

# POWER CONSOLES

## Low Voltage Transformers for Landscape Lighting Professionals.

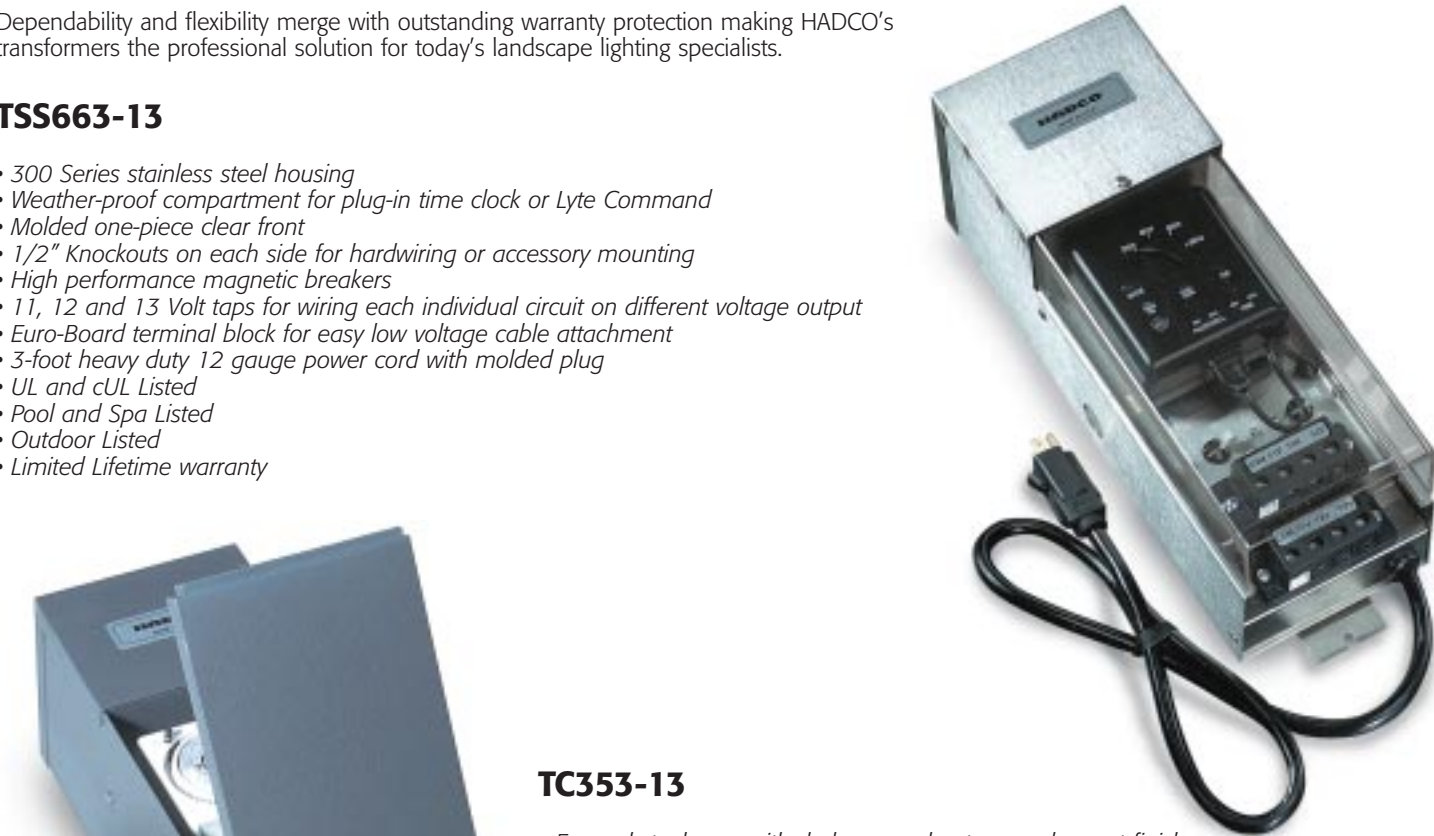
Designed specifically for landscape lighting professionals, HADCO transformers are built solid with features like magnetic circuit breakers and stainless steel housing. Rugged enough for the harshest environments, they are backed by warranties from 10 years to a lifetime. All transformers are assembled with safety and long life as a major concern, meeting the stringent UL requirements for landscape lighting applications (UL 1838).

The triple tap output design allows you to lay each run of cable at your preference of 11, 12, or 13 volts, a performance feature which permits complete flexibility in your landscape lighting set-up.

Dependability and flexibility merge with outstanding warranty protection making HADCO's transformers the professional solution for today's landscape lighting specialists.

### TSS663-13

- 300 Series stainless steel housing
- Weather-proof compartment for plug-in time clock or Lyte Command
- Molded one-piece clear front
- 1/2" Knockouts on each side for hardwiring or accessory mounting
- High performance magnetic breakers
- 11, 12 and 13 Volt taps for wiring each individual circuit on different voltage output
- Euro-Board terminal block for easy low voltage cable attachment
- 3-foot heavy duty 12 gauge power cord with molded plug
- UL and cUL Listed
- Pool and Spa Listed
- Outdoor Listed
- Limited Lifetime warranty



### TC353-13

- Formed steel case with dark gray polyester powder-coat finish
- Weather-proof compartment for plug-in time clock
- 1/2" Knockouts on each side for hardwiring or accessory mounting
- High performance magnetic starters
- 3-foot heavy duty 12 gauge power cord with molded plug
- Lockable captive door, hinged on the bottom
- Euro-Board terminal block for easy low voltage cable attachment
- 11, 12 and 13 Volt taps for wiring each individual circuit on different voltage output
- Enclosed bottom with six 1/2" conduit knockouts for indoor mounting
- UL and cUL Listed
- Pool and Spa Listed
- Indoor/Outdoor Listed
- 10-year warranty on powder-coat steel units

Catalog No.	Description	Height	Width	Depth
TC151-12*	150 VA Transformer (no timer)	11-1/2" (286mm)	3-1/4" (83mm)	3-1/4" (83mm)
TC151-12TP*	150 VA Transformer & Photo Cell (w/built in time clock)	11-1/2" (286mm)	3-1/4" (83mm)	3-1/4" (83mm)
TC353-13	300 VA Transformer	15-3/4" (400mm)	5-1/4" (133mm)	4-1/2" (114mm)
TSS363-13	300 VA Stainless Steel Transformer w/clear door	15-3/4" (400mm)	5-1/4" (133mm)	4-1/2" (114mm)
TC653-13	600 VA (300 watt x 2) Transformer	15-3/4" (400mm)	5-1/4" (133mm)	4-1/2" (114mm)
TSS663-13	600 VA (300 watt x 2) Stainless Steel Transformer w/clear door	15-3/4" (400mm)	5-1/4" (133mm)	4-1/2" (114mm)
TC943-13	900 VA (300 watt x 3) Transformer	15-3/4" (400mm)	6" (152mm)	5-3/4" (146mm)
TSS943-13	900 VA (300 watt x 3) Stainless Steel Transformer	15-3/4" (400mm)	6" (152mm)	5-3/4" (146mm)

\* 150 watt units- 12 volt output only. UL Listed outdoor, pool and spa.

# POWER CONSOLES

## Inground Transformers

### Features

- UL and cUL Listed
- Fiberglass reinforced composite box w/ composite lid and silicone gasketing
- Separate wiring compartment w/ two 3/4" inlets
- Epoxy encapsulated transformer for cool, quiet, weather-proof operation
- Primary side thermal protection
- Shielded between primary and secondary circuits for safety
- 11, 12 and 13 volt output taps for design flexibility and longer cable run capability
- Waterproof connectors for low voltage cable outlets (one supplied with 300-watt unit, two supplied with 600-watt unit)
- Potting compound for line voltage wiring compartment supplied.
- 10-year warranty



### TB100-12

Cast Iron Box  
100 VA/100 Watt  
12 Volt Output Only  
Two 1/2" Bottom Inlets  
One 1/2" Top Outlet  
.8 AMP Line Voltage Draw  
4" (102mm) diameter  
5" (127mm) deep



### TBC303-12

Composite Inground Box  
300 VA/300 Watt 11, 12,  
13 Volt Output Taps 2.7  
AMP Line Voltage Draw

### TBC603-12

Composite Inground Box  
600 VA/300 Watt X 2  
11, 12, 13 Volt Output Taps  
5.5 AMP Line Voltage Draw



## H.I.D. Ballast Boxes

### Features

- UL and cUL wet location listed.
- Above ground, steel, powder coated box
- Inground, fiberglass reinforced composite box
- Mercury vapor and metal halide available
- Single and twin ballasts
- Long range ignitors standard
- Three 3/4" bottom inlets on above ground boxes, two 3/4" inlets on inground boxes

### Mercury Vapor

Catalog No. Above Ground	Catalog No. Inground	Description	Maximum Distance To Lamp
ABM501 6-1/4" W, 10-3/8" H	IBM501 9-5/8" Dia., 12-1/4" H	One 50 Watt MV	100 ft.
ABM502 6-1/4" W, 12-1/2" H	IBM502 9-5/8" Dia., 12-1/4" H	Two 50 Watt MV	100 ft.
ABM1001 6-1/4" W, 10-3/8" H	IBM1001 9-5/8" Dia., 12-1/4" H	One 100 Watt MV	100 ft.
ABM1002 6-1/4" W, 12-1/2" H	IBM1002 9-5/8" Dia., 12-1/4" H	Two 100 Watt MV	100 ft.
ABM1751 6-1/4" W, 10-3/8" H	IBM1751 9-5/8" Dia., 12-1/4" H	One 175 Watt MV	100 ft.
ABM1752 6-1/4" W, 12-1/2" H	IBM1752 12-1/4" Dia., 15" H	Two 175 Watt MV	100 ft.

### Metal Halide

Catalog No. Above Ground	Catalog No. Inground	Description	Maximum Distance To Lamp
ABH701 6-1/4" W, 10-3/8" H	IBH701 9-5/8" Dia., 12-1/4" H	One 70 Watt MH	20 ft.
ABH702 6-1/4" W, 12-1/2" H	IBH702 9-5/8" Dia., 12-1/4" H	Two 70 Watt MH	20 ft.
ABH1001 6-1/4" W, 10-3/8" H	IBH1001 9-5/8" Dia., 12-1/4" H	One 100 Watt MH	20 ft.
ABH1002 6-1/4" W, 12-1/2" H	IBH1002 9-5/8" Dia., 12-1/4" H	Two 100 Watt MH	20 ft.
ABH1751 6-1/4" W, 10-3/8" H	IBH1751 9-5/8" Dia., 12-1/4" H	One 175 Watt MH	50 ft.
ABH1752 6-1/4" W, 12-1/2" H	IBH1752 12-1/4" Dia., 15" H	Two 175 Watt MH	50 ft.

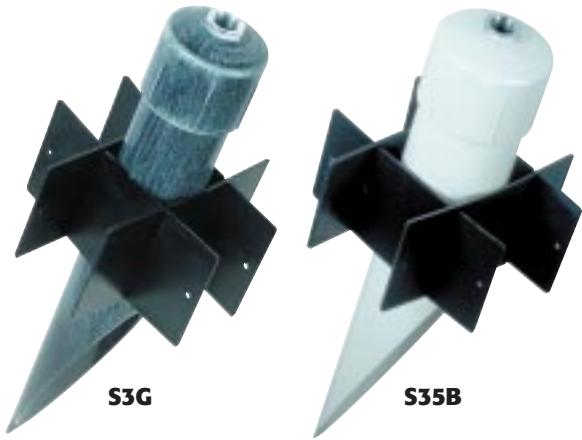


ACCESSORIES

Rocket Perma-Post®

- UL and cUL Listed
- Suitable for wet locations
- Heavy wall, impact-resistant PVC
- Threaded 1/2" N.P.T. (13mm) hub with ground wire
- Slanted bottom accepts conduits of different depths
- PVC stabilizers included (no concrete needed)
- 3" or 3-1/2" O.D. (76mm or 89mm) available
- U.S. Patent No. 4,858,877
- Standard length 19" (483mm). Other lengths available
- Accepts "Y" or "T" fitters (by others)
- Available in white, black, bronze or verde
- May be painted additional colors with water-base paint
- Use with UL listed wet location fixture

Catalog No.	Description	Finish	Packaged
S3A	3" O.D. (76mm) x 19" (483mm) Post	Black	12
S3B	3" O.D. (76mm) x 19" (483mm) Post	White	12
S3G	3" O.D. (76mm) x 19" (483mm) Post	Verde	12
S3H	3" O.D. (76mm) x 19" (483mm) Post	Bronze	12
S35B	3-1/2" O.D. (89mm) x 19" (483mm) Post	White	9



Low Voltage Mounting Stakes



**S1**– Extruded aluminum stake, 10" (254mm) long with 1/2" N.P.T. (13mm) stainless locking screws. Black powder coat finish. Boxed 12 per carton.



**S6**– Telescopic low voltage stake. Constructed of non-corrosive PVC. Field adjustable 2"-14" (51mm-356mm) above ground. Ideal for use in fast growing annual beds. (U.S. Patent No. 7,741,133). Boxed 12 per carton.

Connectors & Wiring



**LVC2**– "T" connector for 2 or 3 wire low voltage cable. Use to branch off existing low voltage cable for additional runs. Boxed 12 per carton.



**LVC3**–HADCO has eliminated the less efficient spacer design and replaced it with a positive lock screw design. The LVC3 also features heavier prongs for a more positive connection and a double-sided bottom that ensures proper fit for single and twin circuit wire. Boxed 12 per carton.



**Low Voltage Cable – Single Circuit**  
**SCW100-12**– 12V, 2 conductor, 12 gauge, 100 ft.  
**SCW500-12**– 12V, 2 conductor, 12 gauge, 500 ft.  
**SCW500-10**– 12V, 2 conductor, 10 gauge, 500 ft.

Mountings



**BI1**– Hot dipped galvanized cast iron junction box. 4" (102mm) square x 3" high (76mm) with 1/2" N.P.T. (13mm) top inlet and two 1/2" N.P.T. (13mm) bottom inlets.



**BI2**– Hot dipped galvanized cast iron junction box. 4" (102mm) square x 3" high (76mm) with 1/2" N.P.T. (13mm) top inlet and two 3/4" N.P.T. (19mm) bottom inlets.



**BI3**– Hot dipped galvanized cast iron junction box. 4" (102mm) square x 3" (76mm) high with 1/2" N.P.T. (13mm) top inlet and four 1/2" (13mm) N.P.T. side inlets and two 1/2" N.P.T. (13mm) bottom inlets.



**BI4**– Hot dipped galvanized cast iron junction box. 4" (102mm) square x 3" (76mm) high with 1/2" N.P.T. (13mm) top inlet and two 1/2" N.P.T. (13mm) side inlets and two 1/2" N.P.T. (13mm) bottom inlets.

Mountings



**CB1**– Precast concrete block with integral cast aluminum splice box and three 1/2" (13mm) top outlets to hold landscape fixtures, floodlights or devices. Splice box has three 3/4" N.P.T. (19mm) bottom inlets. Dimensions: 9-1/4" length (235mm) x 7-3/8" width (187mm) x 3" deep (76mm).



**M0029**– Cast aluminum junction box. 4" (102mm) x 2-1/4" (57mm) with 1/2" N.P.T. (13mm) top inlet and four 1/2" N.P.T. (13mm) side inlets.



**M0040**– Low voltage mounting canopy. 5" (127mm) square.



**TM1H**– Low voltage tree mount canopy. Bronze finish. Combination lag screws with hex nuts included.



**TM2H**– Line voltage tree mount cast aluminum junction box. Bronze finish. Combination lag screw with hex nuts included.



**MF1**– Pack of 12 combination galvanized lag screws with hex nuts for attaching canopies and ballast boxes in trees.



**MA22**– Silicone-filled wire connectors. Necessary to protect splicings from moisture and oxidation. Handles up to 10 gauge wire. Boxed 25 per carton.



**MC1**– Low voltage mounting canopy. Cast aluminum with 1/2" N.P.T. inlet. Suitable for trees, soffit, wall or deck mounting of many NightLife low voltage fixtures. 2-7/8" (73mm) round. Boxed 6 per carton.



**M0028A**– Portable line voltage stake. Cast aluminum with 8 foot (244mm) 3-wire power cord and plug. 8" (203mm) long with 1/2" N.P.T. conduit inlet. Black powder coat finish.

Other Accessories



**MA11**– Grommet-ended wire ties. The perfect accessory to fasten low voltage cable in a tree without allowing tree to grow around the cable. Constructed of UV stabilized, black polyester material. Seven inches long. Boxed 100 per carton.



**T4**– 24 hour plug-in time clock. For use with TC343 and TC643 power consoles.



**MA1**– Re-enterable encapsulant for inground installations. Two-part field mixable material in one convenient package. Boxed 6 per carton.



**MA4**– Corrosion preventive compound. Two ounce tube. Specially formulated non-conductive sealant and corrosion preventative. For use on sockets and electrical contacts. Boxed 6 per carton.



**MA2**– Marker flags. Vinyl 3" (76mm) x 5" (127mm) on 18" (457mm) stem with area for writing model numbers and lamp numbers. Boxed 50 per carton.



**PC1**– Photo cell. Finger type, adjustable photo control. 1/2" N.P.T. for mounting. 120 volt.



# LYTE COMMAND

## Residential Security That Delivers Confidence

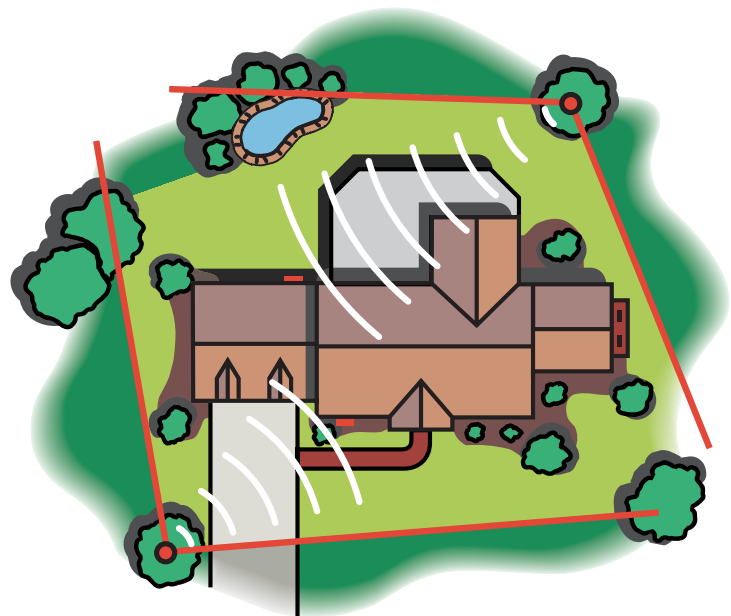
HADCO offers the Lyte Command system as an extra measure of protection for your home, bringing you freedom from worry. The system is easy to install, operate and maintain, and consists of a command module, two motion sensors and two hand-held remotes. The set-up works by way of infra-red light which is used to detect motion. If movement is detected, the sensors relay a radio frequency signal to the command module and the lights instantly come on.

Lyte Command features a hand-held remote which allows you to override the command module and turn the lights on at anytime. The remote can also be used to set the command module to timer, motion detection, dusk-to-dawn or off.

## Residential Security That Works Simply

The command module works by way of a photocell that switches your fixtures on automatically when the light level drops. You decide precisely when the lights come on by adjusting the photocell's sensitivity to ambient light.

Once the sun sets, the light duration timer permits you to determine just how long the lights stay on. The unit can be set for two, four, six or eight hours. And because the command module is time based, it automatically resets itself whenever power outages occur, saving you the trouble. Another benefit of the module permits the weather-tight box to be located anywhere you wish.



## Ordering Guide

Catalog No.	Description
SC100	Command Module, 2 Remote Motion Detectors, 2 Override Switches
SCM1	Remote Motion Detector with Mounting Bracket

## Residential Security That Works Intelligently

The command module automatically switches into motion detection mode once the light duration set time is up. A major benefit of Lyte Command's motion detector is that it uses a flat infra-red beam which prevents the lights from turning on every time an animal passes within its range. Once movement is detected, the lights come on anywhere from 18 seconds to 20 minutes depending on your preference.

Broad areas of your property can be secured because each of the motion detectors has a 70-foot transmitting range with four of them operational through one command module.

# INSTALLATION TIPS

## Lighting Set-Up Tips

- Tips On Connections And Hardware**
- Use Sta-con connectors at transformer terminals to achieve better electrical conduction.
  - Cut low voltage cable ends cleanly, apply protectant such as corrosion preventive compound or silicone gel and then tape ends to prevent short circuits and oxidation.
  - When connecting cables, use gel-filled wire connectors to prevent corrosion.
  - Before burying cable and connectors, activate systems to ensure proper connection.
  - SPT3 cable must be used from the transformer. The cable need not be buried and can be concealed with landscape dressing (mulch, pinestraw, stones). Slice the sod at an angle and bury the cable a minimum of 4 inches when crossing a lawn to prevent damage by aerators or lawn plugging equipment.
  - Use only 60%-80% of transformer capacity on initial installation to allow for additional lamp wattage or fixtures later. HADCO power consoles can be utilized at 100% capacity.
  - Always use a GFI outlet for power. Outdoor above-ground transformers must be installed no less than 12 inches above ground.
  - A transformer that is UL listed for indoor applications must be used when installed in a structure (garage, basement, crawl-space).

- Tips On Lamping**
- Use protectant on socket and lamp base to prolong lamp life, easy lamp changes.
  - Use MR 16 lamps with sealed glass lenses outdoors instead of open MR16 lamps, the lens prevents moisture from getting to the reflector which causes it to lose reflectivity.
  - Aim PAR36 lamps correctly, they have both a horizontal and a vertical beam.
  - Use downlighting for a soft, subtle, comfortable appearance.
  - Use uplighting to create contrast and to call attention to the specimen.

- Installation Near Water And Underwater**
- Do not use brass or copper underwater fixtures in fish ponds or pools.
  - Never use a fixture in a pool or spa unless it is specifically labeled for that application.
  - Prevent water damage to ingrounds by sealing wiring compartments on all line voltage inlets with potting compound. Also, use water-tight compression fittings on all low voltage cables and seal them with silicone or marine sealant.
  - Select fixtures with sprinkler shields when path or spread lighting areas in close proximity to lawn sprinklers to prevent lamps from blowing out.
  - Use higher wattage lamps for underwater applications, every 4 inches of water over a fixture lens reduces light output by approximately 10%.

- Tips On Accessories**
- An ice blue lens enhances the color of evergreen foliage and also "cools off" a halogen lamp like the MR16, giving it the appearance of moonlight.
  - When installing low voltage spread lights in a bed of annual flowers, use the S6 adjustable stake so the fixture can be raised as the flowers grow.
  - Use a cut off louver such as the MGM1 for the BL616 or the ICG16 for the IL116 to help hide the source of light from view.
  - Adjust the shroud on Bullytes to cut down on unwanted glare.
  - Prevent trees from being poisoned by mounting fixtures with only stainless steel or cadmium plated steel fasteners.
  - When attaching low voltage cable to a tree, use a wire-tie with a grommet end. Then the cable can flex off the tree slightly preventing damage to both.

- Tips on Deck Posts**
- Consider using a 24" long drill bit to bore a wireway through posts when installing deck lighting on 4x4's. Position the deck light (SRL2 or SRL4) approximately 16"-18" above the deck. Start your wire hole centered in the post at this point and drill downward to have the drill bit exit the post at deck level on the opposite side. Then drill straight through the decking and make the wire connection with the cable under the deck.
  - Mount the fixtures with stainless steel or brass screws to eliminate potential rust streaks on the post.