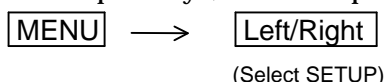


5.5.4 SETUP Menu

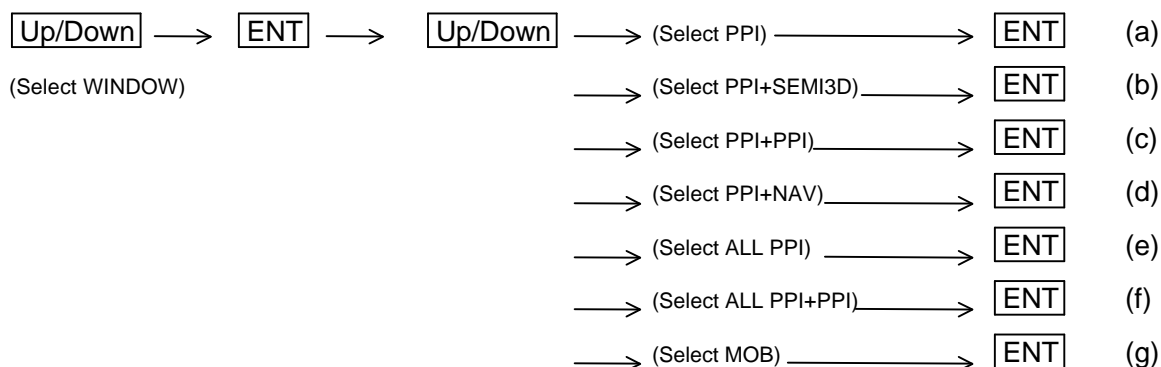
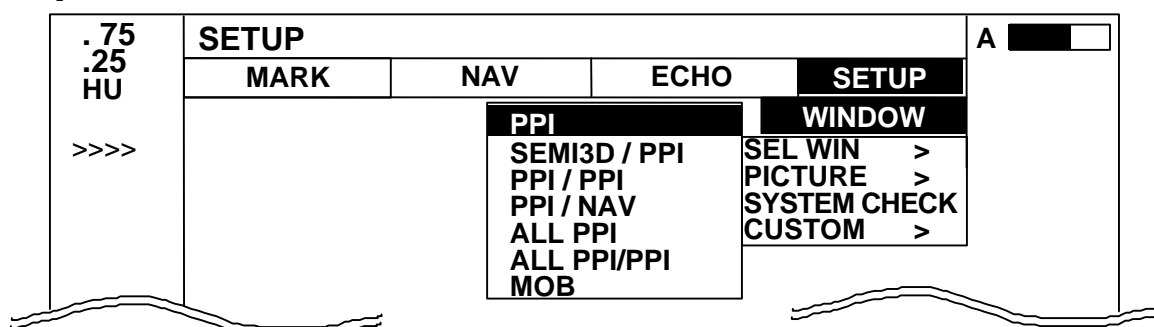
Press the "MENU" key and select "SETUP" from the four displayed menus by using the left or right arrows on the cursor pad. Highlight a specific item in the SETUP menu using the up-down cursor pad keys, and then press "ENT" to reveal the box containing further menu choices.



5.5.4.1 Selecting the screen display (WINDOW)

There are seven selectable screen configurations on the RA40/RA41/RA42/43/44:

- 1) PPI screen with navigation data and soft keys
- 2) PPI screen & SEMI3D screen with navigation data and soft keys
- 3) Two PPI screens, each of which can display a different range setting
- 4) PPI screen & large character navigation screen
- 5) Full-screen PPI display without nav data or soft keys
- 6) Full-screen of two PPI displays
- 7) MOB position data screen



Functions Available On Each Screen

SCREEN ITEM	PPI	PPI/SEMI3D PPI/NAV	PPI+PPI	ALL PPI	ALL PPI PPI	MOB
RANGE	○	○	⊙	○	⊙	X
VRM1, EBL1	○	○	□	X	X	X
VRM2, EBL2	○	○	□	X	X	X
FL VRM2/EBL2	○	X	X	X	X	X
RINGS ON/OFF	○	○	○	○	○	X
ZOOM, OFF CENT	○	X	X	X	X	X
///CSR	○	○	□	○	○	X
HDG OFF	○	○	○	X	○	X
STERN M	○	○	○	○	○	X
NORTH M	○	○	○	○	○	X
GAIN, STC, FTC	○	○	⊙	X	X	X
TUNE	○	○	○	X	X	X
ST	○	○	○	X	X	X
GZ	○	○	⊙	X	X	X
SEL WIN	X	X	○	X	○	X
TXON/OFF	○	○	○	○	○	X

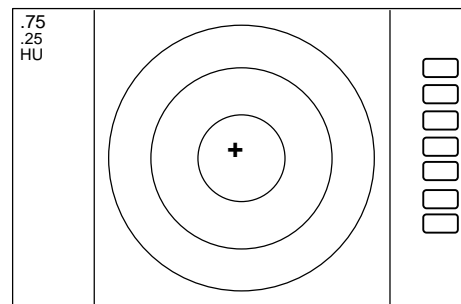
⊙ : Independent control on both screens using SEL WIN
□ : Can only be used on a PPI screens

○ : Simultaneous control on both screen
X : Cannot be used

Screen Modes and Operations

(a) PPI Screen

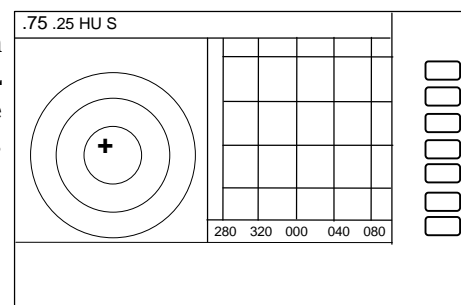
All functions can be used on this screen.



PPI Screen

(b) PPI/SEMI3D Screen

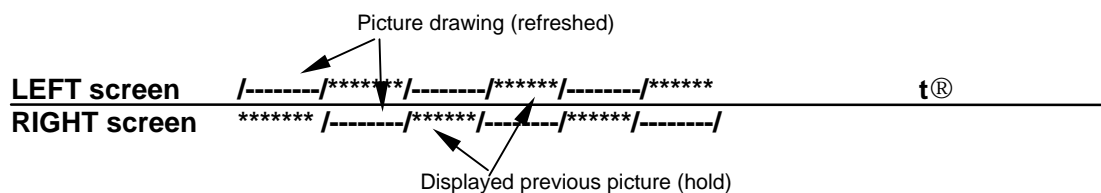
Simultaneous control of both screens at one time with controls, such as EBLs and VRMs. ZOOM, OFF-C, FL EBL2, and FL VRM2 cannot be used on this mode. The "SEMI3D" screen always displays the boat's heading at its center.



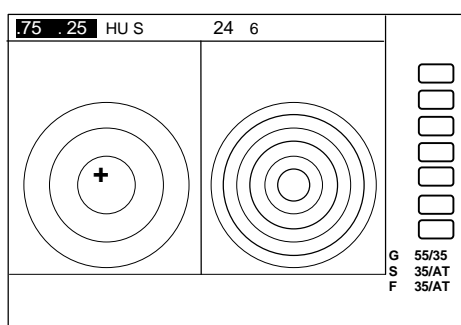
PPI/SEMI3D Screen

(c) PPI/PPI Screen

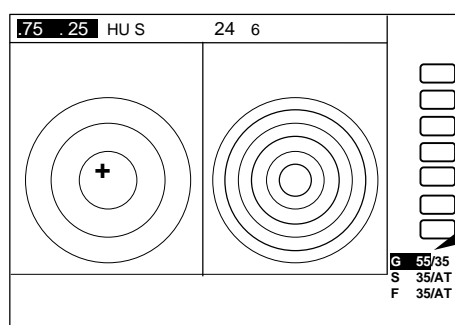
The radar picture is alternately refreshed with a separate scanning interval for each PPI screen. While one image is being refreshed, the other is held static. When cruising at higher speeds, we recommend using a single PPI screen for continuous real-time imaging.



ZOOM, OFF-C, FL-EBL2, and FL-VRM2 can not be used on this screen. RANGE, GAIN, STC, FTC, and GZ can be used independently for each by pressing the "SEL WIN" button. The cross cursor will be displayed on the selected screen and the range indicator will be highlighted.



LEFT screen is selected

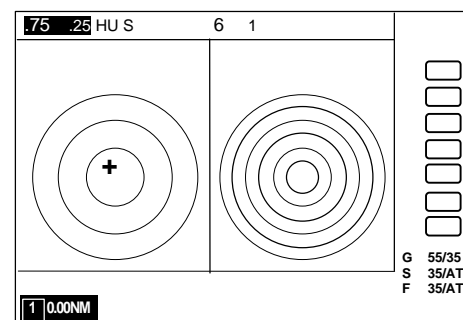


LEFT GAIN is active

When adjusting GAIN, STC, or FTC in a dual screen mode, only the radar image of the screen being adjusted is refreshed. The other is held static. Approximately five seconds after you press "ENT" to save the adjustment, both screens will be refreshed in their normal sequence.

Determining distance with VRM1 on LEFT screen

- 1) If the RIGHT range indicator is highlighted, change to the LEFT screen with "SEL WIN".
- 2) Press the "VRM1" key. The VRM distance in the lower left of the screen will be highlighted.
- 3) Rotate the control knob to determine the distance to a target.

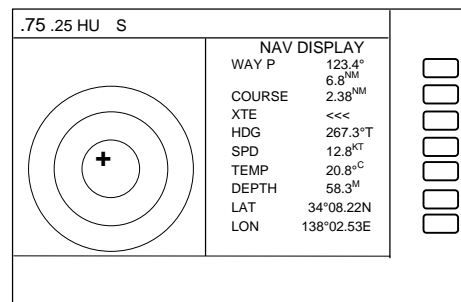


Determining the distance with VRM1 on LEFT screen

In the dual screen mode, VRM2, EBL1, or EBL2 also work the same way.

(d) PPI/NAV Screen

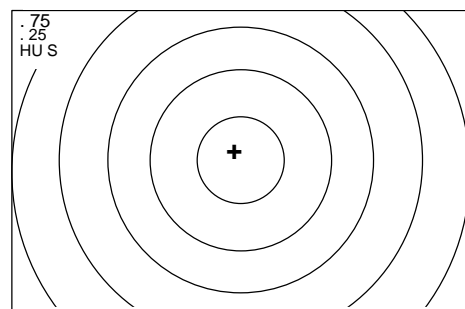
Note: The ZOOM, OFF-C, FL EBL2, and FL VRM2 do not work in this mode.



PPI/NAV screen

(e) ALL PPI Screen

The range, range ring interval and display mode are displayed in the upper-left corner of the screen. To return to a normal PPI screen, press any key except "MENU", "RANGE UP", "RANGE DOWN", "BRILL", or "POWER".

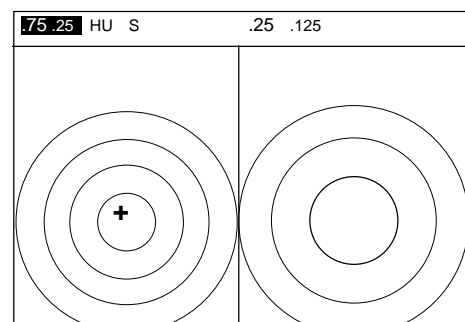


ALL PPI screen

(f) ALL PPI/PPI Screen

The range, range ring interval and display mode are displayed in the upper-left corner of the screen. To return to a normal PPI screen, press any key except "MENU", "RANGE UP", "RANGE DOWN", "BRILL", or "POWER".

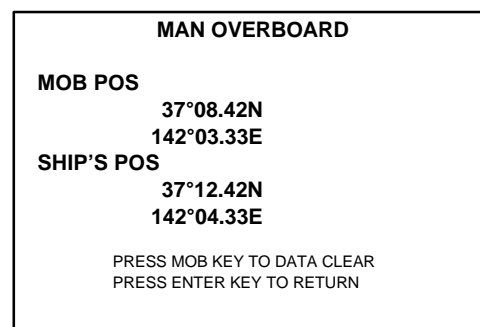
The radar picture is alternately refreshed with a separate scanning interval for each PPI screen. While one image is being refreshed, the other is held static. When cruising at higher speeds, we recommend using a single PPI screen for continuous real-time imaging.



ALL PPI/PPI screen

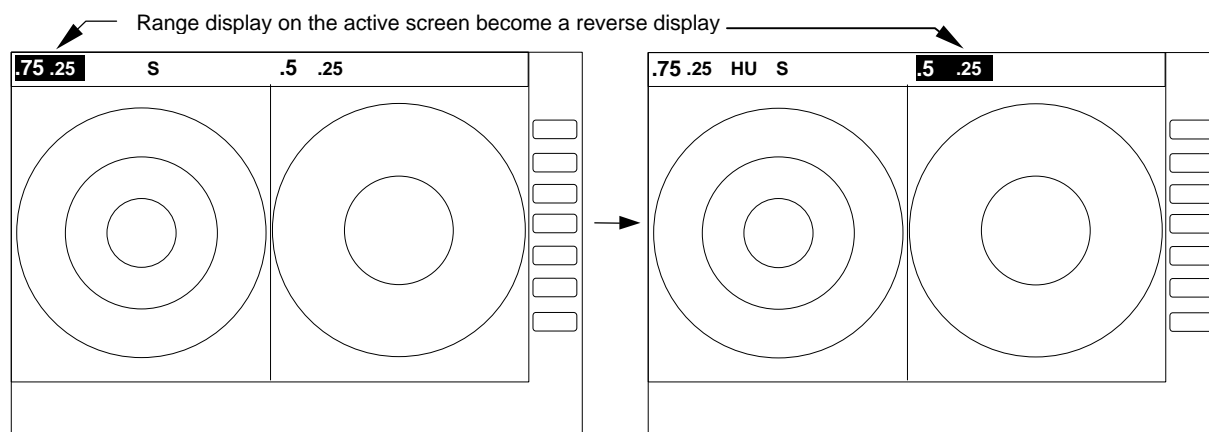
(g) MOB Screen

When you press the "MOB" key, the MOB screen appears. It displays both your present position and the position of your boat when you pushed the button. Press the "MOB" key to clear the MOB position and return to the previous screen. Press "ENT" to return previous screen but keep the MOB position data.



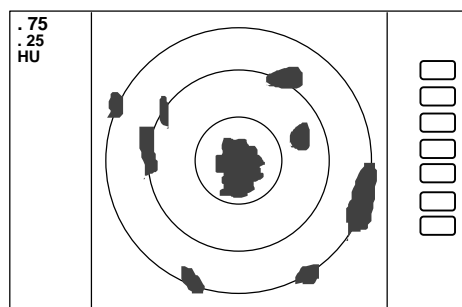
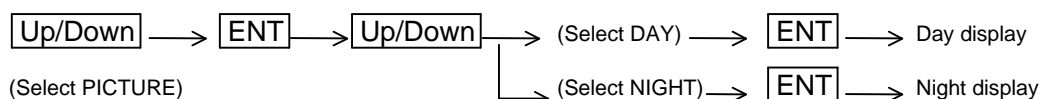
5.5.4.2 Switching screens on PPI/PPI screen (SEL WIN)

"SEL WIN" switches the active screen to operate functions such as RANGE, GAIN, STC, FTC, VRM1/2, EBL1/2, and guard zone. The range indicator of active screen is highlighted.

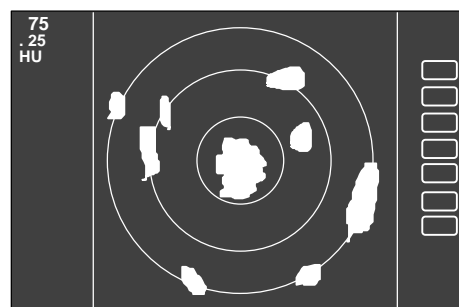


5.5.4.3 Reversing the screen (PICTURE)

You can reverse the screen display for better viewing at night or to suit ambient lighting conditions. Select PICTURE from the SETUP menu and press "ENT". Select either DAY or NIGHT.



DAY display



NIGHT display

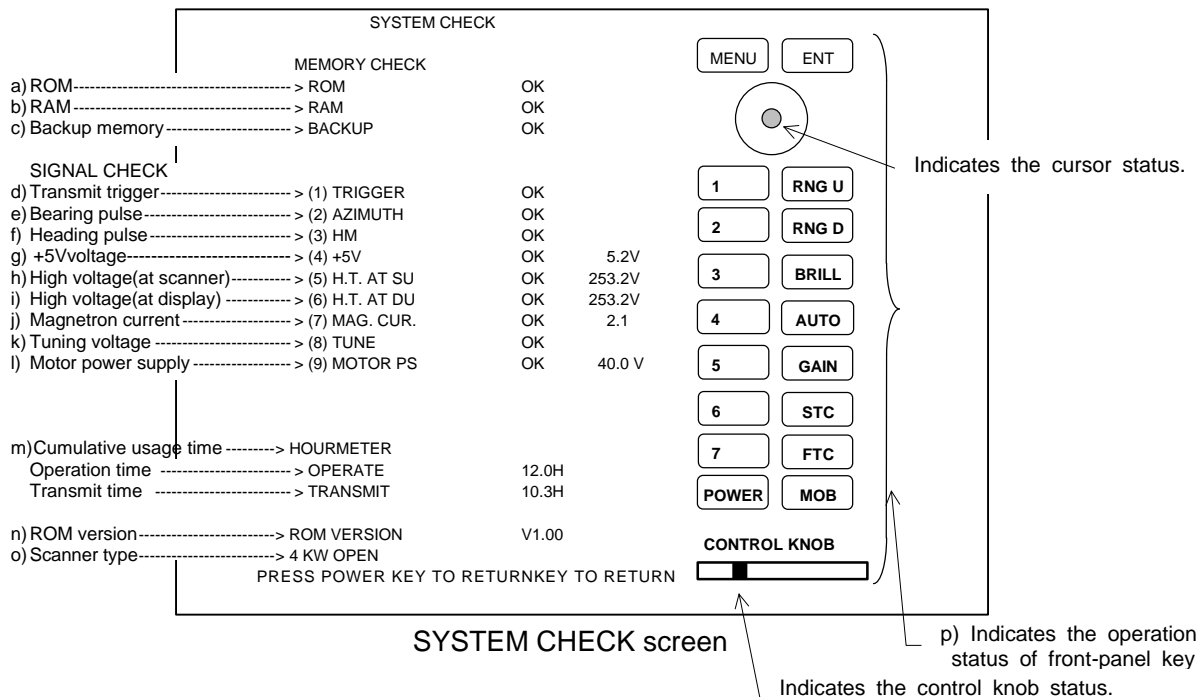
5.5.4.4 Slave Display Operation

It is possible to utilize a slave radar display as a repeater for the RA4x(C) radars. However, there are limitations to this configuration. The master display unit must be set to the single PPI mode only, in order for the slave to operate properly. Additionally, the slave display will have reduced target performance if operated outside the range setting of the master. The slave radar display must be set to "MONI" in the "SETUP", "CUSTOM" and "PRESET 2" menu. See 5.5.4.6.3.

5.5.4.5 Fault Diagnosis by Self Check (SYSTEM CHECK)

SYSTEM CHECK helps you to identify a problem with your system.

- (1) Select SYSTEM CHECK the SETUP menu and press "ENT".
- (2) The self-check will take a few seconds to run. OK indicates the item is operating properly. NG means it is faulty.
- (3) You can test the functioning of the front panel buttons by pushing them. If they are working properly, their corresponding icons will be highlighted. Rotating the control knob will make a line move inside the box on screen.
- (4) Press the "POWER" key to return to the previous screen.



- a) **ROM** Indicates the ROM status.
- b) **RAM** Indicates the RAM status.
- c) **Backup memory** Indicates the backup memory status.
- d) **Transmit trigger** Indicates the signal line status for the trigger signal sent from the scanner unit.
- e) **Bearing pulse** Indicates the signal line status for the bearing signal sent from the scanner unit.
- f) **Heading pulse** Indicates the signal line status for the bow signal sent from the scanner unit.
- g) **+5V voltage** Indicates the reference voltage status of the video circuit and its voltage value. (normally about 5 V)
- h) **High voltage(at SU)** Indicates the status of the high voltage supplied from the display unit to the scanner unit and its voltage value (normally about 250 V) at scanner unit.
- i) **High voltage(at DU)** Indicates the status of the high voltage supplied from the display unit to the scanner unit and its voltage value (normally about 250 V) at display unit.
- j) **Magnetron current** Indicates the status of the anode current flowing in the magnetron and its current value.
- k) **Tuning voltage** Indicates the status of the voltage used for tuning.
- l) **Motor power supply** Indicates the status of the scanner motor power supply (normally about 40 V).
(6 kW/12 kW type only)
- m) **Cumulative usage time** Indicates the cumulative time your radar is used.
OPERATE : Duration of time during which the power supply is turned on.
TRANSMIT : Duration of time transmitting.
- n) **ROM version** Indicates the ROM software version. .
- o) **Scanner type** Indicates the Scanner type ex. 4 KW OPEN
- p) **Front-panel keys** As you press any front-panel key when the SYSTEM CHECK screen is on, the corresponding key is highlighted on the screen by displaying it in reverse video.