SAGE SCIENCE INC

BluePippin Installation Guidelines

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SUMMARY

This guideline documents requirements and procedures for users or Sage Science Staff for installing the BluePippin instrument.

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1.0 INTRODUCTION

1.1 Purpose

This guideline documents requirements and procedures for users or Sage Science Staff for installing the BluePippin system.

1.2 Scope

This document encompasses the requirements, conditions, and steps for the installation of the BluePippin instrument. This document will be used by Sage Science personnel and Sage Science customers or collaborators.

1.3 Reference Documents

460013, BluePippin Operations Manual

All at the latest revision.

1.4 Responsibilities

The Sage Science Applications Lab Director or designee will be responsible to ensure that this procedure is implemented.

2.0 BLUE-PIPPIN INSTALLATION REQUIREMENTS

2.1 Operating Conditions

The BluePippin system is designed to operate under the following environmental conditions:

- Pollution Degree 2
- Installation category 2
- Max. Altitude 2000m
- Indoor use
- Ambient temperature 17-25^{o}C
- Humidity 10-80%, non-condensing

2.2 Safety

Standard laboratory precautions should be taken when handling BluePippin Gel cassettes and operating the BluePippin:

- Wear a lab coat, safety glasses, and gloves.
- Use in proximity of an eye wash station and/or running water

2.3 Power Consumption and Heat

At maximum power consumption, the BluePippin generates approximately 100Watts (**340 BTU/hr**)

2.4 Operating Power and Outlet Requirement

Two **110V (or 220V) outlets** are required:

- BluePippin instrument
- LCD monitor

2.5 Bench Space

A **30" X 30"** area is recommended for operation of the BluePippin and preparation of Gel cassettes, based on a 30" deep bench. Minimally, a depth of 18" will suffice.

BluePippin instrument dimensions:

- 11"W x 7"H x 21"D (28 x 18 x 53 cm)

2.5 Bench Space (cont'd)

LCD monitor dimensions (including stand):

- 17.5"W x 13"H x 7" D (44 x 33 x 18 cm)

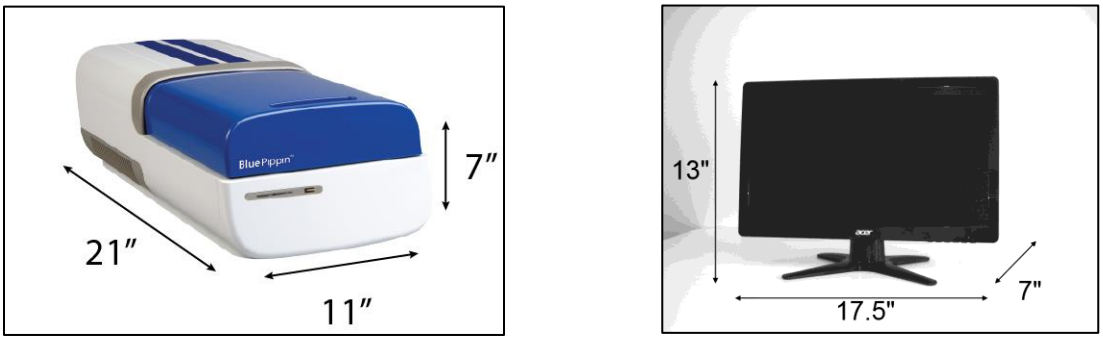


Figure 2.1. Instrument and Monitor Dimensions

3.0 BLUE-PIPPIN INSTALLATION PROCEDURE

3.1 Packaging and Components

The system is shipped in two boxes: one will contain the BluePippin instrument and accessories, and the second box will contain the computer monitor in the manufacturer's original packaging. With the boxes in the upright position, open and confirm that the following items are enclosed:

Monitor

- LCD computer monitor
- VGA video cable
- Power supply
- Power cord

BluePippin

- BluePippin Instrument
- Accessory box
  - Computer keyboard, USB
  - Computer mouse, USB
  - Power supply
  - Power cord
  - Rinse Cassette
  - Optical Calibration fixture
  - Operation Manual

Optical calibration fixture with protective cover

Rinse cassette

3.2 Installation

1. Open the LCD monitor box, and assemble it according to the manufacturer instructions

2. Cut the top seal on the BluePippin box, and open. Remove the upper foam rubber insert.

3. Remove the accessory box and place it on a benchtop. It is a white box (on its side) in the front of the foam rubber inserts. Remove the keyboard, mouse, and instrument power supply and cords from BluePippin their packaging.

4. Grip the front bottom and back top of the instrument and lift it from the box. The BluePippin weighs approximately **15 lbs**. Place the unit onto the bench top.

5. Connect the LCD monitor (VGA port, under the screen) to the BluePippin (VGA port, back panel, see Figure 3.1) using supplied video cable.

6. Using the power cord and power supply provided by the manufacturer, plug the monitor into an electrical outlet.

7. Turn on the monitor.

8. Insert the USB connector from the computer **keyboard** into any USB port located on the back panel of the BleuPippin (Figure 3.1).

9. Insert the USB connector from the computer **mouse** into any USB port located on the back panel of the BluePippin (Figure 3.1).

10. Connect BluePippin instrument to the power outlet using the BluePippin power supply and power cable. The power input connector is in the lower right hand corner on the back panel of the BluePippin (Figure 3.1).

11. When connected to power, the blue leds on the instrument nest will be lit at all times.

12. Press the power button. It is located on the left side of the back panel (Figure 3.1).

13. When powered on, the blue light on the front panel of the Instrument will turn on (Figure 3.2).

14. When powered on, the software will launch (this will take approximately 30 – 60 seconds).

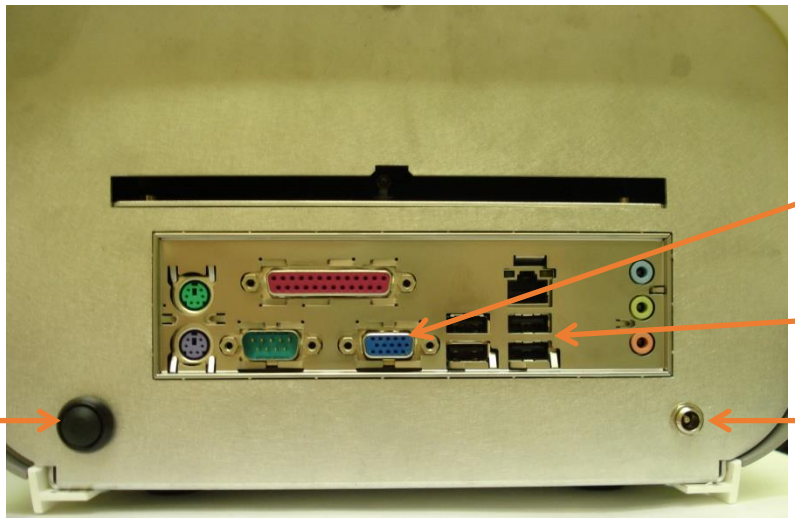
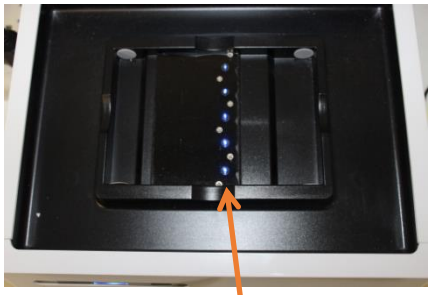


Figure 3.1 Rear Panel of the BluePippin



Nest LED lights are on at all times when connected to power.

When running a protocol, a green light is also indicated on

After the power button is pressed, the front panel Blue LED will light, and the software will launch.

Figure 3.2 Front Panel of the BluePippin and cassette nest