



This technical data sheet covers model numbers PRD000248000,050,100,150 • PRD000249000,050,100,150 • PRD000250000,050,100,150 • PRD000251000,050,100,150 • PRD000252000,050,100,150, 500, 550 (see table on back side for model description).

Introducing the Ascend, the newest design in headset technology by Telex. The Ascend was designed with you, the user, in mind with its modular design, installation options, and its multi-functionality beyond the aircraft. The modular design allows you to interchange different modules to allow the best headset for every environment. The Ascend can be used in aircraft using either a dual plug cord, or 5-pin XLR connector depending on individual configuration.

The Ascend is not just for the aircraft anymore, by installing alternate interface modules, you can connect to a GPS, an MP3 player, or many other audio devices.



Features

Three Headset Frame Options

The Ascend gives you three options when selecting the type of headset perfect for your environment.

- Single-sided headset
- Dual-sided Headset
- Dual-sided Headset with ANR (Active Noise Reduction)

Installation Options

The Ascend has two (2) options for aircraft: dual plug or XLR. You can take your headset to any aircraft installation and plug right in and get to work.

Modular Design

The modular design of the Ascend allows for many options when configuring the perfect headset for use in your specific environment. All the modules are universal, giving you more flexibility in your headset needs. The versatility of the Ascend is obvious when using the music/audio module. The music/audio module turns the aviation headset into an everyday, everywhere headset, allow for MP3 player hookup, GPS connection, and many other applications.

Acoustic Performance

Expanded frequency response ensures clear communications and enhanced audio performance. The adjustable output level allows the user to match the headset to the requirements of the aircraft. Acoustic design and active noise reduction, if available, combine to remove common cockpit noises.

Comfortable Design

The unique design of the Ascend headset with its headband location, in respect to the ear cups, delivers more stability when the headset is being worn. All user contact points, ear cup cushions, temple pads, headband cushions, and the windscreen are completely replaceable allowing for good hygiene.

Specifications

Headset

XLR panel power / input power: 6mA @ 28Vdc

Dual plug: receives power from boom microphone connection

Speaker

Frequency Response: ± 6 dB, 350Hz - 3kHz

Distortion: <5% @ 110dB SPL, 350Hz - 3kHz

Sensitivity: 90 ± 5 dB SPL/mW (standard volume setting)

Impedance at Plug: 600 Ω $\pm 20\%$

Overload: 300mW @ 1kHz, 8hr

Acoustic Quality:

No spurious sounds with 10mW to speaker, 350Hz - 6kHz

NOTE: Headsets and Handsets with Active Circuits. Meets speaker requirements with ANR on or off.

Microphone

Frequency Response: 100Hz - 10kHz per DO-214 fig.2-1

Distortion: <5% @ 114dB SPL, 350Hz - 6kHz

Sensitivity: -28 ± 3 dBV/Pa @ 1kHz

Noise Level: <1mV RMS

Headset/handset Isolation:

<2mV at mic with 10mW to speaker

Insulation Resistance:

>10M Ω between exposed materials and electrical circuit

Cord

Flexibility: No damage when coiled

Connector Flexibility: >25,000 cycles

Pullout Strength: >10kg

Drop Resistance:

No failures after 12 drops from 1m onto concrete floor

Final Distortion:

Meets mic and speaker distortion requirements after applicable environmental tests of DO-160

Noise Reduction (where applicable):

Up to 12dB noise reduction between 100Hz to 2000kHz

Plugs

Dual Plug:

Headphone plug: .250" diameter, 2 conductor plug

Tip: SPK + (white)

Sleeve: SPK - (black/shield)

Microphone plug: .206" diameter, 3 conductor plug

Ring: Mic + (white)

Sleeve: Mic - and Mic Shield (blue/shield)

Tip: N/C

XLR Plug: 5-pin, male plug

Pin 1 SPK + (yellow)

Pin 2 SPK - (black/shield outer)

Pin 3 Mic + (white)

Pin 4 Mic - and Mic Shield (blue/shield inner)

Pin 5 Power (green)

Music Plug: 3.5mm, 3 conductor plug

Tip: Left (yellow)

Ring: Right (red)

Sleeve: Ground (black)

Miscellaneous

Gross Weight: 5 – 8 oz (depends on model & configuration)

Cord Length: 1.8m (straight)

Color: Black

Product Table

Model ¹	Type	Description
PRD000248XXX - Single-sided with mic	-000	Commercial packaged PJ plug (5/box)
PRD000249XXX - Single-sided no mic	-050	Commercial packaged XLR connector (5/box)
PRD000250XXX - Double-sided with boom mic	-100	Retail packaged PJ plug
PRD000251XXX - Double-sided no mic	-150	Retail packaged XLR connector
PRD000252XXX - ANR with mic	-500	Deluxe packaged ^{2,3} PJ plug
	-550	Deluxe packaged ^{2,3} XLR connector

1. XXX represents the type

2. Deluxe versions are only available on the PRD000252 model

3. Deluxe ships with battery, battery charger, and music module.

TSO Compliance: The Telex Ascend Headset (with or without microphone) is approved for aircraft use under FAA TSO-C139. Tests were conducted using RTCA DO-214 and DO-160E. For more detailed information on TSO compliance testing, see the Ascend Technical Manual.

This specifications information is preliminary and is subject to change without notification.
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