TAMAYA NAVIGATION CALCULATOR NC-2200

Tamaya Navigation Calculator NC-2200 allows you to do the most complicated navigation and astronavigation calculations easily, quickly, and accurately.
Safety at sea depends on a good navigation calculator, like the NC-2200, with many built-in programs for simple operation.

Operation	: Touch panel with stylus
Power source	: 3 pieces of size AAA battery (dry cell)
Operating time	: Standard approx. 8 hours for continuous operation
Operating temperature	: 0°C — 45°C (32°F — 113°F)
Display	: LCD, colors, 240 x 320 dots
Dimensions	: 72mm (W) x 125mm (D) x 14mm (H), or 2.83 in. (W) x 4.42 in. (D) x 0.53 in. (H)
Weight	: 165g (without battery), or 582 oz (without battery)
Standard accessories	: Stylus and neck strap

TAMAYA MARINE BINOCULARS SS7x50RB-D

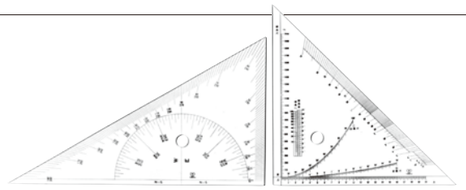
At only 0.99kgs, Tamaya's SS7x50RB-D binoculars are light-weight yet robust! The military type binoculars with superb optics and rubber armored have been designed and constructed specifically for the marine environment. With the individual focus feature, both eyepieces are adjustable. Resistant to shock, the rubber-armored surface fits very well into the hands of the adventure-minded. A product only made by pioneers of navigation instruments, like Tamaya.

Magnification	: 7x
Objective lens diameter	: 50mm
Diameter of exit pupil	: 7.14mm
Relative brightness	: 50
Field of vision	: 7.1°
Field of view	: 124m at 1,000m
Type	: Prismatic individual focus, waterproof
Size	: Approx. 193 x 175mm
Weight	: Approx. 0.99kgs

QM-11 | SEIKO QUARTZ CHRONOMETER

Using high-precision quartz crystal oscillator (TCXO), QM-11 is specially designed to constantly maintain high accuracy even under harsh environmental conditions.

Dimensions	: 184 (W) X 215 (H) X 76 (D) mm
Dial size	: 110mm diameter
Accuracy	: Daily rate of loss/gain : ±0.1 second (at 25˚C)
Operating temperature range	: –10˚C ~ 50˚C
Battery life	: Apporox. 12 months
Circuit	: Quartz C-MOS IC
Weight	: 2.2kgs



NAVIGATION TRIANGLES

Navigation triangles, a position finder for navigator, consisting of a danger-angle triangle and a protractor triangle made of transparent plastic, 36cm.

The design and the specifications might change without prior notice.

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GO!

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TAMAYA

NAVIGATION INSTRUMENTS

TAMAYA SEXTANT

Tamaya marine sextants literally circumnavigate the globe.
From the Cape of Good Hope to Cape Cod, our sextants are in use
by professional fishermen, merchant marines, navy personnel and yachtsmen alike.
We guarantee quality. And we strive hard for precision, toughness, and reliability.
Because we know that when you are miles out at sea,
your life may depend on our craftsmanship.

MS-733

The finest quality of this sextant has been proven in many years of use by ocean-going yachtsmen and marine industry professionals. Its optical system is designed with the knowledge to assure the maximum performance. The sunshade on its horizon mirror is a new feature, which blocks unwanted sunlight.

MS-833

The MS-833 is an economy type but full size sextant.
It has many of the advanced features of more expensive sextants.
Built to rigid specifications and engineered for quality, the MS-833 professional marine sextant is the most popular sextant TAMAYA offers.

Specifications

Model	MS-733	MS-833
Arc	Reads from −5° to 125° White engravings on black finished bronze, Radius 162mm	Reads from −5° to 125° Black finished aluminum plate on bronze, Radius 162mm
Micrometer Drum	White engravings on a black plastic drum. Held securely to tangent screw with two locking devices. 1' scale Vernier reads to 0'.2	White engravings on a black plastic drum with aluminum knob. Held securely to tangent screw with a special locking device. 1' scale Vernier reads to 0'.2
Frame	Lightweight aluminum alloy with corrosion resistant black finish. Bronze arc.	
Index mirror	Rectangular. 57 x 42mm, Aluminized on the rear side	
Horizon mirror	Circular, 57mm diameter. The right half aluminized on the rear side and comes with a sunshade	Circular, 57mm diameter. The right half aluminized on the rear side
Shade glass	4 for index mirror 3 for horizon mirror 1 shade glass and 1 polaroid glass for eyepiece of telescope	4 for index mirror 3 for horizon mirror
Telescopes	4 x 40mm angle of view 7° or 7 x 35mm angle of view 6.5°. All optics fully coated	
Illuminator	On both frame arc and drum	
Weight	1.6kgs.	1.6kgs.
Carrying case	Double wall air mold (H.D. Polyethylene) 335 x 335 x 165mm, 1.7kgs.	
Standard accessories	1 adjusting wrench 2 AA size dry cells 1 LED light bulb	1 adjusting wrench

STRENGTH AND RIGIDITY PLASTIC (H. D. Polyethylene) CASE

MOUNTS IN CASE WITH SCOPE READY FOR USE

MARINE VANE

Tamaya Marine Vane is an anemometer, which measures
both wind speed and wind direction with a wind speed and direction transmitter,
and shows both digital and analog values.

Transmitter

Transmitter compatible to both FV-301 and KV-5020

Transmitter Specifications for both FV-301 and KV-5020

Type	
Wind direction finder area	Absolute encoder type, 8-bit gray code
Wind speed finder area	Non-contact system by optical pulse
Output	
Wind direction	256 partition dial, 8-bit gray code serial signal
Wind speed	24 pulse/one revolution pulse signal
Starting operations	
Wind direction	Below 2m/s
Wind speed	Below 2m/s
Wind speed resistance	
Maximum wind speed	90m/s
Measuring ranges	
Wind direction	All azimuths, 360°
Wind speed	2~60m/s
Accuracies	
Wind direction	Within ±5°
Wind speed	Below ±0.5m/s at wind speeds of less than 10m/s Below ±5% at wind speeds exceeding 10m/s
Output	
Open collector	6p terminal system, 6 shafts sealed
Operating temperature	−40°C to +40°C
Weight	2.5kg(Approximately)
Painting	Munsel mark 2.5 G7/2

FV-301

Compact and Lightweight, Easy to install

High Durability Propeller

Wind speed finder propeller is made of high durability, lightweight glass fiber polycarbonate.

Direct Reading in Either m/s or Knots Can Be Selected

Easy-to-read Analog and Digital Displays.

Indicator Specifications	FV-301
Type	Digital
Features	
Wind direction	LED 36 dot display
Wind speed	LED 31 dot display, m/s or Kt (switchable), 0~60m/s 0~60/120Kt (automatically switchable) LED 7 segment 3 lines (average display)
• Average feature	
Wind speed	Averages speed every 10 minutes
Data sampling time	0.25 second (wind direction & wind speed)
• Data processing feature	
Momentary display	Averages data every second, data input every second
Display of average	Averages data every 10 minutes, data input every 6 seconds
Illumination control	Brightness adjustable by resistor (optional remote control available)
Output signal	Current loop serial signal Transmittal speed 1200 baud (250 ms)
Connection	Terminal system, 6 shafts sealed
Power	AC 100V±10% 50/60Hz (120V, 220V, 240V)
Power consumption	20VA (Approximately)
Operating environment	
Temperature	0°C~40°C
Humidity	20%~80%
Painting	2.5 G7/2
Weight	2.3kgs (Approximately)

KV-5020

Compatible to VDR.

Built-in NMEA output, which is indispensable for ocean-going vessels.

LED illumination with dimmer, for long life.

Optional

The KV-5025 is also available as an absolute wind speed/direction indicator.

Indicator Specifications	KV-5020
Type	Analog
Features	
Wind direction	Relative wind direction (instantaneous) Indicating range:0 ~ 360°
Wind speed	Relative wind speed (instantaneous) Indicating range:270°(60m/s)Kt or m/s
• Data processing feature	CPU vector operation
Illumination control	LED (with dimmer)
Output signal	RS-232C or RS-422 Serial current loop
Connection	Terminal system, 6 shafts sealed
Power	AC 87~264V, 47~440Hz
Operating environment	
Temperature	−10°C~+50°C
Humidity	20%~95%(no condensation)
Painting	2.5 G7/2
Weight	7.5kgs (Approximately)
Optional equipment	Remote dimmer switch KV-5025 absolute wind speed/direction indicator Simplified vessel speed/course signal transmitter