

“PYRAMID” Flowcheck System

Code n. 89389

INSTRUCTION MANUAL



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INSTRUCTION MANUAL

READ THIS BOOK CAREFULLY

It is intended to help you operate and maintain your new instrument properly.
Keep it handy for answers to your questions.

IMPORTANT SAFETY INSTRUCTIONS

When using this appliance, always exercise basic safety precautions, including the following:

- Use this appliance only for its intended purpose as described in this Use and Care book.
- This instrument must be properly installed in accordance with the Installation Instructions before it is used.
Note: We strongly recommend that any servicing be performed by a qualified individual.
 - A. Before cleaning.
 - B. Before replacing any accessories.
- Do not operate your instrument in the presence of explosive fumes.

Warning

Fire or electric shock hazard, do not expose this product to rain or moisture.

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1. INTRODUCTION

The new “PYRAMID” flowcheck is a new, easy-to-use, battery operated system that is applied to control the performance of all the air samplers of the “SAS” family.

This instrument is composed of two separate units, a fan and a flowmeter. The perfect balanced fan has a special rubidium-made bearing that generate an electromagnetic field proportional to the fan speed. The flowmeter measures this electromagnetic field and then calculates the exact air flow that is passing through the fan.

The “Pyramid” flowcheck system can display the airflow either in litres per minutes (L) or cubic feet per minute (CF). The precision of the measured value is for “SAS Super 100” air sampler +/- 3 litres, for “SAS Super 180” air sampler +/- 6 litres.

The internal battery life is approximately 3 years under normal operative conditions.



2. TECHNICAL SPECIFICATIONS

Weight: 890 grams

Measurement range: 70-200 litres per minute

Suggested operational temperature: +20°C (+/- 2°C)

Power supply: 3V type CR2032 lithium battery. The normal battery life is 30.000 measurements of 60 seconds

Reading: The LCD display can show the results in litres per minutes (L) or cubic feet per minute (CFM).

3. COMPONENTS OF THE “PYRAMID” SYSTEM

The “Pyramid” system consists of 4 separate parts:

- (a) fan
- (b) flow sensor with LCD display
- (c) vertical wind tunnel
- (d) Instruction Manual with record documentation

It is recommended that this scientific system is treated with care and attention in order to maintain its precision.



4. PRELIMINARY INSPECTION

The apparatus is subject to specific working tests before shipping and it is carefully packed to avoid possible damage during transit. However, a visible check should be carried out as soon as possible to determine any transit damage. This must be reported immediately. The following procedures should be followed to check that the unit is functioning correctly.

5. INSTALLATION & OPERATION

Fan installation

1. Screw the fan housing (a) on top of the aluminium vertical wind tunnel.

Flow sensor installation

2. Fix the flow sensor with LCD display (b) on side of the aluminium vertical wind tunnel.

Vertical wind tunnel installation

3. The battery pack of the “SAS” air sampler instrument to be checked must be charged for at least 14 hours before the test (4 hours if fast battery charger is used).
4. The “SAS” air sampler should be positioned in vertical position in a quiet place on a strong surface. Avoid current of air around the instrument.
5. Insert a Contact plate (RODAC plate) into the aspirating chamber of the air sampler and screw the aspirating head
6. Program 1000 litres of air on the “SAS” air sampler and switch it on.
7. Position the “Pyramid” system (c) on top of the SAS air sampler.
8. Switch on the “Pyramid” system by briefly pressing the switch button of the flow sensor. The software version will appear on the LCD display first, after which the instrument moves into the mode for measuring the current air flow (litres per minute or cubic feet per minute). The measuring time is approximately 30 seconds to obtain a stable data reading.

Unit of measurement choice

9. The LCD display switches to the converse version (L/minute or cubic meter per minute) by repeated pressing of the push button.
10. Record the lower and higher values on the record paper.
11. Repeat the operation from 6 to 8 ten times. Record the values of each cycle on the record paper and calculate the average.

Switch off of the unit

12. Hold the push button pressed down until the unit switches off.

6. MAINTENANCE

In order to maintain its precision, it is recommended that the system is carefully treated.

The system doesn't require special care and maintenance procedure. Clean the outside surface with a normal cloth.

Do not subject the system to sudden shock.

Battery replacement

It is suggested that the lithium battery 3V type CR2032 is replaced by servicing people or watch dealer.

- (a). Unscrew the six screws of the metal back.
- (b). Unscrew the screw of the battery cover.
- (c). Remove the cover and extract the lithium battery.
- (d). Put in the new battery observing the polarity (+ upwards). Screw back the battery cover. Make sure that the tiny tongue in the centre of the top is raised so that it touches the metal back.
- (e). Before refitting the metal back cover, make sure that the seal is clean and securely positioned in its slot.
- (f) Refit the back and screw its six screws.

WARRANTY

WARRANTY CONDITIONS

International PBI warrants this product to be free of defects in materials and functionality.

The repairs will be performed by International pbi or by authorized dealers as follows:

- Faulty components free replacement
The labour is always at customer's expense
- The equipment will be sent at buyer's expenses and risk and the return will be ex-works
- This warranty does not apply to damages resulting from tampering, abnormal use and installation and does not cover transport damages
- International PBI shall not be liable for any commercial damages, whether incidental, consequential or otherwise derived from the use of instruments

ATTENTION

TO OUR NEW CUSTOMER

As a user of our equipment you are covered for a 12 month guarantee for all spare parts as a result of mechanical failure of the machine during normal use. In order to provide you with first class service, it is essential for us to know all your references and which equipment you have. We kindly ask you, therefore, fill in the attached guarantee and return the card to us by first class mail.

A NOTRE NOUVEAU CLIENT

En tant que utilisateur de notre appareil vous êtes couvert par une garantie de 12 mois pour toutes pièces de recharge eventuelles resultant de défauts mecaniques en utilisation normale. Dans le but de vous fournir un service impeccable il est essentiel que nous sachions qui vous êtes, ou vous êtes situes et quel equipment vous possédez. Voudriez vous remplir cette carte de garantie et nous la retourner.

Le service PBI peut vous proposer un service d'entretien vous assurant un fonctionnement parfait rapide en cas de panne.

Votre distributeur local peut vous fournir tous renseignements au sujet de ce contrat d'entretien et des prix appliqués.

FÜR UNSERE NEUEN KUNDEN

Für Benutzer unserer Apparate sind alle ersatzteilen die sich aus mechanischen Fehlern in normalen Gerbrauch ergeben., für zen Monate garantiert.

Damit wir Ihnen einem erstklassigen Service dienen können, ist es unbedingnotwending, dass wir wissen wo Sie sind und welches Gerat Sie haben. Darum bitten wir Sie, die beiliegende Garantiekarte auszufüllen, und Sie uns per Post zuzuschicken.

PBI bietet Ihnen auch einen vorbeugenden Kundendienst, um dafür zu sorgen, dass Ihre Apparate zu allen Zeiten in Ordun sind, dass Sie regelmassig kontrolliert werden, einen Express –Krisen-Service, wenn ein Apparat ausfällt.

Ihr Verkaufs Agent hat alle Details des Service Kontraktes und kann Ihnen Preise offerieren.

A TODOS NUESTROS NUEVOS CLIENTES

El equipo adquirido por Vd. Está garantizado por doce meses contra cualquier defecto de fabricación que pudiera producir avería durante el uso normal. Con el fin de poderle ofrecer un servicio eficiente, es esencial que sepamos su nombre o razón social, dirección y equipo adquirido. Para ello, rogamos que por favor rellene el certificado de garantía adjunto y nos lo envíe por correo certificado.

PBI también puede ofrecer un servicio postventa de mantenimiento preventivo para mantener el perfecto estado de funcionamiento de su equipo, así como ofrecerle una atencion normal y un rapido servicio en el caso de que su equipo falle.

DECLARATION OF CONFORMITY

International PBI S.p.A.
Via Novara, 89 - 20153 Milano - Italy

HEREBY DECLARES
under its sole responsibility that the following product

“PYRAMID” Flowcheck System
Code: 89389

- ◆ conform with the technical requirements
of the following directives
89-336 CEE, 92-31 CEE
- ◆ and the following harmonized standards
have been applied EN55014



President
Roberto Ligugnana

Milan 2009

MICROBIAL AIR SAMPLER CONTROL

☐ DATE..... ☐ INSTRUMENT MODEL☐ DATE OF LAST CONTROL.....

☐ AVERAGE VALUE OF THE LAST CONTROL

☐ 55mm CONTACT PLATE (RODAC)	☐ 84mm CONTACT PLATE	☐ 90mm PETRI DISH
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TEST N°	1	2	3	4	5	6	7	8	9	10
LTS/MN										
TEMPERATURE										
LOCATION										
AVERAGE										

THE INSTRUMENT IS ☐ *SUITABLE* ☐ *NOT SUITABLE*

NOTE.....

OPERATOR'S NAME.....

SUPERVISOR'S NAME.....