

SCRAPER

Safe work in hazardous Environments



 SWISS MADE

SOLUTION FOR LONG-DISTANCE REMOTE CONTROL WITH VIRTUAL REALITY GOGGLES

WITH HAZARDOUS MATERIALS & IN HIGH-RISK ZONES

OVERVIEW

GUARANTEED SAFETY

The remote control ensures the total safety of your operators.

IMMERSION

The operator is immersed in cabin's working environment reproduced with virtual reality goggles.

COMPATIBILITY

The system is quick to install and compatible with almost all construction machinery. The control from the cabin remains possible at any time.

LOW COST

Small investment, fraction of the price of your machine.

HAZARDOUS MATERIALS & HIGH-RISK SITUATIONS

In the event of natural or industrial disaster, fast intervention is required close to the danger. On a mountain road threatened by landslide, when the soils and air are contaminated with toxic substances, in presence of explosives or atomic radiation, only distance ensures the total safety of the operator.



Our entirely standardized and compact system can be rigged on a large range of construction machinery — regardless of their size.



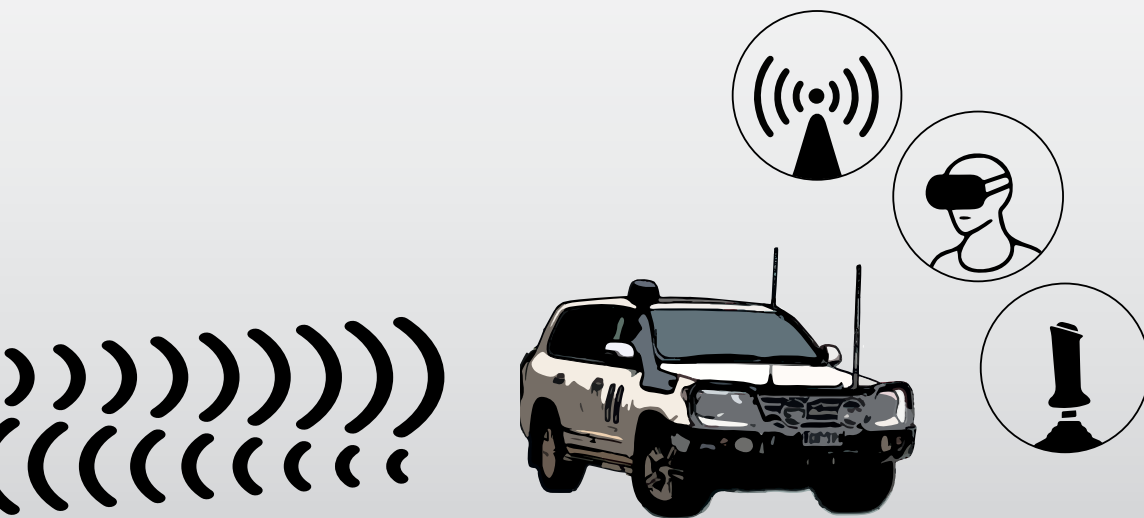
The stereoscopic camera in the cabin is connected to augmented reality goggles, allowing the operator to precisely remote control the machine.

The operational range is 500 meters with a clear line of sight.



A REMOTELY-CONTROLLED MACHINE IS THE ONLY TOTALLY SAFE SOLUTION

The machine can be operated from a safe distance using professional controllers and augmented reality goggles. The goggles immerse the operator in an augmented reality environment reproducing the machine's cab and allowing him to pilot it as usual.



Your machine remains completely usable from the cabin for conventional work.

The control station can be installed, for example, in a simple vehicle.

With professional controllers [force feedback and damping joysticks], the operator can control all hydraulic functions of the machine.



SCRAPER DATA SHEET

REMOTE CONTROL STATION



Virtual reality goggles and operator's head tracking sensor



Force feedback and damping professional joysticks to be mounted in the remote control station

MACHINE

Stereoscopic camera avatar placed in the machine's cabin



Embedded Radio Communication System



Embedded Electronic System



Pilot pressure and/or high pressure control block



TECH SPECS

| | |
|--|--|
| Operational range | 500 m (line of sight) |
| Hydraulic functions | 8 bi-directional functions (16 valves) |
| Hydraulic pilot pressure range | 30 - 50 bar |
| Direct control of main hydraulic system | possible up to 450 bar |
| Electro-Hydraulic control curves | Fully customizable and user-friendly |

OPERATOR INTERFACE

| | |
|--|---|
| On Screen Display [OSD] | RPM Engine Engine coolant temperature Hydraulic Oil Temperature Fuel level Artificial Horizon |
| Type of camera | Stereoscopic |
| Camera resolution | up to 4 K |
| Controls [depending of the type of machine] | Joysticks Steering wheel Pedals |

OPTIONS

| | |
|--------------------|---------------------------------|
| Geolocation | GPS GPS-RTK [2 cm precision] |
|--------------------|---------------------------------|

DIGGER DTR IS A SWISS-BASED FIRM OFFERING TECHNOLOGICAL AND INNOVATIVE SUPPORT FOR HUMANITARIAN DEMINING AND CIVIL APPLICATIONS.

- FOUNDED IN 1998
- SOLE NON-PROFIT DEMINING MACHINE MANUFACTURER
- FIELD EXPERIENCE IN MORE THAN 15 COUNTRIES IN THE HARSHTEST CONDITIONS
- RIGOROUS FOLLOW-UP ON PROJECTS WITH TECHNICAL SUPPORT
- DEVELOPMENT OF INNOVATIVE SOLUTIONS FOR POST-CONFLICT EXPLOSIVE CLEARANCE
- UNIQUE KNOW-HOW AND SWISS QUALITY
- CAPACITY BUILDING AND KNOWLEDGE TRANSFER TO LOCAL OPERATORS, GUARANTEEING MAXIMUM INDEPENDANCE