GEWA REC2 Andromeda Aids Database

GEWA REC2 Andromeda Aids Database User Manual

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GEWA

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Introduction

Product Description
Andromeda REC2 is a programmable IR receiver with 2 relay outputs with alternating relay contacts. The receiver can be programmed with all GewaLink channels or coded channels (4096). The receiver's relay can be programmed to function in a bistable or a monostable manner. The receiver has an internal IR detector. Andromeda is designed to be easy to program, but it also provides more advanced settings to meet a range of different applications. You can choose between Monostable-, Bistable-, Public Function or Polycode. Settings can be made for how long time the relay will pull and the time delay before the relay is to be activated.

The following versions of Andromeda REC2 are available:

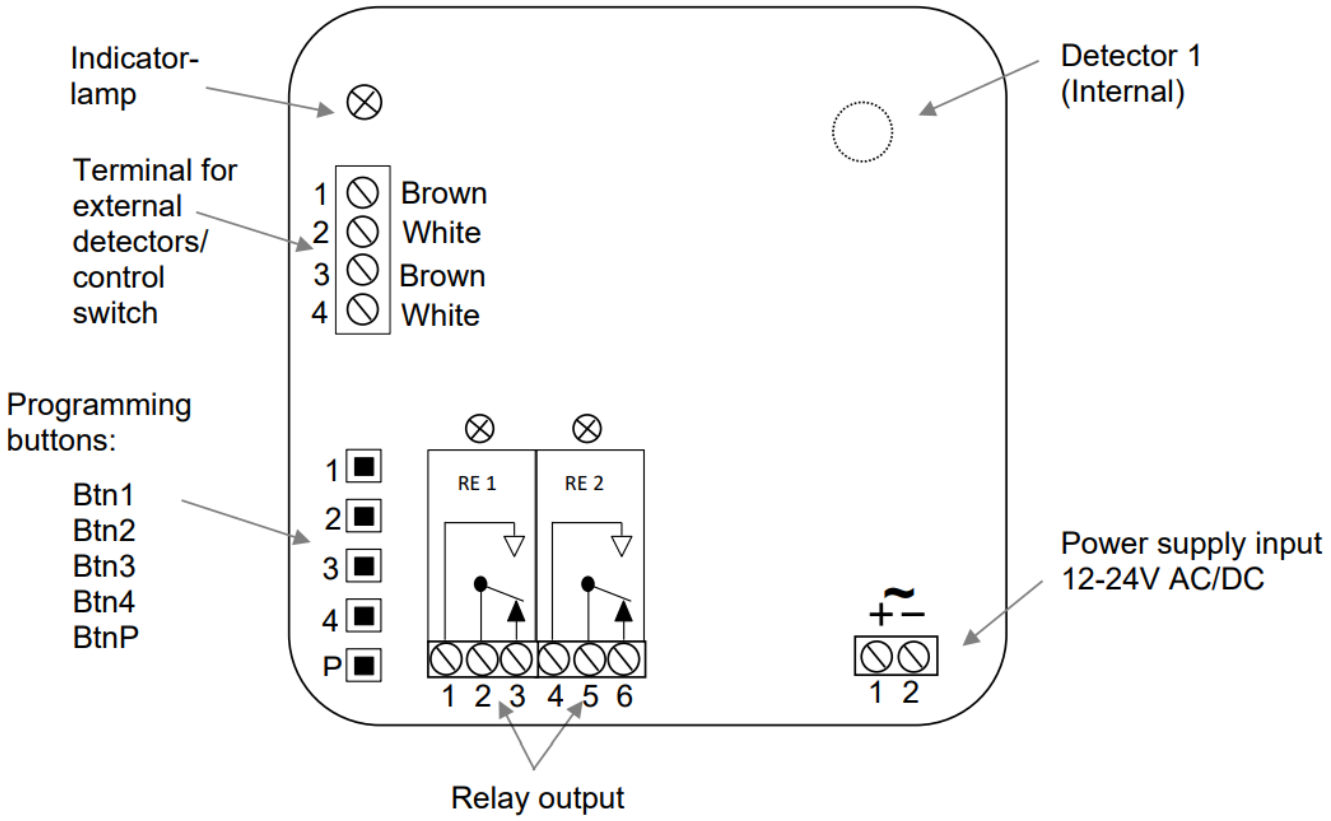
Art.no	Item	Description
419812	IR-REC2	IR receiver for indoor use. 2 relay output.

- The receiver must not be used to control life-critical functions, where people can be seriously injured
- If the controlled function requires a continuous power supply in order not to cause injury to a person, battery backup must be used.

Intended purpose

Andromeda REC2 is intended to support people with motor, cognitive or visual impairments to remotely control electronic equipment at home. It can receive IR and GEWA radio signals from remote controls and use relay outputs to control electronic equipment. The device is intended for indoor use.

Connections
All terminals are detachable so that they can be removed before connecting wires. The figure shows how wires are to be connected.



External detector
The detector is the actual eye that receives the IR signal. There is an internal detector on the circuit board of the receiver. The colors of the wires are to be connected as shown in the figure when connecting an external detector. Make sure that the wires are correctly connected when connecting a detector. There are two terminals for connecting external detectors. It is possible to connect more than two external detectors by connecting them in parallel to the existing terminals. A maximum of 5 pcs can be connected.
NOTE: The range will be reduced if the detector eye is covered or hidden in some way, for example by curtains or furniture.

Connecting control switch
There are two terminals for the connection of control switches to Andromeda. A control switch is connected to the terminal for external detectors. For example, an elbow switch can be connected.
NOTE: When the relay is activated by a control switch, the relay is held about 0.5 seconds after releasing the control switch.

Relay Connection
The receiver has two alternating relay contacts. Inductive loads, such as motors and relays, should be connected through a disturbance filter. The maximum relay loading is specified in Product specifications.

Power supply
The receiver is powered with 12-24V AC/DC (-10% – +20%).

Simple programming
Andromeda is designed to be easy to program. Follow the instructions below for programming the most common uses. The IR receiver can be programmed with GewaLink-channels 0-127 (channel 62 has no function) or one coded channel (4096). The selection is also made during programming whether a particular relay is to function in a monostable or a bistable manner. A Gewa IR transmitter is required to program the receiver. Monostable functioning = The relay is activated as long as the button on the IR transmitter is held down.

Bistable functioning = The relay is activated when the button on the IR transmitter is held down and released. The second time the button is held down and released, the relay will be deactivated.
NOTE: The relevant relay is activated during the programming. This may cause an inadvertent activation of some

equipment.

Program relay for IR and Monostable functioning

1. Press the selected button on the IR transmitter and, at the same time, press the programming button for the selected relay on the IR receiver.
2. Wait until the indicator lamp flashes and the relay is activated.
3. Release the programming button (within 2 seconds) and the button on the IR transmitter.
4. Check the function by pressing the selected button on the IR transmitter.

Program relay for IR and Bistable functioning

1. Press the selected button on the IR transmitter and, at the same time, press the programming button for the selected relay on the IR receiver.
2. Wait until the indicator lamp flashes and the relay is activated. Keep the button pressed for 2 seconds.
3. Release the programming button and the button on the IR transmitter.
4. Check the function by pressing the selected button on the IR transmitter.

If you are not satisfied with the selected channel (button on the IR-transmitter) or function, simply repeat the procedure. Remember that if the programming button is held down for less than 2 seconds, the relay is programmed with a monostable function. If it is held down for 2 seconds, the relay is programmed with a bistable function.

Advanced programming
Andromeda receiver provides more advanced settings to meet a range of different applications. You can choose between Monostable/Bistable/Public Function/Polycode, time settings for how long the relay will pull, and time delay before the relay is to be activated. See the figure below.

Public function =	The relay is activated by all GewaLink-channels or all coded 4096-channels (setting), e.g., for automatic doors in public spaces.
Polycode =	A sequence of 4 GewaLink-channels, e.g. a four-digit access code.
Max time =	Maximum time that the relay is activated, then you have to re-activate the relay with the IR-transmitter. Various time can be set.
Min time =	When sending a short time with the transmitter, the relay is activated for a pre-set time after you release the button on the IR-transmitter. Various times can be set.
Delayed On time =	Delay time. The time that the button on the IR-transmitter should be pressed down before the relay is activated. Various times can be set.

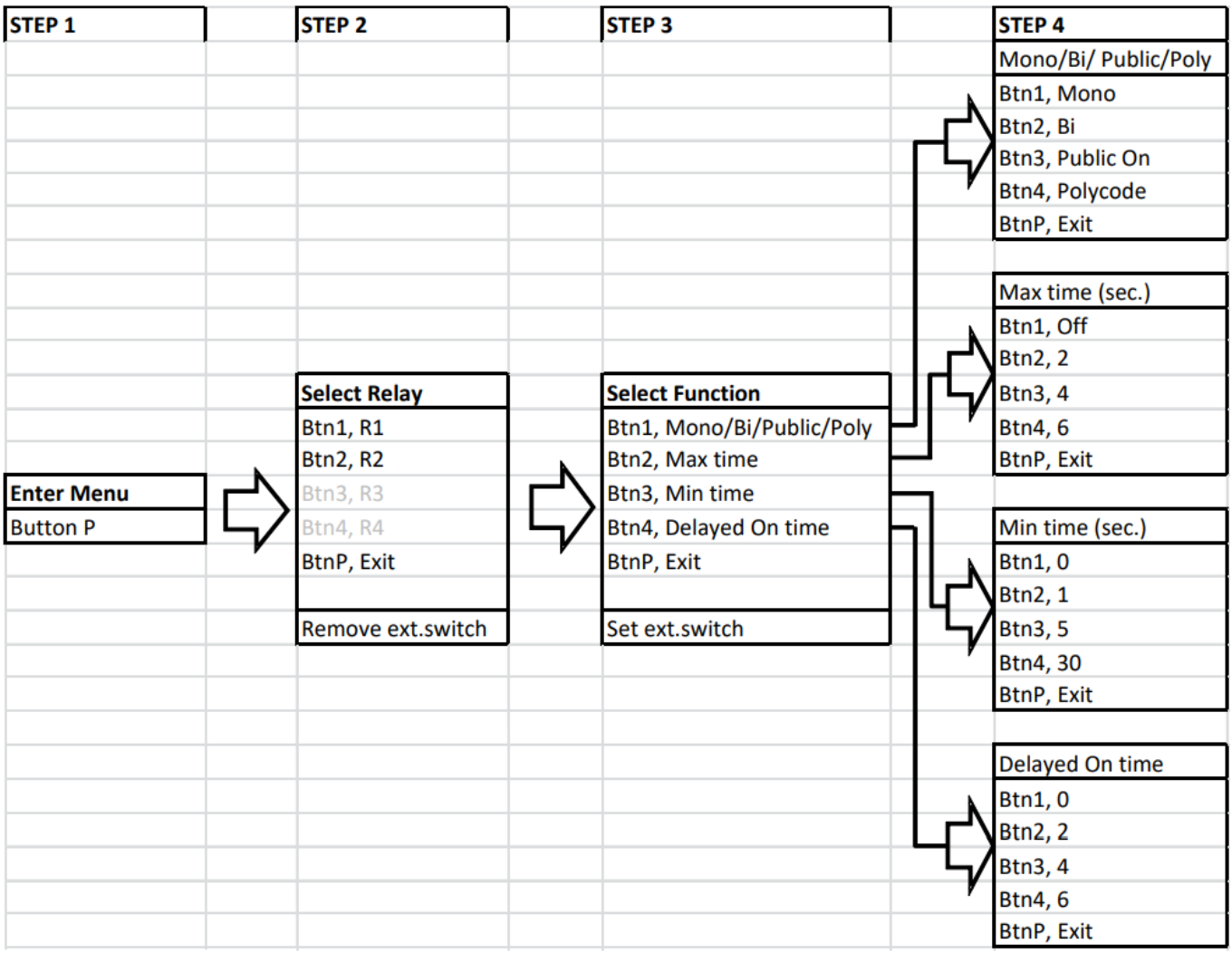
Programming relay with advanced options
To program Andromeda with advanced options, go to the setup menu. See the figure below for the selection of settings. Do as follows:

1. Press the programming button P.
2. Select the relay to be programmed (step 2 in the figure).
3. Select the desired function according to step 3.
4. Depending on the selected function, different choices can be made, see Step 4

Andromeda communicates with flashes and draws of the relay if the setting was successful or failed. After a successful setting the setting is saved automatically. If a setting is incorrect or if a choice is not made within about 10 seconds, Andromeda returns to normal mode and informs “Fail”.

Message
Success: 3 flashes and simultaneous 3 draws by the relay.
Fail: 8 flashes.

Advanced options overview
The figure below shows the receiver’s different advanced settings options.



Examples of programming
Adding or removing an external switch
Do as follows to add an external switch:

1. Press the programming button P.
2. Select the relay to be activated by the external switch and press the programming button for the selected relay.
3. Press the external switch.
4. Done! Check the function by pressing the external switch.

Do as follows to remove an external switch:

1. Press the programming button P.

2. Press the external switch whose function is to be removed.
3. Done! Check if the external switch has been removed.

Example 1: Setting “Public function” for Relay 2
Note that “Public function” can be set for all GewaLink channels or all coded 4096 channels. The default setting is all GewaLink-channels. The selected type for “Public function” is set by recording any GewaLink-channel or coded 4096-channel to the selected relay.
Note that “Public function” is deleted, for security reasons, when an IR-channel is recorded for a relay. The “Public function” must always be selected after the IR recording. First, program Relay 2 for monostable function with all GewaLink-channels, follow the instruction Program Relay for IR and Monostable functioning on page 15.

Continue by programming the function of the relay (according to the table):

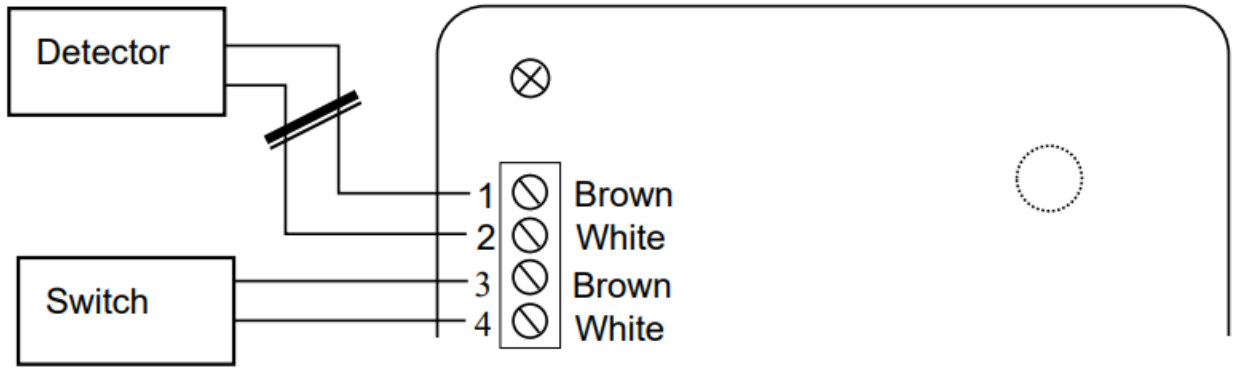
1. Press the programming button P.
2. Press Btn2 (Selects Relay 2)
3. Press Btn1 (Selects ../Public/..)
4. Press Btn3 (Selects Public function On)
5. Done! (Success: 3 flashes and simultaneously 3 draws by the relay.)

Example 2: Setting “Polycode” for Relay 1
Polycode is a sequence of 4 GewaLink-channels, e.g. four-digit access code. The sequence can consist of GewaLink channels and/or coded 4096 channels.
Do as follows to program the function for the relay (according to the table):

1. Press the programming button P.
2. Press Btn1 (Selects Relay 1)
3. Press Btn1 (Selects ../Polycode/..)
4. Press Btn4 (Recording sequence starts) |
5. The indicator lamp flashes 2 times, press the desired button on the IR transmitter.
6. Release the button on the IR transmitter when the indicator lamp flashes 1 time.
7. Repeat steps 5 and 6 for all four IR codes of the Polycode.
8. Done! (Success: 3 flashes and simultaneously 3 draws by the relay.)

Typical Installation of Door Automatics

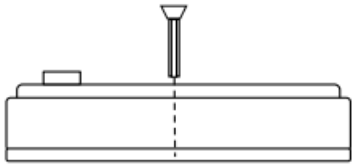
When installation is made for controlling door automatics with an additional external detector outdoors and control switch (e.g., elbow switch) indoors, the external detector and the control switches must be connected on separate terminals for external connections (1-2/Brown-White and 3-4/Brown-White).
NOTE: If the external detector and the control switch are connected and programmed for the same terminal, any short circuit of the detector/detector cable will be registered as a press on the control! switch, and the relay is activated (door opens!).



Default setting
Andromeda comes preset with Monostable functioning and GewaLink-channel 16-17 on relay 1-2.

Resetting to the default setting
To restore Andromeda to the default setting, press and hold the programming button P for 5 seconds until the indicator lamp flashes, and then press the programming button P again within 2 seconds when the indicator lamp remains lit.

Attaching the lid
On model IR-REC2 it is possible to attach the lid with the included screws.



Cleaning
Dip a cloth into water with a little detergent in it and wring it out well. This can then be used to clean the outer casing of the receiver.

Product specifications

Supply voltage:	12-24V AC/DC (-10% - +20%)
Maximum current drawn when idle:	10mA (relay inactive)
Maximum current drawn when idle:	15mA (2 detectors, relay inactive)
Maximum current drawn:	55mA (2 detectors, relay active)
Maximum relay load:	3A, 24V AC/DC resistive load
Maximum number of detectors:	6, including internal detector
Programming channels:	GewaLink-channels 0-127 (channel 62 is without function), one coded channel (4096).
Ambient temperature:	-20° - +35°C, (-4° - +95°F)
Surroundings:	Indoors: IR-REC2, (IP-21)
Dimensions:	IR-REC2: 96 x 96 x 36mm
Estimated lifetime:	5 years

Storage and disposal

Storage Keep the product indoors at room temperature and away from moisture. Recycling Waste Electrical and Electronic Equipment The product contains electronic components that must be recycled. When the product is no longer in use, hand it into a recycling centre for waste electrical and electronic equipment.

Important information
Before you use the product, read and understand the contents of this user manual.

Safety definitions
WARNING: Risk of injury or death if the instructions are not followed.
CAUTION: Risk of damage to the product if the instructions are not followed.
NOTE: Information that is necessary in a given situation.

Serious incidents
if a serious incident related to the product occurs, report this to the manufacturer and the competent authority of your country. A serious incident directly or indirectly led, might have led or might lead to the death of a patient, user or other person; the temporary or permanent serious deterioration of a patient's, user's or other person's state of health; or a serious public health threat. Conformance with requirements for medical devices Andromeda REC2 is marketed as a technical aid for people with disabilities. It complies with all requirements, regulations and directives for medical devices.

Product liability
The product is developed and risk-assessed according to ISO 14971. The manual and the technical specifications are made according to the safety assessments in the risk analysis. Always consider the safety when using the product. Abilia AB does not take responsibility for any consequences following the incorrect use or installation of the product. Any form of damage or tampering with the product invalidates the warranty and disclaims the manufacturer's liability. The estimated lifetime of the product applies when used by its intended use and maintenance instructions.

Documents / Resources

	GEWA REC2 Andromeda Aids Database [pdf] User Manual REC2 Andromeda Aids Database, REC2, Andromeda Aids Database, Aids Database, Database

References

- art.no
- User Manual