

# speich

## CT41

### USER'S MANUAL

#### 1. General



**CT41** is a microcontroller based wiper control for operating one wiper motor; it provides all the functions for a proper windscreen cleaning.

- Voltage supply: 12V or 24V
- It fits any DC motor (see output current) and any kind of parking switch.

- Three interval delays
- Self parking with dynamic brake
- Wipe/wash program
- Dimmer input
- Standard switch size compatible
- Easy to install and to use
- Reliable

Packet include:

- no. 1 CT41
- no. 1 ten pole connector with female pins
- no. 1 user manual

#### 2. Controls and signalings

##### Push buttons scope

Controls are user friendly.

- 1 ON/OFF switch
- 2 increase speed / decrease time between strokes.
- 3 decrease speed / increase time between strokes

All the push buttons have a double function, as below described.

##### Signalings

Three leds show wipers operation setting. By pressing any button, mode will change and the leds:

- will flash as many times 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.

After blinking, leds will show the selected mode.

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

CT41 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. CT41 will stay in stand-by, ready to operate.

#### 4. ON switching

By pressing no. 1 or no. 2 button, wiper will start in SLOW speed mode (the only possible continuous mode if one speed motor is used).

#### 5. OFF switching

By pressing no. 1 button, wiper 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 no. 1 or no. 2 button pressed.

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

#### 7. Failure

A continuous asymmetrical flashing indicates that CT41 doesn't receive the parking switch signal.

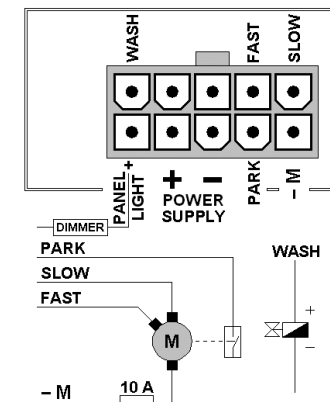
This may happen if:

- parking switch is damaged or unconnected
- motor doesn't run (damaged or unconnected)
- 10 poles connector has been inserted after supply power and control works as with one speed motor.

#### 8. Technical specifications

SPEICH CT41	
Voltage supply	10V to 30V DC
Protection	4 Amps PTC
Stand-by current	Less than 20 mA
Polarity inversion	Protected
Motor – output current	Single or double speed – 4 Amps max.
Input	1 parking switch (open in park position) Dimmer (connect to + supply if not used)
Output	1 slow speed – SLOW 1 high speed – 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
Case	ABS black
Working temperature	-10 °C / +50 °C
Storage Temperature	-20 °C / +70 °C

#### 9. Wires



#### 10. Dimension

