LIGO Laboratory / LIGO Scientific Collaboration

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Online Power Switch for LDF: Options

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1. Introduction

The purpose of this document is to outline the options for a remotely controlled power switch for the XY stage and/or the 1064nm laser at the LDF experiment.
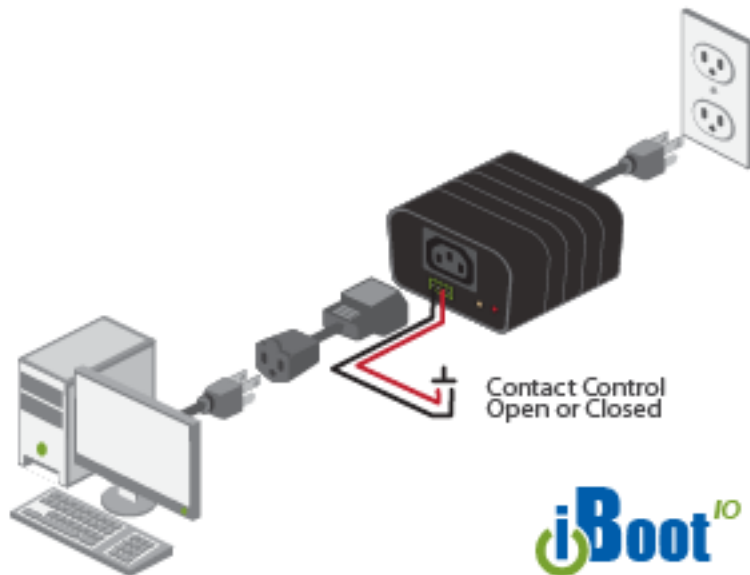
2. Options

Option #1:

iBoot-IO

General Description: Single-Outlet, Contact Closure and Logic Level Remote Power Control
link: http://dataprobe.com/iboot-io/#top
Image of setup:

Price: $125.00
105-240 VAC (volts in alternating current, auto-ranging)
12 Amps max at 105-125 VAC
10 Amps max at 210-240 VAC
Power Inlet: IEC 320 C13 Plug. Linecord for North America Included. 16AWGX3C
Power Out: IEC 320 C14 Receptacle. Extension Cord for N. America Included. 16AWGX3C
"iBoot-IO is easy to install - just attach it to the device you want to control, plug it ino the power outlet and close the control contacts, and you'll gain remote access."

Option #2:

Web Power Switch 7

General Description: Smart, reliable, web power control. Automatic reboot. Powerful, yet simple to use. Eight switched circuits, fully programmable. The internal web server is accessible from any standard browser. Simply enter an IP address. The controller may be configured and controlled via the web. Eight individually switched controlled circuits are provided with single outlets. Outlets are spaced for large adapters and plugs. Two unswitched outlets are provided for "always on" devices.
link: http://www.digital-loggers.com/lpc.html

Image of device:

SPECIFICATIONS

Alert Beeper	73dBa at 12". Programmable.	Options - User	• Right-Angle 19" rack-mount bracket.
Applications	Commercial, industrial, and residentialremote power control and reboot. Indoor use only.	Options - OEM Min. Order Qty. Applies	• Internal TTL serial devices • Custom labeling • WiFi / External Ports
Circuit Breaker	Manual reset, 15A Thermal, UL	Power Supply Rating	90-240V, AC/DC Autosensing
Clock / RTC	15 year Li battery, NTP support	Outlet Switching	8 individually switched circuits 2 unswitched (always on)
Control / Display	Reset -to-factory-default switch 2x16 Backlit LCD w/ PowerSave	Password Transmission	Encrypted, base 64 Movable HTTP port for security
Dimensions	Outside 1.6x5.8x13" Between mounting holes 12.3"	Power Dissipation	3.9W Typ Max (all on) <3 W idle
EEPROM	512Kb I2C Standard	Power Fail Hold-Over	350ms minimum (all relays on)
Enclosure	Aluminum chassis, double grounded. Injection molded high-temp thermoplastic base plate. Vented 2 sides. Fanless.	Power-Up Modes	Last used settings, all power on or off, sequential on or run BASIC program script
Ethernet Interface	10/100 autosensing, Static IP, TCP port selectable, 8 pin RJ-45 w/ internal FCC filtering	Relay Contact Spec	15-25A x 2 AC/DC, 1/2HP
		Software Controls	Individual outlets on/off, all on/ off/cycle. Net settings, Web UI
FCC Testing	Part 15 S/D	Surge Protection	3600J Metal Oxide Varistor
Humidity	8-80% RH Operating	Size (Single-Pack Carton)	2.4x7.7x15.8"
Input Power Cord	Removable C19 14AWG 6' length standard, others avail.	Weight (bare) (single pack) (10 pack) (pallet)	Single unit 3.3 lbs incl cord. Single boxed unit 4.0lbs 10-unit multi-pack carton 42lbs Pallet of 300pcs 1260lbs
Input and Outlet Rating	UL, CSA 15A, 120VAC only		
Input Frequency	50-400Hz		
Operating Temperature	-30º to 170ºF, -34º to 77ºC		

Price: $129.00
Power Supply Rating: 90-240V, AC/DC Autosensing
15-25 A

Option #3:
3Gstore Remote Power Switch
General Description: simple product that automatically power-cycles any device when internet connectivity is lost. All you have to do is connect the included ethernet cable from the 3Gstore IP Switch to your router, and then connect the power cables of the devices that you want to be

power-cycled when internet connectivity is lost, like your DSL modem and router. Once you have everything connected, press the "UIS" button, and everything will be up and running.
link: http://3gstore.com/product/6081_2_outlet_ip_switch.html
Image of device:

Price: $119.00
Electrical Rating: Input: 125~250V~50/60Hz
Output: 10A (for 2 sockets) & DC5V, 500mA (for USB port)
The 10A output to the outlets is independent of the network card's usage. The network card itself uses about 5W (including the LEDs).
Socket Type: 2x North American (Type B, NEMA 5-15R)
Option #4:

Wireless Remote Controlled Wall Outlets (3 pack)

General Description:
link: https://www.groupon.com/deals/gg-wireless-remote-controlled-wall-outlets?deal_option=15ed67c2-37e5-11e6-9bff-00259060b5da&utm_source=Google&utm_medium=cpc&utm_campaign=US_DT_SEA_GGL_TIM_TTT_PADS_CBP_CHP_NBR_g*gg-wireless-remote-controlled-wall-outlets_c*92163990661_k*_m*_d*Goods-Product-Ads_keyword*_target*_adposition*1o4_prodtarget*119828635021_adtype*pla_merchantid*10018412_productid*47634537_productpartitionid*119828635021_campaignid*228801421_adgroupid*19827788821&mr:referralID=b67dddd7-5e75-11e6-8292-005056947d48&gclid=Cj0KEQjw_qW9BRCcv-Xc5Jn-26gBEiQAM-iJhd2oz21941ZIvq-CikzKgQy30_cFTLQi7TWjVGhUIZ4aApee8P8HAQ
Image of devices:

Price: $19.99
Specs:
Plugs into any standard wall outlet
Range: up to 60'
Maximum 10-amp load
Product dimensions: 7.5"x5.5"x3"
Condition: new