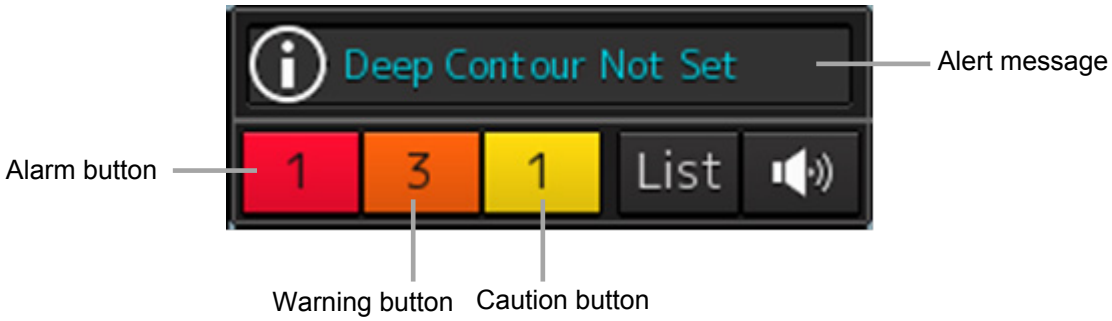
Appendix B Alert List

When an alert occurs, alert information is displayed in the alert notification area.



The numbers displayed in the buttons indicate the number of such alerts that have occurred.

Memo

The alert button of a category that has not occurred will not be displayed.

The display colors of alert messages are defined as follows according to the type and seriousness of alerts.

Alert Type	Alert Class (Seriousness)	Display Color	Alert Display Status	Alert Sound
Alarms (An alert indicating a state asking sailors to pay immediate attention and take immediate action.)	Alarms	Red	Before alarm acknowledgement: Blinking After alarm acknowledgement: Lighting	Present (repetitive)
Warnings (An alert indicating that the state has changed, which although is not immediately dangerous, but may become so in the near future if no action is taken. Warnings are alerts displayed for preventing possible future hazardous states.)	Warnings	Orange	Before alarm acknowledgement: Blinking After alarm acknowledgement: Lighting	Present (once)
Cautions (Although these are neither alarms nor warnings, these alerts indicate that it is necessary to pay more than normal attention to cautions, statuses, or to the supplied information.)	Cautions	Yellow	Lighting	No sound
No Alarm	-	Green	-	-

APP B

The list of alert messages by alert type is shown below.
Each item in the “Subject” column indicates the following.
TCS: Alert relating to the TCS function
HCS: Alert relating to the HCS function
INS: Alert relating to the INS function
ECDIS: Alert relating to the ECDIS function
RADAR/AIS: Alert relating to the RADAR/AIS function
S-JOY: Alert relating to the S-JOY function
Control unit: Alert relating to the control unit
Antenna: Alert relating the antenna
Display unit: Alert relating to the display unit
Operation unit: Alert relating to the operation unit
Power supply: Alert relating to power supply
AIS: Alert relating to the AIS function
Maintenance: Alert relating to maintenance
Others: Other alert

B.1 Alarms

Message	Subject	Explanation
ACCA	TCS	Reached Wheel Over Line alert (Displayed by TCS Ed.1.)
ACCA(Back-up Navigator Call)	TCS	Arrival at Wheel Over Line Alarm was not acknowledged for 30 seconds. (Displayed by TCS Ed.1.)
Actual course change	TCS	Arrival at Wheel Over Line Alarm was not acknowledged for 30 seconds. If the alarm is not acknowledged for an extra period of 30 seconds, Back-up Navigator Call is transferred to BNWAS. (Displayed by TCS Ed.2.)
Break Off WPT	ECDIS	WP off course
Change Autopilot steering mode	TCS	Manual steering prompt alert (Displayed by TCS Ed.1.)
Change Autopilot steering mode	TCS	Manual steering prompt alert (Displayed by TCS Ed.2.)
Collision avoidance function lost	INS	Loss of the collision avoidance function
CPA/TCPA(AIS)	RADAR/AIS	CPA/TCPA alarm
CPA/TCPA(TT)	RADAR/AIS	CPA/TCPA alarm
Cross Track	ECDIS	The off-track distance from the planned route exceeded the limit.
Crossing Safety Contour	ECDIS	Crossing the safety contour
Depth below keel	INS	Alarm on the depth below the keel

Message	Subject	Explanation
Early course change	TCS	An early course change alarm was not acknowledged for 30s seconds. If the alarm is not acknowledge for an extra period of 30 seconds, Back-up Navigator Call is transferred to BNWAS. (Displayed by TCS Ed.2.)
End Of Track	TCS	An End Of Track notice was not acknowledged for 30 seconds. If the notice is not acknowledge for an extra period of 30 seconds, Back-up Navigator Call is transferred to BNWAS. (Displayed by TCS Ed.2.)
End Of Track	TCS	End of Track notice 1 to 5 minutes before the arrival of the last WP (Displayed by TCS Ed.1.)
End Of Track (Back-up Navigator Call)	TCS	An End Of Track notice was not acknowledged for a period of 30 seconds. (Displayed by TCS Ed.1.)
Heading(Sensor Failure)	TCS	Heading sensor failure (Displayed by TCS Ed.1.)
Heading(Sensor Failure)	TCS	Heading sensor failure If the failure is not acknowledge for a period of 30 seconds, Back-up Navigator Call is transferred to BNWAS. (Displayed by TCS Ed.2.)
Heading(Sensor Failure, Back-up Navigator Call)	TCS	A Heading sensor failure was not acknowledged for a period of 30 seconds. (Displayed by TCS Ed.1.)
POSN1(Sensor Failure)	TCS	POSN1 sensor failure (Displayed by TCS Ed.1.)
POSN1(Sensor Failure)	TCS	POSN1 sensor failure If the failure is not acknowledged for a period of 30 seconds, Back-up Navigator Call is transferred to BNWAS. (Displayed by TCS Ed.2.)
POSN1(Sensor Failure, Back-up Navigator Call)	TCS	A POSN1 sensor failure was not acknowledged for a period of 30 seconds. (Displayed by TCS Ed.1.)
Speed(Sensor Failure)	TCS	Speed sensor failure (Displayed by TCS Ed.1.)
Speed(Sensor Failure)	TCS	Speed sensor failure If the failure is not acknowledged for a period of 30 seconds, Back-up Navigator Call is transferred to BNWAS. (Displayed by TCS Ed.2.)
Speed(Sensor Failure, Back-up Navigator Call)	TCS	A speed sensor failure was not acknowledged for a period of 30 seconds. (Displayed by TCS Ed.1.)
Track Control Stopped	TCS	TCS stopped (Displayed by TCS Ed.1.)

Message	Subject	Explanation
Track Control Stopped	TCS	TCS Stop was not acknowledged for a period of 30 seconds. If the effect is not acknowledged for an extra period of 30 seconds, Back-up Navigator Call is transferred to BNWAS. (Displayed by TCS Ed.2.)
Track Control Stopped(Back-up Navigator Call)	TCS	TCS Stop was not acknowledged for a period of 30 seconds. (Displayed by TCS Ed.1.)
Track Control Stopped (Reboot)	TCS	TSC stopped since MFD restarted during auto sailing (Displayed by TCS Ed.1.)

B.2 Warnings

Message	Subject	Explanation
ACCI	TCS	Waypoint notification 30 seconds prior to the arrival at WOL (Displayed by TCS Ed.1.)
Actual course change	TCS	Arrival at Wheel Over Line alarm 30 seconds prior to the arrival at WOL (Displayed by TCS Ed.2.)
AIS 95% Capacity	RADAR/AIS	Exceeded 95% of the maximum number of AIS targets
AIS ACT 95% Capacity	RADAR/AIS	Exceeded 95% of the maximum number of AIS activation targets
AIS ACT Max	RADAR/AIS	The number of activated AIS targets has reached the maximum number of active targets.
AIS(Communication failed, Direct)	INS	AIS communication failure on serial port of CCU
AIS(Communication failed, Main LAN)	INS	AIS communication failure on LAN1 (Main network)
AIS(Communication failed, Sub LAN)	INS	AIS communication failure on LAN2 (Sub network)
AIS(invalid)	INS	AIS data validity error
AIS(unavailable)	INS	AIS data not received yet
AIS Max Target	RADAR/AIS	The AIS target count exceeded the maximum target display count
ALC #n(Communication failed, Main LAN)	INS	ALC#n communication failure on LAN1 (Main network)
ALC #n(Communication failed, Sub LAN)	INS	ALC#n communication failure on LAN2 (Sub network)
Anemometer(Communication failed, Main LAN)	INS	Anemometer communication failure (wind direction/wind speed) on LAN1(Main network)
ARCS Security failed	ECDIS	[ARCS] Alert related to ARCS security
Arrived at WOL	ECDIS	Approach to the Wheel Over Line
Arrived at WPT	ECDIS	Arrived at a WPT
Autopilot(Invalid)	INS	Autopilot data validity error
Autopilot(Not Plausible)	INS	Autopilot data plausibility error
Autopilot(Unavailable)	INS	Autopilot data not received yet
Autopilot(Communication Failed, Main LAN)	INS	Autopilot communication failure on LAN1(Main network)
Autopilot malfunction	S-JOY	AP equipment malfunction
Blizzard#n-DSP#m(Communication error)	Control section	Communication error with the DSP (Blizzard#n - DSP#m)

Message	Subject	Explanation
Blizzard#n DSP#m (Load Failed)	Control section	The transfer of the DSP program did not succeed. (Blizzard #n - DSP#m)
Blizzard#n High TEMP	Control section	Blizzard#n temperature rise
Blizzard(Process Error)	Radar antenna	Signal process error within Blizzard
Blizzard(SYNC Signal Lost)	Radar antenna	Interrupt signal (without external synchronous signal)
BNWAS(Communication Failed, Main LAN)	INS	BNWAS communication failure on LAN1 (Main network)
CCU Fan	Control section	Drop in CCU fan revolution per speed
Change Autopilot steering mode	TCS	Manual steering prompt alert (Displayed by TCS Ed.2.)
Chart database failure	ECDIS	Chart database corrupted
Chart Shift	ECDIS	ARCS chart shift
Chart Shift to WGS84	ECDIS	Chart shift to WGS84 in ARCS chart
CIF(Communication error)	Control section	Communication error between the CPU and the Companion MPU
CMP RelaySoftware(Communication error)	Control section	Communication error between the Companion MPU relay software and the MFD
COG/SOG(doubtful)	INS	Integrity verification of COG/SOG data is doubtful
COG/SOG(failed)	INS	Integrity verification of COG/SOG data failed
COG/SOG(invalid)	INS	COG/SOG data validity error
COG/SOG(not plausible)	INS	COG/SOG data plausibility error
COG/SOG(unavailable)	INS	COG/SOG data not received yet
Course difference(heading deviates from track course)	TCS	Course difference (ship's heading deviates from track course) (Displayed by TCS Ed.1/Ed.2.)
CPU Core#n Clock down	Control section	CPU Core#n clock down
CPU Core#n High TEMP	Control section	CPU Core#n temperature rise
CPU High TEMP	Control section	(RPS) CPU temperature rise
Crossing a danger(Buoy/Light)	ECDIS	Crossing a buoy/light
Crossing a danger(dangerous symbol)	ECDIS	Crossing a danger symbol
Crossing a danger(obstruction)	ECDIS	Crossing an obstacle
Crossing a danger(spot sounding)	ECDIS	Crossing a dangerous water depth

Message	Subject	Explanation
Crossing a danger(under water rock)	ECDIS	Crossing underwater rock
Crossing a danger(wreck)	ECDIS	Crossing a wreck
Crossing anchorage area	ECDIS	Crossing an anchorage area
Crossing anchorage prohibited	ECDIS	Crossing an anchorage prohibited area
Crossing archipelagic sea lane	ECDIS	Crossing an archipelagic sea lane
Crossing cable area	ECDIS	Crossing an underwater cable area
Crossing cargo transshipment area	ECDIS	Crossing a cargo transshipment area
Crossing caution area	ECDIS	Crossing a caution area
Crossing channel	ECDIS	Crossing a channel
Crossing dangerous area	ECDIS	Crossing a dangerous area
Crossing dangerous line	ECDIS	Crossing a dangerous line
Crossing deeper water route	ECDIS	Deeper water route (crossing a deeper water route)
Crossing depth area	ECDIS	Crossing an area shallower than the safe water area
Crossing dredge area	ECDIS	Crossing a dredge area
Crossing dumping ground	ECDIS	Crossing a dumping ground
Crossing fairway	ECDIS	Crossing a fairway
Crossing fishing ground	ECDIS	Crossing a fishing ground
Crossing fishing prohibited	ECDIS	Crossing a fishing prohibited area
Crossing ice area	ECDIS	Crossing an ice area
Crossing Incineration area	ECDIS	Crossing an incineration area
Crossing inshore traffic zone	ECDIS	Crossing an inshore traffic zone
Crossing marine farm/aquaculture	ECDIS	Crossing a marine farm/aquaculture
Crossing military practice area	ECDIS	Crossing a military practice area
Crossing offshore production area	ECDIS	Crossing an offshore production area
Crossing pipeline area	ECDIS	Crossing a pipeline area
Crossing recommended traffic lane	ECDIS	Crossing a recommended traffic lane
Crossing restricted area	ECDIS	Crossing a restricted area
Crossing seaplane landing area	ECDIS	Crossing a seaplane landing area
Crossing sensitive sea area	ECDIS	Crossing a sensitive area
Crossing specially protected area	ECDIS	Crossing a specially protected area
Crossing spoil ground	ECDIS	Crossing a spoil ground
Crossing submarine transit area	ECDIS	Crossing a submarine transit area
Crossing traffic Crossing	ECDIS	Crossing a traffic crossing area
Crossing traffic precautionary	ECDIS	Crossing a traffic precautionary area
Crossing traffic roundabout	ECDIS	Crossing a traffic roundabout

Message	Subject	Explanation
Crossing traffic separation zone	ECDIS	Crossing a traffic separation zone
Crossing two way traffic	ECDIS	Crossing a two-way traffic route
Current(invalid)	INS	Current data validity error
Current(not plausible)	INS	Current data plausibility error
Current(unavailable)	INS	Current data not received yet
Current (Communication failed, Main LAN)	INS	Current communication failure on LAN1 (Main network)
Data Disk(Failed)	Control section	Disk #n failed and cannot be accessed
Data Disk (Not Connected)	Control section	Disk #n not acknowledged yet
DATUM(invalid)	INS	DTM sentence validity error
DATUM(not plausible)	INS	DTM sentence plausibility error
DATUM(unavailable)	INS	DTM sentence not received yet
Depth(doubtful)	INS	Integrity verification of depth data is doubtful
Depth(failed)	INS	Integrity verification of depth data failed
Depth(invalid)	INS	Depth data validity error
Depth(not plausible)	INS	Depth data plausibility error
Depth(unavailable)	INS	Depth data not received yet
DSC(Communication failed, Main LAN)	INS	DSC (Digital Selective Calling) communication failure on LAN1 (Main network)
DSP(Heading Data)	RADAR/AIS	Heading data error (heading error received by the Companion MPU)
DSP(Sweep Data)	RADAR/AIS	Missing header in sweep data
Early course change	TCS	Early course change alarm 3-6 minutes prior to the arrival at WOL (Displayed by TCS Ed.2.)
ECCI	TCS	Early waypoint notification 1-5 minutes prior to the arrival at WOL (Displayed by TCS Ed.1.)
Echo Sounder(Communication failed, Main LAN)	INS	Echo sounder communication failure on LAN1 (Main network)
Echo Sounder(Communication failed, Sub LAN)	INS	Echo sounder communication failure on LAN2 (Sub network)
Emergency Mode	Others	The system is running in the Emergency Mode activated when both disks have failed

Message	Subject	Explanation
End Of Track	TCS	Final WP notice 3-6 minutes prior to the arrival at final WP (Displayed by TCS Ed.2.)
e-Token(Communication error)	Control section	Communication error between the CPU and e-Token
External TT#n(invalid)	INS	TT#n data validity error
External TT#n(unavailable)	INS	TT#n data not received yet
GIF(Communication error)	Control section	Communication error between the Companion MPU and the Gyro IF (USB connection)
GIF-RIF(Open)	Control section	The open state was detected between the GIF and the RIF
GIF-SLC(Open)	Control section	The open state was detected between the GIF and the SLC
GPS #n(Communication failed, Direct)	INS	GPS#n communication failure in the CCU serial port
GPS #n(Communication failed, Main LAN)	INS	GPS #n communication failure in LAN1 (Main network)
GPS #n(Communication failed, Sub LAN)	INS	GPS #n communication failure in LAN2 (Sub network)
GPS Compass(Communication failed, Direct)	INS	GPS Compass communication failure on serial port of CCU
GPS Compass(Communication failed, Main LAN)	INS	GPS Compass communication failure on LAN1 (Main network)
GPS Compass(Communication failed, Sub LAN)	INS	GPS Compass communication failure on LAN2 (Sub network)
Gyro #n(Communication Failed, Direct)	INS	Gyro communication failure on the CCU serial port
Gyro #n(Communication Failed, GIF-Direct)	INS	Gyro IF communication failure on the CCU serial port
Gyro #n(Communication Failed, GIF-Main LAN)	INS	Gyro IF communication failure on LAN1 (Main network)
Gyro #n(Communication Failed, GIF-Sub LAN)	INS	Gyro IF communication failure on LAN2 (Sub network)
Gyro #n(Communication Failed, Main LAN)	INS	Gyro communication failure on LAN1 (main network)
Gyro #n(Communication Failed, Sub LAN)	INS	Gyro communication failure on LAN2 (sub network)
HASP(Communication error)	Control section	Communication error between the CPU and the HASP
Heading(invalid)	INS	Heading validity error
Heading(not plausible)	INS	Heading plausibility error
Heading(unavailable)	INS	Heading data not received yet

Message	Subject	Explanation
Heading(failed)	INS	Integrity verification of heading data failed
IAS(Communication Failed, Main LAN)	INS	IAS communication failure on LAN1 (Main network)
IAS(Communication Failed, Sub LAN)	INS	IAS communication failure on LAN2 (sub line)
ISW(Communication error)	RADAR/AIS	Communication error between the Companion MPU and the ISW
LAN(TCS-ECDIS)(Communication error)	S-JOY	Communication error with ECDIS with TCS authorization
LAT(Out Of Bounds)	ECDIS	Exceeded the system's operating latitude range (out of bounds)
LCD Fan#n(LCD)	Display Unit	The LCD fan#n stopped
LCD High TEMP	Display Unit	LCD temperature rise
Loading Different Datum Chart	ECDIS	Loading a different datum chart
Loading Unknown Datum Chart	ECDIS	Loading [ARCS] unknown datum chart
Log #n(Communication failed, Direct)	INS	Log communication failure on the CCU serial port
Log #n (Communication failed, GIF-Direct)	INS	Failure of log communication via Gyro IF on the CCU serial port
Log #n (Communication failed, GIF-Main LAN)	INS	Failure of log communication via Gyro IF on LAN1 (main network)
Log #n (Communication failed, GIF-Sub LAN)	INS	Failure of log communication via Gyro IF on LAN2 (sub network)
Log #n (Communication failed, Main LAN)	INS	Log communication failure on LAN1 (main network)
Log #n (Communication failed, Sub LAN)	INS	Log communication failure on LAN2 (sub network)
Lost(AIS)	RADAR/AIS	AIS target lost
Lost(TT)	RADAR/AIS	TT target lost
Low Speed	TCS	Low speed alarm (Displayed by TCS Ed.1.)
NAVTEX(Communication failed, Main LAN)	INS	NAVTEX communication failure on LAN1 (main network)
New Target(AIS)	RADAR/AIS	AIS is in the initial acquisition state
New Target(TT)	RADAR/AIS	TT is in the initial acquisition state
No.#n Conning(Communication failed, Main LAN)	INS	No.#n Conning communication failure on LAN1 (main network)
No.#n ECDIS(Communication failed, Main LAN)	INS	No.#n ECDIS communication failure on LAN1 (Main network)
No.#n Radar(Communication failed, Main LAN)	INS	No.#n Radar communication failure on LAN1 (Main network)

Message	Subject	Explanation
No.1#nRemote-Conning(Communication failed, Main LAN)	INS	No.#n Remote-Conning communication failure on LAN1 (main network)
No.#n RPS(Communication failed, Main LAN)	INS	No.#n RPS communication failure in LAN1 (main network)
No. #n Wing-Conning(Communication failed, Main LAN)	INS	No.#n Wing-Conning communication failure on LAN1 (main network)
OPA-OPB(Communication error)	Operation section	OPA-OPB open detection
OPU-Serial(Communication error)	Control section	Communication error between the Companion MPU and the operation unit (serial)
OPU-USB(Communication error)	Control section	Communication error between the Companion MPU and the operation unit (USB connection)
Position1(NON-WGS84)	ECDIS	Primary datum failure
Position2(NON-WGS84)	ECDIS	Secondary datum failure
Position monitor	TCS	Monitoring of the position (Displayed by TCS Ed.1/Ed2.)
Position(failed)	INS	Integrity verification of Position data failed
Position(GPS#n) Not Differential	INS	GPS#n is not DGPS
Position(invalid)	INS	Position validity error
Position(not plausible)	INS	Position plausibility error
Position(unavailable)	INS	Position not received yet
Power(AC Low Voltage)	Power supply	AC Power supply OFF
Power(DC Low Voltage)	Power supply	DC Power supply voltage low
Power Fail	Control section	3.3V/2.5V/1.5V/1.2V and other receiving power dropped or stopped
Power(Fan)	Power supply	The fan in the power supply unit is broken
Power(TXRX, Failed)	Power supply	Radar antenna power supply failure operation
PROC(AZI)	RADAR/AIS	Azimuth signal abnormality (signal processor)
PROC(HL)	RADAR/AIS	Heading line signal abnormality (signal processor)
PROC(Interrupt 1)	RADAR/AIS	Stern interrupt abnormality in the signal processor
PROC(Trigger)	RADAR/AIS	Trigger signal abnormality (signal processor)
PROC(Video)	RADAR/AIS	Radar video signal abnormality (signal processor)

Message	Subject	Explanation
RADAR PROC(Data)	RADAR/AIS	RADAR PROC or RADAR Draw control failure
RIF(Communication error)	Control section	Communication error between the Companion MPU and the RIF
ROT(invalid)	INS	ROT data validity error
ROT(unavailable)	INS	ROT data not received yet
Rudder(Communication failed, Main LAN)	INS	Rudder communication failure on LAN1 (Main network)
S-J I/O <-> AP(Communication error)	S-JOY	Communication error between S-J I/O and AP
S-J I/O(Unit failure)	S-JOY	S-J I/O Unit failure
S-J I/O Time Out	S-JOY	Communication error between S-J I/O and the display unit
S-JOY <-> S-J I/O(Communication error)	S-JOY	Communication error between S-JOY and S-J I/O
S-JOY(Unit failure)	S-JOY	S-JOY unit failure
Safety contour monitoring stopped	ECDIS	Safety contour monitoring confirmation stopped
SLC1-#n(Communication failed, Main LAN)	INS	SLC1-#n Communication failure on LAN1 (Main network)
SLC2-#n(Communication failed, Sub LAN)	INS	SLC2-#n Communication failure on LAN2 (Sub network)
STW Speed(invalid)	INS	STW validity error
STW Speed(not plausible)	INS	STW plausibility error
STW Speed(unavailable)	INS	STW data not received yet
TEMP(invalid)	INS	Water temperature data validity error
TEMP(unavailable)	INS	Water temperature data not received yet
Track Control Stopped	TCS	TCS stopped (Displayed by TCS Ed.2.)
TT 95% Capacity	RADAR/AIS	Exceeded 95% of the maximum number of TT targets
TT: Out of Range	RADAR/AIS	TT exceeded 32NM
TT: REF TT(Lost target)	RADAR/AIS	TT reference target lost
TT: Max Target	RADAR/AIS	The maximum number of TT targets is being acquired
TXRX(AZI)	Radar antenna	Azimuth signal abnormality (transceiver section)
TXRX(Communication error)	RADAR/AIS	Communication error between Companion MPU and radar antenna
TXRX(DRV AC LKV)	Radar antenna	Drive section failure (insufficient AC power supply)

Message	Subject	Explanation
TXRX(DRV AC OVV)	Radar antenna	Drive section failure (AC over-voltage)
TXRX(DRV COM)	Radar antenna	Drive section failure (communication error)
TXRX(DRV CPU1)	Radar antenna	Drive section failure (motor driver CPU1 failure)
TXRX(DRV Hall Sensor)	Radar antenna	Drive section failure (hall sensor failure)
TXRX(DRV High Rotate)	Radar antenna	Drive section failure (high rotation speed error)
TXRX(DRV IPM OVH)	Radar antenna	Drive section failure (IPM overheating)
TXRX(DRV Low Rotate)	Radar antenna	Drive section failure (low rotation speed error)
TXRX(DRV MOT OVH)	Radar antenna	Drive section failure (motor overheating)
TXRX(DRV OVC)	Radar antenna	Drive section failure (over-current)
TXRX(DRV Over Rotate)	Radar antenna	Drive section failure (over-rotation error)
TXRX(DRV VBUS LKV)	Radar antenna	Drive section failure (insufficient VBUS voltage)
TXRX(DRV VBUS OVV)	Radar antenna	Drive section failure (VBUS over-voltage)
TXRX(Fan #n)	Radar antenna	Radar antenna Fan #n abnormality (This warning is not issued when a solid state antenna is connected.)
TXRX(Heater)	Radar antenna	Magnetron heater over-voltage error (Although radar transmission can be continued while this warning is issued, it is recommended to restrict the use of the equipment under an emergency situation only since the equipment is damaged.)
TXRX(High Temperature)	Radar antenna	Radar antenna (internal temperature failure)
TXRX(HL)	Radar antenna	Ship's heading signal abnormality (transceiver section)
TXRX(IF PLL)	Radar antenna	PLL lock error inside of DAC for IF
TXRX(LO PLL)	Radar antenna	Radar antenna LO frequency error
TXRX(Magnetron Current)	Radar antenna	Prevention of modulation circuit damage by damaged magnetron
TXRX(MHV)	Radar antenna	Modulation voltage error

Message	Subject	Explanation
TXRX(Motor Current)	Radar antenna	Motor over-current error
TXRX(Option)	Radar antenna	Radar antenna Option module error
TXRX(PROC)	Radar antenna	Radar antenna Signal processing circuit error
TXRX(PS)	Radar antenna	Radar antenna Power supply circuit error
TXRX(SSW Off)	Radar antenna	Safety switch OFF
TXRX(Reverse)	Radar antenna	Radar antenna rotating in reverse
TXRX(Trigger)	Radar antenna	Trigger signal abnormality (transmission/reception section)
TXRX(Video)	Radar antenna	Radar video signal abnormality (transmission/reception section)
VDR(Delivery Failed)	RADAR/AIS	The delivery of capture images for the VDR failed continuously for 1 min (i.e., continuously 4 times)
VDR(Unexpected Data)	RADAR/AIS	Abnormality when the connected socket received some signal at image distribution to VDR
VDR (Communication failed, Main LAN)	INS	VDR communication failure on LAN1 (Main network)
VDR(Communication failed, Sub LAN)	INS	VDR communication failure on LAN2 (sub network)
Water Thermometers communication failed(LAN1)	INS	Water TEMP communication failure on LAN1 (Sub network)

The AIS alerts received from external sensors are as shown below.

For the AIS alerts received from external sensors, alert messages are suffixed by (External).

Example: Antenna VSWR exceeds limit (External)

Message	Subject	Explanation	Alert ID
Antenna VSWR exceeds limit	AIS	Antenna output error	002
Data Flash memory err	AIS	Transponder data storage circuit error	063
external EPFS lost	AIS	Abnormality in external EPFS connection	025
general failure	AIS	General error	006
Heading lost/invalid	AIS	Ship's heading data has not been input or is invalid.	032
MKD connection lost	AIS	Abnormality in the connection between the transponder and the controller	008
mkd connection lost	AIS	No response from the transponder (detected in the display)	064
no sensor position in use	AIS	Internal GPS data has not been input or is invalid.	026
no valid COG information	AIS	COG data has not been input or is invalid.	030
no valid ROT information	AIS	ROT data has not been input or is invalid.	035
no valid SOG information	AIS	SOG data has not been input or is invalid.	029
Not Transmitting Tx malfunction	AIS	Malfunction at or during transmission	001
Pa current error	AIS	Error in the current during transmission	054
Pa temp error	AIS	Abnormal temperature rise during transmission	055
Power supply error	AIS	Error in power supply voltage	053
Program Flash memory err	AIS	Control circuit error of the transponder	062
Rx channel 1 malfunction	AIS	Malfunction of reception channel 1	003
Rx channel 2 malfunction	AIS	Malfunction of reception channel 2	004
Rx channel 70 malfunction	AIS	Malfunction of reception channel 70	005
SSD mismatch	AIS	Mismatch in static information (between the display and the transponder)	065
Tx pll unlock	AIS	Error in the synthesizer circuit for transmission	060
Tx power down	AIS	Transmit by reducing output power due to error	051
Tx power supply error	AIS	Error in power supply voltage during transmission	052
Tx power too high	AIS	Power is higher than the specified transmission power.	059
Tx power too low	AIS	Power is lower than the specified transmission power.	056
Tx stop interrupt	AIS	Transmission is forcibly stopped by the transmission monitoring circuit.	058
Vr error	AIS	Transmission system output error	057

B.3 Cautions

Message	Subject	Explanation
AIS(invalid)	INS	AIS data validity error
AIS(unavailable)	INS	AIS data not received yet
AMS #n(Alert Communication Failed, Main LAN)	INS	AMS#n communication failure on LAN1 (main network)
AMS #n(Alert Communication Failed, Sub LAN)	INS	AMS#n communication failure on LAN1 (sub network)
Autopilot(invalid)	INS	Autopilot data validity error
Autopilot(unavailable)	INS	Autopilot data not received yet
AZ area : Different thresholds entered	INS	Threshold value was entered, but the AZ area is different.
Chart licence expired(SSE 25)	ECDIS	The chart license has expired
Chart licence will expire soon(SSE 20)	ECDIS	The chart license will expire within 30 days
COG/SOG(invalid)	INS	COG/SOG data validity error
COG/SOG(unavailable)	INS	COG/SOG data not received yet
Customized display indication	ECDIS	Display is customized.
DATUM(invalid)	INS	DTM sentence validity error
DATUM(unavailable)	INS	DTM sentence not received yet
Dongle Disable Mode	ECDIS	Operation is performed in the Dongle Disable mode at a USB dongle failure
Depth(invalid)	INS	Water depth data validity error
Depth(unavailable)	INS	Water depth data not received yet
ENC Data Are Available	ECDIS	ENC chart is available
External TT#n(invalid)	INS	TT#n data validity error
External TT#n(unavailable)	INS	TT#n data not received yet
HDOP Exceeded (GPS #n)	INS	GPS #n HDOP increased (deterioration of GPS precision)
Heading(invalid)	INS	Heading data validity error
Heading(unavailable)	INS	HDG data not received yet
Information overscale	ECDIS	When own ship moves to another chart, the chart is expanded to the double scale or more of the chart scale
Larger scale ENC available indication	ECDIS	A detail chart is available.
Life Expectancy FAN(CCU)	Maintenance	CPU FAN approaching its life expectancy
Life Expectancy FAN(Power)	Maintenance	Power FAN approaching its life expectancy
Life Expectancy LCD Backlight	Maintenance	LCD Backlight approaching its life expectancy
Life Expectancy LCD FAN#n	Maintenance	LCD FAN#n approaching its life expectancy

Message	Subject	Explanation
Life Expectancy Magnetron#n	Maintenance	Magnetron#n approaching its life expectancy
Life Expectancy SSD#n	Maintenance	SSD#n approaching its life expectancy
Life Expectancy TXRX#n FAN	Maintenance	Antenna#n fan approaching its life expectancy
Life Expectancy TXRX#n Motor	Maintenance	Antenna#n motor approaching its life expectancy
Life Expectancy UPS	Maintenance	UPS approaching its life expectancy
No ENC Available indication	ECDIS	Scaling factor/sea area chart to be indicated is unavailable in ECDIS
Not up-to-date(Chart)	ECDIS	The chart that is indicated is not the latest chart
Position Shift	ECDIS	When own ship's position is offset
Position(invalid)	INS	Position validity error
Position(not plausible)	INS	Position plausibility error
Position(unavailable)	INS	Position not received yet
ROT(invalid)	INS	ROT data validity error
ROT(unavailable)	INS	ROT data not received yet
RSA(invalid)	INS	RSA data validity error
RSA(unavailable)	INS	RSA data not received yet
Scanner Rotating	RADAR/AIS	The scanner is rotating (waveforms not transmitted yet): ICE CLASS standby
Selected Fix View	ECDIS	When Fix View is selected
STW Speed(invalid)	INS	STW data validity error
STW Speed(unavailable)	INS	STW data not received yet
TEMP(invalid)	INS	Water temperature data validity error
TEMP(unavailable)	INS	Water temperature data not received yet
TIME(invalid)	INS	Time validity error
TIME(unavailable)	INS	Time not received yet
Trial	RADAR/AIS	Trial

B.4 List of Alert Icons

The alert icons displayed in the alert status area are listed below.

No.	Name of alert icon	Functional outline	Alert icon
1	Active – unacknowledged alarm	A flashing red triangle. A symbol of loudspeaker in the middle of the triangle.	
2	Active – silenced alarm	A flashing red triangle. A symbol as in icon number 1 with a prominent diagonal line above it.	
3	Active – acknowledged alarm	A red triangle. An exclamation mark in the middle of the triangle.	
4	Active - responsibility transferred alarm	A red triangle. An arrow pointing towards the right in the middle of the triangle.	
5	Rectified – unacknowledged alarm	A flashing red triangle. A tick mark in the middle of the triangle.	
6	Active - unacknowledged warning	A flashing yellowish orange circle. A symbol of loudspeaker in the middle of the circle.	
7	Active – silenced warning	A flashing yellowish orange circle. A symbol as in icon number 6 with a prominent diagonal line above it.	
8	Active – acknowledged warning	A yellowish orange circle. An exclamation mark in the middle of the circle.	
9	Active - responsibility transferred warning	A yellowish orange circle. An arrow pointing towards the right in the middle of the circle.	
10	Rectified – unacknowledged warning	A flashing yellowish orange circle. A tick mark in the middle of the circle.	
11	Caution	A yellow square. An exclamation mark in the middle of the square.	
a	Aggregation	A plus sign. To be presented together with icons number 1 to 11	
b	Acknowledge not allowed for alarm	A red triangle with a cross in the middle of triangle. To be presented together with icons number 1, 2 and 5.	
c	Acknowledge not allowed for warning	A yellowish orange circle with a cross in the middle of circle. To be presented together with icons number 6, 7 and 10.	

Appendix C Setting the Inter switch

C.1 Overview

C.1.1 Overview

The Inter switch NQE-3141 is equipment that makes it possible to freely select several radar display units provided in the bridge and the several radar antennas with different properties.

Even when the power supply of the display unit has been switched OFF or has become faulty, it is possible to operate the radar antennas from other display units.
When it has become impossible to use the Inter switch, it is possible to carry out operations independently.
The selection can be made up to a maximum of 8 units.
When the radar antenna is switched, the following settings are read out.

Setting	Reference
Rough adjustment tuning	19.2.2 Performing basic adjustments on the radar
Bearing adjustment	
Range adjustment	
Antenna height	19.2.3 Adjusting TXRX (Radar screen only)
TXRX settings	
Performance monitor adjustment	19.2.4 Adjusting a radar performance monitor (Radar screen only)
Sector blank	19.2.5 Setting Sector Blank (Radar screen only)
Radar antenna position	19.3.2 Verifying/Setting CCRP (Consistent Common Reference Point)

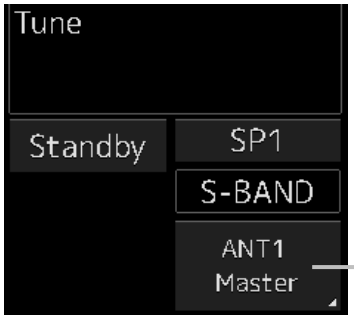
The setting of each of coarse adjustment tuning, tuning peak setting, tuning indication level, bearing adjustment, monitor transmission level (performance monitor adjustment), Tune Indicator (TXRX adjustment), and Sector Blank is read from the antenna at switching.
Other settings are read from the indicator that is used.
The settings that are saved in the indicator are saved by antenna and the previous setting is read at the connection.

C.1.2 Checking the connection status with the connected radar antennas

The status of connection with the connected radar antenna is displayed by the Inter switch connection change button of the Radar system information.

Note

Always a display unit that becomes the master is necessary for making a slave connection.
When putting a slave display unit in the transmit state, it is necessary to put the master display unit in the transmit state.



Inter switch connection change button

The name of the connected radar antenna is displayed in the upper part.
The connection state is displayed in the lower part.

Memo

In simple Inter switch mode, only the connection status is displayed.

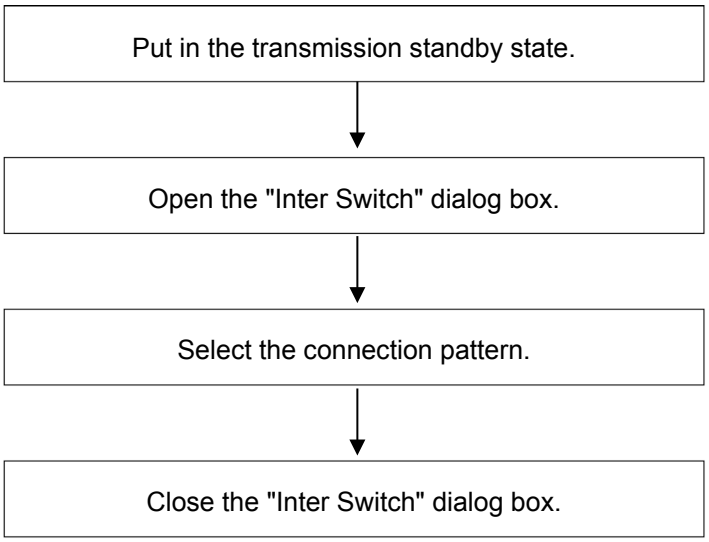
Connection state
[Master]: The state in which the display unit can control the radar antenna.
[Slave]: The control of the radar antenna is not possible.

In the [slave] state, transmit/stop, and pulse length change cannot be made. Also, there will be restrictions on the usable range.

C.2 Inter switch Operations

When changing the connection pattern, carry out the operations according to the following flow.

C.2.1 Flow of operations



APP C

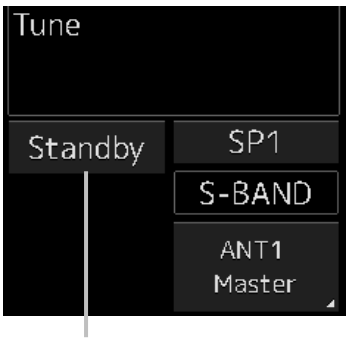
C.2.2 Opening the "Inter Switch" dialog box

Memo

The "Inter Switch" dialog can be displayed in the Transmission Not Ready state or preheat state.
When transmission is not ready, "Preheat" or "Standby (disable)" is displayed on the Standby/Transmission change button.

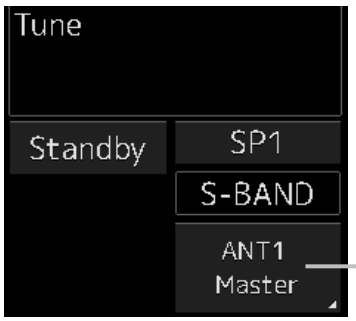
1 In the transmission state, click on the Standby/Transmission change button.

"Standby" is displayed on the button and the equipment is set to Transmission Not Ready state.
If the equipment is already in the Transmission Not Ready state, this operation is not required.

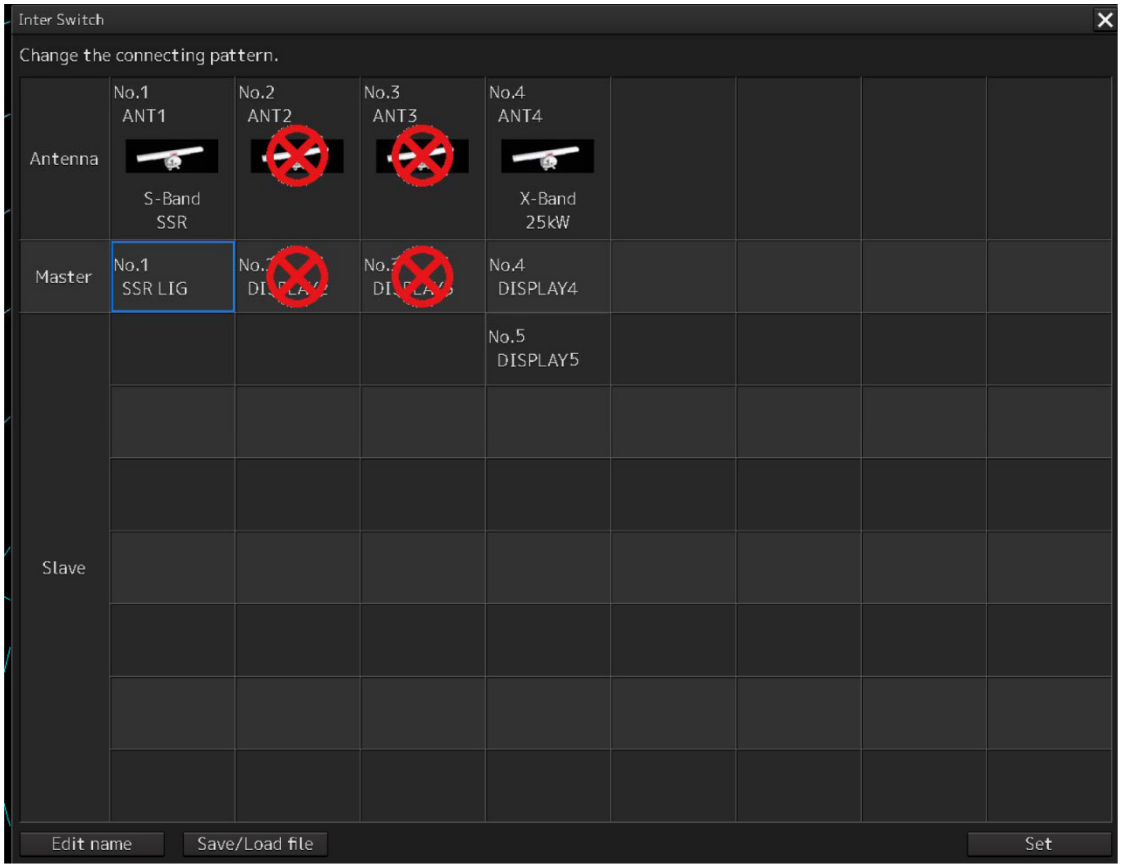


Standby/Transmit changeover button

2 Click the Change Inter switch connection button.



Change Inter switch connection button



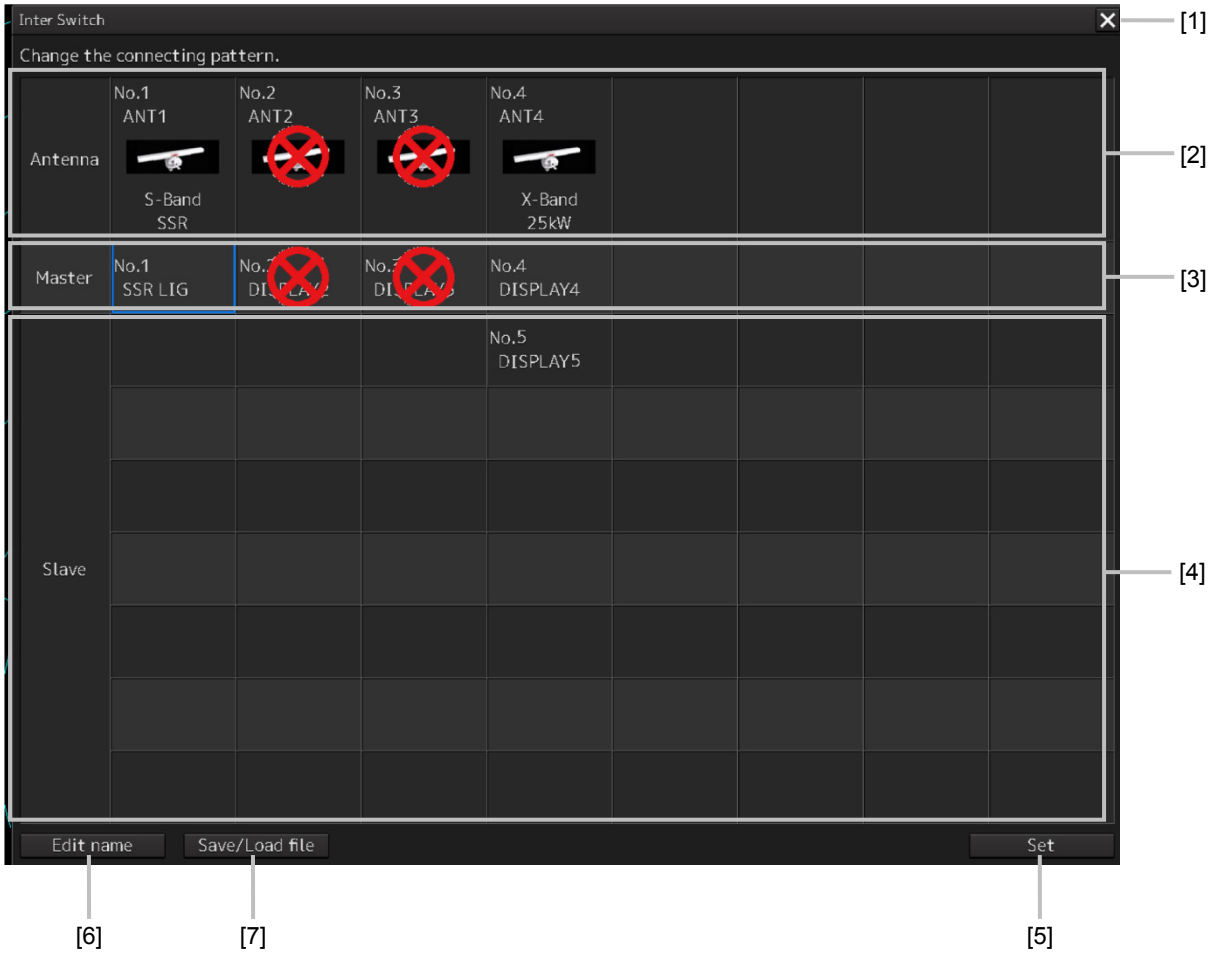
The "Inter Switch" dialog box is displayed.

The connection state between the current radar antenna and the display unit obtained by communication with the Inter switch is displayed in the "Inter Switch" dialog box.

APP C

C.2.3 Checking the connection pattern

■ When connecting 3 to 4 radar antennae (extension) × 3 to 8 display units

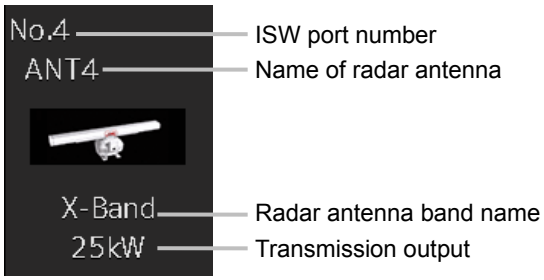


[1] [×] button

Closes the "Inter Switch" dialog box.

[2] Connected radar antenna

The connected radar antennas are displayed.



[3] Master display unit selection button

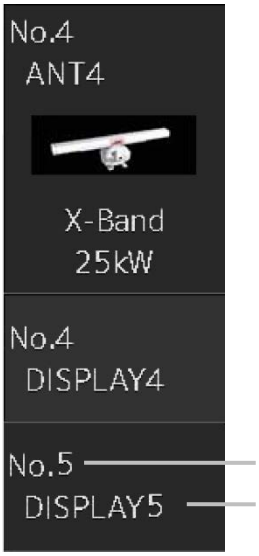
Displays radar antenna to which the master display units are respectively connected.

For changing the combinations of master display units and radar antennas, refer to "C.2.4 Changing the connection pattern".

[4] Slave display unit selection button

Displays radar antenna to which the slave display units are respectively connected.

For changing the combinations of slave display units and radar antennas, refer to "C.2.4 Changing the connection pattern".



[5] [Set] button

When this button is clicked, the information of the set connection pattern is transmitted to the Inter switch.

Note

When a master or slave display unit button in which the error notification mark ( ) is being displayed, the [Set] button becomes disabled.

For the details of error notification marks, refer to " C.2.3.1 About equipment defect mark ( ) and error notification mark ( )".

APP C

[6] [Edit name] button

When this button is clicked, a dialog box is displayed for changing the names of the radar antennas and display units.

Regarding the operations in the "Edit name" dialog box, refer to "C.2.5 Changing the name of radar antenna or display unit".

[7] [Save/Load file] button

When this button is clicked, the "Connection pattern file operation" dialog box is displayed.

The current connection pattern can be saved in the file or the connection pattern that has been saved previously can be loaded.

For details of the "Connection pattern file operation" dialog box, refer to "C.2.6 Using the set connection pattern".

C.2.3.1 About equipment defect mark (⊗) and error notification mark (!)

■ Equipment defect mark

This mark is displayed when the power supply of the radar antenna or the indicator unit is OFF or faulty.

Check the cause and take corrective action.

■ Error notification mark

This mark is displayed when there is some error in the settings of a radar antenna or a display unit.

Check the cause and take corrective action.

Cause	Countermeasure
The master display unit does not exist or is faulty although the slave display unit is connected.	Connect the master display unit.
The master or slave display unit that is connected is not permitted to be connected to a radar antenna.	Check the setting by selecting [Service] - [Installation] - [Settings] - [Inter switch] on the menu and permit the connection to the display unit or connect another display unit whose connection to the radar antenna is permitted.

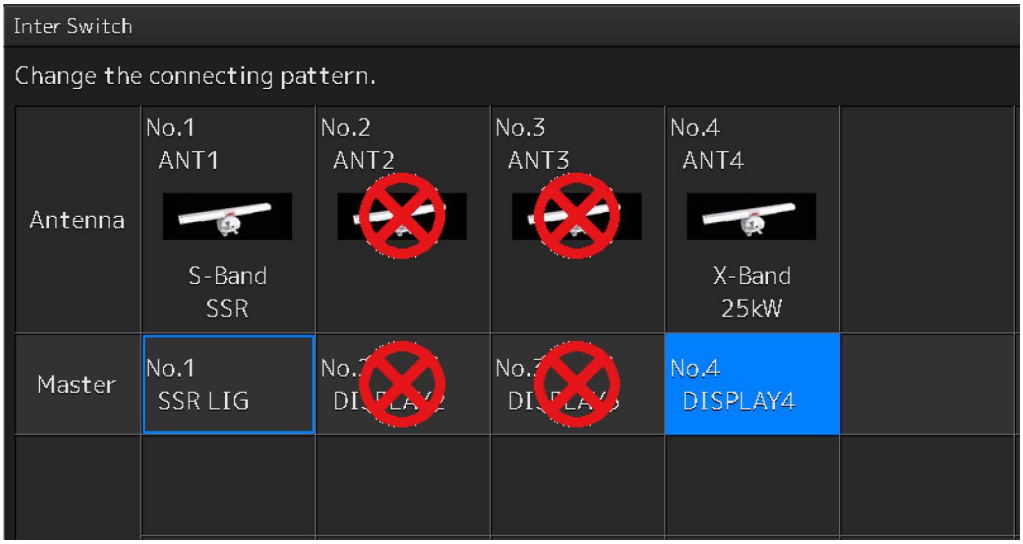
C.2.4 Changing the connection pattern

1 Click the "Change Inter switch connection" button.

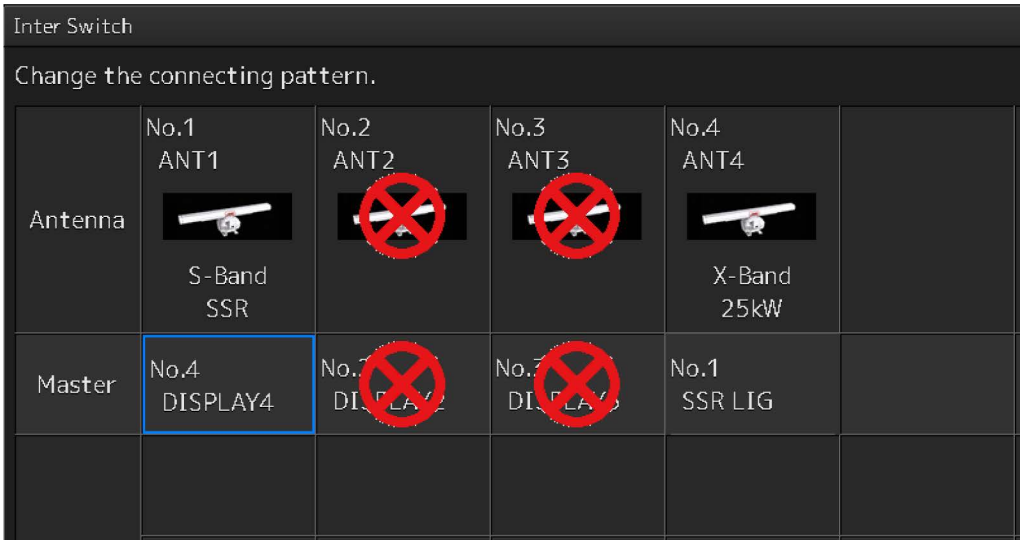
The "Inter Switch" dialog box is displayed.

2 Click the Master or Slave display unit selection button to be connected to the radar antenna.

The selected display unit is highlighted.



3 Place the cursor to the destination of change and click it on.



The currently selected display unit and the change destination display unit are interchanged.

4 If necessary, carry out the steps 2 and 3 for other display units.

5 Click the [Set] button.

The information of the set connection pattern is transmitted to the Inter switch.

6 Click the [×] button.

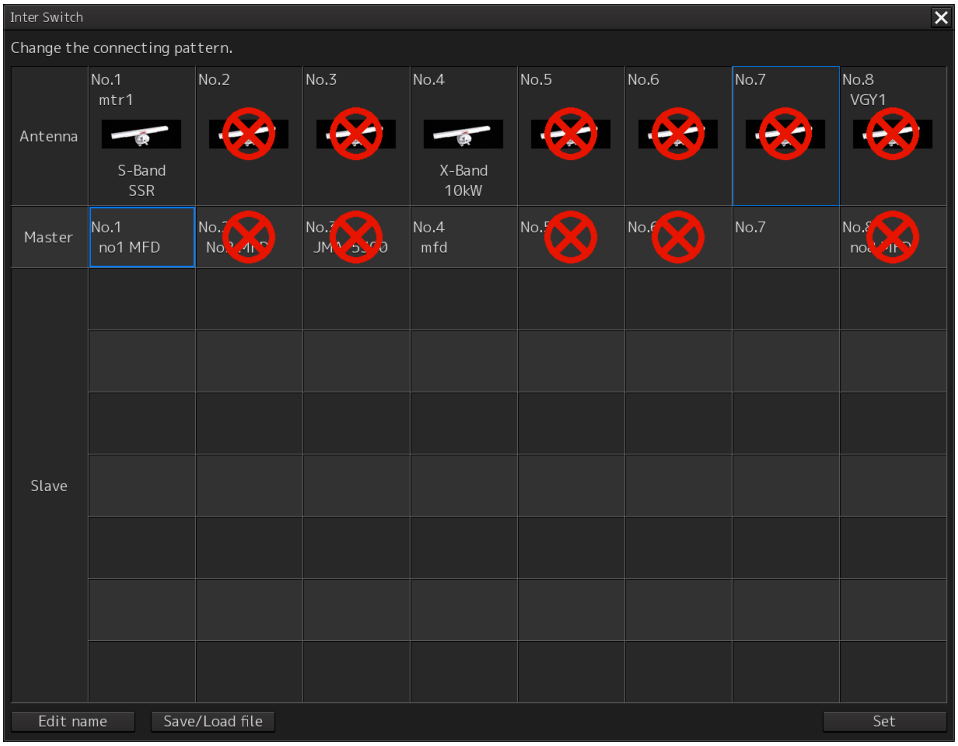
The "Inter Switch" dialog box is closed.

APP C

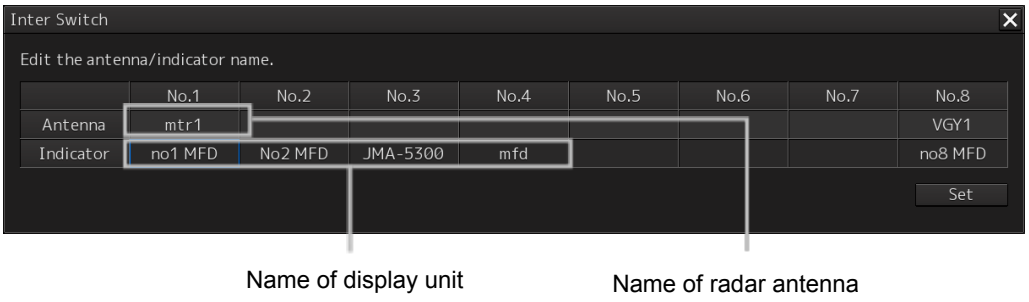
C.2.5 Changing the name of radar antenna or display unit

1 Click the [Edit name] button of the "Inter Switch" dialog box.

The "Edit name" dialog box is displayed.



2 Click the name of the radar antenna or the display unit whose name is to be edited.



A software full keyboard is displayed.

3 Change the name.

The name can be input by using 1 to 8 alphanumeric characters and symbols.

4 Click the [Set] button.

The name is changed.

5 Click the [×] button.

The "Edit name" dialog box is closed.

C.2.6 Using the set connection pattern

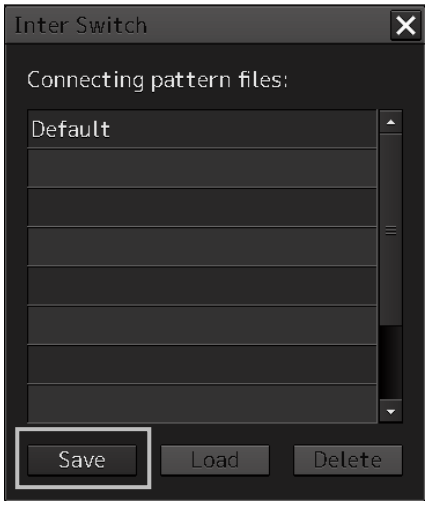
When connecting 3 to 8 radar antennas × 3 to 8 display units, it is possible to save the set connection pattern in a file. By reading out the saved connection pattern when required, it is possible to quickly change the connection pattern.

■ Saving a connection pattern

1 After setting a connection pattern, click the [Save/Load file] button of the "Inter Switch" dialog box.

The "Connection pattern file" dialog is displayed.

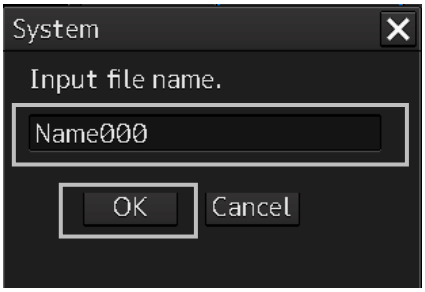
2 Click the [Save] button.



The "Input file name" dialog is displayed.

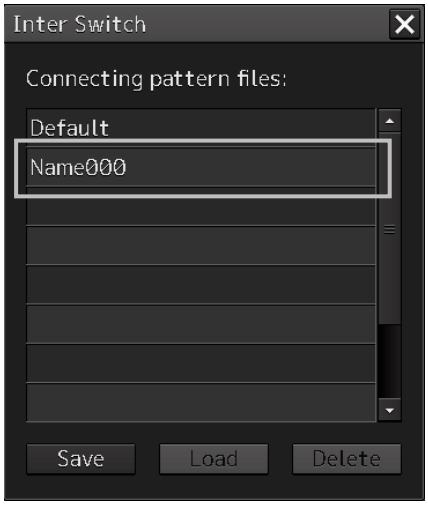
3 Input the file name using the software full keyboard.

4 Click the [OK] button.



APP C

The connection pattern is saved, and the connection pattern name is displayed in the "Connecting pattern files:" dialog.



Note

- The number of connection patterns that can be saved is up to 10 apart from the connection pattern set at the time of shipment from the factory (default).
  If any more connection patterns are attempted to be saved, the following message dialog box appears.

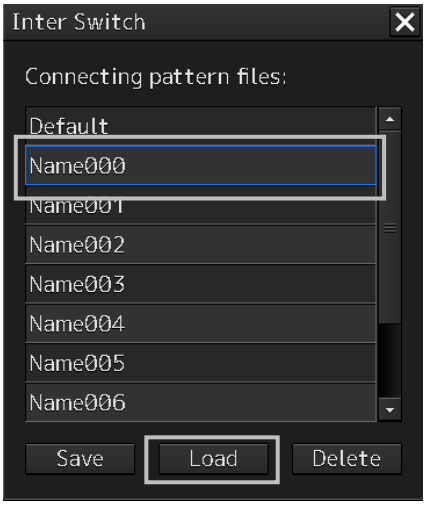
- The pattern that is set at factory delviery (Default) cannot be changed.

■ Loading a connection pattern

1 Click the [Save/Load file] button of the "Inter Switch" dialog box.

The " Connecting pattern files:" dialog is displayed.

2 Click the connection pattern to be loaded.



3 Click on the [Load] button.

The loaded connection pattern is displayed in the "Inter Switch" dialog.

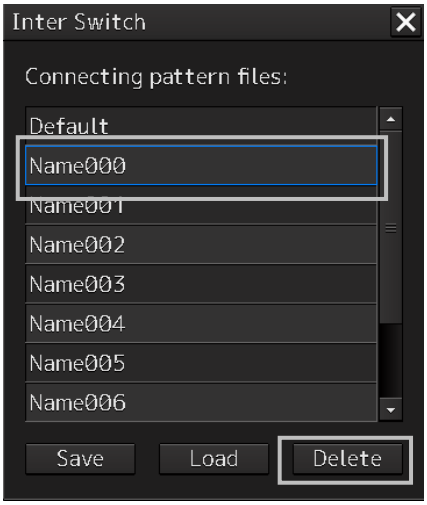
4 Click the [×] button.

■ **Deleting a connection pattern file**

1 Click the [Save/Load file] button of the "Inter Switch" dialog box.

The " Connecting pattern files:" dialog is displayed.

2 Click the connection pattern to be deleted.



3 Click the [Delete] button.

A dialog box for confirmation of deleting is displayed.

4 Click the [OK] button in the dialog box to delete.

The selected connecting pattern file is deleted.

APP C

C.3 Reference

C.3.1 Pre-heat time after changing the connection pattern

After changing an Inter switch connection pattern has been completed, the pre-heat time varies depending on the connection state of the radar antenna and display unit before the change.
This is for protecting the electron tube that emits the radio waves.

- If the radar antenna was already being used before setting the new connection pattern, a pre-heat time will not be required.
- If the radar antenna was not being used before setting the new connection pattern, a pre-heat time will be required.

C.3.2 Precautions while changing the connection pattern

A setting of change of the connection pattern may not be reflected immediately. This is because time is taken for the internal processing and, in this case, repeat the changing operation again after leaving a time gap of several seconds.

C.3.3 Precautions during a slave connection

When the master display unit is not in the transmit state, it is not possible to put the slave display unit in the transmit state. Further, when the master display unit goes from the transmit state to the transmission standby state, the slave display unit is forcibly put into the transmission standby state. In this case, the message "ISW(Master Standby)" is displayed in the alert notification area and the notification sound is made.

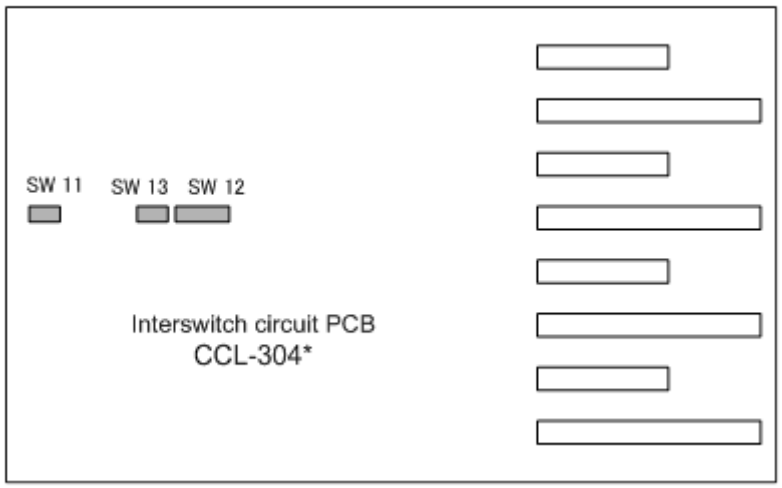
It is not possible to carry out control of tuning in a slave display unit. Tuning is controlled by a master display unit.

Changing the distance range of a slave display unit is restricted by the range and transmission pulse length/transmission pulse repetition frequency of the master display unit. As a rule, although it is not possible to change the range of the slave display unit to a range larger than the range of the master display unit, depending on the range, if the transmission pulse length and the transmission pulse repetition frequency are the same, it may be possible to select a range larger than the range of the master display unit. When the master display unit makes the range smaller or changes the transmission pulse length, the range of the slave display unit may be changed forcibly. In this case, the message "Master Range CHG" is displayed in the alert notification area and the notification sound is made.

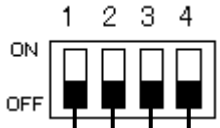
C.3.4 Setting during installation

■ Setting of the Inter switch circuit (CCL-304*)

The details of the dip switches SW11, SW12, and SW13 are given below.



1) Setting of SW11 (setting of extended mode, master/slave)



Extended mode setting

4	Description
ON	Extended mode
OFF	Normal mode

Set to OFF when 4 or fewer units are connected.

Master/slave setting

3	Description
ON	Slave
OFF	Master

During the extended mode, set to ON in the ISW board on the slave side.

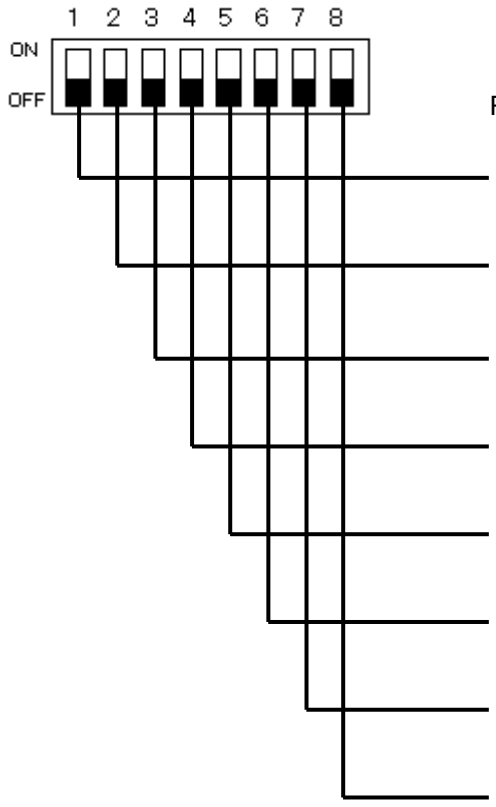
Not used

1, 2	Description
ON	Not used
OFF	Not used

Normally set to OFF.

APP C

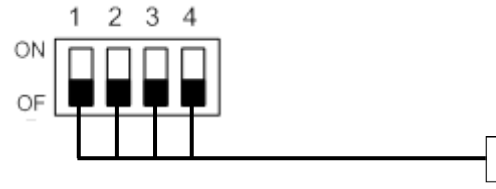
2) Setting of SW12 (Radar connection setting)



Radar connection setting

1	ON	Display unit No.1 connection present
	OFF	Display unit No.1 connection not present
2	ON	Radar antenna No.1 connection present
	OFF	Radar antenna No.1 connection not present
3	ON	Display unit No.2 connection present
	OFF	Display unit No.2 connection not present
4	ON	Radar antenna No.2 connection present
	OFF	Radar antenna No.2 connection not present
5	ON	Display unit No.3 connection present
	OFF	Display unit No.3 connection not present
6	ON	Radar antenna No.3 connection present
	OFF	Radar antenna No.3 connection not present
7	ON	Display unit No.4 connection present
	OFF	Display unit No.4 connection not present
8	ON	Radar antenna No.4 connection present
	OFF	Radar antenna No.4 connection not present

3) Setting of SW13 (Not used)



1, 2, 3 and 4	Not used (all OFF)

Note

When setting the dip switches of the Inter switch circuit, turn OFF the circuit breaker of the Inter switch, and ensure safety before carrying out the setting.

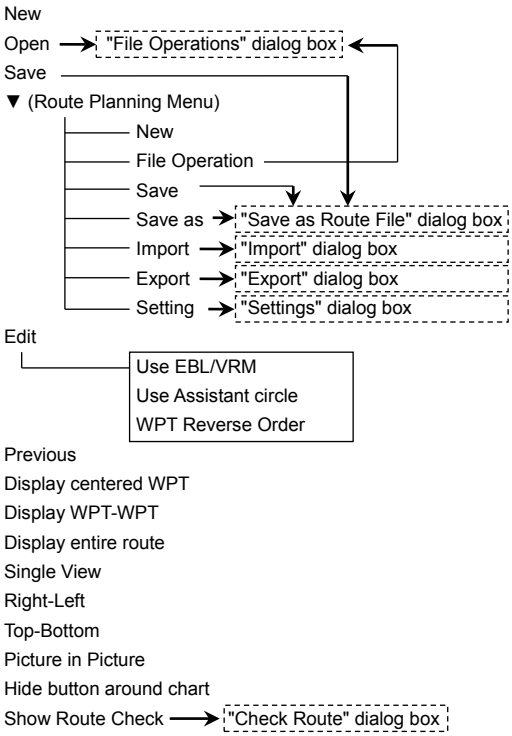
Appendix D Menu List and Materials

D.1 Menu List

This section shows the menus and dialog items of this equipment by target menu.

* ECDIS RADAR CONNING indicates the task that is targeted for display.
* Items that are enclosed by a frame of broken lines indicate the dialog and window names that are displayed by selecting the relevant menu.

D.1.1 Route Planning ECDIS



Planned Route tab
Insert
Delete
Comment
(WPT list)
- WPT No.
- Name
- Position-LAT
- Position-LON
- Leg-Course
- Leg-Distance
- Sail
- XTL -PORT
- XTL -STBD
- Arrival Radius
- Turn Radius
- Plan Speed
- ROT
- ETA
- Time Zone
- TTG
- Total Distance

D.1.2 Route Monitoring

ECDIS RADAR

Route
To WPT
"File Operations" dialog box display button → "File Operations" dialog box
Voyage Information → "Voyage Information" dialog box
Voyage Calculation → "Voyage Calculation" dialog box
Pair of data → "Pair of data" dialog box

D.1.3 Anchor Watch ECDIS RADAR

Monitoring Anchor
Mode
(Mode: Selecting [Circle])
Position
Radius
(Mode: Selecting [Polygon])
New
Point
(list)

D.1.4 Autosail* ECDIS

* Displayed when the automatic sailing option is attached.

(Select Route)
[Track
Click here to plan a new track
Click here to confirm and modify the track.
Next]
Select WPT
[TO-WPT
Start
Back]

D.1.5 Chart ECDIS RADAR

Manual Update ECDIS
- Select Chart → "Select Chart" dialog box
- Save
- Chart Name
- FIX
- Display All Object
- Display Hidden Objects

My Port List ECDIS
- Save
- My Port List
- Delete
- Jump

Select S-57 Chart ECDIS
- Search
- Chart List
- Reset Picked Chart
- OK

Off Center by Entering Position ECDIS
- Jump to the following position
- LAT/LON

Accept S-57 Updates ECDIS
- S-57 Chart List
- Show
- Accept

Date-dependent View ECDIS
- UTC/LMT
- Date
- Time
- Calendar Icon
- Time Zone

Chart Boundary ECDIS
- Chart Boundary
  - Overview
  - General
  - Coastal
  - Approach
  - Harbour
  - Berthing
  - Show Chart Name
  - Show ENC Data

↓

"Edition and date of chart" dialog box

* Displayed when the chart is clicked on while the "Chart Boundary" dialog box appears.

Chart Abbreviation

T & P(ARCS) ECDIS
- Number
- Temporary and Preliminary Notice to Mariners

Datum Offset(ARCS) ECDIS
- Offset by Cursor
- Clear Offset
- Offset

Datum Transformation ECDIS
(Geodetic Datum)
From
To
(Reference Position)
Position
Ship Position
by Cursor
(Chart Shift)
Reference Position
[Position]
Shifted Position
[Position]
OK
Cancel

D.1.6 User Map

ECDIS RADAR

File Operation
- New
- Delete
- Copy
- Import
- Export
- Merge Display Files
- Geodetic
- (File List)
- Edit User Map
- Display Objects

Mark/Line List
- User Map tab
  - Symbol
  - Line
  - Area
  - Text
  - Delete
  - Page feed button
  - Page number specification
  - Object list
  - Jump
- Mariner's Mark/Line tab
  - Event Mark
  - Information Mark
  - Tidal Stream
  - Highlight
  - Clearing Line
  - Delete
  - All Delete
  - Page feed button
  - Page number specification
  - Object list
  - Jump
- Manual Update tab
  - Symbol
  - Line
  - Area
  - Text
  - Hide
  - Restore
  - Page feed button
  - Page number specification
  - Object list
  - Jump

Delete by type/color
- Type
- Color
- OK

D.1.7 Logbook ECDIS

Date
Calendar Icon
Event
Event List (Event List)
- User Task Log tab
  - No.
  - Date(LMT)
  - Event
- Navigation Alert Log tab
  - No.
  - Date(LMT)
  - Event
- System Alert Log tab
  - No.
  - Date(LMT)
  - Event

Event details page (Event detail information)
- Event
- Date
- Time Zone
- Descriptions
- (Position)
  - Longitude
  - Latitude
  - POSN1
  - POSN2
- (Course/Speed)
  - HDG
  - STW
  - COG
  - SOG
  - SOG-Av.(4h)
  - SOG-Av.(24h)
- Depth
- Chart
- INFO
- (Current)
  - Set
  - Drift
- (Wind)
  - Dir.
  - SPD
  - BFT
- (Wave)
  - Dir.
  - Height
- (Voyage Distance)
  - (Ground)
  - (Water)
- (Weather)
  - Air Pressure
  - Air Temperature
  - Water Temperature
  - Weather Condition
- Engine Rev.
- Comment

D.1.8 TT/AIS ECDIS RADAR

AIS Voyage Data
- Destination
- ETA(UTC)
- Calendar Icon
- NAV Status
- Draft
- Cargo cat.
- Persons on-board
- Send

Edit and Send AIS Message
- (Send To:)
  - Addressed MMSI
  - Name
  - Target ID
  - Broadcast
- Category
- LL&Time
- View Tray
- Message
- Save
- Send

AIS Message - AIS MSG Tray: Same as the common information window (AIS MSG Tray of the information reference screen)
- Tray Select
- Message Format:
- Message Category:
- Message List
- MMSI
- Ship's Name
- AIS Message
- Edit
- Select

Highlighting
- Highlighting by the following search criteria
- (TT/AIS)
  - Transit direction
  - TCPA(MIN-MAX)
  - TCPA MIN
  - TCPA MAX
  - CPA(MIN- MAX)
  - CPA MIN
  - CPA MAX
  - SOG(MIN- MAX)
  - SOG MIN
  - SOG MAX
  - Unknown Ship
- (AIS)
  - Length MIN- MAX
  - Type of Ship
  - Cargo category
  - Registry of ship
  - Navigation Status

Trial Maneuver RADAR

- Trial Function
- Course
- Speed
- Vector Time
- Time to Maneuver
- Own Ship's Dynamic Trait

TT/AIS List: Same as the TT/AIS list of the common information window (information monitoring screen)

- List Select
- List Expand
- List Normal
- (TT List)
  - Column
  - ID
  - CPA
  - TCPA
  - BCR
  - BCT
  - CTW or COG
  - STW or SOG
  - BRG
  - RNG
  - LAT
  - LON
  - Status
- (AIS List)
  - Column
  - ID
  - CPA
  - TCPA
  - CTW
  - STW
  - Name
  - Call Sign
  - MMSI
  - BCR
  - BCT
  - BRG
  - RNG
  - HDG
  - LAT
  - LON
  - Status
  - Show AIS Detail

Own Ship AIS Data: Same as AIS of the common information window (information reference screen)

Own Ship AIS Data/Last Lost AIS Target
Name
Call Sign
MMSI
IMO No.
Length
Beam
Destination
ETA(UTC)
Navigation Status
Draft
Type of Ship
Cargo category
CTW or COG
STW or SOG
Heading
ROT
Position
Position Accuracy
Position Sensor

Last Lost AIS Target: Same as AIS of the common information window (information reference screen)

Own Ship AIS Data/Last Lost AIS Target
Name
Call Sign
MMSI
IMO No.
Length
Beam
Destination
ETA(UTC)
Navigation Status
Draft
Type of Ship
Cargo category
Persons on-board
Bearing
Range
CTW or COG
STW or SOG
Heading
ROT
Position
Position Accuracy
Position Sensor

D.1.9 Tools ECDIS RADAR

Marker

- Position
- Bearing
- Range
- Unit switching button
- TTG
- Time

EBL/VRM readout ECDIS

- EBL1
- VRM1
- EBL2
- VRM2
- Origin Position of EBL1/VRM1
- Origin Position of EBL2/VRM2
- EBL Bearing Reference
- VRM Distance Unit
- Control Indication

PI Menu

- Display for All Lines
- Mode
- (All)
- PI Bearing
- Interval
- Unit switching button
- Operation Area
- (Individual)
- Index Line
- Display
- PI Bearing
- Interval
- Unit switching button
- Length L
- Length R
- Unit switching button
- Sequential
- (Track)
- Group
- Display
- PI Bearing
- Interval
- Unit switching button
- (Equiangular)
- Group
- Display
- PI Bearing
- Vertical Angle
- Floating
- Heading Link
- Reference Bearing

EBL Maneuver Setting

- Display Maneuver curve
- Course T
- Course R
- Reach
- (Turn set)
  - Radius
  - Rate
- WOL
- TTG

Manual position fix ECDIS

- LOPs Fixing tab
  - LOP
  - Total, MAX
  - (Observations Time)
    - Date
    - Calender Icon
    - Time (UTC)
  - Position(e.g. landmark)
  - Bearing
  - Distance
  - Transfer Position Line
    - HDG/STW
    - COG/SOG
    - HDG
    - STW
    - Set
    - Drift
  - Set
  - Delete
  - Plot
    - Set plotted position → "Select LOP or TPL" dialog box
    - Offset to plotted POSN(Main)
    - Offset to plotted POSN(Sub)
  - Plot by cursor
  - Clear all lines
- Position Offset tab
  - (POSN(Main))
    - Offset
    - Clear Offset
    - Enter Offset
    - Enter Position
  - (POSN(Sub))
    - Offset
    - Clear Offset
    - Enter Offset → "Enter Offset" dialog box
    - Enter Position → "Enter Position" dialog box

Node Fixed EBL/VRM ECDIS

- Use node fixed EBL/VRM
- Bearing
- Distance

Cursor readout ECDIS

- BRG
- RNG
- POS
- TTG
- ETA

File Manager

File Management tab

- File Type
- Drive
- Name
- Copy >>
- << Copy
- Select All
- Delete

File Load/Save tab

- File Type
- File Type (Included GPS Buoy Track)*
- *Setting for using [Utilities] - [GPS Buoy] when [File Type] is [Target Track]
- File List - Name
- File List - Modified
- File List - Display
- Load Mode
- Load
- Unload
- Save Current Target Track

D.1.10 View

View-Multi View Mode ECDIS
- Multi View Mode
  - View selection
  - Select Area from View1 for View2

View-Options
- Own Ship
  - Type ECDIS
  - Heading and Beam Line ECDIS
  - Stern Line RADAR
  - (Vector)
    - Ground stabilised vector
    - Sea stabilised vector
    - Time
    - Stabilization indicator RADAR
    - Vector Time Mark
    - Interval
  - POS2 Symbol ECDIS
  - Setting of AIS Filter
  - Setting of AZ
  - Setting of Anti-Grounding Vector/Sector *
  - * Case where the chart option is assigned to the radar (chart radar)
- Own Track ECDIS *
- * Selecting [ECDIS own Track] on the Utilities menu
  - Past Track
  - Plot Color
  - Track Period
  - Time Label
  - Interval
  - Past Position
  - Interval
- Route
- For ECDIS ECDIS RADAR *
- * Selecting ECDIS Route on the Utilities menu.
  - (Date/Time for Monitoring)
  - Format
  - Show ETA
  - Cross Track Limit Line
  - Color
  - Show WPT Name
  - WPT Name Font Size
- User Map
  - (Object Type)
    - (Selecting Individual)
      - Symbol
      - Line
      - Area
      - Text
    - Area Fill
    - Symbol/Simple Line Color
    - Mark Size
    - Comment Font Size
- Mariner's Mark/Line ECDIS RADAR
  - Clearing Line
  - Tidal Stream
  - Information Mark
  - Highlighting
  - Event Mark
  - Plotted position
  - NAVTEX Mark

RADAR ECDIS RADAR

- RADAR
- RADAR Overlay
- Transparency of Echo/Trails

Target

- CPA Ring RADAR
- AIS Symbol
- TT Symbol
- TT1 Symbol
- TT1 Symbol Source Selection
- TT2 Symbol
- TT2 Symbol Source Selection
- TT Vector ECDIS
- TT Target ID
- AIS Target ID

Target Track ECDIS RADAR

- Display tab
  - (Target Track Display)
  - (Selecting Individual)
    - Track 1
    - Track 2
    - Track 3
    - Track 4
    - Track 5
    - Track 6
    - Track 7
    - Track 8
    - Track 9
    - Track 10
    - Track 11 to 20
  - File Load/Save
- Plot tab
  - (Plot Color)
    - For All Target Track
    - For individual Target Track
    - Track 1
    - Track 2
    - Track 3
    - Track 4
    - Track 5
    - Track 6
    - Track 7
    - Track 8
    - Track 9
    - Track 10
    - Track 11 to 20
  - Plot Interval
  - File Load/Save
- Clear tab
  - (Clear by Specified Color)
  - Track Color
  - (Clear by Specified Number)
  - Track Number

Chart Common ECDIS RADAR *

* Case where the chart option is assigned to the radar (chart radar)

- Area Boundary
- Chart Symbol
  - Full Light Line
  - Consider Scale MIN
- (Depth)
  - Shallow Contour
  - Safety Depth
  - Safety Contour
  - Deep Contour
  - Two Color Depth
  - Shallow Pattern
  - Show Isolated Danger In Shallow Water
- C-MAP Ed.3 Database

Chart View ECDIS RADAR *

* Case where the chart option is assigned to the radar (chart radar)

- (For Chart Radar)
  - Chart Type
  - Primary Chart INFO.Set
    - Coastlines
    - Safety Contour
    - Danger To Navigation
    - Fixed and Floating Aids to Navigation
  - Land Area
  - Depth Contour
  - Scale Boundary
  - Sounding
  - Text
  - Other Objects
  - Text Size
- (FOR ECDIS)
- View1 tab
  - Chart Type
  - Chart Load
  - Text Size
  - Layer
  - Text
- View2 tab
  - Chart Type
  - Chart Load
  - Text Size
  - Layer
  - Text

AIO

- All AIO Objects
- Temporary Notice(T)
- Preliminary Notice(P)
- ENC Preliminary Notice(EP)
- No Information Objects

Tools ECDIS RADAR

- Range Rings
- Bearing Scale ECDIS
- EBL1
- EBL2
- VRM1
- VRM2
- PI
- Index Line 1
- Index Line 2
- Index Line 3
- Index Line 4
- Index Line 5
- Index Line 6
- Index Line 7
- Index Line 8
- Node Fixed EBL/VRM

Unit ECDIS RADAR CONNING

- Depth(Included depth in Chart)
- Current Speed
- Wind Speed
- Propeller Revolution
- Propeller Pitch Angle
- Thruster Revolution
- Thruster Pitch Angle
- Air TEMP
- Water TEMP
- Air Pressure
- Wind Direction(True)

Control

- (Top Level Screen Information on RADAR) RADAR *
- * Group box units
  - Show Own Track Control
- (Top Level Screen Information on ECDIS) ECDIS *
- * Group box units
  - Show Sub Information Window
  - Watch(Vector / RADAR / Target status)
  - POSN DIFF(Difference between POSN(Main) and POSN(Sub))
  - Depth
  - Current

Depth Graph *

* Case where the depth sensor is connected.

- (Depth Trend Graph)
  - Depth Range(Docking) CONNING
  - Depth Range(Voyage)
  - Time Range
  - Reference

Rudder Graph

* Case where the gyro and rudder is connected.

(Rudder Trend Graph)
- Time Range
- Rudder Range

Gyro/Rudder Graph *

* Case where the depth sensor is connected.

(Gyro/Rudder Trend Graph)
- Time Range
- Rudder Range

Engine Graph *

* Case where the engine is connected.

(Engine REV Trend Graph)
- Time Range
- Maximum RPM
- Minimum RPM

ROT

(ROT)
[ROT Scale]

D.1.11 Alert

ECDIS RADAR CONNIN

Collision Avoidance ECDIS RADAR

- (CPA/TCPA Alarm)
  - CPA Limit
  - TCPA Limit
- (Alarm Detection)
  - AIS Lost Alarm
  - AIS CPA/TCPA Alarm

New Target Alarm ECDIS RADAR

- Use AZ 1
- Use AZ 2
- 1 tab
  - Make AZ1 ⇒ Change to the AZ1 range setting mode
  - Start Angle
  - End Angle
  - Start Distance
  - End Distance
- 2 tab
  - Make AZ 2 ⇒ Change to the AZ2 range setting mode
  - Start Angle
  - End Angle
  - Start Distance
  - End Distance

Depth/Safety Contour ECDIS RADAR *

* Case where the Chart option is assigned to the radar (Chart RADAR)

- (Depth Below Keel Alarm)
- Depth Below Keel
- (Crossing Safety Contour Alarm)
  - Shallow Contour
  - Safety Depth
  - Safety Contour
  - Deep Contour
- View Settings for Chart Common

Vector/Sector ECDIS RADAR *

* Case where the Chart option is assigned to the radar (Chart RADAR)

- (Vector)
  - Use Vector
  - Vector Length
  - Vector Width
- (Sector)
  - Use Sector
  - Sector Radius
  - Sector Width

Area warning ECDIS RADAR *

* Case where the Chart option is assigned to the radar (Chart RADAR)

- Area Warning

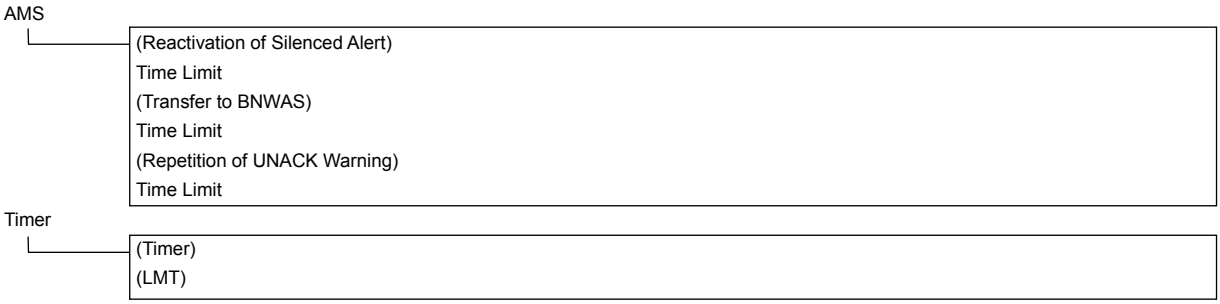
Track Control ECDIS RADAR

- (Course difference warning) *
- [Course difference limit]
- (End of track warning) *
- [End of track limit]
- (Early course change warning) *
- [ECC limit]
- * Case where [Show Alert On/Off for Track Control] on the utilities menu is set to [On].

Position Integrity

- (Position monitor warning)
  - Position Difference Limit
  - Radius Limit (GPS)
  - Radius Limit (DGPS)
  - Time Limit
- (HDOP exceeded caution)
- [HDOP Limit]

APP D


AMS
(Reactivation of Silenced Alert)
Time Limit
(Transfer to BNWAS)
Time Limit
(Repetition of UNACK Warning)
Time Limit
Timer
(Timer)
(LMT)

D.1.12 Settings

ECDIS RADAR CONNING

Signal Process(Basic) ECDIS *

* Case where the radar is connected

- Gain
- Sea
- Rain
- IR
- Target Enhance
- Echo Process

Signal Process ECDIS * RADAR

* Case where the radar is connected

- Video Latitude
- Video Noise Rejection
- Auto Dynamic Range Control
- (Process Switch)
  - Process Switch
  - 2nd Process Mode *
  - * Case where [Process Switch] is set to [Off]
  - Process Switch Range *
  - * Case where [Process Switch] is set to [Range Fix]
- Fast Target Detection
- SART RADAR

Obs, Scene Preset RADAR

- Obs.Scene
- (page 1/6)
- IR
- Target Enhance
- Echo Process
- Sea
- Rain
- Save Present State
- Next
- (page 2/6) 4kW, 6kW, 10kW, 25kW, 30KW, 50kW, 60kW scanner or solid-state radar connector
- (Pulse Width)
  - 0.75(0.75 to 1.5)
  - 1.5(1.5 to 3)NM
  - 3(3 to 6)NM
  - 6(6 to 12)NM
  - 12(12 to 16)NM
- Back
- Next
- (page 3/6)
- Video Latitude
- Video Noise Rejection
- AUTO Dynamic Range Control
- (Process Switch)
  - Process Switch
  - 2nd Process Mode *
  - * [Process Switch] is other than [Off]
  - Process Switch Range *
  - * [2nd Process Mode] is other than [Range Fix]
- Fast Target Detection
- Back
- Next
- (page 4/6)
- Trails Mode
- Trails Ref Level
- Trails Reduction
- MAX Length
- Trails Length
- Back
- Next

APP D

(page 5/6)
Gain offset
PRF
Small Buoy Detection
Fishnet Detection
Antenna Height
Back
Next
(page 6/6)
Save as User Default
Load User Default
Initialize
Back

Trails RADAR

Trails Mode
Trails Ref Level
Trails Reduction
MAX Length

TXRX RADAR

PRF Fine Tuning
Stagger Trigger
PRF
Ice Class Standby Mode

Association ECDIS RADAR

Association
Priority *
(Threshold) *
- Bearing
- Range
- Course
- Speed

Applicable AIS Target *
* Case where [Association] is [On]

Ship's Dynamic Trait ECDIS RADAR

Reach
Turn Mode
(Turn Set)
- Radius
- Rate

Acceleration
Deceleration

TT Test RADAR

Test Video
TT Simulator
Gate Display
(Status)
- Vector Constant
- VD Level Mode (Manual)
- VD Level (Manual)
- VD Level (Auto)
- Gate Size
- Tracking

Filter ECDIS RADAR

- Sector Filter
- Start Angle
- End Angle
- Ring Filter
- Distance
- Filtering Mode
- Sector tab
  - Make AIS Filter
  - Start Angle *
  - End Angle *
  - * Case where [Make AIS Filter] is On
- Ring tab
  - Make AIS Filter
  - Distance *
  - * Case where [Make AIS Filter] is On

Target Track ECDIS RADAR

- Target Track Function
- View for Target Track
- File Load/Save

Route

- For (ECDIS route) ECDIS RADAR *
- * Selecting [ECDIS Route] on the Utilities menu
- (Default)
  - XTL(PORT)
  - XTL(STBD)
  - Arrival radius
  - Speed
  - Sail
  - Turn radius
  - Time zone
- Distance calculation mode
- Monitoring
- MAX Latitude
- Minimum Leg Length for Limit Check

Autosail * ECDIS RADAR

* Displayed when the automatic sailing option is attached.

- Turning Gain *
- * Auto Pilot is displayed in the following cases
  - Tokyo Keiki TCS Category C
  - Tokyo Keiki TCS Category B (new mode)
- Tracking Gain **
- Drift Correction **
- Dead Band **
- Dead Band **
- Alert for Track Control
- ** Auto Pilot is displayed in the following cases
  - Tokyo Keiki TCS Category B (old mode)
  - YDK TCS Category C
  - YDK TCS Category B
  - All the autosail types

Temporary Route ECDIS RADAR

- Pre Run Speed
- Pre Run Time
- Pre Run Distance
- Enter Angle
- Turn radius
- XTD MAX

Chart ECDIS RADAR *

* Displayed when the Chart option is assigned to the radar (Chart RADAR)

- Chart
  - (Redraw)
  - Border Range ECDIS
  - Margin(Chart Rotation)
  - AUTO Accepting S-57 Updated Chart
  - Deletion Mode(Chart Maintenance)

Logbook ECDIS

- Logging Events tab
  - At noon
  - Every
  - Event Mark
  - Manual Position Fix
  - Chart Manual Updating
  - System Start
  - System Exit
  - Route Alert
  - Chart Alert
  - Autosail Alert
  - System Alert
- View Filter tab
  - At noon
  - Specified Period
  - Event Mark
  - Manual Position Fix
  - Chart Manual Updating
  - System Start
  - System Exit
  - Route Alert
  - Chart Alert
  - Autosail Alert
  - System Alert
  - Latest Display Days

General ECDIS RADAR

- (Gyro I/F) *
  - GYRO Setting
  - * Gyro I/F is equipped

Color and Brightness

- Day/Night
- Def.
- Display Color tab
  - OuterPPI */Dialog
  - InnerPPI *
  - Character
  - RADAR Video *
  - * Under radar connection
  - RADAR Trails(Time)
  - Target Symbol *
  - * Displayed at the equipment setting for receiving TT information
  - Range Rings *
  - * Under radar connection
  - EBL1/VRM1/PI
  - EBL2/VRM2
  - Own Symbol/HL/Vector
- Brightness tab
  - Character
  - RADAR Video *
  - * Under radar connection
  - Target Symbol *
  - * Displayed at the equipment setting for receiving TT information
  - Range Rings *
  - * Under radar connection
  - EBL/VRM/PI
  - Own Symbol/HL/Vector
  - Panel
  - Day1 : Level4 / Day2 : Level3 / Day3 : Level2 / Dusk,Night : Level1
  - Display
  - <26 inch>[0~100]Day1/Day2/Day3 : 67 / Dusk : 60 / Night : 11
  - <19 inch> Day1/Day2/Day3 : 42 / Dusk : 20 / Night : 4

Sounds

- Volume tab
  - Key ACK
  - Misoperation
  - Response/Notification
  - Message Notification
  - Alert Setting Reminder
  - Navigation 1 Alarm *
  - * For UKC alarm
  - Navigation 2 Alarm
  - Navigation 3 Alarm
  - CPA/TCPA Alarm
  - Warning
- Melody tab
  - Navigation 1
  - Navigation 2
  - Navigation 3
  - CPA/TCPA

Key Assignment

- User Keys tab *
  - * Under the connection of the optional unit
  - DISP Off Key
  - User Key 1
  - User Key 2
- Multi Dial tab
  - Vector Time
  - Trails Length
  - C UP Angle
  - Own Track Color
  - Manual Tune
  - Display Brightness
  - Panel Brightness
  - Gain *
  - Sea *
  - Rain *
  - * Under radar connection
- AZ Key tab * ECDIS RADAR
  - * Under the connection of the optional unit and radar
  - AZ 1
  - AZ 2

Preferences ECDIS RADAR

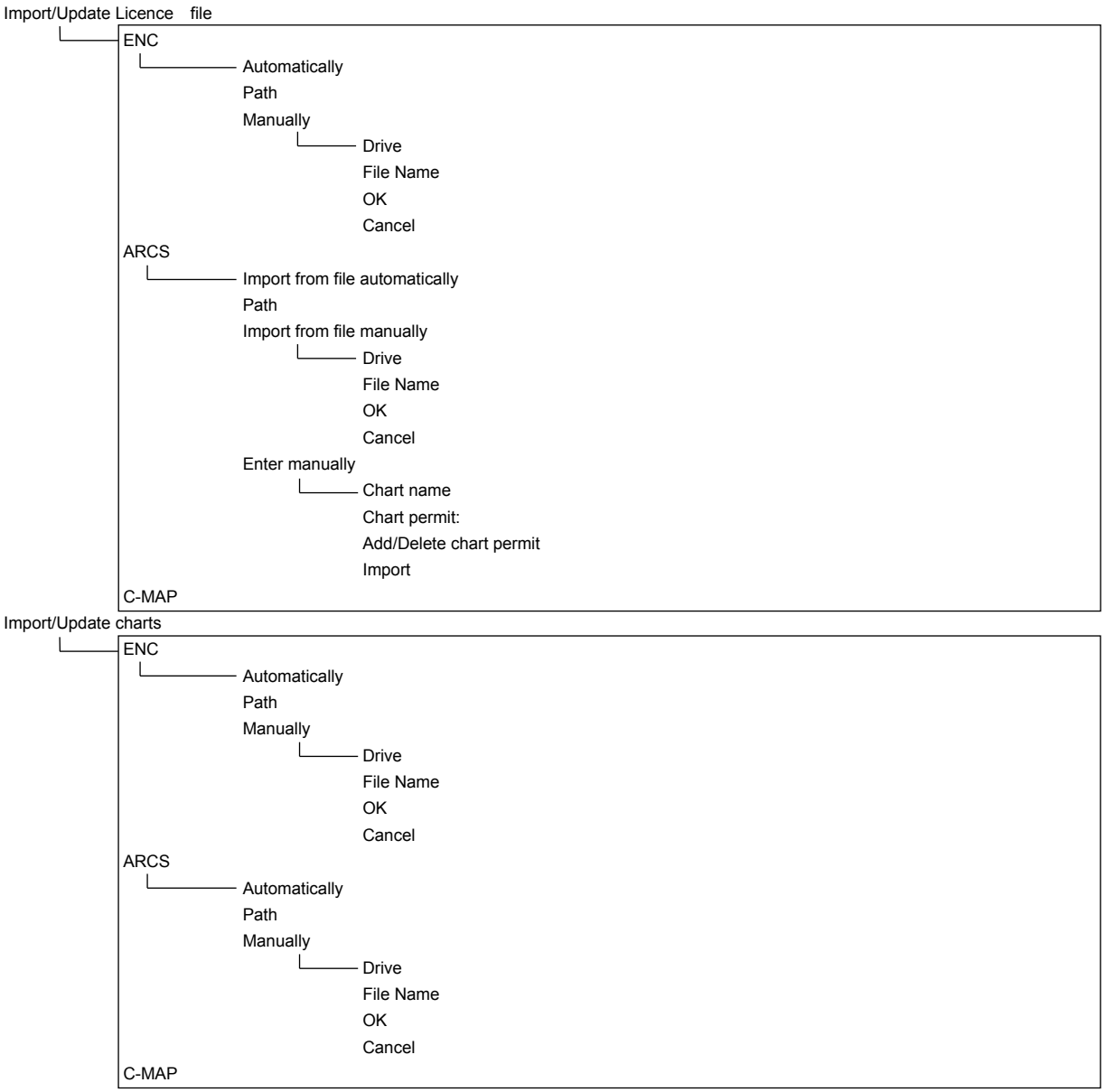
- Name
- Save *
- * Disable is displayed when up to the maximum private settings are saved.
- Load *
- * Disable is displayed when no item is selected in the name list.
- Delete *
- * Disable is displayed when no item is selected in the name list.
- Default display configurations

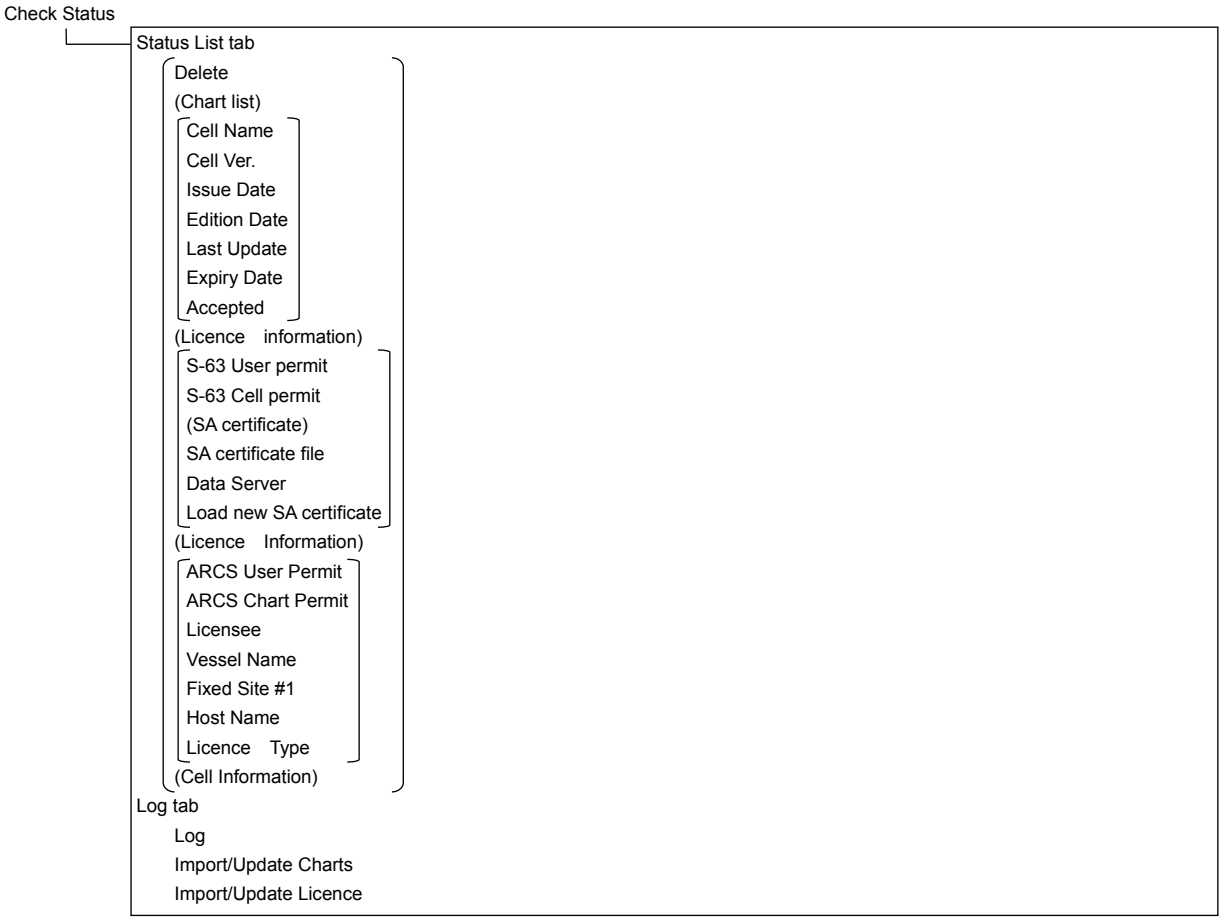
Screen capture ECDIS RADAR

- AUTO Capture Interval
- AUTO File Erase
- * Disable is displayed when [AUTO Capture Interval] is set to [0].
- File Management

D.1.13 Chart Maintenance

ECDIS RADAR




Check Status
Status List tab
Delete
(Chart list)
Cell Name
Cell Ver.
Issue Date
Edition Date
Last Update
Expiry Date
Accepted
(Licence information)
S-63 User permit
S-63 Cell permit
(SA certificate)
SA certificate file
Data Server
Load new SA certificate
(Licence Information)
ARCS User Permit
ARCS Chart Permit
Licensee
Vessel Name
Fixed Site #1
Host Name
Licence Type
(Cell Information)
Log tab
Log
Import/Update Charts
Import/Update Licence

D.1.14 Maintenance

ECDIS RADAR CONNING

- Date/Time/Time Zone
  - (Date)
    - Month
    - Year
    - Day
  - Time(LMT)
  - Time Zone
  - Display Style
  - Synchronize with Time Source
- System Information
  - Software tab
    - Type
    - Application
    - Maintenance No.
    - TXRX
    - TCS
    - Presentation Library
  - Functionality tab
    - Device Licence Status
    - Option Licence Status
  - H/W Key tab
    - (ARCS Information)
      - PIN
      - User Permit
    - (S-63 Information)
      - User Permit
  - Specification tab
    - Specifications
  - Save to USB Device
- Operating Time
  - (Operating Time of Work Station)
    - Total
    - SSD1
    - SSD2
    - LCD
    - LCD FAN
    - CCU FAN
    - PSU FAN
    - UPS
  - (Operating Time of Scanner)*

  * Under radar connection
    - Total
    - Transmit
    - Motor
    - FAN
- Voyage Distance
  - (Current Voyage Distance)
    - Ground
    - Water
  - Clear

Sensor Selection/Status

- Sensor Selection
  - (Sensor Selection)
    - Position (POSN(Main))
    - POSN(Sub)
    - Heading
    - STW
    - COG/SOG
    - Time
    - Depth
    - SOG(Docking) CONNING
    - Navigational Data CONNING
    - Switch to equipment for Autosailing CONNING
- Position Status
  - Position Status
    - CCRP

Diagnosis

- Monitor Test
  - All Red
  - All Green
  - All Blue
  - All White
  - Pattern4
  - Pattern5
  - Pattern6
  - Gray Scale
  - S-57 Color Pattern
  - ARCS Color Pattern
- Key Test
  - Key Test Start
    - Key
    - Key Test Stop
- Sound Test
  - Sound Test Start
- Light Test
  - Light Test Start
- Vibration Test
  - Vibration Test
- Magnetron Curr. * RADAR

* Under magnetron radar connection

  - Magnetron Current
- Memory Check
  - Memory Check Start
  - Results
- MON Check * RADAR

* Under magnetron radar connection

  - (Transmitter System)
    - Bar
    - Attenuation Value
  - (Receiver System)
    - MON Pattern Range
    - Attenuation Value
  - Push aside this dialog
  - Back
- MON Check(SSR) * RADAR

* Under solid-state radar connection

  - (Transmitter System)
  - Attenuation Value
  - (Receiver System)
  - Attenuation Value
  - Back

Software Update

- Software Update
  - Software Update
  - Help Install

DVD Drive Cleaning

D.1.15 Help ECDIS RADAR CONNING

←
→
Home
(Contents tab)
(Search tab)
keyword
Search
Results

D.1.16 Code Input ECDIS RADAR CONNING

Password

D.1.17 Service

ECDIS RADAR CONNING

Adjustment ECDIS RADAR

- Basic Adjustment
  - Tune Adjustment *
    - * Under magnetron radar connection
  - Bearing Adjustment
  - Range Adjustment
  - Master/Slave (radar operation mode)
- TXRX RADAR
  - Antenna Height
  - Tune Peak Adjustment *
    - * Under magnetron radar connection
  - Tune Indicator
  - Output BP
- Performance Monitor (under magnetron connection) RADAR
  - MON Adjustment
  - MON Indicator Adjustment
  - MON Level
- Performance Monitor(SSR) (under SSR connection) RADAR
  - TX Monitor Adjustment
  - RX Monitor Adjustment
  - Monitor Sector
  - Monitor Range
  - RX Monitor Gain
  - Reference of Attenuator Value
- Sector Blank RADAR
  - Use Sector1
  - Use Sector2
  - Use Sector3
  - 1 tab
    - Make Sector1
    - Start Angle
    - End Angle
  - 2 tab
    - Make Sector2
    - Start Angle
    - End Angle
  - 3 tab
    - Make Sector3
    - Start Angle
    - End Angle
- TNI Blank RADAR (Menu for a person in charge of installation)
  - Use TNI Blank *
    - * Under magnetron radar connection
  - Make Sector
  - Start Angle
  - End Angle
- Input BP Count (Menu for a person in charge of installation)
  - RADAR1
  - RADAR2
- Output BP Count (Menu for a person in charge of installation)
  - Output BP
- Echo Noise Level (Menu for a person in charge of installation)
  - Echo Noise Level
  - Adjustment Mode

TT RADAR
- Vector Constant
- VD Level Mode (Manual)
- VD Level (Manual)
- VD Level (Auto)
- Gate Size
- Limit Ring

MBS
- Initial Level
- Area Offset

Cable Attenuation (Menu for a person in charge of installation)
- Correction Level

Installation

Installation Information (Menu for a person in charge of installation)
- (Installation Information)
  - Date:
  - Calendar Icon
  - Name:
  - Company:
  - SSR Scanner type *
  - * Under compact solid-state radar connection

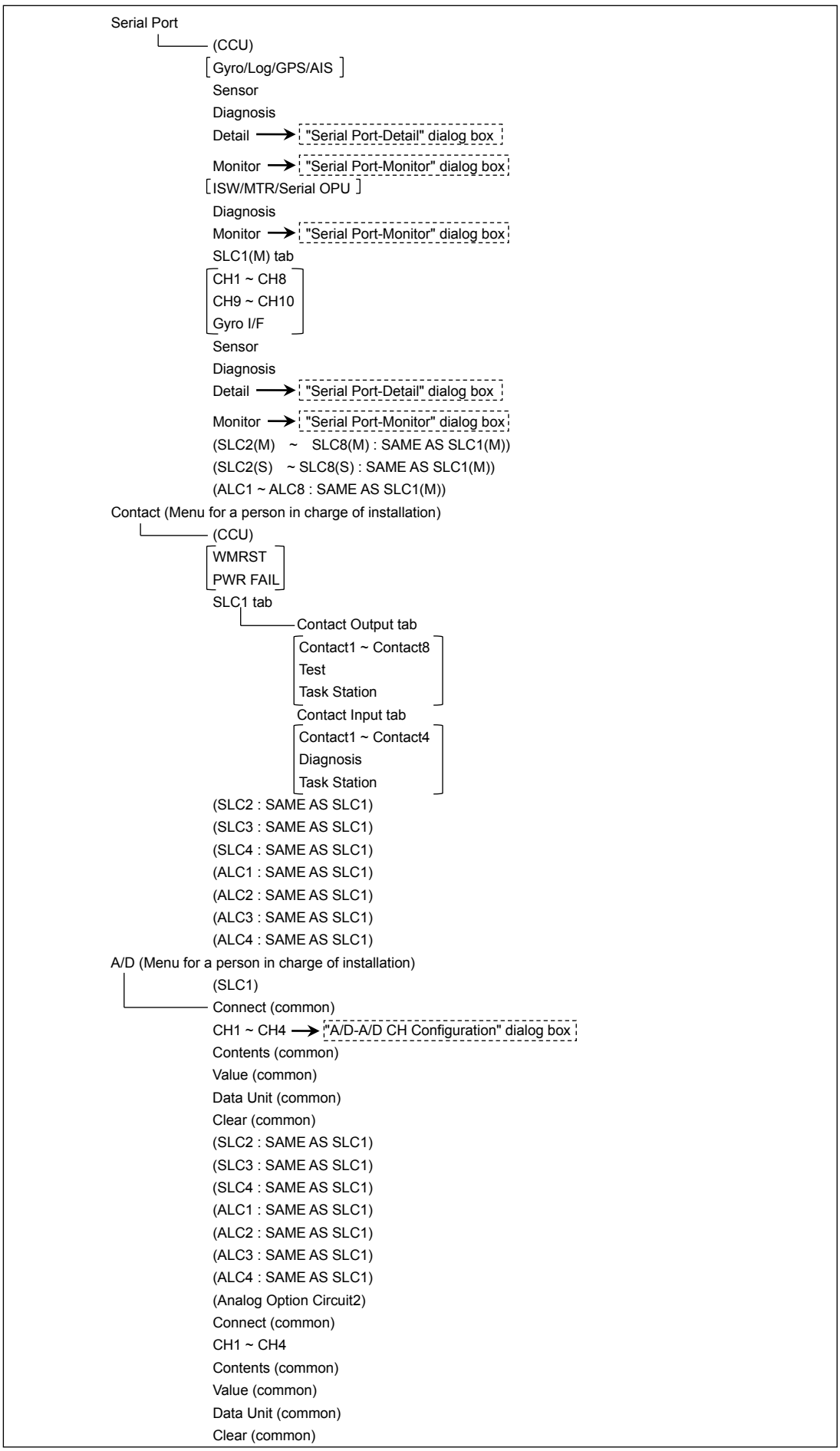
Language (English version only) (Menu for a person in charge of installation)
- Language

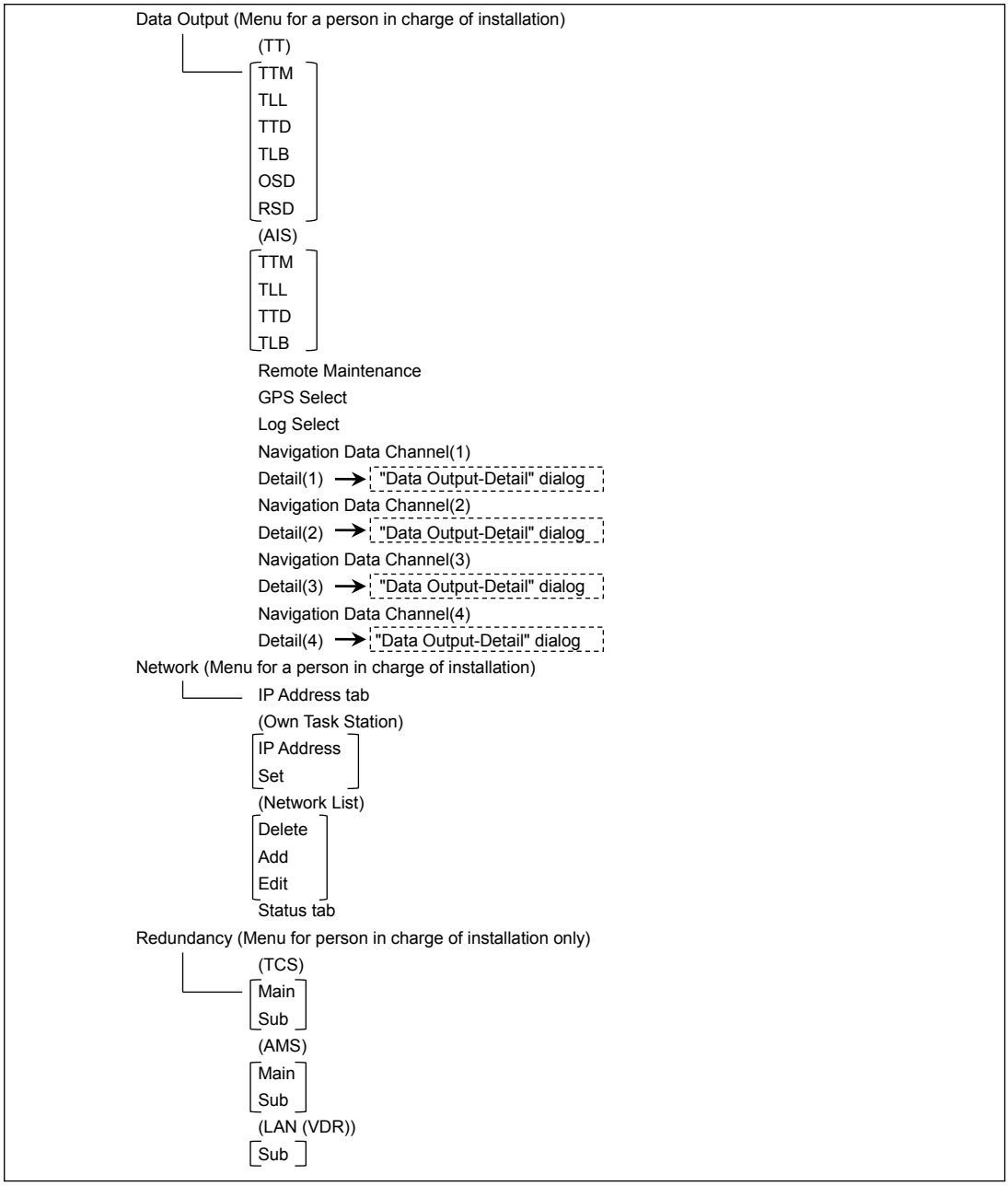
System Configuration
- Subsystem Installation CONNING (Menu for a person in charge of installation)
  - (Own Task Station)
    - Task Station No.
    - Own Equipment No.
    - IP Address(Main):
    - IP Address(Sub):
    - USB OPU
    - Serial OPU
  - (Junction Box)
    - Junction Box 1
    - Task Station
    - Space A
    - Space B
    - AOC
  - (Junction Box 2 : Same as Junction Box 1)
  - (Junction Box 3 : Same as Junction Box 1)
  - (Junction Box 4 : Same as Junction Box 1)
  - (Junction Box 5 : Same as Junction Box 1)
  - (Junction Box 6 : Same as Junction Box 1)
  - (Junction Box 7 : Same as Junction Box 1)
  - (Junction Box 8 : Same as Junction Box 1)
  - (Device Installation)
    - Task Station 1
    - Equipment No. 1
    - Task Station 2
    - Equipment No. 2
    - Task Station 3
    - Equipment No. 3
    - Task Station 4
    - Equipment No. 4
    - Task Station 5
    - Equipment No. 5
    - Task Station 6
    - Equipment No. 6
    - Task Station 7
    - Equipment No. 7
    - Task Station 8
    - Equipment No. 8
    - RADAR 1
    - RADAR 2
    - VDR(JRC)
    - Printer
    - Heading Sensor 1

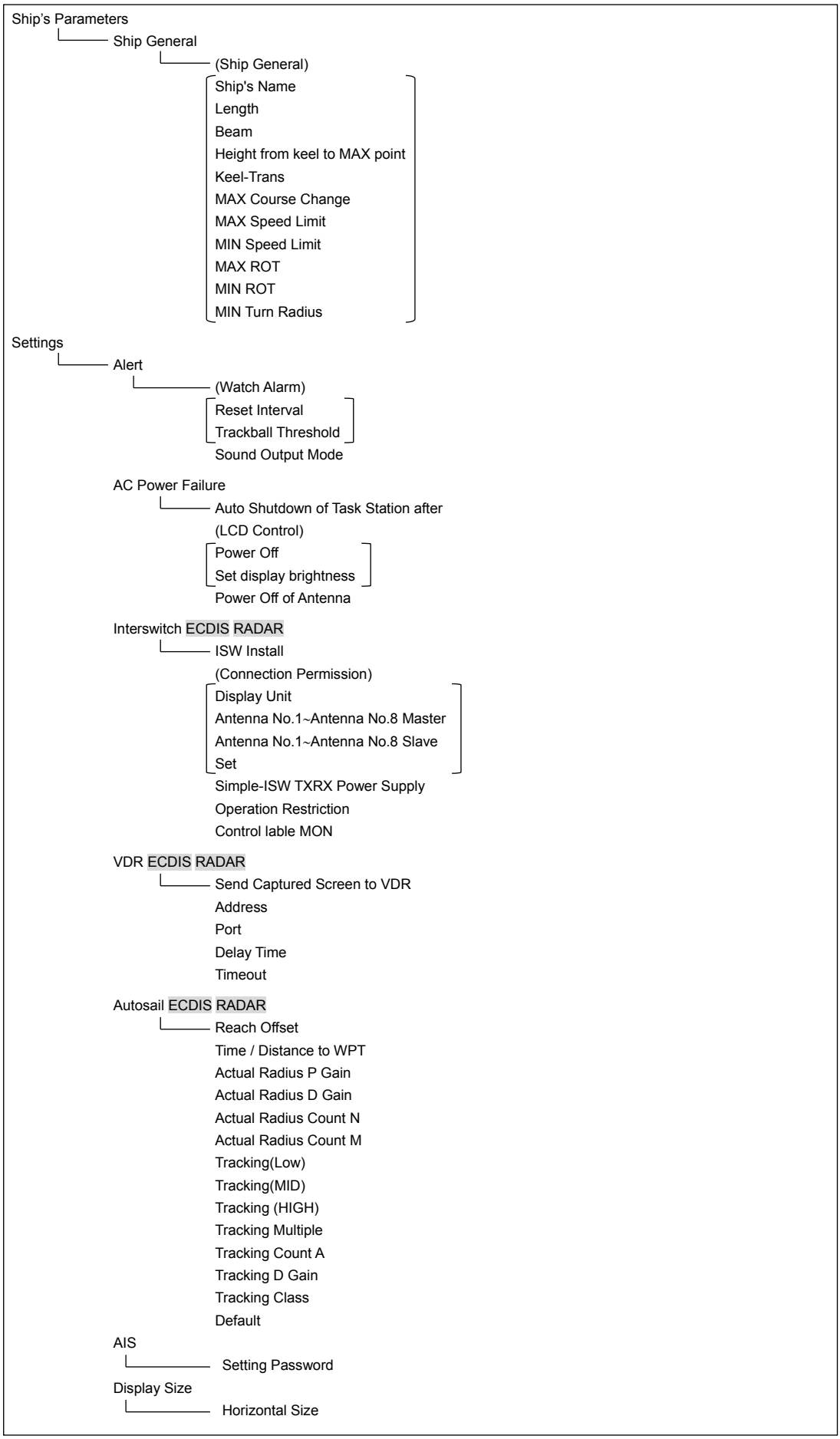
- Heading Sensor 1(Type)
- Heading Sensor 2
- Heading Sensor 2(Type)
- Log 1
- Log 1 Interface/Type
- Log 2
- Log 2 Interface/Type
- GPS 1
- GPS 2
- GPS 3
- GPS 4
- Ship's Clock
- Echo Sounder (T/D 1)
- Echo Sounder (T/D 1) Position
- Echo Sounder (T/D 2)
- Echo Sounder (T/D 2) Position
- Echo Sounder (T/D 3)
- Echo Sounder (T/D 3) Position
- AIS
- NAVTEX
- Anemometer
- Water TMP Meter
- Current Meter
- Climate Meter
- Autopilot
- Autopilot Type
- Rudder
- Rudder Number
- Engine/Propeller
- Engine/Propeller Number
- Engine Telegraph
- Engine Telegraph Number
- Bow Thruster
- Bow Thruster Number
- Stern Thruster
- Stern Thruster Number
- Azimuth Thruster
- Azimuth Thruster Number
- Generator
- Generator Number
- Fin Stabilizer
- Fin Stabilizer Number
- YEOMAN Digitizer
- Radar Simulator
- S-JOY1
- S-JOY2
- S-JOY3
- S-JOY4
- S-JOY5
- GPS Selector
- Log Selector
- Set

CCRP

- Length
- Beam
- GPS1 X ~ GPS4 X
- GPS1 Y ~ GPS4 Y
- RADAR Antenna1 X ~ RADAR Antenna8 X
- RADAR Antenna1 Y ~ RADAR Antenna8 Y
- CCRP1 X ~ CCRP4 X
- CCRP1 Y ~ CCRP4 Y
- (Speed Position(from fore Draft))
  - Bow
  - Stern


Serial Port
(CCU)
Gyro/Log/GPS/AIS
Sensor
Diagnosis
Detail → "Serial Port-Detail" dialog box
Monitor → "Serial Port-Monitor" dialog box
ISW/MTR/Serial OPU
Diagnosis
Monitor → "Serial Port-Monitor" dialog box
SLC1(M) tab
CH1 ~ CH8
CH9 ~ CH10
Gyro I/F
Sensor
Diagnosis
Detail → "Serial Port-Detail" dialog box
Monitor → "Serial Port-Monitor" dialog box
(SLC2(M) ~ SLC8(M) : SAME AS SLC1(M))
(SLC2(S) ~ SLC8(S) : SAME AS SLC1(M))
(ALC1 ~ ALC8 : SAME AS SLC1(M))
Contact (Menu for a person in charge of installation)
(CCU)
WMRST
PWR FAIL
SLC1 tab
Contact Output tab
Contact1 ~ Contact8
Test
Task Station
Contact Input tab
Contact1 ~ Contact4
Diagnosis
Task Station
(SLC2 : SAME AS SLC1)
(SLC3 : SAME AS SLC1)
(SLC4 : SAME AS SLC1)
(ALC1 : SAME AS SLC1)
(ALC2 : SAME AS SLC1)
(ALC3 : SAME AS SLC1)
(ALC4 : SAME AS SLC1)
A/D (Menu for a person in charge of installation)
(SLC1)
Connect (common)
CH1 ~ CH4 → "A/D-A/D CH Configuration" dialog box
Contents (common)
Value (common)
Data Unit (common)
Clear (common)
(SLC2 : SAME AS SLC1)
(SLC3 : SAME AS SLC1)
(SLC4 : SAME AS SLC1)
(ALC1 : SAME AS SLC1)
(ALC2 : SAME AS SLC1)
(ALC3 : SAME AS SLC1)
(ALC4 : SAME AS SLC1)
(Analog Option Circuit2)
Connect (common)
CH1 ~ CH4
Contents (common)
Value (common)
Data Unit (common)
Clear (common)


Data Output (Menu for a person in charge of installation)
(TT)
TTM
TLL
TTD
TLB
OSD
RSD
(AIS)
TTM
TLL
TTD
TLB
Remote Maintenance
GPS Select
Log Select
Navigation Data Channel(1)
Detail(1)
"Data Output-Detail" dialog
Navigation Data Channel(2)
Detail(2)
"Data Output-Detail" dialog
Navigation Data Channel(3)
Detail(3)
"Data Output-Detail" dialog
Navigation Data Channel(4)
Detail(4)
"Data Output-Detail" dialog
Network (Menu for a person in charge of installation)
IP Address tab
(Own Task Station)
IP Address
Set
(Network List)
Delete
Add
Edit
Status tab
Redundancy (Menu for person in charge of installation only)
(TCS)
Main
Sub
(AMS)
Main
Sub
(LAN (VDR))
Sub


Ship's Parameters
Ship General
(Ship General)
Ship's Name
Length
Beam
Height from keel to MAX point
Keel-Trans
MAX Course Change
MAX Speed Limit
MIN Speed Limit
MAX ROT
MIN ROT
MIN Turn Radius
Settings
Alert
(Watch Alarm)
Reset Interval
Trackball Threshold
Sound Output Mode
AC Power Failure
Auto Shutdown of Task Station after
(LCD Control)
Power Off
Set display brightness
Power Off of Antenna
Interswitch ECDIS RADAR
ISW Install
(Connection Permission)
Display Unit
Antenna No.1~Antenna No.8 Master
Antenna No.1~Antenna No.8 Slave
Set
Simple-ISW TXRX Power Supply
Operation Restriction
Control lable MON
VDR ECDIS RADAR
Send Captured Screen to VDR
Address
Port
Delay Time
Timeout
Autosail ECDIS RADAR
Reach Offset
Time / Distance to WPT
Actual Radius P Gain
Actual Radius D Gain
Actual Radius Count N
Actual Radius Count M
Tracking(Low)
Tracking(MID)
Tracking (HIGH)
Tracking Multiple
Tracking Count A
Tracking D Gain
Tracking Class
Default
AIS
Setting Password
Display Size
Horizontal Size

- Maintenance
  - Storage
    - Management
      - Drive Information
      - File Information
    - RADAR RADAR
      - Safety Switch
      - (TXRX Time)
      - Clear TX Time
      - Clear Motor Time
      - Clear FAN Time*
      - * Under magnetron radar connection
      - TXRX To Display Unit
      - Display Unit To TXRX
      - Status
      - (Saved Time To Display Unit)
      - Transmit
      - Motor Rotate
      - Notice
    - Operating Time Setup
      - (Operating Time of Work Station)
      - Total
      - Clear
      - LCD
      - Clear
      - LCD FAN
      - Clear
      - CCU FAN
      - Clear
      - PSU FAN
      - Clear
      - UPS
      - (Setup of UPS)
      - Setup Date(UTC)
      - Calendar Icon
      - Replace Time
    - Initialization
      - Set Default (All settings except service)
      - Set Default (Service settings)

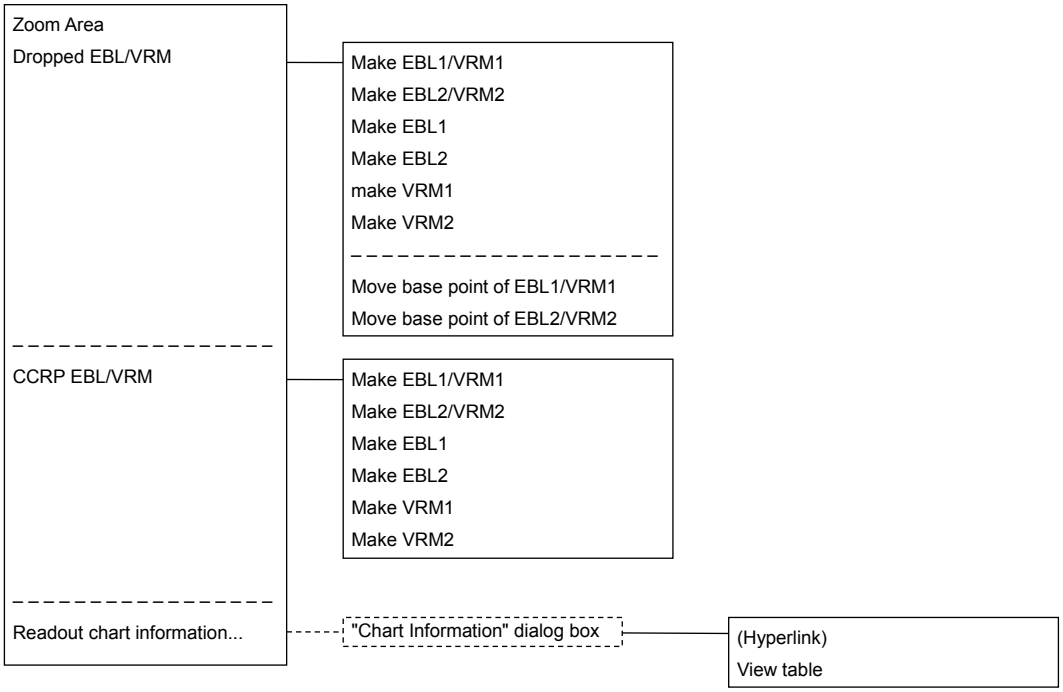
D.2 Context Menu List

This section shows the context menus that are displayed by clicking the right button by target object.

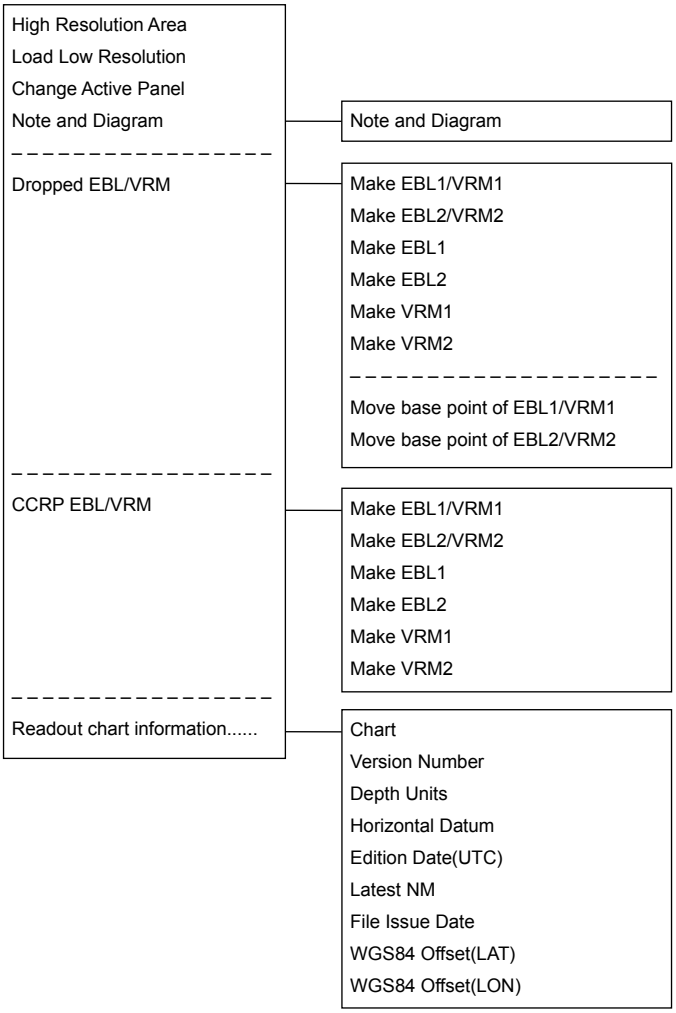
* The items that are enclosed by the frame of broken lines indicate the dialogs and windows that are displayed by selecting the relevant menu.

D.2.1 No object

D.2.1.1 ECDIS (S57/C-MAP) screen



D.2.1.2 ECDIS(ARCS) screen

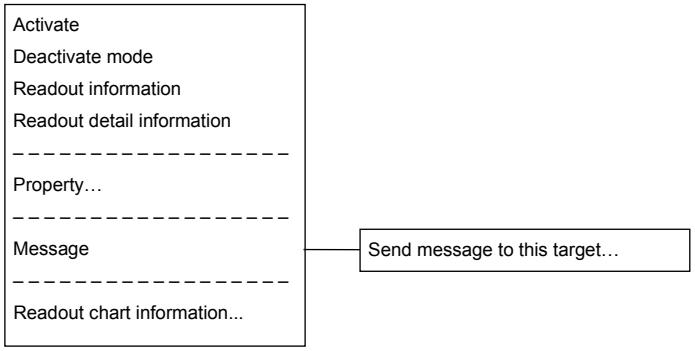


D.2.1.3 RADAR screen

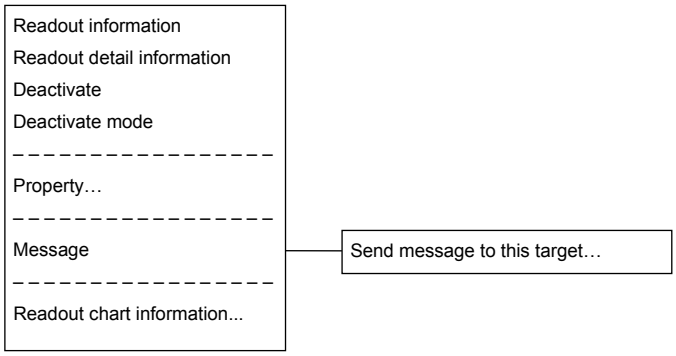
Acquire Acquire and readout information Cancel all TTReadout chart information…

D.2.2 AIS

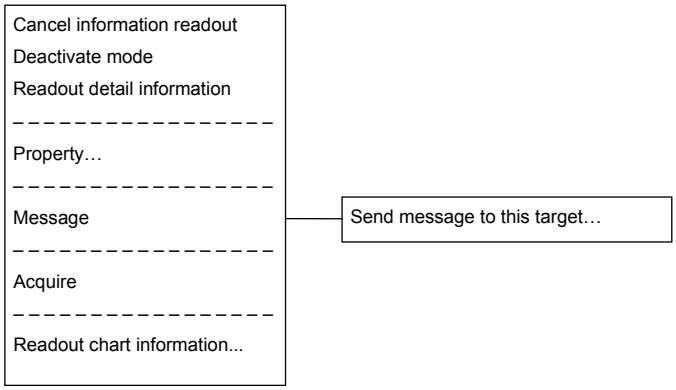
D.2.2.1 Sleeping AIS target



D.2.2.2 Activated AIS target

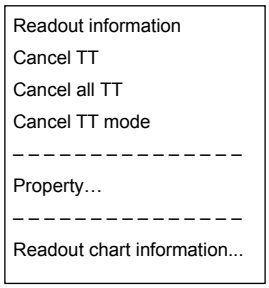


D.2.2.3 Numeric displayed AIS target

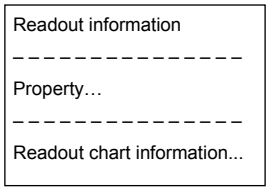


D.2.3 TT

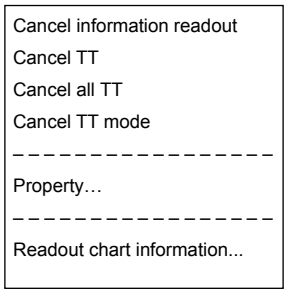
D.2.3.1 Internal TT



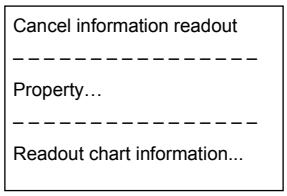
D.2.3.2 External TT



D.2.3.3 TT detail information display (internal TT)



D.2.3.4 TT detail information display (external TT)



D.2.4 NAVTEX

D.2.4.1 NAVTEX

Readout NAVTEX information
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.5 Mariner's Mark/Line

D.2.5.1 Event mark

Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.5.2 Information mark

Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

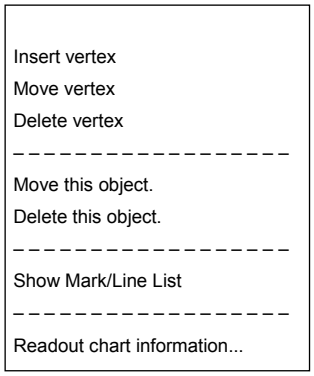
D.2.5.3 Current mark

Move this object
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.5.4 Clearing line

Move start point
Move end point
Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.5.5 Highlighted display



D.2.6 User map

D.2.6.1 Symbol

Move this object.
Delete this object.
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Show Mark/Line List
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Readout chart information...

D.2.6.2 Simple line

Add vertex
Insert vertex
Move vertex
Delete vertex
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Select All
Move this object.
Delete this object.
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Show Mark/Line List
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Readout chart information...

D.2.6.3 Line - Circle

Change radius
Move this object.
Delete this object.
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Show Mark/Line List
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Readout chart information...

D.2.6.4 Line - Ellipse

Change horizontal and vertical
Move this object.
Delete this object.
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Show Mark/Line List
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
Readout chart information...

D.2.6.5 Arc

Change radius
Change start angle
Change end angle
Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.6.6 Polygon

Insert vertex
Move vertex
Delete vertex
– – – – – – – – – – – – – – – – – –
Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.6.7 Area - Circle

Change radius
Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.6.8 Area - Ellipse

Change horizontal and vertical
Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.6.9 Fan

Change radius
Change start angle
Change end angle
Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.6.10 Text

Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.6.11 Arrow

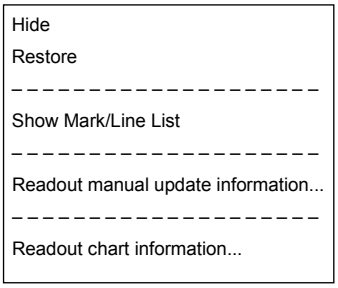
Move start point
Move end point
Move this object.
Delete this object.
– – – – – – – – – – – – – – – – – –
Show Mark/Line List
– – – – – – – – – – – – – – – – – –
Readout chart information...

D.2.7 Manual Update

D.2.7.1 Objects that have not been saved

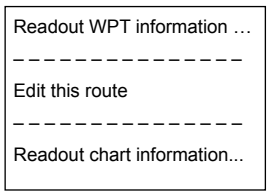
Same as "D.2.6 User map"

D.2.7.2 Saved objects (hidden)



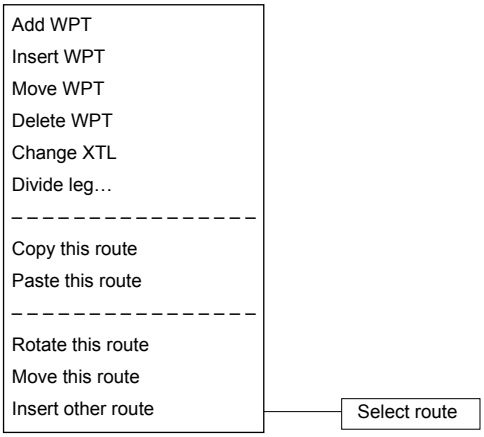
D.2.8 Monitored route

D.2.8.1 Monitored route



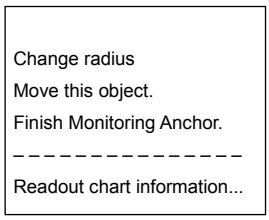
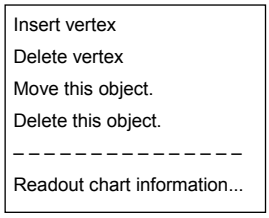
D.2.9 Planned route

D.2.9.1 Planned route



D.2.10 Monitoring dragging anchor

D.2.10.1 Dragging anchor monitoring circle



D.2.10.2 Dragging anchor monitoring polygon