

WPC-02

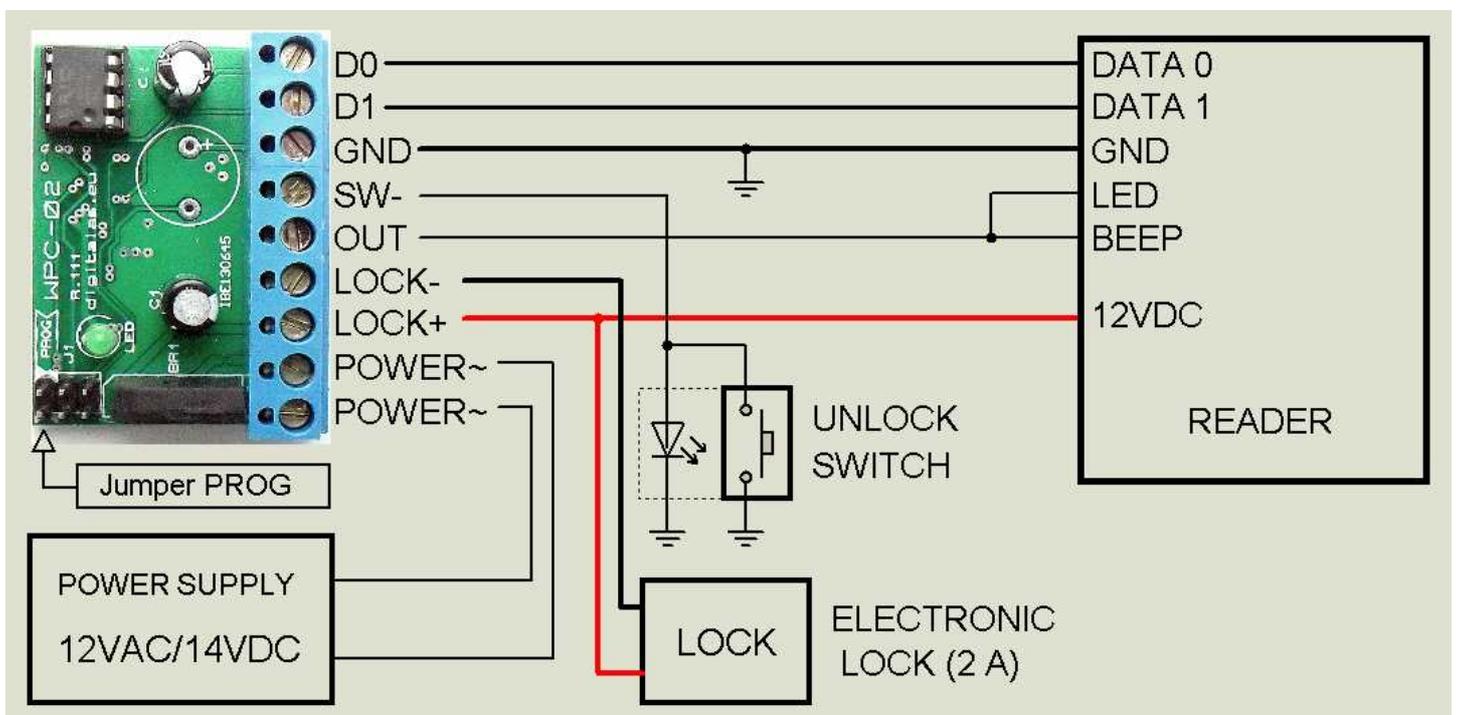
User Manual

WPC-02 – is an autonomous Weigand interface controller, designed to receive and process Weigand 26 data. Weigand 26 data protocol is often used in access control systems. The controller WPC-02 is easy to use and easy to program.

Specifications:

- ◆ Programmable lock type (Electromagnet/Electronic Bolt/Trigger).
- ◆ Unlock delay time – from 1 to 99 seconds
- ◆ Special function – *Collect All New Tags*.
- ◆ 4 *MASTER* / 8 *Admin* / 2024 User Tags.
- ◆ All function is programmed by using *MASTER* Tag.
- ◆ Easy to use and easy to program.

WPC-02 Wiring diagram:



NOTE. Connect all wires first, and then switch the power supply ON. It is recommended before first use to make full system reset (see part 3. Full System Reset).

1. Setting-up the Controller.

- 1.1. Follow the wiring diagram and connect the circuit. Make a full system reset (recommended for the first use only).
- 1.2. Enroll at least one *MASTER* Tag. **NOTE. When enrolling any new MASTER Tag, all MASTER Tags enrolled before going to be deleted.**
- 1.3. Follow the Programming instructions, change controller settings that you need and enroll User/Admin Tags.
- 1.4. Set-up is done.

2. Enroll *MASTER* Tag.

1. Put the jumper PROG ON and wait 2 sec. for long beep, and 2 sec. more for short beep;
2. Enroll Master Tags one after other (max 4 Tags);
3. Take the jumper PROG OFF.

NOTE. When enrolling any new MASTER Tag, all MASTER Tags enrolled before going to be deleted.

3. Full System Reset.

1. Put the jumper PROG ON and wait 2 sec. for long beep;
2. Take the jumper PROG OFF and wait 2 sec. for long beep;
3. Put the jumper PROG ON and wait 2 sec. for long beep;
4. Take the jumper PROG OFF and wait 2 sec. for long beep. After sound signal controller will erase all data on the controller memory, and will return factory settings values. After reset controller gives two beeps and returns into standby mode.

4. Programming mode.

When controller is in programming mode lock contacts (LOCK+, LOCK-) becomes OPEN, which means that no power for electronic lock is provided. Controller automatically returns to standby mode in 16 seconds after last operation, or manually when choosing the last programming function (see programmable functions table).

When enter Programming mode, by default is set function No. 1. After you choose another function, you have 5 seconds to make next operation, otherwise controller returns to function No. 1.

4.1. Programmable Functions and Factory Settings.

Function No.:	Function name and description	Factory Setting
No.1	<u>Enroll User Tags (max 2024 Tags)</u>	
No.2	<u>Electronic Lock Type.</u> <i>1. Electromagnet</i> – lock contacts „LOCK+“ „LOCK-“ continually gives power (max current 3A). Controller cuts the power when OPEN. <i>2. Electronic Bolt</i> – lock contacts „LOCK+“ „LOCK-“ continually gives NO power. Controller gives power pulse when OPEN (max current 3A). <i>3. Trigger mode</i> – It's a flip-flop mode, when Lock power is switched from one state to another when enrolled Tag was read.	Electromagnet
No.3	<u>Unlock Delay Time.</u> From 1 to 99 seconds	5 seconds
No.4	<u>Collect All New Tags.</u> <i>1. Disable.</i> <i>2. Enable.</i> When this function is enabled, all the fresh Tags will be able to unlock the door and going to be enrolled to the memory as an User Tags. If you have already enrolled Tag, it will only unlock the door.	Disable
No.5	<u>Erase All User Tags.</u> All 2024 User Tags will be erased.	
No.6	<u>Erase Single User Tag.</u> You can erase single Tag that you have. If Tag was lost, you can erase it by it's number on the list (1 - 2024).	
No.7	<u>Enroll Admin Tags (max 8 Tags).</u>	
No.8	<u>Erase Admin Tag.</u> You can erase single Tag that you have. If Tag was lost, you can erase it by it's number on the list (1 - 8).	
No.9	<u>Restore Factory Settings.</u> Factory Settings will be restored (Tags will NOT be erased).	
No.10	Return to Standby Mode.	

4.2. Enter Programming Mode.

To enter the Programming mode, read *MASTER* Tag. If Tag is correct you will hear 10 short beeps as a confirmation. When enter Programming mode, by default is set function No. 1.

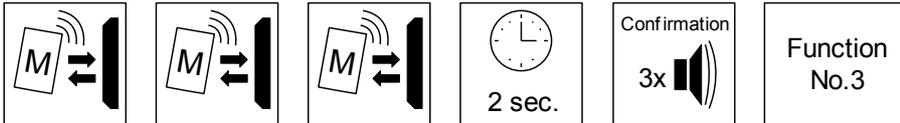
e. g. enter programming mode:



4.3. Select Programming Function.

Read *MASTER* Tag every second the number of times corresponding which function you need and wait 2 seconds for confirmation (number of beeps equal to function number).

e. g. select Function No.3:



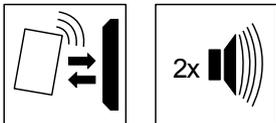
4.4 Programming.

No.1 Enroll User Tags.

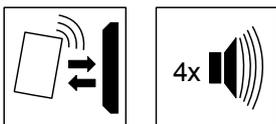
Select Function No.1 and read fresh Tags one after other. Tags going to be saved as User Tags, and you will hear a confirmation signal – one beep:



If current Tag is already enrolled, you will hear double beep:



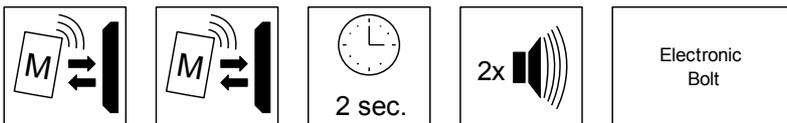
4 beeps means that memory is full:



No.2 Electronic Lock Type (1-electromagnet / 2-electronic bolt / 3-trigger mode).

Select Function No.2, wait for confirmation, and read *MASTER* tag number of times corresponding which function type you want to select, and wait 2 seconds for confirmation.

e. g. select an electronic bolt type:

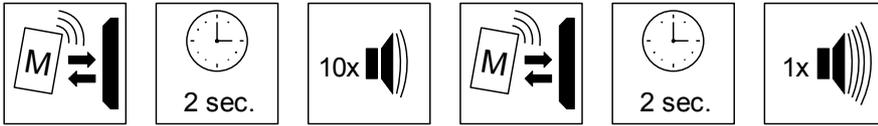


If you will not make any operation in 5 seconds, controller will return to the function No.1 automatically.

No.3 Unlock Delay Time (1 - 99) seconds.

Select Function No.3, wait for confirmation, then read *MASTER* Tag and wait 3 seconds. After this time controller gives one beep every one second. The number of beeps is equal to the Unlock Delay Time in seconds. To confirm Unlock Delay Time, read *MASTER* Tag, and wait for confirmation signal.

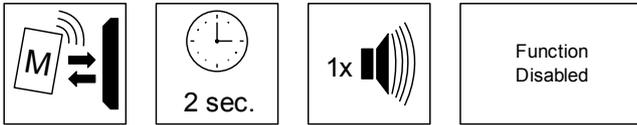
e. g. set Unlock Delay Time for 10 seconds:



If you will not make any operation in 5 seconds, controller will return to the function No.1 automatically.

No.4 Collect All new Tags (1-disable / 2-enable).

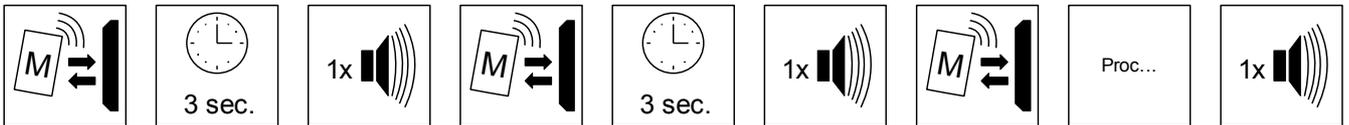
Select Function No.4, wait for confirmation, and read MASTER tag number of times corresponding which function type you want to select, and wait 2 seconds for confirmation.



If you will not make any operation in 5 seconds, controller will return to the function No.1 automatically.

No.5 Erase all User Tags.

Select Function No.5, wait for confirmation, then read MASTER tag, and wait 3 seconds for long beep, read MASTER tag again, and wait 3 seconds for long beep, read MASTER tag one more time, and memory with User Tags will be erased, after this operation, you will hear confirmation signal:



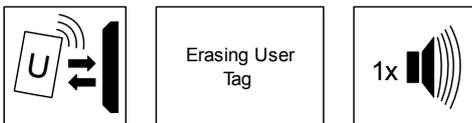
If you will not make any operation in 5 seconds, controller will return to the function No.1 automatically.

No.6 Erase Single User Tag.

There are two ways to erase User Tag:

1. You have User Tag which you want to erase.

Select Function No.6 and read User Tag which you want to erase, and it will be immediately erased. If you will not make more operations in 5 seconds, controller will return to the function No.1 automatically.



2. You have lost User Tag which you want to erase. You can erase it by it's number on the list.

Follow instructions below to set User's Tag number on the list:

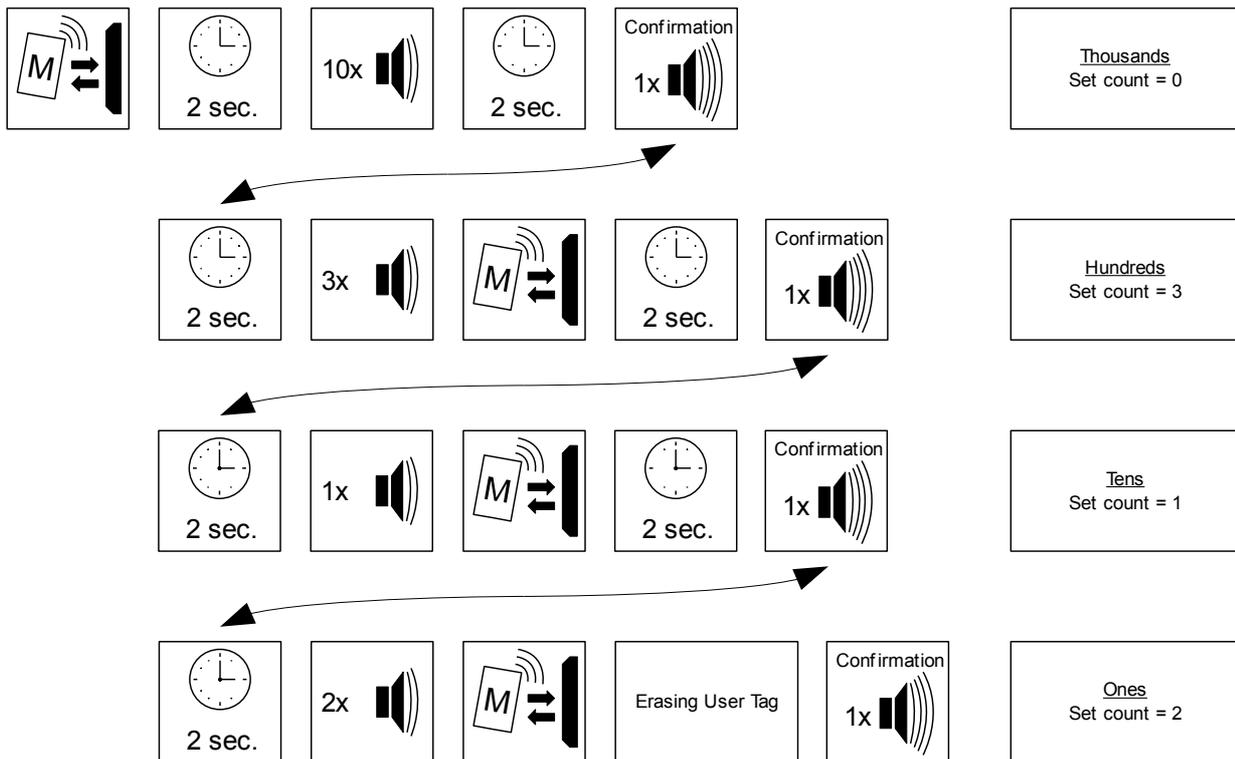
- 1) Set count of thousands;
- 2) Set count of hundreds;
- 3) Set count of tens;
- 4) Set count of ones;

After User's Tag number is set, controller erases it automatically, and gives confirmation signal. If you entered not correct number (0 or higher than 2024), no Tags will be erased.

To set any count (from 0 to 9) read MASTER Tag and wait 3 seconds. After this time controller gives one beep every one second. The number of beeps is equal to the count value. To confirm count value, read MASTER Tag, and wait for confirmation signal.

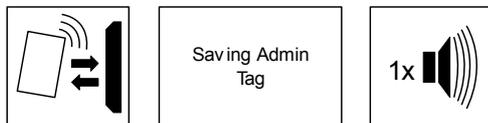
To enter 0 (zero) wait for 10 beeps, and 0 will be set automatically.

e. g. erase User Tag No. 0312:



No.7 Enroll Admin Tag (max 8 Tags).

Select Function No.7 and read fresh Tags one after other. Tags going to be saved as Admin Tags, and you will hear a confirmation signal – one beep. If you will not make any operation in 5 seconds, controller will return to the function No.1 automatically.



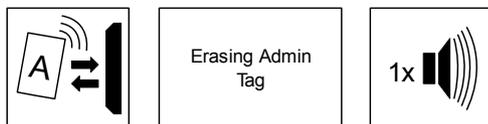
If current Tag is already enrolled, you will hear double beep, and 4 beeps means that memory is full

No.8 Erase Admin Tag.

There are two ways to erase Admin Tag:

1. You have Admin Tag which you want to erase.

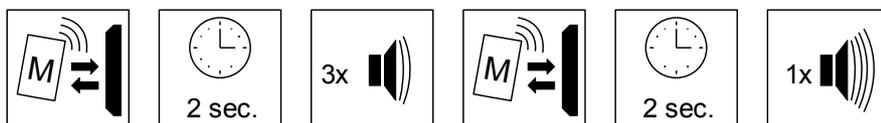
Select Function No.8 and read Admin Tag which you want to erase, and it will be immediately erased. If you will not make any operation in 5 seconds, controller will return to the function No.1 automatically.



2. You have lost Admin Tag which you want to erase.

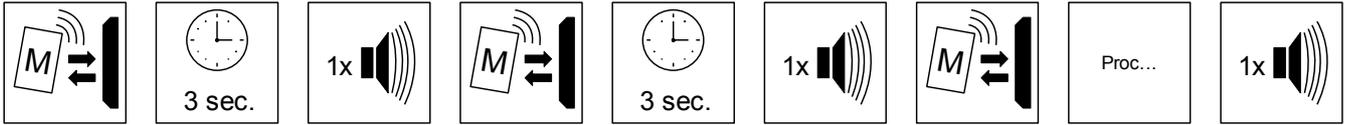
Select Function No.8, wait for confirmation, then read MASTER Tag and wait 3 seconds. After this time controller gives one beep every one second. The number of beeps is equal to the Admin Tag's number on the list (1 - 8). To confirm number, read MASTER Tag, and wait for confirmation signal.

e. g. erase Admin Tag No.3:



No.9 Restore Factory Settings.

Select Function No.9, wait for confirmation, then read MASTER tag, and wait 3 seconds for long beep, read MASTER tag again, and wait 3 seconds for long beep, read MASTER tag one more time, and Factory Settings will be restored, after this operation, you will hear confirmation signal:



If you will not make any operation in 5 seconds, controller will return to the function No.1 automatically.

No.10 Return to the Standby mode.

If you select this function, controller will restart and return to the standby mode.

5. Unlock The Door.

To unlock the door read any enrolled User Tag in Standby Mode:

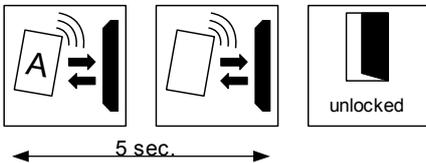


6. Administrator functions.

6.1 Enroll fresh User Tag.

There is possible to enroll fresh User Tag by using Admin Tag (one User Tag per one operation).

To enroll User Tag read Admin Tag, and in 5 seconds read fresh Tag. Fresh Tag will be enrolled as User Tag, and door will be unlocked. If you want to enroll more than one User Tag, repeat this operation for every fresh Tag.



If no operation is done in 5 seconds after Admin Tag was read, controller will only unlock the door.

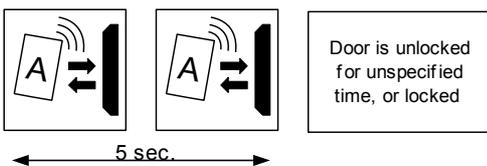
6.2 Unlock the door for unspecified time.

NOTE. Do NOT use this function if you are using electronic bolt. It's possible that electronic bolt will be damaged after some time.

To unlock the door for unspecified time read Admin Tag in 5 seconds twice. The door will be unlocked and you will hear a confirmation signal – three short beeps.

To lock the door repeat the same operation.

e. g. unlock for unspecified time or lock the door:



NOTE. During this mode (when door is unlocked for unspecified time) User tags are disable to control the door.