

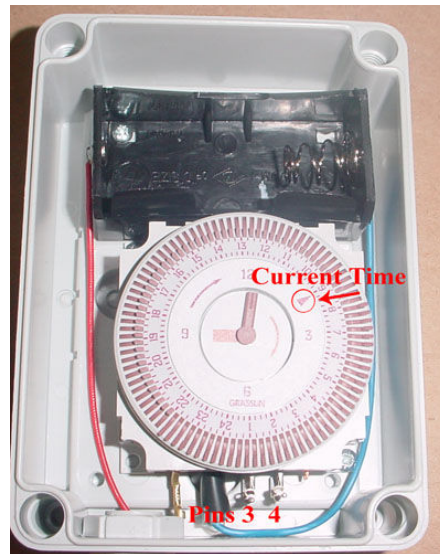
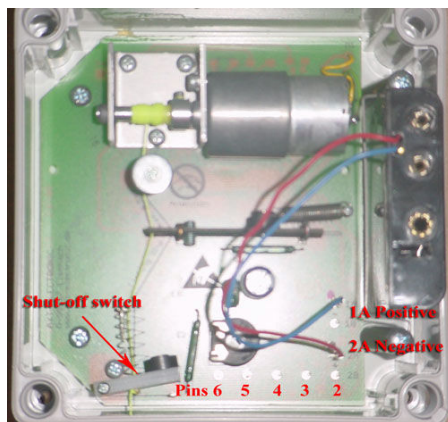
## Mounting and Operating Instructions for the Electronic Doorkeeper

VSB (for outside installation) and the VSBi (for inside installation)

**Important:** Before mounting the Electronic Doorkeeper, it is absolutely necessary to read through these instructions. Do NOT bend or “straighten” any of the internal parts of the VSB unit! Do NOT apply any voltage to contacts 3 or 6 or defect will occur! Do NOT install batteries until the unit is correctly mounted and set up. Do NOT carry out any functional tests before mounting the Doorkeeper!

- 1. Fastening the sliding gate HS.** Arrange the lower fastening screws of the slide rails inside as a lower stop of the sliding gate. If several sliding gates are intended to be mounted, they can be fastened with idlers (pulley-like devices) (maximum total weight of doors: 7 lbs.) Arrange the lower stop in such a manner that any freezing faces will not cause the sliding gate to freeze in the up or down position. When mounting the slide rails with the screws, the door will hit the screws and stop because the VSB unit will detect the decrease in weight of the door.
- 2. Mounting the VSB unit.** Mount the VSB unit above the sliding gate door by using the 4 screws. (use type VSB for outside installation, use type VSBi for inside installation). The pull cord of the VSB should be directly vertical above the sliding gate door's center. Do NOT yet apply any voltage to the VSB. Open the sliding gate door to a maximum of 60 cm / 23 in. (the desired up position) and in this position, fasten it to the cord of the VSB. Note where the cord enters the VSB unit. At this up position, you must adjust the knot in the cord so that the shut off switch is activated at the correct position at which the cord enters the VSB unit. If the knot in the cord is not adjusted correctly, the door opening will either stop too soon or not stop until the cord is broken or the motor is damaged. **THE KNOT IN THE CORD DETERMINES WHEN THE DOOR STOPS OPENING.** The lower stop will automatically be “chosen” by the sliding gate when the gate's weight becomes smaller than 200 gr. (about ½ lb.) Whenever the sliding gate is blocked, stopped by the screws mentioned above or load exceeds 5 kg, the motor in the VSB SHOULD stop within seconds. When the blockage is removed, (or if the timer / sensor indicates otherwise) the motor will again switch on again within 3 minutes. The strain on the battery is virtually negligible.
- 3. Electrical Connection.** Do NOT connect the VSB unit until the sliding gate door(s) have been installed. **VSB:** Apply 6 to 12 volts DC to the pins (1A or 1B = positive blue wire / 2A or 2B = negative red wire). Power supply 220V AC > 6 max 9V DC. **VSBb:** (battery unit) install 4 AA (LR6) type batteries. **VSBbi:** To be installed inside. Install the outside light sensor in a recessed manner in an outside wall and seal it with a silicon compound. Fit the adaptor plugs (connectors) of the outside light sensor to pins 5 and 6 in the VSB unit. **PINS 5 AND 6 INSIDE THE VSB UNIT ARE FOR INSTALLING THE OUTSIDE LIGHT SENSOR. THESE PINS MUST BE BRIDGED WITH THE GREEN JUMPER WIRE IF USING THE TIMER UNLESS YOU WISH FOR THE DOOR TO OPEN ACCORDING TO TIME AND SHUT AT DUSK, BUT NO LATER THAN THE SET CLOSE TIME. BY INSTALLING THE BRIDGE BETWEEN PINS 5 AND 6, THE VSB WILL OPERATE SOLEY BASED ON THE TIMER.** Insert the batteries as described for the VSBb. **BS:** Battery-powered timer BS. To be installed inside. By using the two-pole connector cable, connect to pins 3 and 4 inside the battery-powered timer to pins 3 and 4 of the VSB unit. (In other words, connect pins 3 to 3 and 4 to 4.) Insert the alkaline single-cell batteries (LR20) enclosed. 1A and 2A are the primary power connectors (marked by a blue and a red dot). These pins should be used when connecting the VSB battery unit. Pins 1B and 2B are intended for the connection of an external or secondary power source. This secondary power source should be 6V DC but NOT to exceed 12V DC. Power conversion required.
- 4. Functional Test.** Completely darken the VSB(b) (which is very difficult at sunlight) or the outside light sensor of the VSB or close it by actuating the timer or bridge the pins 3 and 4 with a screw driver so that the sliding gate is lowered until it reaches the bottom and switches off. After about 10 seconds, the sliding gate is opened. Do not move, block or restrict any parts of the VSB unit! It is also highly recommended that you test the opening position of the door by means of adjusting the light sensor or timer to make the door open. Be ready to disconnect the power if the unit does not shut off before the door reaches the top of the VSB unit or idler. Again, remember to adjust the knot on the VSB cord so that the shut off switch activates at the correct position. (The knot on the pull cord pushes the shut off switch down and shuts off the VSB's motor.) Not doing so can damage the VSB unit!!
- 5. Varying the sensitivity.** The adjusting device above pins 5 and 6 (slot marked with an arrow) has been set in such a way that the sliding gate door is closed relatively early. If it is still too bright at this closing time, turn the controller dial clockwise and check the changed adjustment from a certain distance. Check the adjustment at a later time and re-adjust the controller dial counter-clockwise if necessary. **SHIELD THE VSB LIGHT SENSOR OR EXTERNAL LIGHT SENSOR FROM FOREIGN LIGHT SOURCES.**

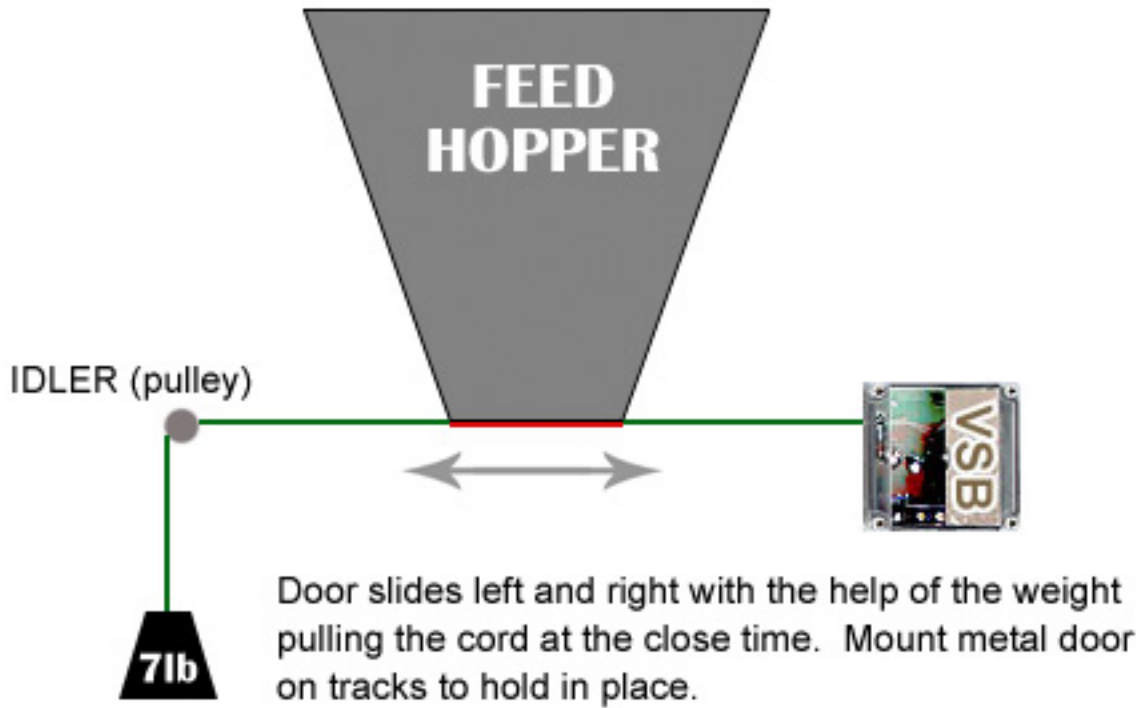
1. **Controlling the sliding gate by means of a timer (BS).** To set the time, turn the tappet disk clockwise. The closed period set at the factory is 2200 to 0800 hours. (Note that the pins pushed INWARD indicates the open time and the pins pushed OUTWARD indicates the closed time.) The closing time can be seen from the tappets or pins projecting to the OUTSIDE. Then adjust the tappet disk until the current time is indicated by the arrow on the inside of the disk. Thus the VSB unit will open around 8:00 AM and close it when it becomes dark, but no later than 10:00 PM. This mode of operation eliminates the necessity of constant closing time readjustment. If the system is intended to be controlled only by means of the timer, pins 5 and 6 must be connected with each other by using the enclosed green plug-in jumper. The VSB unit can also be closed by the switch (no contact) via pins 3 and 4 – same operation as that of the timer. If pins 3 and 4 are not connected with each other and pins 5 and 6 are closed by means of the switch, the sliding gate will be opened. Be sure to close the BS unit completely. Use an open-end spanner to screw on the cable. Otherwise, your timer will stop working after a few years. **That is, to make sure that all external connections going into the timer and VSB unit are sealed from moisture.**
2. **Pull cord.** After some years of operation, it may happen that the cord will break. Check the condition of the pull cord at certain intervals. For replacing the pull cord, close the gate door manually, “draw out” the complete cord, while not pulling at the cord. But wait until the cord is drawn out mechanically. Now slightly slow the cord and guide it back into the VSB unit. We disclaim any warranty for pull cords being broken and the consequences of such. The pull cord will have a service life of about 10 years or more.
3. **Maintenance instructions.** Do NOT lubricate the pull cord with oil or grease. Merely apply a very small amount of spray grease to the bearing bolts of the plastic gears if they should generate severe noise.
4. **Technical Data.** Operating voltage: 6 to 12 V DC. MAXIMUM sliding gate weight: 7 lbs. Minimum sliding gate weight: 200 gr. (in case door weight is below 200 gr., a closing operation is not possible.) Maximum stroke length: 60cm / 23 in., automatic adjustment. Delay: About 10 seconds for opening and about 1 second for closing, thus the device is insensitive to lightning stroke. Batteries: 4 AA, Mignon, only alkaline version (the latter version has a two-fold capacity, compared to “Super” batteries).
5. **Other.** The battery-powered timer (BS) can be readily added at a later date. Using the battery-powered timer, it is possible to open and close the sliding gate door according to the time setting or to open it according to the time setting and close it in response to light conditions at dusk. Opening in response to light conditions at dawn may involve a risk because daybreak may occur (beyond the 45<sup>th</sup> degree latitude) in the summer months before 4 AM.



(Left- VSB Unit / Right- Timer BS)



USE TO OPEN & CLOSE A FEED BIN (hypothetical)



USING IDLERS (PULLEYS) FOR MULTIPLE DOOR INSTALLATION

