

CT41 INTELLIGENT WIPER SWITCH USERS MANUAL

1. General



CT41 is a microcontroller - based "intelligent switch" for operating one wiper motor; it provides all the functions for a proper windscreen cleaning.

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

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- Three intermittent speed functions
- Perfect self parking position due to "dynamic brake"
- Wipe/wash program
- Dimmer input
- Standard switch size compatible
- Easy to install and to use
- reliable

Package includes:

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

2. Controls and signalings

Push buttons functions

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 wiper 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 motor) before connecting to power supply.** 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 the wiper will stop in park position. The same will occur by keeping the no. 3 button pressed more than one second.

6. Wipe / Wash program

By keeping the no. 1 or no. 2 button pressed 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 the wipe / wash program is over, wiper will return to operating in the previous selected mode.

7. Failure

A continuous asymmetrical flashing indicates that CT41 is not receiving the parking switch signal.

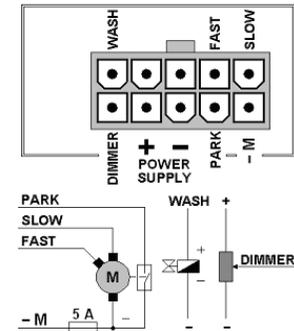
This may happen if:

- parking switch is damaged or disconnected
- motor doesn't run (damaged or disconnected)
- 10 poles connector was inserted and connected to the motor after the connection was made to the power supply.

8. Technical specifications

	CT41
Voltage supply	10V to 30V DC
Internal fuse	4 Amps, self-resettable PTC
Stand-by current	Less than 20 mA
Protection	polarity inversion
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 motor) 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

