

ALT200 Pressure Sensitive Altimeter



THIS IS A TRANSPORT CANADA APPROVED MANUAL

The following checklist outlines the required articles for the ALT200 altimeter.

	Documentation	Document Number
<input type="checkbox"/>	Introduction (this document)	S200-ALT200-001
<input type="checkbox"/>	Warranty Statement	S200-AWS
<input type="checkbox"/>	Wiring and Installation Schematic	S200-ALT200-INST
<input type="checkbox"/>	Setup Guide	S200-ALT200-004
<input type="checkbox"/>	Operations Guide	S200-ALT200-005
<input type="checkbox"/>	Product Specifications	S200-ALT200-006
<input type="checkbox"/>	Installation Compliance	S200-ALT200-007
<input type="checkbox"/>	Authorized Release Certificate	TCCA FORM ONE

Components

- ALT200 Instrument
- 4 X Mounting Screws

ALT200 Pressure Sensitive Altimeter

The Fastest Way to Install and Start Using this Product

NOTE: This product is certified as a primary replacement, new or secondary instrument only when installation is performed in accordance with the documented instructions and procedures.

1. Review the Warranty Statement before performing any tasks. Do not remove the instrument from the sealed package until you agree with the stated terms.

2. **Certified Aircraft Note:**

ALT200 is TSO'd to C10b with additional testing as an electronic altimeter. As such, it may replace any existing TSO C10b altimeter that does not exceed 35,000' of use. It connects, without any changes, to the existing aircraft static system. It does not contain any non-TSO'd functions.

For all other vehicles, aircraft that do not have a TSO C10b altimeter as required equipment, experimental aircraft and new OEM installations you are required to confirm applicability for use.

3. Follow the Installation Instructions exactly as noted, referring to the Wiring Diagram as and when required. Note: The installation process has been optimized based on the sequence of components to be installed. Installing the product in any other way will, in all likelihood, take longer and be more complex.
4. Perform the Instrument Setup as noted in the Instrument Setup Guide.
5. Validate that all functions perform as outlined in the Operations Guide.
6. Complete all regulatory documentation, if required.



NO NONSENSE WARRANTY

Our warranty policy is simple It is even written in plain English!

Please read it BEFORE DOING ANYTHING WITH YOUR NEW INSTRUMENT!

If you require technical support when installing your instrument please call our Technical Support department directly on 416-628-0725

We will:

- Repair or replace (at our discretion) any instrument which becomes defective within a period of 12 (twelve) months of manufacture date. You will pay for the shipping costs to return the instrument to us and we will pay for the shipping costs to return the instrument to you;
- Replace all instruments that fail out of warranty for a flat rate of 50% of the cost of a new instrument, at the time of the failure.

We are not:

- Liable for any costs associated with the installation or removal of any of our instruments, irrespective of the cause;
- Liable for any misuse or non-use of the instrument in whatever form.

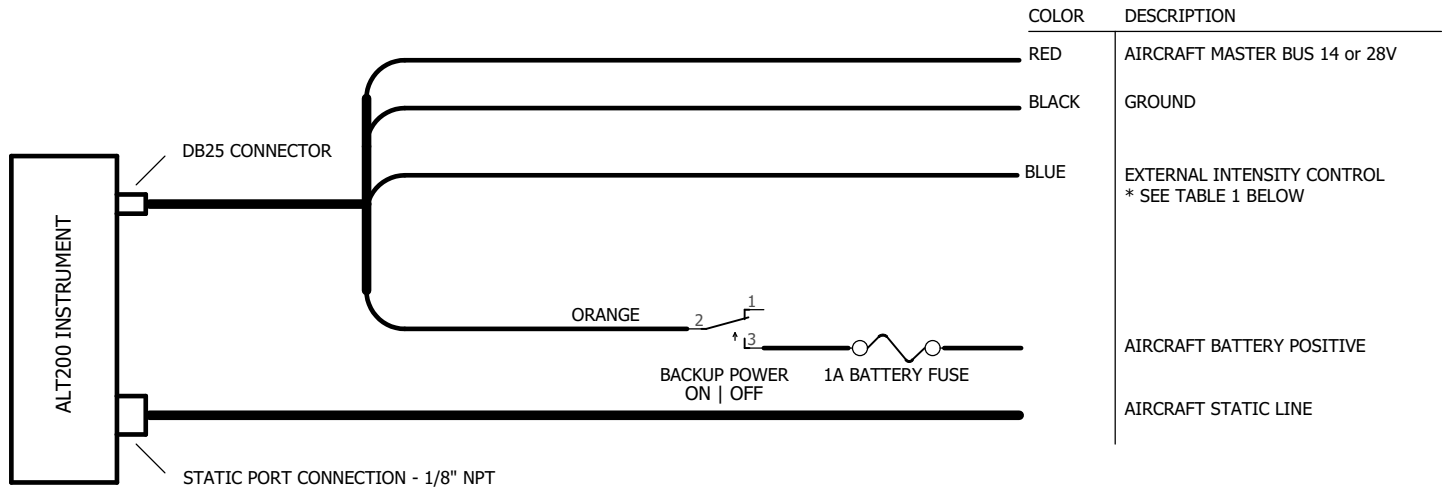
We will not:

- Repair or replace your instrument free of charge, under warranty, if it has not been installed by an appropriately licensed person.

If you do not agree with ANY of the above statements, return your new instrument to us immediately for a FULL refund LESS shipping costs.

ALL RETURNS REQUIRE RETURN MATERIAL AUTHORIZATIONS (RMA). WE DO NOT ACCEPT RETURNS WITHOUT RMA NUMBERS. CALL 416-628-0725 FOR AUTHORIZATION.

Aerospace Logic Inc. ALT200 Wiring and Installation Schematic



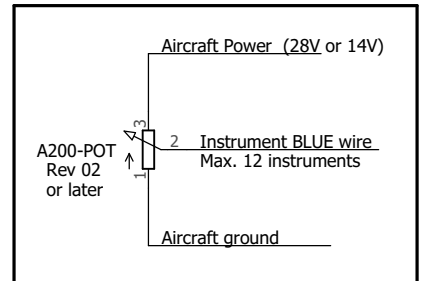
INSTALLATION NOTES:

1. Allow for current drain of 0.150A (150mA)
2. RED WIRE - Connect using a dedicated breaker or panel fuse for primary power
3. ORANGE WIRE - Switched, direct connect to aircraft battery positive using a 1A inline fuse (installer to supply). Connect the fuse as close as possible to the battery terminal.

TABLE 1 - INTENSITY CONTROL OPTIONS

Day VFR Only	Connect BLUE wire to power bus (14V or 28V)
ALL OTHER FLIGHT CONDITIONS	Connect BLUE wire to panel rheostat only if the rheostat output is as follows: 0V for lowest intensity at night, AND Bus voltage for highest intensity at night, AND Bus voltage for daylight operations.
	If the panel rheostat does not function as above then use Aerospace Logic potentiometer Part # A200-POT and connect per TABLE 2

TABLE 2 - A200-POT CONNECTION



THERE ARE NO INSTRUCTIONS FOR CONTINUED AIRWORTHINESS APPLICABLE TO THIS PRODUCT

THERE IS NO FLIGHT MANUAL SUPPLIMENT APPLICABLE TO THIS PRODUCT

THIS PRODUCT IS CERTIFIED FOR USE AS BOTH A PRIMARY AND SECONDARY FLIGHT INSTRUMENT

ALT200 Setup Guide

The only available user setup option is to select the pressure units, either inHg or mb.

To enter the setup start with the instrument turned off.

Press and hold the top button and apply power at the same time.

Once the selection menu appears, release the top button.

Press the bottom pressure selector knob to toggle between inHg and mb options.

Once the desired option is displayed press the top button to save.

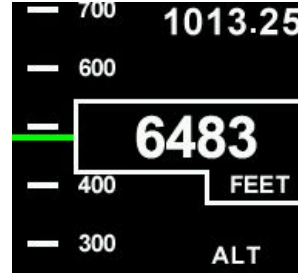
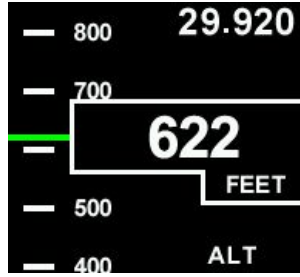
The instrument will restart with the selected pressure units.

WARNING

All flight operations are to be performed in accordance with the specific instructions pertaining to your aircraft, including those provided by the aircraft manufacturer.

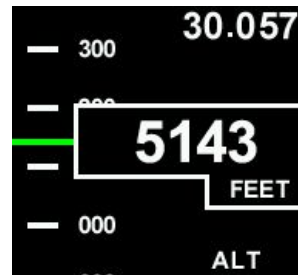
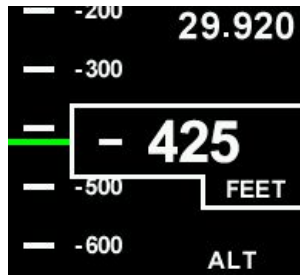
The ALT200 altimeter is certified as a primary replacement or for secondary use as appropriate.

ALT200 Operations Guide



The top button will toggle between the **current set pressure and standard pressure** (29.29 inHg or 1013.25 mb, depending on the pressure units selected).

Rotate the bottom pressure selector knob clockwise to increase pressure and anti-clockwise to decrease pressure.



By pressing the bottom pressure selector knob the pressure units will toggle between fine and course setting more.

Fine mode is used to select the correct pressure based on a known ground altitude.

Course mode is used for flight conditions and corresponds to conventional pressure settings as provided by ground weather stations and ATC.

Altitudes below sea level as denoted by the “ - ” sign in front of the displayed altitude.

AIRCRAFT MASTER BUS POWER FAILURE

In the event of an aircraft master bus failure, turn on the backup power switch to retain operation of the instrument. Do not operate the instrument with both primary and backup power energized. In the backup mode the instrument external intensity control is disabled and a fixed intensity is provided. Internal intensity control remains available.

All flight operations are to be performed in accordance with the specific instructions pertaining to your aircraft, including those provided by the aircraft manufacturer.

The ALT200 altimeter is certified as primary replacement or secondary use.

ALT200 Product Specifications

Certification / Compliance

TSO	C10b
SAE	AS392C, AS8009B
Environmental	DO-160E
	C1CAASXXXXXXYBXXBBBCSBA1C11XXAX
Software	DO-178B, Level C

DC Power Source

Input voltage	6 to 36 VDC
Power consumption	125mA
Load dump tolerance	+60V
Direct spike tolerance	+/- 60V
Cable spike tolerance	> +/- 1KV

Operating Temperature

Constant operating	-20°C to +55°C
Short term operating (1hr)	-40°C to +70°C
Storage	-55°C to +85°C

Display Units

Altitude	Feet
Atmospheric Pressure	inHg or mb

Display Ranges

Altitude	-1,000ft to 35,000ft
Pressure (inHg)	27.500 – 31.500
Pressure (mb)	931.30 – 1066.70

Accuracy

Demonstrated	+/- 1ft
Certified (Exceeds)	Various per TSO SAE Reference Table 2

Display

Sunlight readable LCD
80/80/80/80 Degree viewing angle

Interface Connector

Electrical	DB-25
Static Port	1/8" NPT

Software Functionality

Primary Display	Altitude and pressure
Setup	Select pressure units

Dimensions

Enclosure	2.45" X 2.45" X 0.96"
Including pressure port	2.45" X 2.45" X 1.725" (maximum dimension point)

Weight (excluding harness)

4.65 oz

Finish

Black anodized 6061 aluminum

ALT200 Installation Compliance

1. TSO LODA Compliance Statement

“The conditions and tests required for TSO approval of this article are minimum performance standards. Those installing this article either on or within a specific type or class of aircraft must determine that the aircraft installation conditions are within the TSO standards which include any accepted integrated non-TSO function standards. TSO articles and any accepted non-TSO function(s) must have separate approval for installation in an aircraft. The article may be installed only according to 14 CFR part 43 or the applicable airworthiness requirements.”
FAA LODA dated JUN 11, 2014.

2. Installation Procedures and Limitations

Installation must be in accordance with the following ALT200 published documents:

- a. ALT200 Wiring and Installation Document (S200-ALT200-INST)
- b. Instrument Setup (S200-ALT200-004).

3. Installation Location and Visibility

The ALT200 is to be installed in existing panel holes and to replace existing instrumentation. As primary and secondary replacement products they must be placed in the same panel location as the original equipment. Their visibility and placement relative to other instruments are the same or similar to the existing instruments. Where they are installed in a different location it is the responsibility of the installer to ensure that the necessary approvals are obtained prior to returning the aircraft to service.

4. There are no components (instrument or harness) that require ongoing maintenance to ensure airworthiness.
5. No additional maintenance requirements are specified after the installation.
6. No component maintenance or repair is performed on any component of the system. In the event of failure the failing device is replaced in its entirety.
7. The ALT200 may be subject to time-interval inspections as per FAA AC 43-6C, later approved revisions or similar documents issued by other aviation bodies.

In such case the inspection shall be a field validation of performance as outlined in the above referenced document and in accordance with the instructions outlined therein. Any failures shall require the device to be replaced.

8. Should the ALT200 be installed in an aircraft that does not require time-interval inspections as per (4) above, maintenance shall be limited to the replacement of the device in the event of a failure.