For use with new Ocher colored 8MB ROM cards
*** See FQ4-2007-003 for complete information

Navionics V24 CMap V20:
1. Enhancement: Heading Line is now changed from one pixel width to three pixels in width. It is now much easier to discern the vessel COG line on the Plotter Display.
2. Enhancement: Plotter Mode "NO DETAILS AVAILABLE" window dwell time has been reduced from five to three seconds.
3. Bug Corrected: Sunrise/Sunset Times turned to zero when Position Fix was obtained in Western Hemisphere.
4. Enhancement: Local Time Offset Compensation is now used for Tide Mode display. However, DST (Daylight Savings Time) Compensation will not be added. (DST Correction has been added to Navnet vx2)

New GPS core in the GP320B:
1) WAAS Capability: New GP320B is capable of receiving WAAS satellite signal only when it is connected to NavNet series with these software revision levels or above:
   M1722/GD-1700 CMAP 0359170019
   NAVIO 0359171023
   M1722C/GD-1700C CMAP 0359172019
   NAVIO 0359173023
   M1723C/GD-1710C CMAP 0359196007
   NAVIO 0359197007
   M1833 CMAP 0359174019
   NAVIO 0359175023
   M1833C/GD-1900C CMAP 1590001019
   NAVIO 1590002023
   M1833C-BB/GD-1900C-BB CMAP 1950010-01.07
   NAVIO 1950011-01.07
2) Receiving signal level: With new GP-320B, the receiving signal level reads 5.8dB lower than old GP-320B because of the measurements at a different point.
*** See FQ4-2004-012 for further information
Symptom from CMap ver 017: Model 1723C freezes in the start-up sequence after the language is changed from English to Spanish. In some languages, unreadable (garbage) characters appear on the GRI line in TD SETUP menu, (Menu>System>Configuration>NAV OPTION). Different symptoms occur in different languages.

All models are upgraded to eliminate the problem which potentially occurs during the operation of TD SETUP menu.

**** See FQ3-2004-013 for further information

Main feature of this revision - CU-200 connectivity; also:
1) On Chart Details Page 2, the default for CMAP Complex Obj. is changed from Multiplex to Single.
2) The default for radar target color is changed from Green to Color.
3) The default for Data 1 port is changed to BBGPS.
4) The default for Depth and Temp input is changed from NMEA to ETR, (Model 1833C and Model 1833C-BB only).
5) Radar "RSR" function key name is changed to "TX".
6) Radar "SFT" function key name is changed to "OFS".
7) When GD1900C, GD1900C-BB PLOTTER appears at the start-up display.
8) Radar heading setup is 180 degrees off for the radar antenna type of B. This is solved.
9) In plotter mode, the own ship's mark jumps after redrawing the display, (e.g. when the mode is changed). This is solved.
10) When the unit (NM, KTS, & YARDS), in General setup menu is changed, no change occurs. This is solved.
11) IP address can be set up to 255. The old software accepts the entry of IP address values of 256 and above.
12) In combination screen, the bearing scale of 1 degree does not appear. This is solved

****See FQ3-2004-010 for further information

 Only programmable with CDUpdate CDROM.****
1) Radar timing adjustment default value is set to one for 10m antenna cable. When 10m antenna cable is used, no timing adjustment is needed. (M1722/C and M1833C)
2) vibration causes the trackball to move, this is solved
3) Plotter setup menu is debugged so that all items in the menu function as indicated (other than English version)
4) Message and text fit the bounding box exactly
5) The bounding box does not disappear partially, this problem is solved
6) In network connection, MOB data is not updated when receiving a MOB data from another display unit, problem is solved
History.txt

**** See FQ3-2004-005

ver Navio 018/CMap 014  10/20/2003
Increased refresh speed.  CMap/NT zoomable to 0.125 nm

ver Navio 017/CMap 013

ver Navio 016/CMap 012
1. display redrawing speed is improved
2. c-map chart can be zoomed in/out in the lower ranges
3. Message and text end up on the border in Italian, Spanish, and Portuguese versions.  This problem is solved
4. SRVC PORT icom appears in correct position in chart offset mode
5. Mark line soft key appears in the same brightness as other soft keys
6. lines appear in LineStyle/Mark Setup menu correctly.
7. In network connections, chart is not shown on the display where the chart card is inserted into the slot
8. in network connection, targets outside of the watchman alarm area blinks in km and sm ranges
9. Soft key does not appear after radar installation menu is used.
****See FQ3-2004-004

ver Navio 015/CMap 011
ETR-30N works with all the NavNet displays.
****See FQ3-2002-xxx for complete information


******C-MAP******

**C-MAP Version 10    July 24, 2002
Changes from Ver 9

1. Debugged too slow transfer speed for mark data within network
2. Debugged the problem - On radar overlay mode, TTM mark is indelible even after tracking is terminated and then acquire another target, nearest other ships track is connected to the target.
3. Debugged indelible XTE alarm icon even after the alarm is stopped.
4. Debugged erroneous null in the status filled of Wind data MWV when it goes through NavNet

Remedies the following symptoms:
1. When GPS receiver is connected to DATA 1 port, position fix error is large occasionally.
2. The CPU freezes when marks in the specified area are erased.
3. It takes long time to transfer mark data in the network if the display unit which receives data is in Plotter mode or when + cursor is displayed.
4. In combination mode, ARP target mark is erased, but the TTM mark is not erased when tracking ARP target is cancelled.
5. When XTE alarm is released, ALARM icon does not disappear.
6. When km unit of range and speed indication is selected, a letter and a line overlap in the speed alarm setup menu.
7. When adding a Quick Point to the route being created, a letter and a line overlap in the window.
8. When the received wind data MWV is output from another port, the status field changes to "Null".

**C-MAP Version 9 June 24, 2002**
debugged GPS input problem. In addition, freeze at erasing marks, lines by area is also debugged

Note: Software for PGmaster doesn't include the 1MB base chart for C-MAP version.

**C-MAP Version 8 May 20 2002**
Note: Software for PGmaster does NOT include the 1MB base chart.

**C-MAP Version 7 March 26, 2002**
Attached the debugged software for ARP-11 problem of NavNet 10.4", Furuno/Navionics Ver 11 and C-MAP Ver 7.
Problems solved:
1. When AD10 heading data is used, magnet variation is not output to ARP-11.
2. With the C-Map chart cartridge inserted into the slot on the master display, another display in the network cannot be turned on.

They are based on Ver 10 and 6 and we only debugged MAG deviation problem with ARP-11. We are updating the software to solve another issues and it will be completed by the end of next month as Ver 12 and Ver 8.

**C-MAP Version 6 Dec 2001**
In addition to same changes as FURUNO/Navionics version 10, debugged following functions.

CHART DETAILS
DEPTH INFO
BATHYMETRIC LINE
SPOT SOUNDING
BOTTOM TYPE
**C-MAP Version 5  Nov 2001**

Same as FURUNO/Navionics Version 5

In addition, the latest versions comply with following REQUESTS FROM FUSA.

"Offset function for NMEA input of depth and temp (independent from ETR calibration)"

"Display Mode
""EXT VIDEO"" icons should have ""X"" or be removed if optional video board is not fitted."

"Display Mode
Red highlight Box should be ""thicker"

"Characters
Characters in D-BOX should be larger."

"Characters
Characters of depth readout (sounder mode) should be larger."

"Demo
A-scope is not displayed in Dual Freq mode in Demo."

"ENTER function
All items should be Entered by pushing Rotary Knob."

"GO-TO Waypoint Synchronization
Navnet displays should have single Go-To Waypoint Synchronization between multiple displays connected to a single Navnet"

Four NAVNET displays with ETR on one network

"RADAR ""TX ON/OFF"" Function Key
Add a Radar TX On/Off Programmable Function Key to the radar function keys."

"RADAR ""TX ON/OFF"
Add help message ""Press Power/Brill key then Radar/STBY soft key for Transmit mode"".

"Background color for D-BOX, menus
Background color for D-BOX, Disp Mode menu and other menus should change to another color. It is too bright for night time operation."

"Noise rejection default
It should be OFF in default setting."

"Basic radar simulator image
Add basic radar simulator image in 4 or 6 nm range taken from EG-3000 on Radar Simulation 1 by the end of this month.
FEC will let FUSA know how to get radar simulation image to be programmed in Radar Simulation 2."

"Distribution of Wind Data
NMEA Sentence for WIND is not on the ""OUTPUT TO NETWORK"" List. Navnet Displays in a Network should share this information."
**Navionics Version 14**  
**JULY 24, 2002**

**Changes from Ver 13**

1. Debugged too slow transfer speed for mark data within network.
2. Debugged the problem - On radar overlay mode, TTM mark is indelible even after tracking is terminated and then acquire another target, nearest other ships track is connected to the target.
3. Debugged indelible XTE alarm icon even after the alarm is stopped.
4. Debugged erroneous null in the status field of Wind data MWV when it goes through NavNet.

**Remedies the following symptoms:**

1. When GPS receiver is connected to DATA 1 port, position fix error is large occasionally.
2. The CPU freezes when marks in the specified area are erased.
3. It takes long time to transfer mark data in the network if the display unit which receives data is in Plotter mode or when + cursor is displayed.
4. In combination mode, ARP target mark is erased, but the TTM mark is not erased when tracking ARP target is cancelled.
5. When XTE alarm is released, ALARM icon does not disappear.
6. When km unit of range and speed indication is selected, a letter and a line overlap in the speed alarm setup menu.
7. When adding a Quick Point to the route being created, a letter and a line overlap in the window.
8. When the received wind data MWV is output from another port, the status field changes to "Null".

**Navionics Version 13**  
**JUNE 24, 2002**

Debugged GPS input problem. In addition, freeze at erasing marks, lines by area is also debugged.

**Note:** Software for PGmaster doesn’t include the 1MB base chart for C-MAP.
**Navionics Version 12**
May 3, 2002

1. Usage of Navionics XL chart
2. Connection of GPS receiver GP-320B
3. WAAS capability

**Navionics Version 11**
March 26, 2002

Attached the debugged software for ARP-11 problem of NavNet 10.4", Furuno/Navionics Ver 11 and C-MAP Ver 7.

They are based on Ver 10 and 6 and we only debugged MAG deviation problem with ARP-11. We are updating the software to solve another issues and it will be completed by the end of next month as Ver 12 and Ver 8.

Problems solved:
1. When AD10 heading data is used, magnet variation is not output to ARP-11.
2. With the C-Map chart cartridge inserted into the slot on the master display, another display in the network cannot be turned on.

**Navionics Version 10**
Nov 2001

- For 7" Color - Modified backlight for new board
- For All - Debugged memory back-up of setting for contrast of 7" Color, IRE, A/C AUTO, rings and watchman.
- For All - Debugged disappearing waypoint mark on radar display at heading 0.
- For 10.4" Color - Changed font size of DBT, BRG, TMP and CSE data on compass display.
- For 7/10.4" Color - Modified not to redraw the chart when the [SHOW/HIDE] key is pressed on radar overlay display.
- For 7/10.4" Color - Deleted AUTO SHIFT function on Radar overlay display. When radar overlay display is selected during AUTO SHIFT mode, AUTO SHIFT is to be released.
- For 7/10.4" Color - Debugged duplicate cursors on radar overlay display.
- For All - Debugged interruption of sounder picture advance while chart redrawing and trackball operation in the combination with Sounder and Plotter.
- For All - Debugged failure of Echo trail when the [TRAIL ON/OFF] key is repeatedly pressed.
- For 7" Color - Adjusted the gap by 8 dots between Radar echo and chart on overlay mode.
- For 10.4" Color - Changed font color of heading data to dark green on radar display to stand out from radar echo.
- For All - Debugged incorrect cross track error indication at great circle mode.
- For All - Debugged persistent and indelible ARP mark indication on Radar stand-by mode.
- For C-MAP version - Granted priority to radar presentation over Intertidal AREA.
- For All - Debugged indelible head mark at erasing track.
- For All - Debugged incorrect depth information of depth counter.
- For All - Debugged depth indication out of depth counter.
- For 10" Mono/10.4" Color - Debugged target tracking without heading data.
- For 7" Mono/Color - Debugged unnecessary trail echo when switching relative and true on echo trail mode.
- For All - Debugged invisible red circle even after setting PROXIMITY ALARM.
- For All - Debugged invalid watchman stand-by when manual TX is made during watchman stand-by mode.
- For 7" Mono/Color - Debugged radar image erroneously shifted upper on Networked 7" display for few seconds after starting.
- For All - Debugged incorrect direction of radar echo and heading line at course up mode with NMEA heading input.
- For All - Debugged lack of a part of frame line of alarm message.
- For All - Prohibited guard zone alarm setting during stand-by warming up time.
- For All - Debugged problem EBL indication is not updated during stand-by warming up time.
- For All - Debugged unnecessary indication of guard alarm zone when set waypoint as destination by GWP function key.
- For All - Revised wording (DEMO SIMULATION).
- For C-MAP version - Debugged invisible waypoint mark.
- For 7" Color - Debugged color of indication for [SPLIT] soft key on sounder display.
- For All - Debugged problem that the alarm doesn't sound when no heading input (Gyro or NMEA).
- For All - Debugged + cursor on popup menu when [RSR] function key is selected.
- For All - Debugged no chart number indication when memory card test is done.