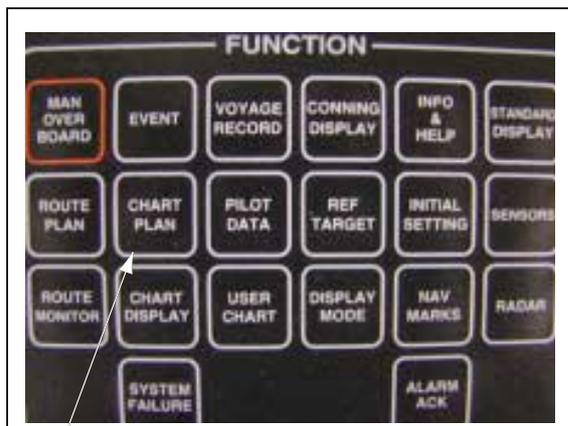


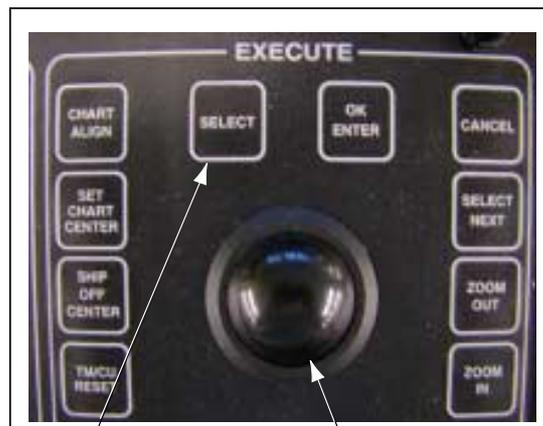
ECDIS FEA-2100/2105

C-MAP Chart Update Manual

- Update chart before embarking on a voyage. Do not update charts during a voyage.
- During updating, do not display the radar overlay screen or the route monitor screen. Hangup may result. If hangup occurs, turn the power off and on again.
- It takes about seven hours to update one zone. Plan accordingly.



[CHART PLAN] key



[SELECT] key

Trackball

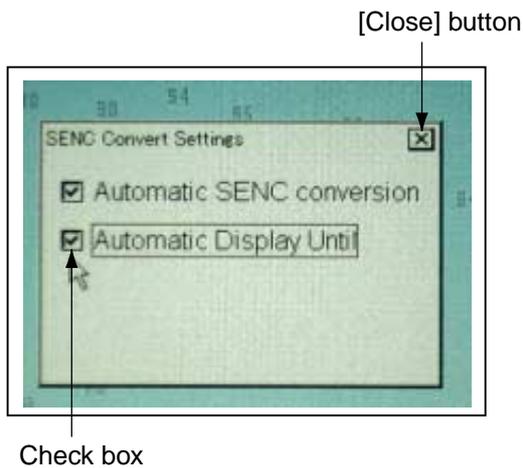
ECDIS Keyboard

1. Preparation



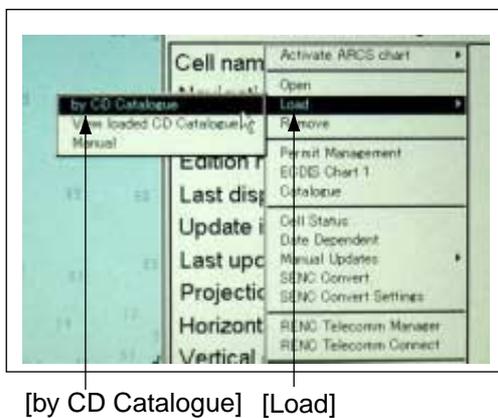
[SENC Convert Settings]

1. Press the [CHART PLAN] key.
The menu appears in the Information area at the right side of the screen.
2. Rotate the trackball to place the cursor (arrow mark) on [SENC Convert Settings] and press the [SELECT] key.
The [SENC Convert Settings] window appears.

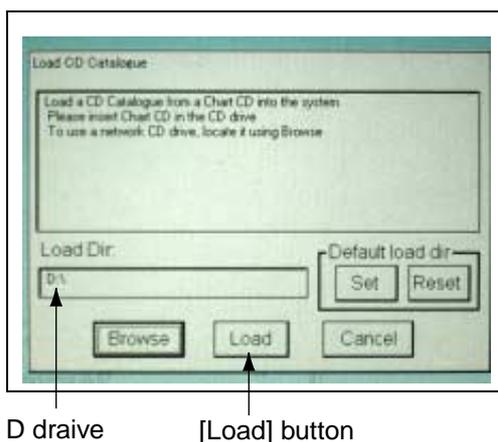


3. Check the box on [Automatic SENC conversion] and [Automatic Display Unit]. (Or confirm that the check marks are displayed.) To check the box, place the cursor on the box and press the [SELECT] key.
4. Place the cursor on the [Close] button and press the [SELECT] key to close the windows.

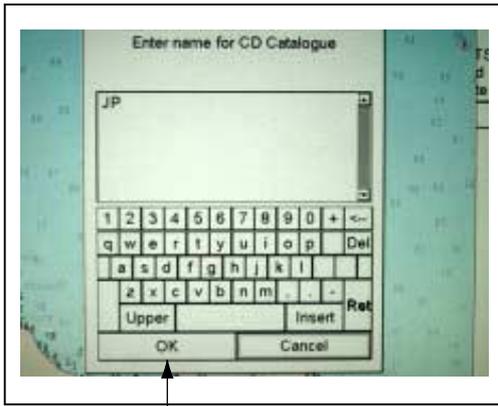
2. Loading the catalogue chart to be updated from CD-ROM to ECDIS



1. Insert latest CD-ROM in the CD drive.
2. Press the [CHART PLAN] key to display the menu.
3. Place the cursor on [Load] and [by CD Catalogue], and press the [SELECT] key to display the [Load CD Catalogue] window.

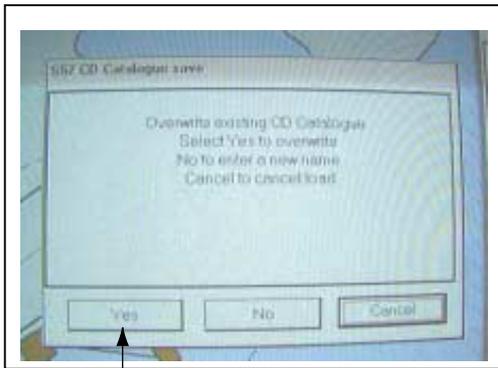


4. Confirm that the drive is "D" on the [Load Dir] box. Place the cursor on the [Load] button and press the [SELECT] key. When the catalogue is loaded, the catalogue name input window appears.



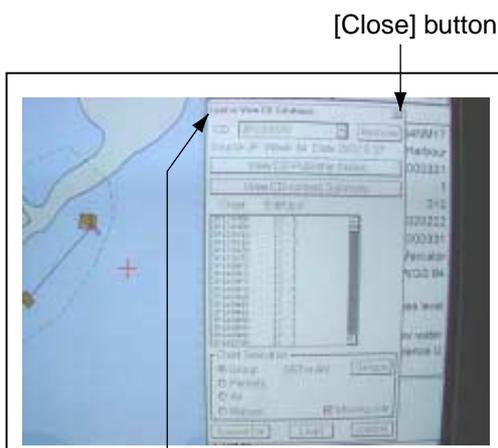
[O K] button

- The catalogue name [CM93PROF3] is shown.
- Place the cursor on the [OK] button and press the [SELECT] key.



[YES] button

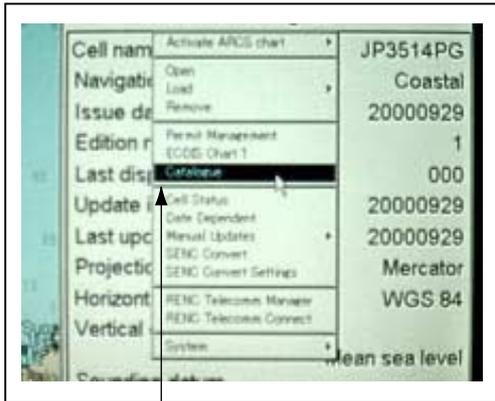
Note: If the catalogue name is the same as an existing one you named previously, the following message appears. To overwrite the name, place the cursor on the [Yes] button and press the [SELECT] key. To change the name, place the cursor on the [No] button, press the [SELECT] key and enter a new name.



[Load or View CD Catalogue] window

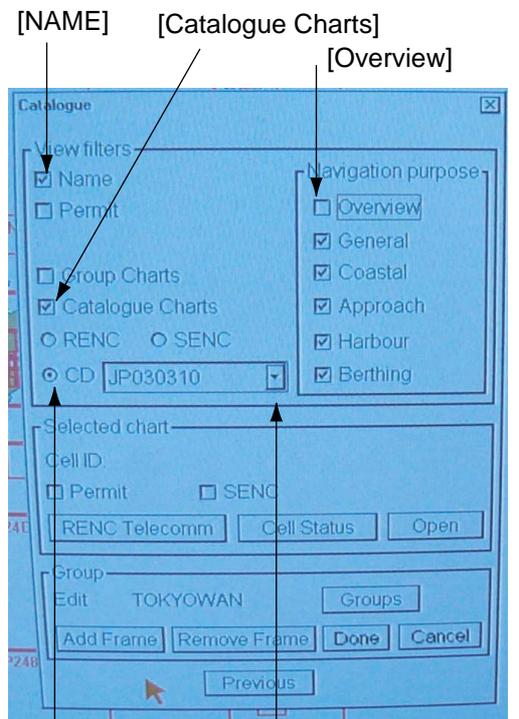
- Place the cursor on the [Close] button and press the [SELECT] key to close the [Load or view CD Catalogue] window.

3. Displaying the Catalogue Chart



[Catalogue]

1. Press the [CHART PLAN] key to display the menu.
2. Place the cursor on the [Catalogue] and press the [SELECT] key.



[CD]

Choose catalogue name.

3. Check on the [Name] and [Catalogue charts] check boxes and select [CD] in the [View filters] window.
4. Place the cursor on the down arrow in the [CD] box, press the [SELECT] key and select the catalogue name entered at step 5 in the previous section.

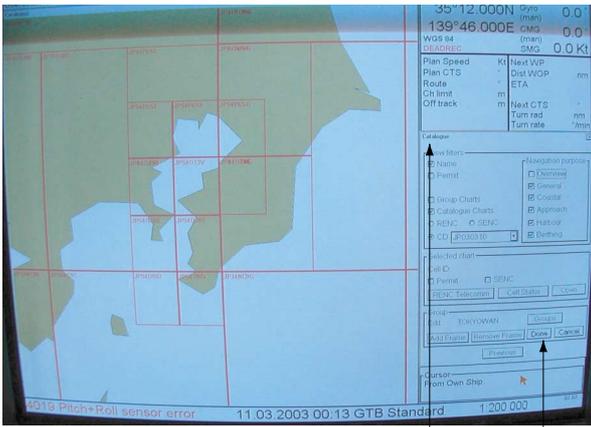
Note: We recommend that you check off the [Overview] check box in the [Navigation purpose]. This will omit the loading of the zoomed-out charts, which are normally not used and the ECDIS has already installed these types of chart (7C type). Conversion time can be reduced by not loading the "Overview" charts.



5. Using the [ZOOM IN], [ZOOM OUT] or [SET CHART CENTER] key, adjust the catalogue chart scale so that you can see all charts desired.

6. Set the chart group to update as follows.

- a. Place the cursor on the [Groups] button at the bottom of the [Catalogue] window and press the [SELECT] key.



[Groups] button
[Catalogue] window

- b. Place the cursor on the [New] button and press the [SELECT] key.

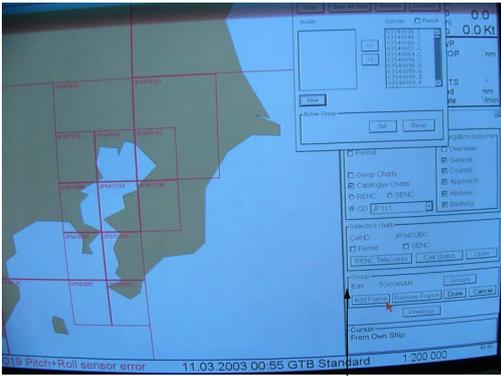


[NEW] button

- c. Place the cursor on an alphabet or number button and press the [SELECT] key. Repeat this to enter group name. Set a name which is easy to understand.
- d. Place the cursor on the [OK] button and press the [SELECT] key.

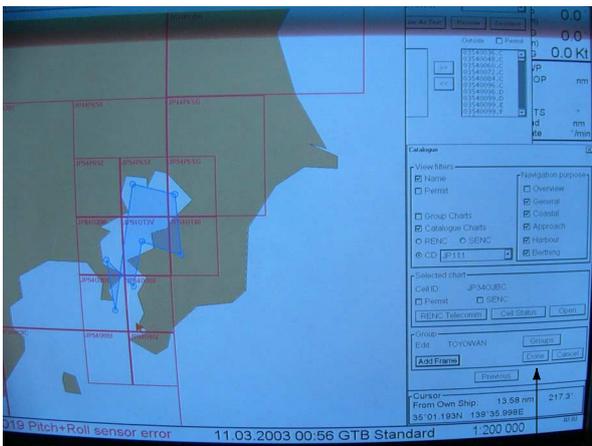


Enter group name.
[OK] button



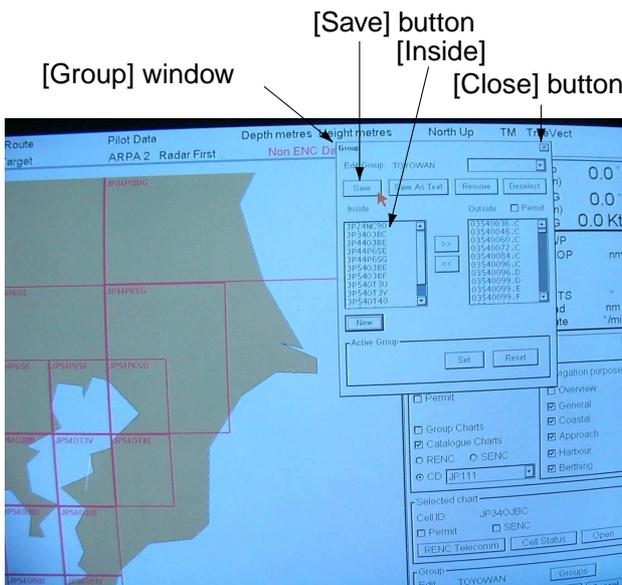
[Add Frame] button

- e. Place the cursor on the [Add Frame] button and press the [SELECT] key.
- f. Rotate the trackball to place the cursor inside the chart cell frame desired and press the [SELECT] key. Repeat this to select all desired areas.
The selected areas are shown in blue.



[Done] button

- g. After selecting all areas desired, place the cursor on the [DONE] button and press the [SELECT] key.



[Group] window

[Save] button

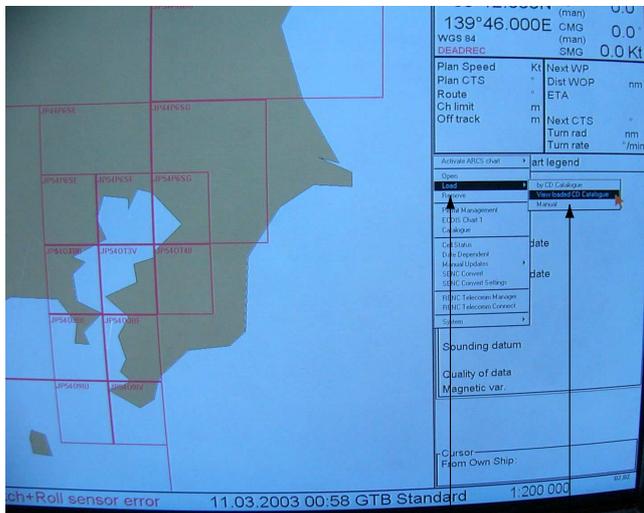
[Inside]

[Close] button

- h. Confirm that the chart numbers selected are shown in the [Inside] box in the [Group] window and then place the cursor on the [Save] button and press the [SELECT] key.
- i. Place the cursor on the [Close] button and press the [SELECT] key to close the [Group] window.

4. Chart Conversion (from ENC format to SENC format)

The chart data in a CD-ROM (ENC format) must be converted to SENC format in order to display it on the ECDIS. Note that the conversion takes several hours.

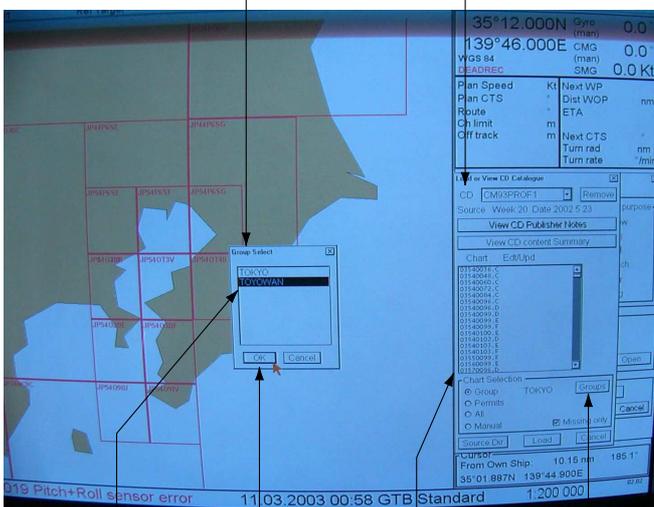


[Load]
[View loaded CD Catalogue]

1. Press the [CHART PLAN] key to display the menu.
2. Place the cursor on [Load] - [View loaded CD Catalogue] and press the [SELECT] key.

[Group Select] window

[CD] box



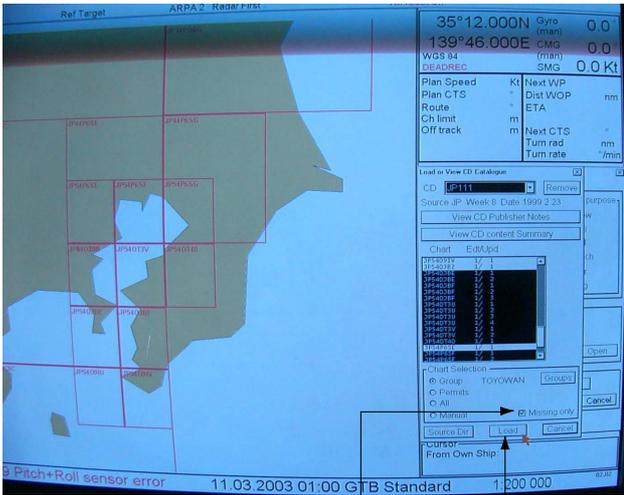
[OK] button

[Groups] box

Group name entered.

[Chart Selection]

3. Choose the catalogue name from the [CD] box.
4. Place the cursor on the [Groups] button in the [Chart Selection] window and press the [SELECT] key.
5. Place the cursor on the catalogue name entered at the [Group Select] window and press the [SELECT] key. The chart numbers chosen above are displayed in black as shown in the left figure.



[Load] button
[Missing only] check box

6. Place the cursor on the [Missing only] check box and press the [SELECT] key to display the check mark.
7. Place the cursor on the [Load] button and press the [SELECT] key.



Numbers of charts loaded Total numbers of charts Hourglass charts

The catalogue data is loaded to the ECDIS. During loading, the hourglass mark and the number of chart loaded are displayed. For example, if the screen displays "110 of 209", 110 charts of 209 charts in the CD have been loaded to the ECDIS. "209 of 209" means that the loading is completed.



A chart cell frame on the screen changes from green to orange when loading of that frame is completed.

[S57LOAD] window

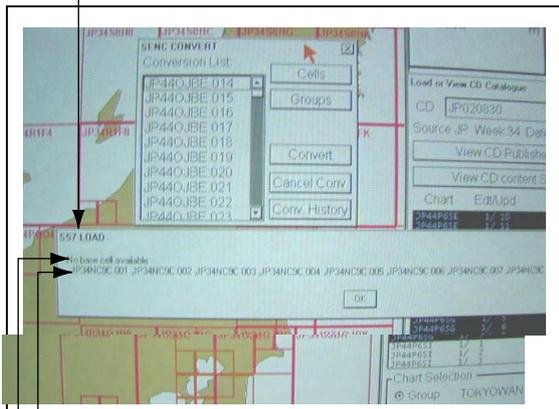
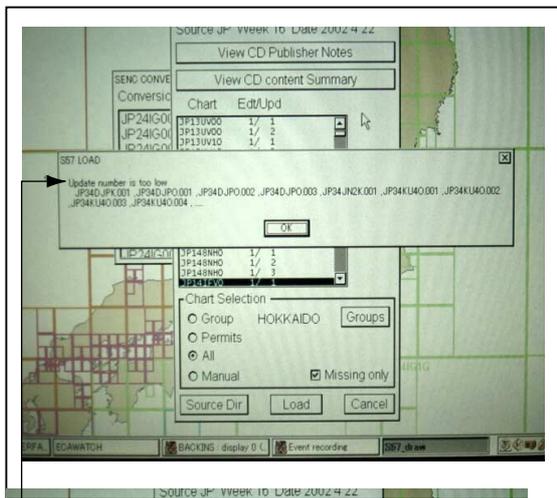


Chart cell number
[No Base Cell available]

After loading all charts desired, the chart conversion (from ENC to SENC) automatically starts.

- At this time, the message [No Base Cell available] and chart cell numbers are displayed in the [S57 LOAD] window. Then, place the cursor on the [OK] button and press the [SELECT] key.

The chart CD-ROM contains all chart data, but there are some areas which the base charts cell (last three digits of chart number : 000) are not installed in the ECDIS. These chart cell numbers are displayed.

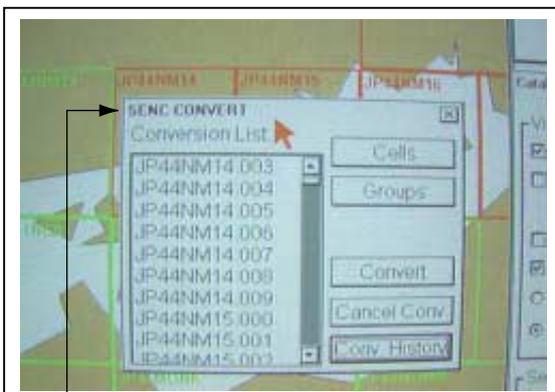


[Update number is too low]

- If the message [Update number is too low] and chart cell numbers are displayed in the [S57 LOAD] window, place the cursor on the [OK] button and press the [SELECT] key

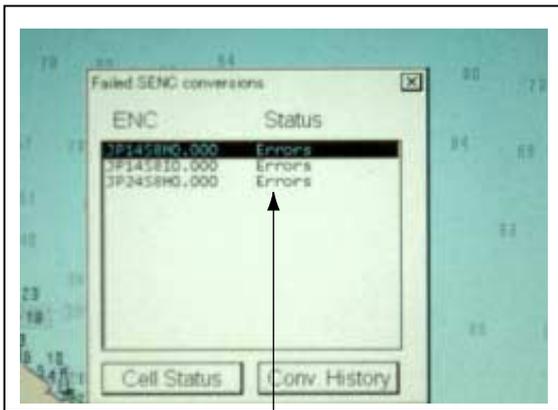
This message means that the ECDIS does not update older version charts contained in the CD-ROM.

For example, if the lower three digits of the chart numbers are 001 to 028, 001 - 015 are not updated (not used) and 016 - 028 are updated.



[SENC CONVERT] window

The chart cell numbers to be updated are displayed in the [Conversion list] on the [SENC CONVERT] window. The chart is updated cell by cell from the top of the list. After the conversion has been completed, the chart numbers disappear from the window. Further the color of a chart cell frame changes to green when conversion of the cell is completed. The conversion may take 4 - 5 hours, depending on the quantity of chart numbers installed.



[Error]

The error message may appear during conversion, however leave the message displayed until the conversion is completed.



List becomes blank after conversion is completed.

[Conversion List]

The list in the [Conversion List] becomes blank after conversion is completed.

- Place the cursor on the [Close] button of the [SENC CONVERT], [Failed SENC conversions] and [Catalogue] and press the [SELECT] key to close the windows.

The message [FAIL CONVERSION] may appear during the conversion. If this occurs, press the [CHART PLAN] key, place the cursor on {CELL STATUS}, press the [SELECT] key and confirm that the date has been updated at [SENC] in the [CELL STATUS] window. And also, press the [CHART PLAN] key, place the cursor on [CATALOGUE], press the [SELECT] key and confirm that the charts updated now are shown in green on the chart screen. This completes the procedure for updating charts.