

Trawl Sonar

Specifications

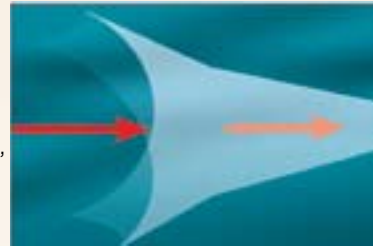
TRAWL CURRENT DIRECTION:

Equipped with three sensors, the TCS780 headrope unit (sled) is able to detect the direction and flow of the current at the headrope. Trawl efficiency is achieved when the current is perpendicular to the mouth of the net. The current direction indicator on the TCS780 trawl system gives the essential information to adjust the net for optimum fish catch. Positioning the net ahead of fish that swim with the current will fill the net much faster reducing tow time and fuel consumed.



TRAWL SPEED:

Current at fishing depth can be different than current at the surface. By monitoring the water flow at the mouth of the net, the current vessel speed can be set to catch the fish that might be lost, saving fuel as well. Both trawl speed and current direction information are sent to the vessel through the net sounder cable, a reliable link unaffected by depth and water conditions.



INNER-NET SPEED:

The WESMAR INS 85 inner net speed sensor is a new sensor that measures the water speed inside the net and communicates acoustically with the TCS 780 sled. Typically the inner-net sensor is installed inside the intermediate, close to the codend. Water should flow smoothly through the net taking the fish with it to the codend. If the water flow slows because of the water blockage or the net being filled with fish, the fish can swim out and escape. The WESMAR INS 85 inner net speed sensor will sense the change in the water flow signaling the skipper it is time to haul back.



TCS780 HEADROPE UNIT (SLED)

Working Depth: 1800m
Frequency: 110kHz Forward Scan, 8.5 x 8.5 degrees
110kHz Downsounder, 28 x 28 degrees
180kHz Profile, 4 x 30 degrees
OR: 300kHz Profile, 2.3 x 25 degrees

Stabilizer: Forward Scan +/- 30 degrees
Trawl Current Direction: Relative to net opening
Trawl Speed: 0.5 to 9.9 knots
Inner-Net Speed: 0.5 to 9.9 knots
Catch Sensors: 1 to 6 Wesmar sensors, 1 to 4 other sensors
Depth Sensor: Meter, Fathom, Feet
Temperature: +0.1 degree Centigrade
Weight: 65lbs, 29.5 kg dry; 20.9 lbs, 9.5 kg wet

TCS380 HEADROPE UNIT (SLED)

1000m
N/A
200kHz Down Sounder, 28 x 28 degrees
300kHz Profile, 4 x 30 degrees
N/A
N/A

Relative to net opening
0.5 to 9.9 knots
0.5 to 9.9 knots
1 to 6 Wesmar sensors, 1 to 4 other sensors
Meter, Fathom, Feet
+0.1 degree Centigrade
26.5lbs, 12 kg dry; 9.9 lbs, 4.5 kg wet

WHEELHOUSE ELECTRONICS TCS780/380 PROCESSING MODULE

Hand Controller: Wired hand controller (connect any number)
Optional Radio Link
Input Voltage: No Voltage Required
Data Output: NMEA, depth, temp or both
Tow Timer: Up to 9 hours and 59 minutes
Talking Catch Sensors: Speaker in wired hand controller
Video Output: VGA, 640 x 480
Dimensions: L 26cm, W 10cm, H 22.9cm

CABLE POWER DRIVER

Input Voltage: 110/220V AC, 100 watts
Output Voltage: 120V DC @ 0.8A
Test Cable: 10m
Interconnect Cable: Cable to Processing module 10.6m
Dimensions: L 38cm, W 16.5cm, H 44.5 cm

TCS780

Trawl Sonar with Multiple Functions



- Forward Scan to Measure Door Spread
- High Frequency Profile for Net Geometry and Fish Entry
- High Frequency Vertical Sounder to follow Bottom and Footrope
- Depth, Temperature, and Level Monitor are Standard
- Works with up to Six Catch Sensors
- Optional Current Measurement Function
- Lightweight at just 65lbs or 29kgs



WESMAR Western Marine Electronics

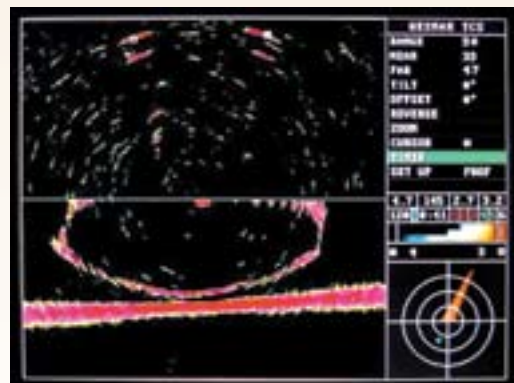
Telephone: (425) 481-2296 Fax: (425) 486-0909
E-mail: dsoderberg@wesmar.com www.wesmar.com

LIGHTWEIGHT TECHNOLOGY FOR OPTIMUM CATCH



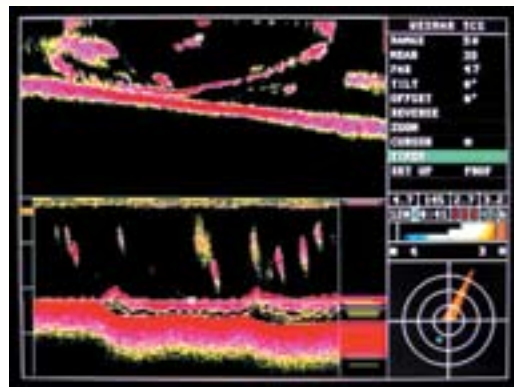
Improve Catch Volume, Catch Quality And Save Fuel With The New TCS780 and TCS380 Trawl Sonars...

The WESMAR TCS780 Trawl Sonar incorporates requests and ideas from captains and fish masters around the world who are forever looking for ways to improve the quality of the catch while reducing fuel consumption.



FORWARD SCAN:

The forward looking transducer will scan forward marking doors and tracking fish, measure door spread and bridle lengths, and determine if the doors are horizontal or one is above or below the other. The forward looker will also confirm that the fish are not passing over the bridles.



SPLIT SCREENS:

Select Profile & Down Sounder or Forward Scan & Down Sounder or Forward Scan & Profile for simultaneous viewing. Each transducer has its own adjustments to bring out the best resolution. The Down Sounder keeps a steady view of the net opening, fish and footrope while the captain can take measurements in the other screen. Activate the 4X zoom feature and follow the footrope and bottom relation.

LIGHTWEIGHT:

The TCS 780 weighs 29 kgs, 18 kgs lighter than other headrope units with the forward scanning capability. One person, not two or three, is needed to handle the sled.

CATCH SENSORS:

A large codend can use more than four sensors to monitor the catch rate. WESMAR catch sensors are quick to respond providing the best protection from overfilling the net.



Improve your catch capability with these options:

Including powerful wheelhouse electronics

Hand Control:

A new processing module with more power than ever before, better graphics and response time takes the place of the TCS770 console with knobs. The hand control makes the operation easier and more accessible throughout the wheelhouse. For even greater convenience an optional wireless remote control is available.

Data Output:

Depth and Temperature data are available as NMES outputs. Connect the TCS780 to a compatible video sounder and view a depth line across the screen that represents the positions of the net. Align the net line with fish targets on the screen before the fish reach the net.

Tow Timer:

Timer will start automatically when the system is turned on. Or, reset the timer any time.

Talking Catch Sensors:

A beep signals the number of the sensor that have triggered eliminating the need to watch the screen.

Better Interface:

The trawl sonar screen is never covered by a menu when adjustments are made. The effect of all adjustments is immediately visible on the screen.

Quicker Update in Split Screen:

By managing the transmit interval of the profile & sounder transducers, the profile picture will update much faster.

Better Net View:

A larger 220 degree profile sector is now available in split screen. This keeps the headrope in view during turns without adjusting dome offset.

Compatibility:

New processing module and cable power driver are compatible with the following WESMAR headrope units (sleds): 780, 770, 380, 345, 335. Any of these sleds can be carried on the vessel to suit the fishing conditions.

Profile the net opening with the compact lightweight TCS380 Trawl Sonar.

For both bottom and mid water, the TCS380 has a variety of features developed to optimize catch.

Pressure Sensor

Will constantly monitor the depth of the headrope making it possible to align the net with the fish as they pass under the boat.

Depth Sounder

On the bottom, the depth sounder will indicate how far down the slope the net is fishing.

Spilt Screen

With split screen or two monitors, the profile and down sounder are displayed at the same time.



The TCS 380 Headrope Units weighs only 26lbs (12 kgs) dry and becomes a lightweight on the net at 9.9 lbs (4.5 kgs), ideal for bottom and small research nets.