

PRE-INSTALLATION GUIDE

# ClonePix 2 Mammalian Colony Picker



Welcome to the family of Molecular Devices ClonePix® 2 Mammalian Colony Picker users. This document provides you with the necessary information to prepare your facility for the installation of your new ClonePix 2 system.

This document will cover the following topics:

- Environment Requirements
- Space and Table Requirements
- Power Requirements
- Facility Receiving Requirements
- Service, Safety, and Hazard Identification
- Service and Support

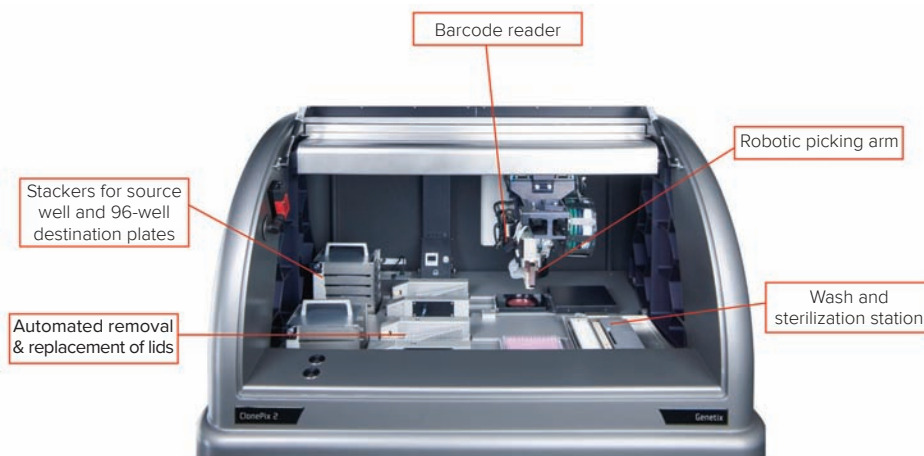
## Environment Requirements

ClonePix 2 system is designed to provide a controlled environment for sample protection conducive to accurate and reliable mammalian cell picking. Protection within the robot top cover is provided by utilizing a rear-mounted HEPA-filtered air supply and a front mounted exhaust fan. This creates a horizontal laminar flow of sterile air across the picking area of the bed of the machine when the front door is closed.

Below are the environmental requirements:

### Indoor use only

Temperature	10°C to 40°C (50°F to 104°F)
Humidity	20 to 80% non-condensing
Altitude	Up to 2000M
Mains supply	+/- 10% Rated voltage
Transient overvoltage	Installation category (Overvoltage category) II
Rated pollution	Pollution degree 2



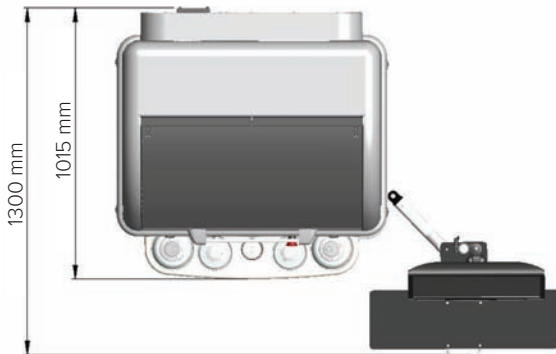
Bed layout inside ClonePix 2 system.

## Space and Table Requirements

The size and weight for the instrument portion of the ClonePix 2 system are provided below. The instrument should be accessible on the front, sides, and back to allow service access to the filters and other maintenance replacement parts.



Front view.



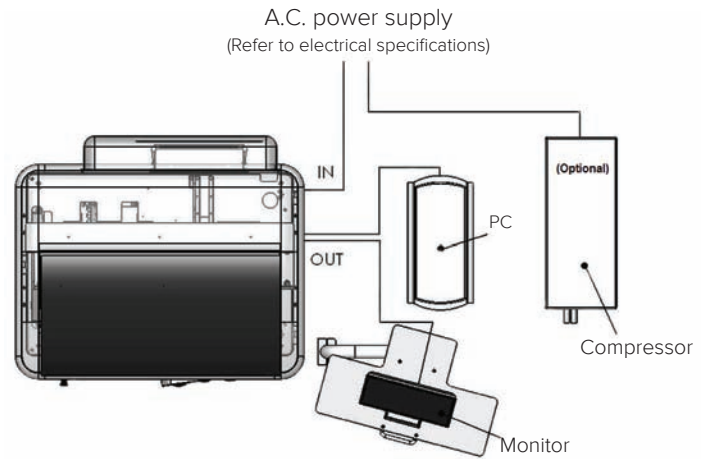
Top view.



Optional oil-free compressed air unit draws air from the local environment and filters it to 0.02 microns using a 3-stage filtration process. This compressor supplies 4.4 CFM. Dimensions and weight. Weight: 84 lbs (38 Kg) Measurements: 440 mm (17 in.) L X 440 mm (17 in.) W X 613 mm (24 in.) H

## Power Requirements

At least two power sockets are required as shown below:



### Europe:

- Voltage: 210 - 250V AC 45-66 Hz single phase
- Power: Robot - 1575W

### USA/Japan:

- Voltage: 100 - 125V AC 45-66 Hz single phase
- Power: Robot - 1250W

## Facility Receiving Requirements

Only Molecular Devices personnel are authorized to open the crates.

Equipment will arrive in two crates. Shipping crate dimensions and weights are shown below. Crates must be stored inside and protected from environmental extremes until equipment is removed. The instrument crate requires 3 meters (10 feet) of clearance on one side to allow removal of the instrument from the crate. Due to its weight, the instrument must be moved to the installation site on a rolling cart (included) that is approximately 61 cm (24 in.) wide x 92 cm (36 in.) long. Door information for crates and instrument only.

### ClonePix 2 system crates (2 crates)

	L	W	H	Weight
Instrument crate	119 cm (47 in.)	119 cm (47 in.)	172 cm (68 in.)	399 Kg (879 lbs)
Accessory crate	114 cm (45 in.)	89 cm (35 in.)	94 cm (37 in.)	132 Kg (291 lbs)

## Service, Safety, and Hazard Identification

### Compressed Air

Compressed air is required for the gentle picking action of the picking pins and for controlling the movement of the illumination cover. The instrument requires 100 psi (0.69 MPa) at 60 Liters/Minute. The minimum pressure should never drop below 6 Bar/87Psi/0.60 MPa. The instrument is supplied with a regulator and filter, so the air supply pressure can exceed the recommended input pressure, and it will be reregulated down at the input. The line must be a 6 mm (metric) o.d. polyurethane pneumatic hose rated for more than 100 psi. Do NOT use the closest English equivalent. While it is very similar in size, it will develop a leak over time.

### Transport and Storage

The instrument must be stored and transported in temperatures within the range -25°C (-13°F) to +55°C (131°F). The machine is fitted with caster wheels for ease of movement. The castor wheels have a height adjustable foot, by adjusting the foot height down; it lifts the castor off the ground, preventing movement.

The instrument should not be moved after installation. If relocation is necessary, contact Molecular Devices Customer Relations.

The instrument should be moved into position using appropriate handling equipment such as forklift trucks or dolly trucks. The machine should be properly balanced on the forks prior to lifting.

**Important note: Do not use any part of the exterior bodywork to lift the instrument as this may cause irreparable damage.**

### Electrical Safety

The instrument must be connected to a properly earthed power outlet to protect users from the risk of electric shock. The main chassis of the machine is earthed together with all associated electrical components. Do not remove any of the fixed covers, as there are no user serviceable parts inside. All internal work should be referred to Molecular Devices approved service personnel. In the event of a liquid spillage into the base cavity of the robot, you must disconnect the power supply at the mains before you attempt to clean up the spillage. There should not be any spillage from the Wash Bath in normal use with the Wash Station correctly set up. However, spill trays have been fitted where appropriate.

### Safety Features

**Door:** The instrument will not run with the front door open. If the door is open an electromagnetic switch prevents the machine from running. This switch should never be tampered with, as it serves two purposes: It prevents the motors from running and therefore the potential of any physical damage. It disables the UV light therefore preventing the risk of damage from UV radiation. The door is made from acrylic, and so prevents UV light from passing through during operation.

**UV Light:** ClonePix 2 system is fitted with a UV germicidal lamp with timer. This is a 30 W linear discharge lamp with a sharply defined output at 253.7 nm making the lamp an efficient source of germicidal radiation.

**Emergency Stop button:** There is a Emergency Stop (Red Knob) on front of the instrument. Pressing the Emergency Stop button will immediately stop the machine and cut power from the drives. The button must be pulled out before the machine can be restarted.

**Hot Air/Halogen dryer:** ClonePix 2 system is fitted with an ultra-high temperature halogen dryer. The casing may become hot during the drying cycle.

**Noise levels:** During normal operation the level of airborne noise emitted by the robot will not exceed 70 dB measured at a distance of 1 meter.

### Support and Service

**Only a ClonePix 2 system trained Molecular Devices engineer is authorized to install or uninstall the instrument.**

For support or service, please contact us at:

Web: [www.moleculardevices.com/support](http://www.moleculardevices.com/support)  
[www.moldev.com/support](http://www.moldev.com/support)

### Contact Us

Phone: +1.800.635.5577  
Web: [www.moleculardevices.com](http://www.moleculardevices.com)  
Email: [info@moldev.com](mailto:info@moldev.com)

Check our website for a current listing of worldwide distributors.

### Regional Offices

USA and Canada	+1.800.635.5577	China (Beijing)	+86.10.6410.8669	Japan	+81.3.6362.9109
United Kingdom	+44.118.944.8000	China (Shanghai)	+86.21.3372.1088	South Korea	+82.2.3471.9531
Europe*	00800.665.32860	Hong Kong	+852.3971.3530		

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