ACT's Altitude Control System is ...

QUIET – ACT utilizes sound attenuation padding, spring suspensions, vibration tables, and silencing mufflers on each air unit ensure virtually silent operation.

BEAUTIFUL – No equipment clutters living space. The controller can be prominently displayed to show its beautiful color touch screen and mountain graphics, or it can be discreetly placed out of sight.

TRUE – Altitude simulation requires a barometric pressure sensor, oxygen sensors, and algorithms to calculate the partial pressure of oxygen. To ensure accuracy, we use two oxygen sensors. The controller continually compares their readings to ensure accuracy and to prevent sensors from drifting out of calibration.

CONVENIENT – ACT's altitude control system operates automatically. It requires no attention – even to turn it off and on. It can integrate with your Savant or Crestron home automation system, it can manage automatic schedules, and you can control it from your smartphone from anywhere in the world.

GREEN – ACT's systems activate the least amount of equipment to maintain your altitude simulation and air quality. Sensors detect occupancy based on human respiration and intelligently select one of three different modes – oxygenation, ventilation, or standby to maximize performance and minimize energy use.

EASY – The system is virtually maintenance-free. Yearly filter replacement takes five minutes. Our sensors even calibrate themselves.

COOL – ACT's altitude simulation system has a full range of high-tech features including data logging, real-time graphs, remote diagnostics, automatic software updates and beautiful graphics.

Our 3 Step Process

1 Analyze

We analyze the volume and air exchange of your rooms; we evaluate existing heating, ventilation, air conditioning and humidification systems, and we identify the best location to place the equipment.

2 Design and Engineer

We run computer simulations and fluid dynamics analysis to ensure proper performance, air quality, and fire safety. We engineer the system specifically for your home for optimal oxygenation and correct air exchange.

3 Install

Our team of experienced technicians professionally installs your system over two days. We handle everything from start to finish. With your new oxygenation system, your house will be more comfortable while being just as beautiful and as quiet as it now.

Warranty

Our warranty covers everything. If any part of the system fails we immediately replace it with brand new equipment.

ACT
ALTITUDE CONTROL TECHNOLOGY

For more information
on home oxygenation and what
it can do for you, call:
(970) 528.1300
Email us at info@AltitudeControl.com
See our website at www.AltitudeControl.com

Ahhhhh... Oxygen!™

What a difference a good night's sleep makes! ACT's award-winning technology lowers your effective altitude by as much as 7,000 feet.
Let us oxygenate your mountain home for better sleep,
more energy, and no altitude sickness.

Imagine how you'll feel tomorrow after sleeping in your oxygenated room tonight.™

ACT
ALTITUDE CONTROL TECHNOLOGY

The safest, most effective oxygenation systems on the planet.™

(970) 528.1300 • info@AltitudeControl.com • www.AltitudeControl.com

The Problem with Altitude

Thin mountain air can keep you from feeling your best. Low oxygen levels at altitude can cause headaches, nausea, and fatigue. Many people have difficulty sleeping at higher elevations. Others feel out of breath or weak and cannot acclimatize. Aging can compromise our ability to process oxygen.

The Solution

Adding oxygen to your bedroom can prevent the symptoms of mountain sickness and insomnia while providing restful sleep and more energy throughout the day. ACT's altitude control system creates the same oxygen levels found at low altitude, so you can feel as well in the mountains as you do at sea level. Six to eight hours of oxygen at night is enough to restore the body's oxygen saturation to normal levels and interrupt the cycle of hypoxia (low oxygen) that causes mountain sickness. As a result, you can wake up feeling refreshed, energetic, and ready to enjoy a full day of mountain activities.

Our Expertise

We are a group of scientists and engineers who love the mountains. We understand how the lack of oxygen at altitude can undermine health, sleep, and energy. Our goal is to improve your wellbeing so you can enjoy your experience in the mountains with your family and friends.

ACT pioneered oxygen control systems in the 1990s. Since then, we developed the state of the art technology for precise altitude simulation. Our proprietary system is a scientific instrument that precisely controls oxygen and is recognized as the gold standard the world over for true altitude simulation.

We are the world's leading authority in altitude simulation. ACT's team includes physicians and physiologists from the schools of medicine at the University of Colorado, the College of William and Mary, and the University of California. The science of altitude is the foundation of our technology.

Health and Safety Standards

FIRE SAFETY – Oxygen can increase fire risk unless the system meets NFPA standards for safe oxygen levels, which vary with changing atmospheric pressure – what is safe one day may not be safe the next. Our controller continuously measures barometric pressure. It then adjusts oxygen levels every six seconds, so your room is always safe. Our system meets insurance requirements and local fire regulations. ACT is the only system that meets NFPA's standard for fire safety.

AIR QUALITY – ACT's system keeps the air fresh. Rooms can become stuffy if not adequately ventilated. ACT's system detects when a room is occupied and increases ventilation to maximize air quality. When the room is empty, the system allows the equipment to shut down to reduce power consumption. Whether a room is occupied or not, ACT's controller maintains air quality, desired altitude, and proper oxygen levels at all times. ACT's is the only oxygenation system that incorporates controlled ventilation, occupancy detection, and meets OSHA air quality standards.

OXYGEN SAFETY – ACT's is the only oxygen control system to guarantee meeting CDC's standard for safe oxygen levels in all areas of the building. Oxygen safety must never depend on hardware, software, atmospheric conditions, or even correct operation. ACT systems are intrinsically fail-safe and create no risk even in the event of a power outage or complete system failure.

ACT Announces Altistat™

The Altistat™ is the first and only proprietary hardware and software combination that closely monitors, controls, and simulates a specific altitude within a room. All room oxygenation systems require limiting air exchange to contain a concentration of oxygen within the room. With simpler systems, this can make a room feel stuffy or stale, and potentially lead to unsafe conditions. In contrast, ACT's unique technology manages air exchange, adjusts to changing conditions such as people entering or leaving the room, and keeps the air consistently fresh, safe, and comfortable to breathe.

Homeowners select altitude settings with the easy-to-use in-room touchscreen or any device with an internet connection. Altistat™ constantly monitors the atmospheric pressure and oxygen levels using multiple in-room sensors, allowing the system to effectively control the airflow and ensure precise settings are maintained. With this improved technology, setting a desired sleeping altitude in the bedroom is easier than ever.

Award-Winning Technology

ACT's technology resulted in major contracts with the US Naval Air Systems Command (NAVAIR) in 2006. Since then, NAVAIR has provided millions of dollars to ACT in research and development funds to further develop our technology. The result is the most advanced altitude control system available. ACT's technology has been awarded the HI-Q Innovation Award™, The Mercury 100 Award™, and two US Federal Government Small Business Innovative Research™ Awards. Our systems have been awarded three US patents, and additional patents are pending. Today ACT's advanced technology is used in research, training, and mountain homes the world over.

How Altitude Simulation Works

- Air separation devices extract oxygen and deliver it to your room in a constant flow.
- A controlled ventilation system keeps the air in your room fresh.
- Sensors send data to the control system - oxygen levels, air quality, and barometric pressure.
- ACT's control system manages altitude simulation, oxygen levels, air quality, ventilation, and fire safety. It detects occupancy and intelligently manages the system for energy conservation. The controller automatically calibrates sensors, handles all hardware functions, and schedules oxygenation. ACT's state of the art control system links to your home Wi-Fi to communicate with ACT for monitoring, diagnostics, and automatic software updates.

Our Customers

Over the last 25 years, ACT has become the world leader in altitude simulation. We have more experience than all other companies combined with more than 3,000 satisfied customers including Harvard Medical School, Nike, Olympic Training Centers in 14 countries, the Smithsonian, The Ritz-Carlton, the University of Colorado Altitude Research Center, the US Air Force Academy, and US Naval Air Systems Command.

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