

## INTERCOM SYSTEM FOR WIRELINE UNITS ALS3A103 OPERATIONS AND MAINTENANCE MANUAL



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## 1.0 GENERAL DESCRIPTION

This system is designed to mount inside a wireline unit to provide communications between personnel inside the logging cabin and personnel working outside at the wellsite.

The system consists of three components, the intercom, The cable spool and the remote speaker.

### 1.1 INTERCOM

The intercom is powered from 12 - 24vdc

A hand held microphone is provided to ensure good voice pickup with little background noise.

Gain adjustments are available for both the internal audio volume and the external speaker audio volume.



## 1.2 CABLE SPOOLS

Two different types of spools are available for the rig speaker cable. One spool is portable spool and can be carried around. The other spool is designed to be mounted to the Wireline unit.



**C276P204**  
**REEL HAND REWIND**



**ALS3P204**  
**REEL HAND REWIND**  
**11.0D X 7.75W X 3.00ID**  
**9.00 OAL**

### 1.3 SPEAKERS

The intercom comes with connectors for two remote speakers. A switch is provided on the front panel to select which speaker is in use.

The external speakers connect to the intercom output port through either a bulkhead cable with a flange mount connector (ALS3A014), or with a cable connected between the spool and the intercom panel (ALS3A015).

One speaker can be placed near the well head through a 100' – 250' cable reel.

The speakers serve both as a speaker and a microphone.

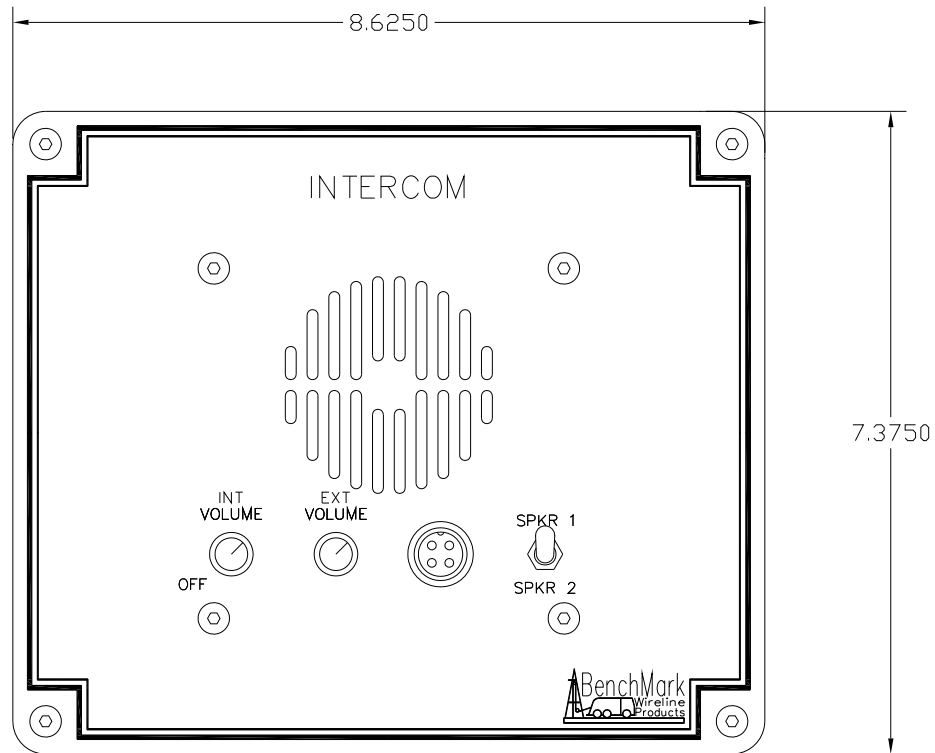


A secondary speaker is also available as an option. This speaker is designed to be permanently mounted in the hoist compartment area of the Wireline unit.



## 2.0 SPECIFICATIONS

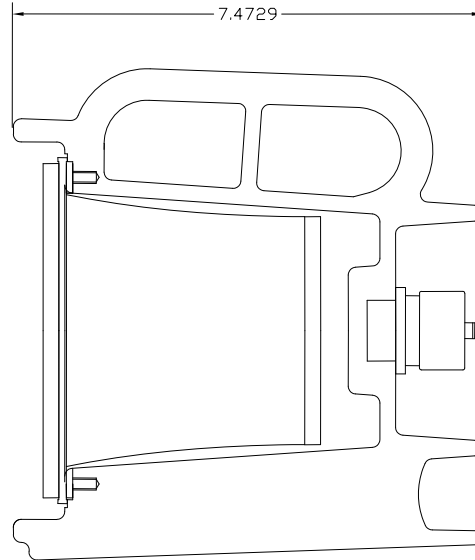
### 2.1 ALS3A103 INTERCOM ASSY



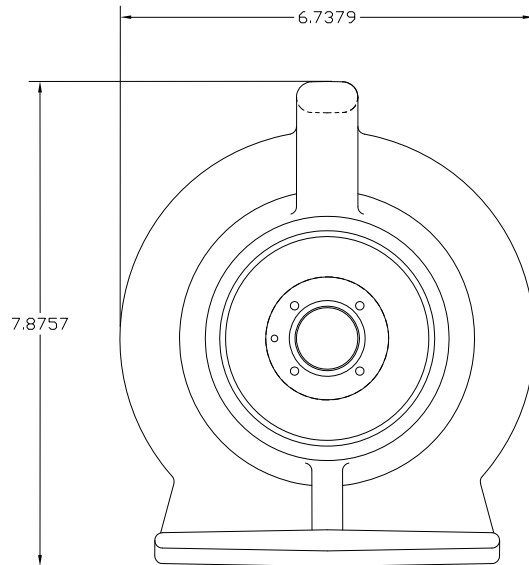
**DEPTH: 2.72" 6.9 CM**

**WEIGHT: 3 LBS 1.37 KG**

## 2.2 ALS3A124 SPEAKER ASSY



**PIN A = SPEAKER +**  
**PIN B = SPEAKER -**



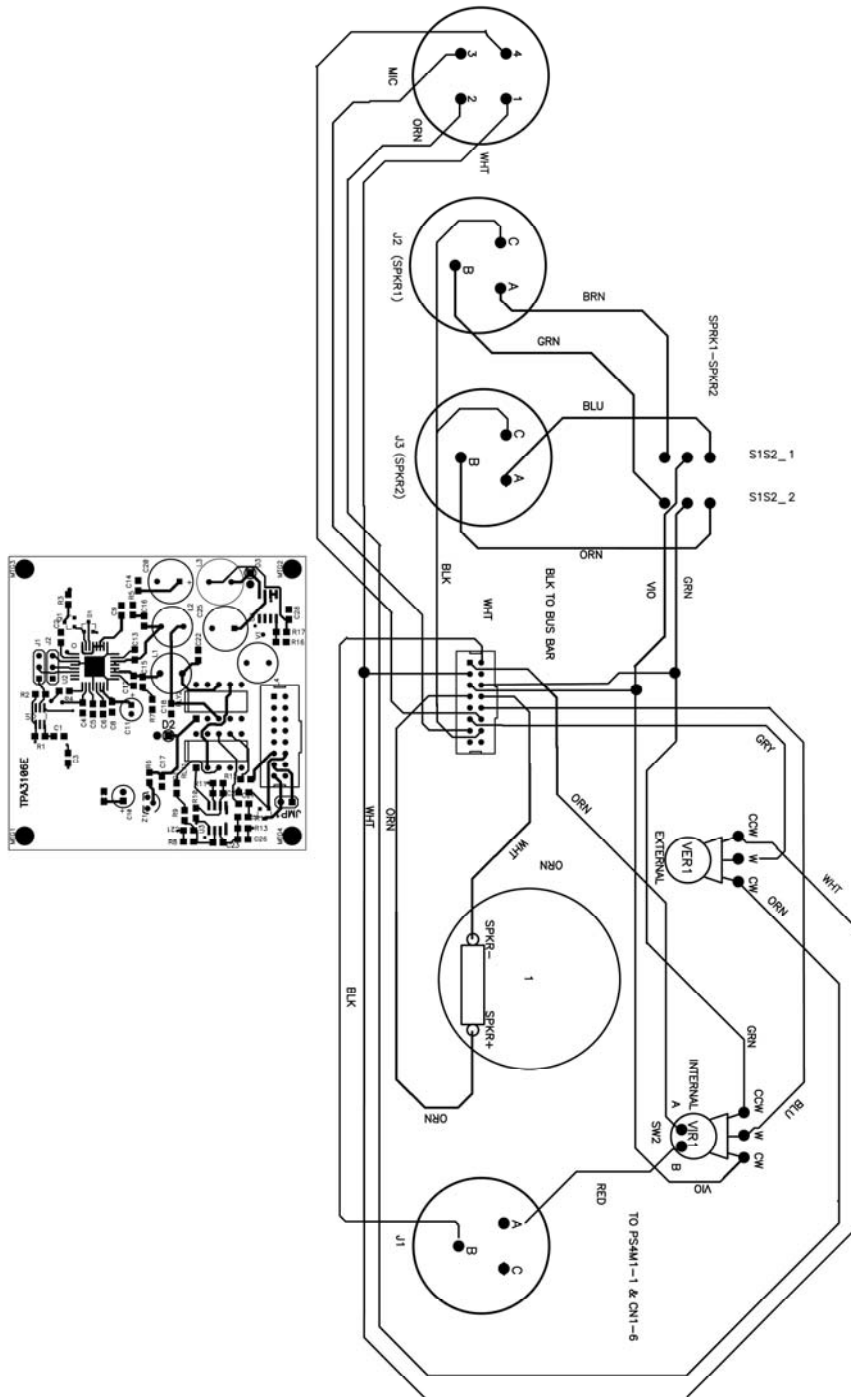
<b>WIDTH:</b>	<b>6.8"</b>	<b>17.3 CM</b>
<b>HEIGHT:</b>	<b>7.9"</b>	<b>20 CM</b>
<b>DEPTH:</b>	<b>7.5"</b>	<b>19 CM</b>
<b>WEIGHT:</b>	<b>9 LBS</b>	<b>4.08 KG</b>

### **3.0 OPERATING INSTRUCTIONS**

- 3.1 Apply power - +12v to pin A and gnd to pin B of power input connector
- 3.2 Connect speaker 1 cable to speaker 1 connector on rear of panel.
- 3.3 Connect speaker 2 cable to speaker 2 connector on rear of panel
- 3.4 Mount speaker 1 on a fixed mount inside the unit drum compartment. Mount it at a location where noise from the drum compartment will be minimal.
- 3.5 Connect speaker 2 to the cable reel.
- 3.6 Place speaker 2 near work area. The Speaker will pickup sounds from the work area and broadcast them from the intercom.
- 3.7 Use the speaker 1 / 2 switch on the front of the panel to select which speaker to listen and transmit to.
- 3.8 Use the internal volume control to adjust the volume of the intercom. This control only affects the intercom volume, not the external speaker.
- 3.9 Use the external volume control to adjust the sound level at the external speaker.
- 3.10 To transmit from the intercom to the external speaker, Press the transmit button on the microphone and speak into it.

## 4.0 DRAWINGS AND PARTS LISTS

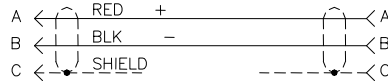
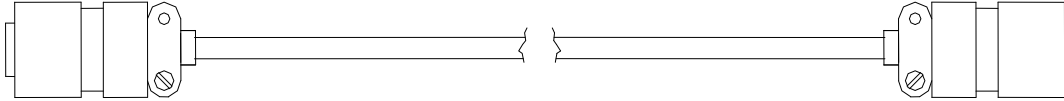
### 4.1 ALS3A103 INTERCOM WIRING DIAGRAM



## 4.2 ALS3A103 INTERCOM BOM

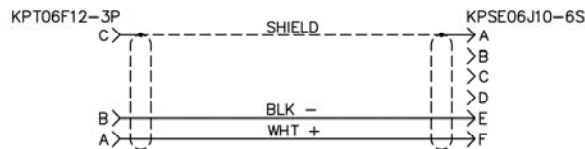
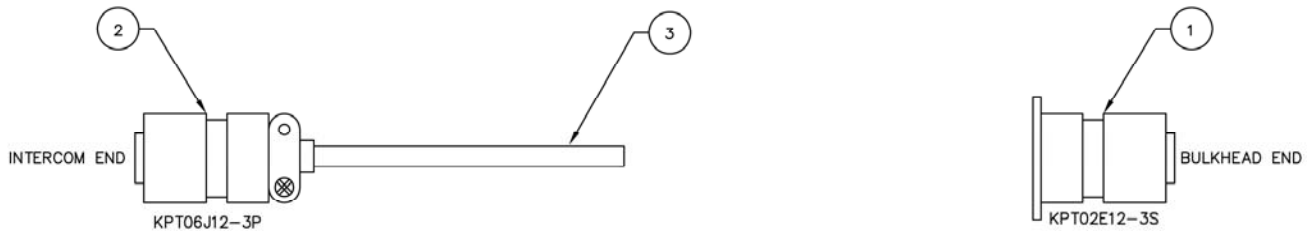
Item	Part Number	Description	Qty	UM
1	ALS3M111	PANEL FRONT I-COM PNL MT 2 POT	1	EA
2	ALS3M022	ENCLOSURE MOD INTERCOM PANL MT	1	EA
3	ALS1P032	SPEAKER ALNICO 8 OHM 2W 77MM	1	EA
4	AMS4P021	SWITCH CAP ALCO C-22 BLACK	1	EA
5	AMS4P362	POT 500 OHM 1/4W CARB LNR W/SW	1	EA
6	AMS4P363	KNOB INSTRUM SKIRTED RND .5"DI	2	EA
7	ALS3P026	SCREW 10-24 X 3/4 BTN HD SST	4	EA
8	ALS3M014	SCREW M12-1.25P X 12MM SET MOD	4	EA
9	AMS4P179	CONN KPSE02E12-3S RECEPTACLE	2	EA
10	AMS4P169	CONN KPSE02E12-3P RECEPTACLE	1	EA
11	AMS4P153	INSERT CLINCH STUD 8-32 x .38	4	EA
12	AMS4P028	SWITCH DPDT TOGGLE LOCKING	1	EA
13	ALS3P018	STANDOFF 8-32 X 1 M/F HEX	4	EA
14	C276P336	NUT 8-32 MACHINE SML PTN SST	2	EA
15	AMS1P056	WASHER #8 LOCK SST	4	EA
16	ALS1P011	POT 250 OHM CLAROSTAT 381N250	1	EA
17	ALS3A034	PCB ASSY NTERCM 3" MONO W RLYS	1	EA
18	C276P228	WASHER #8 FLAT SST	4	EA
19	AMS4P154	INSERT CLINCH NUT 4-40	1	EA
20	AMS4P418	CONN MICROPHONE 4 PIN PNL MT	1	EA
21	AMS4P419	MICROPHONE CB COBRA HG-M73	1	EA
22	AMS4P131	CLIP CB MICROPHONE	1	EA

### 4.3 ALS3A012 CABLE ASSY INTERCOM TO SPEAKER (CAN BE MOUNTED ON A SPOOL)



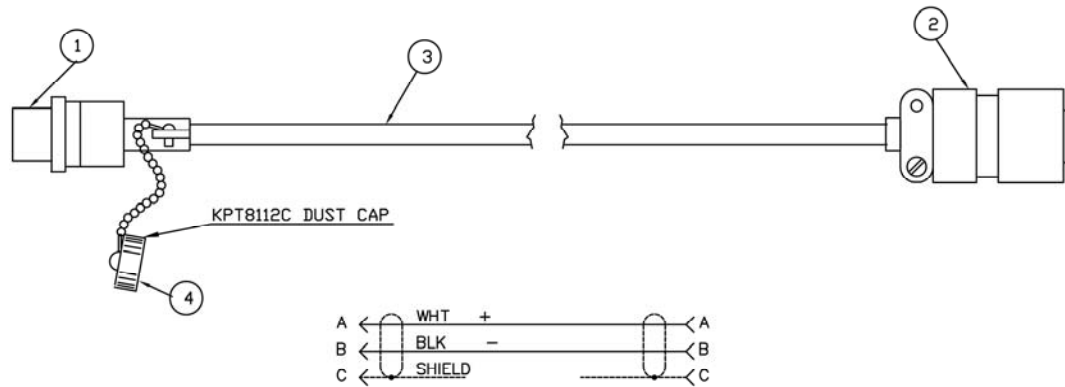
AMS4P177	CONN KPSE06J12-3S STR PLUG SOCKET	1	EA
AMS4P178	CONN KPSE06J12-3P STR PLUG PINS	1	EA
AM5KP070	DUST CAP KPT801C CANNON	1	EA
AMS4P222	CABLE 20/4C ALPHA 25154 BLACK	20- 250	FT

### 4.4 ALS3A014 CABLE ASSY INTERCOM TO BULKHEAD



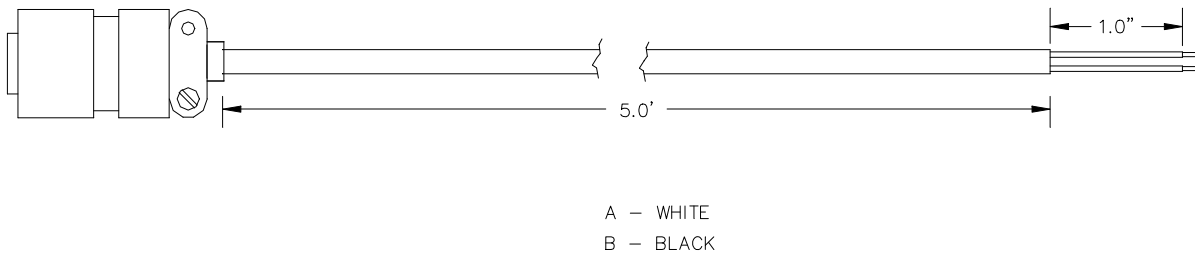
AMS4P179	CONN KPSE02E12-3S RECEPTACLE	1	EA
AMS4P178	CONN KPSE06J12-3P STR PLUG PINS	1	EA
AMS4P222	CABLE 20/4C ALPHA 25154 BLACK	15- 25	FT
AMS4P188	DUST CAP KPT8112C RECEPT	1	EA

#### 4.5 ALS3A015 CABLE ASSY INTERCOM TO SPOOL



ALS3P015	CONN KPSE01J12-3S RECEPTACLE	1	EA
AMS4P178	CONN KPSE06J12-3P STR PLUG PINS	1	EA
AMS4P222	CABLE 20/4C ALPHA 25154 BLACK	35	FT
AMS4P188	DUST CAP KPT8112C RECEPT	1	EA

#### 4.6 AMS4A827 CABLE ASSEMBLY – DC POWER IN



AMS4P177	CONN KPSE06J12-3S STR PLUG SOCKET	1	EA
AMS4P222	CABLE 20/4C ALPHA 25154 BLACK	20	FT