

## *Full Automatic Piloting, Dead Reckoning and Navigation*



TAMAYA NAVIGATOR

# NC-2100E



GPS receiver compatible to NC-2100E

### FEATURES

- Simple operation with built-in programs
- Course and Distance computation
- Dead Reckoning computation
- Great Circle computation
- E TA computation
- Current computation
- LOP computation
- Meridian Passage computation
- Convenient conversions for to HMS and to HHH
- Long term Nautical Almanac for the Sun, Moon, Venus, Mars, Jupiter, Saturn and 63 stars. The built-in Almanac is usable until 2100, it is good with accuracy better than 0.2
- Twilight Time mode computes time of rise or set, civil twilight and azimuth for the Sun and rise or set, age and azimuth for the Moon
- Prediction/Identification mode computes azimuth and altitude for all celestial bodies and displays any usable bodies above the horizon
- Can input Latitude and Longitude from optional GPS receiver

### Programmed Navigation Functions

- 1 . Navigation Computations for Dead Reckoning and Piloting  
PILOT 1
  - 1) Course and Distance
  - 2) Dead Reckoning
  - 3) Great Circle
  - 4) Composite Sailing
  - 5) Estimated Time of Arrival
- 2 . Navigation Computations for Current, True Wind, Tide and Stream  
PILOT 2
  - 1) Current
    - 1-1) Course and Speed Made Good
    - 1-2) Course and Speed to Make Good
    - 1-3) Course to Steer and Speed Made Good
    - 1-4) Set and Drift
  - 2) Direction and Speed of True Wind
  - 3) Tide at Standard Port
  - 4) Tidal Stream
- 3 . ASTRO. NAV
  - 1) Twilight
  - 2) Prediction & Identification
  - 3) Nautical Almanac
  - 4) Line of Position
  - 5) Position Fix
  - 6) Meridian Passage
- 4 . SEXTANT
  - 1) Altitude Corrections
  - 2) Distance to Object
- 5 . TIME & ARC
  - 1) Time computation
  - 2) Arc computation
- 6 . TIME Calculations
  - 1) To HMS
  - 2) To HHH
  - 3) Normal Computations

### PDA

- Operation : Touch panel with stylus pen
- Power Source : Lithium battery and AC Adaptor ( AC100-240V )
- Operating Time : Approx. 6 hours for continuous operation
- Charging Time : Approx. 4 hours for full charging
- Operating Temperature : 0 ~ 40
- Display : LCD(32,768 colors) 240 × 320 dots
- OS : Microsoft Pocket PC
- Card slot : SD card slot
- Dimensions : 70mm(W) × 114mm(D) × 13.4mm(H)
- Weight : Approx. 120g( including battery )
- Accessories : AC adaptor and stylus pen
- Option : GPS receiver for SD card

Course and Distance



Departure Lat.  
 Departure Long.  
 Arrival Lat.  
 Arrival Long.  
 Course  
 Distance

3) Set and Drift



DR Lat.  
 DR Long.  
 Fix Lat.  
 Fix Long.  
 Time  
 Set  
 Distance Drifted  
 Drift

Position Fix



No. Azimuth Intercept

Dead Reckoning



Departure Lat.  
 Departure Long.  
 Course  
 Distance  
 Arrival Lat.  
 Arrival Long.

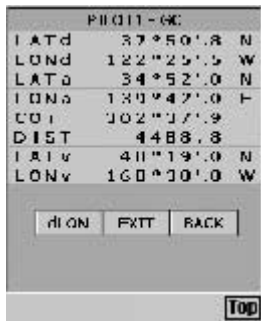
Direction and Speed of True Wind



Ship Course  
 Ship Speed  
 Apparent Wind Direction  
 Apparent Wind Speed  
 True Wind Direction  
 True Wind Speed



Great Circle



Departure Lat.  
 Departure Long.  
 Arrival Lat.  
 Arrival Long.  
 Initial Course  
 Great Circle Distance  
 Vertex Lat.  
 Vertex Long.

Nautical Almanac



Greenwich Mean Time  
 Date  
 Celestial Body  
 Declination  
 Greenwich Hour Angle



DR Latitude  
 DR Longitude  
 Fix Lat.  
 Fix Long.

Current

1) Course and Speed Made Good



Course steered  
 Speed through water  
 Set  
 Drift  
 Course made good  
 Speed made good

Calculated Altitude and Azimuth



Greenwich Mean Time  
 Date  
 Celestial Body  
 DR Latitude  
 DR Longitude  
 Azimuth  
 Altitude

Input from GPS receiver



Departure Lat.

GPS Input Key

GPS Indicator (left)

2) Course to Steer and Speed Made Good



Course to make good  
 Speed through water  
 Set  
 Drift  
 Course to steer  
 Speed made good

Line of Position



DR Latitude  
 DR Longitude  
 Declination  
 Greenwich Hour Angle  
 Azimuth  
 Altitude



Departure Long.

GPS Input Key

GPS Indicator (left)