Lighting Upgrade Manual

A smart energy solution

Lsi
Industries™

A smart energy solution

Lsi

Petroleum Lighting™

September, 2006

Why You Should Consider Upgrading Your Lighting

Reduce your total cost of ownership with an energy-efficient lighting upgrade from LSI. From the parking lot throughout the site, LSI has lighting products to fit your requirements. Using pulse-start lamps, vertical burn technology and high performance reflectors, LSI can dramatically improve the appearance of your site efficiently and economically 24 hours a day.

Remember, over a 10-year period, the capital cost of your lighting package will only be 10% of the total cost of ownership. The balance, 20% installation / maintenance and 70% energy are your greatest cost of ownership. LSI lighting products will have the greatest affect on your bottom line.

What a Lighting Upgrade Means to You

The ability to bring your current lighting up to today's new standards without adding additional fixtures.

- **Marketing impact due to greater long-range visibility, which draws customers to your site as they approach.**

- **Improved safety for customers and employees which means increased sales and reduced employee turnover.**

- **Increased vertical illumination making the overall site brighter and more inviting.**

  - **Building Walls**   **- Spanners**

  - **Pump Faces**   **- Fascia**

  - **Column Cladding**   **- Entrance/Exit Areas**

  - **Parking Lot**

- **Improved light levels while reducing electrical power bills.**

- **Color consistency from all fixtures.**

Your Options:

1. Do nothing and let the competition eat you alive

2. Go for a low budget option - get adequate lighting performance for a relatively low cost but recognize that it is not a long-term solution.

3. Invest in the best long-term solution and make your competition eat its heart out!

Canopy Lighting Upgrades

Upgrade your canopy with one of LSI's family of upgrade options, using either the 250 or 320 watt Pulse-Start Metal Halide lamps. The LSI upgrade will increase your site's visibility while reducing energy cost 20 - 50%. Many options feature ground relamping which reduces your maintenance cost.
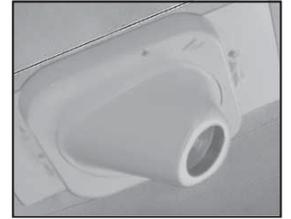

Focus RECU SuperKit® - Recessed

RECU SuperKit® - Recessed   Panel Retrofit Kit

SuperKit®
(Standard or Universal)-2x2

Scottsdale® Surface Mount

Adjustable Focus RECU SuperKit® - Recessed

Typical Canopy Cost Analysis Over 1 Year
(40' x 90' Canopy / 6 Dispensers)

FIXTURE TYPE	# OF FIXTURES	KWH/YEAR	$/YEAR	SAVINGS/YEAR
400W DAKOTA	24	48,145	$ 3,851	$ 0
320W SCOTTSDALE	18	29,013	$ 2,321	$ 1,530
250W ENCORE FLAT LENS & 100W ENCORE FOCUS	8 12	16,872	$ 1,349	$ 2,502
200W ENCORE LOW PROFILE, 100W ENCORE FOCUS & ADJUSTABLE FOCUS	8 12	15,014	$ 1,201	$ 2,650

**.08 / KWH, 12-HOUR / DAY, 365 DAYS A YEAR
FIXTURE X FIXTURE WATTAGE X 12 X 365 / 1,000 = $/YEAR**

Flat Lens Panel Retrofit Kit

Area Lighting Upgrades

Additional savings can be achieved by upgrading your site lighting to one of LSI's high performance, energy efficient fixtures. Using LSI's Internal Fitter, you can easily upgrade using existing 4" or 5" square poles (with a wall thickness of 11 ga. (0.120") or 7 ga. (0.180").

Reduced Wattage/Pulse-Start Fixtures

Typical Existing 5 Pole Lighting

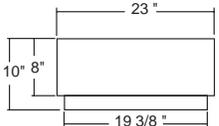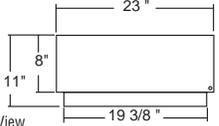| Your Fixture Choice	Operating Costs Per Year	Your Savings Per Year
Retrofit with Single 1000 Watt Standard Metal Halide Product	$1892	$0
Upgrade with **Twin** 400 Watt Super Metal Halide Challengers	$1612 *SAVE 15%*	$280
Upgrade with **Single** 750 Watt Pulse-Start Metal Halide (PSMV) Challenger	$1489 *SAVE 21%*	$403
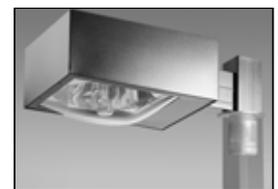
Citation® II
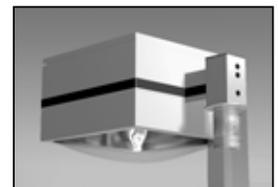
Greenbriar® Reduced

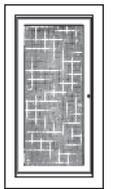

Challenger®

3
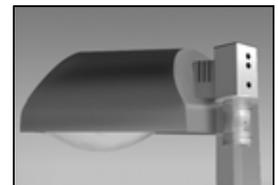
SUPERKIT® & UPK UPGRADES

Identify your existing fixture and select your SuperKit accordingly.
See Ordering Chart for complete offerings.
It is the customer's responsibility to verify the dimensions of their fixture.

If you have			Order this
Fixture Type	**Dimensions**		

SURFACE 2X2

LSI:
Masters/Dakota®

Whiteway:
Riviera

Jet-Phillips:
Houstonian (Old Style)

Dimensions:
23", 10" 8", 19 3/8", SIde View
23", 8" 11", 19 3/8", SIde View

LSI Masters/Dakota®
Whiteway Riviera
Jet-Phillips Houstonian (Old Style)

Order this:
SSK LSI S 175 PSMV PG MT WHT
SSK LSI S 250 PSMV PG MT WHT
SSK LSI S 320 PSMV PG MT WHT
SSK LSI S 400 MHR PG MT WHT
SSK LSI S 200 PSMV LP MT WHT
SSK UNV S 100 PSMV FO MT WHT
SSK UNV S 100 PSMV ADJ MT WHT
UPK LSI 400 - #43412
UPKV LSI 400 - #167101

Whiteway:
Riviera II
Thunderbird
Vision

Dimensions:
21 1/8", 10" 8", 19 3/8", SIde View

Order this:
SSK WW S 175 PSMV PG MT WHT
SSK WW S 250 PSMV PG MT WHT
SSK WW S 320 PSMV PG MT WHT
SSK WW S 400 MHR PG MT WHT
SSK WW S 200 PSMV LP MT WHT
SSK UNV S 100 PSMV FO MT WHT
SSK UNV S 100 PSMV ADJ MT WHT
UPK WW 400 - #43443
UPKV WW 400 - #167194

Works with all listed above, plus:

Jet-Phillips:
Houstonian
(Current Style) SHO/RHO

Guardian MC-1411

Cooper CLS

Dimensions:
23", 8" 10", 19 3/8", SIde View
21 1/8", 8" 10", 19 3/8", SIde View
21 3/4", 8 1/4" 10 1/4", 19 3/8", SIde View
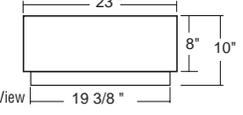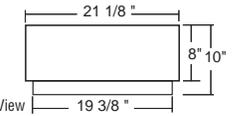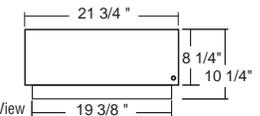
Jet-Phillips Houstonian
Guardian MC-1411
Cooper CLS

Order this:
SSK UNV S 175 PSMV PG MT WHT
SSK UNV S 250 PSMV PG MT WHT
SSK UNV S 320 PSMV PG MT WHT
SSK UNV S 400 MHR PG MT WHT
SSK UNV S 200 PSMV LP MT WHT
SSK UNV S 100 PSMV FO MT WHT
SSK UNV S 100 PSMV ADJ MT WHT
UPK Jet - #43467

RECESSED

LSI:
Richmond®

Whiteway:
Civic (current model)

Whiteway:
Civic (old model)

Jet-Phillips:
Recessed Icon
(original model)

Dimensions:
19 1/8", 9 3/8", 18 1/2"
8 9/16", 18 1/2"
8 5/16", 17 1/2"
9", 18 1/16"
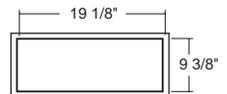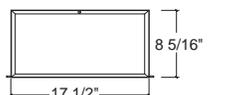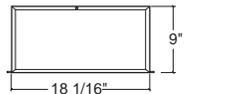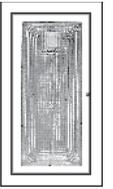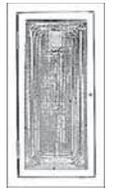
LSI Richmond® Series
Whiteway: Civic (Current Model)
Whiteway: Civic (Old Style)
Jet-Phillips Recessed Icon (Original Model)
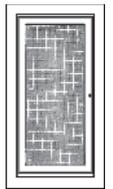
Order this:
SSK RECU S 175 PSMV PG MT WHT
SSK RECU S 250 PSMV PG MT WHT
SSK RECU S 320 PSMV PG MT WHT
SSK RECU S 400 MHR PG MT WHT
SSK RECU S 200 PSMV LP MT WHT
SSK RECU S 100 PSMV FO MT WHT
SSK RECU S 100 PSMV ADJ MT WHT
UPK RIC 400 - #435020
UPK CVCN 400 - #43501
UPK CVC 400 - #43503
UPK Jet 400 - #43504

SUPERKIT

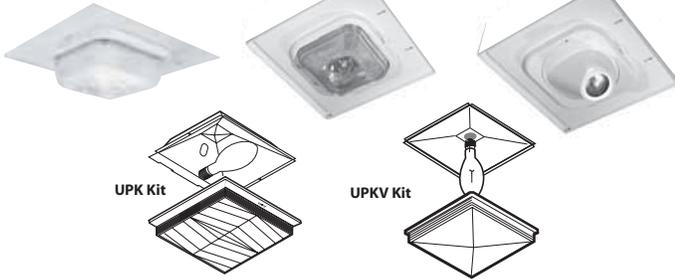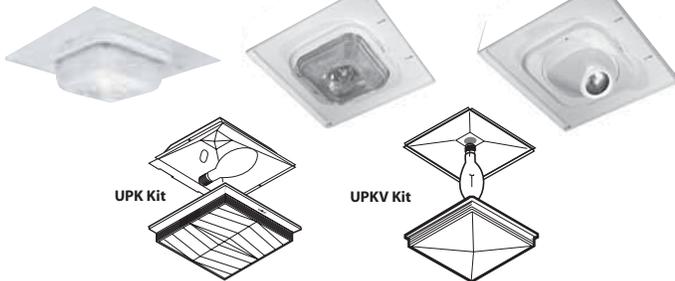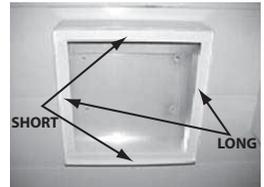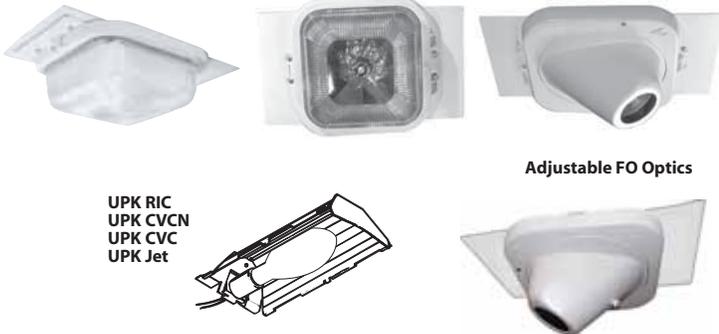| To receive	Kit consists of
PG Optics **LP Optics** **FO Optics** **UPK Kit** **UPKV Kit**	Fully assembled SuperKit includes: - Plate - Lens - Lamp - Ballast
	UPK Kit includes: - Lamp - Lens/ Frame - Reflector For Jet-Phillips old Style, order UPKLSI plus socket #4208602
PG Optics **LP Optics** **FO Optics** **UPK Kit** **UPKV Kit**	Fully assembled SuperKit includes: - Plate - Lens - Lamp - Ballast
	UPK Kit includes: - Lamp - Lens/Frame - Reflector
PG Optics **LP Optics** **FO Optics** **Adjustable FO Optics** **UPK Kit**	**UNIVERSAL SUPERKIT** Fully assembled Universal SuperKit includes: - Plate - Lens - Lamp - Ballast - Adaptor Brackets (set of 4) SHORT LONG **Four adaptor brackets for retrofitting your existing canopy fixture**
	UPK Jet Kit includes: - Lamp - Lens - Socket - Reflector
PG Optics **LP Optics** **FO Optics** **Adjustable FO Optics** **UPK RIC** **UPK CVCN** **UPK CVC** **UPK Jet**	Fully assembledSuperKit includes: - Plate - Lens - Lamp - Ballast
	UPK includes: - Lamp - Lens/Frame - Reflector
	UPK includes: - Lamp - Lens/Frame - Reflector
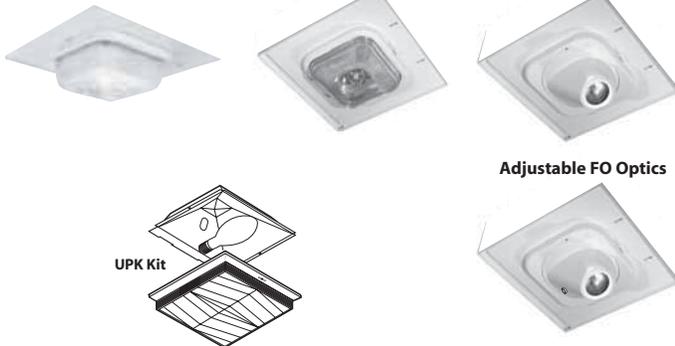
Improved Lighting and Reduced Energy
Through Product Replacement
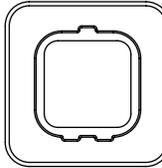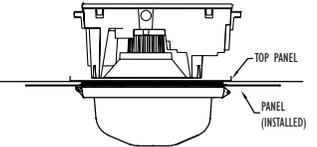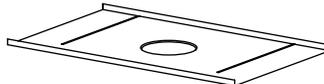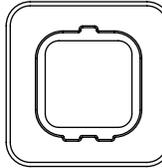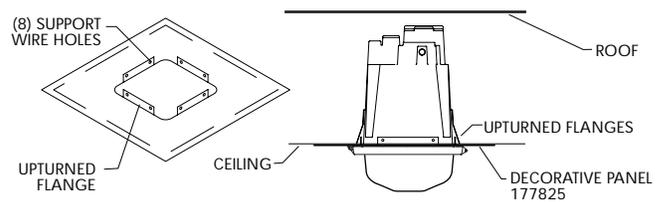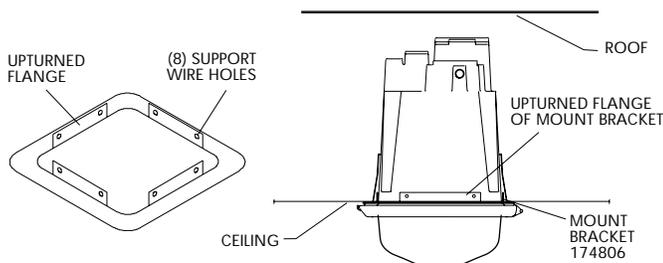
If you have...	Order the identified kit plus the fixture with optics desired		
Dakota	**EC - Encore**	**ECTA - Top Access Encore**	**SC - Scottsdale**
	PANEL (INSTALLED)	PANEL (INSTALLED)	PANEL (INSTALLED)
Decorative Panel			
Kit #	**180292**	**132627**	**132627**
Richmond®	**EC - Encore**	**ECTA - Top Access Encore**	**SC - Scottsdale**
	TOP PANEL — PANEL (INSTALLED)	TOP PANEL — PANEL (INSTALLED)	TOP PANEL — PANEL (INSTALLED)
Above Deck Filler Panel			
Decorative Panel			
Kit # (Includes Filler & Decorative Panels)	**253852**	**171377**	**133417**
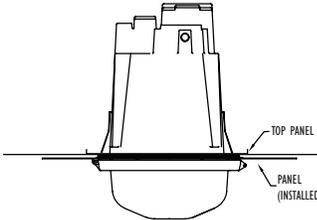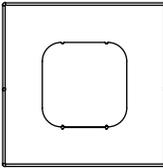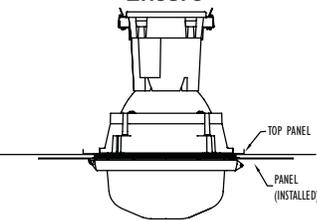
Double Deck Mounting

DDM - DOUBLE DECK MOUNTING BRACKET (ORDER NUMBER 174806)

UPTURNED FLANGE (8) SUPPORT WIRE HOLES ROOF UPTURNED FLANGE OF MOUNT BRACKET CEILING MOUNT BRACKET 174806

DDM - For use in covered areas (i.e. water proof plenum) where ceiling material will not support the fixture or access is not available from above to utilize standard locking ring.

**DDRMP - DOUBLE DECK RETROFIT MOUNTING PANEL (ORDER NUMBER 177825)**

(8) SUPPORT WIRE HOLES ROOF UPTURNED FLANGE UPTURNED FLANGES CEILING DECORATIVE PANEL 177825
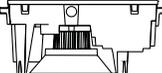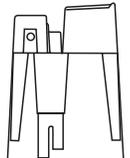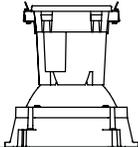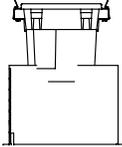
DDRMP - Decorative retrofit panel is for use on double deck canopies only. Panel will structurally support the Encore while covering an opening up to 600mm by 600mm. For use in covered areas only (i.e water proof plenum).

6

Existing Fixture Retrofit
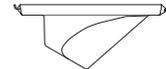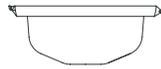
	PG	LP	F	FO/ADJ
SC - Scottsdale	400, 320, 250, 200, 175	200	—	100
EC - Encore	400, 320, 250, 200, 175	400, 320, 250, 200, 175	400, 320, 250, 200, 175	100
ECTA - Top Access Encore	320, 250, 200, 175	320, 250, 200, 175	320, 250, 200, 175	100
SCF - Flat Lens Scottsdale	320, 250, 200, 175	320, 250, 200, 175	320, 250, 200, 175	100

Optic Assembly (Gasket & Glass)		Part #
	PG	231041
	LP	231040
	Flat	231043
	C73	231045
	FO	177684
	ADJ	263878

Ballasts - Pulse Start Assy. (Ballasts, Capacitor, Ignitor)		Part #
100 Watt PSMV	w/o feet	EH0400AA
	w/ feet	178597Z
175 Watt PSMV	w/o feet	156891
	w/ feet	153865
200 Watt PSMV	w/o feet	177453
	w/ feet	177714
250 Watt PSMV	w/o feet	146681
	w/ feet	147852
320 Watt PSMV	w/ removable feet	151262
400 Watt MH	w/o feet	EH0271A
	w/ feet	200610

Lamps - Pulse Start Metal Halide	Part #
100 Watt PSMV	175992
175 Watt PSMV	153864
200 Watt PSMV	177426
250 Watt PSMV	146684
320 Watt PSMV	22187Z
400 Watt MHR	22159

Note: Fixture requiring ballast w/ feet - SCSM, SSK
Fixture requiring ballast w/o feet - ECTA, SC, EC, SCF

Area Light Survey

Please identify and document the specifications for each area light on the site. If more than one type of area light fixture is used, be sure to indicate these fixtures in the additional space provided. Complete a separate page for each type of fixture assembly; label each accordingly (i.e. Type A, Type B, etc.) and show location on a sketch or drawing.

Quantity (# of poles with this type of fixture) _____

Assembly Type	○ Single Head	○ Double Head - 90°	
	○ Double Head - 180°	○ Triple Head - 120°	
Color	○ Bronze	○ White	○ Platinum	○ Black
Model Type (looks like)	○ Challenger®	○ Greenbriar®	○ Citation®
	○ Classic	○ Starbeam	○ Flood
Wattage	○ 400 Watt	○ 1000 Watt	
Pole Dimensions	○ 4"	○ 5"	○ 6"
Pole Shape	○ Square	○ Round	○ Round Tapered
Head Mounting	○ Bolt on	○ Tenon	○ Pole Top
Condition of Pole	○ Replace	○ Internal Slipfitter (4" & 5" square poles only)	
Pole Height	○ 16'	○ 20'	Other (write in) _____
Base Bolt Size	○ 3/4"	○ 1"	○ 1-1/4"	○ 1-1/2"

Bolt Circle Diameter * _____   **Number of Bolts** _____
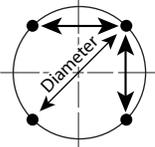
*Or indicate left to right or top to bottom dimension. Bolt circle can be determined from these.

Footer Height _____

Pole Mounting	○ Spaced	○ Direct to Footer	○ Direct Bury

Indicate any unusual conditions and Draw Diagram if Helpful

Check out the full line of Petroleum/C-store lighting at www.lsi-industries.com

CANOPY LIGHTING

Encore Top Access - Adjustable Focus

Scottsdale®

Encore Top Access

(shown with flat lens)

Scottsdale® Universal SuperKit® –2x2

Scottsdale® Universal SuperKit® –Recessed

Scottsdale® Surface Mount

Dakota®/Masters

Richmond®

SITE LIGHTING

Challenger®

Challenger® Medium

Greenbriar®

Citation® II

Hilton® II

Patriot

Classic®

Heritage®

BUILDING LIGHTING

Challenger® Wall Sconce

Doral® Wall Mount

Cascade

Eagle

INDOOR LIGHTING

Soho

Atrium

High Tech

Parabolic

SOFFIT & STRIP LIGHTING

Wall Wash

Wide Fascia

Sovereign

FLOOD LIGHTING

Doral®

OFL

Linear Flood

LSI community-friendly fixtures are designed to eliminate unnecessary uplight, minimize light trespass, glare and wasted energy and still provide quality lighting as required in today's society.

LSI PETROLEUM LIGHTING

10000 Alliance Road ◆ Cincinnati, Ohio 45242 ◆ (513)793-3200 Fax: (800)373-9887 ◆ www.lsi-industries.com

LSI Industries™

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