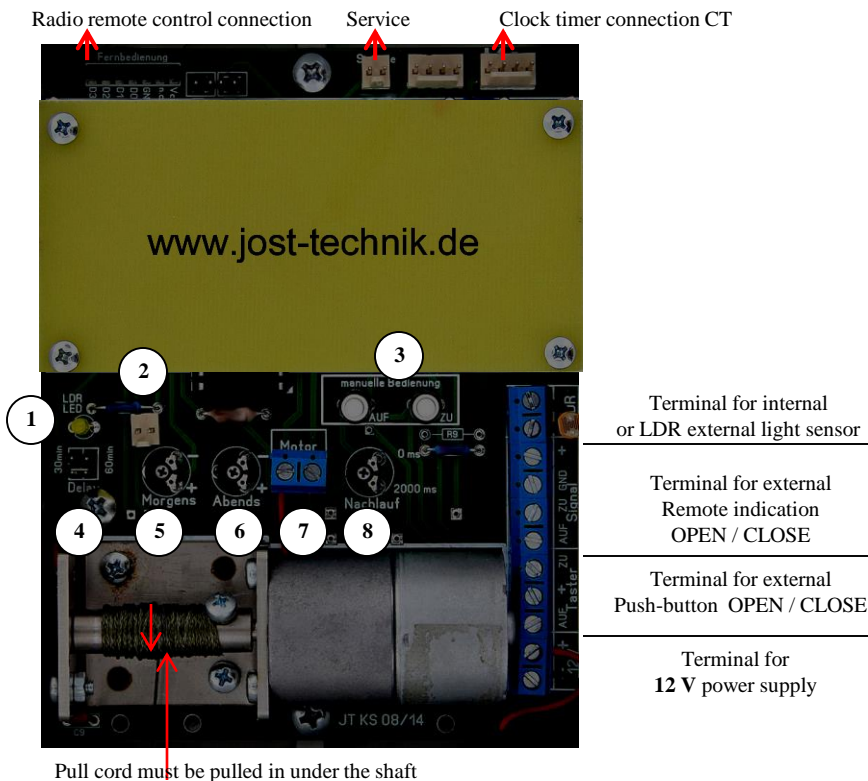


## 1. JT KS Gate Control Unit pin assignment

- 1 LED display for LDR light sensor  
LED = ON - LDR min. brightness reached  
LED = OFF - LDR min. darkness reached
- 2 Terminal for external light switching
- 3 Push-button for internal manual operation ON / OFF
- 4 Jumper for time delay OFF - move  
Jumper, **left vertical** 30 min delay  
Jumper, **right vertical** 60 min delay  
Jumper, **lower horizontal** - no function  
Jumper, **left and right vertical** 90 min delay
- 5 Pot for setting min. brightness for mornings  
Value range 15% to 100%
- 6 Pot for setting min. darkness for evenings  
Value range 2% to 12%
- 7 Terminal for motor
- 8 Pot for setting lag for flap gate self locking system, if available  
Value range from 2 ms to 2000 ms (= 2 sec)



## 2. Functionality of the JT KS Gate Control Unit ...

The gate control unit principally works in automatic mode.

This mode is controlled by the light sensor (LDR) and the pots (in figure 5 + 6) for morning and evenings.

**The LDR light sensor** continually measures the current level of brightness which is internally converted into a percentage ( 0% - 100% ) and serves as a reference value during automatic operation for other actions ( 0% = absolutely dark and 100% = direct sunshine).

If the current level of brightness is higher or the same as the level specified for the mornings, the LED of the LDR illuminates. Only when the current level of brightness is lower high or the same as the level the pot specifies for the evenings, the LED of the LDR switches off.

### Pot for mornings ( 5 ) and pot for evenings ( 6 )

The pot for the mornings determines a minimum level of brightness in a % value that must be reached so that the gate control unit opens the flap gate in the mornings ( OPEN ).

The value range has been determined as being 15% to 100% !

The pot for the evening determines how minimally dark it has to be so that the gate control unit closes the flap gate in the evenings ( CLOSE ).

The value range has been determined as being 2% to 12% !

**Safety minute:** If the respective level of brightness for the mornings or the evenings has been reached, a safety waiting period of one minute has been programmed to run before each operation occurs. Afterwards, the automatic system checks again if the previous triggering was valid or if it had to do with an unwanted incidental illumination or darkening.

**Delay:** Using this jumper (4) it is possible **for the evenings** to delay closing if the LDR detects that it is dark.

Jumper, **left vertical** 30 min delay

Jumper, **right vertical** 60 min delay

Jumper, **lower horizontal** - no function

Jumper, **left and right vertical** 90 min delay

**Lag:** With this delay using the pot (8) from 2 ms to 2000 ms (= 2 sec), it is possible to set the exact operation of the flap gate mechanism with a self locking system.

**LED ( LDR ) display:** The yellow LED indicates if the light sensor has detected light = LED ON (light) or if the light sensor detects darkness = LED OFF.

## Do not perform any functional tests before assembly and read these assembly instructions carefully beforehand!

Do not use and pesticides in or on the unit! This can damage the electronics and repairs will be refused!

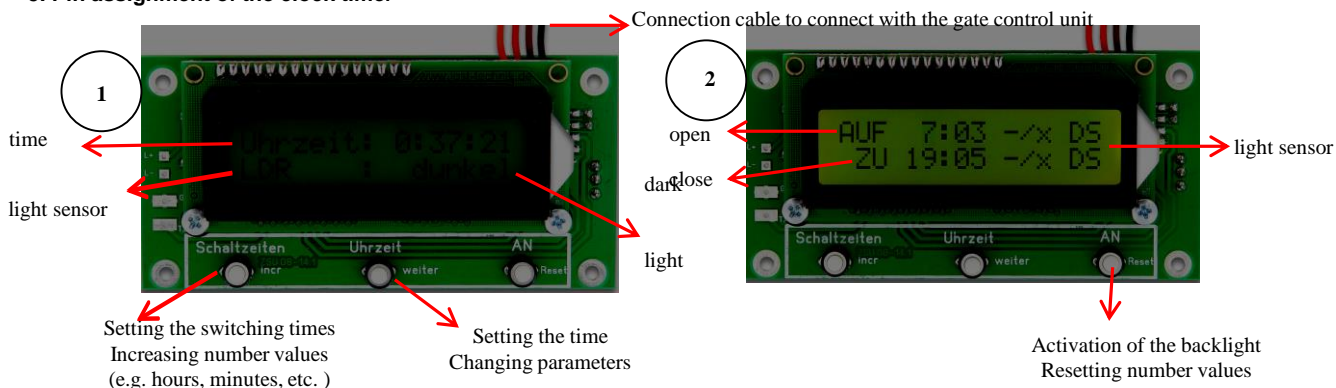
**3. Assembly of the JT-KS Gate Control Unit:** Bring the JT-KS into position as indicated in the assembly examples and pay attention that the pull cord is pulled straight out of the JT-KS in a straight manner and avoid pulling it out at an angle. The gate or flap gate must be completely open. In this opened state, the gate or flap gate must be attached to the fastening nut over a connection cord which represents the upper attachment point and is located at the bottom of the JT-KS. In the process, do not try to pull the cord out of the JT-KS! That is where the upper end position of the gate or the flap gate has been determined. The JT-KS detects the lower limit of the gate or the flap gate on its own. This lower end position must not be set manually. The flap gate's or gate's weight should be at least 400 g and not exceed 3 kg. In the case of gate's weight being between 300 g and 400 g, this should be indicated before the product is supplied since a different setting of the automatic shutoff system is required. If the JT-KS is assembled indoors, an outside light sensor is required.

## 4. (Initial) start-up of the JT-KS Gate Control Unit ...

Starting up the JT-KS must not take place without the flap gate being attached (weight ) !!!!

Starting up the JT-KS should take place when it is light outside. After applying the 12 V DC supply voltage (inserting the 12 V plug-in power supply into the plug) or after re-establishing the 12 V supply voltage after a voltage interruption or power outage, the control system initiates with an automatic start-up routine. During this, the flap gate starts to OPEN until reaching the end-stop. Afterwards, the light sensor (LDR) is checked by the control system and depending on the status (light or dark), the flap gate starts to open again or CLOSE (even if it already OPEN). Afterwards, the control system is in automatic mode. This process also takes place after interruption of the voltage supply or a power outage.

## 5. Pin assignment of the clock timer



## 6. Clock timer functionality CT

**The CT principally functions with two times of day >> mornings = 3:00 o'clock to 14.59 o'clock and evenings = 15.00 o'clock to 2.59 o'clock <<**

The CT receives a signal via its input from the gate control unit that informs the CT which state the LDR is currently at. This is indicated in the display with LDR : dark or LDR : light. The corresponding operation only takes place when the appropriate time of day has been reached. The three push-buttons under the display work with double functions. In "normal" mode, the Function of the caption above the push-button is applicable while the caption next to the caption is applicable when setting times.

**The left push-button ( switching time )** is for setting the switching times. Within the settings, this push-button is used to increase values.

**The middle push-button ( time of day )** is for setting the current time. Within the settings, this push-button is used skip to the next parameter

**The right push-button (ON)** is for activation the backlight of the display. The backlight deactivates on its own at the next full minute upon completion of settings. Within the settings, this push-button is used to reset values (set to zero).

The clock timer CT is set to the following times and operation modes by default: OPEN 7:03 +/+ and CLOSED 19:05 X / X

### Setting the time of day:

Press the middle push-button ( time of day ) The light is activated, the cursor blinks and appears under the display for the hour value. Push the left push-button (incr.) as frequently as required until the hour for the current time of day has been set. Press the middle push-button ( next ) in order to confirm and skip to the next parameter, setting minutes. Now, set each minute in exactly the same way the hour value was set. Confirm with the middle button in order to set the seconds in exactly the same manner. After the time of day has been set, press the middle push-button ( next ) in order to return to the "normal" display.

### Setting the switching times:

Press the right button (ON) the light is activated.

Press the left push-button ( switching times) until the time display behind "OPEN" blinks and with the middle push-button (Incr.) as well as the middle push-button ( next ), set the time to Open – OPEN as well as the corresponding switching conditions:

**X / -** switching should only occur via time control, the LDR ( light sensor) and the DS - dimmer switch is not observed

**- / X** clock timer is not observed or ignored, switching only occurs via LDR (light sensor) or DS dimmer switch.

**X / X** switching either with clock timer or LDR ( light sensor) or DS - dimmer switch

**+ / +** switching either with clock timer and LDR ( light sensor) or DS - dimmer switch

**The following setting examples result from this:**

- X / - flap gate should be opened in the morning at \_\_\_ o'clock ( only via time control ).
- / X flap gate should be opened in the morning when it is light enough ( only via LDR light sensor or. DS - dimmer switch)
- X / X flap gate should be opened in the morning at \_\_\_ o'clock **or** when it is light enough.
- + / + flap gate should be opened in the morning at \_\_\_ o'clock **and** when it is light enough.

Setting with the push-button "next" , now the switching conditions are exactly the same for closing – CLOSED:

The following setting examples result from this:

- X / - flap gate should be closed in the evening at \_\_\_ o'clock ( only via time control ).
- / X flap gate should be closed in the evening when it gets dark ( only via LDR light sensor or. DS - dimmer switch).
- X / X flap gate should be closed in the evening at \_\_\_ o'clock **or** when it gets dark.
- + / + flap gate should be closed in the evenings at \_\_\_ o'clock **and** it must be dark.

Now the clock timer is ready for use!

**7. (Initial) start-up of the JT-KS Gate Control Unit with clock timer CT**

Starting up the JT-KS cannot take place without the flap gate being attached (weight ) !!!!

After applying the 12 V DC supply voltage (inserting the 12 V plug-in power supply into the plug) or after re-establishing the 12 V supply voltage after a voltage interruption or power outage, the control system initiates with an automatic start-up routine. During this, the flap gate starts to OPEN until reaching the end-stop. Afterwards, the light sensor (LDR) is checked by the control system and depending on the status (light or dark), the flap gate starts to open again or CLOSE (even if it already OPEN). Afterwards, the control system is in automatic mode. This process also takes place after interruption of the voltage supply or a power outage.

**Important:** As soon as the clock timer is used, all actions are dependant upon the time of day >>> see **Clock timer functionality**

**8. Maintenance:** No maintenance is required for the pull cord and the gear unit, do not lubricate or oil!

Load: approx. 300 g to max. 3 kg (with deflection rollers as a pulley, high level of weight up to a max. of 5 kg possible)

**9. Disposal**

**Sales packaging** includes packages that the end consumer accrues (Art. 3 para. 1 no. 2, regulation on packaging [VerpackV])

Product manufacturers or distributors must undertake to either take back the packaging waste at their place of business or within the immediate vicinity free of charge (Art. 6 para. 1) or take part in a complete-coverage system that picks up the packaging waste at the private end user or in his immediate vicinity (so-called dual systems).

**Obligation to inform according to the Battery Ordinance [BattV]**

In relation to the distribution of batteries or with the delivery of equipment that contain batteries, we are obligated to make you aware of the following:

According to law, you are obligate to returned used batteries as the end user. You can return old batteries to our dispatch warehouse (address for dispatch) that we carried or have carried in our assortment free of charge. The symbols depicted on the batteries have the following meaning:

The symbol of the crossed-out waste bin means that the battery must not be disposed of as household waste.

- Pb = battery contains more than 0.004 percent of lead by weight
- Cd = Battery contains more than 0.002 percent cadmium by weight
- Hg = Battery contains more than 0.0005 percent mercury by weight

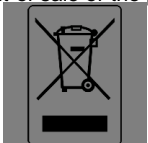
**WEEE Directive 2002/96/EG**

Electrical and electronic equipment must not be disposed of as household waste according to the European WEEE Directive. The equipment's components must be separated for recycling or disposal because poisonous or dangerous components could strongly damage the environment if they are not disposed of properly. As a consumer, according to the German Electrical Equipment Act [ElektroG],

at the end of its service life, you are obligated to return electric and electronic equipment to the manufacturer, the point of sale or the public collection points designated for this purpose free of charge.

Details regarding this are regulated by respective regional law. The symbol on the product, operation manual and/or the packaging makes reference to these regulations.

WEEE Reg. No.: DE58973207



**EC declaration of conformity according to the EC Machinery Directive 2006/42/EG from 17 May 2006, appendix II A**

We hereby declare that the machine named in the following in its concept and construction as well as the version brought to the market by us comply with the essential health and safety requirements of the EC Directive 2006/42/EC.

In the event a change is made to this machine without our consent, this declaration shall no longer be valid.

**Manufacturer/authorized representative:**

Jost-Technik owner Ilka Jost Martha-Brautzsch-Str. 26a, D- 04838 Doberschütz Telephone: +49(0)34244/59566

**Description of the machine:**

- Function: Gate control unit
- Type / model : JT-KS ...
- Serial number: V1
- Year of manufacture: 2014

**A declaration shall hereby be made on the compliance of the product with other equally applicable directives/regulations:**

- EC - EMC Directive (2004/108/EC) from 15 December 2004
- EC - Low Voltage Directive (2006/95/EC) from 27 December 2006

**Authorise representative for the compilation of the technical documentation:**

Gerd Jost Martha-Brautzsch-Str. 26a D-04838 Doberschütz

