KOSDAQ
코스닥상장법인

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TOTAL CONTROL ON YOUR VOYAGE

ECDIS

Electronic Chart Display & Information System

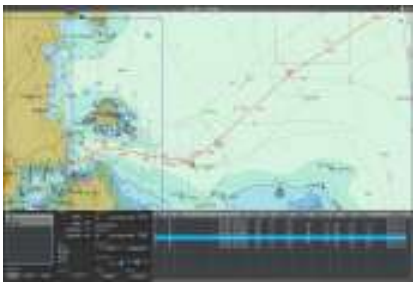
SCD-2000(19") / SCD-2000(23") / SCD-2300(23")

- 19"/ 23" Color LCD Display (Desk & Console Type)
- Route planning/ Route control
- Route monitoring/ Heading monitoring
- Automatic alarm system
- AIS and ARPA target(Chart overlay)
- Radar overlay(Option)

삼영이엔씨 |주|

Electronic Chart Display & Information System

ECDIS MANDATORY PERFORMANCES



ROUTE PLANNING

The ECDIS plans and sets a sailing route on the seperate window for the vessel routing and checks in advance possible problems in the planned route through a route test. Also the ECDIS provides the Great Circle route for a long distance voyage.

VOYAGE RECORDING

The ECDIS employs the tracks on AIS, ARPA targets and which own vessel passed by previously under the given conditions. Also the tracks are shown on the screen or saved as a form of external file.

ROUTE MONITORING

The ECDIS applys a planned route on the chart area to monitor the voyage. Also it provides necessary information for voyage and the alarm operates automatically in case of the vessel is out of route.

HEADING MONITORING

The ECDIS creates a monitoring area as large as the angle set up in the direction where the vessel advances foward. Also the alarm on when a particular object comes up within a surveillance area.

FEATURES_ *Spectacular user friendly interface*

Menu bar

Toolbar for quick execution of frequently used functions and check up the current status

Alarms occuring at a single glance

Wide display view

<Main screen>

Easy inputting of latitude and longitude. Automatical punctuates of [.],[/] according to the input formats

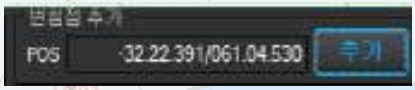


Chart area

Official IHO charts (S-57 and S-63) marked on it with own vessel symbols and target symbols etc.

IMO and IEC REGULATIONS

- Res.MSC.232(82)
- S-57 Ed 3.1.2
- S-52 Ed 3.4 (PL 3.4)
- S-63 Ed 1.1.1
- IEC-61174 Ed 3.0
- IEC-62288 Ed 1.0
- IEC-60945 Ed 4.0
- IEC- 61162-1 Ed 4.0

WHAT WE OFFER

24Hour Global A/S

1day a/s service in South Korea region
1year warranty

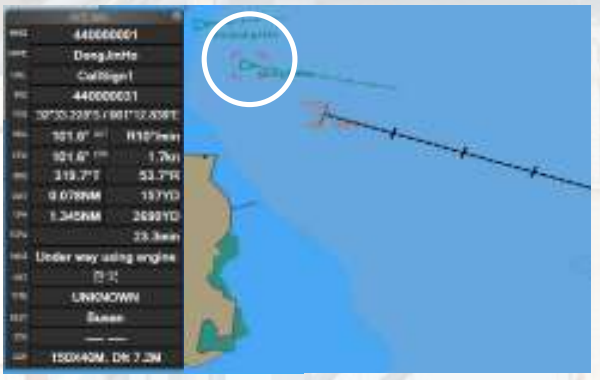
Training

Korean/ English booklet
Lecture and training

AIS TARGET / ARPA TARGET

The ECDIS sets up hazardous targets using CPA/TCPA data. If it is recognized as a hazardous target, the target symbol alters the color to red and alarm warns.

AIS TARGET



AIS target is marked as triangle and if the target is active, the ECDIS provides various information of the target such as MMSI, name, location, bearing, velocity, distance from the vessel and CPA/TCPA.
If AIS target is active, the mark of its heading line appears.
Also if the AIS target has the information of its course and velocity, it is shown as a velocity vector.

ARPA TARGET

ARPA target is marked as a black circle with a velocity vector and if the target is active, the ECDIS provides information on the target number, location, bearing, velocity, distance from the vessel and CPA/ TCPA.

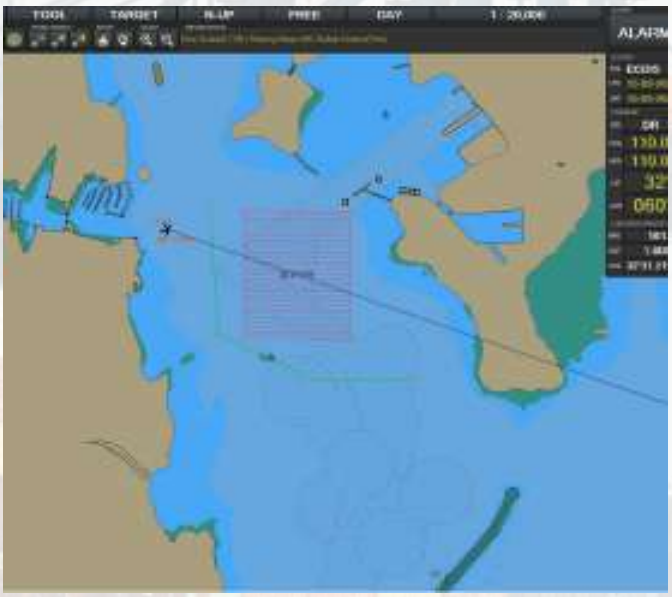
ALARM

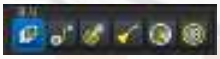
In case of hazardous situation, alarm warns immediately with information on each case.
If the situation cleared, it is deleted from the list automatically.

Alarm warns when a particular object found within the monitoring area in which the vessel forwards.

CREATE YOUR OWN MAP BY ONE CLICK

[DRAW TOOL] offers a notebook to the user to record in ECDIS.
You can create and save the objects such as mark, line, polygon,circle,sector,arc, etc., regardless of the chart data.





One click on an item in [DISPLAY MARK] for on and off of user's own map.

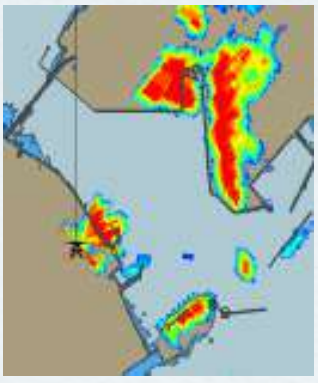
If the mark is the symbol for tide, the user can appoint a direction(CRS) together.

Zoom in and out of the chart by trackball wheel.

SPECIAL FEATURE

The ECDIS utilises Fishing Zone on the Sea map of South Korea.

OPTIONAL FEATURE

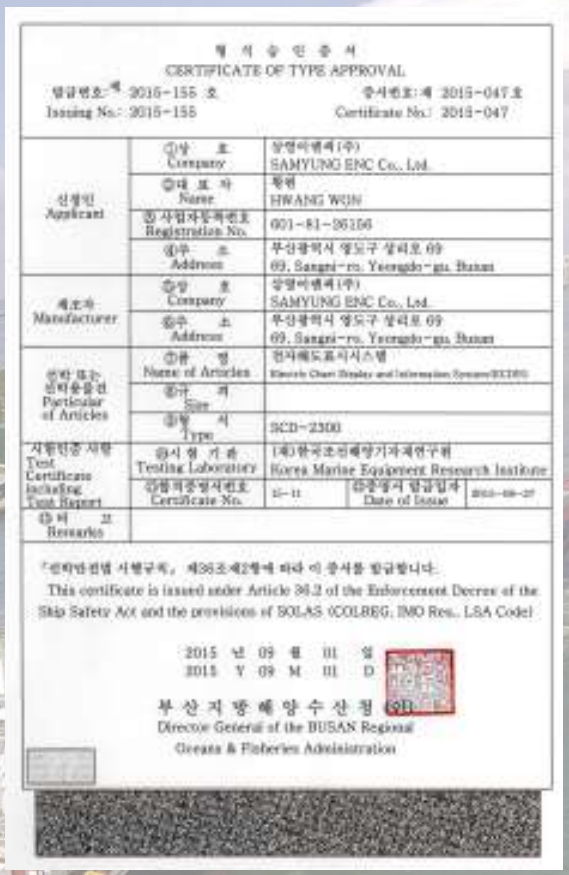


RSC(Radar Image)
Radar images appear centering the vessel in the chart area by receiving radar image signals.

SAMYUNG'S TYPE SPECIFIC ECDIS TRAINING COURSE

ECDIS is far more than the image of a chart displayed on an electronic screen. ECDIS is a highly sophisticated system which, besides the navigational functions, includes components of a complex, computer-based information system.In total, the system includes hardware, operating system, ECDIS software, sensor input interfacing, electronic chart data, rules for presentation and display, status and parameters of alarms and indications, etc.
All these items are accessed through an appropriate human-machine interface. As such, care must be taken when navigating with ECDIS to avoid

-Incorrect operation
-Misinterpretation
-Malfunction or, even worse,
-Over-reliance on this highly-automated navigation system



CERTIFICATE OF TYPE APPROVAL

Issuing No.: 2015-155 호 — Certificate No.: 2015-047호

신청인 Applicant	①상 호 Company	삼영이엔씨(주) SAMYUNG ENC Co., Ltd.
	②대 표 자 Name	황원 HWANG WON
	③사업자등록번호 Registration No.	601-81-06156
	④주 소 Address	부산광역시 영도구 상리로 69 69, Sangni-ro, Yeongdo-gu, Busan
제조자 Manufacturer	①상 호 Company	삼영이엔씨(주) SAMYUNG ENC Co., Ltd.
	②주 소 Address	부산광역시 영도구 상리로 69 69, Sangni-ro, Yeongdo-gu, Busan
주된 또는 선박용품의 Particular of Articles	①품 명 Name of Articles	전자해도표시시스템 Electronic Chart Display and Information System(ECDIS)
	②규 격 Size	
	③형 식 Type	SCD-2300
시험인증 서류 Test Certificate including Test Report	④시 험 기 관 Testing Laboratory	1.㈜한국조선해양기자재연구원 Korea Marine Equipment Research Institute
	⑤합격증명서번호 Certificate No.	15-11 ⑥증명서 발급일자 Date of Issue 2015-09-07
⑦비 고 Remarks		

「선박안전법 시행규칙」 제38조제2항에 따라 이 증서를 발급합니다.
This certificate is issued under Article 38.2 of the Enforcement Decree of the Ship Safetr Act and the provisions of SOLAS 'COLREG, IMO Res., LSA Code

2015 년 09 월 01 일
2015 Y 09 M 01 D

부산지방해양수산청장
Director General of the BUSAN Regional Oceans & Fisheries Administration

SAMYUNG ENC provides Type Specific ECDIS training course

The course includes

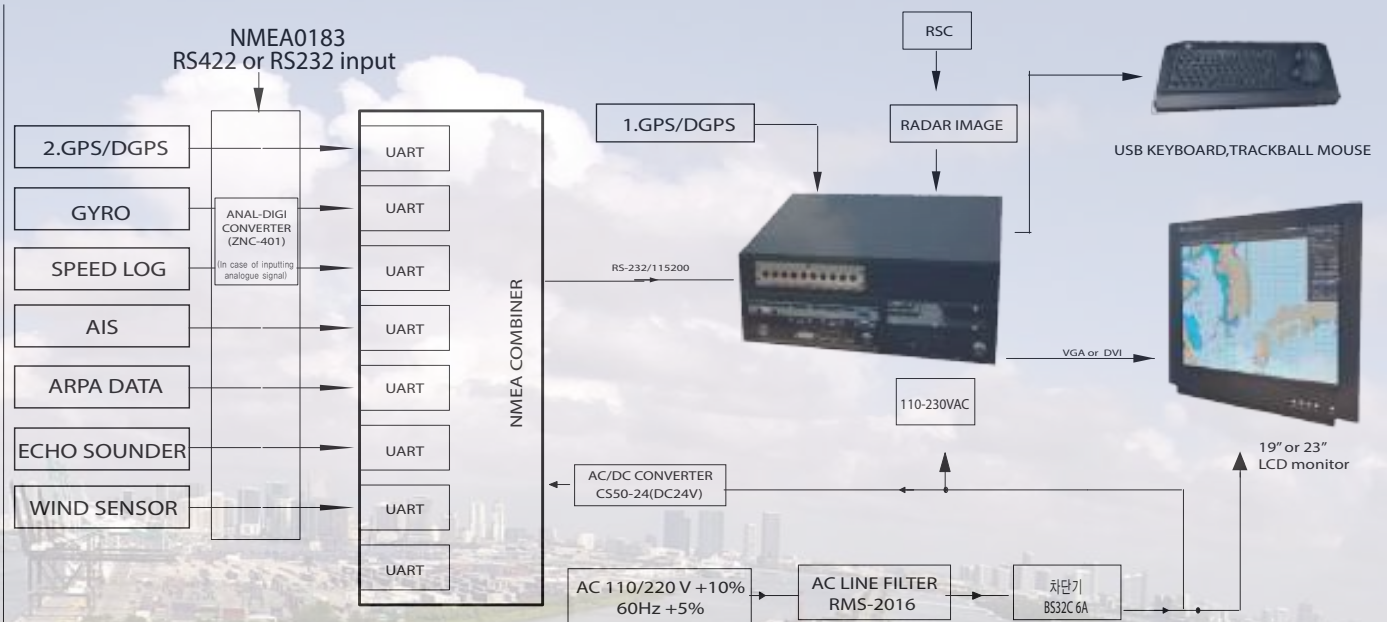
- Safe operation of the ECDIS equipment
- Use of the functions for route planing and monitoring
- Selection, Display and interpretation of relevant information
- Ambiguities of data management
- Assessment of alarms and indications
- Errors of displayed data and their interpretation
- Real and potential limitations
- Over-reliance on ECDIS
- Knowledge of legal aspects and responsibilities related to electronic chart
- Awareness of the status of ECDIS and ECS
- Limitations of RCDS mode

SAMYUNG ENC

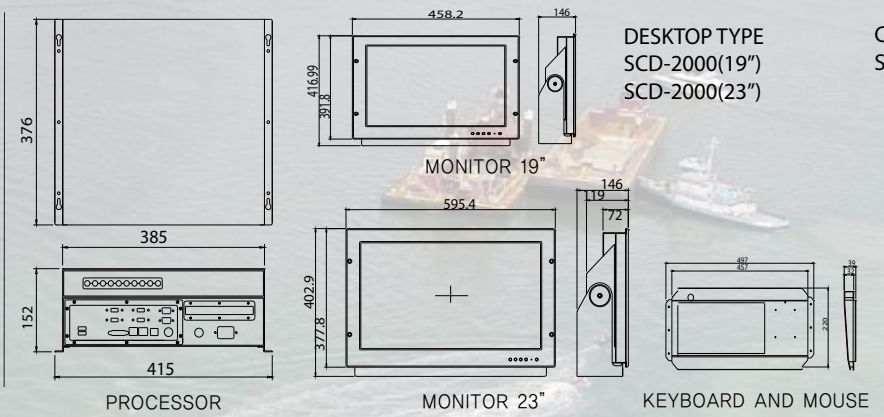
CERTIFICATE
OF
TYPE SPECIFIC ECDIS TRAINING COURSE

NAME OF MODEL : SAMYUNG SCD-2300(21")
PLACE OF TRAINING :
COURSE TRAINER :

INTERCONNECTION DIAGRAM

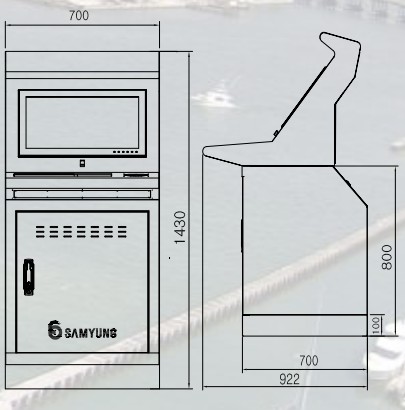


DIMENSION



DESKTOP TYPE
SCD-2000(19")
SCD-2000(23")

CONSOLE TYPE
SCD-2300(23")



SPECIFICATION

MODEL	SCD-2300,SCD-2000(19", 23")
STANDARD	IMO MSC.232(82), IEC61174 Ed.3 IEC61162-1 Ed.4, IEC61162-2 Ed.1 IEC62288,IEC60945 Ed.4
MONITOR	19" COLOR LCD(1280X1024) 23" COLOR LCD(1920X1080)
BRIGHT	DAY,DUSK, NIGHT
DISPLAY	NORTH UP, COURSE-UP, ROUTE UP, HEADING UP
DATA PRESENTATION	CHART : S-57, S-63 AND OFFICIAL/MANUAL UPDATE, QUERY INFORMATION OWNSHIP: SYMBOL, POSITION, COURSE, HEADING, SPEED TARGET(AIS, ARPA): SYMBOL, COURSE, SPEED, BEARING, DISTANCE, CPA/TCPA, OTHERS INFORMATION ETC: USER CHART, EBL/VRM, RANGE RING...
ALRAM INFORMATION	DANGEROUS , MONITORING , SENSOR , DETECTION ALARM AND SEVERAL ALARMS
POSITION CALCULATION	DEAD RECKONING WITH GYRO AND SPEED LOG DATA
ROUTE PLANNING	PLANNING BY RHUMB LINE AND GREAT CIRCLE
NAVIGATION RECORDING	LATEST 24HOURS OF NAVIGATION DATA TO BE RECORDED
ROUTE MONITORING	DISPLAY XTD, BTW, DTW, TTG, ETA OFF-TRACK, WAYPOINT ARRIVAL ALARM, SHALLOW DEPTH ALARM, HAZARD ALARM
USER CHART	CREATING AND DISPLAY OF USER CHART
ETC	MOB MONITORING, ANCHORAGE MONITORING, FIXED OBJECT, BACKUP ARRANGEMENTS, CALCULATION CURRENT WHTH GPS, GYRO, SPEED LOG DAT
POWER SUPPLY	100-230 VAC, 1PHASE, 50/60Hz
OPERATION ENVIORNMENT	TEMP -15℃ - +55℃ HUMIDITY 93% OR LESS AT 40C VIBRATION : IEC60945 Ed.4

INTERFACE

- GPS
- GYRO COMPASS
- SPEEDLOG
- AIS
- RadarImage(option),ARPA
- ECHO SOUNDER
- Wind Sensor

HARDWARE

- CPU: Intel i3-2330M 2.2GHz
- RAM: 4GB
- SSD:128GB
- OS: Windows 7(SPI) 32bit
- DVD R-W
- Serial Port(RS-232) x 2
- USB Port x 6
- LAN Port
- Map Data ENC(S-57/S-63)
- SOFTWARE SCD S/W
- MONITOR LCD COLOR MONITOR

COMPONENT

STANDARD	OPTION
MAIN UNIT: SCD-2000(19") SCD-2000(23") SCD-2300(23") KEYBOARD MONITOR AD Converter	RSC

SAMYUNG ENC Co.,Ltd.
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