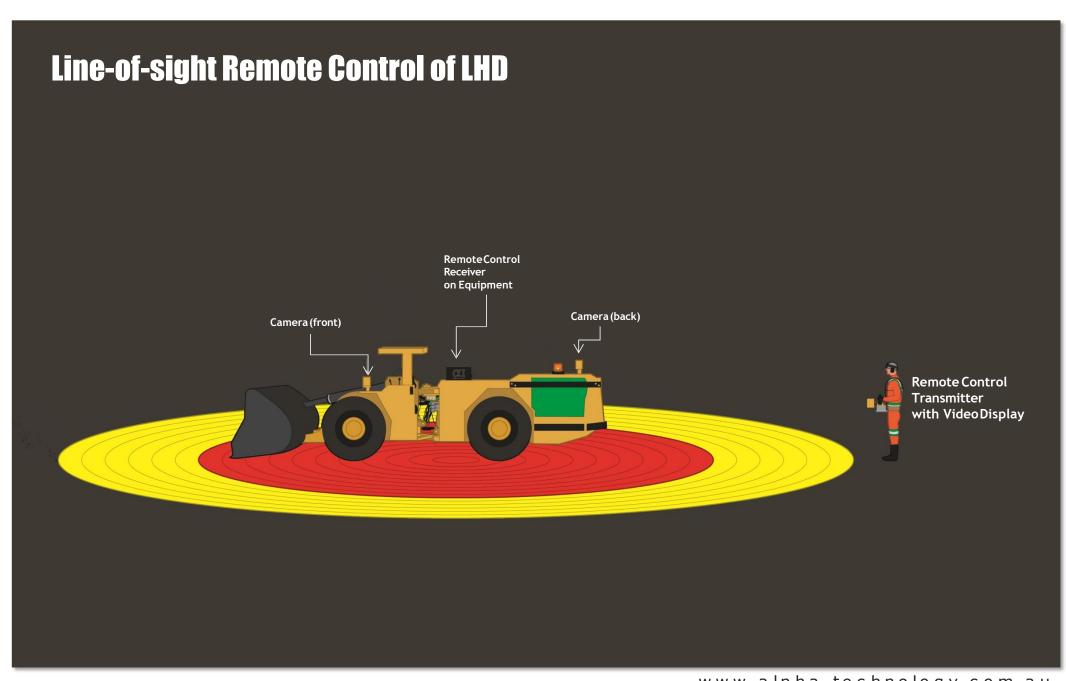
ALPHA Intelligence



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www.alpha-technology.com.au



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Line-of-sight Remote control is based on Radio Wireless communication between transmitter and receiver (installed on equipment).

XR Wireless Transmission Technology

Anti-interference

Stable Connection





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Video-plus Line-of-sight Remote set mainly consists of the following parts:



Remote Control Transmitter



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ALF40 Transmitter

Explosion-Proof & Intrinsically Safe

Working voltage: DC 12.8V;

Signal Transmission Rate:

1Mbps; Wireless Range: 0~100

meters;

Battery: Rechargeable Lithium

Battery; Ports: 12 AI, 32 DI, CAN bus,

RS485, etc. Video Display: 7 or 9 inch

HD Screen

Optional: Industrial Grade 3.2 inch OLED on panel, displaying equipment status and maintenance guidance.

Remote Control Transmitter



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ALF50 Transmitter

Working voltage: DC 7.4-8.4V;

Wireless Range: >100m (in

open area); Battery:

Rechargeable Lithium Battery;

Video Display: 4.3 inches,

visible in the sun; Frequency

range: 400-470MHz, optional

2.4G; Receiving sensitivity: -

115dBm

Optional: large-size LCD display, visible in the sun, and pictures of feedback content can be customized



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ALS40 Receiver

Explosion-Proof & Intrinsically Safe

Working Voltage: DC 24V

Signal Transmission Rate: 1Mbps

Wireless Range: 0~100m

Ports: 32-way digital/PWM output, 5-way DI,

8-way AI, CAN bus, RS485

Output Capacity: Single-way maximum 24V/1.5A

Support Custom-built Functions



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ALS50 Receiver

Working Voltage: DC 9-32V;

Protection level: IP65 or IP67;

Temperature: - 40-+ 85 °

Ports: 16-way PWM output, 4-way PI, 7-way DI, 7-way AI, CAN bus, RS485, wireless, RS232

Support Custom-built Functions



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Hydraulic System

Including: Proportional Solenoid Valve, Switching Solenoid Valve, Hose Connector, Hose and tee accessories.

Connected with remote control receiver to achieve equipment actions, such as

Forward/Backward, Steer Left/Right, Boom up/down, Ore loading/unloading, Throttle control, Brake control, etc.



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Electrical System

Connected with Remote Control Receiver to control the equipment power supply, such as power ON/OFF, front and rear lights, engine starting, engine hold, etc.

With switch of manual/remote control two working modes, so as to control the equipment to work manually or remotely.



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Video System

1/3 inch HD Color CMOS, 2 million pixels

Camera Lens&Angle: 2.8mm, F1.2 & 130 ° wide angle

Working Voltage: DC8~32V

Infrared Distance: 10m

Infrared Life: 100 Hours

Working Temperature: -20 °C to +60 °C

Humidity: 90%MAX

Waterproof: IP69K

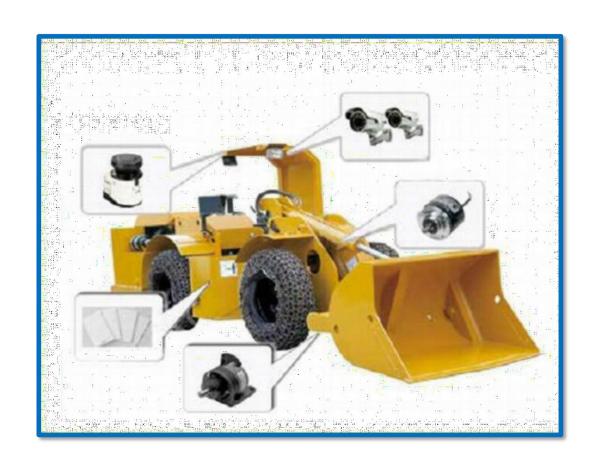
Shockproof Level: 10G

Dimension: 106*75 x 70.5 mm

Weight: 500g



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Cusom-built Function (optional)

Various sensors can be installed on the equipment to monitor the running status in real time.

LCD screen on the remote transmitter can display the signal and feedback with error alerts as well.

Engine parameters: Oil pressure, engine temperature, engine speed, etc.

Hydraulic parameters: Hydraulic oil pressure, brake pressure, hydraulicoil tank

Others: Fuel tank level, travel time, engine operating status, braking state, neutral state, etc.



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Real-time monitoring of operating status with the fault alert & maintenance guidance

Emergency Button to enhance safety performance

Remote system upgrading supported by USB port

Reliable Wireless Transmission

7.7 or 9 inch 720p HD display, dual or foursplit-screen

Infrared wireless 850nm type camera with IP69K waterproof, Auto-focusing, 130° wide angle,



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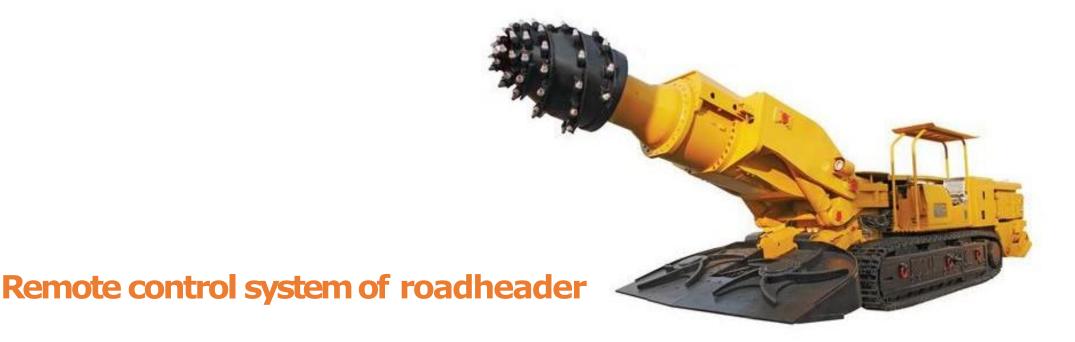
9-way PWM signal: Forward, backward, Steer left, Steer right, Boom down, Boomup, Loading, Unload, Throttle control;

11-way digital output signals: Engine hold, Engine start, Headlight control, Rear light control, Forward control, Backward control, Brake control, Auxiliary brake control, Fire suppression control, Fast and slow gear control, Speaker control;

4-way digital input signals: Remote and manual control switching, Brake detection, Neutral gear detection, Alarm detection.



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Proportional control: Left track forward and backward, Right track forward and backward, Boom lift, Boom down, Gathering starspeed.

Switch control: System start and stop, Bell, Gathering star start&reveral start, Shovelplate up&down, Back support up&down, Conveyor steer left&right, Conveyor up&down, Conveyor start, No.1Conveyor start&reversal start, No.2 Conveyor start&stop, Cutting telescopic, Low-speed cutting start& stop, High-speed cutting start&stop, Pump start&stop, Spray start&stop, Emergency stop button.



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Drilling rigs remote control function

Proportional control: Left track forward&backward, Slewing left&right, Stick open&retract, Right track forward& backward, Boom up&down, Bucket open&retract, Rotating Clockwise&Counterclockwise

Positioning knob: Breaker Hammer

Switch control: Lighting switch, Working & walking

mode selection, Belling, start, stop, Key switch,

Emergency stop





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Mining Concrete Sprayer remote control function

Walking mode: Left track forward, Left track backward, Right Track forward, Right track backward.

Working mode: Boom pitch, Boom forward&backward, Boom steer left&right, Boom telescopic, Sprayer tilt, Sprayer up&down

Any mode: Front and rear light switch, bell, emergency stop, Brushed motor, Agitator motor.



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Mining Scaler Remote control function

Proportional control: Steer left&right, Jack and retracted, NO.1 arm pitch, NO.2 arm Tilt, Slewing left& right, NO.3 arm Tilt, Hammer tilt, Hammer swing, Throttle control;

Switch control: Front & Rear light, Selection of Working & Outrigger &Running mode, Forward &neutral reversing switch, Power switch, Bulldozer up&downt, No.2 arms telescopic, Broking hammer start&stop, Sey switch, Emergency stop.



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Bogger remote control function

Proportional control: Steer left&right, Boom up&down, Ore loading&unloading,Throttle control, Forward& backward control.

Switch control: Horn, Remote &manual control mode switch, Front&Rear light control.



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Excavator Remote control function

Proportional control: Stcik up&down, Slewing left&right, Boom up&down, Bucket inward&outward, Throttle control

Switch control: Fast speed&Slow speed, Ignition, Floodight, Horn



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Continuous Miner Remote control function

Proportional control: Left track forward&backward, Right trackforward&backward.

Switch control: Start, Reset, water in, Cutting strat&stop,Oil pump start&stop, Spray, Headlight, Rear light, Cutting arm up&down, mounting movement, reverse motion, stable shoe lift, steady shoe drop, cutting forward, cutting back, dust removal, dust removal stop, loading and opening, loading and closing, shovel plate lifting, shovel plate lowering.



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Proportional control: Steer left &right, Shovel up&down, Shovel left incline&right incline, Ripper up&down

Switch control: Start, Forward, Backward, Gear, Emergency stop

Others: Working system pressure detection, oil temperature and pressure alarm detection



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Grifin Mining Ltd Caijiaying Lead-zinc Mine



4 sets of 3m³ Anchises Diesel LHD Remote Control System

Wugang Group Project Pictures Daye Iron Mine



1 set 1.5m³ Atlas EST-2D LHD Remote Control System



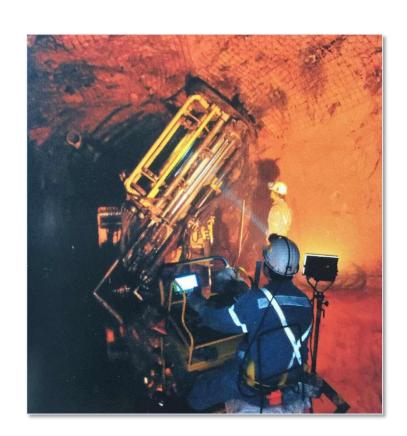
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Jiangxi Copper Corporation Yongping Copper Mine



1 set 1.5m³ Atlas ST-2K LHD Remote Control System

Beijing Shougang Co Ltd Xingshan Iron Mine



1 set Atlas Simba 1354 Drill Jumbo Remote Control System



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Mining Concrete Sprayer Remote Control



3 set 2m³ LHD Remote Control Fanshan Phosphorus Mine Mine



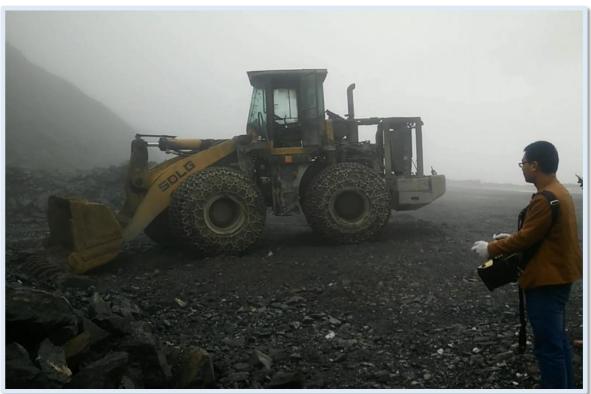
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Zijin Group Ashele Copper Mine



4 set 2m3 LHD Remote Control

Shanxi Baoshan Mining Baoshan Iron Mine



1 set SDLG Bogger Remote Control



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Sichuan Development Mining YiJiXuGong Group Group **Tianrui Phosphate Mine**



1 set Slag Scraper Line of Sight Control



Remote Control System of Bulldozer



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Nuro Inc., a driverless Unicorn company from Silicon Valley in San Francisco. Alpha customized remote control system for its company's driverless R3 series logistics distribution vehicle, so as to cut into the remote control system for control in case of emergency when the vehicle is on the road.







Get in Touch Today!

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