

## SETUP AND OPERATION

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### MODEL

AVM 7K Space Cannons are **Ireos** units, not Ireos Pro.



**Figure 1. Ireos, power supply, and cases**

### TRANSPORTATION

The fixture travels with the lamp installed. The lamp is shock-mounted in the fixture and the fixture is shock-mounted in the case.

The lamp is pressurized and therefore is like a hand-grenade with the pin pulled. Please use extreme care when moving the fixture. The fixture should not be exposed to any kind of rough treatment or dropped over curbs and the like.

Both fixture and power supply cases are fitted with wheels for ease of movement.

Recommended transportation should be in air-ride type trucks. The carrier should be made aware of the fragile nature of the cargo.

The standard truck pack is two fixtures across a power supply on top of each. There are some power supply cases with two power supplies in one case; these must be on the bottom of the stack. Each row requires three feet of cargo depth.

The pack must use necessary load straps and bars to prevent the fixtures from rolling in the truck during transit.

### CONNECTING SEARCHLIGHT TO POWER SUPPLY

The DC cable between the power supply and the fixture will be found loosely wrapped on the base of the fixture at the junction of the pan arms and the base. It is approximately ten feet in length. The power supply must be located close enough to the fixture to avoid overstressing this cable.

The cable has a male and female connector, which plug in to the mating connectors on the power supply and the fixture. As with all multipin connectors, care should be used in lining up the connectors. Make sure that the locking ring is fully in the lock position (dots line up).

The DC cable's connectors are somewhat fragile and should not be dropped, as the locking ring can crack or break. As well, the cable is somewhat stiff and cannot be twisted to mate with the units. The natural curl in the cable must be maintained, as any torque on the cable may twist the DC pins in the connector making it impossible to line up the pins when plugging in.

### CONNECTING POWER SUPPLY TO AC SERVICE

The power requirement is 200-220V 50-60 Hz, three-phase, 30amps per leg, delta-wired (i.e. no neutral wire needed). The ground is required.

There is a three-position tap on the power supply that must be set before the power is applied. The taps are as marked 200v, 208v and 220v. **All three taps must be the same.**

The standard power supply AV plug fitted with the unit is a pin and sleeve splashproof (**not waterproof -- please do not leave it in a pool of water**) connector. The part specification for the connector on the power supply is:

Manufacturer: **Crouse-Hinds**  
Product Line: **Arrow Hart**  
Part number: **AH530P9**

### AVM AC DISTRIBUTION

AVM can supply AC distribution and cabling for the fixtures if required. Our standard extensions are 50' and 100' lengths of 10/5 wire. Using this cable, the maximum run between the distribution point and a power supply may be up to 150', as the cable is only #10. Should longer runs be required, please request wire of larger gauge.

AVM distributions units can feed a maximum of six fixtures. Input connectors on the distribution units are Camlok-type, with ground and neutral reversed. Feed through Camloks are provided. As well, there are 120v convenience outlets.

Camlok cable is not normally supplied, but is available on request, as are with cutoff switches.

### POWERING UP

The following procedure should be followed to power up the searchlight:

1. Ensure that the fixture and power supply have been properly connected to the AC service and to each other.
2. Turn on the three-phase breaker switch on the power supply.
3. The fixture should home at this point. If it does not, check the red rocker switch at the base of the fixture -- it disables the pan and tilt motors.
4. Allow the power supply to charge up to 28 volts before igniting the lamp. The charge is indicated by the voltmeter on the left of the face plate. Charge-up will can take 20 seconds to a couple of minutes, depending the particular power supply, fixture mating, and ambient temperature.
5. When charge is complete, switch on the lamp. You will hear an interesting noise. The lamp should ignite almost immediately.

### SHUTTING DOWN

After the light has been turned off, allow everything to cool down. When the fixture and lamp are cool enough, the lamp fans will automatically shut off. This will usually occur in five to ten minutes, depending on ambient temperature.

Make sure that **all the color filter cylinders are down** and **the shutter is up** before powering down. If this is not the case, run **internal program 7**. Please see sheet with list of internal show programs for other options.

### PACKING UP

Please repack the power supply cable as originally supplied, loosely wound around the base of the pan/tilt yoke.

Please keep case lids paired with their original bases.