Raytech’s Central Tire Inflation System technology maximizes vehicle mobility by adjusting tire pressure to the track on any kind of terrain. Raytech’s CTIS provides not only high performance, but also the reliability required in military and off-road applications.

Whether in paved roads or in rough terrain, Raytech’s CTIS technology increases driving performance, preserves tires and reduces fuel consumption, all while largely dropping the operating cost. Furthermore, CTIS decrease interruptions related to tire malfunctions, such as minor punctures, leaks, or immobilization in muddy terrain.
Raytech’s CTIS consists of three major components:

**Display**
- The display is mounted on the instrument panel in an **easily accessible format** for the driver. The driver can adjust the display as needed.
- The monitoring of the set value comes automatically through the CTIS system.
- Upon request, a **speed trap** can be integrated.
- It is also possible to **adapt this display directly** into the existing dashboard.

**PCU**
- The **Pneumatic Control Unit** sends continuous information to the display and controls the tire pressure according to individual set up.
- Latest communication standards

**Wheel Valves**
- The tire valve seals the air pressure in the tire and **prevents leakage** allowing the system to stay pressure-less while driving.
- By sending compressed air to the tire valve, the valve opens enabling filling and therefore, **increasing the tire pressure**.
- By appropriate controlling the main valve, it is also possible to open the tire valve and to **decrease the tire pressure**, i.e. discharge the air.

**Unique Competitive Advantages of Raytech CTIS:**
- Variable adjustment range without limitations between 0.5 – 10.0 bar
- Safety through our pressure less system between compressor and valves at driving mode
- Additional Safety feature through innovative valves with piston instead of membranes
  NO FATIGUE FAILURES OR BURSTING OF MEMBRANES

**Benefits of CTIS Systems**
- Better grip & mobility
- Longer tire life, less tire leaks
- Enhanced transportability comfort
- Lower operating costs
- Alerts driver of potential tire problems
- Higher vehicle speeds over rough terrain
- Less structural stress on vehicle drive train
- Improved fuel efficiency across all kind of roads
- Improved ride quality and driving stability
- Complete design and installation of valves, PCUs, wiring harnesses and display (J1939) from a single source
- Worldwide customer support.