

# Hardline

## Confined space communications

Robust solutions for rescue operations in confined and hazardous environments



## RELIABLE COMMUNICATIONS FOR CRITICAL RESCUE TASKS

A proven communication system purpose-built for rescue operations in confined spaces and potentially explosive environments. Trusted by technical rescue and mine rescue teams worldwide, Savox Hardline enhances team coordination to maximize safety, efficiency, and operational effectiveness in the most demanding conditions.

## MAIN COMPONENTS

### CSI-2100 COMMAND MODULE

The heart and control panel of the self-powered intercom system.

Com ports	3
Operator port	1
Volume control	Individual adjustment for each port
Max users	7
Expansion port	Yes (connect a second command module and double the number of users up to 14)
Port connector type	AJ-146 6 pin male, MIL-DTL-55116
Noise reduction button	Yes (reduce any high-pitched ambient noise)
Low Battery light	Yes (activates 12h before the battery runs out)
Battery type	3 x 1.5V C Duracell PC1400 or Energizer E93
Battery life	350 h average use
Enclosure material	EX polyester, glass fiber reinforced, thermosetting polyester with graphite additive
Enclosure size (L x W x H)	220 x 120 x 91 mm
Weight	2,2 kg



## CABLE

A durable and chemical-resistant communication cable.

Connector type	AJ-146 6 pin male, MIL-DTL-55116 AP-146 6 pin female, MIL-DTL-55116
Cable length	Various cable lengths available up to 1000 m
Chemical resistance	The protective jacket and connectors shield against acids, alkalis, fuels, and wastewater.
Color	Orange
Outer jacket material	Santoprene
Weight	70 g/m



## DOUBLE CABLE SPLITTER

Double the number of users through COM ports 1 and 2.

Com ports	4 for headsets
Mic control switch	Yes, three-stage system: A & B active, C & D active, or all ports active.
Port connector type	AJ-146 6 pin male, MIL-DTL-55116 AP-146 6 pin female, MIL-DTL-55116
Battery	No
Enclosure material	EX polyester, glass fiber reinforced, thermosetting polyester with graphite additive
Enclosure size (L x W x H)	160 x 75 x 57 mm
Weight	740 g



## CABLE SPLITTER

Doubles the capacity of a single port to two users.

Com ports	2 for headsets / talk boxes
Mic control switch	No
Port connector type	AJ-146 6 pin male, MIL-DTL-55116 AP-146 6 pin female, MIL-DTL-55116
Battery	No
Enclosure material	Diecast aluminum alloy with protective fabric pouch
Enclosure size (L x W x H)	51 x 51 x 31 mm
Weight	200 g



## POWER TALK BOX

A powered open speaker and microphone for hands-free operation.

Port connector type	164-183-S 6 pin female, MIL-DTL-55116
Volume control	No
Communication radius	6 m (typical value)
Power switch	Yes
Low Battery light	Yes (activates 12 h before the battery runs out)
Battery type	2 x 1.5V C Duracell PC1400 or Energizer E93
Battery life	350 h average use
Enclosure material	EX polyester, glass fiber reinforced, thermosetting polyester with graphite additive
Enclosure size (L x W x H)	120 x 92 x 120 mm
Weight	1,6 kg



## TALK BOX

Battery-free open speaker and microphone for hands-free operation.

Port connector type	164-183-S 6 pin female, MIL-DTL-55116
Volume control	No
Communication radius	2 m (typical value)
Enclosure material	EX polyester, glass fiber reinforced, thermosetting polyester with graphite additive
Enclosure size (L x W x H)	75 x 110 x 57 mm
Weight	450 g



## OPERATOR HEADSET

Behind-the-Neck Headset for clear and reliable two-way voice communication.

Connector type	AP-146 6 pin female, MIL-DTL-55116
Variants	BH1 – Speaker on one side BH2 – Speakers on both sides BH2 with Mic mute switch – Speakers on both sides
Boom microphone	Yes
Volume control	No
Cable length	85 cm
Weight	BH1 – 580 g BH2 – 590 g BH2 with Mic mute switch – 670 g



## FACE MASK SET

The Hardline face mask set enables clear communication also while wearing a mask and breathing apparatus.

<b>Headset connector type</b>	AP-146 6 pin female, MIL-DTL-55116
<b>Mic connector type</b>	3,5 mm
<b>Mic options</b>	Boom mic Throat mic
<b>Speaker attachment methods</b>	Helmet mount Speaker pouch Speaker harness
<b>Volume control</b>	No
<b>Mic mute</b>	No
<b>Cable length</b>	400 mm ± 10 mm (before stretching)



## HARD CASES

CSI-2100 KIT CASE



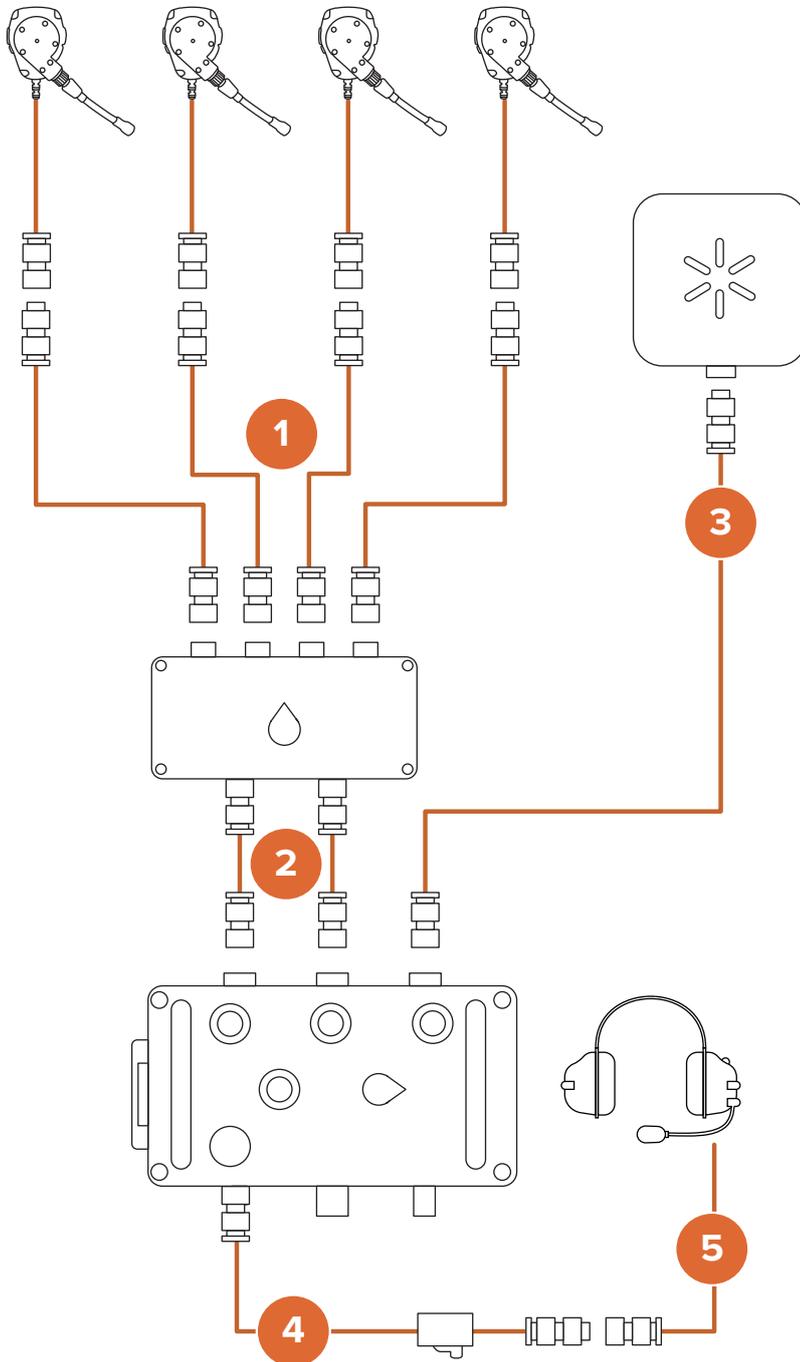
USAR TASK FORCE KIT CASE



CSI-2100 Kit case 61.6 x 49.3 x 22.0 cm

USAR Task Force Kit case 62.7 x 49.7 x 30.3 cm

## CONFIGURATION EXAMPLE



1. Connect face mask headsets to the Double Cabel Splitter box using COM cables.
2. Connect the the Double Cabel Splitter to ports 1 and 2 of the Command module.
3. Connect the Power Talk box to port 3 of the Command module using a COM cable.
4. Connect the mic mute switch to operator port of the Command module.
5. Connect the operator headset to the mic mute switch.

## INTERNATIONALLY CERTIFIED

Savox Hardline CSI-2000 systems and approved accessories are intrinsically safe certified in the United States, Canada, EU, UK, and Internationally as listed below.

Note that the products must be powered by approved batteries to meet the certification requirements. For approved battery types, please refer to product-specific control drawings.

<b>Canada</b>	Ex ia IIC T4 Class I Division 1 Groups A-D Ambient Temperature: $-20^{\circ}\text{C} < T_a < 40^{\circ}\text{C}$	According to standards: CSA C22.2#60079-0:2019 Ed.4 CSA C22.2#60079-11:2014 Ed.2
<b>United States</b>	Ex ia IIC T4 Class I Division 1 Groups A-D Ambient Temperature: $-20^{\circ}\text{C} < T_a < 40^{\circ}\text{C}$	According to standards: UL 913:2013 Ed.8 + R:06Dec2019 UL 60079-0:2019 Ed.7 + R:15Apr2020 UL 60079-11:2013 Ed.6 + R:14Sep2018
<b>European Union</b>	ATEX certification ATEX II IG Ex ia IIC T4 Ga $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$	According to standards: EN IEC 60079-0:2018 EN 60079-11:2012
<b>International</b>	IECEx certification IECEx Ex ia IIC T4 Ga $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$	According to standards: IEC 60079-0:2017 IEC 60079-11:2011
<b>UK</b>	UKEX certification UKEX II IG Ex ia IIC T4 Ga $-20^{\circ}\text{C} \leq T_a \leq +40^{\circ}\text{C}$	According to standards: EN IEC 60079-0:2018 EN 60079-11:2012