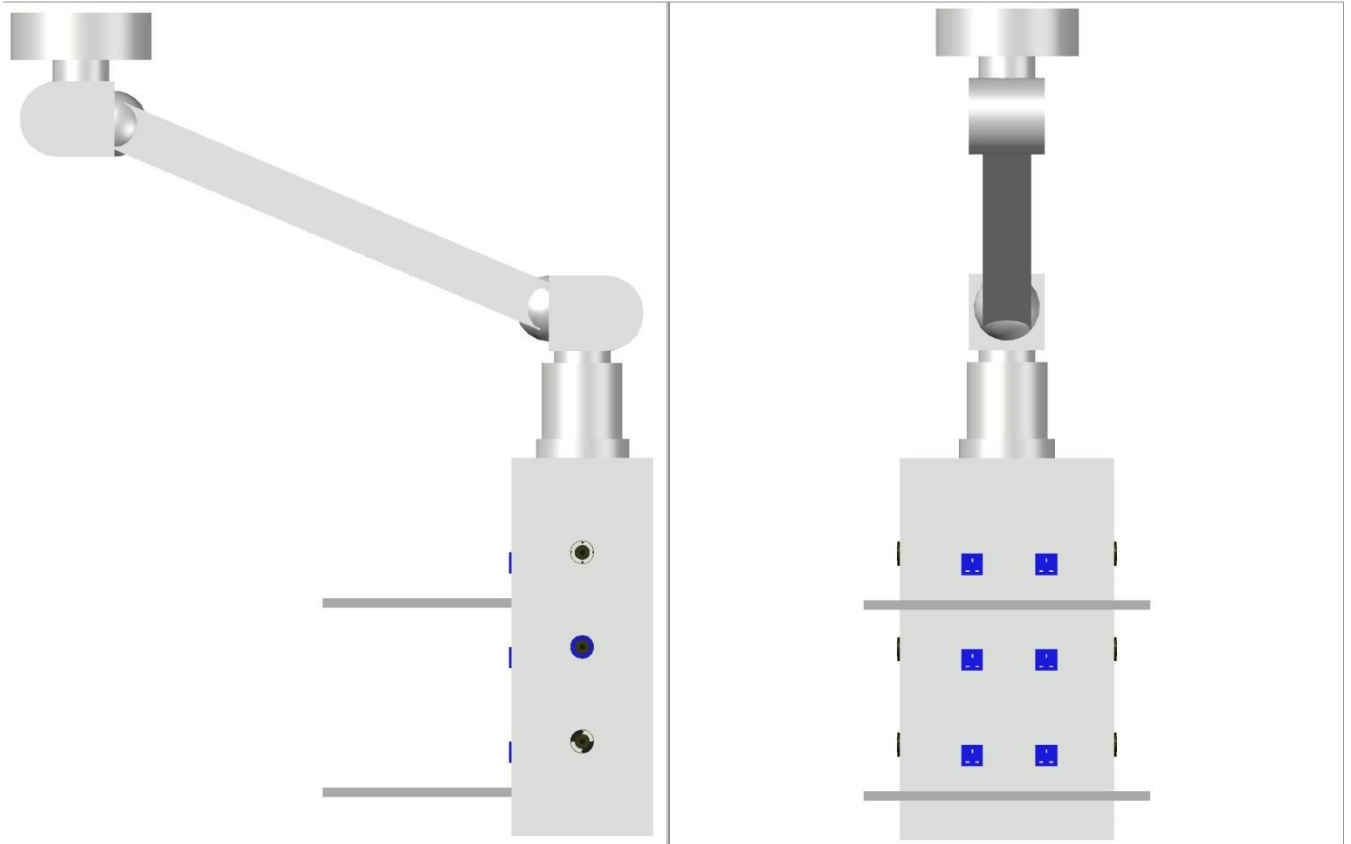


### Technical Specification

#### Single & Double Arm Multi Movement Pendant



#### Product Description

Precision UK supplies a comprehensive range of high quality ceiling suspension systems, competitively priced, which can be purchased as part of an Precision UK Theatre department, Precision UK Piped medical gas installation or as a stand-alone product.

The Precision UK Range of pendants has been developed in response to the following criteria:

- Increased Safety
- Increased Hygiene and Sterility
- Ease of Use

The many advantages in the field of safety and hygiene are;

- No more trailing leads or hoses to restrict movement within the department, all equipment is attached via short connecting hoses or cables to integral hook up points.



## Specialists in HTM02-01 Medical Gas Pipeline Equipment

- Fully encapsulated system, incorporating modular service boxes, makes maintenance and general use easier.
- Single or two piece arm assemblies, motorised or static, equipment can now be located at point of use with the greatest of ease.
- Fully equipped as desired with, high and low voltage supplies, medical gas outlet points, communication points, miscellaneous.



The Precision UK Pendant is a modular unit, which can be supplied with or without height adjustment. The pendant consists of a ceiling mount, upon which a wide selection of arms can be mounted.

Flexible connectors carry services. Gas services are physically separated from the electrical services. The bottom panel of the pendant can be removed to provide access for maintenance.

An optional motor can be provided, and gives 300mm of height adjustment. Other travel lengths are available, depending on the installation.

Operation is by an electrically activated remote control push-button located at the pendant, or if required, at a theatre wall panel.

The Precision UK pendant meets the requirements of the UK DHSS Health Technical memorandum No. 02-01. The standard medical gas terminals installed in the pendant conform to HTM No. 02-01 and to EN ISO 9170-1. The pendant can be constructed to other standards, and other makes of terminal can be fitted.

It is recommended that the terminal units fitted into the pendant be of a similar type to those in other parts of the hospital.



## Services

Services are installed to suit the particular installation. Typical services are:

### Medical Gases:

These services are to BS 9170-1, and include O<sub>2</sub>, N<sub>2</sub>O, O<sub>2</sub>/N<sub>2</sub>O mixture (50%/50%), vacuum, air (4 bar) and air (7 bar).

Maximum number of medical gases that can be accommodated: 7

### Electrical outlets:

These can be high or low voltage. Outlets can be splash proof.

Maximum number of 13 amp sockets that can be accommodated: single: 6 twin: 3

### Waste anaesthetic gas outlets:

These can be in accordance with appropriate standards. However, only the outlet is installed in the pendant. The waste gas extraction system is an additional system.

### Suction:

An outlet for medical suction can be installed in the pendant. The suction can be piped away to an external regulator/collecting jar assembly, such as can be installed in a wall panel

### Practical consideration

The standard recommended height of the lower face of a pendant is 1.7 metre. However, this does not take into account the differing heights of theatre personnel, or conditions needed for particular operations.

The Precision UK pendant allows the unit to be lifted above working height when the unit is not required, but also allows the height to be adjusted to suit particular circumstances.

The pendant should be located near the head of the operating table. However, note must be taken of any moving equipment in the theatre, such as operating theatre lamps, to ensure that the location of the pendant does not foul this equipment.

### Finish

The Precision UK pendant can be supplied in white epoxy finish, or in stainless steel. The unit can also be supplied with a special non-reflective finish suitable for use with laser equipment.



### Electrical requirements

The standard supply to operate the pendant is 240 volts, single phase, 50 Hz. Other voltages and frequencies are available on request.

### Installation

The services are run to a first-fix unit in the ceiling.

For medical gases, these services will terminate in a Non-interchangeable screw connection (NIST) to BS EN 15908.

The first fix installation should be completed, fully tested and blanked until the second-fix installation is needed.

The pendant is supplied as a second-fix item for installation during the finishing of the theatre and is normally supplied with all components installed and tested in the factory.

Gas services are via flexible connectors, which are attached to the first-fix NIST connectors.

Electrical services in the pendant normally terminate in a junction box, at the top of the pendant for connection to the hospital electrical wiring system.

The pendant should be fitted to the solid ceiling of the theatre and not supported by a false ceiling only.

The pendant can be supplied as one long unit, which is secured to the main ceiling and then passes through the false ceiling.

Alternatively, a framework can be attached to the main ceiling, which extends downwards to just above the false ceiling.

The pendant can then be attached to the framework.

The pendant is supplied with a bevelled fascia plate to provide a neat junction at the ceiling.

All securing bolts must be adequate for the load of the pendant.

Any framework must also be designed for rigidity.

Even small loads, such as those imposed by inserting gas probes can cause large deflections on a long pendant.

Any framework should be designed for maximum rigidity to avoid these deflections.

### Operation

Pressing a switch in the remote control unit operates the pendant. One switch controls the rise and another controls the fall.

Components fitted into the pendant should be operated in accordance with the manufacturer instructions.



## Maintenance

Maintenance is important for this pendant to ensure that the flexible connectors have not become worn. Generally, these connectors should be replaced regularly.

'Competent' persons as defined by HTM 2022 should carry out maintenance.

Maintenance of components should be in accordance with the manufacturer instructions.

It is recommended that the maintenance requirements for the components be combined into one programme of maintenance for the pendant and incorporated into the planned maintenance programme for the hospital.

## Safety

The pendant should be installed by 'Competent' persons as defined by HTM 2022.

Particular care should be taken when installing pendants with several gases to ensure that the pipeline to each gas terminal outlet is connected to the correct gas supply pipeline.

Checks should be made using gas flow and gas identity tests to ensure that the connections are correct.

Care should be taken to ensure that electrical earth connections are not disturbed and to ensure that the pendant itself is correctly electrically bonded to the gas and electricity supply to avoid hazard to patients and theatre personnel.

## Guarantee

Precision UK Patient service consoles are guaranteed for 1 year which can be extended by arrangement, subject to the recommended maintenance being correctly carried out by a competent person

