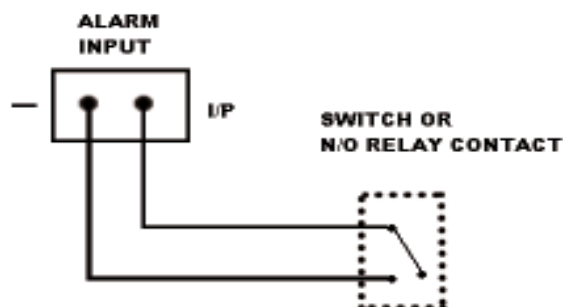


## ALARM INPUT

A switch or relay can be connected to the Alarm Input to trigger the VCR Controller.



A CT550 12V DC Power Supply will be required if a Voltek camera system is NOT connected to your CT220 VideoActivator.

## WARRANTY

This product has a 1 year parts and labour warranty. In the unlikely event that you encounter a problem with this product, it should be returned, carriage paid, to the address shown below or to the place of purchase.

## HELPLINE

Please telephone 09066 191 133\* should you have any questions regarding this product or if you would like to order any spares or accessories.

## SPECIFICATION

Operating voltage	12V dc nominal
Current consumption	50mA
Operating temperature	0°C - +30°C
Weatherproofing	IP30 (indoor use only)
Size (excludes cables)	158mm (W) x 35mm (H) x 129mm (D)
Total package weight	0.2Kg
Carton size	180mm (w) x 50mm (H) x 150mm (D)



Churchill Way, Lomeshaye Ind Est, Nelson, Lancashire. BB9 6RT  
Tel (01282) 695500 Fax (01282) 695511 International (+44 1282)  
Email: info@voltek.co.uk Website www.voltek.co.uk

\* Helpline calls cost 60p/minute. Open 9am to 5pm, Mon to Fri.

Voltek reserves the right to change any product or specification without notice (c) 2004

# INSTALLATION

## CT220 + DVD / Video Activator

Thankyou for purchasing the Video Activator. Please read these instructions carefully before starting the installation.

### PRODUCT FEATURES

- Compatible with CT120/121/122/150/160, 1870/1877, CMS244/500, CRS200
- 12V DC operating voltage for simple and safe wiring.
- Automatically records your camera pictures while you are away from the property.
- Easy programming of unit using your recorders remote control.
- Programme up to 4 codes enabling you to power on, record, stop and power off your recorder..
- Internal sounder with adjustable volume warns of an intruder.
- Simple push buttons and LED indicators allow full control of the product
- Memory backup prevents the need for re-programming in the event of a power loss.
- Adjustable Timers.
- Alarm input via a switch or NO Relay contact

### CONTENTS

Please check and familiarise yourself with all the parts before proceeding with the installation.

- **CT220** Video Activator.
- IR Transmitter and lead.
- 30cm 6 pin connecting lead.
- Alarm input connector.



# INSTRUCTIONS

## INTRODUCTION

The CT220 can be used with either a DVD or a Video recorder. Once programmed, the unit can be set to either activate the recorder when it is in the “standby” position, OR, to activate the recorder when it is in the “off” position. Leaving the recorder in the “standby” position has the advantage that there is minimal delay between the detection of movement and the actual recording. Keeping the recorder in the “off” position means that recording cannot start until the unit has powered up. Please note that if the recorder is to be used in the “standby” position then any “auto power off” function in the recorder must be disabled to prevent it from switching off.

The table below shows the various programme codes in the CT220 and the default settings. The default settings can be changed by the user to suit individual circumstances. The flow diagrams show the sequence of operations by the CT220 and the corresponding actions of the recorder.

### Key to abbreviations

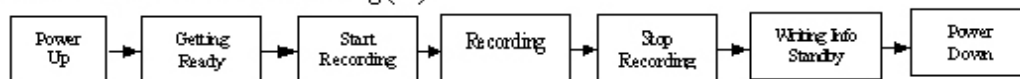
P1	Power on Command	A1	Time interval between P1 & P2 (default 8secs)
P2	Start Record Command	A2	Time interval between P3 & P4 (default 8secs)
P3	Stop Record Command	RT	Time interval between P2 & P3 (default 20secs)
P4	Power Off Command		

### Switch position “A” at the rear of the CT220 (recorder is activated from the “off” position)

Action of Activator after receiving trigger.

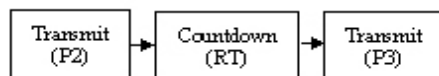


Action of DVD/VCR after receiving (P1).

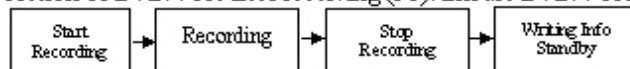


### Switch position “B” at the rear of the CT220 (recorder is activated from “standby” position)

Action of Activator after receiving trigger.



Action of DVD/VCR after receiving (P1). Ensure DVD/VCR remains powered up.

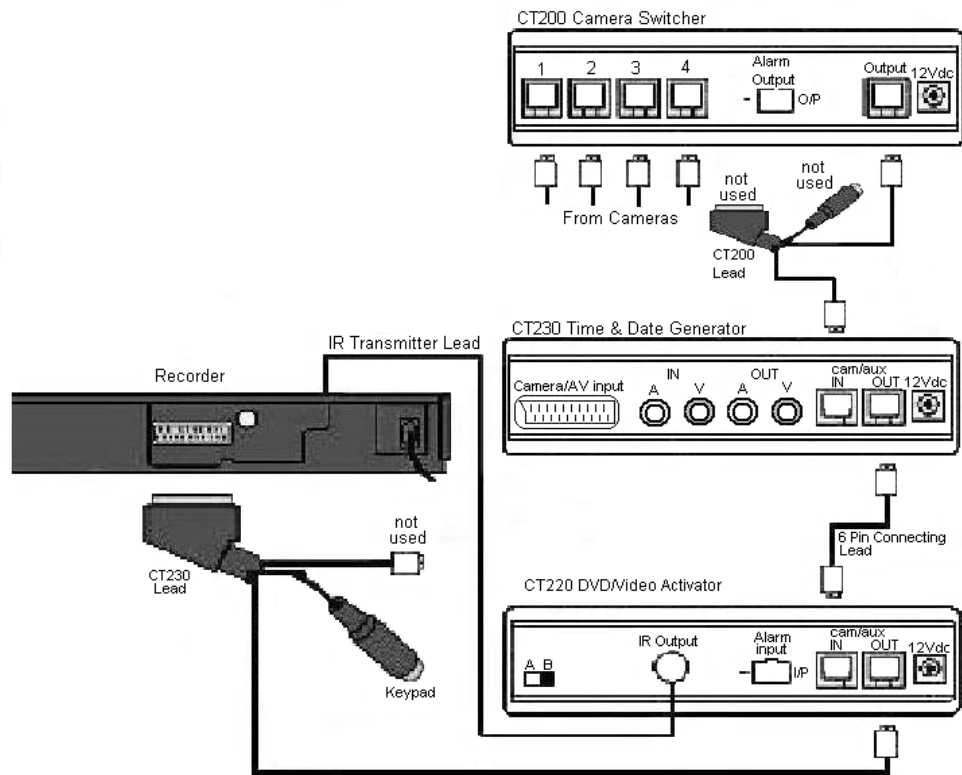


## PROGRAMMING

- 1) Ensure your DVD/VCR is powered on and has recordable media inserted.
- 2) Set the switch located at the back of the CT220 to either A or B position depending on whether you wish to activate your recorder from the “standby” or “off” position. The default position is B and is for activating the recorder from the “standby” position. If this is the option selected then please ensure that any “auto power off” function on your recorder is disabled to prevent it from switching off.
- 3) During programming you have the option of testing each code that has been entered. This is done by pressing the TEST button after each code has been accepted.
- 4) To prepare the CT220 for programming press the LEARN button on the front of the unit. The red LED will illuminate and P1 will be displayed. The unit is now ready for programming.
- 5) Point your DVD/VCR remote control at the IR RX window from a distance of approximately 5cm (you will need to do this for every code being entered).
- 6) Press the **POWER** button on your **remote control**; the activator will bleep to acknowledge the POWER ON command has been accepted.
- 7) Press the **STEP** button (on the CT220); P2 will be displayed in the LED display.
- 8) Press the **RECORD** button on your **remote control**; the activator will bleep to acknowledge the START RECORDING command has been accepted.
- 9) Press the **STEP** button (on the CT220); P3 will be displayed in the LED display.
- 10) Press the **STOP** button on your **remote control**; the activator will bleep to acknowledge the STOP RECORDING command has been accepted.
- 11) Press the **STEP** button (on the CT220); P4 will be displayed in the LED display.
- 12) Press the **POWER** button on your **remote control**; the activator will bleep to acknowledge the POWER OFF command has been accepted.
- 13) Press the **STEP** button (on the CT220); A1 will be displayed in the LED display. This represents the time interval between P1(Power On) and P2 (Record). To adjust this time setting press the **TEST** button and the default time (8 seconds) will be displayed. Press the **STEP** button to increase the time. Once your desired time has been reached press the **TEST** button to store and exit the setting. Please note that the range of adjustment is 0-99 seconds.
- 14) Press the **STEP** button (on the CT220); A2 will be displayed in the LED display. This represents the time interval between P3 (Stop) and P4 (Power off). To adjust this time press the **TEST** button and the default time (8 seconds) will be displayed. Press the **STEP** button to increase the time. Once your desired time has been reached press the **TEST** button to store and exit the setting. Please note that the range of adjustment is 0- 99 seconds.
- 15) Press the **LEARN** button on the CT220 and the unit will bleep and the red LED display will turn off.
- 18) If you wish to alter the length of recording time for each activation then simultaneously hold the **TEST** and **STEP** buttons on the CT220 for 1 second. This will bring up the default recording time on the LED display (20 seconds). Press the **STEP** button to increase the time and once your desired time has been reached then press the **TEST** button to store and exit the adjustment. The range of adjustment is 0- 99 seconds.
- 19) Your programming is now complete.

NOTE: Whilst every effort has been made to ensure the compatibility of this unit to the various makes of DVD and Video recorders on the market, we cannot guarantee that it will work with every recorder available on the market. Certain models of DVD/ VCR may not power up with the power command which may be due to the recorder needing the channel button to be pressed. Compatibility with combined units also cannot be guaranteed due to their codes being unique.

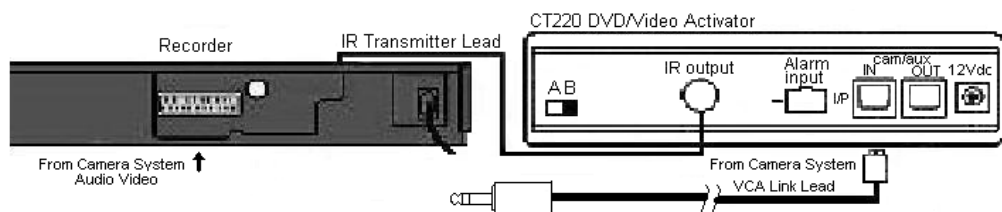
## CONNECTING TO A CT200 & CT230



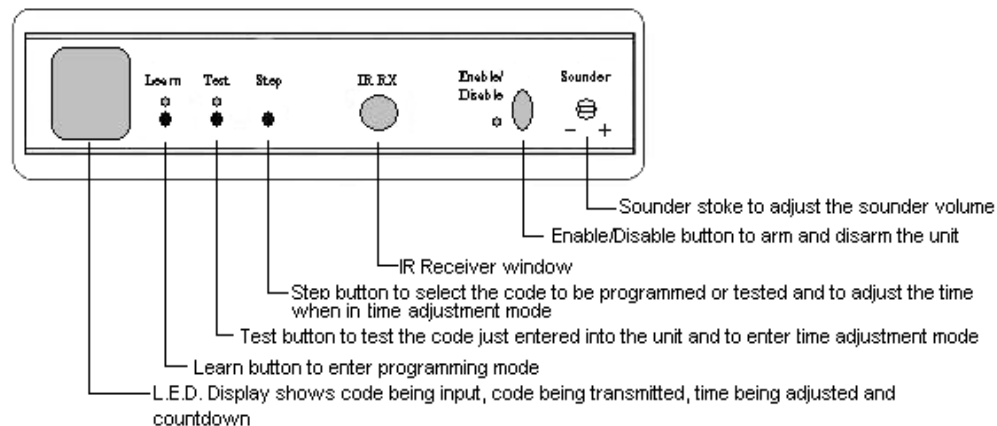
Using the CT200 lead connect the 6 pin connector to the OUT of the CT200 and the other 6 pin connector to the IN of the CT230. The scart connector, 4 pin mini-din and PSU connector are not used. Then using the 6 pin connecting lead, connect 1 between the OUT of the CT230 and the IN of the of the CT220. Then using the CT230 lead, connect the 6 pin connector to the OUT of the CT220 and the scart plug to the scart socket of your recorder and the 4 pin mini-din connector to your keypad. Place the IR transmitter so that it points in to the IR receiver of your recorder and connect the other end of it to the IR output of the CT220. Your cameras and PSUs will remain connected as before.

## CONNECTING TO A CT150/160 OR A CMS244/CMS500 OR A CRS200

Using the VCA link lead, connect between the VCA connection on the Voltek Camera System and the IN on the CT220.

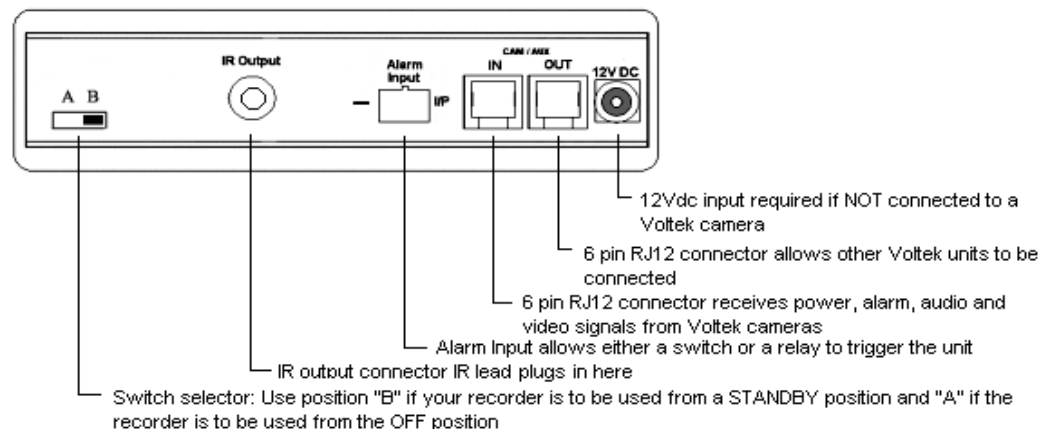


## FRONT PANEL CONTROLS



Note: When the unit is NOT in Learn mode, then pressing the TEST and STEP buttons simultaneously for 1 second will enable you to change the length of recording time when the unit is activated

## REAR PANEL CONNECTIONS



## OPERATING THE CT220

Use the RED button to Enable/Disable the automatic recording facility. The LED indicator will light-up GREEN when the unit is enabled and ready to record.

Before enabling the system please make sure that:

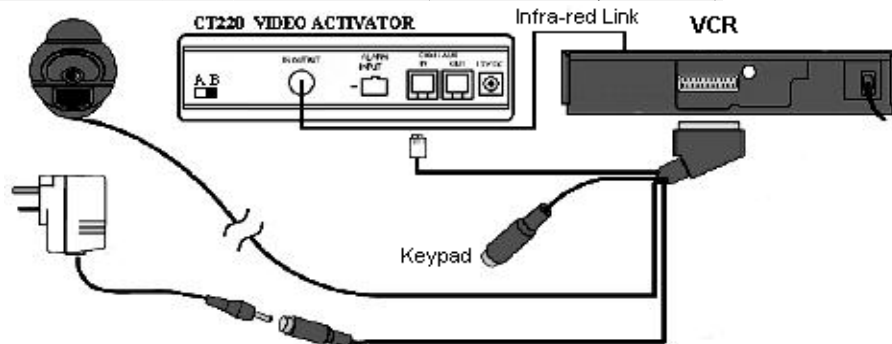
1. Your recorder is in the the STANDBY position if the switch on the rear of the CT220 is set to "B" or that your recorder is in the OFF position if the switch is set to "A".
2. A blank disc or tape is inserted in to your recorder .
3. The correct AV input (when using scart connector) or channel (if you are using a modulator) is selected on the recorder.

## INSTALLATION

### General

1. When using the CT220 with a compatible Voltek camera and other equipment such as a 4-way switcher and / or a time and date generator, you should install these products first and check that they are all working to your satisfaction. You should also check that your DVD or Video recorder is set to the correct channel and working correctly.
2. Place the activator in a convenient location, such as on the top of the DVD/VCR.
3. Place the IR (Infra-Red) transmitter pointing into the IR receiver on your DVD/VCR (Consult the Recorders manual if you are not sure where the receiver is located). Use the sticky tab on the transmitter to secure it into place.
4. Connect the IR transmitter to the IR socket on the rear of the activator.
5. Your CT220 is now ready for connection with any of the products shown below

### CONNECTING TO A CAMERA/PIR (CT120/121/122,1870/1877)

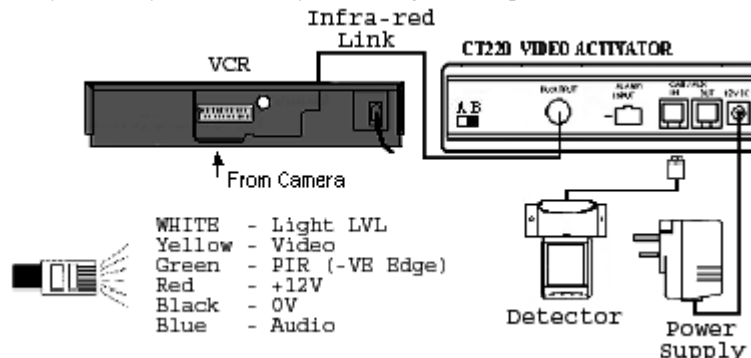


Locate the 6 pin RJ12 plug (small telephone style connector) on the end of the camera lead and connect to the IN socket on the rear of the Video Activator.

Note: The 30cm connecting lead is not used. Please keep this lead in a safe place for future expansion of your CCTV system.

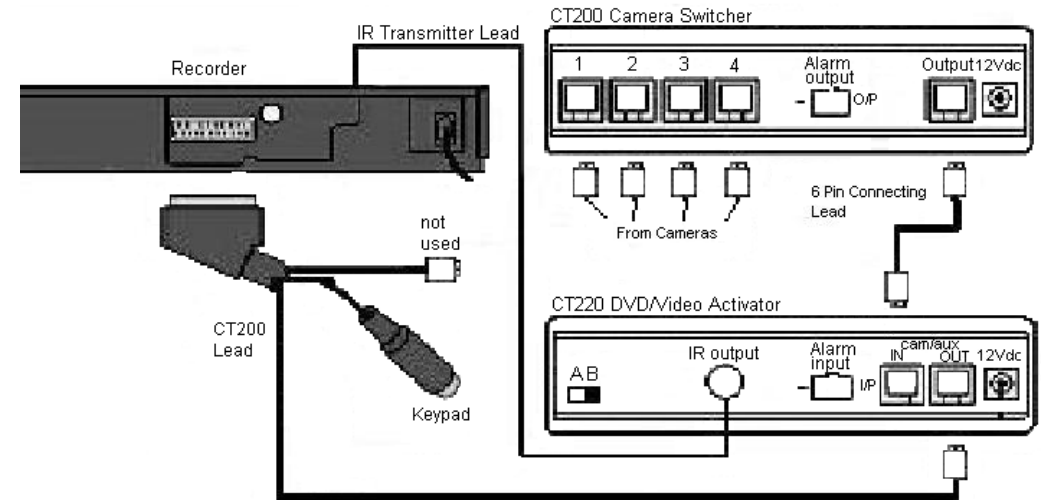
### CONNECTING TO A PIR DETECTOR (1804)

If you have a camera that does not have built in movement detection (PIR) then you can use the CT220 to automatically activate your recorder by connecting it to a separate PIR detector as shown below



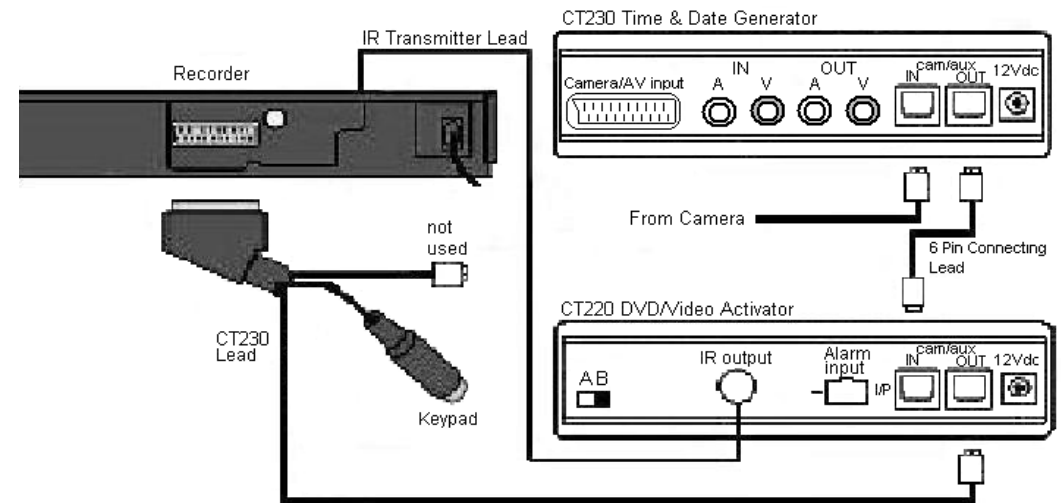
A CT550 12V DC Power Supply will be required if a voltek camera is not connected to your CT220 VideoActivator.

### CONNECTING TO A CT200 CAMERA SWITCHER



Using the 6 pin connecting lead, connect between the OUT of the CT200 and the IN of the CT220. Then using the CT200 lead, connect the 6 pin connector to the OUT of the CT220 and the scart plug to the scart socket of your recorder and the 4 pin mini-din connector to your keypad. Place the IR transmitter so that it points in to the IR receiver of your recorder and connect the other end of it to the IR output of the CT220. Your cameras and PSUs will remain connected as before.

### CONNECTING TO A CT230 TIME & DATE GENERATOR



Using the 6 pin connecting lead, connect between the OUT of the CT230 and the IN of the CT220. Then using the CT230 lead, connect the 6 pin connector to the OUT of the CT220 and the scart plug to the scart socket of your recorder and the 4 pin mini-din connector to your keypad. Place the IR transmitter so that it points in to the IR receiver of your recorder and connect the other end of it to the IR output of the CT220. Your camera and PSU will remain connected as before.