

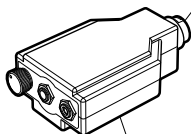
INSTALLATION INSTRUCTIONS

The Intercom Radio Interface provides the facility to connect a radio transceiver and a mobile telephone, music player or recording equipment to two aviation headsets or helmets.

The interface can be used with either panel mount radios or portable radios.

The Intercom Radio Interface works with two Headset Converters which provide the physical connections and the electronic compatibility with each different make and model of headset.

CONNECT TO HEADSET SOCKET



HEADSET CONVERTER

Headset Converters are available for use with all types of headset connector and microphones used in aviation.

The Intercom Radio Interface is designed primarily for dual headset applications but can be used with a single headset.

RADIO:

The Intercom Radio Interface accepts interchangeable radio leads to connect to different radios.

Each type of Radio Lead provides the correct physical connection for a particular radio and automatically configures the interface to provide the appropriate electronic operation.

It is easy to swap between different radios by selecting and connecting the appropriate Radio Lead.

To connect a radio to the Radio Interface, plug the appropriate type interchangeable Radio Lead into the Transceiver Socket (XCVR).

PTT OPERATION:

Two selective PTT inputs are provided to control radio transmissions and to allow each headset to transmit independently.

During the operation of a PTT Switch, one of the headset microphones is opened for transmission and the microphone of any additional headset is muted.

In order to prevent unwanted noise affecting the radio transmission only one headset is able to transmit at a time.

A PTT switch connected to the PTT 1 Socket will control radio transmission from the headset which is connected to the HS 1 Lead.

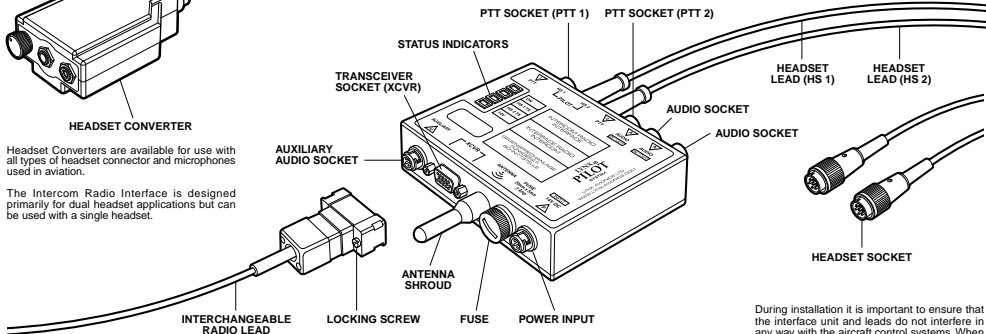
A PTT switch connected to the PTT 2 Socket will control radio transmissions from the headset which is connected to the HS 2 Lead.

To transmit over the radio, press and hold the PTT Switch for the duration of the transmission.

KEY TONE:

The interface provides an audible 'Key Tone' in the headset which confirms when either PTT switch is pressed or released.

The key tone is only audible in the headset and does not transmit over the radio.



PTT OPERATION:

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SOLO OPERATION:

For solo applications a single headset and PTT switch may be connected to the interface. It is important to note that the two PTT inputs each control a separate headset, and care must be taken to ensure that the PTT switch is correctly fitted to select the active headset.

DUAL OPERATION:

For Intercom and radio use, two headsets can be connected to the interface with the option of one or two PTT switches. Again it is important to note that the individual switches must be correctly fitted to the interface, and positioned in the aircraft, in relation to the relevant headset.

All the connections to the interface should be bayonet locked or screw locked and correct operation of the equipment should be established by a radio check before flight.

STATUS INDICATORS:

The interface is fitted with status indicators which are particularly useful for checking correct operation during installation.

- ON = Interface is energised.
- 14V = Interface is energised and powered from external supply.
- HS 1 TX = Headset 1 is transmitting.
- HS 2 TX = Headset 2 is transmitting.

POWER SUPPLY:

The interface should be connected to an external twelve Volt power supply such as the aircraft battery or a separate battery.

When powered from an external source the interface will supply the radio with a filtered and regulated power supply at twelve, eleven, nine or six Volts.

POWER SUPPLY FUSE:

The interface unit is fitted with a three Amp fuse. The fuse protects the interface, and the lead to the radio, in the event of a short circuit at the radio connector, damage to the radio lead or incorrect polarity connection.

POWER CONNECTION:

An optional colour-coded Power Supply Lead is available to enable an external battery to be connected to the interface.

The lead should be fitted and bayonet-locked to the interface, with the red cable attached to the positive terminal and the black cable to the negative terminal of the battery. When connecting the power supply lead, a fuse must also be installed in-line to protect the lead in the event of a short circuit (Three Amp fuse maximum).

The interface is polarity protected and will only power the headsets, and supply power to the radio, if correctly connected to the battery.

CABLE ROUTING:

All cables connected to the interface should be carefully routed around the airframe and attached in position using the cable ties supplied.

Avoid fitting the cables in close proximity to possible sources of interference such as strobe lights or the aircraft antenna. Headset leads should be fitted with the headset connector in an easily accessible location next to the relevant seat.

The PTT switches and leads must be positioned in the aircraft, in relation to their respective headsets, to avoid possible confusion during operation.

AUDIO:

In addition to the primary radio connection, the Intercom Radio Interface can be connected to most modern audio devices including mobile telephones, music players and sound or video recording equipment.

The two Audio Sockets accept Lync 'Audio Input/Output Leads', 'Audio Output Leads' or 'Mobile Telephone Leads'.

AUDIO MUTE:

During use, the Intercom Radio Interface monitors the radio and automatically reduces the volume of the audio inputs during radio reception. A buffer delay holds the mute on during radio exchanges and pauses in radio reception.

This automatic mute feature provides radio priority over any telephone or music input.

AUDIO OUTPUT:

The interface can provide audio output at both 'Microphone Level' and 'Line Level'. Line Level output is at a much higher level than Microphone Level output.

Most domestic recording devices accept an audio input at Microphone Level. Most professional recording devices will only work with an audio input at Line Level.

When connected to recording devices, the interface provides output at Microphone Level when used with an 'Audio Input/Output Lead' and Line Level when used with an 'Audio Output Lead'.

AUXILIARY AUDIO:

An additional Auxiliary Audio Socket is provided on the interface for specialist applications and to provide forward compatibility with future Lync products.

ANTENNA SHROUD:

An antenna shroud is provided on the interface to allow wireless components to be fitted internally and to provide forward compatibility with future Lync products.

INSTALLATION:

The Intercom Radio Interface should be permanently fitted to the aircraft, with the headset input leads and radio connection lead conveniently attached to the airframe.

During installation it is important to ensure that the interface unit and leads do not interfere in any way with the aircraft control systems. When connecting the unit to an aircraft battery, it is also important to check that the operation of the aircraft's electrical equipment is not affected.

Depending on the type of aircraft, a specialist or licensed engineer may be required by law to fit the equipment or inspect the installation.

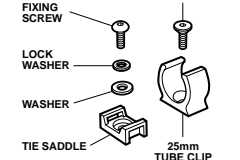
SCREW FITTING:

The interface has two threaded inserts built into the back of the unit for mounting purposes. The threads accept M4 metric machine screws and allow the body of the interface to be screwed directly to a panel or bulkhead.

VELCRO ATTACHMENT:

As an alternative to screw fixing, the unit may be attached to a panel or bulkhead using the Velcro pads supplied.

FIXING SCREW



PLASTIC TIE FITTING:

As an alternative to panel mounting it is also possible to fix the unit in position using plastic ties and tie-saddles. Suitable ties, tie-saddles and screw fasteners are supplied in the fixing kit.

TUBE CLIP FITTING:

The unit is also supplied with two tube clips, which offer an alternative to the plastic tie method, for fixing to tubular structures.

WARNING:

Always check after installation that the interface unit and leads do not interfere in any way with the operation of the aircraft.

