Video & Audio Delay Line

ALLEN AVIONICS

ADJUSTABLE ,COST EFFICIENT VIDEO DELAY LINE. AVAILABLE FROM MILLISECONDS TO OVER TWO MINUTES.

PAL & NTSC COMPATIBLE.

DC POWERED, SMALL AND RUGGED CONSTRUCTION.

LOW POWER CONSUMPTION. LESS THAN 150 mA @ 12 VOLTS.

OPTIONAL HIGH QUALITY STEREO AUDIO DELAY

APPLICATIONS

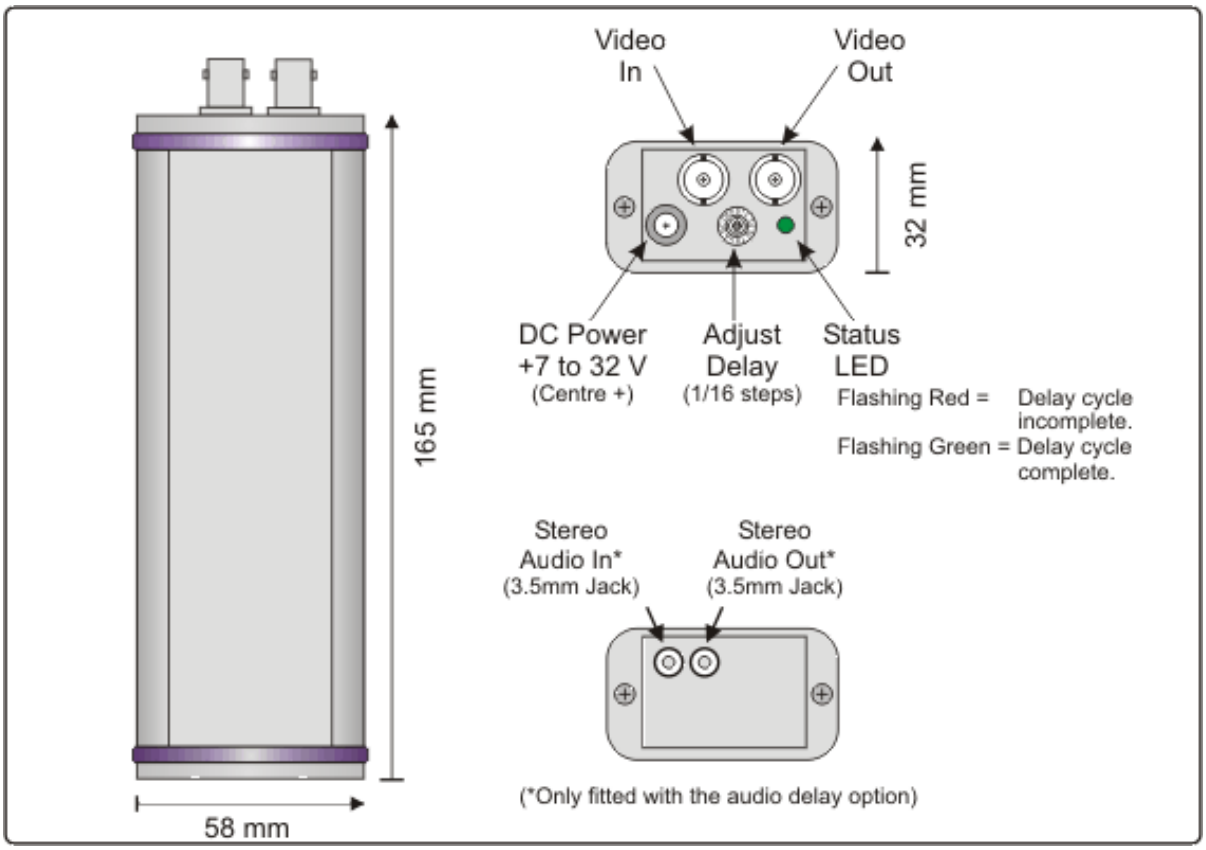
> VCR pre-event recording
> Action replay
> CCTV event monitoring
> Sports events
> Low cost video storage buffer

DelaySystem is a simple and cost-effective Video Delay Line for applications requiring long audio or Video Delays. The DelaySystem can be used in any applications where a constantly rewriting video storage is required. Example applications include any Video storing/delay requirement. Synchronizing video and audio feeds in a studio, at sporting events and for the action replay of any live video feed. The DelaySystem has many applications in timing correction caused by slow digital conversion systems as well.

DelaySystem Video delay line operates by utilizing large banks of memory to provide a video delay with almost no loss in quality. Various DelaySystem models are available offering delays from milliseconds to over 2 minutes. For flexibility, the amount of delay is user adjustable in 1/16 steps. Dual channel high quality audio delay, synchronized with the

video, is available as an option. The video delay system consists of a small DC powered unit that is very simple to install and operate

Video DelaySystem Dimensions and Interfaces:



Video Delay Specifications

Mechanical size	32 x 58 x 168.
Operating temperature range	-10 to + 55 deg C.
Weight	225g (approx).
DC power requirement	7 to 32 V DC at <1.8 Watts (e.g. < 150 mA at 12 V).
Standard accessories	User guide, DC power lead.

Video Delay:

Video standards supported	PAL, NTSC
Video connectors	BNC
Video input / output levels	1 Vpp 75 ohm.
Delay control	16 way (hex) switch

Standard Delays:
(other delays special order)

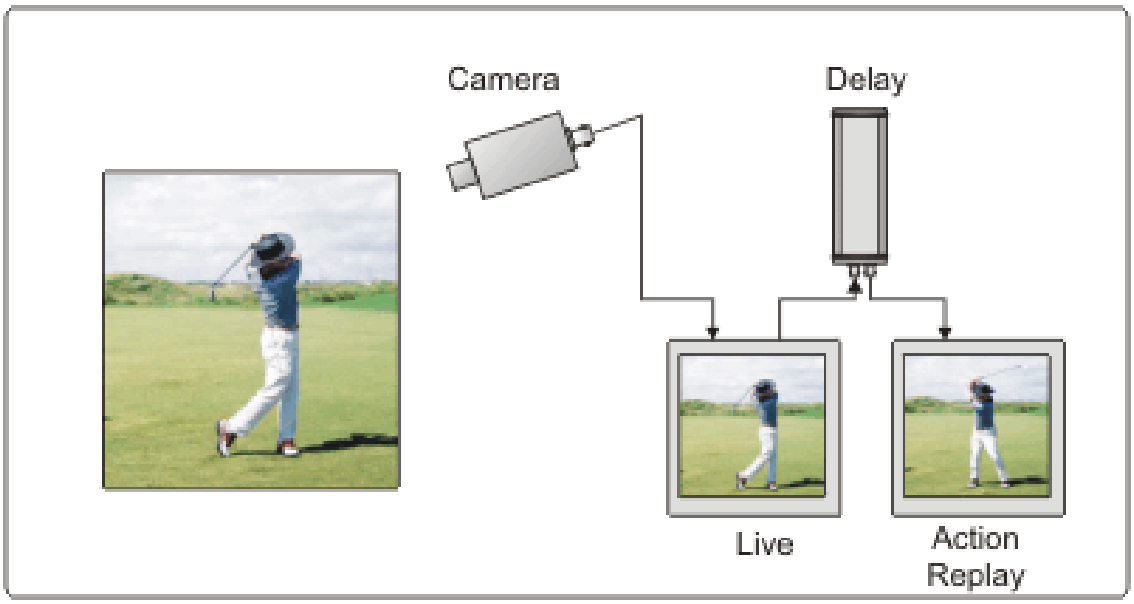
	Total delay:	In 16 steps of:
PN DLS-5379=	0.8 Sec	50 mS
PN DLS-5381=	2.0 Sec	125 mS
PN DLS-5380=	3.2 Sec	200 mS
PN DLS-5155=	7.5 Sec	0.47 S
PN DLS-5117=	15 Sec	0.94 S
PN DLS-5118=	30 Sec	1.88S
PN DLS-5138=	60 Sec	3.75 S
PN DLS-5273=	120 Sec	7.50 S

Audio Delay (optional): PN DLS-5272

Number of channels	2
Input impedance	> 10kR
Output impedance	< 100R
Max I/O level	2.5 V pp
I/O connector	3.5mm stereo jack
Bandwidth	> 15 kHz
Digitising	16 bit linear

Applications

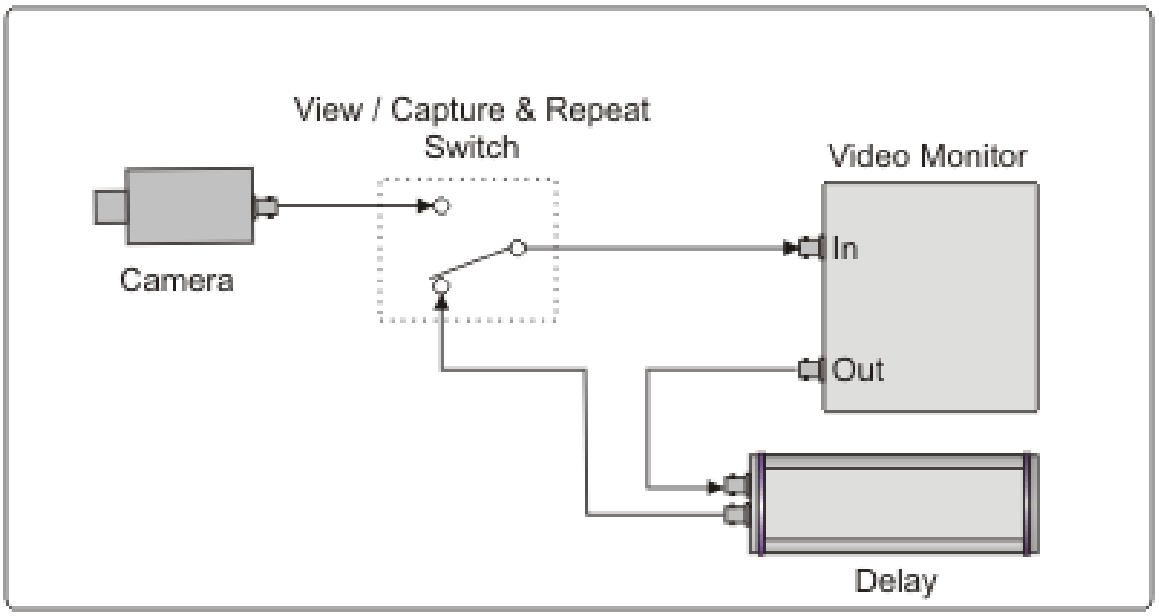
Action Replay



DelaySystem video delay line temporarily stores up to 2 minutes of video. It is therefore possible to use the delay line to replay an event of interest without the need to stop and rewind a video recorder. For example, a CCTV operator can double-check if an offence has taken place by switching to the delayed video, which will replay the event a few seconds later.

Installation is very straightforward. Simply take the video out from the viewing monitor and feed it into the DelaySystem unit. The output of the DelaySystem video delay unit can then be viewed on a second monitor or by connecting to the monitor's "B" input, if available.

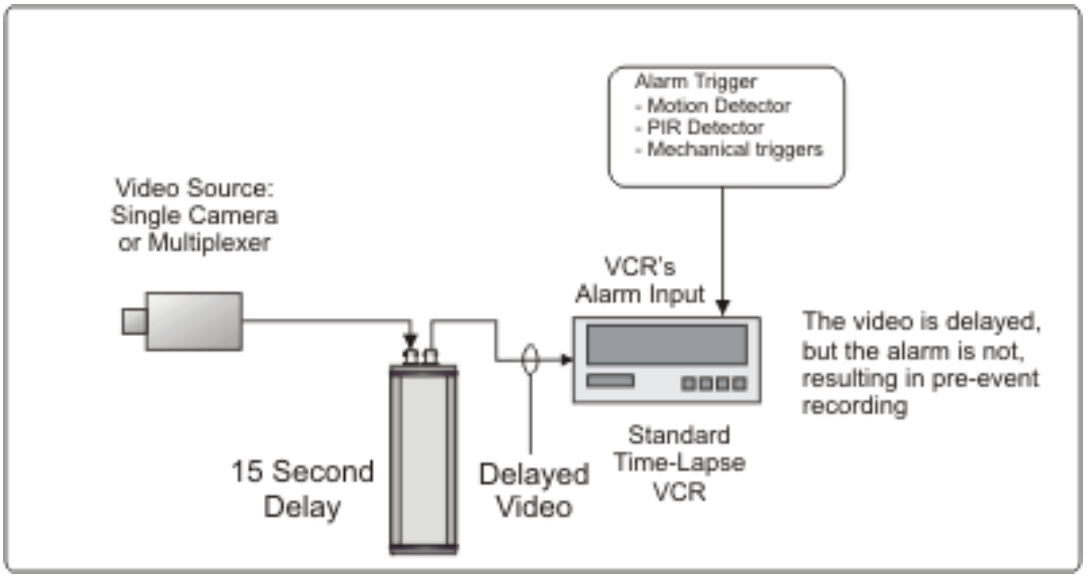
Event Capture / Repeating Action Replay



With an external video switch and monitor, DelaySystem can be used to capture an event and constantly repeat it. With the switch in the normal “view” position the operator sees the live video. If an event of interest occurs, the operator may switch over to the delayed version, which will replay the event (of say 10 seconds duration) and then constantly repeat the event as it is fed back into the DelaySystem.

(Note: The same video is being fed into the Delay Line each time, and therefore degradation occurs over a period of time. However, the system is capable of at least 10 to 20 repeats of good quality video.)

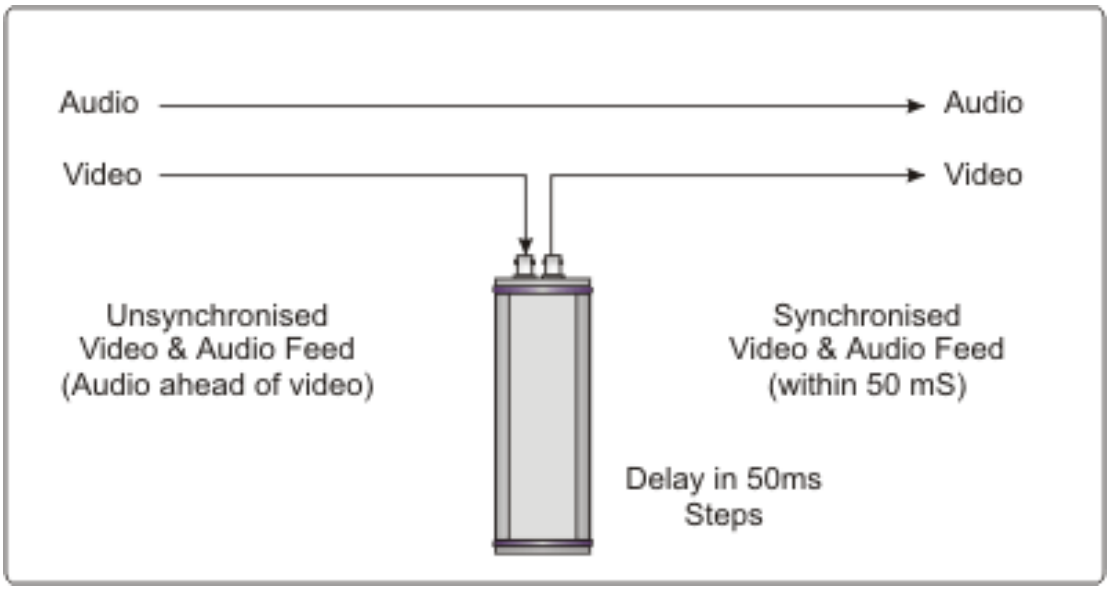
Time-Lapse VCR Pre-Event Recording



DelaySystem can be used to upgrade a standard time-lapse VCR to pre-event recording. This is an advanced feature, which is normally associated with digital

hard-disk recorders rather than traditional VCRs.
A time-lapse VCR can normally be set to record in real-time form either time-lapse or standby under the control of an external alarm input. The major problem with this approach is that it takes time for the VCR to change mode, which can result in a vital loss of footage. By introducing a delay in the video feed (and not the alarm input) of the VCR, the change of mode takes place before the event, resulting in pre-alarm recording.

Synchronizing Video & Audio Feeds



Digital video and audio compression and transmission systems can introduce differing amounts of delay to video and audio signals. “Lip-Sync” requires video and audio synchronization otherwise the viewer becomes distracted by the lack of coordination between the subject’s lips and voice. If the audio is delayed more than the video, DelaySystem can be used to synchronize the two feeds.

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