

4 Fantastic Benefits

1 Improved picture & sound quality

The IXOS® Power Station™ is a fantastic Line Conditioner and will deliver a marked improvement in picture and sound quality - most notably in the latest High Definition HDMI 1080p screens.

2 Protect and prolong the life of hardware

As an outstanding line conditioner the IXOS® Power Station™ absorbs and dissipates the continuous voltage fluctuations, as well as the rarer but catastrophic power surges.

3 No need to replace after a powerful surge

Whereas most surge protectors fail and have to be replaced after a catastrophic power surge, the IXOS® Power Station™ dissipates the dangerous voltage before hitting the more sensitive MOVs. Simply reset and rest easy in the continued protection of your electrical equipment.

4 Invisible installation

Includes bracket for mounting behind the Flat Panel TV to keep the unit out of sight.



CONNECTING SCIENCE TO PERFORMANCE™

IXOS® XHP420 Power Station™



IXOS®
8 Dormer Road
Thame Industrial Estate
Thame
Oxfordshire
OX9 3UD

Tel: +44 (0)1844 219000
Fax: +44 (0)1844 219099

www.ixos.co.uk



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2 Excellent Reasons to Invest in an

IXOS® Power Station™

1

Dirty Power from the grid transmits unwanted noise into your Home Entertainment systems, affecting picture and sound quality.

2

Power Surges occur to a greater or lesser degree hundreds of times a day and can cause serious damage to your sensitive electrical equipment.



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1 Dirty Power

What causes AC line noise?

1. Neighbours

As the sharing of the same power grid and lines cause voltage fluctuations, it is also a source for noise. The higher the load (demand), the higher the AC line noise becomes and the greater the sound/picture distortion.

2. Your Home

Just as your neighbours' electrical devices can cause noise, the appliances within your home will do the same. A simple test is to turn on the blender - in some homes you will see interference in the picture instantly. This is AC line noise at its worst and happens constantly at frequencies that our eyes can't always notice right away causing damage to the power supplies and degrading

the picture and sound quality. Most people think this interference is signal strength related, but it is most commonly noise.

3. Power Grid Distance

Since the chances are your house is not next door to the power grid, distance is also a factor in AC line noise. The further away your house, the more likely the power line has a chance to pick up RF (Radio Frequency) and EM (Electromagnetic) noise and amplify it. Also distance increases the number of people sharing the power line itself.

What makes IXOS® noise filtering more effective?

Linear RFI/EMI Noise Filter

Most noise filters on the market use Non-Linear RFI/EMI Noise Filters. These work on much narrower bandwidths and are ineffective for high resolution format such as SACD, DVD Audio and HDMI 1080p.

IXOS® Power Stations™ use Linear RFI/EMI Noise Filters. These target the full frequency spectrum and work with varying impedances regardless of

power load conditions. Since Linear Noise Filters handle a wider frequency bandwidth and work on varying impedance variances they are more effective with high resolution formats.

Non-Linear Noise Filtering



Typical AC filtering only concentrates on a narrow bandwidth

Linear Noise Filtering



IXOS® Linear AC filters the entire bandwidth

2 Power Surges

What causes voltage fluctuations?

1. Lightning Strikes

These are the most obvious and can be the most catastrophic. They cause an extreme surge in voltage instantly - far above what any power supply can handle. Even if the house is not directly hit, equipment can be damaged instantly.

2. Power Grid Switching

Electricity companies switch the power delivered to homes from one supply grid to another without prior notice. This can be due to over-powering, maintenance, etc. Switching power grids causes a voltage surge that can damage electrical components.

3. Neighbours

Many houses receive their power from the same power grid and even the same power line. A neighbour simply switching on their lights, kettle, TV or any other electrical device pulls voltage from the main line. This demand

decreases the voltage available until the main power grid can respond to stabilise the power supply again.

4. Your Own Home

Just as the neighbours' electrical devices can cause voltage variances, so can the appliances within your own home.

These situations happen thousands of times a day.

How does the IXOS® Power Station™ protect against power surges?

1. Progressive Stage Protection

- Specially constructed patented TVSS (Transient Voltage Surge Suppression) circuit slows down and absorbs most of the dangerous voltages. Much like a shock absorber.
- The spike is dissipated before reaching the MOVs (Metal Oxide Varistors), therefore minimising their risk for damage.

2. IXOSAFE.T™ Circuitry for increased protection

- In the event that the Progressive Stage Protection is unable to absorb and dissipate the extreme transient voltage, the IXOSAFE.T™ circuit automatically shuts down and isolates all the components if it senses the voltage exceeding 270 volts.

Typical T.V.S.S. Circuit



A typical TVSS circuit is like a spring that has been stretched so tight it can snap when struck with force.

Progressive Stage Protection



IXOS® Progressive Stage Protection is like a shock absorber. It is critically damped to easily dissipate transient voltage spikes without sacrificing itself.

3. 'True' Zero Ground Contamination

- If the protecting device uses MOVs as the main protection method there is a high risk of the MOVs leaking the return excess voltage to the sensitive electrical components.
- Only IXOS® Progressive Stage Protection isolates the return voltage to the neutral wiring, driving it to the grounding rod and protecting electrical components. Just like a lightning rod on a church steeple directs lightning voltage direct to the ground, protecting the building from the powerful force.