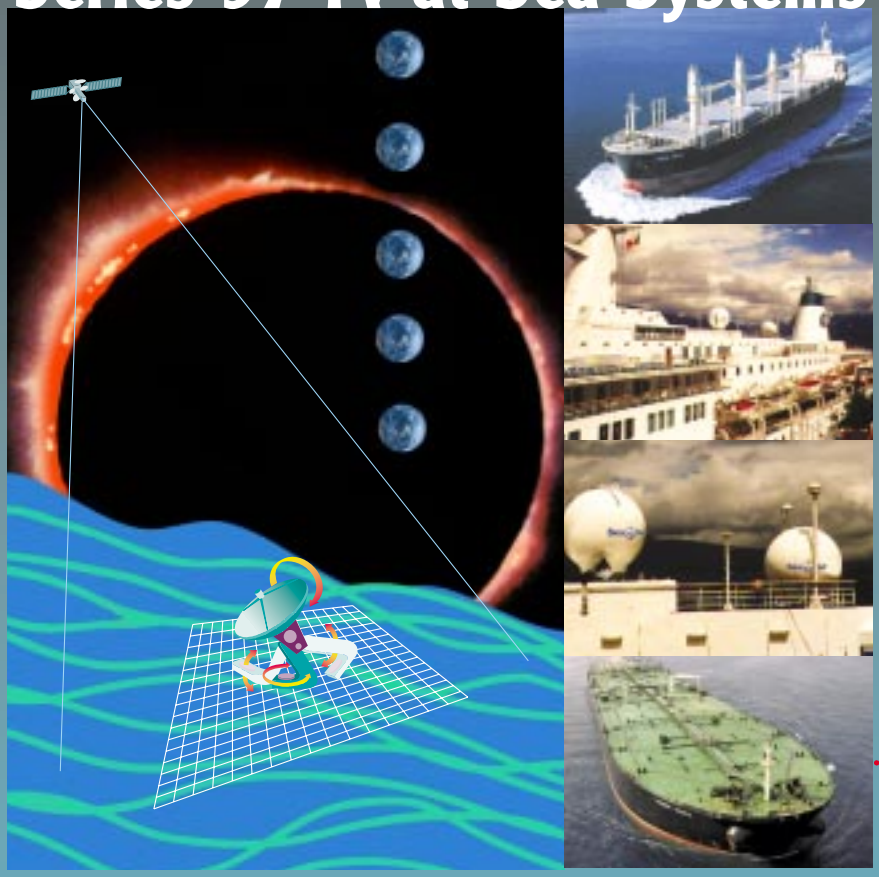
Setting the standard for excellence

Series 97 TV-at-Sea Systems



Sea Tel®

Marine Stabilized Antenna Systems

Sea Tel's Series 97 three-axis satellite tracking system gives you...

More reliable TV reception even in storm conditions

Bad weather? Extreme ship motion? Stabilization and tracking accuracy is better than 0.2° even when the ship is pitching 15° or rolling 25°. It is a difference that lets you enjoy uninterrupted TV reception whatever the elements are throwing at you.

Reception that compares with shore-based installations

With signal loss due to antenna movement reduced to nearly zero, the performance of a Series 97 TV-at-Sea stabilized antenna is comparable to that of a fixed antenna on shore! As a result, satellite TV reception is surprisingly reliable even in the fringe areas of the signal.

A totally new level of reliability means systems better able to cope with the hazards of life at sea than any other on the market...

Our systems are designed and built to pass the U.S. Navy's tests for vibration, shock and protection against RFI and EMI emissions

Life at sea can be rough. Every model of our TV-at-Sea Series 97 systems meets Navy MIL-STD-901D GRADE A shock standards and MIL-STD-461 EMI & RFI standards (including 220V/M). And, when it comes to the ever-present vibration issue, they actually *exceed* Navy MIL-STD-167-1 standards!

Fewer parts means less to go wrong

Our Series 97 antenna systems are more accurate, faster and reliable that anything else on the market today for a very simple reason: they incorporate the latest in modern solid state electronics.

360° of uninterrupted coverage

Series 97 TV-at-Sea systems let you say "goodbye" to cable-unwrap interruption. You get unlimited azimuth turning for undisturbed TV from horizon to horizon.

Faster response

Our new generation systems are fast on their feet...to make sure that TV picture stays on the screen no matter what! The antenna's response to ship motion can be as fast as 90°/sec.

There is no better antenna system made for TV-at-Sea.

The best performance ever. No increase in price!

Look to Sea Tel's new generation of stabilized antenna systems whenever you must have the clearest, sharpest entertainment, news, weather and sports for your crew or passengers – whatever size or type your vessel ... wherever you sail.

Which antenna is best for your ship? Sea Tel lets you choose from three basic models in eight configurations.

A basic system for coastal operation, the Model 8897. This system is available for both C-band and Ku-band. The C-band version lets you receive TV from C-band satellites including the Asiasat, Palapa, and Panamsat series of satellites in the Far East and Panamsat in the Middle East and Africa. The Ku-band version is optimized for service in European and Asian waters, and anywhere Ku-band is available.

The systems for maximum performance in limited space, the Models 9497 & 12097.

These systems operate in many areas around the globe and are compatible with all known and planned TV satellites. They are extremely sensitive systems especially with the enhanced pointing accuracy, stability and reliability made possible by Sea Tel's patented, 3-axis stabilization technology. Choose one of these antennas when you want the best TV coverage you can get but space prohibits installation of our Model 14497 antenna.

When only the best will do, the Model 14497. Our top-of-the-line TV-at-Sea system has always been the choice for the user who needs the largest possible offshore operating area and compatibility with all known and planned satellites.

With the major tracking, reliability and stability improvements introduced this year, it is more than ever the antenna system of choice.

A comprehensive range of configurations. All of these systems are available in C-band and Ku-band configurations. The Models 8897, 9497, 12097 and 14497 are also available in a "dual band" configuration that permits the same antenna to be used for both C-band and Ku-band reception.

All this plus a sophisticated automated controller that lets you bring the TV shows you want on board fast — and easy — from anywhere on the ship.

All of Sea Tel's new-generation systems come with a tracking antenna controller designed for efficiency and speed. Sea Tel's proprietary PCDAC RAM Software package allows the controller to be operated from any Windows®95, Windows®98, Windows®2000 and NT compatible PC.

Sea Tel has made selecting the right satellite very easy. Simply "point and click" on the satellite name and the controller, with the help of the built-in GPS, immediately takes over to point the antenna right at the satellite and start tracking. If the satellite isn't acquired immediately, the controller automatically runs a programmed sweep of the sky until the signal is found and acquired.

When it comes to actually watching the TV, it's even easier. TV users select their favorite shows – just like at home. Because it's a Sea Tel, whatever TV programming they've chosen stays locked-in no matter what the weather is doing outside.

	Model 8897	Model 9497	Model 12097	Model 14497

System Performance Specifications

Antenna Gain				
C-band	36.0 dB @4.0 GHz	38.1 dB @4.0 GHz	39.5 dB @4.0 GHz	41.5 dB @4.0 GHz
Ku-band	41.1 dB @11.25 GHz	47.5 dB @11.25 GHz	48.2 dB @11.25 GHz	50.5 dB @11.25 GHz
Minimum E.I.R.P.				
C-band	32.6-33.5 dB minimum	30-31 dBw	29-30 dBw	28 dBw
Ku-band	36.5-37.5 dB minimum	35-36 dBw	35-36 dBw	32-33 dBw
Type of stabilization	3-axis servo for all systems			
Roll & Pitch stabilization	+/-25 degrees roll and +/-15 degrees pitch for all systems			
Turn response rate	No practical limits for all systems. (Restricted only by ship's gyrocompass response rate.)			
Azimuth range	Unlimited azimuth turning for all systems.			
Elevation range	0 to 90 degrees for all systems			

Above Decks Equipment

Radome Baseframe Assembly	Galvanized steel. Optional aluminum.	Galvanized steel. Optional aluminum.	Galvanized steel. Optional aluminum.	Galvanized steel. Optional aluminum.
Radome Size	2.8 m/ 110 in.	3.2 m/ 126 in.	3.7 m/ 144 in.	4.2m/ 168 in.
Antenna diameter	2.05 meter/ 82 inch	2.4 meter/ 96 inch	3.0 meter/ 120 inch	3.7 meter/ 144 inch
Reception	Dual C-band, Dual Ku-band, Dual C-band switched with Dual or Quad Ku-band, or simultaneous Dual C and Dual or Quad Ku-band capabilities.			
RF Electronics	The proper choice of LNBC's will be provided to match the ship's cruising area and satellite receiver selection.			
Ku-band	The entire frequency range for Ku-band satellite television is 10.7 to 12.75 GHz. LNBs covering this entire frequency band are available. However, this does not guarantee coverage in all areas. Proper polarization is also an issue as both linear polarizations (horizontal and vertical) and circular polarizations (left-hand and right-hand) are used, and one configuration is not compatible with the other.			
C-band	The C-band frequency range is 3.7 to 4.2 GHz worldwide. Sea Tel TV-at-Sea systems are delivered with C-band LNBC noise temperatures of 15 to 25 degrees K. The IF frequency in all cases is 950-1450 MHz.			

Below Decks Equipment

- Sea Tel Model TAC-92 antenna control unit with Trimble GPS interface, internal tracking receiver. LNB power with 13/18V switch is included. Feed assembly skew control is provided. Universal gyrocompass interface is standard. System voltage is 115 or 230VAC, 50/60 Hz, single phase.
- GPS engine for antenna control unit
- CE marked
- Installation & Operation manuals

Sea Tel is ISO 9001 certified by NSAI

More installed systems around the world than anyone!

Sea Tel®

Look to the leader. Look to Sea Tel.

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