

# User Manual

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## Wireless remote control



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## 1 PREFACE

This manual is for the user and the service personnel of that device. It is not an alternative for the actual instruction. We recommend an instruction by a qualified employee of EDT EURODIMA or by a sales partner that we have authorised.



**All persons involved in start-up, service, maintenance, and/or repair of this device must have fully read and understood that manual.**

For any questions, please get back to the producer or the authorised sales partner.



**Please adhere to our safety measures and descriptions which are highlighted in this text by that sign .**

The wireless remote control has safety measures but nevertheless, operation errors or misuse can lead to dangers.



**Non-observance can lead to**

- **danger for life of user or third parties,**
- **damages at this device or other devices,**
- **damages at buildings,**
- **decreasing the efficiency of the sawing system**

## 2 SAFETY

Read this user manual attentively before you start working. This is especially important for first installation, start-up and maintenance of the remote system.

The user manual is part of the remote control system and must be readily available for users at all times. In the user manual, the word „machine“ is used for the different applications of the remote system.

### 2.1 Intended use

- The remote control system is made for control of machines and for data transfer. Always watch the according work safety and accident prevention regulations.
- Reading the user manual and compliance with the comprised safety notes is also intended use.
- The system may not be used in explosive areas or for control of machines for passenger transport, if it is not accredited explicitly by the producer.
- Changes at the system may only be done by specialised staff that has been trained and authorised by EDT EURODIMA. All changes must be documented in a record that is factory-provided at the producer.
- Safety measures of the system may not be changed, removed or bypassed. Especially changes in any part of the emergency stop system are forbidden.

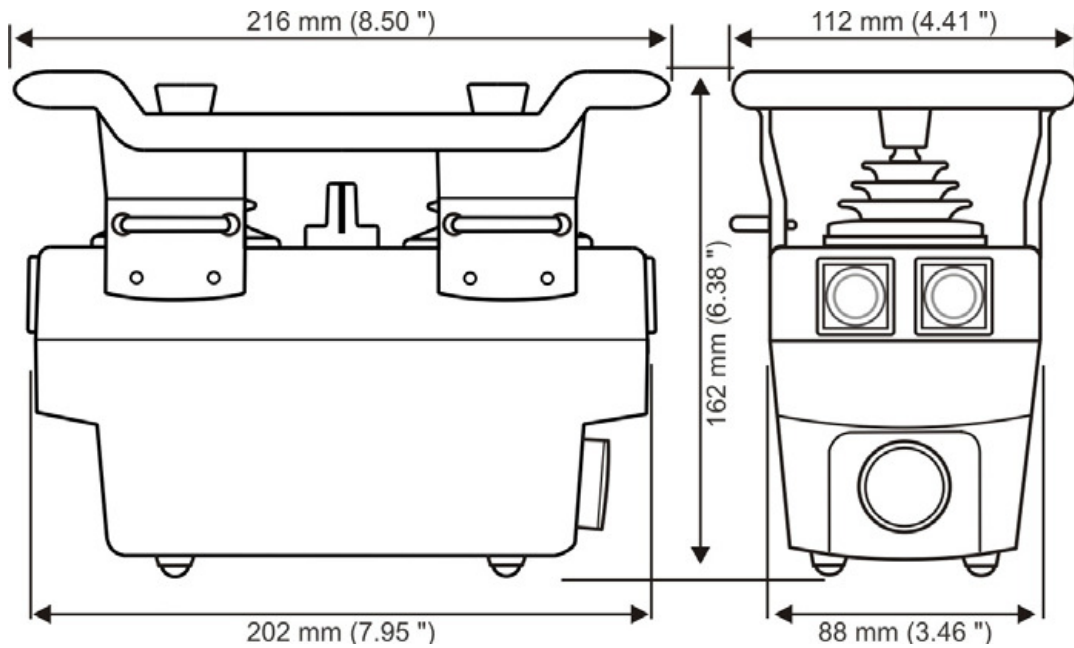
### 2.2 Safety measures at installation and operation

- The electric connection according to the attached wiring plan may only be done by an electrician.
- The receiver may only be opened by trained personnel. Inner parts may be under perilous voltage. The supply voltage of the machine must be turned off before opening the receiver.
- Pay attention to the prohibition of persons in the danger area, especially under loads (cranes!)
- Choose a safe place for remote controlling, where you see all the movements of the machine, the load movements and the surrounding work conditions.
- It is forbidden to put away a remote control with status “on” without supervision. Always turn off the remote sender when it is not needed. This is especially important if you change place, when working without remote control, during breaks, or after end of work. Always secure the remote control against use by unauthorised person, e.g. by shutting away.
- In case of emergency or during incidents, turn off the remote control immediately by pressing the STOP button.
- Only use the remote control in technically perfect condition. Incidents or defects that affect safety must be removed by specialists that are trained and authorised by EDT EURODIMA, before being used again.
- Be aware that the movement directions of the control elements may seemingly change, according to place and perspective to the machine. This is especially valid for rotary cranes if your place is changed from inside the turning circle to its outside. The user must acquaint himself with the sense markings at the machine, prior to starting the machine.
- Let repairs may only be done by specialists that are trained and authorised by EDT EURODIMA. Only original parts and accessories (e.g. batteries) may be used as appliance safety may not be guaranteed and our guarantee will not apply anymore.
- Work cautiously with the remote control, and acquaint yourself with its functions, especially if you it is the first time that you work with it, or if you do so infrequently.
- Prior to every start, check the STOP button function. If you press the STOP button when sender is on, the status LED in the sender must turn out. If it does not turn out, stop the remote system immediately. Remove the battery and the iLOG from the sender and call a service technician.

## 3 TECHNICAL DATA

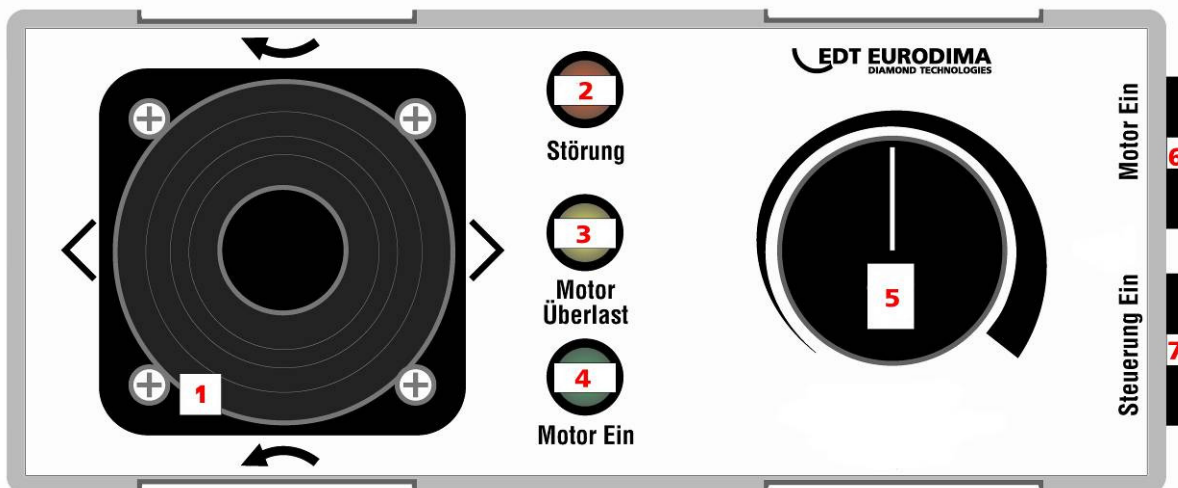
Max. no. commands	25 digital + STOP or 16 digital + 7 prop. + STOP
Frequency ranges	334 – 338 MHz, 400 – 475 MHz1, 865 – 870 MHz, 902 – 928 MHz DECT: 1880 – 1900 MHz 1 not all frequency ranges are available
Channel spacing	12,5 / 20 / 25 / 50 / 250 kHz DECT: 1,728 MHz
Transmission power	TC/TX 641: < 10 mW TC 680/690: < 10 mW TC 681/691: < 5 mW TX 681/691: < 5 mW DECT: nominal 10 mW
Supply voltage	3,6 V
Battery type	BA2230_0 (NiMH)
Battery capacity	2100 mAh
Work time at continuous operation	ca. 20 h
Sender antenna	Internal
Exclusive system addresses	> 1.000.000 possibilities
Betriebstemperaturbereich	-25 °C – 70 °C
Casing material	Fibre-glass reinforced plastics / PA6 GF30
Dimensions	216 x 88 x 162 mm
Weight (incl.battery)	approx. 1.5 kg
Protection class	IP65

## 4 DIMENSIONS



## 5 OPERATION

### 5.1 Display



- |   |  |   |              |
|---|--|---|--------------|
| 1 | 4-way-push-button switch                             | ↑ | cut-in left  |
|   |  | ↓ | cut-in right |
|   |  | < | feed left    |
|   |  | > | feed right   |
| 2 | Error  |   |              |
| 3 | Motor overload                                       |   |              |
| 4 | Motor on   |   |              |
| 5 | Potentiometer for revolution setting feed and cut-in |   |              |
| 6 | Motor on   |   |              |
| 7 | Remote control on/off                                |   |              |

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### 5.2 iLOG

The sender is equipped with the electronic key EDT EURODIMA iLOG. The iLOG contains all data that are needed for the sender operation. Without iLOG, operation is not possible!

According to the model, the iLOG can be used for replacement senders that are identical in construction. When turning on or interrupting the remote connection (e.g. at a connection break or when going over coverage), the remote system reacts with the so-called dead man's constraint.

Release all control elements so that they get back into 0 position, and push the start button. Only then, the machine will react to remote orders again. This prevents the machine from uncontrolled movements after connection disruptions.

### 5.3 Turn on sender

Steps 3 and 4 must be done **within 4 seconds**:

1. Put a charged battery into the battery compartment.
2. Tear the STOP button.
3. Press the start button shortly and release it. If the button is pressed for more than half a second, the sender is turned off!
4. Press the start button once again until the status LED flashes green. Release the button. Now, the sender is ready for operation.
5. According to the application, you have to press the start button once again before commands can be made.

The sender turns off if

- the start button is pressed longer than half a second (see above, point 3)
- the start-up process (step 3 and 4) take longer than 4 seconds
- another button is pressed during the start-up process

Then you have to do the steps 3 and 4 or 3 to 5 again.



**Before starting work, always use the acoustic alarm signal. You alert your colleagues that they have to anticipate machine movements.**

### 5.4 Turn off sender

Press the STOP button.



**If the status LED flashes red in the sender, an acoustic signal sounds, and / or the sender vibrates, you have to change the battery. Otherwise, the sender turns off within minutes. Recharge the battery only with the according charger.**

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### 5.5 Automatic sender shutdown (APO function)

The sender is equipped with an automatic sender shutdown (APO function) and shuts down automatically approx. 15 min. after the last command entry. This function is for safety and prolongs the battery life. To reactivate the sender after an automatic shutdown, you have to push the start button.



**The automatic sender shutdown does not release the user from the responsibility to turn off the sender with the STOP button if it is not needed anymore.**

## 6 BATTERY AND BATTERY CHARGER

### 6.1 NiMH battery

The capacity of the battery depends on its age and the surrounding temperature. Older batteries lose their capacity by and by. Temperatures below 0 °C and above 40 °C make the capacity decrease quicker.

- Charge the battery completely before first use and/or after storage for longer than 6 months. Consider that the battery reaches its full capacity only after 3 to 5 charging cycles (charge and discharge completely).
- Charge the battery only with the associated charger.
- Charge the battery at a surrounding temperature of 0 to 40 °C.
- Charge the battery only if the status LED in the sender flashes red and an acoustic signal sounds.
- Charge the battery completely before it is stored for a long period. Otherwise, it can lead to a total discharge.
- Store the battery at room temperature.
- Protect the battery from short-circuit and always use the provided protection cap for storage.

At proper handling, more than 500 load cycles can be reached.

### 6.2 Charger

According to customer needs, AC or DC chargers are available.

Please consider the following:

- Only charge the batteries that are indicated on the type plate.
- Do not use the charger in explosive areas.
- Use the charger only with the voltage that is indicated on the bottom side.
- Use the charger only in cars or in closed rooms.
- Use the charger only within the indicated temperatures.
- Protect the charger from heating, dust and humidity.
- Do not cover the charger during use.
- Take away the charger from power if it is not used.
- Stop use of the charger immediately if there is an error at the device or the cable.
- Do not make technical changes at the charger or the cable.
- Repairs may only be done by a specialist.



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The current status of operation is shown via three LEDs:

LED green: Illuminated if battery is fully charged

LED orange: Illuminated if battery is being charged

LED red: Illuminated if battery is defect or totally discharged



**If a battery that is totally discharged is put into the charger, the red LED is illuminated for a few seconds, before the charging starts (orange LED illuminated).**

### 6.3 QA108600 / QD108300 / QD308300 with EG type approval

The charger is delivered with a connection cable with appropriate plug.

Charge battery:

1. Connect the charger to current supply via the connection cable.
2. Put the battery into the charging shaft.

Charging starts automatically.

#### Technical data

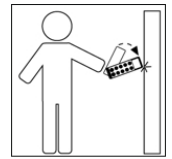
Supply voltage	100 – 240 V AC (QA108600) 10 – 30 V DC (QD108300 / QD308300)
Charging time	approx. 3 hours
Working temperature	10 – 40 °C
Casing material	Plastics
Protection class	II

## 7 OPTIONS

Availability of the following options depends on model and configuration of your remote control system.

### 7.1 Safety features

The safety features allow a fast automatic shutdown of the remote controlling in specific emergency situations. Possible dangers through unintended machine activations are avoided.

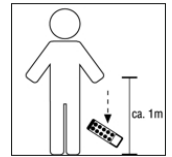


**shock-off** can trigger an automatic shutdown of the control when a strike is put on the sender; e.g. if the sender is hit by a hard device and loses control.

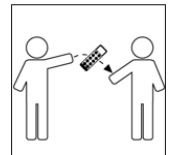


**roll-detect** can detect rolling down of the sender and trigger quick shutdown.

**zero-g** can detect falling or casting of the sender and trigger a shutdown of the sender within seconds.



**inclination switch** can trigger an automatic shutdown if the sender exceeds a certain time in with the inclination angle of 130° to 170°, and/or lies with front side down.



If the sender was switched off with shock-off/roll-detect/zero-g or inclination switch, you must press the start button until the status LED flashes green. Then, the sender is ready for use, again.



**The safety features do not release the user from the responsibility to turn off the sender with the STOP button if it is not needed anymore.**

### 7.2 Frequency switch

#### 7.2.1 Fixed frequency

If a frequency is indicated in the battery place of the sender (e.g. 433,500 MHz), the sender is equipped with a fixed frequency. If a change of frequency should be necessary because the channel is taken by another user, please contact your service department.

#### 7.2.2 Frequency switch via scanner

Sender and receiver are equipped with four frequencies.

If a frequency channel is used, you can switch to another at the sender's rotary switch. The scanner in the receiver follows the sender automatically to the new frequency within a second.

#### 7.2.3 Manual frequency forwarding

If the type plate in the sender's battery place has the indication man, the sender is equipped with the function manual frequency forwarding. With this function, you can change the frequency channel during remote control operation. Press the start button until an acoustic signal sounds. Then, release the button.

If all available frequencies should be taken, please contact your service department.

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### 7.2.4 EDT EURODIMA AFS

If **AFS** is indicated on the type plate in the battery place of the sender, it is equipped with AFS – automatic frequency selection.

When starting the sender, AFS checks if the last used frequency channel is available. If it is used, the system finds automatically an available frequency channel and saves it. If the currently used frequency channel is taken by another frequency system, you have to turn off and on the sender again so that AFS can change to an available frequency channel. The option AFS also includes the function manual frequency forwarding.



**For an optimal performance of AFS, all other remote control systems in direct surrounding (e.g. the construction site) should be turned on before starting the remote control for the first time. So, AFS can detect automatically which remote channels are taken by other systems, and choose an appropriate, available channel for the own system.**

**Furthermore, when starting the control for the first time, the user should pay attention to a realistic distance to the receiver and machine.**

### 7.2.5 EDT EURODIMA AFM

If **AFM** is indicated on the type plate in the battery place of the sender, it is equipped with AFM – automatic frequency management.

AFM detects continually any available frequency channels. If the currently used frequency channel is taken by another system, AFM changes automatically to an available frequency channel.

### 7.3 EDT EURODIMA masterkey

This option allows the user to exchange a defect sender against a replacement sender without any problems. On the masterkey, all system-dependent data such as frequency and system address are placed. This information are transmitted when putting the key into the replacement sender.

The data transfer only works for senders that are equipped with these options. Otherwise, the masterkey is just to switch on and off the sender. If a sender without preparation for the masterkey is operating with a masterkey (the key has the same mechanical closure), it continues to function on “its” internally programmed receiver (see type plate).

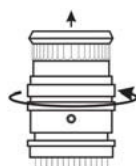
### 7.4 Address switch via coded plug

The coded plug activates a preselected frequency and address coding that match the data of the related receiver.

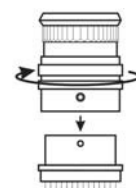
If the coded plug is used in an identical replacement sender, it gets the same data like the original sender, and so, it can access its receiver.

#### Change coded plug:

Turn union nut to the left, take off the coded plug to the top



Put coded plug in the bush of the replacement sender. Turn union nut to the right and lock coded plug.



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- **Without coded plug, operation is not possible.**
- **If the coded plug is torn off during operation, the sender turns off.**
- **The coded plug has the serial number of the related receiver.**

### 7.5 Sender upcoding

The sender is activated by commands only and turns off automatically 7 seconds after entry of the last command. So, for example, self-regulating doors can be opened and closed by different senders.

During longer breaks, turn off the sender by pressing STOP. The function sender upcoding does also save power of the battery.



**The option sender upcoding does not release the user from the responsibility to turn off the sender with the STOP button if it is not needed anymore.**

## 8 SERVICE AND MAINTENANCE

We recommend to have your remote control checked once per year by EDT EURODIMA or an authorised dealer. The system is widely maintenance-free. However, please consider the following:

- Constantly check the functionality of the STOP button. Sediments at the switch can affect mechanism and function.
- Check the bellows / rubber seals of the elements for their leak tightness. Defect bellows or rubber seals must be changed immediately, as humidity and dirt affect the functions.
- Never clean the sender with a pressure washer or with sharp or pointed devices.
- The sender batteries must be charged and discharged regularly.

### In case of defect



**Never work with a defect remote control system!**

- Never try to interfere into the electronics of a remote control system. We would have to reject guarantee claims.
  - Send the defect device immediately to your dealer or the producer. They are well acquainted with the system and dispose of the necessary OEM parts.
  - Always send in sender and receiver, and add a detailed error description.
  - Do not forget to indicate your detailed address and your telephone number so that you can be reached in case of questions.
- To avoid transport damages, please use the reusable form package that you received at the first delivery of the system, or pad the system well. Deliver it free to your dealer or to this address:  
 EDT EURODIMA GmbH  
 Lagerstrasse 6  
 A- 5071 Wals/Salzburg
- If you want to bring a defect system yourself, please call for an appointment.

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### 9 TROUBLE SHOOTING

Please check the functions first with cabin or cable control!

Problem	Possible reason	Measures
No sender reaction when starting up	➤ No voltage	➤ Check battery contacts for damage or dirt ➤ Put charged battery into battery slot ➤ Charge battery fully
Low voltage alert already after short operation time	➤ Battery contacts damaged or dirty ➤ Battery not charged ➤ Battery defect	➤ Check battery contacts for damage or dirt ➤ Charge battery fully ➤ Check if the charging processes correctly ➤ Check sender function with a fully charged or a replacement battery
The status LED in the sender flashes green, but no commands are executed	➤ Receiver has no voltage ➤ No remote connection ➤ Command „crane on“ was not given	➤ Check connection cable to receiver ➤ Check functions via LEDs to control lamps of the receiver
Some commands are not executed	➤ Receiver defect ➤ Connection line to machine is interrupted	➤ Check the connection cable to the receiver for firm seating

If none of these measures lead to resolving the problem, call your service technician, your dealer or EDT EURODIMA.

### 10 LIABILITY AND WARRANTY

Unauthorized modifications and changes to the machine as well as non-observance of the operating instructions void the manufacturer's liability for resulting damage.

We only warrant error-free operation for original replacement parts manufactured by EDT EURODIMA GMBH. Any guarantees and warranty become void if machines or machine parts have been opened. This warranty is valid on condition that the machine is used, handled, maintained and cleaned according to the operating instructions.

Claims under the warranty will be recognized up to 12 months from the date of purchase (invoice date).

The warranty includes the repair or replacement of defective parts free of charge. Parts subject to normal wear are excluded from this warranty.

EDT EURODIMA is not liable for direct, indirect or consequential damage from defects, loss or expenses in connection with or resulting from the unsuitability of the device for a specific purpose. Implied assurances of use or suitability for a specific purpose are expressly excluded.