



RELIABILITY UNDER THE TOUGHEST CONDITIONS

Safety radio remote controls from ARCON are used worldwide, even underground. We offer a broad range of approvals in order to meet all requirements and challenges.

Operation from a safe distance:

With construction crane radio remote controls from ARCON, certified by TÜV, you have your load under control at all times.

Clear view:

From a safe distance to the hazard zone. ARCON is a premium manufacturer in the construction industry.



Maximum safety:

Safety radio remote control systems from ARCON are used worldwide underground. We offer a broad range of approvals in order to meet all requirements and challenges.



You are in good hands:

At ARCON, we place great importance on personal service and a high degree of availability.

We are your reliable partner!

We would be pleased to inspire you with the numerous options for using an ARCON safety radio remote control system. Contact the ARCON Team and experience for yourself the multitude of possible applications!

PUSHBUTTON DEVICES LIGHTWEIGHT AND HANDY



PUSHBUTTON DEVICE

HANDY PUSH BUTTON DEVICE FOR DIGITAL APPLICATIONS

The TGD-8 pushbutton device is extremely versatile, especially in the industrial sector, but also for mobile and customised applications. The transmitter has a particularly ergonomic shape, making it easy and intuitive for the user to handle. To ensure the most efficient operation for the user, the function keys can be flexibly assigned and configured. In order to protect your device against unauthorised use, we offer state-of-the-art security features, such as userdefined security codes.

TGD-8 ERGONOMIC DESIGN

Thanks to its modern, ergonomic design, the TGD-8 keypad is unique in its class. Its new operating concept enables flexibility in each area of use. The TGD-8 offers you a STOP switch, a toggle switch and 8 push-buttons, each of which has a two-step design and can be adapted to your application by means of individual labelling. Optional, we offer up to 6 varicoloured feedback LEDs for your machine's status display.

 PROTECTION CLASS:
 IP 65

 TEMPERATURE RANGE:
 -20 to +60° C

 WEIGHT:
 approx. 300g

 DIMENSIONS:
 80 x 45 x 175 mm (B/D/H)

 FREQUENCY RANGE:
 432-481/863-930MHz; 2.4GHz

BATTERY TECHNOLOGY:
OPERATING TIME:

Industry Constr





Integrated Li-Ion

up to 80 hours









T-SERIES THE NEXT GENERATION IN NEW DESIGN



T-SERIES

OPTIMISED FOR THE BEST OVERVIEW

The T-Series is a state-of-the-art series. It features an attractive design and reliable technology. The T-Series consists of three different transmitters, which offer space for sufficient switches, buttons and joysticks. All three available transmitters provide the user with highly intuitive handling and the best overview for all of your application's information through state-of-the-art colour graphic displays (GDC 3.5 and GDC 4.3). Naturally, all transmitters are equipped according to the needs of our customers.



T3 UNIQUE DESIGN

The special feature of the T3 transmitter is its versatility. You can equip it according to your individual needs and choose between key switches, toggle switches, push-buttons and joysticks with digital or analogue functions. In addition, the T3 transmitter has LED indicators and an optional graphic display for the clear transmission of information.

 PROTECTION CLASS:
 IP 65

 TEMPERATURE RANGE:
 -20 to +60° C

 WEIGHT:
 approx. 1400g

 PIMENSIANS:
 220 v 140 v 150 p

 DIMENSIONS:
 220 x 140 x 150 mm (B/D/H)

 FREQUENCY RANGE:
 432-481/863-930MHz; 2.4GHz

 BATTERY TECHNOLOGY:
 Exchangeable battery NiMH

OPERATING TIME: up to 20 hours













T-SERIES



PROTECTION CLASS: IP 65
TEMPERATURE RANGE: -20 to +60° C
WEIGHT: approx. 1800g

 DIMENSIONS:
 290 x 180 x 155 mm (B/D/H)

 FREQUENCY RANGE:
 432-481/863-930MHz; 2.4GHz

 BATTERY TECHNOLOGY:
 Exchangeable battery, NiMH oder Li-lon

OPERATING TIME: up to 20 hours













NEW T6 TREMENDOUS FLEXIBILITY

The T6 transmitter is the perfect companion for demanding environments. Its glass fiber reinforced housing offers space for up to 4 joysticks or 8 linear joysticks. This versatile transmitter can be equipped with toggle switches, rotary switches and potentiometers. In addition, much more can be customised, and there is even enough space for the innovative displays of the GDM and GDC 3.5 series (colour graphics displays).

PROTECTION CLASS: TEMPERATURE RANGE:

-20 to +60° C approx. 1900g WEIGHT:

325 x 180 x 165 mm (B/D/H) DIMENSIONS: FREQUENCY RANGE: 432-481/863-930MHz; 2.4GHz BATTERY TECHNOLOGY: Exchangeable battery, NiMH oder Li-lon

IP 65

OPERATING TIME: up to 20 hours

Industry













T-SERIES



The T7 transmitter is the largest transmitter within the T-Series. It provides you with the maximum space for positioning your controls. At the customer's request, a 4.3" colour graphic display with optional video feedback can be installed. Thus, you not only have continuous control of the status, but also of your machine's working area.

PROTECTION CLASS: TEMPERATURE RANGE: WEIGHT:

DIMENSIONS: FREQUENCY RANGE: BATTERY TECHNOLOGY:

OPERATING TIME:

IP 65 -20 to +60° C approx. 2000g

approx. 2000g 370 x 185 x 170 mm (B/D/H) 432-481/863-930MHz; 2.4GHz

Exchangeable battery, NiMH oder Li-lon

up to 20 hours













Manoeuvring loads with the utmost precision: ARCON's safety radio remote controls are your highly efficient companion in the most difficult situations.



EX-SERIES SAFE UNDER EXTREME CONDITIONS



EXPLOSION-PROOF

THE NEW GENERATION EX

The topic of explosion protection is becoming increasingly important in all our areas of use. The new generation EX is not only used in classic applications such as in mining and the chemicals industry, but also in the processing industry. In order to meet all requirements, we offer a wide range of approvals for the field of explosion protection.



NEW T5 EX **ERGONOMIC AND ROBUST**

The new T5 EX transmitter is setting standards in the combination of functionality and design in the field of explosion protection. You can equip the T5 transmitter according to your individual needs and choose between key switches, toggle switches, push-buttons and joysticks with digital or analogue functions.

ATEX, IECEx, NEC 500/505

APPROVALS: PROTECTION CLASS: **TEMPERATURE RANGE:** WEIGHT: DIMENSIONS:

-20 to +60° C approx. 1800g 290 x 180 x 155 mm (B/D/H) FREQUENCY RANGE: 419MHz - 869MHz **BATTERY TECHNOLOGY:** Exchangeable battery NiMH **OPERATING TIME:** up to 10 hours

IP 65















MAXIMUM NUMBER OF CONTROLS

The T7 EX transmitter provides you with the maximum space for positioning your controls. On customer request, LED displays or a state-of-the-art graphic display can be integrated. An optional cable control incl. power supply can raise the availability of your radio remote control to the maximum.

APPROVALS: ATEX, IECEx, NEC 500/505 PROTECTION CLASS: IP 65 -20 to +60° C

WEIGHT: approx. 2000g DIMENSIONS (B/D/H): 370 x 185 x 170 mm (B/D/H) FREQUENCY RANGE: 419MHz - 869MHz BATTERY TECHNOLOGY: Exchangeable battery NiMH **OPERATING TIME:** up to 10 hours



TEMPERATURE RANGE:









Underground: ARCON offers individual solutions for the mining industry. Whether roadheader or tunnel boring machine, we have your tailor-made solution.







RECEIVER

EASY AND QUICK TO CONFIGURE

Most of ARCON's receivers are fitted with a programmable motherboard. This enables the ARCON Team to respond to customer requests as fast as possible and offers maximum flexibility.



The smallest receiver housing has been specially designed for mobile applications with limited space. Thanks to its compact design, it can also be mounted in places that are difficult to access. Both digital and serial interfaces can be implemented in this housing variant.



INTERFACES:

RS 232/485, CANopen, CANopen Safety, DeviceNet, J1939, Profibus, Profinet, Relay

outputs, Transistor outputs

PROTECTION CLASS: IP 65

 TEMPERATURE RANGE:
 -20 up to +70° C

 WEIGHT:
 approx. 800g

 DIMENSIONS:
 165 x 115 x 65 mm

 FREQUENCY RANGE:
 419/429/432-481/

REQUENCY RANGE: 419/429/432-481/863-930MHz; 2.4GHz

OPERATING VOLTAGE: 8 – 30 VDC













NEW

R5 HOUSING VARIANT LARGE

The R5 is the universal housing of ARCON. This design offers many digital standard receivers. With the R5 housing variant, analogue outputs can be conveniently implemented for control in loading cranes or special machines. One of our standard proportional receivers, such as the RCV BMS-2, is ideal for this type of application.

INTERFACES:

RS 232/485, CANopen, DeviceNet, J1939, Profibus, Industrial Ethernet, relay outputs, transistor outputs, voltage outputs, current outputs

PROTECTION CLASS: IP 65

-20 up to +70° C approx. 1800g 245 x 165 x 90 mm

TEMPERATURE RANGE: WEIGHT: DIMENSIONS:

419/429/432-481/863-930MHz; 2.4GHz

FREQUENCY RANGE: OPERATING VOLTAGE:

8 - 30 VDC, 48 - 240 VAC, depending on equipment



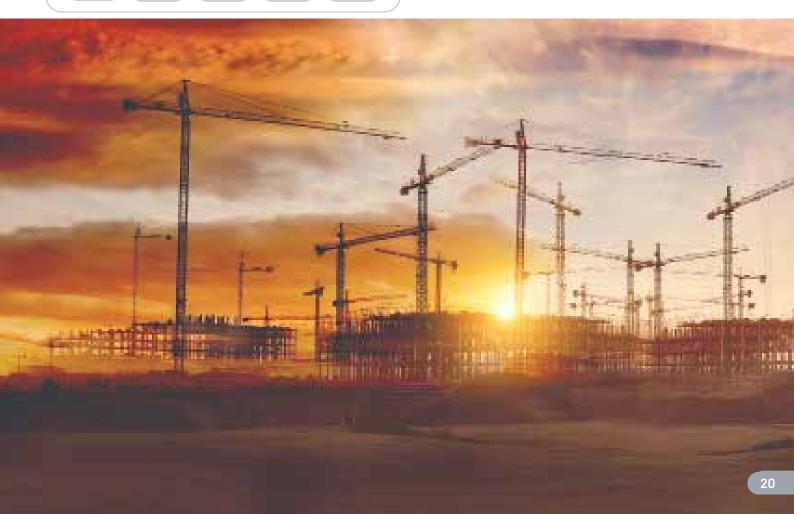














RECEIVER RCV CBB-1 LATEST RECEIVER GENERATION

All-rounder in a compact design

The RCV CBB-1 represents the latest generation of compact interface receivers from ARCON. This new receiver offers a multitude of possibilities, such as two separate CAN interfaces, data logging, error diagnosis via CAN bus and an optional cable control.

INTERFACES: CANopen, CANopen Safety, J1939, Profinet

EtherNet IP, ModBus-TCP and EtherCAT

PROTECTION CLASS:

TEMPERATURE RANGE: -20 up to +70° C approx. 800g WEIGHT: DIMENSIONS: 165 x 115 x 65 mm

FREQUENCY RANGE: 419/429/432-481/863-930MHz; 2.4GHz

OPERATING VOLTAGE: 8 - 30 VDC















ARCON receivers can be mounted directly on the crane. The receivers are protected against the ingress of dust and water and have a breathable GoreTex membrane.



INDUSTRIAL ETHERNET

MAXIMUM CONNECTIVITY - MAXIMUM FLEXIBILITY

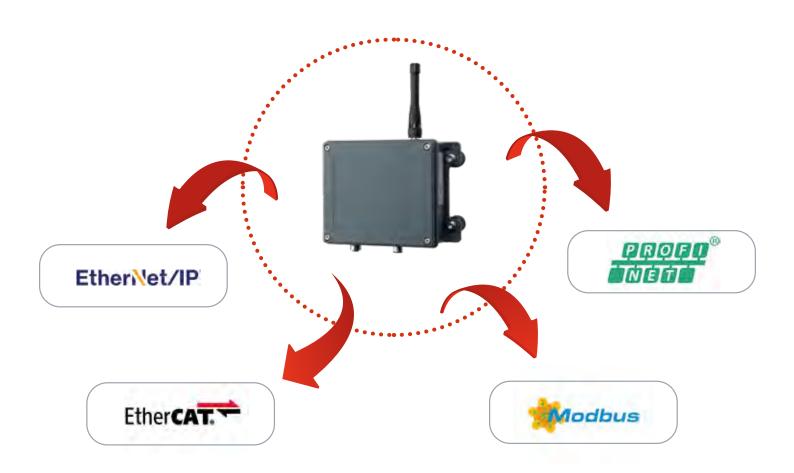
As part of Industrial Ethernet, new networking technologies have been created that adapt the Ethernet standard to industrial environmental conditions.

INDUSTRIAL ETHERNET SOLUTIONS AT ARCON

ARCON has a multitude of possibilities in the field of Industrial Ethernet. With the RCV 14+ Industrial Ethernet, ARCON offers a universal receiver that can be adapted to your requirements by means of software. Various interfaces such as PROFINET, EtherNet IP, ModBus-TCP and EtherCAT are available.

ARCON uses two RJ45 plugs for the standard version RCV 14+ Industrial Ethernet. This means you do not need an additional switch and can avoid additional expenses.

Of course, you can also get your desired plug connection from ARCON.







OUR COLOUR PALETTE



AVAILABLE COLOURS FOR ARCON RADIO REMOTE CONTROLS

ARCON transmitters are delivered by default in the colour combination grey and red. The bright red offers an excellent contrast to the switches, joysticks and the labelling. This gives you an optimal overview of all functions of your ARCON transmitter.

The option of choosing the colours is becoming increasingly important to our customers.

Therefore, with the T3, T5, T6 and T7, ARCON offers you the standard option of having the lower part of the housing in grey or blue.

With the TGD-8, you can choose between the colours grey and blue for the upper part of the housing.



With ARCON, you can choose your colour for all four lower housing parts. The top parts of the TGD-8 housing are also available in grey or blue.

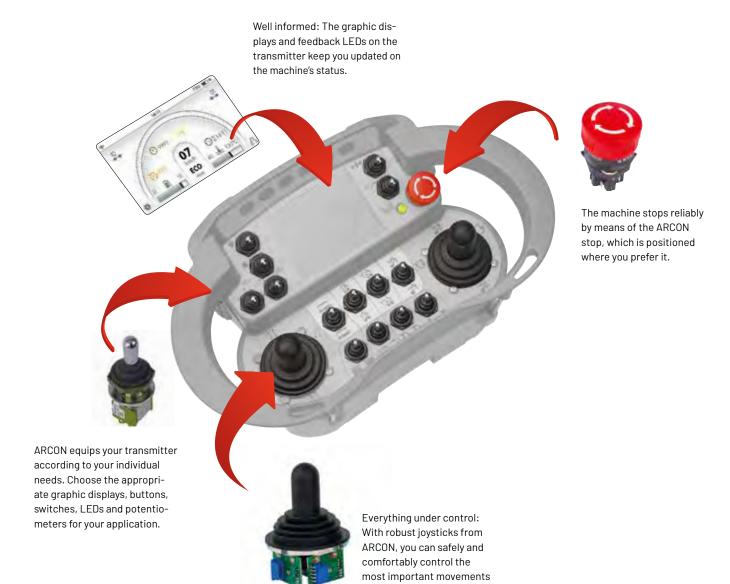
THE PERFECT ASSEMBLY OF YOUR RADIO REMOTE CONTROL

INDIVIDUAL ASSIGNMENT

ARCON's safety radio remote controls are perfectly matched to your application!

Our specialists work together with you to find the best possible positioning of all controls.

At ARCON, the ergonomics and user-friendliness of all joysticks, toggle switches, push-buttons and potentiometers are at the forefront. The distribution of information sources such as LEDs and displays will be discussed with you individually. Get your customised solution at ARCON!



of your machine.



DISPLAYS



GDM-2 display
The GDM-2, with its resolution of 132x32
pixels, is ideally suited to the T3 transmitter and offers an optimal overview of your machine data.



DISPLAYS EVERYTHING IN FOCUS

INDIVIDUAL

DISPLAYS IN DIFFERENT VERSIONS

Information sources are becoming increasingly important for operators of construction machinery, agricultural equipment or when operating municipal vehicles. ARCON has the optimum solution for every individual application. Whether with the monochrome displays of the **GDM series** or the colour graphic displays of the **GDC series**, ARCON has the individual solution for your machine.

The displays were specially developed for outdoor use and can be easily read, despite strong sunlight. With the displays of the GDC series, ARCON offers a wide range of possibilities. These displays have their own processor, with which you can independently program the displays according to your individual needs.

The displays of the GDM series are available in two versions. The GDM-2 is the smaller one, with a resolution of 132x32 pixels. The larger version, the GDM-1, offers a resolution of 128x64 pixels. Both displays can be freely controlled using ASCII characters.





The larger GDM-1, with its resolution of 128x64 pixels, can be integrated in the T5, T6 and the T7 transmitter. With the integrated backlight, you have everything in view even in the most adverse conditions.

STATE-OF-THE-ART COLOUR GRAPHIC DISPLAYS

ARCON's colour graphic displays are available in two sizes (3.5", 4.3"). Both displays can be freely programmed using QT. ARCON provides you with a virtual machine with a pre-configured Linux development environment.

This gives our customers maximum flexibility in the design of their display, and they can change all important settings such as font, font size, backlight and the duty cycle of the display.

A brightness sensor for automatic control of the backlight is available as an option for both displays.

DISPLAYS





BEST OVERVIEW FROM A SAFE DISTANCE

VIDEO SYSTEM OPTION

With the ARCON video system, you always have the best overview of your crane, your construction machinery or your load. This assistance system is compatible with the T5, T6 and T7 housing variants. With the two colour graphic displays of the GDC series, you can choose between a 3.5" or 4.3" display.

With both display variants, you can receive up to 4 camera signals. In combination with the GDC 4.3, it is possible to simultaneously display camera images as well as data feedback. You can use your own cameras or purchase a suitable camera from ARCON.

If you want to use your own camera, it only needs a PAL or an NTSC signal.







- >> Real-time transmission
- >> Reach of up to 75 metres
- Display resolution GDC 3.5: 320x240 pixels Display resolution GDC 4.3: 480x272 pixels
- >> up to 4 cameras possible
- Switchover using rotary selector
- >> Camera connection using PAL and NTSC interfaces
- >> Night vision mode
- >> External video "transmitter" available as an option
- Video feedback with splitscreen and simultaneous data feedback on graphic display GDC 4.3 available

CAMERA

ARCON also offers robust cameras that are compatible with your application. The IP69K-protected devices transmit the machine's image in real time and have motion sensor and night vision mode. With visual contact, a reach of approx. 75 m is possible.

Resolution: 960x480 pixels **Viewing angle:** 150°

Infra-red reach: approx. 10 m
Protection class: IP69K

SAFETY FIRST FOR MORE SAFETY

At ARCON, safety is our top priority. ARCON offers a wide range of tried-and-tested and newly developed safety features:

At ARCON, **STOP** can be implemented up to **CAT. 3 PLe / SIL3**. It puts your machine in a safe state when in dangerous situations.

With the safe **DIGITAL** and **ANALOGUE COMMANDS** over CANopen Safety **(UP TO CAT. 3 PLe / SIL3)**, ARCON offers the highest level of safety.

An optional **TILT SWITCH** is used to detect the inclination of the transmitter or the operator. You can specify the angle and time at which a signal is triggered. Time and angle can be set separately in each direction in the X and Y axes. The Z axis is fixed.

ARCON'S **TWO-HAND OPERATION** ensures that both of the user's hands have to be on the radio transmitter. Only then it is possible to operate the machine.

Another safety feature is the **PUSH TO OPERATE** function. It can be provided either in the joystick (with a push-button) or as a separate push-button anywhere on the transmitter. The customer can freely process this signal in the machine control.

Using the **LOGIN / LOGOUT** system option, you can operate a large number of receivers with just one transmitter. This option can be used for very complex applications, such as the control of offshore cranes in wind farms. ARCON also offers the option of working with two transmitters and one receiver in the LOGIN / LOGOUT procedure.

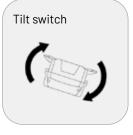
With the **INTEGRATED CHARGING FUNCTION** for the E-Pack S battery, you can charge your radio transmitter WITHOUT INTERRUPTION during operation.

A special feature is the optional cable control, allowing you to switch between radio and cable operation WITHOUT INTERRUPTION.

The LED display always informs you of the current status of the INTEGRATED CHARGING FUNCTION.



Our ARCON safety radio remote controls are always developed with the aim of making operation and work more economical and safer. Choose from a large portfolio of safety features.













Charging function in the transmitter

E-Pack S only

APPROVALS

ARCON relies on the highest quality for its products. We already lay the foundation stone for this during the development phase. At ARCON, the concepts of new products are already discussed and agreed with accredited institutes. Development in line with TÜV is the prerequisite for a successful product that is tested and certified according to the latest standards.

ISO 9001:2015

ARCON is regularly audited by independent testing institutes for compliance with operational procedures. We are very proud that these audits are passed with flying colours and we have a consistently high level of quality according to ISO 9001:2015.

TÜV TYPE EXAMINATION CERTIFICATE

ARCON has a large number of TÜV type examinationcertified radio remote controls pursuant to EN ISO 13849-1 and EN 62061. These examination certificates are being constantly extended.

DNV-GL TYPE EXAMINATION CERTIFICATE

For your offshore applications, ARCON offers a variety of products, which have a DNV-GL examination certificate.

LARGE PORTFOLIO OF RADIO APPROVALS

ARCON safety radio remote controls are certified with various country-specific approvals, such as the FCC for USA, EAC for Russia and MIC for Japan. This is only a small excerpt from ARCON's portfolio. For further information, please contact the ARCON team.

FX PRODUCTS

ARCON has extensive EX approvals such as ATEX, IECEx and NEC 500/505 for the chemicals industry, mining and for many applications in the manufacturing industry.

CERTIFICATES ON REQUEST

If you need additional certificates in order to use an ARCON safety radio remote control for your application, please contact our ARCON team.









Spare parts and accessories

Due to the high load of radio remote controls, spare parts are occasionally needed after a certain period of time. You can easily place your order with ARCON by telephone or email. We always provide you with a helpful ARCON employee at your side and take care of the immediate delivery.



CHARGER BCM-1

100-240VAC / for E-Pack S Battery

EU, UK, US & AUS ADAPTER



also available with:

9-36VDC 9-36VDC VEHICLE ADAPTER FLAT RECEPTACLES



BATTERY E-PACK S

NiMH 3,6V/1,9Ah



CHARGER BCP-M

100-240VAC / for E-Pack M Battery

EU, UK, US & AUS ADAPTER



also available with:

9-36VDC 9-36VDC VEHICLE ADAPTER FLAT RECEPTACLES



BATTERY E-PACK M

Li-lon 3,6V/8,6Ah



BELLY BELT WITH PADDING

T-Series



NECK BELT WITH PADDING

T-Series



SHOULDER BELT

TGD





FOR YOUR SAFETY.

arcon

Safety Radio Remote Controls

ARCON GmbH

Wiesnerstraße 20 4950 Altheim | Austria +43 / 7723 / 21501-0 info@arconremote.com

ARCON GmbH

Branch Office Germany Adalbert-Stifter-Straße 2 84085 Langquaid | Germany +49 / 9452 / 93375-0 info@arconremote.com

www.arconremote.com

Photos | Graphs | Image rights | Copyright: ARCON GmbH istockphoto.com, shutterstock.com, Mirek Kolar Design: komma2 Kuchenbecker