



JOYSTICK PEDAL

SENSING & CONTROL

by URT

... the impossible made simple...



POSITION SENSORS

As natural extension of fixed resistor, we decided to expand the business by entering the pots and sensor market.

We have made agreement with market leaders in their field with the highest level of R&D.

The objective is to offer the widest range available today covering any market including HMI solutions.

URT offer one of the largest position sensors range, the heart of Joysticks and Pedals

The sensors we offer can be used virtually in any market

- Contactless
- Potentiometers
- Linear sensor



JOYSTICK

- Ergonomic
- Small Size & Tilted
- Multifunction
- CAN
- Safety
- IP 67

Markets

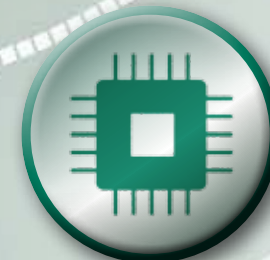
AUTOMOTIVE



OFF ROAD



INDUSTRIAL



CONSTRUCTION



MATERIAL HANDLING



MEDICAL



DEFENCE



URT R&D

MARINE CONCEPT



- Customised design
- Electronic controls for outboard engines
- For leisure and work boats
- Throttle lever and docking joystick



FORKLIFT



Customer challenge

- Need for custom designed

URT solution

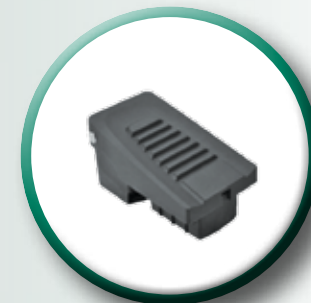
- Multifunctional joystick
- Finger-tip controls
- Throttle & brake pedal
- Operator presence pedal
- Pulley sensor

Features

- Fully customized designs
- Contactless technology
- Height control system

Customer values

- Enhanced operator environment and improved ergonomics
- Increased safety
- Eliminated EMC and ESD problems
- Cost-effective plug & play-solutions



DRILLRIG



Customer challenge

- Need for small sized multi-functional joystick

URT solution

- Custom Viper Compact joystick

Features

- Compact design, many functions and options in a small sized grip
- Redundant hall effect sensors
- Several configurations available with the same grip
- Design similarity with bigger Viper joystick

Customer values

- Time efficient development by evolution of proven design
- Efficient operation due to multi-functions in the grip-> time savings
- Reduced number of joysticks in control panel as well as good wrist support-> improved ergonomics for the operator
- Only small movements needed with high resolution-> excellent feel
- Operators familiar with grip design



AERIAL WORK PLATFORM



Customer challenge

- Larger aerial work platform with working height >27m
- Safe operation of sky lift basket
- Joystick to withstand sun, rain and cold and last a very long time
- No visible metal that conducts electricity

URT solution

- Customised C15 Joystick

Features

- Spring return device for X/Y
- Knob incorporating push button switch

Customer values

- Robust solution-> long lifetime
- Distinct, user-friendly feeling for the operator whilst wearing gloves



Customer challenge

- High failure rate of old palm-grip joystick
- Wish for one supplier for complete joystick range

URT solution

- Customised C15A joystick

Features

- Proportional thumb rocker with dual output
- Custom housing cup
- Custom CAN protocol

Customer values

- Robust standard solution withstanding shaky environment
- One stop shop for all the optional joystick designs required
-> same interface to the cabin for all variants due to same housing cup

TIMBER CRANE



SCRAPHANDLER



Customer challenge

- Need for compact joystick yet incorporating many functions. Pedal breaking after time

URT solution

- Customised ViperPlus joystick grip, left and right hand. P09 Pedal

Features

- 6 buttons and dual trigger resp. 5 buttons, dual trigger and proportional thumb rocker
- Many functions in a compact design
- Double moulded grip with high sealing
- Long-life design for tough usage
- 15 deg. tilted shaft
- Customised interface to hydraulic valve

Customer values

- Only little assembly space in cabin needed
- Decreased need for side panel
- Many control options possible



DEMOLITION ROBOT



Customer challenge

- Need of combining two palm-grip joysticks into one, offering both analogue rocker and wigwag push button, yet keep same size

URT solution

- Customised palm-grip C15 joystick

Features

- Wigwag push button on top and analogue rocker on grip side
- Slimmed and ergonomic design
- Heavy duty rubber cover
- Joystick base with high force strength

Customer values

- Possibility to control extra analogue functions such as a tilt rotator
- Operator freedom to use either wigwag push button or analogue rocker-> alternation between thumb positions to avoid repetitive strain



HARVESTER



Customer challenge

- Low precision and short life time of current solution

URT solution

- Customised C06B joystick & P09 Pedal

Features

- Hall effect sensors
- Spring return device for X/Y
- Sea-saw knob for Z
- Special shielded cable

Customer values

- Enhanced usability through great feeling
- Robust solution-> long lifetime



PUSHBACK



Customer challenge

- Limited cabin space with 180 deg rotatable seat-> 2 pedal set-up need

URT solution

- Customised P11 throttle pedal

Features

- Dual springs
- IVS and kickdown switches

Customer values

- Perfect fit into cabin space
- 100% availability of pedals in operation-> no downtime





www.urt-resistors.com

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