

PRESENCE

HOW WE BUILT TRUST



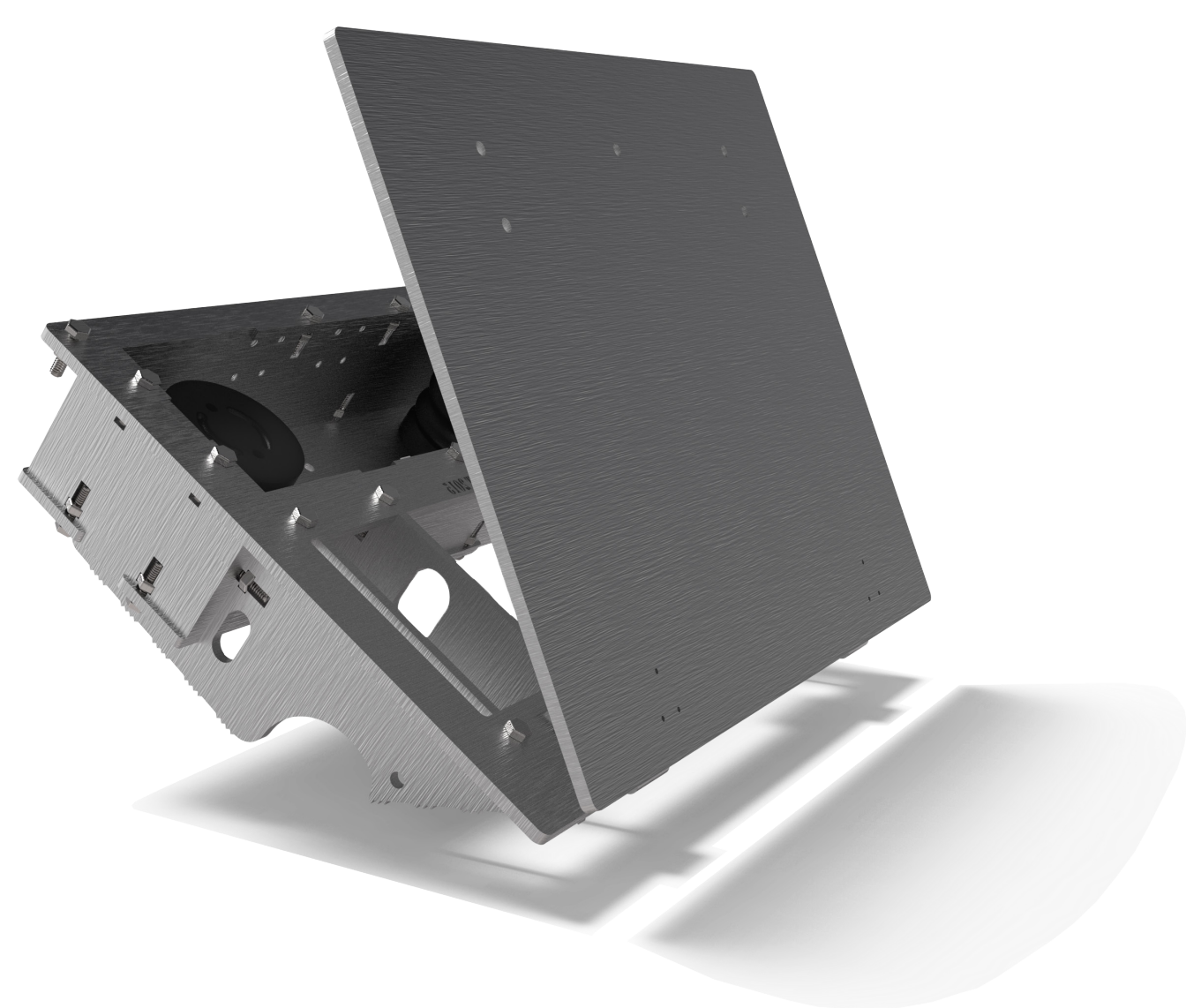
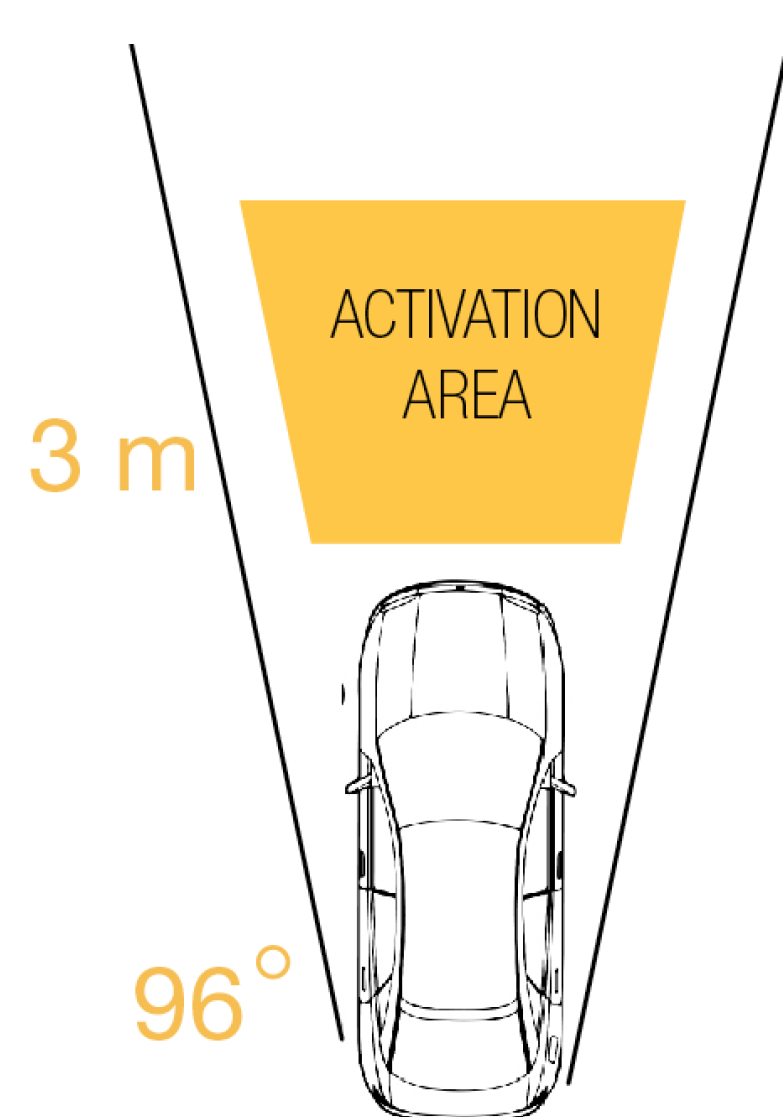
The Footrest



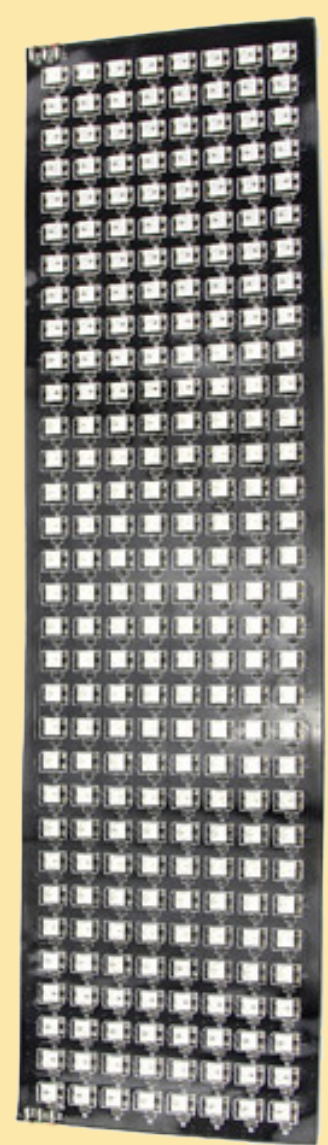
DATA
Model: PM/31022 Pneumatic Bellow
Stroke: 45 mm
Working height: 105 mm
Nominal Ø: 2 3/4"
Holding Force: 170 lb
Input Air Pressure: 1 bar - 6 bar
Company: Norgren

HOW IT WORKS

The moving footrest is controlled by two air-bellows inside the 1/4" aluminium structure. When an object enters the activation area, pneumatic valves will blow up the bellows and gently move the footrest 1/2" upward.



The Visual Display



DATA
Model: Neopixel LED Array
Size: 8 x 32
Color: RGB
Input: 5V
Max Power Consumption: 75W
Company: Neopixel

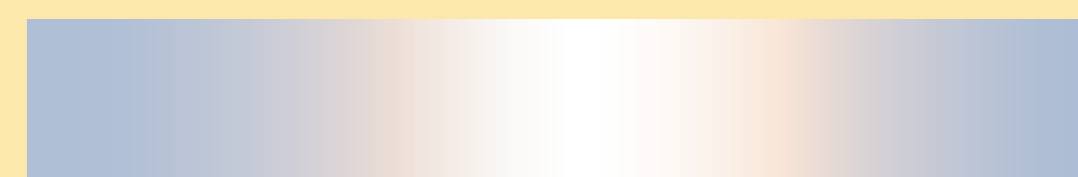
HOW IT WORKS

The light panel consists of 6 8x32 LED panels. They display the information from the car's vision system. The closer an object is, the larger it will appear on the light panel. The system is programmed to let objects as far as 34 m away appear on the display. A non-linear scaling is used for height of the object on the display.

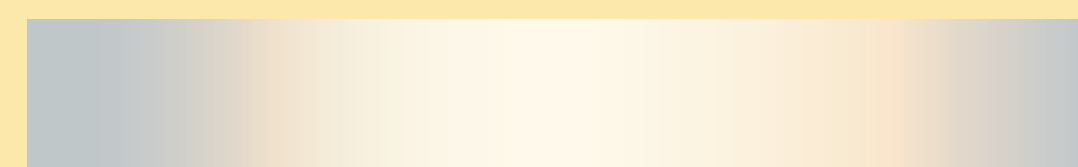
DISTANT OBJECTS (30 M):



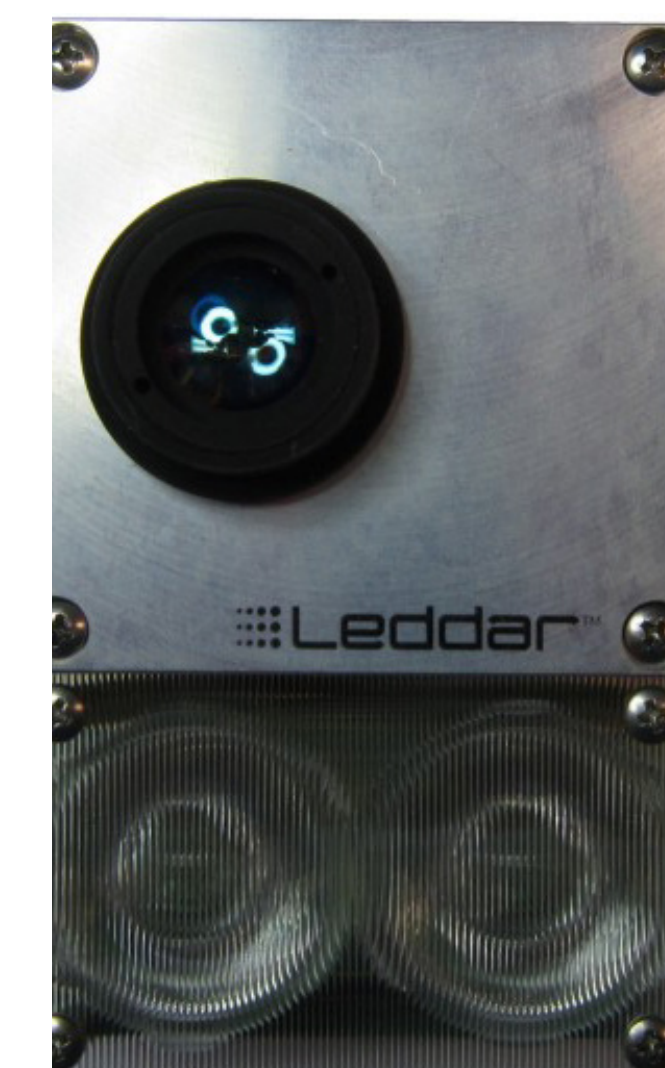
MID-RANGE OBJECTS (5 M):



CLOSE OBJECTS (0.50 M):



The Vision System



DATA
Model: Leddar M16
M16 multi-element sensing module
Leddar™ (Light-Emitting Diode Detection and Ranging) technology
Interface: USB, RS-485, CAN, UART
Detection range: 0 to 50 meters (165 ft.)
Company: LeddarTech

HOW IT WORKS

The vision system consists of three LEDDAR (Light-Emitting Diode Detection and Ranging) sensors with a horizontal span of 48° and a vertical span of 8°. It results in an overall sensing area of 110m x 7m at the maximum 50m range.

