

INSTALLATION INSTRUCTIONS

The Powered Radio Interface provides the facility to connect a radio transceiver and a mobile telephone, music player or recording equipment to two Micro System headsets. The interface can be used with either panel mount radios or portable radios.

When the interface is used with two headsets, the equipment forms an installed intercom and radio system which can be powered from the batteries in the Micro System headsets or from an external twelve Volt supply.

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

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.

HEADSET SWITCHING:

Headsets are connected to the interface using the flying leads and locking connectors built in to the unit.

To simplify operation, and to minimise the possibility of inadvertent battery drain, the interface only becomes energised when a headset is connected.

POWER SUPPLY:

The interface can be powered either directly from a Micro System Headset or can be connected to an external twelve Volt power supply such as the aircraft battery or a separate battery.

When using Micro System Headsets and an external power supply, the radio is powered via the interface and the headsets are also simultaneously trickle charged. When operating in this configuration the interface will automatically switch back to headset power (if enabled), and the radio will revert to its own battery (if fitted), if the external power supply voltage falls below ten Volts.

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.

It is important to remember that all power switching is carried out automatically, by the interface, and the power supply to the radio only becomes available once a headset is plugged in.

Disconnecting the headsets automatically switches off both the interface unit and the power supplied to the radio.

RADIO:

The Powered 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.

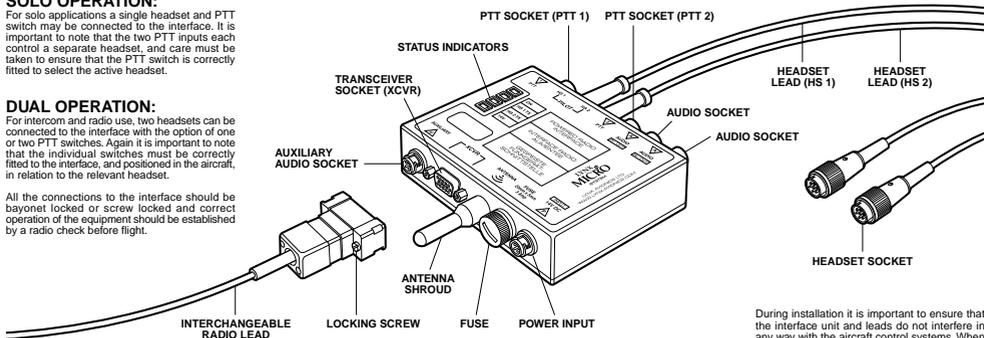
A PTT switch connected to the PTT 1 Socket will control radio transmissions from the headset which is connected to the HS 1 Lead.

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

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.



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

AUDIO MUTE:

During use, the Powered 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 Powered 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.

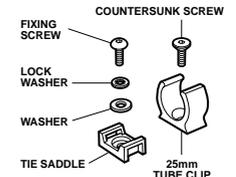
Depending on the type of aircraft, a specialist or licensed engineer may be required by law to fit the equipment or inspect the installation.

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 fitting, the unit may be attached to a panel or bulkhead using the Velcro pads supplied.



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.

