

# MMI R30

## Portable Planetarium



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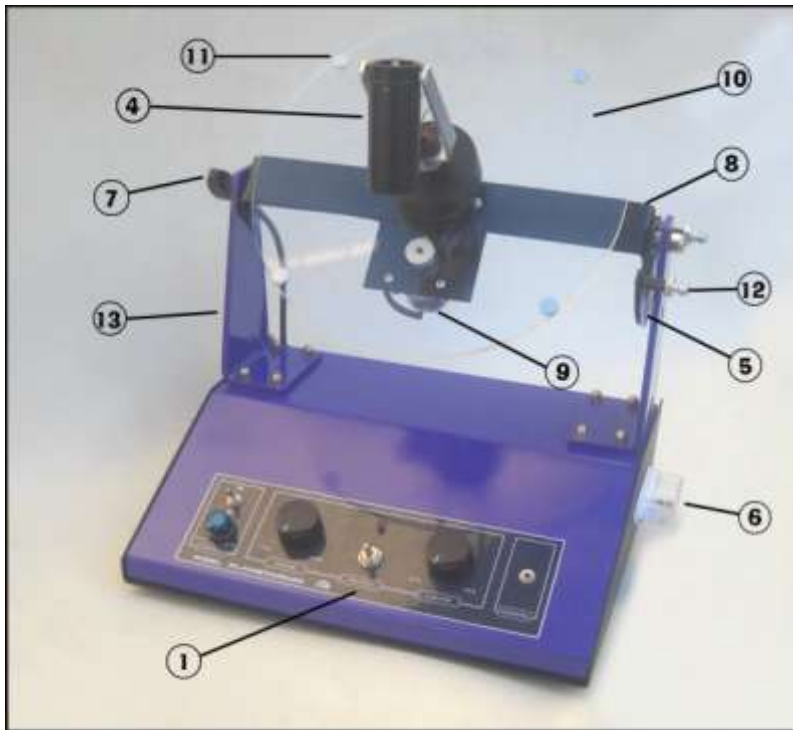
### INTRODUCTION

# MMI R30 Portable Planetarium

## GENERAL INFORMATION

The MMI R30 planetarium projector is a complete instrument for representing the celestial sphere, for acquainting students with the night sky, and for teaching the basics of astronomy at any educational level.

As with all projectors, it is a delicate instrument and must be handled with care. Its correct use and maintenance will bring you years of excellent performance. For this reason, before using it, please read your operation manual with care.



## CHARACTERISTICS

- It projects 2,750 stars down to magnitude 5.45.
- Hand - held constellation projector with 12 mythological figures. [optional]
- The 5 naked eye planets: Mercury, Venus, Mars, Jupiter and Saturn.
- The Sun and the Moon with its phases.
- A comet which can be placed anywhere on the dome.
- It displays 13 naked eye objects: galaxies, nebulae, star clusters, and both Magellanic clouds.
- Six star colors.
- Graduated circle for terrestrial latitude.
- Blue environmental light.
- It operates on 110 or 220 volts [mains voltage is selected when purchased] and features a totally integrated electronic circuit.
- It has a 12 volt diurnal movement motor to simulate terrestrial rotation with variable speed.
- It has brightness controls for stars and blue environmental lights.
- The stars are projected through pin holes using a halogen micro bulb.

*Figure 1.*

## DESCRIPTION OF PLANETARIUM

[see figure 1]

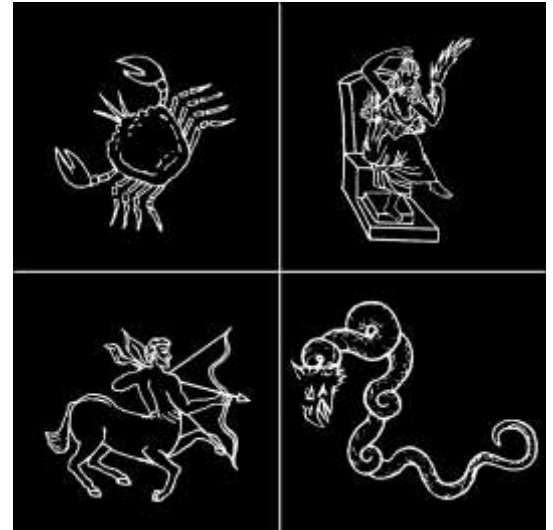
1. Control panel.
2. Socket for 110 or 220V cable from the mains.
3. Fuse.
4. Halogen bulb housing.
5. Latitude circle.
6. Blue environmental light (there are 2)
7. Central axis lock knob.
8. Central axis.
9. Daily motion motor.
10. Acrylic cylinder platform.
11. Magnetic cylinder fasteners.
12. Top and grip for tilting the cylinder platform.
13. Fork/cradle of projector.

## MMI Handheld Constellation Projector



The hand held constellation projector is similar to a flashlight and uses special slides with 12 figures. It is used to project the mythological figures of the constellations over the projected star field. The constellations in the series are: Orion, Lepus, Taurus, Canis Major, Gemini, Scorpius, Cygnus, Crux, Leo, Hercules, Ursa Major and Ursa Minor.

Note that these slides are not standard 35mm slides, but have been specially created to be used with the R30 constellation projector. Eight additional slides may be purchased as a set and they are: Sagittarius, Libra, Cassiopeia, Cancer, Draco, Corona Australis, Cepheus and Canis Minor.



## TRAVEL CASE

The R30 projector with included accessories comes in a sturdy, protective travel case. The aluminum reinforced case can be easily transported by one person and has compartments inside to house the projector and accessories. The travel case also serves as a platform for the projector, once inside the dome. Additionally, it can be used by the operator to place any accessories to be kept at hand during the presentation.





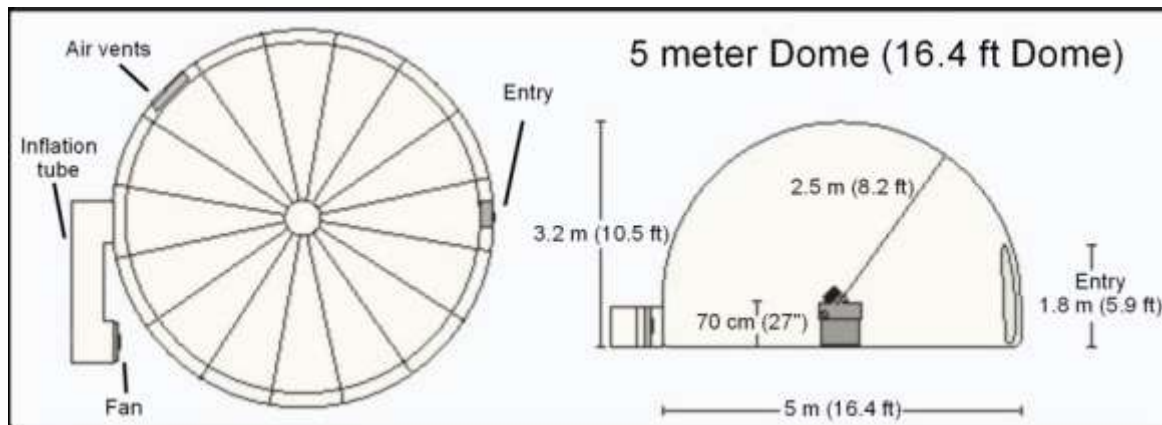
## MMI Domes

The MMI dome is an inflatable dome measuring 5 or 6 meters in diameter. It is inflated by a three-speed fan that continuously blows air into its interior.

To enter and exit, the highest blowing speed is used to compensate for air that is lost. Once the audience is inside, the fan's speed is reduced to its lowest speed to maintain a quiet, continuous airflow that keeps the dome inflated and the interior comfortably ventilated.

The dome fabric is a blackout type with fire retardant treatment. Its complete opacity ensures optimum darkness and thus the best sky possible, regardless of the lighting outside the dome.

Entrance to the dome is quick, comfortable and safe. The two meter high entrance is easily opened and closed with a double-sided, easy to grasp zipper.



Since the dome does not have a floor, emergency evacuation is instantaneously and safely achieved by simply lifting the dome over the audience's heads and to one side, exposing the interior in seconds.

The dome is remarkably lightweight with only 22 Kg. (50 lbs) for the 5 meter one, it can be transported by one person. Once folded, the dome fits neatly in the provided carry bag. The exterior color of the dome is blue. Our company name and data are never visibly printed on our domes.

