

## Intelligent Power System Bak Pak

### Entertainment Technology BakPak IGBT Intelligent Dimmer

Entertainment Technology offers yet another breakthrough in dimming technology for stage lighting. The Bak Pak IGBT Intelligent Dimmer is the perfect complementary device for existing stage lights that require more sophisticated control.

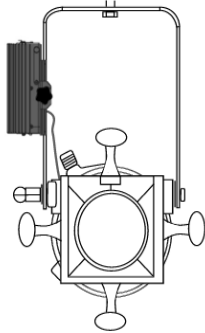
The IPSBP series of Intelligent IGBT dimming modules quickly brings dimming capability directly to conventional lighting instruments. Because the Bak Pak IGBT dimmer is an individual dimmer, you can use it exactly where you need a "single" dimmer, without the need for additional dimmer rack space. Bak Pak IGBT dimmers are quick to mount, wire, and run.

**Mounting:** 4 different mounting options to suit your installation - Yoke mount, C-Clamp (by others), Pipe mount, or Wall mount.

**Wiring:** Connect the Bak Pak IGBT dimmer to the nearest power feed. Connect the power output of the Bak Pak to the light fixture, connect your DMX512 cables, set the address, and it's done.

**Testing:** Use the incorporated local "focus button" for quick setup and testing. Raise / lower the lighting level for focusing purposes.

Bak Pak modules are available in 750 or 1200 operating wattages. Bak Pak IGBT dimmers are fed from a standard power source, thereby eliminating dimmer racks, packs, or remotely located dimmers.



Bak Pak shown with a Yoke Mount  
(shown to approximate scale)

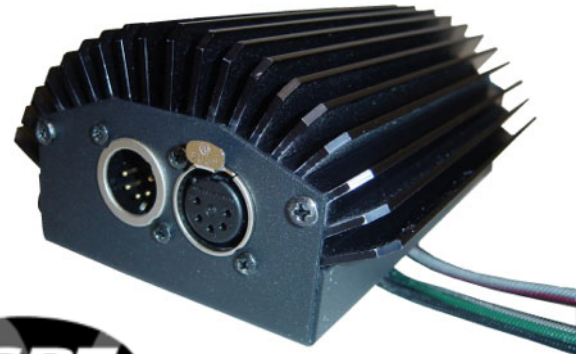
Bak Pak dimmers utilize state-of-the-art Insulated Gate Bipolar Transistor (IGBT) technology, which provides significant performance enhancements over conventional dimming equipment. IPS dimmers are completely solid-state which enable them to operate silently (without mechanical noise) at 800uS in forward or reverse phase control which dramatically minimizes lamp, ballast, or transformer noise in the space. IPS dimmers significantly reduce neutral harmonics and may be configured to operate in LOW HARM mode, making them the lowest harmonic dimmer available. Since IGBT technology does not use filters or chokes, IPS dimmers are more efficient, with a maximum 2.5 volt drop at full operating load, are lightweight, and produce less heat than conventional dimmers.

Through its side-accessible DIP switches, users can select - dim/non-dim, 115/120 volts AC operation, Forward/Reverse Phase Control, and 800/450 micro-second rise time - allowing flexibility for many applications and needs.

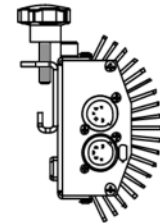
IPS dimmers offer an extended feature set that is unsurpassed in today's conventional dimming equipment. Every IPS dimmer has an on-board intelligent microprocessor, which adjusts and maintains proper voltage and current in response to changes detected in the load and electrical service. The microprocessor automatically suppresses surges, protects against dead shorts, and extends lamp life.

With standard features that surpass every other dimmer, the Intelligent Power System Bak Pak joins the family of most advanced dimmers available.

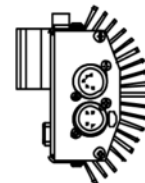
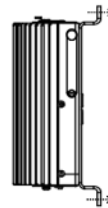
- Chokeless IGBT dimming - no magnetics, no noise, less heat, and less wasted energy
- Available in 750 watt or 1200 watt versions
- Natural convection cooled - silent operation, no cooling fans, or air filters
- DIP switch user-selectable, self-contained effects - Bounce Up, Bounce Down, Bell Curve, 50% Bump, Blink On, Blink Off and more
- Reverse or forward phase control - silences loads
- ILS Network TALKBACK™ - status reporting and fault indication
- LOW HARM™ mode - controls harmonic neutral currents
- IPS "Focus" button on each dimmer - saves setup time and labor
- Uses standard USITT DMX512/1990 control protocol
- Various mounting options - mounts to existing lights, existing structures, or simply on the wall
- Very lightweight and compact in size - fits virtually anywhere



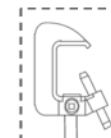
### Mounting Options *(not to scale)*



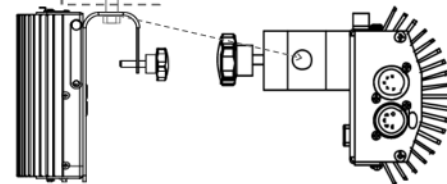
Yoke Mount



Wall Mount



By Others



Pipe Mount *(also for C-Clamp Mounts)*

# IPSBP Series

## Specifications

Number of Dimmers	1 IGBT Intelligent Dimmer
Maximum Output Voltage	120 Volts AC
Min/Max Dimmer Load	Min. 1 Watt / Max. 750 or 1200 Watts*
Transition Time	450 or 800 microseconds (user selectable)
Insertion Loss	Max. 1.5 Volts
Supply	120 Volts AC, 6.5A or 10A per module*
Frequency	50 / 60 Hz.
Control Connections	USITT DMX512/1990 In (D5M) / Out/Thru (D5F)
DMX Load	Represent 1/4 Standard DMX Load
Circuit Protection	Short Circuit / Thermal / Overload Protection

Ambient Temperature	0 to 50 degrees C
Relative Humidity	5% to 95%, non condensing
Cooling Method	Natural Convection**
Height	6.82"
Width	4.53"
Depth	2.93" (750 Watt) / 3.18" (1200 Watt)
Weight	2.1 lbs. (0.95 kgs.)
Power In Feed	36" Pigtail provided from unit is 3-#14 AWG
Power Out Feed	18" Pigtail provided from unit is 3-#14 AWG

\* Depends on model

\*\* It is recommended that the Bak Pak be mounted vertically (as shown below) to allow for optimum natural convection cooling.

## Ordering Guide

### Bak Pak IGBT Dimmers:

Description	Model Number
750 Watt, 120 Volts AC, Bak Pak IGBT Dimmer	<b>IPSBP7501</b>
1200 Watt, 120 Volts AC, Bak Pak IGBT Dimmer	<b>IPSBP12001</b>

### Bak Pak Accessories:

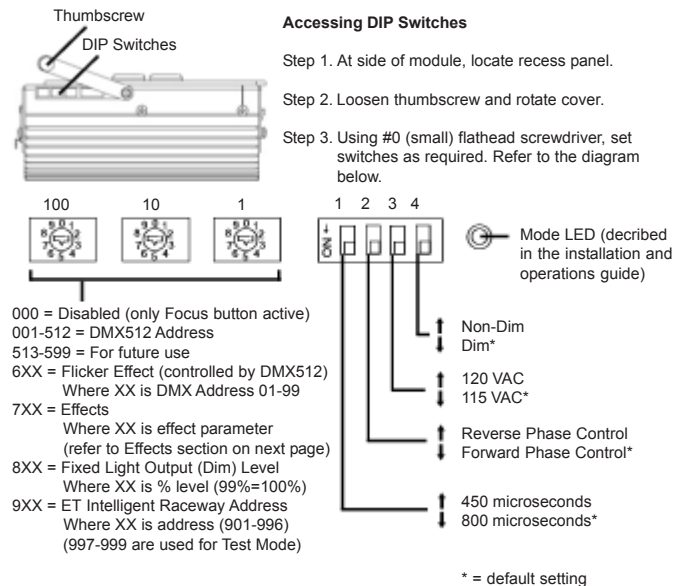
Description	Model Number
Bak Pak Yoke Mount Bracket Only (with safety cable)	<b>IPSBPYOKEMT</b>
Bak Pak Pipe Mount Bracket Only (with safety cable)	<b>IPSBPIPEMT</b>
Bak Pak Wall Mount Bracket Only	<b>IPSBPWALLMT</b>
C-Clamp Only (use with pipe mount)	<b>IPSB105</b>
Scaffold-Style Clamp Only (use with pipe mount only)	<b>IPSB109</b>
DMX512 Termination Plug	<b>IPSDMXT</b>
Network Coupler (for use with Bak Pak Intelligent Effects Network)	<b>IPSBPC</b>

### Notes:

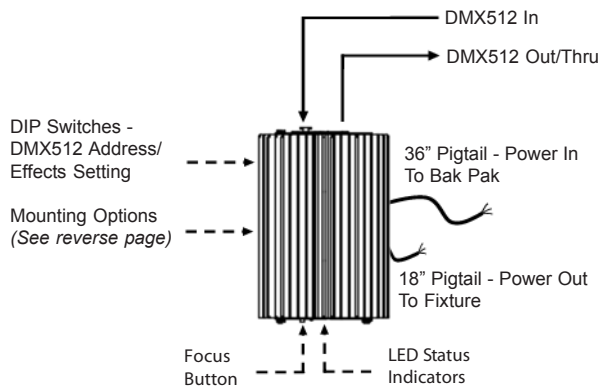
- All Bak Pak™ IGBT Dimmers supplied without connectors
- An IPSDMXT Termination Plug is required when a Bak Pak™ is located at the end of a DMX line.
- For connector or special mounting needs, please contact Entertainment Technology at 1-800-223-9477.

## DIP Switches

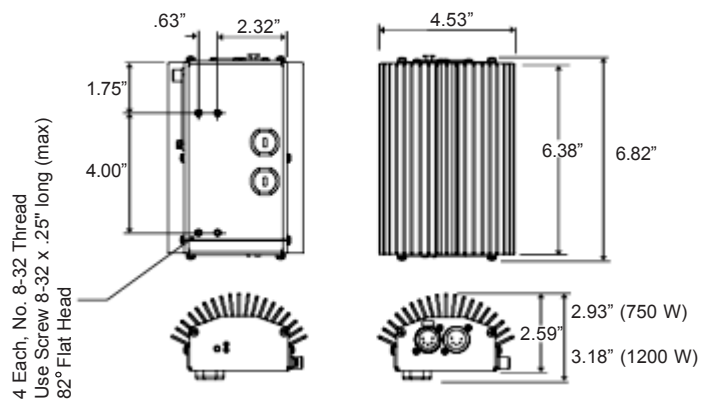
Bak Pak IGBT Dimmer's DIP Switches are user-selectable. Basic operation is as follows:



## Wiring and Operation



## Dimensions



4 December 2003

Entertainment Technology  
 Entertainment Technology is a Philips Brand  
 2828 Trade Center Dr Ste 130B • Carrollton, Texas 75007

For technical/sales assistance, call: 1-800-223-9477  
 Made in U.S.A. Philips 2013  
 www.philipsightingcontrols.com P/N: 87-0475B