MCS-VSS-SCAS
MASTER CLOCK SYSTEM
SOUND RECEPTION SYSTEM
HOSPITAL & REFRIGERATOR SYSTEM
Vingtor-Stentofon products are developed by the Zenitel Group and includes a range of high quality communications equipment and systems. Being in business since 1901, Zenitel’s products are recognized globally for offering high quality communications for both offshore and onshore installations. Primary system offering within the Vingtor-Stentofon portfolio are Public Address and Intercom. Zenitel and the company’s global partner network, also integrate these systems with other security devices; including Radio, CCTV, Access Control and Alarm for a comprehensive security solution.

Vingtor-Stentofon is world-renowned for its extensive knowledge in the design, construction, installation and maintenance of integrated marine communication systems. Leveraging our long-term experience serving the maritime industry, we offer an impressive portfolio and provide cutting edge solutions to vessels worldwide under the brand name of Vingtor-Stentofon. The Vingtor-Stentofon brand underpins our reputation as a supplier of the most flexible, reliable and advanced communication systems available today.

MEETING YOUR REGULATORY REQUIREMENTS
All Vingtor-Stentofon products that form a part of critical communication have been tested according to IEC 60945, IEC 60533 standards, and comply with SOLAS regulations and codes relevant to on-board communication systems. Our systems are delivered in accordance with the rules of all major classification societies.

FOR ALL YOUR SALES & AFTER SERVICE REQUIREMENTS
Vingtor-Stentofon is a specialist provider of spare parts, repairs, maintenance contracts and refit solutions. Responsibility and availability are our guidelines and customer support and service a first priority.
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<td>SCAS HOSPITAL &amp; REFRIGERATOR SYSTEM</td>
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MASTER CLOCK SYSTEMS

Marine Master Clock is the ideal solution for distribution of both Local and UTC time on board ships.

The Master Clock is equipped with several outputs and inputs for control of Slave Clocks as well as distribution of time to computers and other equipment needing the correct time. The four Slave Clock outputs can be individually programmed for different types of clocks. External radio receivers / time synchronisation sources can be connected when higher accuracy is needed.

For control and regulation of various energy consumers such as electrical striking plates, buzzers for pause signalling etc., the master Clock has a built-in yearly programmer with two relay outputs. The Master Clock is equipped with 10 buttons and a 2 x 16 character LCD. To facilitate the change of time zones, two of the buttons are dedicated to this purpose. A light dimmer makes it possible to adjust the background-illumination to the ambient light level.

FEATURES

- Accuracy +/- 0.1 sec./24 hours
- Wide range of different slave clocks (digital, 65, Ex-proof, etc.)
- Easy cabling and calibration
- Accessories and options like radio- or satellite signal receivers, RS232C/RS485 interface
- Alarm outputs, etc.
- Automatic summer/winter time change-over
- All units based on TCM
**MASTER CLOCK UNITS**

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**3005050028**

**70000 123378-01 MARINE MASTER CLOCK**
- Microprocessor controlled crystal time base
- 16 character LCD display showing UTC (GMT), local time and program instructions
- Up to 64 channels of time-related outputs
- UTC time minute and second impulse output
- Local time minute impulse, rapid forward and backward pulsing
- Relay output, 2 closing potential-free contacts
- LAN Connection
- Available for mounting in 19" rack
- 4 x RS232/485 ports, different protocols: NMEA 0183…
- 90 - 264VAC 50Hz and 24VDC -5% +20%

**Properties**
- Size (WxHxD): 483 x 133 x 299 mm
- Weight: 5.6 kg
- Additional Information: IP-20

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**3005050029**

**70000L 123378-11 MARINE MASTER CLOCK, NETWORK TIME SERVER**
- LAN Connection
- Same features as 70000

**Properties**
- Size (WxHxD): 483 x 133 x 299 mm
- Weight: 5.6 kg
- Additional Information: IP-20

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**3005050031**

**70100 122980-00 GPS RECEIVER FOR MASTER CLOCK 70000 AND 50000**
- Used for time synchronization of master clocks 70000 and 70000L
- Plastic housing

**Properties**
- Size (WxHxD): 110 x 110 x 65 mm
- Weight: 0.3 kg
- Additional Information: IP-65

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**2310601000**

**2031580-10 SLAVE CLOCK 300MM, TCM**
- Anodised aluminium housing and black hour and minute hands. The hands are protected by a convex glass and the clock is to be surface-mounted
- DCF format with time zone adjustment
- 2 wire bus connection w/ power and serial time code

**Properties**
- Size (ØxD): 307 x 58 mm
- Weight: 0.95 kg
- Additional Information: IP-44 surface when mount 2310601001 2031584-10 slave clock 300mm, 3 hands TCM

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**2310601010**

**2021580-10 SLAVE CLOCK, 230MM, TCM**
- Anodised aluminium housing and black hour and minute hands. The hands are protected by a convex glass and the clock is to be surface-mounted
- DCF format with time zone adjustment
- 2 wire bus connection w/ power and serial time code

**Properties**
- Size (ØxD): 230 x 58 mm
- Weight: 0.85 kg
- Additional Information: IP-44 surface when mount 2310601020 5133580-10 slave clock 300mm, TCM, WATERTIGHT

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**2310601020**

**5133580-10 SLAVE CLOCK 300MM, TCM, WATERTIGHT**
- Slave clock for outdoor purposes.
- Casing of stainless steel and acrylic front cover
- DCF format with time zone adjustment
- 2 wire bus connection w/ power and serial time code

**Properties**
- Size (ØxD): 357 x 115 mm
- Weight: 1.15 kg
- Additional Information: IP-65
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>2310601030</td>
<td><strong>6431580-10 DOUBLE FACED SLAVE CLOCK, 300MM, TCM</strong></td>
<td>- Anodised aluminium housing and black hour and minute hands. The hands are protected by a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>convex glass and the clock is to be wall mounted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- DCF format with time zone adjustment</td>
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<tr>
<td></td>
<td></td>
<td>- 2 wire bus connection w/ power and serial time code</td>
</tr>
<tr>
<td>Size (BxDxL): 300 x 120 x 435 mm</td>
<td>Weight: 3.0 kg</td>
<td>Additional Information: IP-44 Clock for wall mounting</td>
</tr>
<tr>
<td>2310601035</td>
<td><strong>170130-10 SLAVE CLOCK, 144X144MM, TCM</strong></td>
<td>- The clock is equipped with an adjustable background light and has black hour and minute</td>
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<tr>
<td></td>
<td></td>
<td>hands. The hands are protected by a plain acrylic glass</td>
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<tr>
<td></td>
<td></td>
<td>- DCF format with time zone adjustment</td>
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<tr>
<td></td>
<td></td>
<td>- 2 wire bus connection w/ power and serial time code</td>
</tr>
<tr>
<td>Size (WxHxD): 144 x 144 x 70mm</td>
<td>Weight: 0.65 kg</td>
<td>Additional Information: Clock for console mounting</td>
</tr>
<tr>
<td>2310601025</td>
<td><strong>170170-00 DUAL FACE SLAVE CLOCK, TCM</strong></td>
<td>- The housing is an anodised silver profile with a front cover of plexiglass</td>
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<td></td>
<td></td>
<td>- It is generally for recessed wall / surface-mounting</td>
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<td></td>
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<td>- DCF format with time zone adjustment</td>
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<tr>
<td></td>
<td></td>
<td>- 2 wire bus connection w/ power and serial time code</td>
</tr>
<tr>
<td>Size (WxHxD): 370 x 150 x 65 mm</td>
<td>Weight: 2.0 kg</td>
<td>Additional Information: 9011500001 170170-00-RS Dual face Radio slave clock with Radio</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Silence</td>
</tr>
<tr>
<td>2310601040</td>
<td><strong>190000-05 DIGITAL CLOCK, LUMEX 5, RED, TCM</strong></td>
<td>- Digit height 50 mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- DCF format with time zone adjustment</td>
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<tr>
<td></td>
<td></td>
<td>- 2 wire bus connection w/ power and serial time code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Light intensity of the digits adjustable by a dimmer control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Power 230V AC</td>
</tr>
<tr>
<td>Size (WxHxD): 250 x 96 x 50 mm</td>
<td>Weight: 0.5 kg</td>
<td>Additional Information: IP-22</td>
</tr>
<tr>
<td>2310601045</td>
<td><strong>190020-05 DIGITAL CLOCK, LUMEX 7, RED, TCM</strong></td>
<td>- Digit height 70 mm</td>
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<tr>
<td></td>
<td></td>
<td>- DCF format with time zone adjustment</td>
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<td></td>
<td></td>
<td>- 2 wire bus connection w/ power and serial time code</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Light intensity of the digits adjustable by a dimmer control</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Power 230V AC</td>
</tr>
<tr>
<td>Size (WxHxD): 325 x 120 x 50 mm</td>
<td>Weight: 0.8 kg</td>
<td>Additional Information: IP-22</td>
</tr>
</tbody>
</table>

**MANUALS**

- A100K10807
SOUND RECEPTION SYSTEM

The Sound Reception (VSS) system is a navigation aid system required on ships with enclosed bridges. The system enables the officer in charge of the navigational watch to hear sound signals and determine their direction. The system complies with the following Regulations / Standards: Annex A.1, item No.A.1/4.58 and Annex B, Module B in the directive. SOLAS 74 as amended, Regulation V/18, V19 & X/3, IMO Res. A.694(17), 2000 HSC Code, IMO Res. MCS. 86 (70) & 191 (79).

To improve operation and detection of sound signals, the VSS system utilizes DSP technology. The DSP (digital signal processor) provides active noise cancellation to remove background noises in order to hear external noise signals better and to remove unwanted noise from the bridge.

The VSS system is easy to install. The system consists of one microphone unit with four integrated directional microphones for mounting on top of the wheelhouse. The VSS main panel is installed on the bridge. The bridge main panel interfaces with up to four slave panels, the Voyage Data Recorder (VDR) and a relay output for muting the typhoon/foghorn.

FEATURES

- Active noise cancelling and tone detection based on DSP technology
- Dimmer and adjustable backlight
- Sector indication by use of 8 LEDs
- Central microphone unit with 4 directional microphones for mounting on top of the wheelhouse
- Web interface for system operation
- Output for voyage data recorder
- Remote muting when typhoon/foghorn is activated
- Override function to hear the unfiltered sound from the microphone unit
- Able to connect up to 4 slave panels

APPROVALS

The VSS-V2 systems are tested according to IEC60945 and ISO 14859:2012 and type approved by RMRS, CCS, RINA, BV, Lloyds, and ABS.

DNV-GL
Certificate No: MED-B-9492
EC Type Examination Certificate
Certificate No: MED-D-2016
QS - Certificate of assessment - EC
VSS-MP
VSS MASTER PANEL - V2

- Flush Mounting
- Brushed aluminum with foil
- Operation voltage 24V DC
- Audio 70 to 2100 Hz
- Active noise cancellation
- Adjustable volume
- Adjustable dimmer
- Squelch
- Override function
- 8 Indicator LEDs

Size (WxHxD): 280 x 140 x 120 mm  Weight 1,6 kg
Additional Information: IP-22

VSS-SP
VSS SLAVE PANEL - V2

- Flush Mounting
- Brushed aluminum with foil
- Operation voltage 24V DC
- Adjustable volume
- Adjustable dimmer
- Override function
- 8 Indicator LEDs

Size (WxHxD): 280 x 140 x 54 mm  Weight 0,7 kg
Additional Information: IP-22

VSS-MU
VSS MICROPHONE UNIT - V2

- Mounting stand on plate
- Stainless steel
- Environment -55°C to +55°C
- Operation voltage 24V DC
- 4 directional microphones

Size (HxØ): 660 x 250 mm  Weight 5,0 kg
Additional Information: IP-67

CPM-SNT-120-5
POWER SUPPLY
100-240VAC/24VDC 5A

- Switch mode, regulated power
- 22.5 to 29.5 V DC (adjustable via potentiometer at front)
- Overload protected
- Short-circuit protected
- DIN mounting
- GL approved

Size (WxHxD): 40 x 130 x 125 mm  Weight: 0.7 kg
Additional Information: DIN rail mounting

VSS-SPK
VSS-V2 spare part kit

MANUALS

A100K11209
VSS-V2 Manual, Installation and User
This Hospital and Refrigerator Alarm System, SCAS, is an alarm system that enables a person trapped in a refrigeration room or lying in a hospital bed to call for help from the bridge and/or galley. The system is designed to meet the classification society requirements.

When an alarm is activated, an indication LED on the panel will light up. An extra lamp (optional) outside the actual room will also light up. At the same time, the alarm light on the galley and/or bridge unit will flash and the buzzer will sound. The buzzer can be muted for 3 minutes. However, the alarm can only be reset on the hospital or refrigeration room unit depending on which alarm has been activated.

**BRIDGE UNIT**  
- SCAS1:  
  - indication lamps for power availability, hospital alarm and refrigeration alarm.  
  - buzzer for audible alarm  
  - push button to switch off the sound (max. 3 minutes).  
  - 24V DC input with fuse protection  
  - connection for extra signal device.  
  - console or bulkhead mounted.

**GALLEY UNIT**  
- SCAS2:  
  - same configuration as SCAS 1 except 24V DC input.  
  - bulkhead mounting  
  - weather proof

**HOSPITAL UNIT**  
- SCAS3:  
  - indication lamps for power availability and hospital alarm.  
  - connection for 2 alarm activating bed switches.  
  - connection possibility for additional hospital unit.  
  - alarm reset push-button.  
  - bulkhead mounting.

**REFRIGERATION UNIT**  
- SCAS4:  
  - indication lamps for power availability and refrigeration alarm.  
  - alarm on/off push-button.  
  - connection for signalling device (to be placed outside the room)  
  - connection possibility for additional refrigeration unit.  
  - weather proof IP 65.  
  - bulkhead mounting.
**SCAS1 BRIDGE UNIT FLUSH OR WALL W/BUZZER, 24V DC/MAX 2A**
- Indication lamps for power availability, hospital alarm and refrigeration alarm.
- Push button to switch off the sound (max. 3 min.)
- 24V DC input with fuse protection.
- Connection for extra signal device.
- Flush / Wall mounted

Size (WxHxD): 136 x 132 x 64 mm  
Weight: 0.35 kg  
Additional Information: IP-44

**SCAS2 GALLEY PASSAGEWAY UNIT, W/BUZZER, BULKHEAD**
- Indication lamps for power availability, hospital alarm and refrigeration alarm.
- Push button to switch off the sound (max. 3 min.)
- 24V DC input with fuse protection.
- Connection for extra signal device.
- Bulkhead mounted

Size (WxHxD): 136 x 132 x 64 mm  
Weight: 0.35 kg  
Additional Information: IP-44

**SCAS3 HOSPITAL UNIT WALL W/2 PUSH BUTTONS**
- Indication lamps for power availability and hospital alarm.
- Connection for 2 alarm activating bed switches.
- Connection possibility for additional hospital unit.
- Alarm reset push - button.
- Wall mounting

Size (WxHxD): 136 x 132 x 64 mm  
Weight: 0.35 kg  
Additional Information: IP-44

**SCAS4 REFRIGIRATOR UNIT WALL W/ALARM ON/OFF PUSH BUTTON**
- Indication lamps for power availability and refrigeration alarm.
- Alarm on/off push-button.
- Connection for signalling device (to be placed outside the room).
- Connection possibility for additional refrigeration unit

Size (WxHxD): 136 x 132 x 64 mm  
Weight: 0.35 kg  
Additional Information: IP-44

**SON-16 COMBINED AUDIO VISUAL 24V DC WATERTIGHT, 100 DB**
- Well suited for fire and security purposes incorporating high sound output.
- Low current consumption, high quality and simple installation

Size (WxHxD): 98 x 176 x 83mm  
Weight: 0.5 kg  
Additional Information: IP-55

**A-851 ALARM LAMP 24V DC ORANGE, BULB E14,10W**
- Alarm lamp for security purposes
- Wall mounting

Size (WxHxD): 56 x 107 x 64 mm  
Weight: 0.080 kg  
Additional Information: IP-54

**MANUALS**

**A100K10869**  
SCAS Hospital & Refrigerator Alarm System