



# Creating EZ-LIGHT Flash Patterns using SureCross Products

Creating an EZ-LIGHT flash pattern depends on whether you are using a sourcing EZ-LIGHT or a sinking EZ-LIGHT.

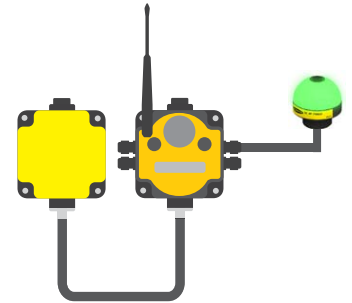
- When using a sinking light, create the flash pattern by manipulating the DX80's sinking outputs. If the EZ-LIGHT is going to be powered by the DX80, you must also create a continuous switch power output.
- When using a sourcing light, create the flash pattern by manipulating the DX80's switch power outputs.

## FLASHING THE SINKING EZ-LIGHT

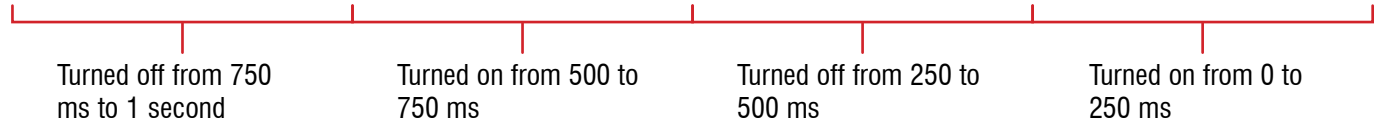
Flashing outputs are available for all output types in version 3.0 or later.

Flash an output by entering a time-based bit mask into the Report Rate parameter for that output. Bit 0 represents the first 62.5 ms time window, bit 1 represents the second 62.5 ms window, etc.

For example, turn ON the output from 0–250 ms, OFF from 250–500 ms, ON from 500–750 ms, then OFF again from 750 ms–1 sec by writing 0x0F0F (3855) to the appropriate output. The example shows Node 1, output 9 being written to.



Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Bin	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
Hex	0				F				0				F			
Dec	3855															



Use the User Configuration Tool (UCT) to set the Report Rate of Node 1, output 9, to 3855, as shown below, to achieve this flash pattern.

**Device Parameters**

Show Value as:  Integer  Hexadecimal

Get Send

Device	I/O Number	Parameter	Value
Node 1	9	Report Rate	3855

# CONFIGURING FOR CONTINUOUS SWITCH POWER

To power the sinking EZ-LIGHT from the DX80 FlexPower Node, configure the Node for continuous switch power.

1. Set one of the outputs to “switch power” type. In our example configuration, we will set Node 1’s output 9 to act as a switch power output using the User Configuration Tool (UCT) Device Parameters screen.

**Device Parameters**

Show Value as:  Integer  Hexadecimal Get Send

Device	I/O Number	Parameter	Value
Node 1	9	I/O Type	107

2. Set its default value to 1.

**Device Parameters**

Show Value as:  Integer  Hexadecimal Get Send

Device	I/O Number	Parameter	Value
Node 1	9	Default Value	1

3. Set the desired voltage.

**Device Parameters**

Show Value as:  Integer  Hexadecimal Get Send

Device	I/O Number	Parameter	Value
Node 1	9	Switch Power Voltage	204

**Switch Power Voltage (bits 7:0).** Used for I/O points supplying power to external devices. Use the lowest operating voltage of the external device when supplying power from a battery-powered DX80. Value range: 0 (default) through 255. (Parameter number 0x0B).

Output Voltage	Parameter (dec)	Parameter (hex)
5V	204	CC
7V	125	7D
10V	69	45
15V	32	20
20V	12	0C
24V	03	03

4. Set the default output condition to “power up” (on the Device Config, Device Information screen).

**Factory Information**

Device:  Get Info

RF Firmware Version:

RF EEPROM Version:

LCD Firmware Version:

LCD EEPROM Version:

Model Number:

Production Date:

Serial Number:

**Default Output Conditions**

Device: Node 1 Get Send

Power-Up

Out-of-Sync

Host Link Failure

Node Link Failure

Gateway Link Failure

# FLASHING THE SOURCING EZ-LIGHT

To create a flash pattern for a sourcing EZ-LIGHT, you must manipulate the switch power output of the DX80 FlexPower Node.

1. Set an output to act as a switch power output.

**Device Parameters**

Show Value as:  Integer  Hexadecimal

Get Send

Device	I/O Number	Parameter	Value
Node 1	9	I/O Type	107

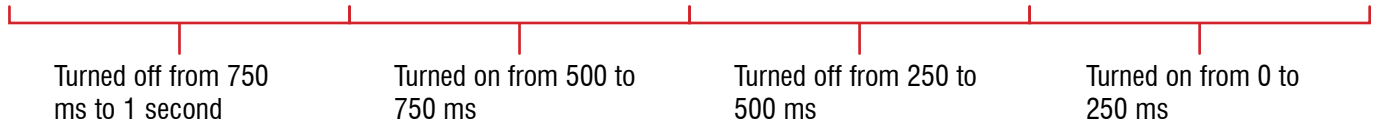
2. Use the User Configuration Tool (UCT) to set the flash pattern of that output by writing the desired value to the Report Rate for that output (see next section).

## SWITCH POWER OUTPUT FLASH PATTERN

Flash an output by entering a time-based bit mask into the Report Rate parameter for that output. Bit 0 represents the first 62.5 ms time window, bit 1 represents the second 62.5 ms window, etc.

For example, turn ON the output from 0–250 ms, OFF from 250–500 ms, ON from 500–750 ms, then OFF again from 750 ms–1 sec by writing 0x0F0F (3855) to the appropriate output. The example shows Node 1, output 9 being written to.

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Bin	0	0	0	0	1	1	1	1	0	0	0	0	1	1	1	1
Hex	0				F				0				F			
Dec	3855															



Use the User Configuration Tool (UCT) to set the Report Rate of Node 1, output 9, to 3855, as shown below, to achieve this flash pattern.

**Device Parameters**

Show Value as:  Integer  Hexadecimal

Get Send

Device	I/O Number	Parameter	Value
Node 1	9	Report Rate	3855