battle station. You must use these in the IBM keyboard-only version.

Important: In most computer versions the battle controls do NOT work in the Conning Tower per se, you must move to a specific battle station to operate your submarine's controls.

Battle Stations & Battle Controls

There are five battle stations where the various battle controls are active. The controls active at any one station are only those appropriate to that station. See pages 15 and 16 in your operations manual for a summary of these controls.

The battle stations are:

Map: Here you can zoom and unzoom between three map scales. In some versions the entire Pacific Map is available for reference. On the map you see what your lookouts, periscope (if up) and sonar detect. Sometimes there are Japanese out there, but you haven't detected them yet! Your lookouts aren't always reliable — it's wise to look around the horizon yourself with the periscope or binoculars.

Bridge: This is a nice place on a sunny day or warm night, and gives you a panoramic view. However, most Captains prefer to fight their ships from the Periscope/Binoculars station.

Periscope/Binoculars: You automatically get binoculars when you're on the surface, periscope if you're submerged. Remember that the periscope won't work if it's lowered, it's at night, or you're below 44 feet depth.

Don't forget that your ship might be sailing on a course quite different from the direction you're viewing on this screen.

TORPEDO or GUNFIRE orders should be given from this screen.

Gauges: This gives a detailed readout of your submarine (see page 13 in the manual for a full explanation of all the gauges).

Damage: If you're under fire or being depth charged, parts of your ship may stop working. Check this station to see what's out of action.

Special Controls

These controls are only available in SOME versions of Silent Service. Other versions do not have these options due to machine limitations.

V Key = Volume Control: In some versions this key is a three-way toggle that either turns off just the engine sound, all sounds, or restores all sounds.

Key = Software Concealment: In some versions this key displays a bogus "Processing Please Wait" message and locks out the keyboard until this key is pressed again. If you're playing at the office and the boss walks by, this key can be very handy!

IBM PC Periscope/Binoculars Rotation: In the IBM PC version with keyboard control, rotate the view by pressing the " " or " " keys. Holding down "shift" as well (the "<" and ">" keys) accelerates the rotation.