

Product Description



The SMC01 Station Master's Console is a robust desk console. It is designed to work with the VAR range of DSP Router/System Controllers in PA/VA system and is typically used by the Station Master for making announcements to any of the PA/VA zones within a station.

It also provides a flexible listen-in facility whereby a mix of all zones, or a mix of selected zones, may be monitored via a built in loudspeaker.

The unit has the facility to act as a 'Fire Microphone' and activate the VAR Router's bypass mode as required by BS5839 Pt 8.

Microphone audio is provided as a balanced 0dBu (nominal) analogue signal. The unit features an in-built signal limiter.

An outgoing 20Hz surveillance tone is generated to enable the audio cabling to the router to be monitored.

A multi-pole connector provides field connections. An additional connector allows a fist microphone to be used as an alternative to the gooseneck.

For further details please refer to the DSP Router/System Controller Handbook.

CE Declaration



This equipment is designed and manufactured to conform to the following EC standards:

EMC	EN 50121-4
Safety	EN 60065

Failure to use the equipment in the manner described in the product literature will invalidate the conformity. A 'Declaration of Conformity' statement to the above standards and a list of auxiliary equipment used for compliance verification is available on request.

Safety and Precautions

ELECTRICAL SAFETY

Always replace blown fuses in the supply to this equipment with the correct type and rating. Ensure power supply cabling is adequately rated.

ENVIRONMENTAL PRECAUTIONS

The temperature and humidity ranges shown in the specifications for this product must not be exceeded. This equipment must not be installed in an area that is subject to a corrosive atmosphere, excessive moisture or may allow water or other liquids to come into contact with the unit or its external connections. In the close proximity of some radio frequency transmitters, the signal to noise ratio of this product may be reduced. If this occurs, re-location of the equipment or the signal cables is recommended.

ESD PRECAUTIONS

This product contains static-sensitive devices. Observe ESD precautions when working on the equipment with the cover removed.

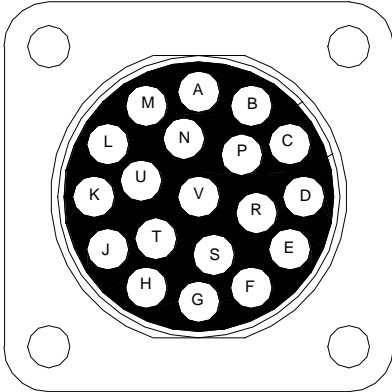
To install this product you will need;

- The SMC01 unit with mating connector kit.
- A 2mm Allen key or driver.
- Suitable wire cutters and strippers
- Suitable crimp tool (ITT Cannon 112108-0014 or R.S. 450-4411)

Recommended installation procedure

- Prepare a flying lead assembly using the supplied connector kit.
- Position the unit on the desk surface.
- Plug the lead assembly into the circular connector to the rear of the unit.
- Connect the flying lead assembly to a marshalling box (which is cabled to the central equipment rack)

Connections



5 Pin XLR: Fist Mic Option

Signal	Pin
Screen	1
Audio Out+	2
Audio Out-	3
PTT+	4
PTT-	5

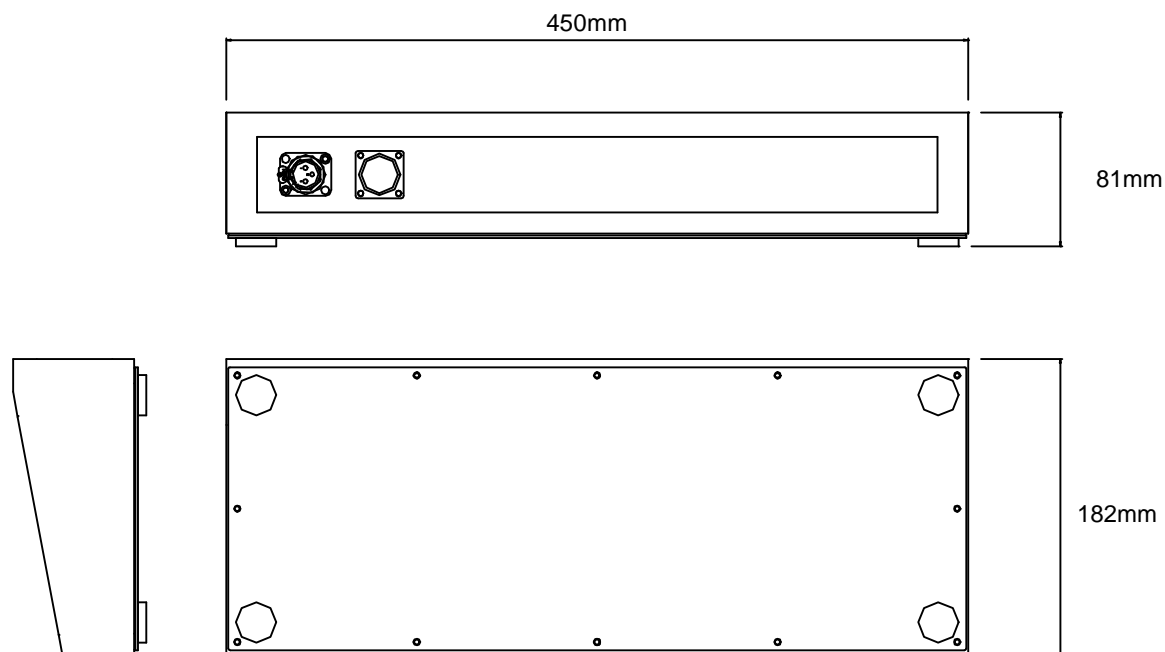
Multipole, to central rack via marshalling box: (shown left)

Signal	Pin
Screen	Bonded to shell
Audio Out+	A
Audio Out-	B
0V Supply	L
+V Supply	M
DXP	D
DXN	E
PTT+	G
PTT-	F
SPEAK NOW LED-	J
ALL CALL-ONLY LED-	H
FAULT LED-	K
Audio In+	P
Audio In-	N

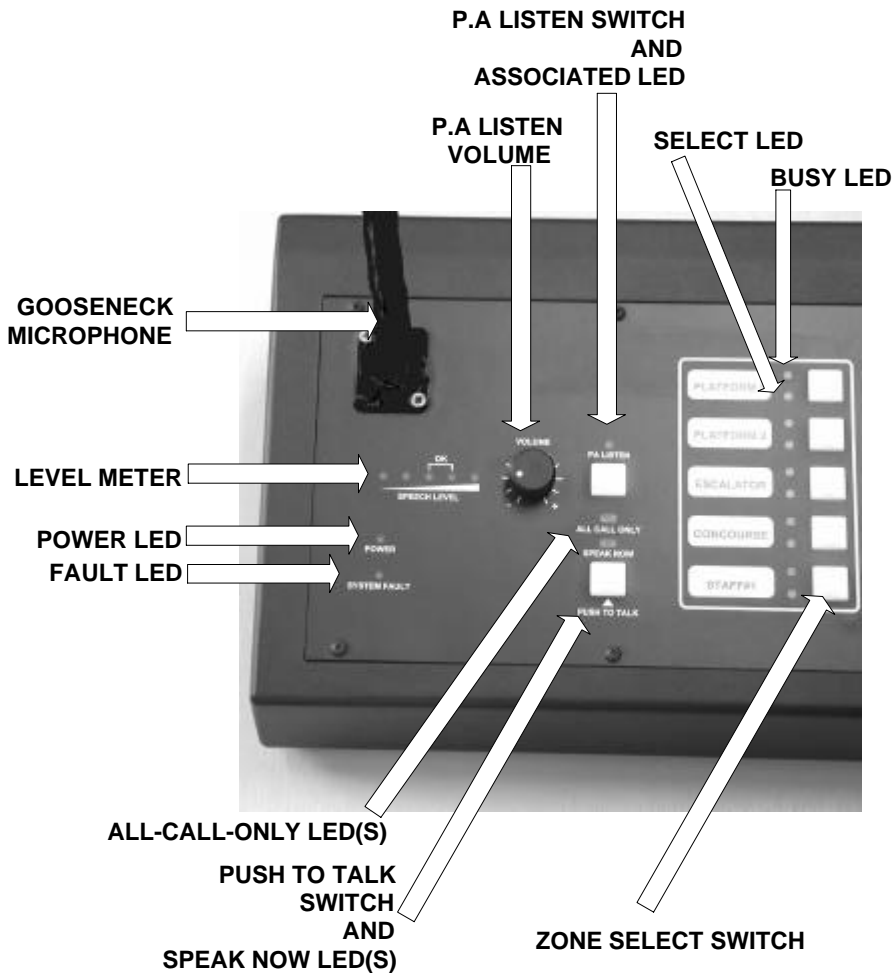
Connector Type: ITT NEPTUNE TNM 0S16-0019P1L fitted with T2P24MC1LT contacts.

Mating Part: ITT NEPTUNE TNM 6S16-00191L fitted with TNM 0S16-0019P1L contacts and TNA16CCSE00L end bell

Key Mechanical Dimensions



Controls and Indicators



Zone Select Switch	Selects which zone(s) will receive the paging announcement from this microphone unit. If pressed a second time, the zone will be de-selected. Zone Select buttons can be configured at the VAR DSP Router/System Control Unit to control a single zone, a group of zones or all zones.
Busy LED	When lit, indicates the zone (or one or more of the group of zones controlled by this button) is already in use by another input. This microphone unit can only select the zone if the other input is of a lower priority. If a higher priority input selects the zone during a paging announcement, the zone will be deselected and the Busy LED will be lit. Announcements will continue to other zones.
Select LED	When flashing, it indicates the zone is successfully selected and is ready for use by this microphone station. This LED will be steady once the PTT button is pressed (as long as a higher priority input has not selected the same zone). If a higher priority input selects the zone during a paging announcement, the zone will be deselected and the Select LED will go out. Announcements will continue to other zones.
Push To Talk Switch	When pressed, it activates the zone selection, opens the microphone channel and triggers the pre-announcement chime (if selected at the VAR DSP Router/System Controller) ready for the paging announcement. When released, the microphone channel is closed and the zone selections cancelled.
Speak Now LED	When the Press To Talk button is pressed, and the chime (if any) has finished, this LED is lit to indicate that the announcement can be made.
PA Listen Switch	Pressing this button once will activate the listen-in function, such that all active audio is mixed. Pressing this button while holding down a zone select button will cause only that zone to be fed to the listen-in speaker. Pressing subsequent zone buttons will add their audio to the mix. Re-pressing will de-select. Pressing the listen-in switch again will cancel the listen-in function.
PA Listen LED	Illuminates while the listen-in mode is active. Note that normal paging is not possible while listen-in is active.
Level Meter	Illuminates according to sound pressure received at microphone, annotated to indicate correct speaking level. The meter operates continuously to allow the operator to 'practice' achieving the correct level before broadcast.
Power LED	Illuminates to indicate that unit is receiving DC power.
Fault LED	Illuminates if any fault is present on the PA/VA system
All-Call-Only LED	Illuminates if processor or comms failure occurs. Pressing the PTT in this mode causes a broadcast to all zones.

For full information about interfacing the SMC01 to the VAR routers, please refer to the DSP Router Handbook.

Cabling Requirements

From rack to marshalling box within control Room

Signals	Cable Description	Suggested Type
Mic Audio:	1 x 2 core, twisted, screened 1.0mm	Fire Rated. MICC, Pirelli FP200 or equivalent.
Listen-In Audio:	1 x 2 core, twisted, screened 1.0mm	Fire Rated. MICC, Pirelli FP200 or equivalent.
Data:	1 x 2 core, twisted, screened 1.0mm	Fire Rated. MICC, Pirelli FP200 or equivalent.
Other Signals:	1 x 7 core, screened 1.0mm	Fire Rated. MICC, Pirelli FP200 or equivalent.

For a given installation ASL can offer advice regarding maximum cable lengths.

From marshalling box to console

An overall screened cable to be used compatible with connector specified above

Signals	Cable Description	Suggested Type
Mic Audio:	1 twisted pair	LSF sheath. Multi-pair cable with overall foil screen. Overall diameter compatible with ITT NEPTUNE TNM 6S16-00191L
Listen-In Audio:	1 twisted pair	
Data:	1 twisted pair	
Other Signals:	7 cores using any available pairs	

Specifications:

Supply voltage range	18-40V DC
Current consumption (max. all LEDs on)	250mA @ 24V DC supply.
Audio output	0dBu balanced. 66Ω Output Impedance
Control data	EIA RS485. 19200 Baud
Listen-in audio	-10dBu balanced.
Dimensions (H x W x D) excluding gooseneck microphone and connectors.	81mm x 450mm x 182mm
Colour	Black with silver annotation
Weight	3.7 kg
Environmental	IP55
Temperature range (storage and operating)	-5°C to +50°C
Humidity range	0% to 93% Non-condensing
EMC EN 61000-4-3. 80MHz to 1GHz EN61000-4-6 0.15MHz to 80MHz	ITU/R 562-3 impairment level 3. In the close proximity to some radio frequency transmitters, the signal to noise ratio of this system may be reduced. If this occurs, ensure adequate system RF earthing or re-locate the equipment or signal cables. <i>Full performance information available on request.</i>

Manufacturer

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This equipment is designed and manufactured in the UK by Application Solutions Ltd to a quality system certified to the internationally recognised quality standard: BS EN ISO 9001: 1994

Certificate number: 96-LON-AQ-041

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