# **INDUSTRIAL REMOTE CONTROL 2.0**

# **INNOVATIVE IDEAS, INNOVATIVE PRODUCTS**

Based upon 60 years of knowledge and experience the Swedish Tele Radio Group developed a new series of industrial remote controls with the highest safety levels for hydraulic, mobile and industrial applications: Tele Radio PUMA.

# YOUR DEMAND YOUR CHOICE

#### BASIC LINE TRANSMITTER

- ✓ Suitable for most applications
- ✓ Standard control elements
- ✓ Standard black face plate
- ✓ Best price

# **BASIC LINE RECEIVER**

- ✓ Multiple pre-programmed I/O's
- ✓ M12 connector, ready for cable control
- ✓ RPSMA conncector, ready for external antenna

# **CUSTOMIZED TRANSMITTER**

- ✓ Tailor made
- ✓ Flexible, adjustable system
- ✓ All control elements possible
- ✓ Customized faceplate
- ✓ Price based upon request

#### **CUSTOMIZED RECEIVER**

- ✓ Multiple programmable I/O's
- ✓ Multiple fieldbus protocols possible
- ✓ All outputs & inputs possible
- ✓ Customized wiring solution
- ✓ Active antenna optional

# **UNIQUE TECHNOLOGY**

At Tele Radio we believe in innovation. We provided our systems with the most modern technology for a better control and communication with your application.

# Active antenna



The active antenna can also serve as a stand-alone repeater. This increases the range between transmitter and receiver substantial. It makes it possible to use this system in very demanding circumstances, like mining, in mountainous areas, or in big buildings without losing signal.

# RFID control



The Tele Radio PUMA products are standard equipped with RFID, a wireless technique for recognition of a unique code of the system, product or user. The settings of a user can be saved on a smartcard with RFID which is recognized by the system during usage. Different user levels can be set up.

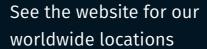
### **BUS systems**



To meet the current industry standards, the Tele Radio PUMA remote controls are compatible with a wide range of BUS systems. A smooth cooperation with the software of your machine can be assured. The Tele Radio PUMA remote controls can handle CANOPEN, MODBUS and SAE J1939.













# **PUMA BASIC LINE**

The Basic Line assortment starts with 3 basic models of transmitters that come with: vibration for warning & alarm feedback, duplex communication for feedback, impact type & twist release stop switch on the side, M12 connector for cable control, standard black faceplate with white symbols,

- > Suitable for most operations
- > Standard control elements
- > Standard black faceplate
- Best price

illuminated faceplate & LEDs in handle bar for panel illumination, 2x Li-Ion battery & charger station, vehicle (12-24Vdc) & Mains (100-240Vac) adapter and carrying neck strap. The basic transmitters are available in a midsize version (T24) and a smaller version (T26).







PUMA T24-01 MIDI	PUMA T26-02 MINI	PUMA T26-03 MINI
3x proportial redundant XY Joystick	2x proportial redundant XY Joystick	6x proportial redundant paddle
2" colour display with menu buttons	2" colour display	2" colour display
2x 1-0 maintained toggle switch (SW1, SW5)	1x 1-0 maintained toggle switch (SW1)	1x 1-0 maintained toggle switch (SW1, SW5)
2x 1-0-1 maintained toggle switch (SW3, SW4)	2x 1-0-1 maintained toggle switch (SW3, SW4)	2x 1-0-1 maintained toggle switch (SW3, SW4)
1x 1/0/1 spring return toggle switch (SW2)	1x 1/0/1 spring return toggle switch (SW2)	1x 1/0/1 spring return toggle switch (SW2)
6x 0/1 spring return metal side buttons	4x 0/1 spring return metal side buttons	4x 0/1 spring return metal side buttons
SIL 3, PLe+Cat3 safety level stop function	PLd+Cat3 safety level stop function	

The Tele Radio PUMA Basic Line contains 2 types of receivers that come with: M12 connector for cable control, RPSMA connector ready for an external antenna, internal antenna, PLd+Cat3 safety level stop function and pre-programmed I/0's.

PUMA R20-01	PUMA R21-01	
26x pre-programmed I/O's	4x pre-programmed I/O's	
PWM for smooth valve control	M12 connector with CAN (J1939 or CANopen) serial communication protocol	
Built in pre-wired 35pin connector with 2 m cable with 35 cores	M20 cable gland	



# **PUMA CUSTOMIZED**

Because of the modular build of the Tele Radio PUMA, the flexibility of the products is extreme. Under the hood of the transmitters one can choose from a wide range of technical possibilities. All transmitters can be configured to your exact specifications. Naturally next to these technical options, all standard control elements imaginable are possible, down to the very last button, joystick or paddle. The faceplate can be customized with either full colour print or engraved, the choice is yours.





The Tele Radio PUMA receivers are small in size but

loaded with features that make it easy to adapt to

most modern systems: multiple programmable I/O's,

multiple fieldbus protocols possible, all outputs and

inputs programmable, optional external antenna and

PUMA R21 options

Secondary CAN

(J1939 or CANopen)

RS485 (Modbus RTU)

customized wiring solution.

PUMA R20 options

RS485 (Modbus RTU)

CAN (J1939 or CANopen)

Relay board

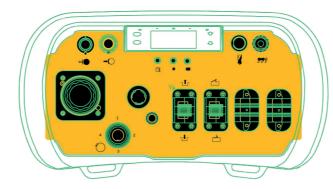


# **CUSTOMIZED SOLUTIONS**

- Multiple programmable I/O'S
- > Multiple fieldbus protocols possible
- > All outputs/inputs programmable
- > External antenna optional
- > Customized wiring solution

# THE CHOICE IS YOURS

- **CONFIGURATION** Your system can be configured to your exact specifications.
- > CONTROL ELEMENTS You will have free choice of all standard buttons, joysticks, paddles and toggle switches
- **FACEPLATE** Your faceplate can be personalized with your own symbols/ text/background image, in full colour printing or engraved.
- > **CERTIFICATIONS** Your system can be made according to the PLe / SIL3 standard. Which is recognized by the system during usage. Different user levels can be set up.



Our products meet the highest requirements that the market demands. We fulfil the following standards and certifications: CE marking is a mandatory conformity marking for products sold within the European Economic Area (EEA). Since 1985 the CE marking is also found on products sold outside the EEA, manufactured in, or designed to be sold in the EEA. The Federal Communication Commission (FCC) is an independent agency of the United States Government. They regulate interstate communication by radio, television, wire, satellite and cable in all states. One of the goals is enforcement of the public safety. Reliable, robust and safe are the characteristics of our products. Various functions, including the emergency stop, are independently certified. Our systems meet the \*PLe, \*SIL3, CAT3 and ISO 13849-

# **ACTIVE ANTENNA**

The repeater/active antenna is an effective way to increase your range of operation with up to 2 kilometers in terrain (at the maximum of 16 repeaters).

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- · Active Antenna in the same enclosure
- 2 kilometers/1.25 mile range
- · Antenna diversity support

# **BATTERY SYSTEM**

The high capacity Li-ion batteries for Tele Radio PUMA are equipped with RFID tags and are also hot-swappable for uninterrupted control.

- Wall/table charger available

