

## Anytronics : Quad Pro-Dim K190/K191

The Anytronics Quad Pro-Dim provides four channels of dimming or zero voltage switching mains control in a handy portable unit with a convenient carrying handle and G-clamp fixings for truss mounting. Whilst this is a portable unit, the Quad Pro-Dim is not intended for outdoor use, and should not be used anywhere it may come into contact or be sprayed with water or other fluids. To provide adequate ventilation, the vents on either side of the case must not be covered, blocked or otherwise obscured whilst the unit is in use.

**Power input** is via a 32A C-form input connector and should be from an adequately rated 210-245Vac 50/60Hz single phase supply. The total load current must not exceed 32A rms to remain within cable, input connector and thermal ratings. The input supply is therefore double pole circuit breaker (optionally RCBO) protected at 32A to ensure this.

Each **output** circuit is available on a C-form 16A socket and is rated and circuit breaker protected at 10 Amps maximum. To avoid any interference effects in adjacent sound equipment route output cables well away from audio cables. Where possible it may also be advisable to use separate audio and lighting mains supplies.

**Level controls** are fitted to the front panel for dimming control of each circuit and an additive preheat control common to all channels is also available internally if required.

Output circuits can be individually set for **dimming** or for zero voltage **switching** operation on the internal 4 way DIL switch on the circuit board. The unit will be supplied with all the switches ON for dimming. Set the switches OFF for switching operation.

Problems dimming towards the bottom of the dimming range can occur when dimming low voltage electronic transformers. Typically the lamp will flash on when the dimming level is being reduced below 10%. Problems like this caused by poor quality lv transformers can usually be overcome by setting DIL switch 2 of the internal two way DIL switch to On for better dimming compatibility with electronic ballasts.

An internal **fan control** circuit will switch on the fan to provide cooling. In ambient temperatures up to 35°C this forced ventilation should be adequate to regulate the temperature inside the unit. Should the unit start to overheat, then all channels will be progressively dimmed to reduce the internal loading and heating effects and a warning LED (on K191, the DMX data LED) on the front panel will flash.

An internal 100mA T fuse is fitted to protect the low voltage electronic supplies.

The **K191 version** includes the following additional features :-

Analogue 0-10V input on DIN socket (each channel adjustable between 0-5V and 0-25V)

DMX in/through via RJ45 and 5 pin (optionally 3 pin) XLR

DMX address setting via bcd switches on front panel.

Setting a DMX start address of zero disables the DMX input.

For each channel, the highest input from slider, analogue input or DMX controls the output level. Note that the RJ45 DMX connector also contains a +5V supply making it compatible with a range of Anytronics DMX products such as the AMD panels, minidesks and the Anyscene products including IR remote controls.



The **K191FX version** includes pre-programmed lighting effects designed for use in the theatre, film and TV industries. These effects are tailor made to simulate a number of light sources but can be adjusted to create different effects through use of the four slider controls provided on the unit. With the DMX hundreds address set to 6, the effects on channels 1 and 2 are set by the ‘tens’ DMX address digit and the effects on channels 3 and 4 by the ‘units’ DMX address digit. With the hundreds address set to 6 the channel 1-4 slider controls do not control the individual channel levels, but control the four effect attributes as follows :-

**Ch 1 Minimum** : sets the minimum or background output level of the effect  
Useful for setting the background lighting level on which the effect is superimposed and thus the overall dramatic effect.

**Ch 2 Maximum** : sets the maximum output level of the effect  
Turning this down reduces the range of the effect and can be used to set the impact of the effect on the overall lighting.

**Ch 3 Speed** : sets the speed of change of the effect  
Used to control the dramatic intensity and high frequency content in the effect.

**Ch 4 Flicker** : sets an extra level of high frequency flicker activity on the output  
[NB The flicker control is not active in the Lightning/Fluoro effects.]

All the effects are designed to simulate the different lighting effects with the flicker control set to zero. For maximum dramatic effect, the temptation is often to use effects at the maximum speed, but for greater realism it may be better to use a slower effect speed but add a little extra flicker on the output with the flicker control. For example the light coming from a TV can be simulated on channel 1&2 by selecting address 66- with minimum set at 25%, maximum at 75%, speed set at 50% and flicker at 25%.

Some suggested initial settings :-

Lighting Effect	Ch1&2	Ch3&4	Effect name	Minimum	Maximum	Speed	Flicker
Gentle firelight	60-	6-0	Firelight1	40%	75%	50%	10%
Active firelight	61-	6-1	Firelight2	40%	75%	70%	50%
Cyclic firelight	62-	6-2	Firelight3	50%	75%	60%	10%
Guttering candle	63-	6-3	Candlelight1	25%	50%	70%	10%
Candle in the wind	64-	6-4	Candlelight2	30%	50%	60%	10%
Candle going out	65-	6-5	Candlelight3	30%	50%	100%	10%
Background TV	66-	6-6	TV1	20%	50%	60%	20%
Cyclic TV	67-	6-7	TV2	50%	100%	40%	30%
Lightning	68-	6-8	Lightning1	10%	100%	80%	-
Faulty Fluoro	69-	6-9	Lightning2	10%	100%	40%	-

