OM-26R/M Level Sensor - Installation Manual
(Auxiliary unit, TKA09452)

Thank you for purchasing the OM-26R/M level sensor. Please read instructions below carefully, as well as the Operation Manual of OM-26R/M, prior to application of this device to the screw feeder.

1. Product Summary

This device is designed to be used with OM-26 R/M automatic screw feeder. When equipped with OM-26R/M, this auxiliary sensor is capable of producing an output signal for notifying that the remaining screw level is running low.

2. Prior to installation of this device, please confirm following items are included:

-Installation manual (this document)

-Sensor cable (5-wire, grey-colored)

-Output signal cable (2-wire)

-Attachment screws x2

3. Installation

The 5-wire sensor cable shall be connecting the level sensor to connector CN90 on circuit board located on the back of the feeder.

The output signal cable shall be connected to CN91 on the same board, and placed through back of the feeder's main body cover. For installation details, please refer to section 8-2 of OM-26R/M's Operation Manual.

4. Adjustment

Upon shipment, the sensor has been adjusted to default setting with standard testing screws. When remaining screws inside the feeder has decreased to 10–20% of the regular amount, an output signal from screw feeder (from attached blue and green wire) shall turn ON. *Note 1: Detection level may vary by actual shapes of screw.

5. Output Specification

DC current = Max. 100mA

Nominal voltage = 5~24V (Max. 27V)

*Note 2: When connecting output signal cable to other sources, please make sure that the blue wire is connected to the higher potential, and green wire is connected to the lower potential end, otherwise the circuitry would be damaged.

6. Additional Notes

- The green LED indicates that the level sensor has been turned on.
- Detection level of the sensor can be adjusted from the variable resistor on top of the sensor unit.

When making adjustments, please follow steps below:

(1) After installing the sensor, please /insert/ the amount of screw to the level intended to be detected as low, and turn on power to the screw feeder. Please set the screw level between 10-40% of the regular storage max amount (below the rail).

(2) Please use the minus (-) side of the plastic adjustment driver attached with the OM-26 R/M unit to adjust the sensor; when the red LED starts to blink, it means that detection level being set has approached actual level of screws.

*Note 3: Please DO NOT use any other screwdrivers other than specified above.

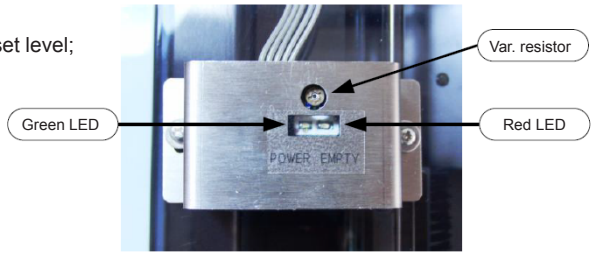
- There are two blinking patterns of the red LED, where a shorter blinking interval signifies a higher precision of the detection level.

Component description:

Green LED: Indicates power to the level sensor.

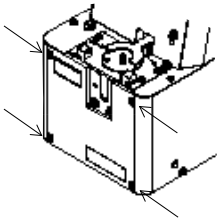
Red LED: Turns on when remaining screws decreased below set level; blinks when the screw level is near the set limit.

Variable resistor: For fine-tuning of the detection level.



OM-26R/M Level Sensor
Installation Instruction

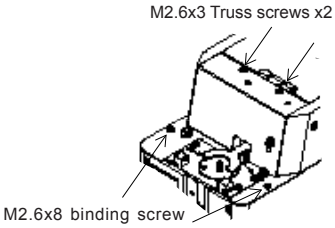
① Detach the lower front cover on OM-26R/M.



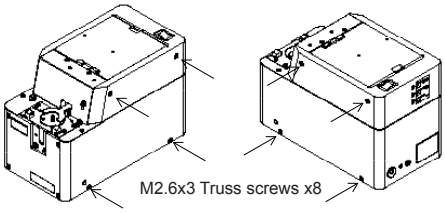
M2.6x8 binding screw x4

* Please use driver #2 when unfastening the screws.

② Take out the upper cover, and unplug the LED connector.



③ Unfasten all remaining screws on the main body cover, and remove it from the machine by holding the front end, slightly open the cover with the back-end tilted as shown as picture on right.



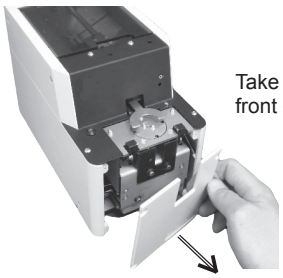
④ Using screws included with the level sensor, attach the sensor to the black clear-acrylic cover of OM-26R/M by fastening screws on each side of the sensor. The sensor shall be placed pointing towards the front of the machine.
The 5-wire sensor cable shall go through the opening between the acrylic cover and body cover, connecting to the circuit board.

⑤ The 5-wire sensor cable (marked A on right) shall be inserted to connector CN90 along the left edge of the smaller circuit board (located on the left, as shown in picture), at the second connector from the top of the board.

For the 2-wire output signal cable (marked B, blue and green), please connect it to the connector located on upper side of the board as shown in photo. This signal cable shall be routed through an opening on the back of the body cover. (as in picture below)

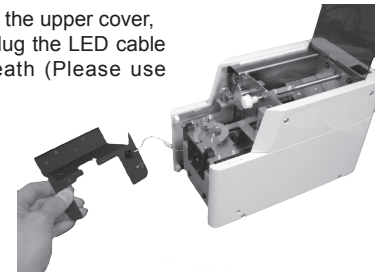
⑥ Without clamping the wires, please install the body cover back onto OM-26R/M main unit with the same steps, with the front covers being installed last.

①

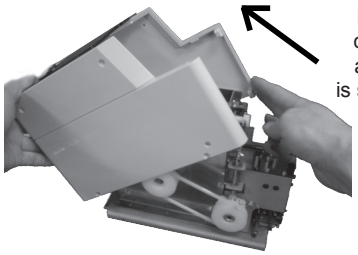


Take out the lower cover on the front of the machine.

② Take out the upper cover, and unplug the LED cable underneath (Please use caution).

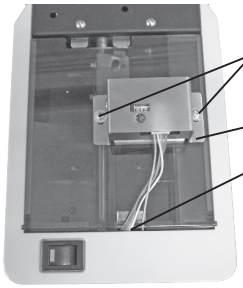


③



Please remove the body cover slowly at an angle, as the power switch wire is still attached to the main mechanical body.

④

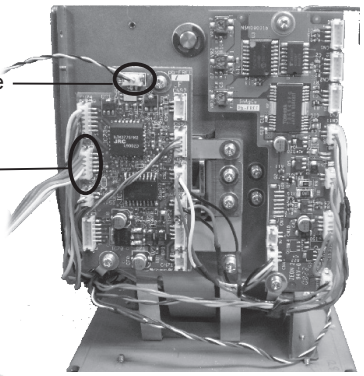


2xM2.6 screws with washer, attach to the acrylic cover.

Level sensor

The cable shall be routed through a cut-out on rear end of the acrylic cover, and connect to the circuit board.

⑤



(Back view of OM-26R/M)

Output signal cable (B) going through body cover.