*Pix*Controller VideoEye ™ Plus Manual
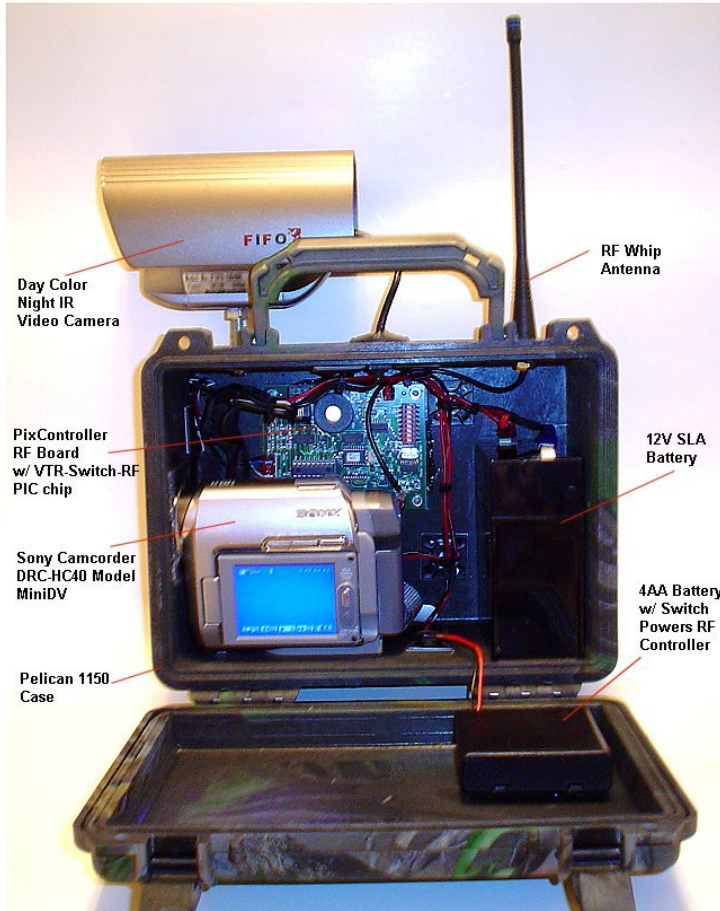

Introduction

This system uses a Sony or Canon camcorder that can be switched into VTR mode (Video Tape Recorder) mode. This is a mode in which you can connect another video camera and record from that source if needed. The system will recording from the camcorder during the day and taking advantage of the crisp color recording the camcorder can do, however, at night the controller will switch the camcorder into VTR mode and record from an IR video camera.

Since we're recording in both VTR mode and camcorder mode I needed to add 2 MIC's. One MIC for camcorder mode and a 12V MIC that gets put into the Audio/Video (AV port) input of the camcorder for night sound recording. The video output from the video camera also goes into this AV port.
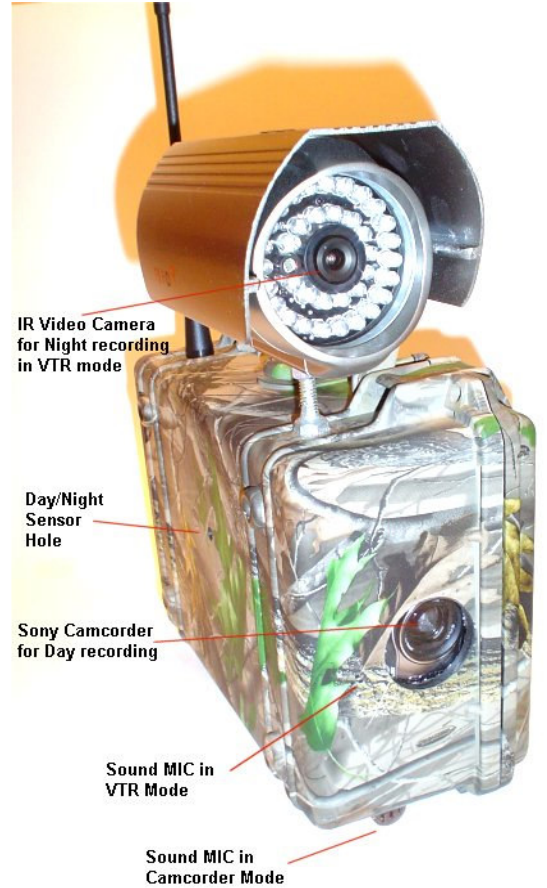
The system camcorder no longer has to have NightShot mode either. That won't be used. With that said you can buy the less expensive Canon MiniDV camcorders. I'm looking into the J-LIP JVC camcorders next to see if we can do the same there.

This is all controlled via our new RF board and you can use the "B" sensor to have the system all powered up ready to start recording once the animal hits the "A" sensor. In that mode you won't have the 4-7 second start up issues.
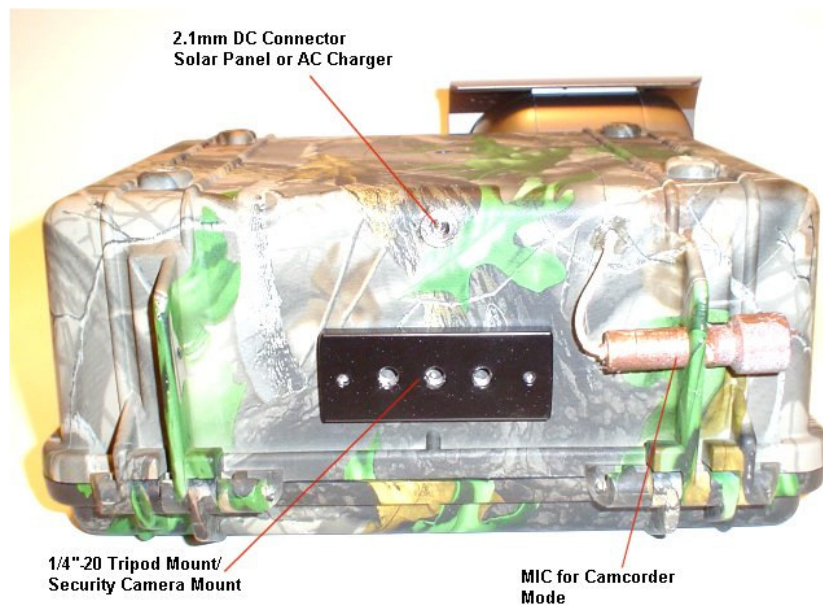
VideoEye™ Plus System Components

Day Color Night IR Video Camera

RF Whip Antenna

PixController RF Board w/ VTR-Switch-RF PIC chip

12V SLA Battery

Sony Camcorder DRC-HC40 Model MiniDV

4AA Battery w/ Switch Powers RF Controller

Pelican 1150 Case

VideoEye™ Plus Interior Components

IR Video Camera for Night recording in VTR mode

Day/Night Sensor Hole

Sony Camcorder for Day recording

Sound MIC in VTR Mode

Sound MIC in Camcorder Mode

VideoEye™ Plus Exterior Components

2.1mm DC Connector Solar Panel or AC Charger

1/4"-20 Tripod Mount/ Security Camera Mount

MIC for Camcorder Mode

VideoEye™ Plus Exterior Bottom Components

PixController RF Controller Overview

This new controller works in conjunction with the X10 wireless motion sensors. The X10 wireless motion sensors will transmit a wireless command signal to the PixController RF receiver controller when a motion event is detected. Multiple X10 sensors can control one or more PixController RF controllers from a "*Line of Sight*" distance of 100 feet or greater depending on the type of receiving antenna used.

Basic Theory of Operation

1. A target, such as an animal or person walks past the X10 wireless motion sensor and triggers an event.
2. Once the X10 wireless motion sensor is triggered it sends out a RF "On" command.
3. The RF PixController board is listening for X10 commands and picks up the RF "On" command sent from the X10 wireless PIR sensor. It will decode the RF commands House Code and Unit Code and make a decision on what to do.
4. If the command send is to trigger the camcorder to start recording video

VideoEye™ Plus Field Setup