# **NOTES OF OPERATION OF DEVICE**





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### **OVERVIEW:**

The instrument C89 is used on circular knitting machines to check the quality of the knitted fabric. The device stop the machine when the signal from the optic head find out a defect on the knitted fabric. It works like the more completed FM8/FM10 with lower options and cost.

This instrument is designed for simple fabric texture and it is very easy of use.

### **COMPONENTS AND ACCESSORIES:**

The tool is composed of the followings parts:

- Main unit with microprocessor and lights based system of visualization for errors (suitable as "leds").
- one optics head for the control of the fabric (different formats available )
- Couple magnetic sensor and magnet for the control of the turns of the machine.

**Note** : The couple magnetic sensor and magnet it is essential to be able to realize the dropped stitches skip .





**C89-16V** 

## **BASIC INSTRUCTIONS**

The device can be turned on and off with the POWER key. The yellow led flashing or continuously on mean that the device is powered on.

The tool checks the presence of imperfections on the knitted fabric and show the defect size on the green/red leds: there are more leds turned on as the defect is bigger .

When the red led will turn on then the machine is stopped ,and the instrument enter the stop mode blinking all the leds; the employee can remove the defect and restart the instrument pressing the RESET key . Then restart the knitting machine .

There is also the JUMP function useful for the discarded needle; if this function is enabled then the knitted fabric after the magnetic sensor is not checked but 'skipped'.

The JUMP function is enabled and/or disabled by the JUMP key :

- if the yellow led is blinking then the JUMP is active
- if the yellow led is continuously on then all the knitted fabric is checked.

The receiving of the signal from the magnetic sensor is point out by the flash of the yellow led .

It is possible to choose between a fixed output relays mode and a blinking one.

To choose this keep the RESET key pressed for 5 seconds while the instrument is in stop mode . A short push on the RESET key always restart the instrument.



#### INSTRUCTIONS FOR THE ASSEMBLAGE OF THE OPTIC HEAD

- 1. The optic head has a black plastic front with a transparent window, as visible in the following image, and a plastic cork on the back. Mount one or two sleighs of metal on the optic head so that sticks out of around two millimeters from the front. Then mount the optic head with the sleighs in contact with the fabric, so that the front of the head is firmly two millimeters apart from the cloth.
- 2. The head must be placed on top, next to the needles, where the fabric is formed. It is generally fixed on the yarn guide. The transparent window of the front, visible in the following image, has to be parallel to the defects of the fabric as the dropped stitches. Mainly the head is placed standing in portrait (not landscape), exactly as in the image.
- 3. If the head is very near to the needles, only the lower sleigh is necessary.
- 4. Check that the fans don't make to tremble the cloth at their passage. This could cause some stop not necessary.
- 5. Connect the head to the main unit



#### INSTALLATION ISTRUCTIONS

Connect the instrument as shown on next page. Then power on the device and keep low the sensitivity, turning the knob on anti-clockwise direction for 10 turns or more.

Then turn on the device by the POWER key.

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Then start the knitting machine, and slowly increase the sensitivity, turning the knob clockwise until one green led start flashing. Then increase sensitivity again until the second green led start flashing a little. Now the instrument should be ready to work ; in case a defect is spotted this will cause the red led to turn on stopping the machine.

Increase the sensitivity if the defects are not pointed out, or otherwise decrease sensitivity if the instrument stop without reason.





### **TECHNICAL SPECIFICATIONS**

- Power supply voltage 16VAC +-20% 50-60Hz.
- Power consumption 3 W.
- Magnetic sensor input compatible with other ILE devices and sensors.
- Multi turns knob for sensitivity regulation.

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