

Tarsafe

AUTOMOTIVE ALARMS

TW20 G4

MANUAL
AUTOMOTIVE ALARM



1) Before Starting:

ATTENTION: We recommend the complete reading of this manual before proceeding with the installation of this product.

- This product is intended to make it difficult or inhibit the theft/robbery of the vehicle, or objects in it.
- Before contacting TARAMPS technical support, make sure you read this manual, it contains all the necessary information for installing and using the product.
- The installation of this product must be done by a specialized professional.
- During installation, only use a multimeter to measure voltage.
- For perfect functioning, the door and ignition switch signals need to be connected to the alarm.
- Carefully clean the location where the ultrasound sensors and master switch will be placed.
- Fixe a chave master em local secreto e de fácil acesso.

2) Technical Features

Supply Voltage	9 to 16 Volts
Consumption	6 to 17 mA
Engine Lock	Max. 20 A
Turning signal Output	2 x 70W c/ digital protection
Lock, Unlock, Auxiliary 1 and 2 outputs	Max. 200 mA - (Negative Signal)
Audio Control and Dedicated Siren	Max. 200 mA - (Positive Signal)
Programmable output for activating locks and original power windows	Universal, Fiat line, VW G5, G6, G7, VW UP and Mobi

3) Composition



		TECHNOLOGY G4					
		Manufacturing	TW20	TW20-P	TW20 CH	TW30	TW30 CH
DEDICATED SUREN			1	1	1	compatible	compatible
	RF SIREN		X	X	X	1	1
CONTROLS	TR2	Before April 2019	X	X	X	X	X
	TR2-P	Before April 2019	X	X	X	X	X
	TR3C	Before April 2019	X	X	X	X	X
	TR2	After June 2019	2	1	compatible	1	compatible
	TR2-P	After June 2019	compatible	1	1	1	1
	TR3C	After June 2019	compatible	compatible	1	compatible	compatible
	TR4C	After June 2019	compatible	compatible	compatible	compatible	1

BASIC ALARM OPERATION: When turning on the alarm by remote control (if the vehicle has audio equipment, windows and power locks properly installed), the audio will be turned off, the doors will be locked, power windows will be closed, and ultrasound sensors and doors will start to monitor the vehicle.

4) Remote Controls*

- Operating Frequency 433.92MHz
- Anti-Cloning Technology (Hopping Code)
- Anti Jammer Transmission System
- 1 3V Battery - CR 2032 LITHIUM

Images for illustrative purposes only and may differ from the real image!



BUTTONS



Replacing the Control Battery.



Carefully open the plastic box from the sides. Replace the battery, observing the polarity (+) and (-). Use CR2032 batteries.



*See item 3 to check which remote control belongs to which Alarm model. Any control model can be purchased separately.

***This equipment operates on a secondary basis, that is, it is not entitled to protection against harmful interference, even from stations of the same type, and may not cause interference to systems operating on a primary basis.**

Controls Functions (Manufactured from June 2019)

- Anti Jammer function. EXCLUSIVE IN THE G4 TARAMPS LINE.

Jammer is when there is another control transmitting near the alarm center, making it impossible to turn the alarm on or off by the registered control.

- Code G3 (for the TW20 G1 to G3 line).

- Code G4 (exclusive for the TW20 G4 line).

Register NEW control in the Alarm Central

It is possible to record up to 4 controls, when recording the 5th the first one will be erased.

PROCEDURE:

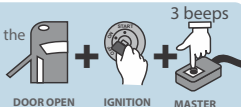
- With the door open, switch on the ignition.

- Hold the master pressed until beep 3.

- When releasing, the alarm will sound 1 long beep and the turning signals will be on.

Simultaneously press the ON + OFF keys, the alarm will sound 3 Beeps confirming the recording.

To exit setup, turn off the ignition.



Change code G3 / G4 - TR2 and TR2-P controls

A - Hold pressed the Home and Auxiliary keys;

B - Release after the LED goes out;

C - The LED will flash informing the new code system:

3 flashes= line G1 to G3

4 flashes= G4 line onwards

ATTENTION: Function only exists in controls manufactured from June/2019.



Change G3 / G4 code - TR3C and TR4C controls

A - Hold pressed the Power off and Auxiliary keys;

B - Release after the LED goes out;

C - The LED will flash informing the new code system:
























3 flashes= line G1 to G3

4 flashes= G4 line onwards

ATTENTION: Function only exists in controls manufactured from June/2019.

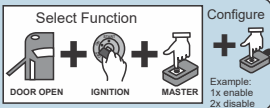


5) Remote Control Functions:

FUNCTION	CONTROL ACTION	ALARM RESPONSE
1 - Turn alarm on	Press 	1 Flash on Turn Signals+ 1 Siren beep 3 Beeps indicate Open Door Item 9.1
2 - Turn Alarm off	Press 	2 flashes on turn signals + 2 siren beeps Note: 4 flashes on the turn signals+ 4 beeps, indicate that there was a trigger when the alarm was activated. Item 12.1
3 - Turn Alarm on without a beep	Press  then 	1 flash on Turn signals 3 Beeps indicate Open Door Item 9.1
4 - Turn Alarm off without a beep	Press  then 	2 flashes on turn signals Note: 4 flashes on the turn signals, indicate that there was a trigger when the alarm was activated. Item 12.1
5 - Locate Vehicle	Press  for 2 seconds with alarm on	turn signals flash for 20 seconds. To cancel, press the button 
6 - Panic	Press  for 2 seconds with alarm on	Activates the siren and the turn signals flash for 45 seconds. To cancel, press the button 
7 - Cancel Alarm Activation	Press  with alarm triggered	Stops the siren and turn signals. The alarm continues to monitor.
8 - Turning Signals	Press  2 times ( + 	Turn signals light for 10 seconds.. Item 9.5
9 - Ultrasound Cancel	Press  then  for 2 seconds	1 Long beep, confirms ultrasound cancellation and window close .Ultrasound operates again at next power on. Item 9.6
10 - Auxiliary output, use auxiliary module	Press  for 2 seconds with the alarm off	while the button is pressed, the alarm generates a negative signal.
11 - Auxiliary output 2 use auxiliary module	Press  for 2 seconds with the alarm off	See item 13
12 - Automatic Presence Transmission	Press  +  for 2 seconds	See item 7 Only TR2-P control
13 - Range Test Presence function	Press  +  for 2 seconds	See item 7.2 Only TR2-P control
14 - HOME	Press 	See item 9.7

6) Programming by Master Key

With the door open, turn the ignition on and hold the master pressed until the desired function beeps. The alarm will beep with the current setting, to change, press the master the number of times of the desired setting.



- | | | | |
|------|---|---|--|
| 1 - | ENABLE/DISABLE the alarm | ✓ | 1 beep = ENABLE
2 beeps = DISABLE |
| 2 - | On/Off BEEP | ✓ | 1 beep = ENABLE
2 beeps = DISABLE |
| 3 - | CONTROL RECORDING | | See item 4 |
| 4 - | AUTOMATIC LOCK | ✓ | 1 beep = ENABLE item 9.3
2 beeps = DISABLE |
| 5 - | AUTOMATIC REACTIVATION | ✓ | 1 beep = ENALE item 9.4
2 beeps = DISABLE |
| 6 - | SELECT WIRED SIREN RINGER | | Press and release the master until you hear the desired ring. |
| 7 - | ANTI-THEFT BY PRESENCE | ✗ | 1 beep = ENABLE item 7
2 beeps = DISABLE |
| 8 - | ANTI-THEFT BY SECRET BUTTON | ✗ | 1 beep = ENABLE item 8
2 beeps = DISABLE |
| 9 - | TIME BEFORE LOCKING | 3 | 1 beep = starts in 1 minuto
2 beeps = starts in 2 minutos
3 beeps = starts in 3 minutos |
| 10 - | AUTOMATIC UNLOCK | ✓ | 1 beep = ENABLE
2 beeps = DISABLE |
| 11 - | SIGN FOR LOCK / ORIGINAL WINDOW | 1 | 1 beep = UNIVERSAL
2 beeps = VW G5
3 beeps = FIAT item 11
4 beeps = VW G6 G7
5 beeps = VW UP (Lock and Unlock only)
6 beeps = MOBI (config. available in alarms manufactured after 12/2020) |
| 12 - | ULTRASOUND SENSITIVITY ADJUSTMENT | 3 | To change, see item 12 |
| 13 - | BROWN WIRE SETUP see item 13 | 1 | 1 beep = Reads Negative Switch
2 beeps = Reads Positive Switch
4 beeps = Headlight Signal On/Off
5 beeps = Auxiliary 2 |
| 14 - | BLACK/YELLOW WIRE SETUP | 5 | Exclusive functions for the TW30 model |
| 15 - | CLONE GATE CONTROL | | |
| 16 - | TURN ALARM ON BY DISTANCING see item 14 | 1 | 1 beep = Disable
2 beeps = Turns alarm on without locking
3 beeps = Turns alarm on and locks
4 beeps = Turn on/lock and turn off/unlock |
| 17 - | FACTORY RESET | | 1 LONG beep
FACTORY SETTING RESTORED |

3 LONG BEEPS = END OF PROGRAMMING WITHOUT CHANGING SETTING

7) Lock Function by Presence/ Distancing

TR2-P Control Required

Operation:

With the ignition on and doors closed, pulling the TR2-P control away from the vehicle automatically activates the distancing lock. After the programmed time (Beep 9 of the configuration by the master), the ultrasound LED starts flashing the audio will be turned off, the siren and turn signals will go off, then 10 seconds, the engine will start failing until it is definitively blocked. To cancel the lock, bring the TR2-P control closer to the vehicle and wait for the automatic transmission or press the end key.

Activate the Presence Function on the TR2-P control

- Hold down the Power and Auxiliary keys;
- Release after the LED goes out;
- The LED will flash informing:
 - 1 flash= Presence Transmission ON
 - 2 flashes= PresenceTransmission OFF

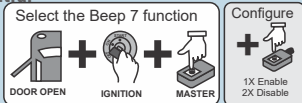


Activate Presence Function in the Alarm Central

- With the door open, turn the ignition on.
- Hold the master pressed until beep 7.
- The alarm will respond informing:

- 1 Beep = Presence Function ON
- 2 Beeps = Presence Function OFF

- To change, press 1x (once) to Enable or 2 x (twice) to Disable. After turning off the ignition, the alarm will confirm the new setting with beeps.



Attention: Function canceled from the factory, must be enabled by Beep 7.

In G4 alarms it is possible to enable the Presence Functions by Beep 7 and the Lock by Secret Button Beep 8.

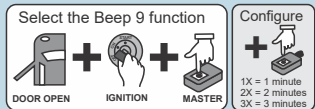
Set Time for Locking, 1, 2 or 3 minutes

- With the door open, turn the ignition on.
- Hold the master pressed until beep 9.
- The alarm will respond informing:

- 1 Beep = Lock in 1 Minute
- 2 Beeps = Lock in 2 Minutes
- 3 Beeps = Lock in 3 Minutes



To change, press the Master key the number of times referring to the desired time. Each time you press the Master, the alarm confirms with 1 beep. After turning the ignition off, the alarm will confirm the new setting with beeps.



7.1) Test Presence Function:

Operation:

It is not necessary to move the control away from the vehicle, to test the lock, just disable the automatic transmission of the TR2-P control, turn the ignition on, close the doors and wait.

Disable the Presence Function on the TR2-P control

- Hold the Power and Auxiliary keys pressed;
- Release after the LED goes out;
- The LED will flash informing:
 - 1 flash= PresenceTransmission ON
 - 2 flashes= PresenceTransmission OFF



7.2) Test the automatic transmission range:

Operation:

It is used to test the automatic transmission range of the Presence function on the TR2-P control. With the automatic transmission of the presence function activated in the control and the function activated in the alarm central, hold the off and auxiliary keys pressed until the LED goes out. After releasing the keys, the LED will flash every 2 seconds, on each flash, the alarm will respond with a BEEP, informing that it has received the transmission. Move the TR2-P control away from the vehicle until the control panel stops responding. To cancel, press any key on the controller.

Activate TR2-P control RANGE test

- Hold down the Off and Auxiliary keys simultaneously;
- Release after the LED goes out;
- The LED will flash every 2 seconds;
- To cancel, press any key on the controller.



Battery Replacement Notice

If when the ignition is turned on, the alarm sounds 1 BEEP, it is indicated that the battery voltage of the TR2-P control is low and will need to be replaced as soon as possible.



Attention: The Presence Lock function will only be activated with all vehicle doors closed.

8) Lock by Secret Button - required to be enabled by master.

Operation:

With the ignition on and the doors closed, press the master key for 1 second. Otherwise, Secret Button Lock will be enabled. After the programmed time, (according to the Beep 9 setting), the ultrasound LED starts flashing, the audio will be turned off, the siren and turn signals will go off, 20 seconds after that, the engine will start failing until it is definitively blocked. To cancel the lock, press the master. ATTENTION: In this case, it will not be possible to cancel the triggering by the control.

Enable Secret Button Lock Function

- With the door open, turn the ignition on.
- Hold the master pressed until beep 8.
- The alarm will respond informing:

1 Beep = Presence Function **ON**
2 Beeps = Presence Function **OFF**



To change, press the Master key, 1x once to Enable or 2x twice to Disable.
After turning off the ignition, the alarm will confirm the new setting with beeps.

Select the Beep 8 function



Configure



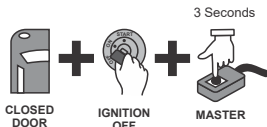
8.1) Valet Function (Secret Button Lock only)

It is used to leave the vehicle in a parking lot, for example, without the need to indicate to the driver the location of the Master (Secret Button).

Operation:

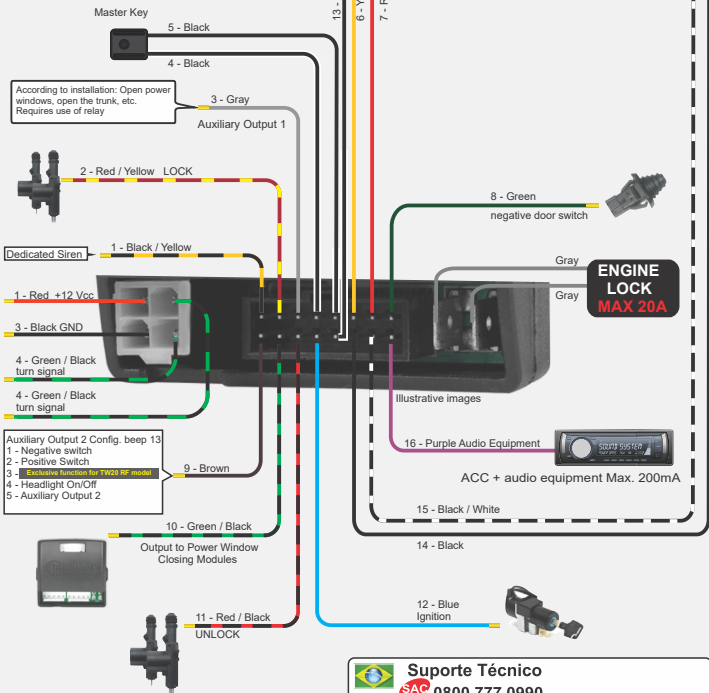
With the door closed, turn off the ignition and hold the Master pressed for 3 seconds. The LED of the ultrasound will flash 3 times confirming activation.

To cancel the valet function and return to normal operation, switch the ignition on with the door closed and press the Master for 1 second.



Installation Scheme:

ATTENTION: The TW20 G4 LINE has a new Ultrasound transmitter.
In case the old alarm central is replaced by G4, the transmitter sensor (right side sensor, without LED) must also be replaced by the new one.



Config. Beep 11
VW mode G6, G7 and UP



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Attention: Function canceled from factory, need to be enabled by Beep 8. In G4 alarms it is possible to simultaneously enable the Beep 8 Secret Button Lock and the Beep 7 Presence Function.

Set Time for Locking, 1, 2 or 3 minutes

- With the door open, turn the ignition on.
- Hold the master pressed until beep 9.
- The alarm will respond informing:

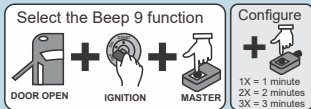
1 Beep = Locks in **1 Minute**

2 Beeps = Locks in **2 Minutes**

3 Beeps = Locks in **3 Minutes**



To change it, press the Master key the number of times referring to the desired time. Each time you press the Master, the alarm confirms with 1 beep. After turning off the ignition, the alarm will confirm the new setting with beeps.



9) Alarm Functions:



1 DOOR OPEN WARNING: When turning the alarm on, if 3 BEEPs sound, it indicates that there is an open door. Close it and turn the alarm back on. If it's not solved, the alarm will cancel the door monitoring. The rest will continue operating normally. If the problem persists, look for a specialized service to repair the door switch.



2 SHUTDOWN - TRIGGERING LIMITER: In case of violation, the alarm will trigger the SIREN and flash the TURN SIGNALS for 45 seconds. 5 seconds later, it will go back to monitoring the sensors. After 4 triggerings by the same sensor, it will be canceled, keeping the others active. It will only be monitored again when the alarm is reset by the remote control.



3 AUTOMATIC LOCK: About 8 seconds after turning the ignition on, the doors will be locked and unlocked by turning the ignition off. It will not lock if a door is open or if the ignition is turned on before closing the door. It is possible to cancel the unlock when the ignition is turned off, **items 6.4 and 6.10**.



4 AUTOMATIC REACTIVATION: Automatically turns the alarm back on after 60 seconds, when turned off by the remote control and:

- Door, hood or trunk are not opened;
- Ignition is not turned on;
- Ultrasonic sensor does not detect movement. It is possible to disable, **item 6.5**.
- Restart function will be canceled, when activating the function turn on remote alarm.



5 TURN SIGNALS: The alarm times the turn signals for 10 seconds. Press the off button on the remote twice, with the alarm off.



6 ULTRASOUND CANCEL: When turning on the alarm canceling the ultrasound, **item 5.9**, the power windows will not be closed. To close the windows and activate the ultrasound, turn off and on the alarm using the remote control.

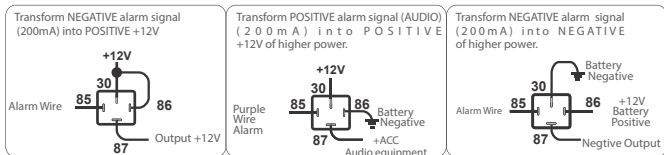


7 HOME function TR2 and TR2-P control: Through the HOME key on the TR2 and TR2-P controls, it is possible to activate the gate operator or residential alarm, without having to use an auxiliary module, only registering the control in the operator's central. The TR2 or TR2-P control must be registered according to the manufacturer's instructions, as if it were a control of the same brand as the gate or residential alarm. Compatible with CODE LEARNING systems.

10) Relay Connections

The lock, unlock, auxiliary and audio equipment outputs can handle a maximum of 200mA.

If it is necessary to install equipment with a consumption that is higher than 200mA, relays must be used.



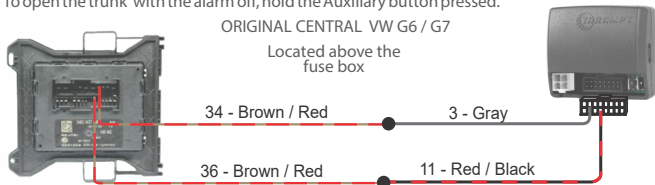
11) VW G6 and G7 Power Window and Door Connections:

Function: Closes and opens the power windows, locks and unlocks the doors and opens the trunk.

Window activation signal setting = **VW G6 / G7, item 11.**

To open windows, turn off the alarm and hold down the off button on the control.

To open the trunk with the alarm off, hold the Auxiliary button pressed.



Attention: The trunk opening function will only work in vehicles with original electrical trunk opening system. For its perfect operation, properly ground the alarm module. Some wire colors may change without prior notice from the car manufacturer. It is important to test before making the connections.

Signal for window/Electric Lock activation Setup

- With the door open, turn the ignition on.

- Hold the master pressed until beep 11

- The alarm will respond informing:

1 Beep = Universal

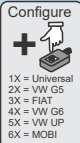
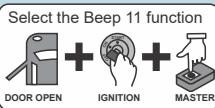
2 Beeps = VW G5

3 Beeps = FIAT

4 Beeps = VW G6

5 Beeps = VW UP

6 Beeps = MOBI



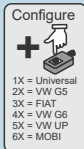
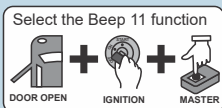
To change it, press the Master key 4 times, referring to the VW G6/G7 signal. Each time you press the Master, the alarm confirms with 1 beep. After turning the ignition off, the alarm will confirm the new setting with 4 beeps.

Window Activation Setup (continuation)

Set Signal for window/Electric Lock activation

- With the door open, turn the ignition on.
- Hold a master pressed until beep 11.
- The alarm will respond informing:

- 1 Beep** = Universal
- 2 Beeps** = VW G5
- 3 Beeps** = FIAT
- 4 Beeps** = VW G6
- 5 Beeps** = VW UP
- 6 Beeps** = MOBI



To change, press the Master key the number of times referring to the desired setting. Each time you press the Master, the alarm confirms with 1 beep. After turning the ignition off, the alarm will confirm the new setting with beeps.

11.1 Universal Mode: Negative signal 15 seconds.

11.2 VW G5 Mode: Gol, Saveiro, Voyage generation 5) Manufactured after February 2009, with original window and power lock. Close the windows, lock and unlock the doors. Connect the Green/Black alarm wire to pin 5 of the original panel 23-way connector, located above the accelerator pedal. DO NOT connect Red / Black and Red / Yellow (lock and unlock) wires.

11.3 FIAT Mode: Palio, Idea, Punto and Linea with automated power windows, close and open. Connect the Green / Black alarm wire to pin 8 on the original central, to the Palio and Idea line located behind the glove compartment. On Linea and Punto, Red / Black wire in the central located behind the fuse box.

11.4 VW G6 and G7 mode: Gol, Saveiro, Voyage generation 6 and 7), with original power windows. Connect the Red / Black alarm wire to the Brown / Red wire, pin 36, from the original central located above the fuse box.

Functions: lock, unlock, close and open the windows.

To open the windows, hold the control off button pressed with the alarm off.

To open the Trunk, connect the Gray wire from the alarm to the Brown / Red wire, pin 34 from the original central located above the fuse box.

NO RESISTOR NEEDED.

11.5 VW UP: Only LOCK and UNLOCK.

Connect the Red / Black alarm wire to the Brown / Green wire located on the left column of the vehicle.

11.6 MOBI: New Uno after 2015, MOBI and ARGO, with original power windows. Connect the Green / Black alarm wire to the Brown / Green wire of the original alarm 6-way harness located on the steering column.

12) G2 Ultrasound Sensors

Attach the sensors to the vehicle's windshield, 10 cm below the roof. Ultrasound sensors come with digital sensitivity adjustment. Change the default setting only if necessary. The table follows below:



Click	Sensor Sensitivity	Alarm Response
1 Once	+20%	1 Beep
2 Twice	+10%	2 Beeps
3 Times	Factory standard	3 Beeps
4 Times	-10%	4 Beeps
5 Times	-20%	5 Beeps

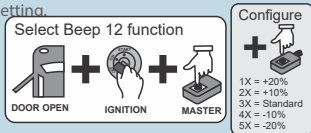
Set Ultrasound Sensitivity:

- With the door open, turn the ignition on.
- Hold the master pressed until beep 12.
- The alarm will respond informing the current setting.

- 1 Beep = Sensitivity+20%
- 2 Beeps = Sensitivity+10%
- 3 Beeps = Sensitivity **Standard**
- 4 Beeps = Sensitivity-10%
- 5 Beeps = Sensitivity-20%



To change, press the Master key the number of times referring to the desired sensitivity. Each time you press the Master, the alarm confirms with 1 beep. After turning the ignition off, the alarm will confirm the new setting with beeps.



12.1) LED FUNCTIONS:

LED OFF - Alarm off;

LED FLASHING NORMALLY - Alarm on;

LED ALWAYS ON - Door, Hood or Trunk open;

LED FLASHES 2X - Alarm on, with cancelled ultrasound sensor;

LED FLASHING AFTER TURNING OFF ALARM BY REMOTE CONTROL - Indicates which sensor caused the last trigger:

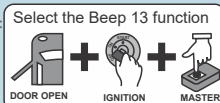
- 1 flash - ignition.
- 2 consecutive flashes - ultrasound sensor.
- 3 flashes in a sequence - doors, hood or trunk.

Auxiliary Output 2 Setup- brown wire

Programming by Master

- With the door open, turn the ignition on.
- Hold the master pressed until beep 13.
- The alarm responds by informing the current setting:

- 1 Beep** = Reads negative switch
- 2 Beeps** = Lê interruptor Positivo
- 3 Beeps** = **Exclusive function for the TW30 model**
- 4 Beeps** = Reads Headlight On/Off
- 5 Beeps** = Auxiliary Output 2



To change, press the Master key the number of times referring to the desired function. Each time you press the Master, the alarm confirms with 1 beep. After turning the ignition off, the alarm will confirm the new setting with beeps.

1) Reads Negative switch.

To install on a door switch, hood or trunk with a Negative signal, when open.

2) Reads Positive switch.

To install on door switch, hood or trunk with Positive signal, when open.

3) Open / Close Automated Gate.

Exclusive function for the TW30 model

4) Headlight Warning On/Off.

After 10 seconds with the ignition on, the ultrasound LED will be flashing, warning that the headlight is off, turning on the headlight, the LED goes out.

When turning the ignition off and opening the door with the headlight on, the alarm sounds a long beep.

5) Auxiliary Output 2

It is used to lower electric windows for example.

Using an Auxiliary Relay is required.

Activate Auxiliary Outputs 2

- Press and hold the OFF key on the control with the ignition off and the alarm off.



+ than 3 seconds

14) Turn Alarm on by Distancing

This function is used to turn on the alarm only when pulling the TR2-P G4 remote control away from the vehicle. After turning the ignition off, opening and closing the vehicle door, and moving the control beyond the transmission range, within 15 seconds the alarm will turn on. According to the setting, the alarm will:

1st Beep = Disabled, the alarm will only turn on/off when pressing the control buttons.

2nd Beep = Turns the alarm on when moving the control away without locking the doors, it will only turn off the alarm when pressing the control Off button.

3rd Beep = Turns on the alarm when moving the control away and locks the doors, it will only turn off the alarm and unlock the doors when pressing the control's Off button.

4th Beep = Turns on the alarm when moving the control away and locks the doors. Turns off the alarm and unlocks the doors by pressing the control's Off button or by bringing the TR2-P G4 control closer to the vehicle and waiting for the automatic transmission.

ATTENTION: EXCLUSIVE function of the G4 line with TR2-P G4 control.

Programming by Master

- With the door open, turn on the ignition.
- Hold the master pressed until beep 16.
- The alarm responds with the current setting:

1 Beep = Disabled

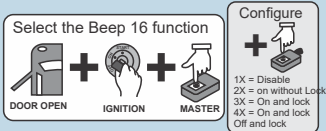
2 Beeps = Turns on the alarm without locking

3 Beeps = Turns on the alarm and lock

4 Beeps = Turn On and Lock / Turn Off and Unlock



To change, press the Master key the number of times referring to the desired function. Each time you press the Master, the alarm confirms with 1 beep. After turning the ignition, off the alarm will confirm the new setting with beeps.



WARRANTY TERM

TARAMPS, located at Rua Abílio Daguano, 274 Res. Manoel Martins - Alfredo Marcondes - SP, ZIP19.180-000, guarantees this product against design, manufacturing, assembly and/or joint and several defects due to design flaws that make it unsuitable or inappropriate for its intended use, for a period of 24 months from the date of purchase. In the event of a malfunction within the warranty period, TARAMPS' liability is limited to repairing or replacing the device manufactured by it.

This warranty excludes:

- Products damaged by incorrect installation, water infiltration, tampering by unauthorized persons;
- Natural wear components: such as battery;
- Scratched or torn warranty seal;
- Cases where the product is not used under normal conditions;
- Defects caused by accessories, modifications or equipment attached to the product;
- The product presents damage resulting from drops, impacts or the action of agents of nature (floods, lightning, etc.);
- Costs for removing and reinstalling the equipment, as well as transporting it to the technical assistance post;
- Damage of any kind, resulting from problems with the product, as well as losses caused by interruption of use.

Factory technical assistance department:

Taramps Electronics - Rua: Abílio Daguano, nº 274 - ZIP19.180-000

Fones: +55(18) 3266-4050 / 99749-3391

E-mail: service@taramps.com.br



Taramps reserves the right to change the contents of this manual without prior notice or obligation to apply the modifications to previously produced units.



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