

# SOLO4 - Audio Transmitter

COFDM - Video, Audio Telemetry and IP Products

**COBHAM**

March 2011 Data Sheet

The most important thing we build is trust



The SOLO Audio Link Transmitter is a COFDM digital audio transmitter, designed specifically for broadcast audio microwave applications.

The SOLO audio transmitter is supplied with microphone or line level audio inputs, and transmission of 1 stereo pair of audio services. Audio is compressed for transmission using a choice of possible compression types including MPEG audio Layer 2 or Nicam. The SOLAUD transmitter is supplied with a user data RS232 channel for transmission of user information such as GPS coordinates.

Security is ensured with optional in AES128/256 Encryption.

The SOLO4 audio transmitter will transmit audio in a non line of sight environment up to 1Km depending on mode and frequency; further range can be achieved with a booster PA.

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## Specification:

### Inputs

Audio 1	Phono (break out cable)
Audio 2	Phono (break out cable)
RS232 Control	Dtype (break out cable)
RS232 Data	Dtype (break out cable)
Power	Lemo 4 pin (break out cable)

### Output

RF Out	SMA
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### RF

Power	100mW (14dBm low power mode)
Tuning Range	5.5 to 6GHz 4.5 to 5GHz 2.0 to 2.5GHz 1.0 to 1.5GHz (model dependant) 300 – 450MHz
Tuning Steps	250KHz

### Modulation

Transmit Modes Narrowband:	
Bandwidth	1.25MHz (625KHz optional)
FEC	2/3, 1/3
Modulation	BPSK, QPSK or 16QAM

### Audio

Input	Line Level or Microphone switchable -2dBu Max input level
Audio Encoding MPEG Layer 1:	
Sample Rate	32KHz 384Kb/s to 64kb/s
Audio Encoding NICAM Style:	
Sample Rate	32KHz, 16KHz, 8KHz switchable
Bits per sample	12 or 8 bit switchable
End to end delay	40-120ms
Bits per sample	12 or 8 bit switchable

### Data Interface

RS232 Data Input	1k2 to 115K2 baud switchable
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### Encryption

Format	ABS Encryption 32 bit AES128/256 (optional)
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### Control

Control Interface	RS232 Control from PC GUI Application
Front Panel	None supplied, future external plug in RS232 controller (field gun)

### Physical

Dimension	L 86mm, W 49mm, H 11mm (main chassis)
Weight	70g

### Power

DC Input	5.9V to 16V Reverse Polarity Protected
Power Consumption	Normal consumption 3.6W for 100mW out

### Environment

Temperature Range	-15 to +60 °C
Vibration	Tested with 15g shock and Random with sine vibration 3g Results will depend on chassis installation

### Product Code:

SOLAUD-550600
SOLAUD-450500
SOLAUD-200250
SOLAUD-100150
SOLAUD-030045

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All product specifications are subject to change without notice. Cobham Tactical Communications and Surveillance will not be liable for technical or editorial errors or omissions.

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