

speich

CT42

USER'S MANUAL

1. General



CT42 is a microcontroller based wiper control for operating two wiper motors; it provides all the functions for a proper windscreen cleaning.

- Voltage supply: 12V or 24V
- Fit for any DC motors (see output current) and for any kind of parking switch

- Activates/deactivates each wiper one by one
- **Synchronization in each selected mode**
- Three intermittent settings
- Self parking with dynamic brake
- Wipe/wash program
- Dimmer input
- Standard switches size compatible
- Easy to install and to use
- reliable

Packet includes:

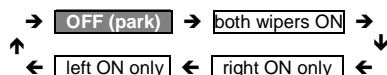
- no. 1 CT42
- no. 1 ten pole connector with female pins
- no. 2 female fast-on
- no. 1 user manual

2. Controls and signalings

Push buttons scope

Controls are user friendly.

- Button: by multiple pressing of no. 1 button the following **wipers selection** are set:



- Button: increase speed / decrease time between strokes.
 - Button: decrease speed / increase time between strokes
- All the push buttons have a double function, as described below.

Signalings

Three leds show wipers operation setting. By pressing no. 1 button a fast leds blinking will indicate the new wipers selection, as in following chart:

Wipers selection	2 seconds long blinking
ON both wipers	Fast blinking
ON right only	Fast blinking
On left only	Fast blinking
OFF both wipers	Leds OFF

After fast blinking, leds will show the selected mode.

By pressing no. 2 or 3 button, mode will change and the leds:

- will flash as many time as delay time (in seconds) between strokes (4 flash if 4 seconds is the delay time selected between strokes).
- will have a light flash – slowly if SLOW speed is selected, quickly if FAST speed is selected.

See the following chart.

MODE	light	Flashing
FAST		Fast slight blink
SLOW		Slow slight blink
2 sec. delay		2 Slow blink
4 sec. delay		4 Slow blink
8 sec. delay		8 Slow blink
OFF		Leds OFF
Wipe/wash		-----
Failure	Asymm.	Continuous

3. Power supply

CT42 will operate on a power supply of 10 up to 30 V DC. **Insert connector (linked to motors) before supply power.** When powered a lamp test is executed. CT42 will stay in stand-by, ready to operate.

4. ON switching

By pressing no. 1 or no. 2 button, both wipers will start in SLOW speed mode (the only possible continuous mode if one speed motors are used).

5. OFF switching

By pressing no. 1 button as many times as required by wipers selection, wipers will stop in park position. The same by keeping pressed no. 3 push button more than one second.

6. Wipe / Wash program

By keeping pressed no. 1 or no. 2 button more than one second, washing program will start.

3sec.	4 sec.	3 sec.
== Spray ==	==== Spray ====	
===== Wipe =====	===== Wipe =====	

To increase wash timing or to increase spray/wipe time, keep pressed no. 1 or no. 2 button.

After wipe / wash, wipers will return for operating in the previous selected mode.

7. Failure

A continuous asymmetrical flashing indicate that CT42 doesn't receive one or both parking switch signal or that it is not possible to reach synchronism.

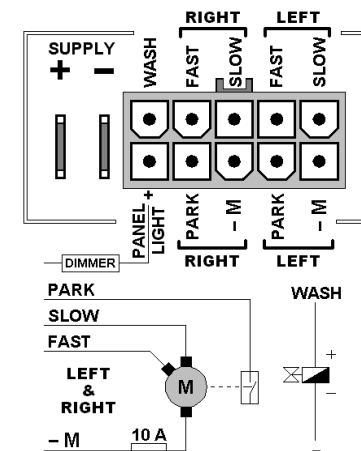
This may happen if:

- one (or both) parking switch is damaged or unconnected
- one (or both) motor doesn't run (damaged or unconnected)
- one (or both) motor doesn't run in FAST or in SLOW speed
- motors run at too much different speeds and it is not possible to reach synchronism.
- 10 poles connector has been inserted after supply power and control works as with one speed motors.

8. Technical specifications

SPEICH CT42	
Voltage supply	10V to 30V DC
Protection	4A PTC for each motor
Stand-by current	Less than 20 mA
Polarity inversion	Protected
Motors – output currents	Single or double speed – each motor 4 Amps max.
Input	2 parking switch (open in park position) Dimmer (connect to + supply if not used)
Output	2 slow speed – L and R SLOW 2 high speed – L and R FAST (if 2 speed motors) 1 wash pump (positive pole)
Functions	3 intermittent settings 2 continuous speeds, slow and high speed Wash / wipe program
Connections	10 poles connector – 2 male 6,3 mm fast-on
Case	ABS black
Working temperature	-10 °C / +50 °C
Storage Temperature	-20 °C / +70 °C

9. Wires



10. Dimension

