

CNP

Communication & Navigation Panel

Orbit's CNP is a highly reliable and secure Audio Management System for single- and two-seater fighter and trainer aircraft. Providing pilots with crisp, clear audio communications, CNP is a field-proven COTS (Commercial Off-The-Shelf) system adaptable to any configuration requirement.

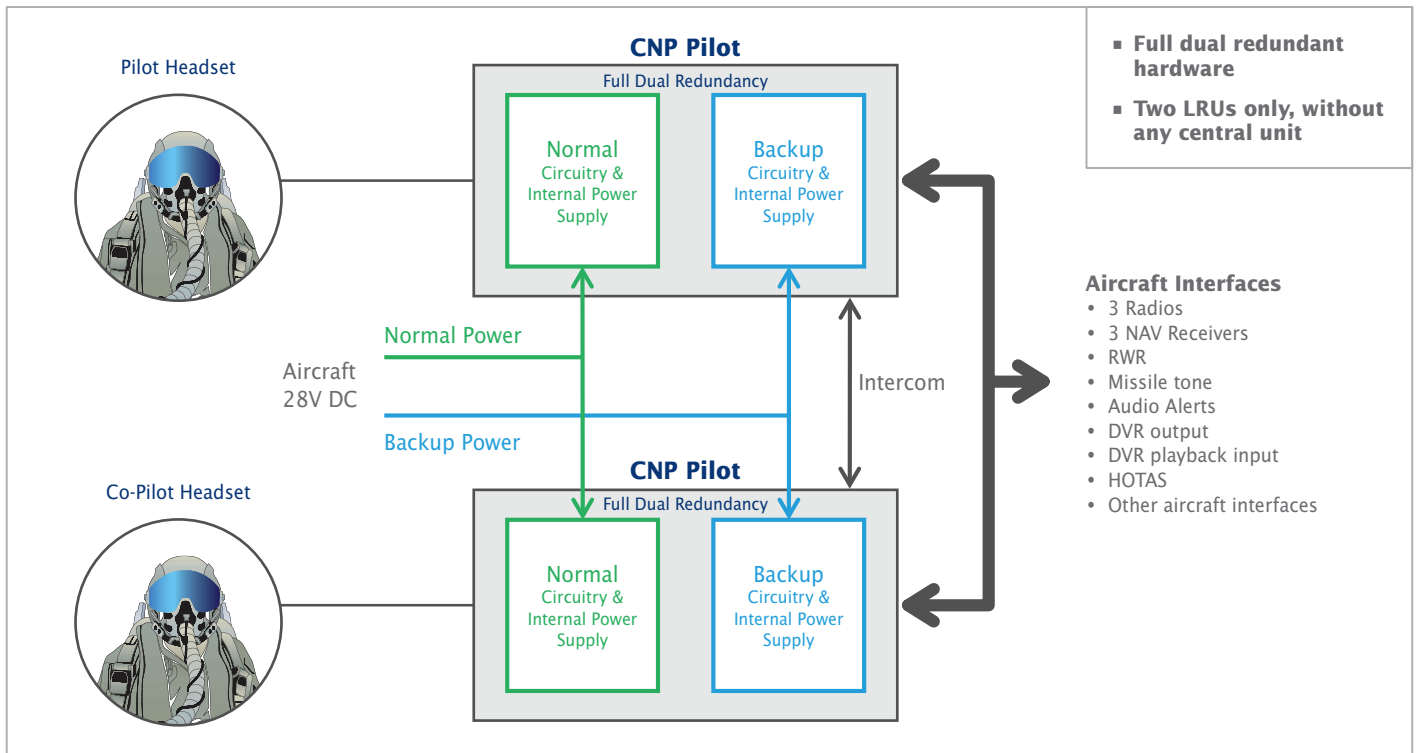
CNP includes all pilot controls, VOX, AGC, signal level adaptation, impedance matching, amplification, as well as processing and mixing of incoming and outgoing signals. It interfaces with the aircraft's radios, NAV receivers, RWR, missile tones, warning receivers, DVR, HOTAS and other devices.

Full backup is achieved by CNP's dual redundant circuitry and internal power supplies. In addition, Normal and Backup systems are powered by separate primary and backup aircraft power sources, while the electrical design eliminates the possibility of short circuits between the sources. An Emergency bypass mode allows for a direct radio connection and is automatically invoked in case of total power failure to the CNP.



Photo by Sgt Bruno Batista, BAF

Two-Seater CNP Configuration



Key Features

- Advanced Audio Management system for single- or two-seater aircraft
- Two identical LRUs for two-seaters, with no need for a central unit
- Full dual redundant circuitry with Normal, Backup and Emergency modes
- Call, VOX and AGC
- Full MIL-STD compliance
- Field-proven deployment in several modernization programs

CNP Specifications

Power requirements	28 VDC per MIL-STD-704D The CNP accepts two separate primary power sources: Normal and Backup
Headset interface	Military low impedance headset
Redundancy	Full dual hardware redundancy
Microphone and headphone amplifiers	Two separate microphone and headphone amplifiers, pilot selectable by "Normal/Backup" switch
Frequency response	±3dB from 300 to 6,000 Hz
Noise level	Better than 55dB below rated output level
Panel illumination	Per MIL-DTL-7788H, Class 1-R, Type VII
VOX	Attack time < 10 msec Release time 1.5 ± 0.3 sec
AGC	Attack time < 40 msec Release time 1.5 ± 0.5 sec
Environmental qualification	Per MIL-STD-810
EMI qualification	Per MIL-STD-461 and DO-160E
Dimensions	146.1 (w) x 133.4 (h) x 115 (d) mm