



SCM
SISTEMAS

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Talk Back System
Public Address System
Self Powered Telephone System (Batteryless)
Automatic Telephone System
Sound Powered Telephone System

**DESIGN AND MANUFACTURE OF INTERNAL COMMUNICATIONS
FOR ALL TYPES OF VESSELS AND OFFSHORE PLATFORMS**

DESIGN AND MANUFACTURE OF INTERNAL COMMUNICATIONS FOR ALL TYPES OF VESSELS AND OFFSHORE PLATFORMS



SCM SISTEMAS

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AUXILIARY SHIPBUILDING INDUSTRY

We design and manufacture our products to be installed in civil and military vessels as well as offshore platforms. Thus, all of them are fully prepared and certified to work in maritime conditions.

Our worldwide customer portfolio includes: Navies, Shipbuilders, Internal Communications Integrators, Ship owners, Engineering Companies, Electrical Shipbuilding Installers as well as prestigious Distributors. We have a large list of references from all types of vessels as well as offshore platforms worldwide. Thousands of vessels navigate with our systems all around the world.

We have a large experience in managing a very specialized technology, which complies with IMO/SOLAS rules as well as any type of technical requirement/certification necessary to adapt ourselves to the highest standard demanding requests (Type Approvals, MIL-STD, ATEX, etc).

Our final products are systems, thus the combination of the elements that, duly installed and connected, are able to perform the functions for which they have been designed.

We classify the elements that configure a system as follows:

- **Main equipments:** Are the essential components that allow the configuration of the system, including those needed for their installation and connection.
- **Auxiliary elements:** Are those which can be left aside without altering the normal performance of the system, but cooperate to optimize the operation and control of the system.



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TALK BACK SYSTEMS

Internal Communication Systems



This system allows communication between a main station (SWITCHBOARDS) and other remote stations (SUBSTATIONS) located in different parts of the vessel. From the main station, it is possible to select, call and communicate to one, several or all substations and from any of the substations to the main station.

The system allows a maximum of 20 substations, all of them adapted to the different locations in the vessel depending on the conditions such as high noisy areas, outside decks, etc.

This system can be connected to the public address in order to configure a complete internal communication system.

All the switchboards include a LCD display to ease the user with information such as which substation/s is being called, which substation is calling, connection with PA system, etc.

Example of Talk Back Systems



SWITCHBOARDS



CINTER 505

Switchboard for 5 substations

Supply:
24 VDC
Consumption:
25 W
Output volume:
Adjustable.
Assembly:
Console.
Weight:
2 Kg approx.
Public Address output available.



CINTER 510

Switchboard for 10 substations

Supply:
24 VDC
Consumption:
50 W
Output volume:
Adjustable.
Assembly:
Console.
Weight:
2 Kg approx.
Public Address output available.



CINTER 515

Switchboard for 15 substations

Supply:
24 VDC
Consumption:
75 W
Output volume:
Adjustable.
Assembly:
Console.
Weight:
2,2 Kg approx.
Public Address output available.



CINTER 520

Switchboard for 20 substations

Supply:
24 VDC
Consumption:
100 W
Output volume:
Adjustable.
Assembly:
Console.
Weight:
2,2 Kg approx.
Public Address output available.



CINTER B.A.

Switchboard for bulkhead assembly

Supply:
24 VDC
Consumption:
25-100 W
Output volume:
Adjustable.
Assembly:
Bulkhead.
Weight / Peso:
6 Kg approx.
Public Address output available.



SP-MIC-1

Control substation

Assembly:
Console.
Weight:
0,5 Kg approx.
IP rating:
54



SP-MIC-2

Control substation with loudspeaker

Supply:
24 VDC
Consumption:
5 W
Assembly:
Console.
Weight:
0,7 Kg approx.
IP rating:
54



SUB-1

Substation with loudspeaker

Power output:
5 W
Impedance:
16 Ω
Assembly:
Bulkhead.
Weight:
0,5 Kg approx.
IP rating:
55



SUB-2

Substation with microphone plug

Power output:
5 W
Impedance:
16 Ω
Assembly:
Bulkhead.
Weight:
0,5 Kg approx.
IP rating:
55



SUB-3

Substation with headset connection

Consumption:
External sign.
Impedance:
Depending on external connections.
Assembly:
Bulkhead.
Weight:
0,8 Kg approx.
IP rating:
55



SUB-1F

Substation for console assembly

Power output:
5 W
Impedance:
16 Ω
Assembly:
Console.
Weight:
0,5 Kg approx.
IP rating:
54



SUB-2F

Substation for flush mounting and microphone connection

Power output:
5 W
Impedance:
16 Ω
Assembly:
Flush mounting.
Weight:
0,5 Kg approx.
IP rating:
54

AUXILIARY ELEMENTS



ALT-INT-1

Internal loudspeaker

Power output:
10 W
Impedance:
16 Ω
Assembly:
Bulkhead.
Weight:
1 Kg approx.



ALT-EXT-2

Exterior loudspeaker

Power output:
15 W
Impedance:
16 Ω
Acoustic pressure:
104dB SPL 1W (1m).
Weight:
1,4 Kg approx.
Dimensions:
222x162x232 mm.
Material:
ABS resin.
IP rating: 65



PUL-1

Push button box

Assembly:
Bulkhead.
Weight:
0,5 Kg approx.
Dimensions:
82x108x65 mm.
IP rating:
65



TB-ACM

Headset with microphone

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing)
Weight:
1 Kg approx.



MIC-1

Gooseneck microphone

Type of transducer:
Electretical.
Impedance:
680 Ω
Sensitivity:
-67 dBV/Mbar
Frequency response:
100-20.000 Hz
Maximum capsule voltage:
10 V
Overall length:
440 mm.
Weight: 114 g approx.



MIC-2

Handheld microphone

Impedance:
500 Ω
Sensitivity:
65 dB (-3 dB)
Weight:
170 g approx.
IP rating:
55



MIC-3

Handheld microphone

Impedance:
1.000-2.000 Ω
Sensitivity:
-36 dB
Frequency response:
150-0.000 Hz
Cable length:
1,8 m.
Weight:
250 g approx.

PUBLIC ADDRESS SYSTEMS

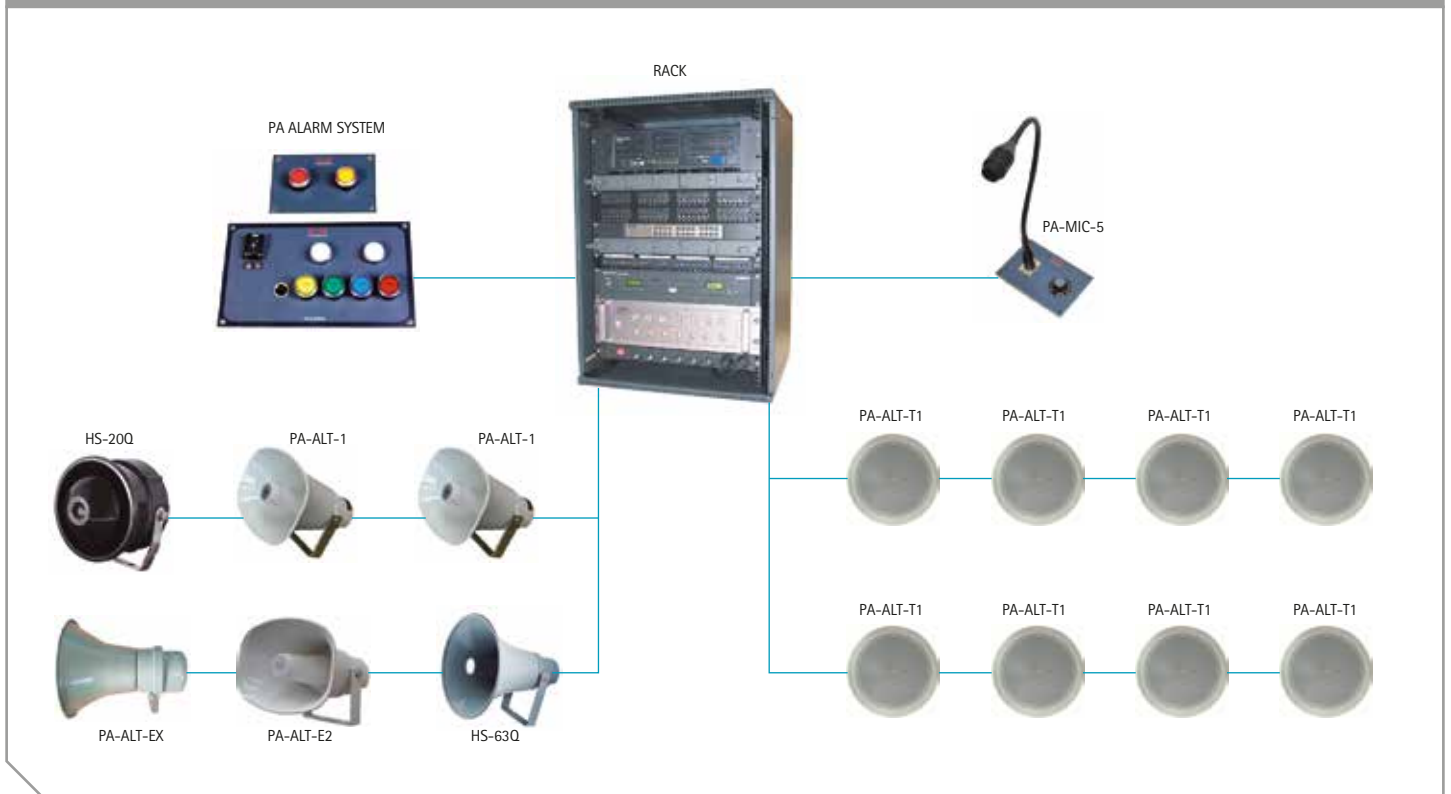
Internal Communication Systems



These systems are configured as a combination of audio devices, microphones, loudspeakers, amplifiers, alarm generator with zone selection, etc.

The Public Address can also be connected to the Talk-Back System and it is also possible to interface it with any required devices, such as the automatic telephones. Thus, this system can be customized upon any requests.

Example of Public Address Systems



AMPLIFIERS



PA-AMP-60

Amplifier for PA system

Power output:

70 W

Consumption:

140 W

Supply:

110-120 VDC or 220-240 VCA,
50/60 Hz (24 VDC)

Output:

4 - 16 Ω / 70 - 100V

Inputs:

Mic 1,2,3: 600 Ω 5mV

Aux 1,2: 10 K Ω 470mV

Weight:

11,3 Kg approx.



PA-AMP-120

Amplifier for PA system

Power output:

130 W

Consumption:

260 W

Supply:

110-120 VDC or 220-240 VCA,
50/60 Hz (24 VDC)

Output:

4 - 16 Ω / 70 - 100V

Inputs:

Mic 1,2,3: 600 Ω 5mV

Aux 1,2: 10 K Ω 470mV

Weight:

12,3 Kg approx.



PA-AMP-260

Amplifier for PA system

Power output:

260 W

Consumption:

350 W

Supply:

110-120 VDC or 220-240 VCA,
50/60 Hz (24 VDC)

Output:

4 - 16 Ω / 70 - 100V

Inputs:

Mic 1,2,3: 600 Ω 5mV

Aux 1,2: 10 K Ω 470mV

Weight:

14,9 Kg approx.



PA-AMP-600

Amplifier for PA system

Power output:

660 W

Consumption:

880 W

Supply:

AC 200~240V / 50~60Hz

Output:

4 - 16 Ω / 70 - 100V

Inputs:

<1V

Weight:

17 Kg approx.



PA-AMP-1000

Amplifier for PA system

Power output:

1000 W

Consumption:

1350 W

Supply:

110-120 VDC or 220-240 VCA,
50/60 Hz

Output:

4 - 16 Ω / 70 - 100V

Inputs:

<1V

Weight:

27,5 Kg approx.



PA-AMP-1500

Amplifier for PA system

Power output:

1500 W

Consumption:

2000 W

Supply:

110-120 VDC or 220-240 VCA,
50/60 Hz

Output:

4 - 16 Ω / 70 - 100V

Inputs:

<1V

Weight:

30 Kg approx.

LOUDSPEAKERS



PA-ALT-E2

Loudspeaker for PA system

Power output:
15 W
Impedance:
512 Ω
Weight:
1,4 Kg approx.
IP rating:
55



PA-ALT-EX

Intrinsically safe loudspeaker for PA system

Power output:
15 W
Impedance:
16 Ω
SPL:
110 dB
IP rating:
65



PA-ALT-T1

Ceiling loudspeaker for PA system

Power output:
3/6 W
Impedance:
640 Ω
Sensitivity:
90 dB
Weight:
0,9 Kg approx.



HS-20Q

Exterior loudspeaker

Power output:
20 W
Impedance:
8 Ω
Acoustic pressure:
104dB/114dB SPL 1W/20W (1m).
Weight:
1,4 Kg approx.
IP rating:
67



HS-63Q

Exterior loudspeaker

Power output:
30 W / 15 / 10 / 5 / 3 W
Impedance:
100V line 330 - 3,3 K Ω
Weight:
2,2 Kg approx.
IP rating:
65

MICROPHONES



PA-MIC-2

Microphone

Impedance:
200 Ω
Assembly:
Console.
Weight:
0,4 Kg approx.



PA-MIC-5

Microphone

Impedance:
200 Ω
Assembly:
Console.
Weight:
0,5 Kg approx.

COM

SELF POWERED TELEPHONE SYSTEMS

BATTERYLESS

Internal Communication Systems



The necessary energy to establish communication comes from a generator incorporated in the telephone. When the handle is activated, a condenser is charged, so communication can be established. When communication begins to fail, the energy can be recharged by activating the handle again. This process can be repeated as many times as desirable.

All the Batteryless telephones include a relay built in the circuit board.

Most of our telephones are built with polymer alloy providing high impact resistance, fireproof, stability to ultra-violet light and excellent chemical resistance.

The Batteryless telephone systems allows communication in hazardous areas as indicated in the diagram below. In this case the system permits also up to 24 extensions.

Example of Self Powered Telephones System





AU-MAG

**Selfpowered telephone (batteryless).
12 extensions**

Acoustic alarm:
80 dB (1 m)
Assembly:
Bulkhead or console.
Weight:
2 Kg approx.
IP rating:
54
Relay incorporated.



AU-MAG-C

**Selfpowered telephone (batteryless)
with connector for headset.
12 extensions**

Acoustic alarm:
80 dB (1 m)
Assembly:
Bulkhead or console.
Weight:
2 Kg approx.
IP rating:
54
Relay incorporated.



AU-MAG-P

**Selfpowered telephone (batteryless)
portable. 12 extensions**

Acoustic alarm:
80 dB (1 m)
Assembly:
Portable.
Weight:
2 Kg approx.
IP rating:
54
Relay incorporated.



AU-MAG-F

**Selfpowered telephone (batteryless).
12 extensions**

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Acoustic alarm:
80 dB(A) (1 m)
Assembly:
Flush mounting.
Weight:
2 Kg approx.
IP rating: 42
Relay incorporated.



AU-MAG-MG

**Selfpowered telephone (batteryless)
with shock and vibration isolation.
12 extensions**

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Acoustic alarm:
80 dB (1 m)
Assembly:
Bulkhead .
Weight: 4 Kg approx.
IP rating: 65
Relay incorporated.



AU-CJ-MAG

**Selfpowered telephone housed in
watertight box (batteryless) with
acoustic and luminous alarm.
12 extensions**

Acoustic alarm:
104 dB (A) (1m)
Alarms supply:
24 VDC - 25W
Assembly:
Bulkhead.
Weight:
5,5 Kg approx.
IP rating: 55
Relay incorporated.



AU-MAG-MG-B

Selfpowered telephone (batteryless) housed in watertight box with shock and vibration isolation. 12 extensions

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6 Kg approx.
IP rating: 66
Relay incorporated.



AU-CJ-MAG-MG

Selfpowered telephone (batteryless) housed in watertight box with acoustic and luminous alarm, shock and vibration isolation include. 12 extensions

Acoustic alarm:
104 dB (A) (1m)
Alarms supply:
24 VDC - 25W
Assembly:
Bulkhead.
Weight: 6,5 Kg approx.
IP rating: 66
Relay incorporated.



AU-MAG-A

Selfpowered telephone (batteryless) with amplifier. 12 extensions

Acoustic alarm:
80 dB (A) (1 m)
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead or console.
Weight:
2 Kg approx.
IP rating: 54
Relay incorporated.



AU-MAG-A-F

Selfpowered telephone (batteryless) with amplifier. 12 extensions

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Acoustic alarm:
80 dB(A) (1 m)
Assembly:
Flush mounting.
Weight:
2 Kg approx.
IP rating: 42
Relay incorporated.



AU-MAG-A-MG

Selfpowered telephone (batteryless) with amplifier, shock and vibration isolation. 12 extensions

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB (1 m)
Relative humidity:
Up to 95% (non condensing).
Conversation time: 20 - 30 min.
Assembly: Bulkhead.
Weight: 2,5 Kg approx.
IP rating: 65
Relay incorporated.



AU-CJ-MAG-A

Selfpowered telephone (batteryless) with amplifier housed in watertight box with acoustic and luminous alarm. 12 extensions

Acoustic alarm:
104 dB (A) (1m)
Alarms supply:
24 VDC - 25W
Assembly:
Bulkhead.
Weight:
5,5 Kg approx.
IP rating: 55
Relay incorporated.



AU-MAG-24

**Selfpowered telephone (batteryless).
24 extensions**

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB (1 m)
Relative humidity:
Up to 95% (non condensing).
Conversation time: 20 - 30 min.
Assembly:
Bulkhead or console.
Weight: 2 Kg approx.
IP rating: 54
Relay incorporated.



AU-MAG-24-C

**Selfpowered telephone (batteryless)
with connector for headset.
24 extensions**

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB(A) (1 m)
Relative humidity:
Up to 95% (non condensing).
Conversation time: 20 - 30 min.
Assembly: Flush mounting.
Weight: 2 Kg approx.
IP rating: 54
Relay incorporated.



AU-MAG-24-P

**Portable selfpowered telephone
(batteryless). 24 extensions**

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB (1 m)
Relative humidity:
Up to 95% (non condensing).
Conversation time: 20 - 30 min.
Assembly:
Portable.
Weight: 2,5 Kg approx.
IP rating: 54
Relay incorporated.



AU-MAG-24-F

**Selfpowered telephone (batteryless)
flush mounting. 24 extensions**

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Acoustic alarm:
80 dB(A) (1 m)
Assembly:
Flush mounting.
Weight:
2 Kg approx.
IP rating: 42
Relay incorporated.



AU-MAG-MG-24

**Selfpowered telephone (batteryless)
with shock and vibration isolation.
24 extensions**

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB (1 m)
Relative humidity:
Up to 95% (non condensing).
Conversation time: 20 - 30 min.
Assembly: Bulkhead.
Weight: 4 Kg approx.
IP rating: 65
Relay incorporated.



AU-CJ-MAG-24

**Selfpowered telephone batteryless)
housed in watertight box with
acoustic and luminous alarm.
24 extensions**

Operating temperature: -20°C to +50°C
Acoustic alarm:
104 dB (1 m)
Luminous alarm:
21W - 90 flash/min.
Conversation time: 20 - 30 min.
Assembly: Bulkhead.
Weight: 6 Kg approx.
IP rating: 55
Relay incorporated.



AU-MAG-A-24

Selfpowered telephone (batteryless) with amplifier. 24 extensions

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB(A) (1 m)
Relative humidity:
Up to 95% (non condensing).
Conversation time: 20 - 30 min.
Assembly:
Bulkhead or console.
Weight: 2 Kg approx.
IP rating: 54
Relay incorporated.



AU-MAG-A-24-C

Selfpowered telephone (batteryless) with amplifier and connector for headset. 24 extensions

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Acoustic alarm:
80 dB(A) (1 m)
Assembly:
Bulkhead or console.
Weight: 2 Kg approx.
IP rating: 42
Relay incorporated.



AU-MAG-A-24-F

Selfpowered telephone (batteryless) with amplifier flush mounting. 24 extensions

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Acoustic alarm:
80 dB(A) (1 m)
Assembly:
Flush mounting.
Weight: 2 Kg approx.
IP rating: 42
Relay incorporated.



AU-MAG-A-MG-24

Selfpowered telephone (batteryless) with shock and vibration isolation. 24 extensions

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB (1 m)
Relative humidity:
Up to 95% (non condensing).
Conversation time: 20 - 30 min.
Assembly: Bulkhead.
Weight: 4 Kg approx.
IP rating: 65
Relay incorporated.



AU-MAG-MG-B-24

Selfpowered telephone (batteryless) housed in watertight box with shock and vibration isolation. 24 extensions

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6 Kg approx.
IP rating:
66
Relay incorporated.



AU-CJ-MAG-A-24

Selfpowered telephone (batteryless) with amplifier housed in watertight box with acoustic and luminous alarm. 24 extensions

Acoustic alarm:
104 dB (A) (1m)
Alarms supply:
24 VDC - 25W
Assembly:
Bulkhead.
Weight:
5,5 Kg approx.
IP rating: 55
Relay incorporated.

TELEPHONES



AU-MAG-EX



Ex Proof sound powered telephone selector switch. 12 extensions

Weight:
4 Kg approx.
IP rating:
66
Needs a Buffer unit in safety area.
Ex II 3G Ex ic IIB T4 Gc approved.
LOM 14ATEX4063



AU-MAG-EX-24



Ex Proof sound powered telephone selector switch. 24 extensions

Weight:
4 Kg approx.
IP rating:
66
Needs a Buffer unit in safety area.
Ex II 3G Ex ic IIB T4 Gc approved.
LOM 14ATEX4063



AU-CJ-MAG-EX



Ex Proof sound powered telephone selector switch housed in watertight box. 12 extensions

Operating temperature:
-25°C to +40°C
Relative humidity:
Up to 95% (non condensing).
Weight:
15 Kg approx.
IP rating:
65



AU-CJ-MAG-EX-24



Ex Proof sound powered telephone selector switch housed in watertight box. 24 extensions

Operating temperature:
-25°C to +40°C
Relative humidity:
Up to 95% (non condensing).
Weight:
15 Kg approx.
IP rating:
65



BA-BU-24



Barrier Buffer unit for use with telephone AU-MAG-EX

Supply:
24 VDC
Power consumption:
100 W max.
Operating temperature:
-20°C to +40°C
Relative humidity:
Up to 95% (non condensing).
Weight:
12 Kg approx.
IP rating:
65



AU-ACM-EX



Ex Proof headset with microphone

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Weight:
0,5 Kg approx.
Ex II 2G Ex ib IIC T4 approved.
Dynamic microphone.

TELEPHONES



AU-ACM

Headset with microphone

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Weight:
0,9 Kg approx.
Cable length:
10 m.



AU-ACM-A

Headset with microphone and amplifier

Supply:
24 VDC
Power consumption:
2 W
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Weight:
1,5 Kg approx.
Cable length:
10 m.

AUXILIARY ELEMENTS



T-198

High intensity bell for self powered telephones

Supply:
24 VDC
Current consumption:
15 mA
Volume output:
104 dB (A) (1m)
Weight:
0,17 Kg approx.



L-98

Flashing beacon alarm

Supply:
24 VDC
Power consumption:
21 W
Weight:
0,15 Kg approx.



ACM-A

Amplifier for headset telephone

Supply:
24 VDC
Power consumption:
2 W
Weight:
0,5 Kg approx.
IP rating:
55

AUXILIARY ELEMENTS



CAB-92

Soundproof booth

Assembly:
Bulkhead.
Weight:
5 Kg approx.



IS-MC1-R



Ex Proof acoustic and luminous alarm

Supply:
24 VDC through Zener barrier or galvanic isolator.
Power consumption:
2,6 W max.
Operating temperature:
-20°C to +60°C
Relative humidity:
Up to 95% (non condensing).
Weight: 0,2 Kg approx.
IP rating: 65
Approved: SIRA 05ATEX2084X
Ex II 1G Ex ia IIC T4 Ga approved.



JACK-1-AU

Box with 1 jack for connection to AU-ACM

Assembly:
Bulkhead.
Weight:
0,75 Kg approx.
IP rating:
66



JACK-1-24

Box with 1 jack for telephone 24 extensions

Weight:
1,5 Kg approx.
IP rating:
66



AUTOMATIC TELEPHONE SYSTEMS

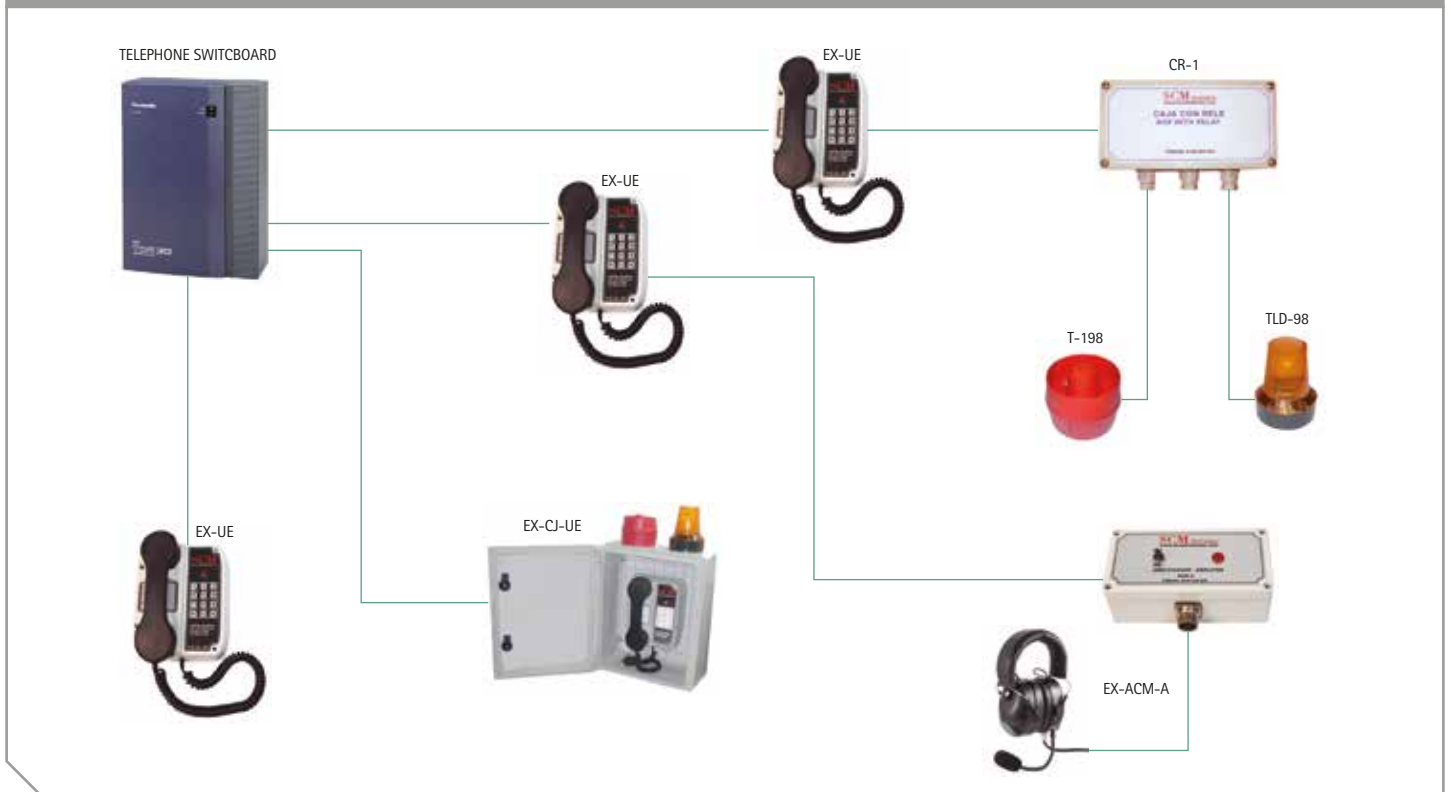
Internal Communication Systems



The necessary energy to establish communication comes from the main supply.

Due to the especial materials used in these equipments, these types of telephones are manufactured to work under extreme conditions.

Example of Automatics Telephones System



TELEPHONES



EX-UE

Automatic telephone

Supply:
From telephone line.

Acoustic alarm:
80 dB (1 m)

Assembly:
Bulkhead or console.

Weight:
2 Kg approx.

IP rating:
54



EX-CJ-UE

Automatic telephone housed in watertight box

Acoustic alarm:
104 dB(A) (1 m)

Luminous alarm:
21W - 90 ciclos/min

Alarms supply:
24 VDC - 25W

Assembly:
Bulkhead.

Weight:
5 Kg approx.

IP rating:
65

AUXILIARY ELEMENTS



EX-ACM-A

Headset with microphone and amplifier

Supply:
From telephone line.

Weight:
1,5 Kg approx.

IP rating:
55



CR-1

Relay box

Supply:
From telephone line.

Output:
Voltage free contact 250V - 4A

Weight:
0,2 Kg approx.

IP rating:
55

SOUND POWERED TELEPHONE SYSTEMS

Internal Communication Systems



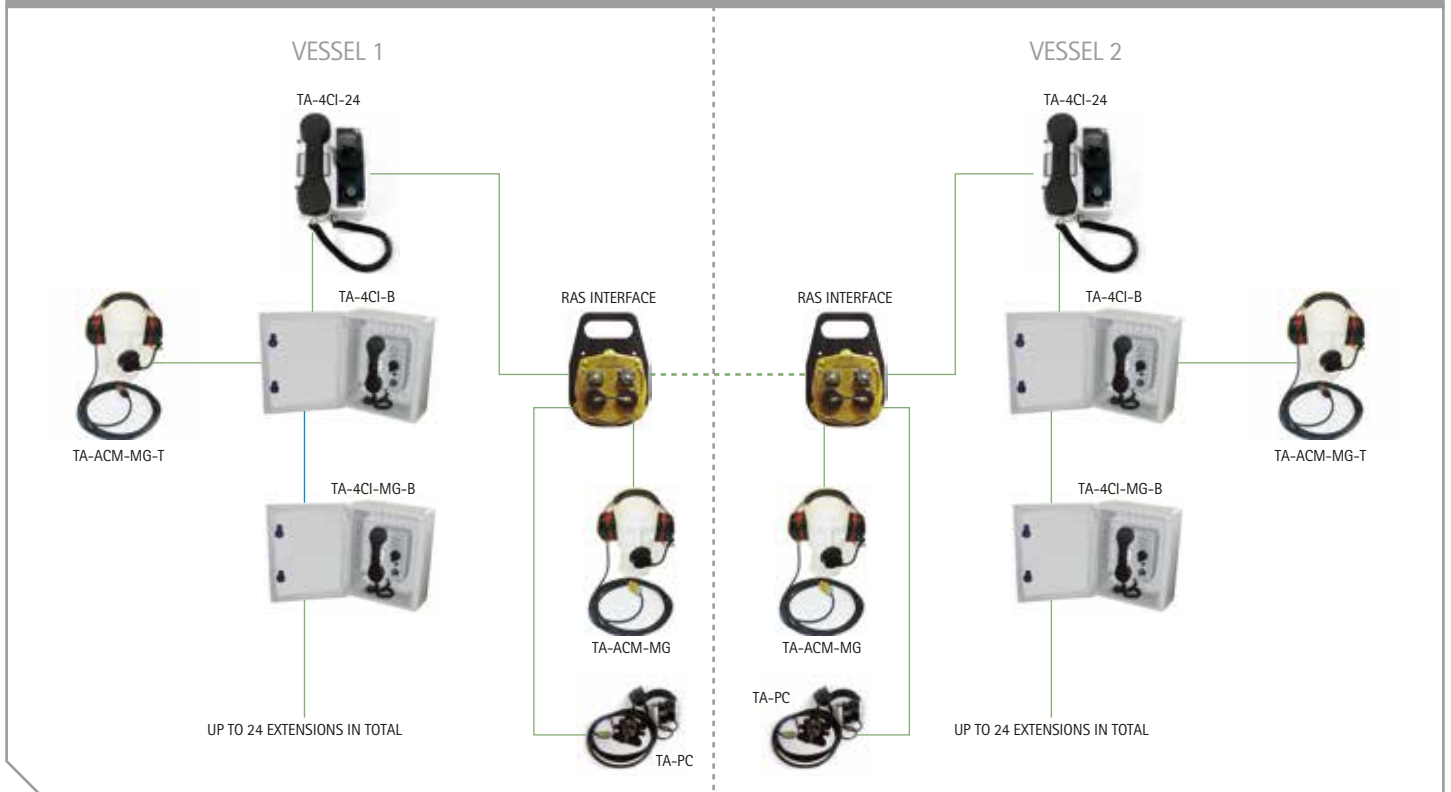
The necessary energy to establish communication comes only from the user's voice. The acoustic energy is transformed to electrical, and then from electrical to acoustic.

All of our sound powered telephones are built with polymer alloy providing high impact resistance, fireproof, stability to ultra-violet light and excellent chemical resistance.

These types of telephones are used when security in communication is of vital importance, as is the case of the combat systems in military vessels.

Our sound powered telephone systems comply with MIL-STD.

Example of Sound Powered Telephones System





TA-4CI-S

Sound powered telephone single way

Acoustic alarm:
80 dB (1 m)
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead or console.
Weight:
2 Kg approx.
IP rating:
54



TA-4CI

Sound powered telephone with 12 extensions selector

Acoustic alarm:
80 dB (1 m)
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead or console.
Weight:
2 Kg approx.
IP rating:
54



TA-4CI-S-B

Sound powered telephone single way housed in watertight box

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
5 Kg approx.
IP rating:
55



TA-4CI-B

Sound powered telephone with 12 extensions selector housed in a watertight box

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
5 Kg approx.
IP rating:
55



TA-CJ-4CI-S

Sound powered telephone single way housed in watertight box with acoustic and luminous alarm

Acoustic alarm:
104 dB (A) (1m)
Alarms supply:
24 VDC - 25W
Assembly:
Bulkhead.
Weight:
5 Kg approx.
IP rating:
55



TA-CJ-4CI

Sound powered telephone with 12 extensions selector housed in watertight box with acoustic and luminous alarm

Acoustic alarm:
104 dB (A) (1m)
Alarms supply:
24 VDC - 25W
Assembly:
Bulkhead.
Weight:
5,5 Kg approx.
IP rating:
55



TA-4CI-24

Sound powered telephone with 24 extensions selector

Operating temperature:
-20°C to +50°C
Acoustic alarm:
80 dB (1 m)
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead or console.
Weight:
2 Kg approx.
IP rating:
54



TA-4CI-24-B

Sound powered telephone with 24 extensions selector housed in a watertight box

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
5 Kg approx.
IP rating:
55



TA-CJ-4CI-24

Sound powered telephone with 24 extensions selector housed in watertight box with acoustic and luminous alarm

Acoustic alarm:
104 dB (A) (1m)
Alarms supply:
24 VDC - 25W
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly: Bulkhead.
Weight: 5,5 Kg approx.
IP rating: 55



TA-4CI-MG-S

Sound powered telephone single way with shock and vibration isolation

Acoustic alarm:
80 dB (1 m)
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
2 Kg approx.
IP rating:
54



TA-4CI-MG

Sound powered telephone with 12 extensions selector with shock and vibration isolation

Acoustic alarm:
80 dB (1 m)
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
2 Kg approx.
IP rating: 65



TA-4CI-MG-S-B

Sound powered telephone single way, housed in a watertight box with shock and vibration isolation

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6 Kg approx.
IP rating:
66

TELEPHONES



TA-4CI-MG-B

Sound powered telephone with 12 extensions selector housed in a watertight box with shock and vibration isolation

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6 Kg approx.
IP rating:
66



TA-CJ-4CI-MG-S

Sound powered telephone single way housed in a watertight box with shock and vibration isolation with acoustic and luminous alarm

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6,5 Kg approx.
IP rating:
66



TA-CJ-4CI-MG

Sound powered telephone with 12 extensions selector housed in a watertight box with shock and vibration isolation with acoustic and luminous alarm

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6,5 Kg approx.
IP rating:
66



TA-4CI-MG-24

Sound powered telephone with 24 extensions selector with shock and vibration isolation

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
2 Kg approx.
IP rating:
66



TA-4CI-MG-24-B

Sound powered telephone with 24 extensions selector housed in a watertight box with shock and vibration isolation

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6 Kg approx.
IP rating:
66



TA-CJ-4CI-MG-24

Sound powered telephone with 24 extensions selector housed in watertight box with acoustic and luminous alarm with shock and vibration isolation

Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Bulkhead.
Weight:
6,5 Kg approx.
IP rating:
66

PORTABLES TELEPHONES



TA-4CI-P

**Sound powered telephone portable
12 extensions selector**

Acoustic alarm:
80 dB (1 m)
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Portable.
Weight:
2 Kg approx.
IP rating:
54



TA-4CI-P-24

**Sound powered telephone portable
24 extensions selector**

Acoustic alarm:
80 dB (1 m)
Operating temperature:
-20°C to +50°C
Relative humidity:
Up to 95% (non condensing).
Assembly:
Portable.
Weight:
2 Kg approx.
IP rating:
54



TA-ACM-A

**Headset with microphone and
amplifier**

Supply:
24 VDC
Power consumption:
2 W
Weight:
1,5 Kg approx.
IP rating:
55



TA-ACM-MG

Headset with microphone

Operating temperature:
-20°C to +70°C
Relative humidity:
Up to 95% (non condensing).
Microphone adjustment:
By flexible arm.
Assembly:
Portable.
Connector: Plug H-39-A.
Weight: 1,4 Kg approx.
SNR: 35dB
Noise attenuation:
H 40dB, M 32dB, L 23dB



TA-ACM-MG-T

Headset with microphone

Operating temperature:
-20°C to +70°C
Relative humidity:
Up to 95% (non condensing).
Microphone adjustment:
By flexible arm.
Assembly:
Portable.
Connector: Plug four pole.
Weight: 1,4 Kg approx.
SNR: 35dB
Noise attenuation:
H 40dB, M 32dB, L 23dB



TA-ACM-MH

Helmet headset

Operating temperature:
-20°C to +50°C
Weight:
1,5 Kg approx.
Cable length:
6 m.

PORTABLES TELEPHONES



TA-PC

Head-chest sound powered telephone

Operating temperature:
-20°C to +50°C

Assembly:
Head-chest.

Connector:
Plug H-39-A.

Weight:
1,5 Kg approx.

Cable length:
6 m.



TA-PC-T

Head-chest sound powered telephone extended temperature

Operating temperature:
-20°C to +70°C

Assembly:
Head-chest.

Connector:
Plug H-39-A.

Weight:
1,5 Kg approx.

Cable length:
6 m.



TA-MT-MG

Sound powered handset

Connector:
Plug H-39-A.

Weight:
0,7 Kg approx.

SWITCH BOX



CI-10

10 Switch box to isolate telephone lines

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
3,7 Kg approx.

IP rating:
65



CI-12

12 Switch box to isolate telephone lines

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
3,7 Kg approx.

IP rating:
65



CI-20

20 Switch box to isolate telephone lines

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
3,9 Kg approx.

IP rating:
65

DISTRIBUTION BOX



CD-12

Distribution box for telephone lines for 12 circuits

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
3,8 Kg approx.

IP rating:
65



CSR-2

Rotary selector switch box for 2 circuits

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
0,65 Kg approx.

IP rating:
65



CSR-5

Rotary selector switch box for 5 circuits

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
3,3 Kg approx.

IP rating:
65



CSR-10

Rotary selector switch box for 10 circuits

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
2,6 Kg approx.

IP rating:
65



CSR-16

Rotary selector switch box for 16 circuits

Operating temperature:
-25°C to +70°C

Assembly:
Bulkhead.

Weight:
1,5 Kg approx.

IP rating:
65

SCM

AMPLIFIERS



TA-AM-MG-1

90 W Amplifier for sound powered telephone systems

Supply:
110 VDC

Power consumption:
130 W

Power output:
90 W

Assembly:
Bulkhead.

Weight:
12,5 Kg approx.



TA-AM-MG

15 W Amplifier for sound powered telephone systems

Supply:
24 VDC

Power consumption:
25 W

Power output:
15 W

Assembly:
Bulkhead.

Weight:
2,3 Kg approx.



TA-AMT

Amplifier for self powered telephone system (batteryless)

Supply:
24 VDC

Power consumption:
15 W

Power output:
5 W

Assembly:
Bulkhead.

Weight:
2 Kg approx.



ACM-A

Amplifier for headset telephone

Supply:
24 VDC

Power consumption:
2 W

Weight:
0,5 Kg approx.

IP rating:
55

CONNECTORS



JACK-1

Box with 1 jack

Weight:
0,75 Kg approx.

IP rating:
66



JACK-2

Box with 2 jacks

Weight:
0,75 Kg approx.

IP rating:
66



JACK-4

Box with 4 jacks

Weight:
1,15 Kg approx.

IP rating:
66



JACK-24

Box with 1 jack for telephone 24 extensions

Weight:
1 Kg approx.

IP rating:
66

CONNECTORS



H-39-A

Connector for portable telephones

Weight:
0,05 Kg approx.



A-689

Portable connector with cap

Weight:
0,1 Kg approx.



H-27-A

Panel-mounted jack

Weight:
0,1 Kg approx.



RAS INTERFACE

Communication device

Auxiliary element for the emergency communication among two vessels

Assembly:
Bulkhead.
Weight:
1,25 Kg approx.
IP rating:
66



RAS INTERFACE-P

Communication device portable

Auxiliary element for the emergency communication among two vessels

Assembly:
Portable or bulkhead.
Weight:
1,5 Kg approx.
IP rating:
66



JACK-1-AP

Watertight jackbox high-pressure resistant up to 50 bars

Connector:
Type H-27A
Weight:
7 Kg approx.
IP rating:
68

ALARMS



EXP-90

90 W Exponential loudspeaker

Power output:
90 W
Impedance:
200 Ω
Acoustic pressure:
112dB SPL 1W (1m)
Weight:
25 Kg approx.
IP rating:
65



EXP-15

15 W Exponential loudspeaker

Power output:
15 W
Impedance:
8 Ω
Acoustic pressure:
112dB SPL 1W (1m)
Weight:
1,1 Kg approx.
IP rating:
65



PUL-1-MG

Push button for one extension

Weight:
0,7 Kg approx.
IP rating:
66



PUL-3-MG

Push button for three extensions

Weight:
0,8 Kg approx.
IP rating:
66



LD-MG

Alarm white light beacon

Supply:
110 VAC
Power consumption:
21 W
Weight:
3,6 Kg approx.
IP rating:
65



Z-MG

Buzzer for sound powered telephones

Supply:
110 VAC
Current consumption:
0,5 A
Volume output:
104 dB (A) (1 m)
Weight:
3 Kg approx.
IP rating:
66



CR-MG

Relay box for alarm activation

Supply:
24 VDC / 110 VAC
Output voltage:
24 VDC /110 VAC
Weight:
1,3 Kg approx.
IP rating:
66



CAB-92

Soundproof booth

Assembly:
bulkhead.
Weight:
5 Kg approx.



CJ-EXT-1

Stowage box for 1 telephone TA-PC

Weight:
2,5 Kg approx.
IP rating:
66



CJ-EXT-2

Stowage box for 2 telephone TA-PC

Weight:
3,5 Kg approx.
IP rating:
66



CJ-EXT-1-X

**Stowage box in stainless steel
telephone TA-PC**

Weight:
7,5 Kg approx.
IP rating:
66



CJ-EXT-2-X

**Stowage box in stainless steel for
two telephones TA-PC**

Weight:
8,5 Kg approx.
IP rating:
66



CRT-CE

**Cable reel for emergency
communications**

Length:
60 m approx.
Weight:
4,3 Kg approx.

AUXILIARY ELEMENTS



CRT-CE-100

Cable reel for emergency communications

Length:
100 m approx.
Weight:
6 Kg approx.



SP-TA-PC

Set holder for TA-PC telephone

Weight :
0,3 Kg approx.
Material:
brass.



SP-MT-MG

Handset holder for TA-MT-MG telephone

Weight:
1,5 Kg approx.
IP rating:
54

SCM

ADDITIONAL SERVICES

SCM
SISTEMAS



WARRANTY

The standard warranty is 18 months since the goods arrive to its final destination. A warranty extension is also available under request.

SPARES

Under customer request, a kit containing the optimal number and type of elements can also be supplied along with each and every delivered equipment.

SCM has a large experience in supplying on Board & Depot spares, which is a usual request in the case of military vessels.

TECHNICAL INFORMATION

Connection diagrams for installation as well as a complete users manual is always supplied with delivered goods. Under customer request, an ad hoc technical handbook can also be supplied; this could be the case of complex systems where connection and maintenance may arise some difficulties for the installer.

COMMISSIONING

Under customer request, commissioning can be efficiently and rapidly done by our experienced technicians at any part of the world. This includes trials such as "Factory Acceptance Tests" "Harbour Acceptance Tests", "Setting At Work", etc.

PACKING MANUALS

When a system contains a significant number of items, SCM provides a packing manual, which allows the addressee of the delivered system to clearly identify where is the exact location of each item into the pallet/s, and hence, easing the unpacking process.

CUSTOMERS ADAPTABILITY

SCM is aware of the urgent needs for its customers in terms of commercial and/or technical requests. That is why a maximum 72 hours response is considered a must.

Also, in the case of delivery terms, the strong commitment on SCM's production team, as well as our "state of the art" software program and internal procedures, allows SCM to be honoured of having the shortest delivery times for its systems to any part of the world.

EMMAS



SCM SISTEMAS

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MIL-STD



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