Instructions - Mode d'emploi - Bedienungsanleitung



Bluetooth®

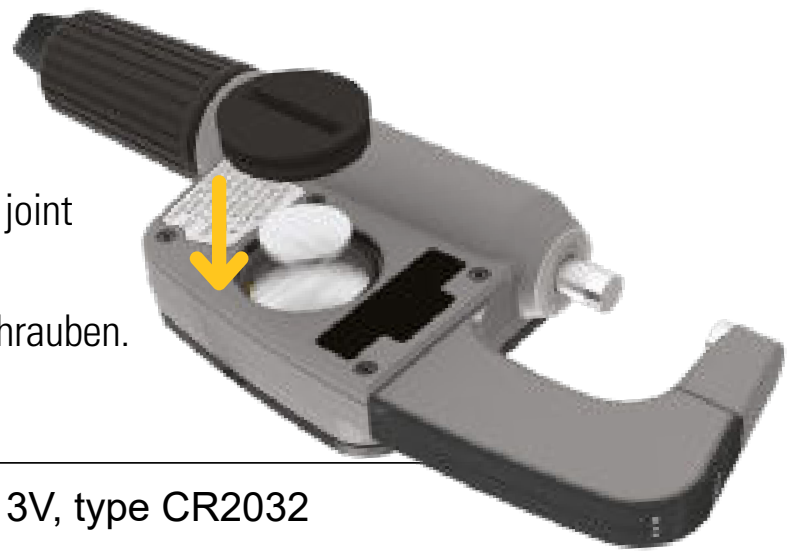
IP67

Digital Micrometer	E
Micromètre Digital	F
Digital Mikrometer	D

Installing and replacing the battery /Mise en place et remplacement de la batterie / Einbau und Austausch von Batterie

The display of the symbol «B» indicates the end of the battery life. However some working hours will remain. / L'affichage du symbole «B» indique la fin de vie de la batterie. Cependant il reste des heures de travail disponibles. / Die Anzeige des Buchstabens «B» zeigt das Ende der Batteriebetriebsdauer an. Es verbleiben einige Arbeitsstunden.

1. Open the battery cover / Dévisser le bouchon de pile / Batterie deckel mittels
2. Change the Battery (Lithium CR2032 type) / Changer la pile (Pile lithium type CR2032) / Batterie wechseln. (Lithium Batterie, Typ CR2032).
3. Check the rubber protection position / Contrôler la mise en place du joint / Dichtungslagerung kontrollieren.
4. Close the battery cover / Revisser le bouchon / Deckel wieder einschrauben.



Battery / batterie / **Batterie**: Lithium 3V, type CR2032

To unlock the spindle, rotate the speeder to disengage the lock, then keep rotating the controller to move the spindle forward.

Pour déverrouiller la broche, tournez la manette rapide pour débloquer le verrou, puis continuez à tourner l'avance rapide pour faire avancer la broche.

Um die Spindel zu entriegeln, drehen Sie den Speeder, um die Verriegelung zu lösen, und drehen Sie dann den Trommel weiter, um die Spindel vorwärts zu bewegen.



1. General description

The external micrometer is equipped with a Bluetooth® connection and the SIS. (Smart Inductive Sensor) with the reference position being maintained, even when the instrument is in standby mode.

It includes the following functional features:

- Input of Preset values.
- Selection of the measuring unit (mm / INCH).
- Transfer of measurement value (Bluetooth® connection).
- Protection against penetration of dust and liquids (oil, water), protection degree IP67 according to (IEC 60529 standard).

The micrometer is extremely easy to operate thanks to its menu selection system.

4. Maintenance

Store the micrometer in a dry environment when not in use for long periods of time to avoid corrosion of the metallic parts.
Do not close the measuring spindle with the anvil when not in use. Keep a distance of 1-2 mm.
Do not use aggressive products (alcohol, trichloroethylene or others) to clean the plastic parts. Do not store the micrometer in areas which are exposed to sun, heat or humidity.

Important : clean and dry the spindle and metallic parts regularly, and protect the spindle with light oil to guarantee a perfect mechanical functioning and to avoid corrosion.

5. Switching ON, initialisation

After pressing any button, the instrument displays «--SET--» for the initialisation of the reference point. Bring the measuring spindle on to the anvil (0-25mm) or on to the corresponding setting Gauge block for larger ranges. Then press [SET]. The instrument is now ready (Check the Preset Value).

6. Standby

The Reduced Consumption Mode works without the loss the reference position. The standby mode is activated automatically after 10 minutes of no use. It can also be activated by pressing the [SET] key until extinction of display.

The instrument awakes automatically when movement is detected on the thimble, by pressure on a button, or when requesting Data.

7. Full Switch OFF

In order to fully switch off the instrument (minimum power consumption), press the [SET] button until the message «OFF» appears. In this state no data is maintained and therefore the Reference position is lost. The --SET-- message will be displayed again during the next use (see “Switching ON”).

8. Description of the menu system

The [MODE] key enables the selection of the different menus (each key stroke activates the following menu). The [FAV] key enables the activation of a function assigned to the corresponding selected menu.

To avoid a wrong action, each menu is active only for 5s. After 5s, the instrument automatically switches back to «Measuring Mode» as long as no action has been performed to the [MODE], [SET] or [FAV] key.

9. Preset mode

Preset makes it possible to introduce an alternative reference value different from zero.

Repeatedly press the [MODE] button until menu «PRE» appears. Then press the [FAV] button to activate the function Introduction of Preset. The display shows 00.000 or the last stored value of Preset. The first digit blinks.

Each push of the [SET] button modifies the value of the blinking digit (±, 0..9).

Each push on the [FAV] button moves the cursor to the right. A short press on the [MODE] button validates the Preset value and leaves the Preset menu. The instrument automatically returns to «Measuring Mode» when there are no further actions from the buttons [MODE] or [SET] or [FAV] for a period of 15s.

10. Reset, recall of the preset

A push of 2s on the [SET] button assigns the Preset-value (or zero) to the current position of the measuring spindle.

11. Changing unit (mm/inch)

Press [MODE] button until the display enters Advanced Menus, then the [FAV] button to change the unit «MM» or «INCH».

12. Locking of the instrument

Press [MODE] until the display enters advanced menus, then repeatedly press [MODE] until the display shows «LOC».

When the instrument is locked, only the function of [Fav] button is active (default: Data sending). Pressure of 5s on a button, unlocks the instrument.

13. Bluetooth® Function (depends on model)

The connection procedure has been designed to be simple and is signalled by the following three states:

1° Symbol	off	Disconnected Mode
2° Symbol	blinking	Advertising Mode
3° Symbol	on	Connected Mode

The following options can be selected to control the Bluetooth® module.

On	Enable Bluetooth® module (start advertising mode).
OFF	Disable Bluetooth® module (terminate active connection).
rESEt	Clear pairing information.
MAC	Display the MAC (Media Access Control) address.

Three Bluetooth® profiles are available.

SIMPLE	Profile without pairing (default).
PAIr	Paired and secured profile.
HId	Virtual keyboard mode (compatible with recent equipement without driver installation).

Note:

- Bluetooth® pairing information is cleared when the profile is changed.

13.1. Connection :

1° Activate Bluetooth® compatible software and hardware (Master : PC, Display Unit).

2° Start the instrument. By default the Bluetooth® module is active and the instrument is available for connection (Advertising Mode).

3° If no connnection is established during the advertisement period reactivate the Bluetooth® module using the bt / On menu.

4° Instrument is ready to communicate (connected mode.)

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13.2. Only with Paired Profile :

Pairing with master is automatically done at first connection.

To connect the instrument to a new master (new pairing), pairing information on the instrument must be cleared using the bt / rESEt menu.

13.3. Bluetooth® Specifications

Frequency Band	2.4GHz (2.402 - 2.480GHz)
Modulation	GFSK (Gaussian Frequency Shift Keying)
Max Output Power	Class 3: 1mW (0dBm)
Range	Open space: up to 15m Industrial environment: 1-5m
Battery life	Continuous : up to 2 months - Always connected with 4 values /sec. Saver : up to 5 months - The instrument sends value only when the position has changed. Blind/Push : up to 7 months - Value is sent from the instrument (button) or requested from the computer.

14. Favourite keys

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The [FAV] key gives direct access to a predefined function, and can be configured according to the needs of the user. In order to assign a function to the [FAV] key, give a prolonged press on the Favourite key, and then select the required function :

0 dAtA Data Transmission (default)	3 rEF REF 1 - REF 2	mm - INCH
1 HoLd Hold Display	Recall Preset	0.01 0.001 / 0.001 0.0001 (depends on model)
2 SEt Zero Reset	Bluetooth® ON-OFF	8 noF No function

Validation of selection: By a prolonged press on [FAV] Key or a short press on [SET] or [MODE].

Note :

- A function can also be assigned via RS232 using the command <FCT + Function No.> (FCT 0..9 A..F)
example : Toggle unit = <FCT6>, reference change = <FCT3>.

15. Remote commands

The data request is done by the sending of the character ASCII <?>, followed by <CR> (carriage return). The instrument also answers in the same way during the detection of an impulse pedals/automaton.
The other commands are shown in the following table:

?	Sends the displayed value
AOFF 0 / AOFF 1 / AOFF?	Deactivates/activates/status the automatic switch-off
BAT?	Sends the status of the battery (BAT1=ok or BAT0=low)
ID ?	Sends the instrument identification (SY306)
IN	Activates the Inch unit
KEY 0 / KEY 1 / KEY?	Locks/unlocks/status of keyboard (except data output)
ECO 1 / ECO 0 / ECO?	Activate/deactivate/status of Bluetooth® economic mode
LCAL?	Sends the date of the last calibration (DD.MM.YYYY)
LCAL DD.MM.[YY]YY	Sets the date of the last calibration
MM	Activates the millimeter unit
NCAL?	Sends the date of the next calibration (DD.MM.YYYY)

NCAL DD.MM.[YY]YY	Sets the date of the next calibration
NUM ?	Sends the instrument number
NUM X..X	Modifies the instrument number (up to 10 characters)
OFF	Switches instrument OFF
OUT 0 / OUT 1 / OUT?	Disables/enables/status of the automatic data transmission
PRE?	Sends the Preset value (±xxx.yyy[yy])
PRE ±XXX.YYY	Sets the Preset value (max. 199.999mm / 7.83'')
RST	Resets instrument
SBY xx	xx number of minutes before stand-by
SET?	Transmits the configuration of the instrument (IN or MM, STO0 or STO1, KEY0 or KEY1, BAT1 or BAT0)
STO 0 / STO 1 / STO?	Hold off/Hold on/status of Hold mode
UNI 0 / UNI 1 / UNI?	Locks/unlocks/status of measuring unit
VER?	Sends the version and date of software (Vx.x DD.MM.YYYY)
BT 0 / BT 1 / BT?	Desactivate/activate/status of the Bluetooth® module
BTRST	Clear pairing information
MAC ?	Transmits the Bluetooth® MAC Address

16. Error messages

In case of problems, the following error messages will be sent via the data connection and on to the display :

- ERR0 : Error of the reading sensor
- ERR1 : Error of parity
- ERR2 : Error in the received remote command
- ERR3 : Overflow of the measuring range
- ERR8 : Memory error
- ERR9 : Critical error, the instrument must be revised
- No Data : Bluetooth® transmission error

The errors 0 and 3 must be confirmed by the button [MODE] or [SET], and then the instrument must be reinitialised.
The Error 'No Data' must be confirmed by button [MODE] or [SET]

CERTIFICATE OF CONFORMITY

We certify that this instrument has been manufactured in accordance with our Quality Standard and tested with reference to masters of certified traceability by the federal institute of Metrology.

CERTIFICAT DE CONFORMITE

Nous certifions que cet instrument a été fabriqué et contrôlé selon nos normes de qualité et en référence avec des étalons dont la traçabilité est reconnue par l'institut fédéral de métrologie.

QUALITÄTSZEUGNIS

Wir bestäbrochen, dass dieses Gerät gemäss unseren internen Qualitätsnormen hergestellt wurde und mittels Normalen mit anerkannter Rückverfolgbarkeit, kalibriert durch das eidgenössische Institut für Metrologie, geprüft worden ist.

Description of Bluetooth® module:
This module is based on Nordic Semiconductor nRF8001 µBlue Bluetooth Low Energy Platform. The nRF8001 is a single chip transceiver with an embedded baseband protocol engine, suitable for ultra-low power wireless applications conforming to the Bluetooth Low Energy Specification contained within v4.0 of the overall Bluetooth specification. The nRF8001, used in the current revision of ISP091201, is a production product using a RoM for the baseband protocol engine.

U.S./Canada Certification

Sylvac
m.n: S_Mike EVO

This device contains
FCC ID: 2AAQS-ISP091201
IC: 11306A-ISP091201

NOTICE :
Changes or modifications made to this equipment not expressly approved by Sylvac may void the FCC authorization to operate this equipment.

NOTICE:
This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions.
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE:
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Radiofrequency radiation exposure Information:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Brazil Certification



Description :
This module is based on Nordic Semiconductor nRF8001 µBlue Bluetooth® Low Energy Platform. The nRF8001 is a single chip transceiver with an embedded baseband protocol engine, suitable for ultra-low power wireless applications conforming to the Bluetooth® Low Energy Specification contained within v4.0 of the overall Bluetooth® specification. The nRF8001, used in the current revision of ISP091201, is a production product using a RoM for the baseband protocol engine.

Este equipamento opera em caráter secondário, isto é, nãotem direito à proteção contra interferência prejudicial, mesmo de estações do mesmo tipo e não pode causar interferência a sistemas operando em caráter primário.

Korea South certification

MSIP-CRM-iNs-ISP091201

Class A Equipment (Industrial Use)

이 기기는 업무용(A급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.

Mexico certification

Contiene modulo inalámbrico
Marca: Sylvac
Modelo: ISP091201D
IFT: RCPSYIS14-0655

La operación de este equipo está sujeta a las siguientes dos condiciones: (1) es posible que este equipo o dispositivo no cause interferencia perjudicial y (2) este equipo o dispositivo debe aceptar cualquier interferencia, incluyendo la que pueda causar su operación no deseada.

Japan certification

R 001-A06167

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Taiwan certification

CCAH18LP2040T6

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前項合法通信,指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

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EU DECLARATION OF CONFORMITY (DoC)

We, Sylvac SA, hereby declare under our sole responsibility that the product

Name	S_Mike Evo Smart
Description	Professional micrometer with Bluetooth® wireless technology
Part Numbers	803-6025, 803-6050, 803-6075, 803-6100

has been submitted to a conformity assessment and fulfils the essential requirements of the following European directives/re.

2023/988 (EU)	General product safety Regulation
2014/30/EU	EMC
2011/65/EU & 2015/863/EU	RoHS
2014/53/EU	RED

and complies with the following harmonized standards or other normative documents

EN 61326-1:2021	Electrical equipment for measurement, control and laboratory use – EMC requirements
EN IEC 63000:2018	Technical documentation for the assessment of electrical and electronic, products with respect to the restriction of hazardous substances
EN 300 328 V2.2.2	Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband transmission systems

Person authorized to compile the technical file and issue the declaration of conformity: Eric Schnyder

Place and date of issue	Yverdon-Les-Bains, August 12, 2024
Name (position)	Eric Schnyder (CEO)
Signature	