

FURUNO

SCX21 FAQ

Q How can the SCX21 be mounted?

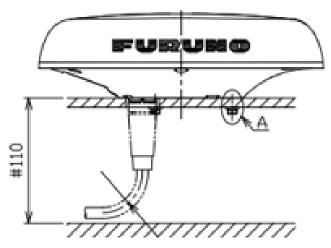
The SCX21 comes standard with a pole mount kit. This kit supports a 1x14 Standard Marine Thread (same as used with VHF antennas).



Optional mast mount kit is also available. Part # 001-556-240-00. This kit is used in combination with the pole mount kit.



The SCX21 can also be surface mounted. Please see the installation manual for full details.



Q What are the physical dimensions of the SCX21?

3"H x 8"W x 10"L (without pole mount attachment). 2.2lbs

Q What type of connector does the SCX21 use?

The SCX21 uses a 16pin proprietary connector.

Q What connection cable is the SCX21 supplied with?

The SCX21 is supplied with a 15-meter serial data/power pigtail cable. A 30-meter cable is optional. Part # 001-555-570.

Q How many I/O ports does the SCX21 have?

The SCX21 has one Three (3) NMEA0183 ports. Two (2) NMEA0183 input ports, and one PPS port for WASSP.

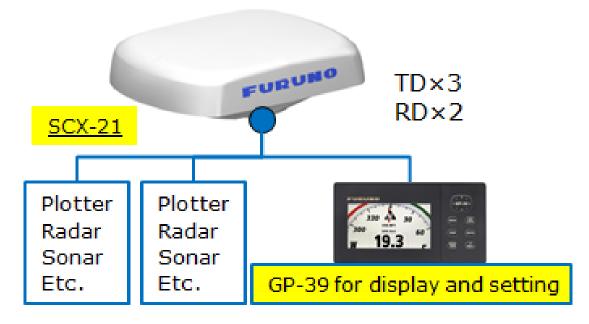
Q What voltage can the SCX21 operate from?

The operating voltage of the SCX21 is 12vdc to 24vdc.

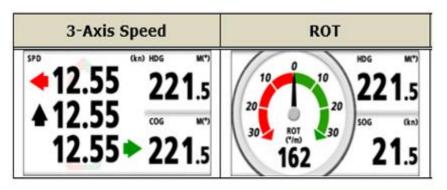
Q What NMEA0183 sentences does the SCX21 output/Input?

SCX-21:	3 Ports NMEA0183, Tx 3 Ch, Rx 2 Ch
	1 Port PPS, RS-485, rising edge detecting
Data Sentences	
Input:	AAM*, APB*, BOD*, BWC*, BWR*, RMB*, TLL*, XTE*
Output:	AAM*, APB*, BOD*, BWC*, BWR*, DTM, GGA, GLL, GNS, GSA, GSV,
	HDG, HDT, HRM, POS, RMB*, RMC, ROT, THS, TLL*, VBW, VTG, XDR,
	XTE*, ZDA
P Sentences	GPatt, GPhve, GPimu, pidat, SDmrk*, GPmsv, hdcom
	*: GP-39 REQUIRED

Q Sample connection diagram.



Q When the GP39 is connected to the SCX21, what additional displays are available on the GP39?



	HDG	Pitch and Roll
	The second	ROLL HEAVE PITCH 30 -30 - 9 30 -
1	N 300 330	N 🎢 🗄 🚝
100	HDG M(*)	
240		-30 30 .gl .30
		● 9.0° +3.3ft + 5.

Q Does the SCX21 output Heave information for my Furuno Sounder?

Yes, the SCX21 outputs Heave along with pitch and roll.

Q What is the update rate of the SCX21 position/heading information?

The SCX21 updates position and heading at 10hz.

Q Can the output rate be changed and or individual sentences turned off? Yes. Sentence output rates can be individually changed or turned off completely using a connected GP39, or via a PC running Tool software.

Q Is the SCX21 compatible with the TZtouch2/3 sensor management menu?

No. TZT2/3 Sensor management is done over the NMEA2000 bus. The SCX21 is not a NMEA2000 device.

Q Is the SCX21 affected by GPS blockage and or multipath?

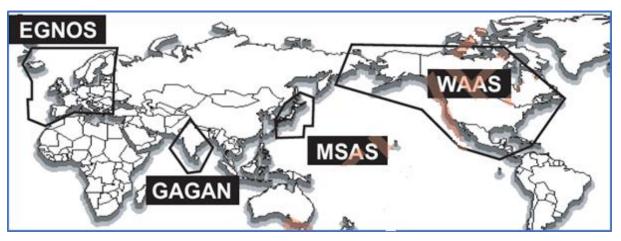
Any GPS sensor or satellite heading sensor can be affected by blockage and or multipath. The SCX21 decreases these affects by using 4 internal GNSS antennas creating 6 baselines, the most currently available on the market, for measurement. While the SCX21 can use all 6 baselines for heading, it does not have to. It can calculate heading using only two baselines. The chance that all 6 baselines would be affected by multipath is decreased. This makes the SCX21 much more resistant to these issues.

Q What satellite systems is the SCX21 compatible with?

The SCX20 is compatible with GPS, Galileo (EU), GLONASS (Russia), and QZSS (Japan and Oceania). The SCX20 will track multiple GNSS Satellite Systems for heading calculation.

Q Is the SCX21 compatible with any SBAS systems?

The SCX21 is compatible with the following **S**atellite **B**ased **A**ugmentation **S**ystems.



Q How can offsets and changes be made to the SCX21?

Offsets and changes can be made to the SCX21 via a GP39, or by a PC running SCX20 Tool software. Slight heading corrections can also be made by physically adjusting (port or starboard) the SCX21 antenna. The PC Tool software can also monitor the status of the SCX21, such as condition, signal reception and blockage condition of all the antennas.

Q How is the SCX21 connected when used with the PC Tool software?

FURUNO SCX-21 Base color Stripe color Power Supply 12-24VDC Equipment DC_P_IN Red No Stripe DC M IN Black No Stripe RD-H White TD1-A No Stripe RD-C Blue No Stripe TD-A 5 Yellow No Stripe TD-B 6 RD1-C Light Green No Stripe 7 White Orange Equipment 8 TD2-B Blue Orange RD-9 TD3-A White Gray RD+ 10 Gray (0000) TD-11 Gray Yellow US8 TD+ 12 RD3-C Light Green Gray 0 13 PPS(+) No Stripe Brown 14 Purple No Stripe USB-RS422/485 Converter 15 Black 16 Tube

A PC is connected to either Port 1 or 3 using a USB 422/485 converter.

Q Is the SCX21 compatible with the IF-NMEASC?

No. The SCX21 is not compatible with the IF-NMEASC. However, you could use the SCX21 to replace an SC30/IF-NMEASC installation.

Q What options are available for the SCX21?

Options include mast mount kit, Bird repellents, Snow cover kit, GP39. For a complete list of available options, please visit the accessories page of the SCX21 on the Furuno USA website.

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