



# ***X80 Activator***

## **User's Manual**

Version 1.3

***[www.buckeyecam.com](http://www.buckeyecam.com)***

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## 1. Warnings

### 1. Warnings



If the *X80 Activator* is used to remotely operate an electrical or electromechanical device, it is the responsibility of the user to ensure that such devices are operated in a safe manner and to ensure that any necessary safety interlocks or warning signs are in place.



Under certain circumstances, the *X80 Activator* may fail to operate properly, or may operate at random times. It should never be considered a “fail-safe” device and should never be used in an application where a failure to operate properly may result in a risk of personal injury or loss of life.



Contains FCC ID:MCQ-XB900HP The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.



If the device is used with any antenna other than the one supplied, the system may not comply with the FCC regulation Part 15.247, Operation within the license-free band 902 – 928 MHz. Contact manufacturer regarding use of optional high-gain antennas with the X Series wireless camera system.



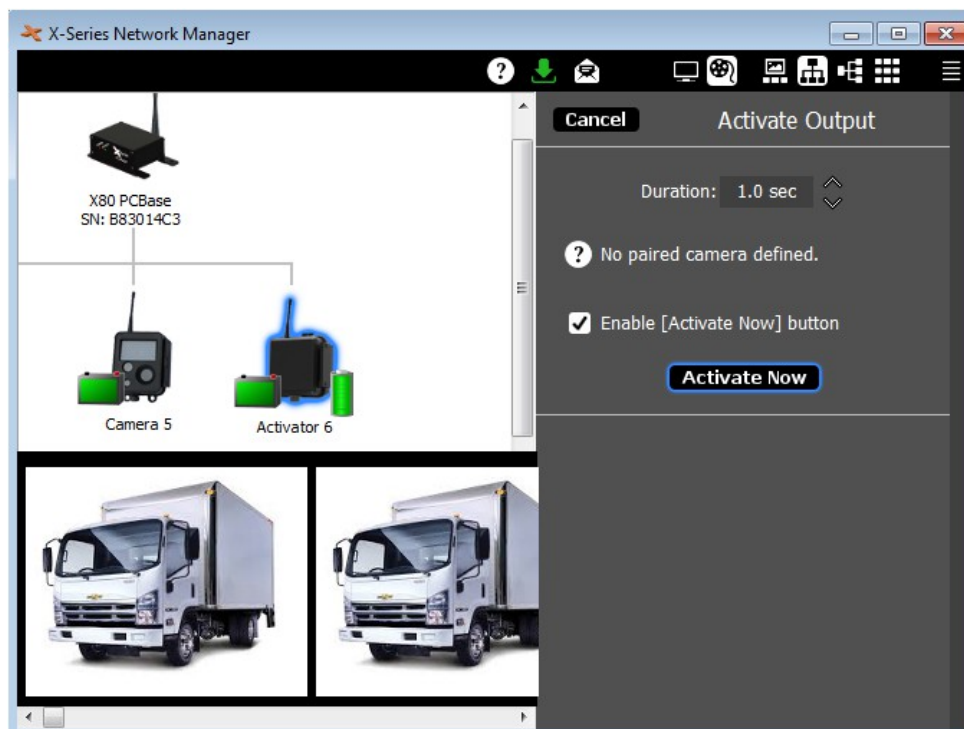
To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance are not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

## 2. Overview

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The X80 Activator can be used to remotely operate a 12 Volt DC electrical device using the *X-Series Network Manager* software application. Common applications include operating gates in response to images that are received from *X80 Wireless Cameras*.

Before using the *X80 Activator*, it is important to be familiar with *X-Series Network Manager*. User's manuals and video tutorials may be found at [www.buckeyecam.com/site/support.html](http://www.buckeyecam.com/site/support.html).



### 3. Getting Started

#### 3. Getting Started

Before using an *X80 Activator*, it must be registered to a base using the *X-Series Network Manager* software application. If you have not already done so, refer to the *X80 Wireless Camera System User's Manual* for instructions on how to connect to a base.

If X-Series Network Manager is installed and connected to a base, follow the steps shown below to register an *X80 Activator*.

1

#### Attach antenna.

Screw the antenna onto the threaded antenna connector. Do not over-tighten.



2

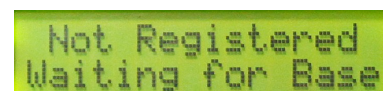
#### Install 5 AA batteries.

Remove the battery cover and install 5 AA batteries as shown. Replace the battery cover when done.



3

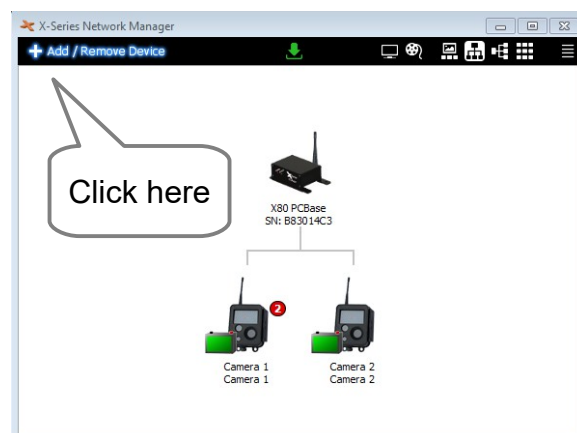
#### Wait for the LCD display to read "Not Registered Waiting for Base".



4

#### Add to X-Series Network Manager.

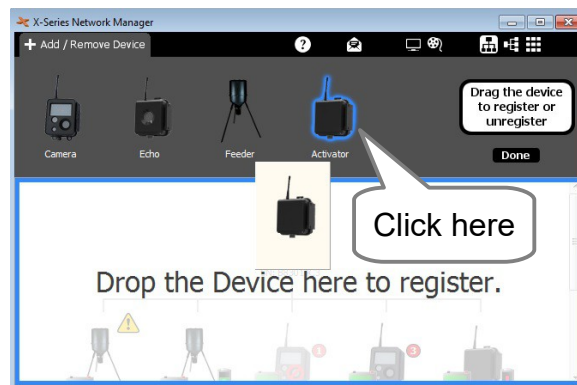
Click on "Add/Remove Device".



5

#### Click on the Activator icon and drag it into the network view.

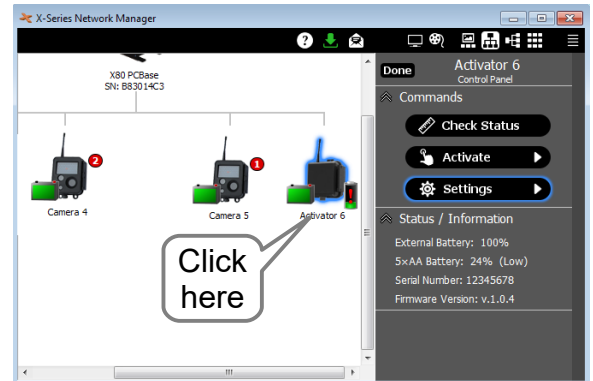
Once the Activator has been registered, it will be assigned a number.



### 3. Getting Started

6

Click on the Activator icon in the network view to open the Control Panel.



7

Click the “Settings” button on the Control Panel.

8

**Enter optional text labels.**

Text may be entered in the Text 1 and Text 2 fields to make it easy to identify the Activator in the software. This is especially helpful if you have more than one Activator.

9

Set “Beep Before Activation to Yes or No.

10

Click Update to save the changes, or Cancel if no changes were made.

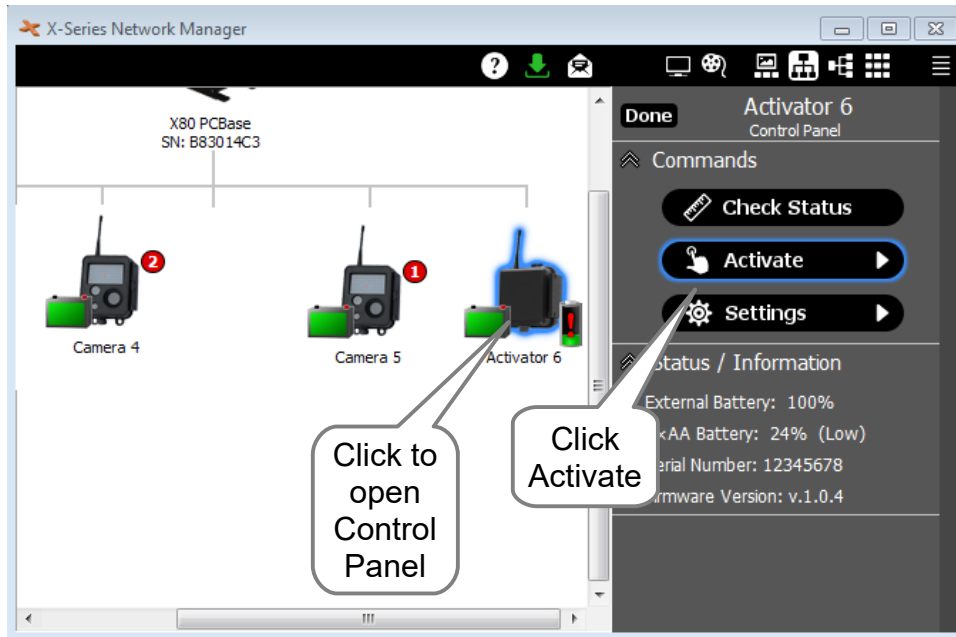
11

Repeat steps 1 through 11 for all Activators.

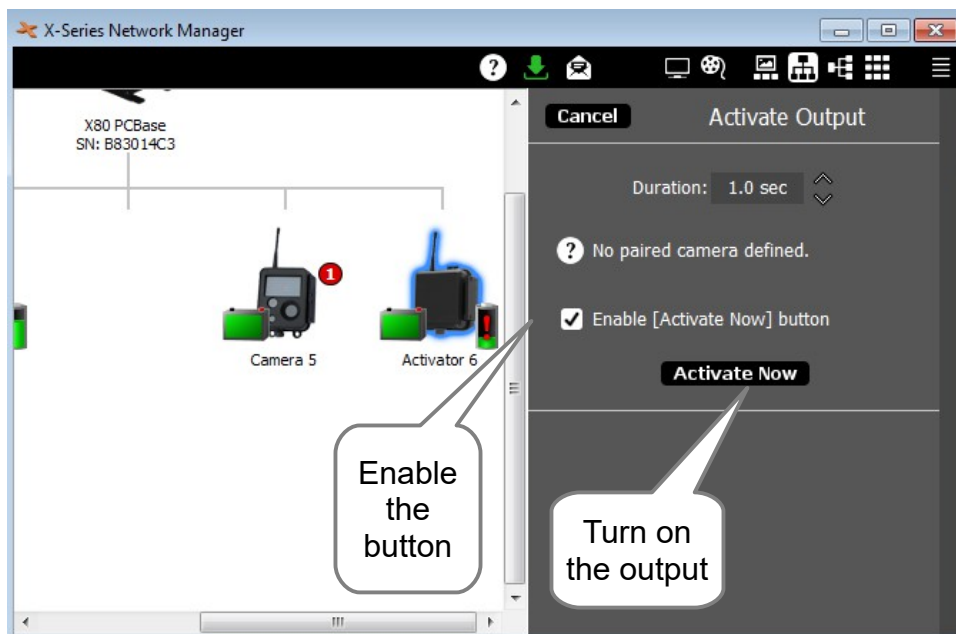
#### 4. Using the Activate Button

#### 4. Using the Activate Button

To access the Activate button, click on the Activator icon to open the control panel.



Set the time duration. This will limit the amount of time that the output is on.  
Check the box to enable the “Activate Now” button.  
Click “Activate Now” to turn the output on.



## 5. Wiring

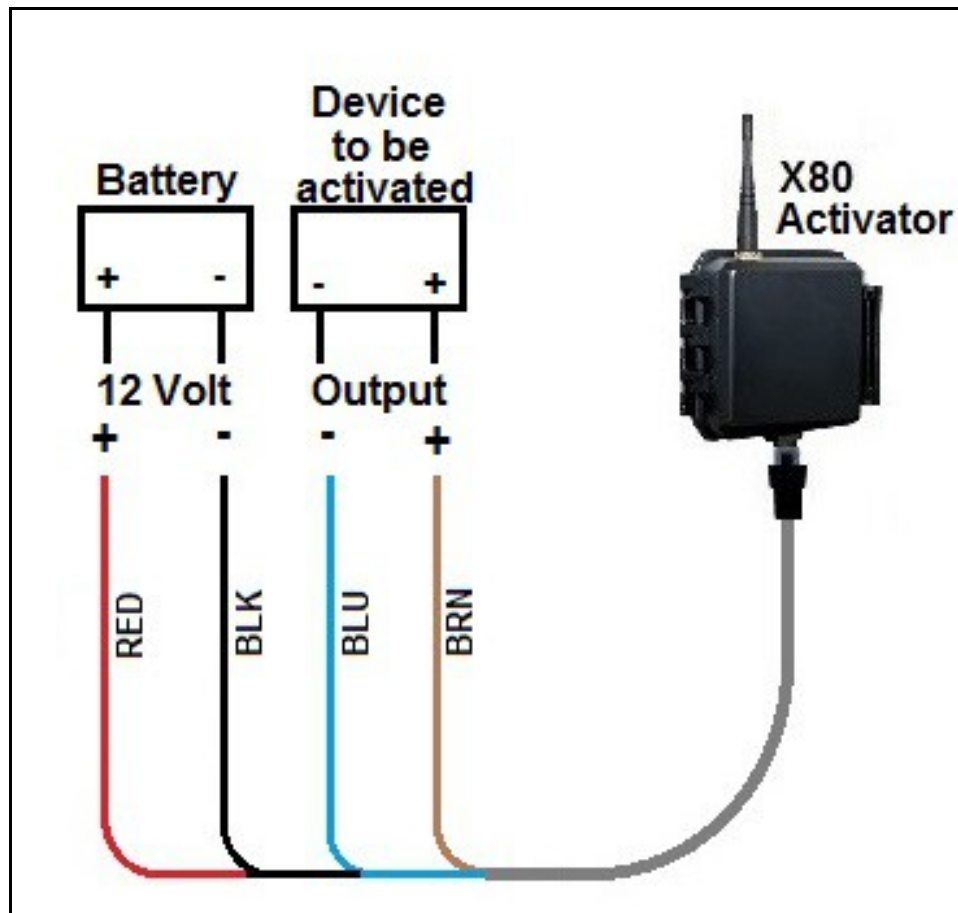
### 5. Wiring

There are 3 different ways to connect the X80 Activator to a device. In order to determine the type of connection that is appropriate, you must know the voltage and current requirements of the device. Three different device types are acceptable:

1. Devices that require 12 Volts and less than 5 Amps of current.
2. Devices that require 12 Volts and 5 to 20 Amps of current.
3. Devices that require a contact closure only with no voltage applied (i.e. “dry contact”).

**Note:** Types 2 and 3 require the optional Auxiliary Relay Pack.

For Devices that Operate on 12 Volts and Less Than 5 Amps		
Wire Color	Connection	Description
Red	12 Volt Battery (+)	Connect to a 12 Volt battery positive terminal (+)
Black	Battery (-)	Connect to a 12 Volt battery negative terminal (-)
Brown	Device to be activated (+)	When activated, this wire will be switched to the (+) battery voltage for up to 10 seconds (software adjustable setting).
Blue	Device to be activated (-)	When activated, this wire will be switched to the (-) battery.

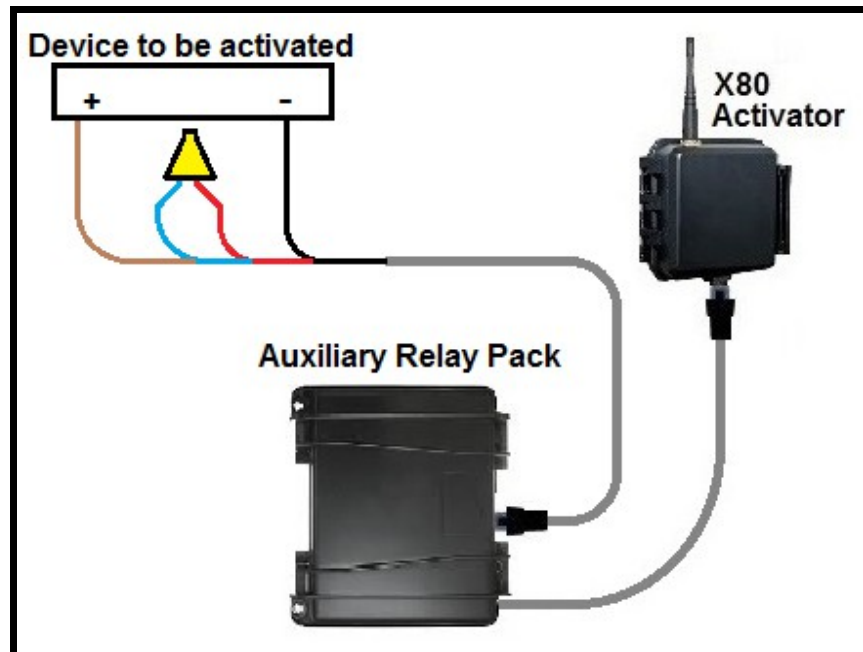




### 5. Wiring

For Devices that Operate on 12 Volts and 5 to 20 Amps		
Wire Color	Connection	Description
Red	+12 Volts	+12 Volts from battery that is inside of Auxiliary Relay Pack
Black	-12 Volts	-12 Volts from battery that is inside of Auxiliary Relay Pack
Brown	Relay contact	One side of the Normally Open relay
Blue	Relay contact	One side of the Normally Open relay

1. Install a UB1270 Sealed Lead Acid battery inside of the Auxiliary Relay Pack.
2. Connect the cables as shown below.
3. Connect the Red and Blue wires with supplied wire nut as shown below.
4. Connect the Brown wire to the device positive terminal (+).
5. Connect the Black wire to the device negative terminal (-).

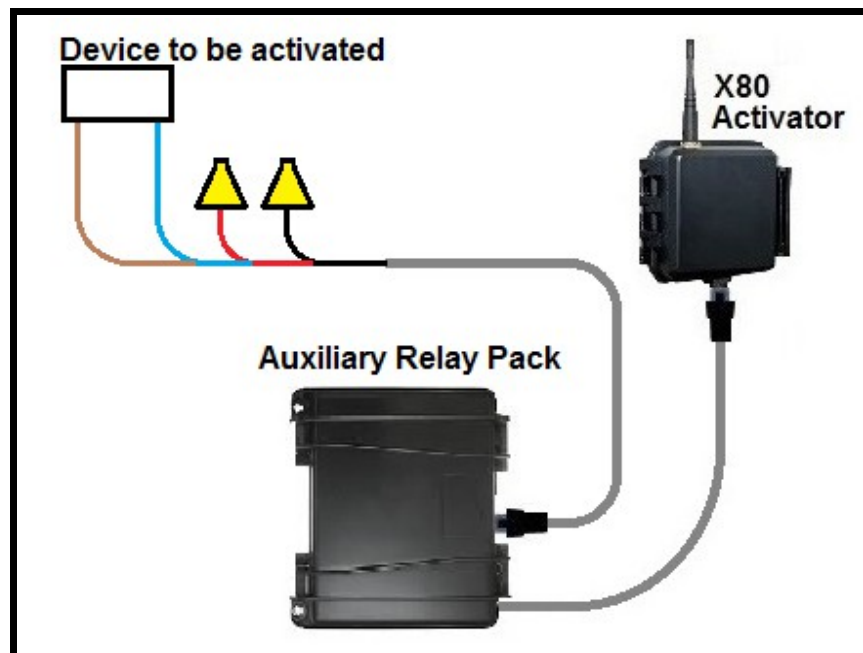


### 5. Wiring

For Devices that Require a Contact Closure to Operate		
Wire Color	Connection	Description
Red	+12 Volts	Not used
Black	-12 Volts	Not used
Brown	Relay contact	One side of the Normally Open relay
Blue	Relay contact	One side of the Normally Open relay

1. Install a UB1270 Sealed Lead Acid battery inside of the Auxiliary Relay Pack.
2. Connect the cables as shown below.
3. Connect Blue and Brown wires to the device contact closure input.
4. The Red and Black wires are not used. Cap them off with wire nuts as shown.

**Note:** The Blue and Brown wires are connected to the contacts of a Normally Open relay inside of the Relay Pack. The contacts will close when activated for up to 10 seconds (software selectable). There is no voltage applied to the contacts (i.e. “dry contact”).



## 6. Specifications

### 6. Specifications

<b>X80 Activator Performance Features</b>	
Function	12 Volt DC output. On duration adjustable up to 10 seconds.
Compatibility	All X80 Wireless Devices, X-Series Network Manager X80 PC Base, Cell Base, and Net Base <sup>1</sup>
Operating temperature	-40 to 140 F
<b>Electrical Specifications</b>	
Output	12 Volts. 5 Amps max. <sup>2</sup> On time = 10 seconds max.
Internal battery	5 AA <sup>3</sup>
External battery	12V SLA <sup>3</sup>
Supply Current (Activator Only) (Typical) <sup>6</sup>	0.5 mA when in low power sleep mode (i.e. no activity) 60 mA when transmitting 20 mA during 20 second idle state after transmission
<b>Wireless Network</b>	
Maximum number of network devices	254 (total of all device types)
Line-of-sight transmission range	Up to 2 miles with standard antennas <sup>4</sup>
Maximum allowable antenna gain	15.1 dBi (including cable losses)
Transmission type	902 to 928 MHz frequency band, FHSS
Transmitter output power	Up to 250 mW
<b>Agency Approvals</b>	
FCC (USA)	MCQ-XB900HP
IC (Canada)	1846A-XB900HP
C-Tick (Australia)	Yes
Anatel (Brazil)	Pending
<b>Dimensions</b>	
X80 Wireless Feeder Controller	4L x 4.4W x 2.75D (Dimensions are in inches)

<sup>1</sup> An X80 Base is required to use the wireless features (PC Base, Cell Base or Net Base) (sold separately).

<sup>2</sup> For currents greater than 5 Amps or for a dry contact output, the Auxiliary Relay Pack is required.

<sup>3</sup> Batteries are not included.

<sup>4</sup> Transmission distance depends on terrain and may be increased using high gain antennas and/or repeaters.

<sup>6</sup> Average supply current does not include the device that is activated (i.e. solenoid, relay, etc.) and will vary depending on level of activity, signal strength, etc..

The *Buckeye Cam X80 Series* includes wireless cameras, sensors, repeaters, and actuators. All of the available devices work seamlessly together and may be controlled and monitored with the *X-Series Network Manager* software application.

For more information visit, [www.buckeyecam.com](http://www.buckeyecam.com) or call toll free at: 866-325-8172

## **7. Additional Information**

### **Video Tutorials**

*X-Series Network Manager* video tutorials are available at [www.buckeyecam.com](http://www.buckeyecam.com).

### **Repeaters and High Gain Antenna Setups**

For more information on the different types of repeater setups and high gain antenna options see the *X80 Wireless Camera System User's Manual* available at [www.buckeyecam.com](http://www.buckeyecam.com).

## **8. Warranty and Service**

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For service or repair, contact ATSI/Buckeye Cam at:

ATSI

8157 US Hwy 50 • Athens, OH 45701

(866) 325-8172 • (740) 592-2874

Fax (740) 594-2875

[www.buckeyecam.com](http://www.buckeyecam.com)

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