C-net Instrumentation

MORE POWER AND MORE INFORMATION THROUGH SINGLE WIRE INTERCONNECTION

With computers networking means linking individual machines together to share resources and information. That is the principle behind C-net.

A single wire datalink connects the individual C-net instruments together. Each gains information from the rest, and together they form a completely integrated navigation system offering previously unheard-of accuracy and reliability.

And as with networking computers, the shared resources cut out much duplication and leads to much-improved performance and savings in cost.

Just consider the compass – perhaps the most essential piece of equipment on any craft.

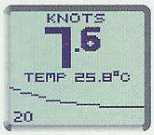
The C-net compass takes its information from a highly-sophisticated remote sensor hidden deep in your boat, well away from any electrical or magnetic interference. What you might think of as the compass is in fact only a repeater, repeating the information it receives through the datalink from the remote sensor.

But the autopilot needs that heading information too. So the information in the datalink is shared by all the C-net instruments connected to it. The compass is aware of the course being set by the autopilot, and can alert you to any off-course error. Plot your course on the chartplotter and the instructions are relayed directly to the autopilot. Have a C-net GPS on the network and your position can be fixed with satellite precision. Quick and accurate bearing and distance can be called up at any time, anywhere in the world.

All of this information can then be relayed to inexpensive C-net repeaters situated anywhere on board. Offering the possibility of having all of your navigation information, right down to the temperature of the water, available not only in the wheelhouse but also at the navigator's position, the owner's cabin or the tuna tower.

From any of these repeaters you could check on your course, tell when you will reach the next waypoint, or display the alarm settings.

While an integrated C-net system must be the pinnacle of excellence in navigational instrumentation, many of the units are actually very good on their own. All of the features on the C-net Depth for example, are available on the stand-alone instrument (with its associated transducer) or as part of a network. You can start with this and add C-net Speed and then Compass as your budget and horizons expand. The more instruments you add, the more information there is available.



C-net SPEED

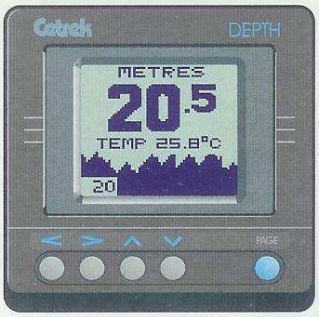
The C-net Speed is a powerful multi-function instrument that can provide a comprehensive range of information on speed, distance travelled, sea temperature, and timing.

Unique to C-net, the information is available in a choice of displays including giant numbers and see-at-a-glance speed graph.

Speed:
- Current Boat Speed
- Average Speed
- Maximum Speed

Log:
- Total Distance: Up to 99,999 miles
- Trip 1 Distance
- Trip 2 Distance

Timer:
- Race Timer (10 or 5 minute countdown)
- Stop Watch with Lap Timer
- Trip 1 Timer
- Trip 2 Timer
- Total Hours

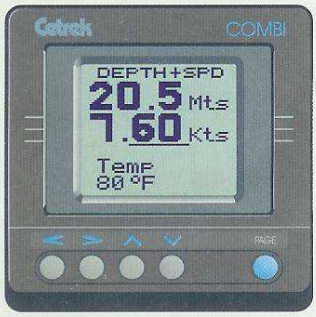


C-net DEPTH

As with C-net Speed, information is available in a choice of display. Only C-net allows you to choose between giant numeral displays and a graphic record of the depth.

Depth:
- Water depth: 0.3m to 60m, 1ft to 200ft
- Depth: metres/feet selectable
- Sea-bed: graphic display
- Numerals: Giant Display

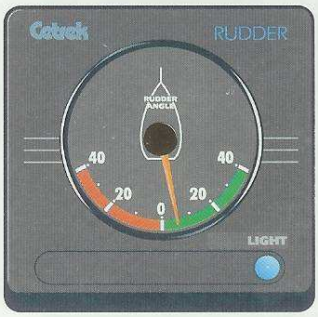
Alarms:
- Shallow Alarm.
- Deep Alarm.
- Anchor Watch.



C-net COMBI

The C-net Combi is a single multi-function instrument that can combine Speed, Depth and Water Temperature in one display. Extra timer functions, alarms and calibration settings are simply accessed at the push of a button. This instrument is ideal for boats where space is at a premium or for use as a repeater either at the chart table or on the flybridge.

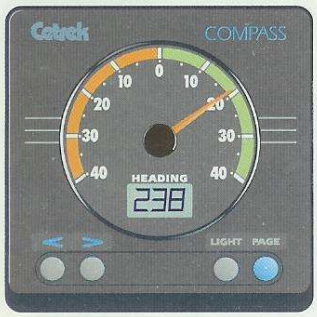
The information that can be displayed is the same variables as available from the C-net Speed plus Depth instruments and features the same unique display characteristics.



C-net RUDDER ANGLE INDICATOR

The C-net Rudder Angle Indicator is an analogue display providing rudder angle position in a clear unambiguous way. Forming part of the C-net system it can be used when installed with a C-net Pilot.

Rudder Angle: 40° Port to 40° Starboard
Calibration: Via Pilot Control



C-net COMPASS

This truly remarkable instrument can be used as a compass or a repeater for your navigation system, and features both Analogue and Digital displays.

Compass Functions:
- Magnetic compass heading – both analogue and digital display of heading
- Off-course display
- Automatic compensation for deviation
- Heading alignment - simple keyboard input
- Automatic adjustable damping controlled
- Off-course alarm

Navigation Functions - when connected to a navigator, GPS, Loran or Decca:
- Bearing
- Distance to next waypoint
- Cross-track error
- Steering control from GPS or Navigator
- Waypoint arrival alarm

C-net PILOT

The C-net compatible pilot from Cetrek offers all the benefits of automatic adaptive technology. The pilot self-adjusts depending on the sea state and the speed of the boat. Adaptive sea state damping and rudder sensitivity are standard features of this superb, new generation autopilot.

- Multi Station
- Compass, Navigator or Windvane Mode
- Waypoint Sequencing
- Dodge facility
- Auto-alignment of compass
- Auto-phasing of rudder
- Auto-phasing of motor
- Auto-alignment of rudder
- Auto-damping of compass
- Auto-seastate of Pilot
- Auto-tacking
- Auto-tracking
- Watch Alarm
- External Alarm

C-net GPS

The C-net GPS (Global Position System) puts you on the map – literally! This six channel GPS receiver antenna and display combination is a precision instrument giving highly accurate position fixing worldwide, 24 hours-a-day.

Functions:
- Bearing to Waypoint
- Distance to Waypoint
- Stores up to 99 Waypoints
- Automatic/manual Waypoint sequencing
- Waypoint transfer ability to and from C-net Chartnav
- VMG to waypoint
- Latitude/Longitude to 2 or 3 decimal places
- Time/Date corrected to Local Time
- Tidal Set and Drift calculation.

Bearings/Courses: True or Magnetic

C-net NAV

The C-net NAV repeater is a simple, no nonsense easy-to-use instrument that functions as a navigation repeater for any NMEA 0183 compatible electronic navigation receiver.

Functions:
- Bearing to Waypoint
- Distance to Waypoint
- Stores up to 99 Waypoints
- Automatic/manual Waypoint sequencing
- VMG to waypoint
- Latitude/Longitude to 2 or 3 decimal places
- Time/Date corrected to Local Time
- Tidal Set and Drift calculation

Bearings/Courses: True or Magnetic.

C-net WIND

The C-net Wind instrument, like all the C-net analogue instruments, uses a highly accurate analogue pointer to indicate apparent wind, while the digital display indicates wind speed and VMG.

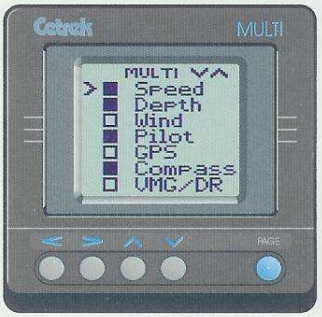
Wind Angle:
- Apparent: 360° Analogue scale
- True: 360° Analogue scale (as boat reference only)

Wind Speed: Knots or nearest metres
- Apparent: 2 digits on LCD
- True: 2 digits on LCD

Masthead Alignment: Keyboard alignment of wind angle

Damping: Adjustable damping coefficient

Units: Select Knots, metres or Beaufort for speed



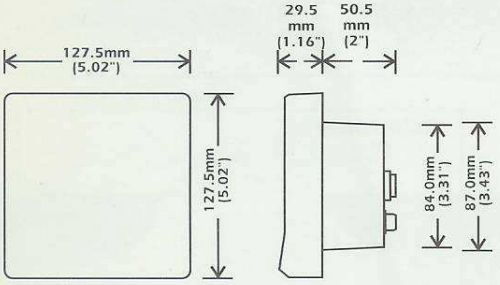
C-net MULTI

This one display is not only capable of displaying all the information of the other instruments connected to the system, but it also calculates VMG and DR itself.

Speed Data Display
Depth Data Display
Wind Data Display
Autopilot Data Display
GPS/Nav Data Display
VMG/DR Data Display

Specifications

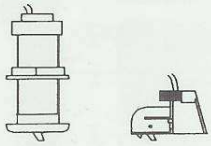
Supply Voltage: 10 to 30 volts.
Weight: 450 g (1lb).
Operating Temperature: -10°C to +50°C.
Storage Temperature: -25°C to +85°C.
Environmental: IP65 Weatherproof.
Mounting: Flush Mount (supplied), Trunnion Mount (optional).
Outputs: C-net data or NMEA 0183



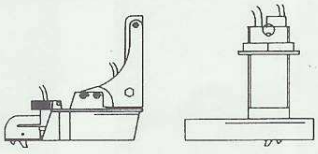
Transducers

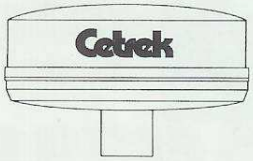
Depth Transducers

Speed Transducers



Tri-Ducers



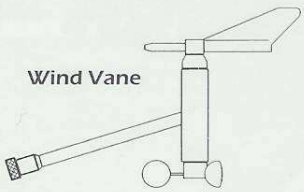


GPS Antenna/ Receiver

Linear Rudder Feedback

Rotary Rudder Feedback

Wind Vane



C-net PLOTTERS

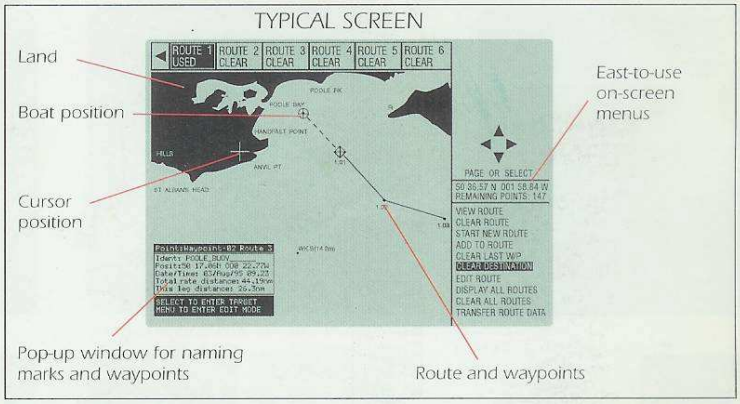
Cetrek manufacture a range of C-net compatible plotters, offering either LCD or CRT displays in colour or mono.

If your C-net system includes a Plotter, Pilot and GPS, navigation becomes simply a case of plotting your course on the screen. Your course is plotted using waypoints (or turning points where a particular course changes to another). Instruct the system to take you to the first waypoint and all you need do is keep watch. C-net will take care of any off-course error caused by wind or tide and alert you when you are nearing the waypoint.

Then just instruct the system to take you to the next waypoint. You will arrive at your destination with an astonishing degree of accuracy.

And if you need to deviate from the course, to avoid another boat for instance, just use the dodge controls on the Pilot. C-net will return you to your course when you've completed your manoeuvre.

C-net takes the hard work out of navigation and gives you more time to enjoy your boating to the full.



Chartnav 350

Three-part plotter with an ultra-slim LCD screen. Also serves as a multi-instrument repeater – perfect for both cockpit and flybridge installations. Four-slot cartridge reader allows for extended cruising without changing cartridges. Full dual station capability.

Chartnav 390

High quality compact plotter with separate four-slot cartridge reader for extended range. Multi-instrument repeater function as on the 350. Full dual station capability.

Chartnav 343

Bracket mounted LCD plotter available in colour or mono with detailed cartography.

Chartnav CRT

Bright 'green screen' display with a trackball for ease of use.

(Chartnav is the registered trade mark of Laser Plot Inc.)

Plotter Selection Chart

	Chartnav 350	Chartnav 390	Chartnav 343	Chartnav CRT
Screen size diagonal (mm)	255	150	150	180
Display type	LCD	LCD	LCD	CRT
Colour			✔	
Mono	✔	✔	✔	✔
Mount type	flush	flush	bracket	flush/ bracket
No. of cartridges held in unit	4	4	1	1
Cartridge type C-Map	mini	mini	c-card	mini
No. of routes in memory	6	6	6	6
No. of waypoints/marks	500	500	500	300
Waypoint/mark naming	✔	✔	✔	
Waypoint/mark symbol choice	✔	✔	✔	
Man overboard marker	✔	✔	✔	
Tracking by time	✔	✔	✔	✔
Tracking by distance	✔	✔	✔	✔
No. of track points	1000	1000	1000	1000
Overzoom	✔	✔	✔	✔
Cross track error display	✔	✔	✔	✔
Instrument data repeater	✔	✔	✔	✔
Alarms				
Waypoint arrival	✔	✔	✔	✔
No navigator	✔	✔	✔	✔
Navigation inputs				
NMEA 0183	✔	✔	✔	✔
Navstar 2000D	✔	✔		✔
Navigation interface				
NMEA 0183	✔	✔	✔	✔
Trackerball or pad control	pad	pad	pad	ball
Waterproof	✔	✔	✔	splash
Flybridge/extra screen	✔	✔		✔
Supply voltage 12/24v DC	✔	✔	✔	✔

Cetrek Ltd reserve the right to alter product specifications without notice.
All dimensions shown are approximate.

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