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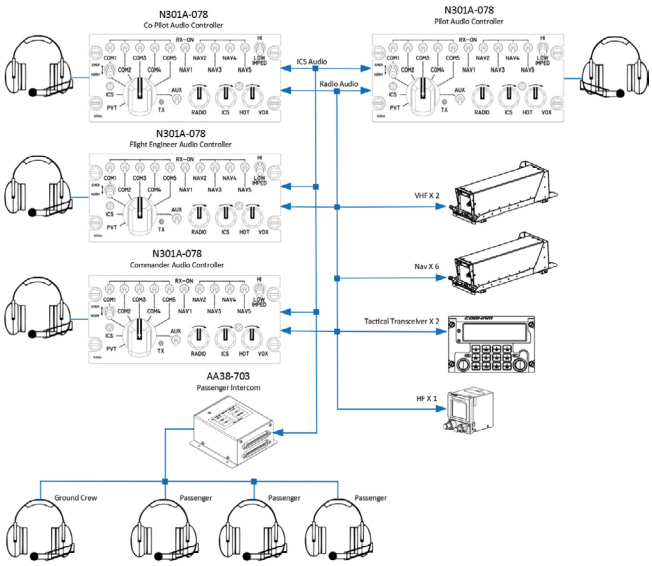
AUDIO

N301A Based audio system upgrade for the Mi-17
Proven Performance | Customizable

MI-17 AUDIO SYSTEM UPGRADE

The Mi-17 (NATO reporting name = Hip) is the exported version of the Mi-8. It entered service in the early 60's. Since the 2000's this family of aircraft have been manufactured in record numbers for domestic and international customers, as it is commonly understood to provide competitive value for its capabilities. Annual manufacturing quantities have approached the 200 mark in recent years, with 80% destined for military or paramilitary customers. It is regarded as easy to fly, maintain and was designed with simplicity in mind with the intention of it operating in extreme climactic conditions.

The primary component of the system is the N301A-078 (four in this configuration). These single user audio controllers permit the four operators (Pilot, Co-Pilot, Flight Engineer and one cabin operator) to transmit and receive on six transceivers and five navigational receivers. Included in the system is an AA38-703 remote mounted intercom. The AA38-703 is used to expand the number of users (by four) and is specifically designed to supports military headsets (5 ohm mic and 8 ohm phones). This specific system is NVIS friendly providing NVIS Green B panel lighting and filtered annunciators on the N301A. The audio controllers also provide a front panel switch for externally switching the user's headset. This permits the user to switch headset impedances as required and not being installation dependent like most audio systems. This system adds needed functionality, such as CVR outputs and Direct Audio inputs for warning audio (TAWS, TCAS, RAD ALT, etc.). Another feature not available on the original equipment is VOX gating for each user's microphone. The N301A has been widely adopted for retrofits on the Mi-17 as well as now being a forward fit option from the Kazan Helicopters facility that manufactures the Mi-17.



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N301A-XXX

About the product

With industry-leading quality and reliability, the N301A delivers significant performance improvements over older OEM audio installations. The unit provides features specifically designed for retrofitting into older airframes such as fully-floating inputs to remove ground-loop or common-mode noise. The internal circuitry is modular, utilizing solid start circuitry and sealed gold contact switches for low noise and long life.

Canyon's N301A is a Dzus-mounted Audio Controller with a built-in intercom. It provides full transmit and receive functions for the user. The front panel 'level controls' permit user adjustment of selected audio, such as radio, ICS, and VOX squelch. It controls the audio from multiple receivers, and allows transmission of mic audio to a selected transmitter. Intercom operation is provided with two proprietary tie lines, Andrea and NAT format, for system expansion. The Andrea format permits 8+ audio panels to be connected. The NAT format permits up to 7 audio panels to be connected. Three modes of ICS are available: HOT, PTT, AND VOX. Redundancy is provided to ensure continued safe flight. The unit's Emergency mode provides a passive connection to one of the transceivers (typically wired to the primary Comm) and one of the direct audio inputs to ensure the user can hear high priority warnings coming from the . Emergency mode is entered automatically if power is lost to the unit or can be manually forced by the unit's NORM/EMER switch.

All versions of the N301A can support both military and civilian headsets and some, like the -078 permit the user to select the impedance. There are a wide range of customized panels available for the N301A, with a broad selection of radio labels and lighting options (White, NVIS Green A, NVIS Green B, 5 Vdc and 28 Vdc).

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AA38-XXX

About the product

The AA38-703 is a remote mounted Local ICS Loop which provides support for four low impedance headsets. The unit features adjustments for ICS Volume and VOX threshold. ICS level and VOX sensitivity adjustments are provided for each headset position. The unit can be configured to gate the microphone audio using ICS PTT logic inputs if desired. The unit also provides the ability to connect to a transceiver. Each user on the AA38 us provided a transmit PTT logic input. When activated the user's headset gets connected to the transceiver and the transceiver's Key input is activated, permitting the user to transmit. If not connected to a transceiver, the receive audio input on the AA38 can be used to provide music to the four users. The unit supports both standard NAT and SuperNAT ICS tieline levels. The unit also provides the ability to connect to a transceiver. Each user on the AA38 us provided a transmit PTT logic input. When activated the user's headset gets connected to the transceiver and the transceiver's Key input is activated, permitting the user to transmit. If not connected to a transceiver, the receive audio input on the AA38 can be used to provide music to the four users. The unit supports both standard NAT and SuperNAT ICS tieline levels.

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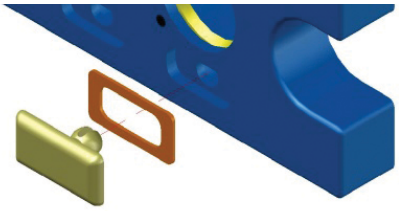
UPGRADE TO THE SYSTEM

N301A - ADDITIONAL FEATURES

The N301A also comes in versions that have field customizable radio legends (-2xx and -3xx). For these units there is a wide selection of legends available to ensure the product can be customized to match your exact requirements



AA38 - ADDITIONAL FEATURES

There a multiple versions of the AA38 available that can provide additional headsets, support for Low and High impedance headsets, support for NAT, SuperNAT and dB ICS tielines and versions with anFAA approval. AA38-300 – 8 High Impedance headsets, NAT and Andrea ICS tieline and TSO'ed

AA31 - TALK GROUPS

The AA31 ICS Mode Controller provides a convenient, centralized method of organizing the aircraft audio system into multiple intercom circuits for independent or common operation. This function is especially valuable for applications where several independent operations occur within the aircraft that often require isolation from each other, while retaining the ability to share common communications when needed. The AA31 can provide ICS switching for three or four audio controllers, or other products incorporating an ICS TIE LINE. The AA31 also has provisions for driving external annunciators.

630A-000 - ADDITIONAL WARNING AUDIO

The 630A is Canyon's most advanced audio alert & notification system. The new Audio Storage & Playback Unit (ASPU) goes beyond a simple aural warning generator and provides multi-channel, digital audio playback of tones and voice messages to the cockpit and cabin. The 630A now features up to 96 alerts based on 24 alert trigger discretes. Each alert trigger can generate up to four alerts: voice, tone and combination. Aircraft pilot and co-pilot sides may have individually-customized and prioritized alerts or advisory messages. Muting of chimes, briefing messages and background joins new features of pause, cancel and alert test to deliver unmatched flexibility Operators and installers have the greatest flexibility to customize the audio alerts by selecting each tone, chime or voice message. Available to ensure the product can be customized to match your exact requirements.

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