Durable and Reliable AMT Touch Screen for Transportation Sector

Modern-day transportation vehicles are operated in terrestrial, atmospheric, and oceanic environments. Technologies used in these machines have to work under extreme temperatures while coping with rapid temperature changes. Meanwhile, they must also tackle challenges, including magnetic and electric noises, ultraviolet rays, corrosive substances, and so on. These issues all pose potential threats to touchscreen operation. AMT has years of successful experience in designing touch panels for trains, monorail cars, automobiles, electric scooters, commercial aircraft, yachts, cultivators, excavators, cranes, and other vehicles in many world-famous companies. Below are some of our proud designs:

Faultless Dual-screen

Touchscreens on high-speed rail systems often adopt dual-screen designs to avoid failure. The design incorporates two touch screens on one piece of glass. As a result, the electric fields between the two projected capacitive (PCAP) touch screens are very likely to interfere. The disturbance might aggravate if there were metal or water between the two touch screens. AMT designed the dual-touch screen in the train cockpit for a famous European manufacturer. AMT's engineers have conducted many internal tests and used different signal frequencies to reduce the problem of interference and

Alcom electronics
Singel 3 | B-2550 Kontich | Belgium | Tel. +32 (0)3 458 30 33
info@alcom.be | www.alcom.be
Rivium 1e straat 52 | 2909 LE Capelle aan den IJssel | The Netherlands
Tel. +31 (0)10 288 25 00 | info@alcom.nl | www.alcom.nl

make the application of dual-screen successful.

Anti-UV Yet Intelligible

Mechanic vehicles are often operated and parked outdoors, and they must be able to withstand prolonged sun exposure. If left unprotected, UV from extended sun exposure can cause yellowing, hazing, and cracking of plastics on the machine. AMT has been providing UV-resistant PCAP touchscreens for leading brands in heavy industry. Our products can pass ASTM G154 Cycle 1 - 1,000 hours and MIL-STD-810H Pro 1 - 1,000 hours tests and meet customers' full spectrum test specifications. Moreover, the outdoor light reflection will make the screen unclear, and the optical bonding service provided by AMT can solve this problem. Of course, we can also offer touch panels with a Low-Reflective (LR) design, improving legibility in bright light.

Anti-Noise Design

Electromagnetic compatibility (EMC) is of great importance for transportation applications. The Federal Aviation Administration (FAA) regulations require all devices installed on aircraft to pass DO-160 Environmental Conditions and Test Procedures for Airborne Equipment certification. With suitable integration and firmware adjustment, AMT PCAP touch solutions can meet DO-160 Conducted RF Emission at 150 KHz to 152 MHz and Radiated RF Emission at 100MHz to 6000MHz test standards. Our unique hardware and software designs create excellent electromagnetic shielding for aviation applications.

AMT is one of the few touch solution suppliers worldwide that develops and manufactures touch panels and controllers by itself. We have a long history of designing transportation vehicles and can provide a full range of touch solutions for you. Our next move is to innovate more designs for touch applications in the EV market.