

//ANGEL React

# Shirt System Clip System

Quick Start Guide



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ANGEL React Shirt System and Clip System Quick Start Guide, Version ENU 1.0

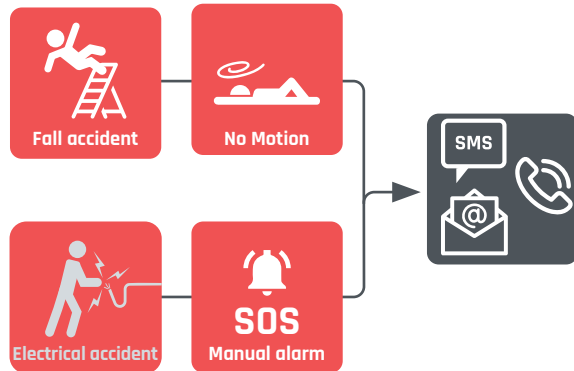
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The users bear full responsibility for any application of our products.

# Welcome

Thank you for opting for an ANGEL React System, which we have developed to increase your safety at work. ANGEL React notices whenever you get into a dangerous situation while working and sets the emergency call chain in motion.



In the event of an emergency and depending on the configuration, the ANGEL React App sends text messages, emails, and an automated voice call to your emergency contacts. They should be able to help you straight away, as your location will also be sent to them.

(Shirt System only)

## How to get started



1. Install the ANGEL React App on your smartphone and connect it to the Genius via Bluetooth®.

2. Follow the instructions in the manual [www.adresys.com/en/angelreact/faq/manual](http://www.adresys.com/en/angelreact/faq/manual)

3. Now you're all set up to work safely. We hope you enjoy using the product!

# About ANGEL React

ANGEL React is available as a Shirt System and Clip System.

The Shirt System detects:

- Electrical accidents
- Falls from a height
- Motionlessness
- Elapsed Task Timer



The Clip System detects:

- Falls from a height
- Motionlessness
- Elapsed Task Timer



Both systems comprise

- Genius: an electronic data processing unit that is connected to the ANGEL React App via Bluetooth®. With the Shirt System it is attached to the left upper arm, and as a Clip it can be attached to a waistband, for example.
- ANGEL React App on a smartphone: this carries out emergency communication.

The Watchdog is an add-on of ANGEL React. It deactivates the voltage source on which you are currently working. You can find out further information about the Watchdog from your ANGEL React sales partner.

ANGEL React is a product from ADRESYS Adaptive Regelsysteme Gesellschaft m.b.H.

# Safety instructions

This Quick Start Guide gives you a brief overview of the ANGEL React equipment and its handling. It contains important instructions for the safe, proper, and efficient use of this equipment. Any use of the ANGEL React equipment other than that described in this Quick Start Guide is improper use. Improper use may impair the safety of the equipment and result in property damage or personal injury.

- Read this Quick Start Guide before using your ANGEL React Shirt System or Clip System.
- Follow all the safety instructions, warnings, and other instructions it contains.
- Only use the ANGEL React System as described in the Quick Start Guide and User Manual.
- Always keep the Quick Start Guide or the manual ready to hand where you are using your ANGEL React System.

Reading the Quick Start Guide/manual alone does not release you from the obligation to independently and responsibly apply all rules, regulations, and laws relevant to your work.

- Only use the ANGEL React Shirt or Clip System in compliance with all applicable company-specific rules, national and international safety regulations, and regulations on accident prevention, occupational safety, and environmental protection.

**NOTE:** Neither we, nor the manufacturer, nor the supplier will be liable for any injury or damage resulting from the use of the ANGEL React System for purposes other than those for which it was intended. Correct and safety-conscious use also includes observing the instructions in this Quick Start Guide.

This section only contains some of the legal information, and has been shortened to make it easier to read.

The complete, current, and legally binding documents, along with our terms of business, terms of use, and software license conditions can be found here:  
[www.adresys.com/legal](http://www.adresys.com/legal)

The following warnings are used in this Quick Start Guide:

## Danger



Failure to observe the relevant safety instructions will result in serious injury or even death.

## Warning



Failure to observe the relevant safety instructions may result in serious injury or even death.

## Caution



Failure to observe the relevant safety instructions may result in minor or moderate injury.

ANGEL React helps you in critical work situations and can save lives. It is not personal safety equipment as defined in Regulation (EU) 2016/425. ANGEL React is not designed or intended for the diagnosis, prevention, monitoring, or treatment of diseases, injuries, or for other medical purposes. It is not a medical device as defined in Regulation (EU) 2017/745 of 05/25/2017.

Some of the conditions for the use and performance of ANGEL React are outside ADRESYS's sphere of influence. ADRESYS aims to ensure high availability of the services, but is dependent on third party services (network operator, GPS signal) over which ADRESYS has no influence. ADRESYS does not guarantee interruption-free or fault-free operation, or suitability for a specific purpose. No guarantees can be accepted with respect to specific availability times and modes of operation for ANGEL React (including the app). Furthermore, due to the differing areas of use, ADRESYS does not guarantee that every emergency situation will be detected.

## Caution



Risk due to damage

- Do not use the ANGEL React equipment if you notice any mechanical or other damage, or if any other unusual situations arise.
- Contact our Support immediately if you become aware of problems or damage.
- Only have the equipment repaired by ADRESYS employees or a service contracting party listed on the website

## Caution



Malfunction due to opening the equipment components

- Do not open the system components of your ANGEL React equipment.
- Do not touch the electronic components as this may result in injury and malfunctions.
- Do not perform your own repairs on the equipment.
- Only have your equipment repaired by ADRESYS employees or a listed service contracting party.

## Caution



Malfunction due to improper handling of the equipment

- Do not expose the Genius to extreme heat or direct sunlight (e.g., inside a closed car). This could damage the lithium-ion battery.
- Protect the electronic components against moisture and high levels of humidity.

## Warning



Danger due to a lack of attention

- Only use your ANGEL React Shirt or Clip System if the circumstances permit.
- Do not allow the use of the ANGEL React System to distract you from your immediate surroundings and activity.

## Warning

Danger due to lack of data or Bluetooth® connection

If the data or Bluetooth® connection is not activated, or if these connections are unavailable, the system cannot work reliably or make emergency calls.



- Ensure that the ANGEL React App and the Genius are always connected via Bluetooth®.
- Check the notifications in the app.
- Start the Task Timer if your smartphone does not have a permanent data connection.

## Danger



Serious health consequences with implanted medical devices

The integrated magnetic contacts may affect the reliability of other electronic devices if they are worn too close to the heart.

- Consult a doctor before using the ANGEL React Shirt System if you wear a pacemaker, defibrillator, or other implanted electronic devices. Clarify whether the small, imperceptible currents in the microampere range could impair the function of these devices.

## Danger



Risk of injury due to arc fault

- Do not use ANGEL React as arc fault protection.
- Wear arc-resistant work clothing.
- Comply with national regulations and internal company provisions for the prevention of arc faults.

## Danger



Risk of injury due to an equipment malfunction

- A Genius malfunction may be indicated by smoke or an unusual odor.
- In the event of a malfunction, immediately remove the Genius from the T-shirt or the Clip cradle, and contact Support.

## Danger



Risk of injury due to explosion

- Never use the equipment in the presence of flammable gases as this may result in fire or explosion.
- Never use your ANGEL React equipment in a potentially explosive working environment.

## Danger



Serious injuries due to non-observance of the safety instructions

ANGEL React does not protect you against contact with voltage or electrical accidents.

- Always observe the applicable safety regulations and your duty of care.
- Do not deliberately induce contact with voltage.

**NOTE:** ANGEL React may only be used as an additional safety measure.

# How the system works








## Colors of the ANGEL React Shirt System/Clip System

Our colors provide information about, and reflect the status of the ANGEL React Shirt System or Clip System. The Genius and the app communicate using the same color.

- **GREEN** – READY – Genius and the app are working correctly.
- **ORANGE** – LIMITED – There are problems. Note the status message in the app.
- **RED** – NOT READY – The system is not working perfectly. Action is essential. Note the status message.
- **BLUE** (on the Genius only) – PAIRING MODE – The Genius must flash blue before pairing with the app is possible.
- **ALL COLORS** (on the Genius only) – FIRMWARE-UPDATE – Stop working and wait until the update is complete.

**NOTE:** If you are using the Watchdog, be aware that it uses a different color logic.

## Symbols in the ANGEL React App

	Genius	The Genius processes all the data that is recorded by the sensors. The following are displayed here: <ul style="list-style-type: none"> <li>• Optional: Skin contact with the ANGEL React T-shirt electrodes</li> <li>• Genius battery level</li> </ul>
	Emergency call	Emergency call communication services: <ul style="list-style-type: none"> <li>• Shows the two possible alarm chains: via emergency contacts, or emergency contacts + emergency call center</li> <li>• Information about account details and location</li> <li>• Test using the practice alarm</li> </ul>
	Optional: Electrical accident	The ANGEL React Shirt System detects an electrical accident by measuring the voltage drop between both upper arms.
	Fall from a height	ANGEL React detects a free drop with impact. If this is followed by motionlessness, it assumes a fall from a height.
	No Motion	ANGEL React detects motionlessness when you don't move for an extended period of time.
	Watchdog	The ANGEL React Watchdog ensures that the electric circuit on which you are working is deactivated in the event an emergency is reported.
	Task Timer	The Task Timer can be used in the following situations: <ul style="list-style-type: none"> <li>• For activities involving increased risk</li> <li>• If your smartphone has no data connection</li> </ul> The start of a timer is also transferred to the server so that if you do not acknowledge a pre-alarm, an alarm can also be triggered without a data connection.

# Setting up the system

## Install the ANGEL React App on your smartphone

- Download the App ANGEL React. Use the smartphone that you carry with you during your daily work.
- Deactivate the battery saver option/battery optimization
- Allow the app to access:
  - Bluetooth®
  - Location
  - Phone calls and text messages



Link to  
ANGEL React App

## Connect the Genius to the app

- Watch the pairing video.
- Make a note of the serial number and key on the back of the Genius so that you have this to hand when pairing.

**NOTE:** Once you are done with pairing, the Genius often requires a firmware update. This can take up to 20 minutes. Please place the Genius on the charger during the update.



Link to  
pairing video

## Enter the details of your emergency contacts

- Your emergency contacts will be notified in the event of an emergency by the ANGEL React App. For this reason, choose people nearby that could quickly help if you have an accident.
- Create several contacts and make one of them your primary emergency contact.
- Before every job, activate the appropriate contacts for your work situation in the portal.
- Raise a practice alarm to check that your emergency contacts receive the emergency text messages/emails and an automated voice call.

Your emergency contacts will receive a link to the **ANGEL React Help Coordination Portal** in the emergency text messages/emails with detailed information about the accident. It lists the steps your emergency contacts can follow in order to help you.

**NOTE:** Optionally, you can also book the paid service of an external emergency call center, if this service is available in your country.

# Usage

## Daily Use

- Before starting your work, make sure the Genius is charged.
- Enable Bluetooth® and the location on your smartphone, and start the app.
- Click the Genius into the cradle. The app will usually connect to your Genius automatically; the status in the app will change to READY.
- Keep your smartphone nearby at all times. The Genius will beep if the Bluetooth® connection is lost.
- At the end of your work day, take the Genius out of the cradle and charge it overnight.
- Disable Bluetooth® and the location when you have finished work to save your smartphone's battery.

### Important information about washing the ANGEL React T-Shirt:

- Remove the Genius and the Genius cradle before washing.
- Do not tumble dry or iron the T-shirt because it contains electrical conductors.

## Detecting emergency situations

In the event of a fall from a height and motionlessness, the Shirt System and the Clip System first raise a pre-alarm. If you do not acknowledge the pre-alarm, your system issues an alarm and sends an emergency message to your emergency contacts and the emergency call center, if you have subscribed to this service. If the ANGEL React Shirt System detects an electrical accident, it raises an alarm immediately. The pre-alarm is not used in this case.

**NOTE:** Your smartphone requires a data connection in order to send emergency information. If this connection is unavailable, the data will be sent the next time you are connected. Before working without a data connection, you can set the Task Timer.

## Task Timer

You need the Task Timer in the following situations:

- before carrying out high-risk work on your own
- if your smartphone will temporarily have no access to a data connection, and so will be unable to place an emergency call, e.g., in a basement.

You program the Task Timer for a certain period of activity, and it saves the last known GPS position. If you do not deactivate it after the programmed time, it sets the emergency response chain in motion because it will assume there is an emergency.

**NOTE:** Do not start the Task Timer unless your smartphone has enough charge for the Task Timer runtime, plus at least one hour in reserve. Otherwise you will be unable to deactivate the Task Timer, or receive any calls, and the emergency response chain will be set in motion.

# Technical data

The operating conditions define the physical environment, and the parameters for using the Genius. You must only use the Genius under the following operating conditions:

Temperature	
Operation	-10 to +55 °C
Storage	-10 to +55 °C
Storage: optimum temperature to maximize battery life	+10 to +25 °C
while charging	0 to +45 °C
Air humidity	10–90%, no condensation

- Charging time: no more than 2 hours
- Genius running time: typically 12 hours (1 working day)
- Battery type: Lithium-ion battery

# Space for your notes



# Support

## To contact us:

ADRESYS Adaptive Regelsysteme Gesellschaft m.b.H.  
Oberndorferstraße 35/C  
5020 Salzburg  
Contact: [support@adresys.com](mailto:support@adresys.com)  
Support: +43 59495 6969

We are available from Monday to Friday between 8:00 am and 6:00 pm. If you are unable to reach us, please leave us a message and we will get back to you directly. We make every effort to respond to all your concerns as quickly as possible.



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# Watchdog

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ANGEL React Watchdog Quick Start Guide, Version ENU 1.0

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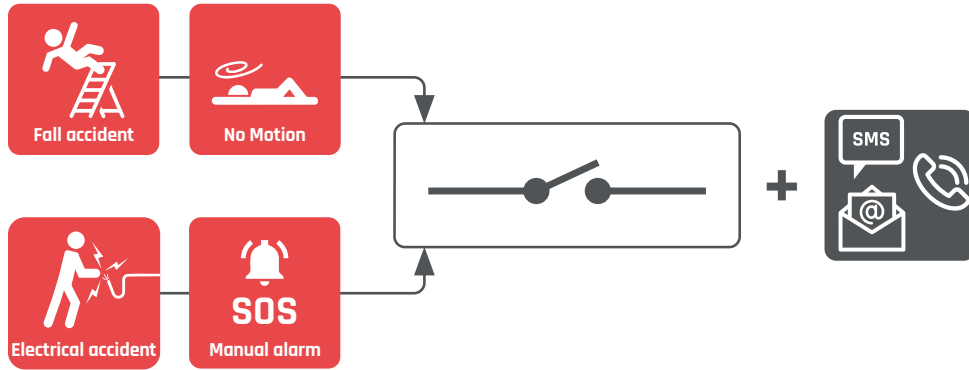
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The user bears full responsibility for any application of our products.

# Welcome

Thank you for opting for an ANGEL React Watchdog. As part of the ANGEL React program, we developed the Watchdog to make your working environment safer.

ANGEL React notices whenever you get into a dangerous situation while working and immediately reacts. Always use the ANGEL React Watchdog together with an ANGEL React Shirt System (in special cases an ANGEL React Clip System).



In the event of an emergency, the ANGEL React App sends text messages, emails, and an automated voice call to your emergency contacts. They should be able to help you straight away, as your location will also be sent to them.

The Watchdog also has a potential-free contact to ensure that the electric circuit on which you are working is deactivated.

## How to get started

1. Scan the USER QR code on your ANGEL React Watchdog. Click on the Watchdog icon to call up the QR scanner in your ANGEL React App. Your app will from now on automatically connect to the ANGEL React Watchdog.
2. Follow the instructions in the manual [www.adresys.com/en/angelreact/faq/manual](http://www.adresys.com/en/angelreact/faq/manual)
3. Now you're all set up to work safely. We hope you enjoy using the product.



The ANGEL React Watchdog is a product of ADRESYS Adaptive Regelsysteme Gesellschaft m.b.H.

# Safety instructions

This Quick Start Guide contains important instructions for the safe, proper, and efficient use of the ANGEL React Watchdog. Any use of the Watchdog other than that described in this Quick Start Guide is improper use. Improper use may impair the safety of the equipment and result in property damage or personal injury.

- Read this Quick Start Guide and the manual before using your ANGEL React Watchdog.
- Follow all the safety instructions, warnings, and other instructions it contains.
- Always use the Watchdog exactly as described in the manual.
- Only use the Watchdog in compliance with all applicable company-specific rules, national and international safety regulations, and the regulations concerning accident prevention, occupational safety, and environmental protection.
- Always keep the Quick Start Guide or the manual ready to hand where you are using your ANGEL React Watchdog.

**NOTE:** Neither we nor the manufacturer nor the supplier will be liable for any injury or damage resulting from the use of the Watchdog for purposes other than those for which it was intended or from its improper use. Correct and safety-conscious use also includes observing the instructions in this Quick Start Guide.

This section only contains some of the legal information and has been shortened to make it easier to read.

The complete, current, and legally binding documents, along with our terms of business, terms of use, and software license conditions can be found here:

[www.adresys.com/en/legal](http://www.adresys.com/en/legal)

The following warnings are used in this manual:

## Danger



Failure to observe the relevant safety instructions will result in serious injury or even death.

## Warning



Failure to observe the relevant safety instructions may result in serious injury or even death.

## Caution



Failure to observe the relevant safety instructions may result in minor or moderate injury.

Reading the manual alone does not release you from the obligation to apply all rules, regulations, and laws relevant to your work in an independent and responsible manner.

The ANGEL React Watchdog helps you in critical work situations and can save lives. It is not personal safety equipment as defined in Regulation (EU) 2016/425. The Watchdog is not a medical device as defined in Regulation (EU) 2017/745 of 05/25/2017.

Some of the preconditions for the use and performance of the ANGEL React Watchdog are outside ADRESYS's sphere of influence. ADRESYS aims to ensure high availability of its services, but is dependent on third party services (network operator, GPS signal) over which ADRESYS has no influence. ADRESYS does not guarantee interruption-free or fault-free operation, a controlled shutdown, or suitability for a specific purpose. No guarantees can be accepted with respect to specific availability times and modes of operation of ANGEL React (including the ANGEL app), or for a controlled shutdown by the Watchdog. Furthermore, due to the differing areas of use, ADRESYS does not guarantee that every emergency situation will be detected.

## Caution



Risk due to damage

- Do not use the ANGEL React Watchdog if you notice any mechanical or other damage, or if any other unusual situations arise.
- Contact our Support immediately if you become aware of problems or damage.
- Only have the equipment repaired by ADRESYS staff or service contractors listed on our website.

## Caution



Malfunction due to opening the equipment components

- Do not open the Watchdog.
- Do not attempt to carry out any repairs to the Watchdog yourself.
- Only have the device repaired by ADRESYS staff.

## Caution



Malfunction due to improper handling of the equipment

- Protect the Watchdog from rain and excessive humidity.

## Warning



Danger due to lack of Bluetooth® connection

If the Bluetooth® or data connection has not been enabled, or is missing, the ANGEL React equipment will not work reliably and will not be able to send any emergency calls. Additionally, the Watchdog will not be able to deactivate the electric circuit. You cannot assume that the system will be able to call for help or break power circuits in every situation.

- Ensure that the ANGEL React App and the Genius as well as the Genius and the Watchdog, are always connected via Bluetooth®.
- Check the notifications in the ANGEL React App.
- If your smartphone does not have a permanent internet connection, activate the task timer.

## Warning



Danger due to a lack of attention

- Only use the Watchdog if the circumstances permit.
- Do not allow the use of the Watchdog to distract you from your immediate surroundings and activity.

## Danger



Danger due to unsuitable or missing restart protection when working with the Watchdog

- Make sure that your system has a working restart protection. If this is not the case (or you are not sure about it), use the ANGEL React Restart Inhibit.
- The Restart Inhibit must only be installed in existing emergency shutdown circuits by trained, qualified electrical personnel.
- Do not connect the Watchdog to loads that must not be switched off, such as emergency lights.

## Danger



Risk of injury due to a device malfunction

A malfunction of the Watchdog may be indicated by smoke or an unusual odor.

- Disconnect the Watchdog from the power supply and contact our Support team.

## Danger



Risk of injury due to explosion

- Never use ANGEL React equipment in the presence of flammable gases, as this may result in a fire or an explosion.
- Never use the Watchdog in a potentially explosive working environment.

## Danger



Serious injury if the safety instructions are not observed

The ANGEL React equipment does not protect you against voltage contact or electrical accidents.

- The ANGEL React Watchdog is not a shutdown device in the sense of a disconnecter (e.g., a circuit breaker)
- The Watchdog may only be used as an additional safety measure. It cannot carry out an all-pole disconnection.
- Always observe the applicable safety regulations and your duty of care.
- Do not deliberately induce voltage contact.
- Ensure that a restart lock is always present.

**NOTE:** ANGEL React may only be used as an additional safety measure.

# Technical data

## Operating conditions

The operating conditions define the physical environment and the parameters for using the ANGEL React Watchdog. You must only use the Watchdog under the following operating conditions:

Temperature	
Operation	-10 to +55 °C
Storage	-10 to +55 °C
Rated current	500 mA
Rated voltage	5 V, +/- 10%
Maximum operating height	2000m above sea level
Usage	Indoors
Air humidity	5–95%rh, non-condensing
Overvoltage category	OVC II
Shutdown	Single pole
Pollution degree	PD2
Protection class	2, totally insulated

## Data for potential-free contact

AC General Use	126VA 42VAC/3A Utilization Category AC-15
DC General use	36W 60VDC/0.6A at L/R=40ms
AC resistive load	168W 42VAC/4A Utilization category AC-1
DC resistive load	90W 60VDC/1.5A resistive load
AC switching capacity	250VA limited by internal fuse
DC switching capacity	250W limited by internal fuse

Data of the connection cable to the potential-free contact	250 Vrms/5A, 2x0,5mm <sup>2</sup> , 2m length 3000V Ader/Ader with Sub-D-connector: AD-S04128-00 with ANGEL React Connector: AD-S04130-00 with open end: AD-S04131-00
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The Watchdog requires no maintenance and must not be cleaned.

Space for  
your notes

# Support

## To contact us:

ADRESYS Adaptive Regelsysteme Gesellschaft m.b.H.  
Oberndorferstraße 35/C  
5020 Salzburg  
Contact: [support@adresys.com](mailto:support@adresys.com)  
Support: +43 59495 6969

We are available from Monday to Friday between 8:00 am and 6:00 pm. If you are unable to reach us, please leave us a message and we will get back to you directly. We make every effort to respond to all your concerns as quickly as possible.



AD-S04141-00

Art.Nr.: AD-S04141-00



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# Restart Inhibit

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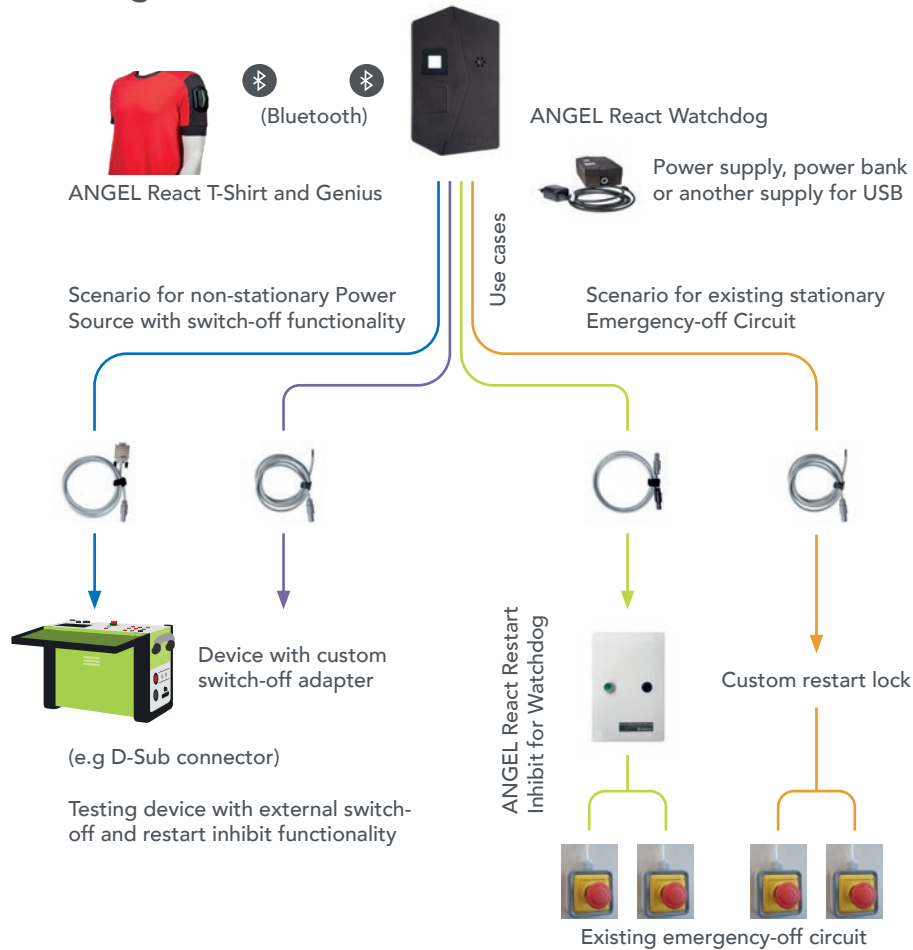
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# Welcome

Thank you for opting for an ANGEL React Restart Inhibit. You can use it in combination with the Watchdog. It enables the Watchdog to be correctly connected to an existing emergency stop circuit.

## Watchdog - Overview



The Restart Inhibit is wired to an existing emergency stop circuit. It must also be supplied with mains voltage.

# Safety instruction

This Quick Start Guide contains important instructions for the safe, proper, and efficient use of your ANGEL React Restart Inhibit. Any use of the Restart Inhibit other than that described in this Quick Start Guide is improper use. Improper use may impair the safety of the equipment and result in property damage or personal injury.

- Read this Quick Start Guide and the manual before using your Restart Inhibit.
- Follow all the safety instructions, warnings, and other instructions it contains.
- Only use the Restart Inhibit as described in the manual.
- Only use the Restart Inhibit in compliance with all valid company-specific rules, national and international safety regulations, and regulations on accident prevention, occupational safety, and environmental protection.
- Always keep the Quick Start Guide or the manual ready to hand where you are using your Restart Inhibit.

**NOTE:** Neither we nor the manufacturer nor the supplier will be liable for any injury or damage resulting from the use of the Restart Inhibit for purposes other than those for which it was intended. Correct and safety-conscious use also includes observing the instructions in this Quick Start Guide.

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## Caution



Risk due to damage

- Do not install the Restart Inhibit if the housing has been damaged during transport.
- Take the Restart Inhibit out of operation if you notice mechanical or other damage, or any unusual conditions.
- Contact our Support if you become aware of problems and damage.
- Only have the Restart Inhibit repaired by ADRESYS employees or by service contract partners listed on the website.

## Caution



Malfunction due to improper handling of the equipment

- Protect the Restart Inhibit from humidity and bright sunlight.

## Danger



Danger due to improper installation

- Improper installation of the Restart Inhibit can result in personal injury and property damage.
- Only have the Restart Inhibit connected to the emergency stop circuit by a trained and qualified electrician.

## Danger



Danger when opening the Restart Inhibit

Touching live parts inside the Restart Inhibit may result in life-threatening or even fatal injuries.

- The Restart Inhibit must only be opened by a trained and qualified electrician.
- Only have the fuses of a connected Restart Inhibit changed by an electrician.
- Keep the key for the cover of the Restart Inhibit in a safe place to prevent unauthorized persons from opening it.

## Danger



Danger when using incorrect fuses

- If incorrect fuses are used, the safe functioning of the device cannot be guaranteed.

## Danger



Danger due to device malfunction

A malfunction of the Restart Inhibit may be indicated by smoke or an unusual odor.

- Take the device out of operation.
- Have a qualified electrician uninstall the Restart Inhibit.
- Contact Support.

## Danger



Serious injuries due to non-observance of the safety instructions

- The ANGEL React equipment does not protect you against contact with electricity or electrical accidents.
- Always observe the applicable safety regulations and your duty of care.
- Do not deliberately induce contact with electricity.

**NOTE:** ANGEL React may only be used as an additional safety measure.

# Installation

# Usage

The Restart Inhibit must only be installed in existing emergency stop circuits by trained and qualified electricians.

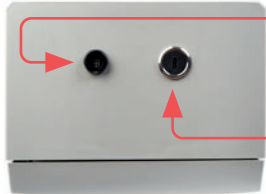
- Observe the circuit diagram on the inside of the Restart Inhibit cover.
- Install the Restart Inhibit vertically at +/- 90 degrees.

In general, the following applies for the underside of the Restart Inhibit:



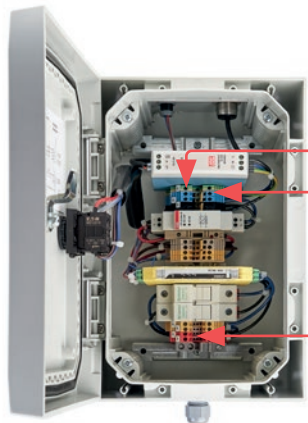
- I/O lines connection for wiring into the emergency stop circuit(s)
- Voltage supply for the Restart Inhibit 100-240 VAC

And for the top of the Restart Inhibit:



- Socket for the Watchdog plug (Lemo socket)
- USB port for the Watchdog power supply

Connections inside the Restart Inhibit:



- Connect the power cable wires (100-240 VAC) for the Restart Inhibit according to the connection diagram on the inside of the cover.
- Wire the cables of the emergency stop circuit(s) to the red and yellow terminals according to the connection diagram on the inside of the cover.

**NOTE:** Following successful installation, the proper function of the Restart Inhibit must be checked by a qualified specialist.

Connect your Watchdog to the Restart Inhibit via the connections on the top of the Restart Inhibit:

- The Lemo socket on the top of the Restart Inhibit is used to connect the ANGEL React Watchdog Connection Cable.
  - If no suitable cable is enclosed for connecting the Watchdog and Restart Inhibit, one must be ordered from ADRESYS.
  - The order number is AD-S04130-00.
  - A different cable cannot be used.
- The USB-C port on the top of the Restart Inhibit is used for the Watchdog voltage supply.

If, following the detection of an emergency, you wish to reactivate your Restart Inhibit and thus the entire ANGEL React System, proceed as follows:

- Acknowledge the emergency in the ANGEL React App: Click on the Watchdog icon and set the Watchdog switch to active again.
- Press the green illuminated restart button on the Restart Inhibit. This should go out after being pressed once.

If the restart button light does not go out permanently after pressing, there may be various reasons:

- You have not reset the Watchdog properly after tripping.
- There is no connection between the Watchdog and the Restart Inhibit.
- The Watchdog is not being supplied with power.

The **short-circuit adapter** can be used if the Restart Inhibit is not connected to the Watchdog, but a restart of the emergency stop circuit is still to be enabled.

# Technical data

You can find the complete technical data in the user manual.  
Only the most important data is listed here.

## Operating conditions

The operating conditions define the physical environment and the parameters for using the ANGEL React Restart Inhibit.

Use these under the following operating conditions.

Temperature	
Operation	-10 bis +55 °C
Storage	-10 bis +55 °C
Maximum operating height	2000 m above sea level
Usage	Indoors, no direct sunlight
IP protection	IP 20
Housing flammability	UL 94-V0
Protection class	2, totally insulated
Air humidity	5 – 95 %rh, non-condensing
Pollution degree	PD2

The Restart Inhibit requires no maintenance and must not be cleaned.

## Connections

Shutdown	One or two-pin, depending on the selected wiring type
Input voltage for internal supply	100-240VAC/0,75A max.
Internal power consumption	Max. 15 W

## Data for potential-free contacts

Voltage rating	12-250V AC/DC
Current rating	3mA – 4A AC/DC

## Connections

I/O lines connection	2x PG11 screw connection
Watchdog connection	1x six-pin black Lemo socket
USB-C port connection:	For supplying external devices (Watchdog), max. 5 VDC/2 A

## Watchdog connection cable

Cable data	300 Vrms/5 A, 2x0.5 mm <sup>2</sup> , 2 m length
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# Support

## To contact us:

ADRESYS Adaptive Regelsysteme Gesellschaft m.b.H.  
Oberndorferstraße 35/C  
5020 Salzburg  
Contact: [support@adresys.com](mailto:support@adresys.com)  
Support: +43 59495 6969

We are available from Monday to Friday between 8:00 am and 6:00 pm. If you are unable to reach us, please leave us a message and we will get back to you directly. We make every effort to respond to all your concerns as quickly as possible.



AD-S04147-00

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