

The X80 Echo combines a passive infrared motion detector (PIR) and an RF repeater in a single device. When added to an X80 Wireless Camera network, it can be used for any of the following functions:

**Repeater**

- Increase transmission distance
- Add up to 254 devices to network
- Works with all X80 Bases

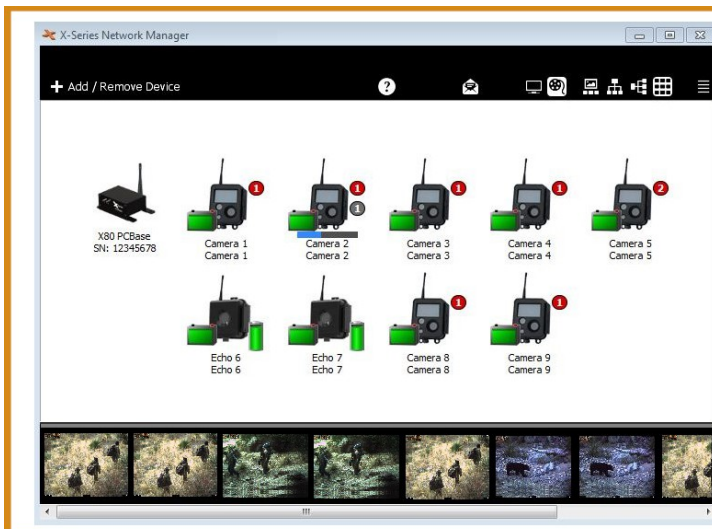
**Ground Sensor Interface**

- Trigger camera with ground sensor
- Works with Vortex Ground Scout
- Works with any sensor that has a relay output

**Auxiliary Camera Trigger**

- Trigger one or multiple cameras
- Echo is small and easy to conceal
- Cover wider field of view
- Camera can be offset from target making it less likely to be discovered

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



- X-Series Network Manager**
- Control cameras and receive images
  - Custom settings for each camera
  - Images can be automatically emailed
  - Works with Windows and Mac
  - Works with mobile devices
  - Optional external sensors can be added
  - Interface with Unattended Ground Sensors

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<b>X80 Echo Performance Features<sup>1</sup></b>	
Functions	Motion Sensor, RF Repeater, Auxiliary Sensor Interface
Auxiliary Input	Connect to battery (-) to activate. Max. current = 10mA
Compatibility	All X80 Wireless Devices, X-Series Network Manager
Operating Temperature	-40 to 140 F
<b>Motion Detection</b>	
Type	Passive Infrared (PIR)
Range <sup>2</sup>	User adjustable. Up to 100 feet
Angle	Approximately 10 degrees
Reaction Time <sup>3</sup>	0.1 Seconds
Delay between activations	User selectable. 1 second to 2 hours.
Data transmitted with each activation	Date, Time, custom text field
<b>Wireless Network</b>	
Maximum number of network devices	254 (total of all device types)
Line-of-sight transmission Range <sup>4</sup>	2 miles (standard antennas), Up to 25-30 miles (see note 4)
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>Power Requirements</b>	
Internal Battery <sup>5</sup>	5 internal AA. For best performance use Lithium type.
External Battery (Optional) <sup>5</sup>	External 12V SLA UB1270, required for repeater function
Solar Panel	Optional solar panels sold separately
<b>Dimensions</b>	
X80 Echo	4L x 4.4W x 2.75D (Dimensions are in inches)
Optional External Battery Pack	8.5L x 5.5W x 3.75D (Dimensions are in inches)

<sup>1</sup> For a complete list of specifications and operating instructions see the *X80 Echo User's Manual* available at [www.bectactical.com](http://www.bectactical.com)

<sup>2</sup> Motion detector range may be affected by mounting angle and ambient temperature.

<sup>3</sup> Reaction time specification is for motion detection only. It does not include transmission delays and delays associated with triggering other devices.

<sup>4</sup> Actual transmission range will depend on the type of antennas that are used, the surrounding terrain and the amount of interference received. Transmission distance may be increased by many miles with high gain antennas and/or repeaters.

<sup>5</sup> Batteries are sold separately



For more information consult the *X80 Echo User's Manual* available at [www.bectactical.com](http://www.bectactical.com)

*Buckeye CAM* products are manufactured by  
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