



The Flash Banding artifacts caused by un-synchronised flashing lights such as strobes, lightning effects or other fast on-off light sources can look terrible when shot using cameras with a rolling shutter. This includes most CMOS based cameras, including the RED ONE™.

The Creamsource Flashbandit solves this problem and allows you to use Creamsource High Power LED lights as a strobe, flash or lightning effect **in sync** with your camera.

It is NOT necessary to use a Flashbandit unless using strobing or flashing effects. Used as a continuous light source the Creamsource is flicker free to over 2,000fps



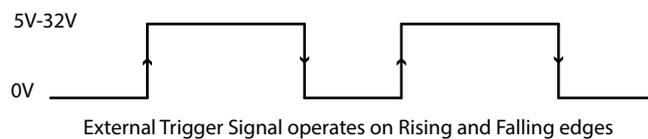
- 1 – Cable to Creamsource
- 2 – Spare Accessories Port

- 3 – BNC Video Sync Input
- 4 – LED 'sync' Indicator
- 5 - External Trigger Input

Using the External Trigger Input

The External Trigger Input allows an external pulse to trigger any effect including Timed Flash and Dual Level Flash. It is essentially a way of remotely accessing the FLASH button on the Creamsource, and performs the same function as pressing and releasing this button. The LED indicator will illuminate when a valid trigger signal is present.

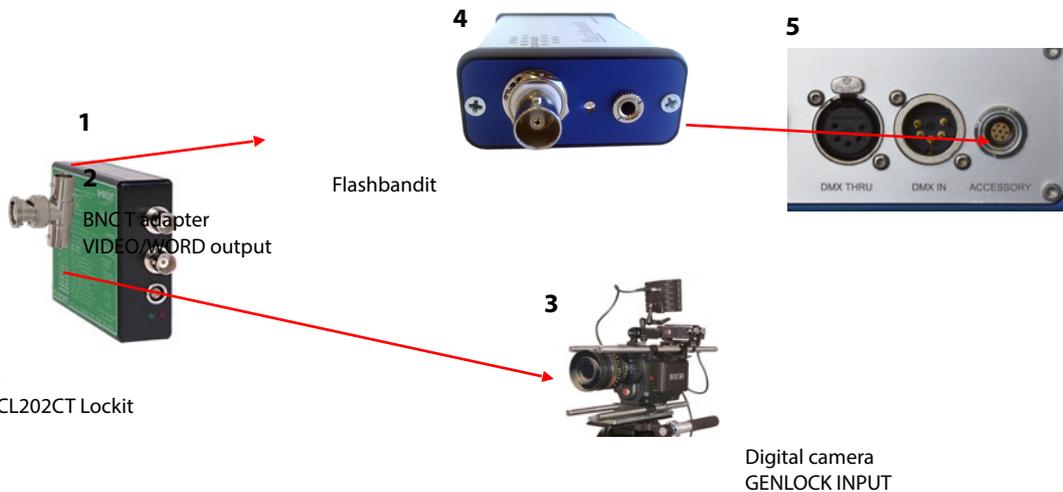
Input Voltage	5-32V DC
Input Impedance	180KΩ
Jack Barrel	GND Input
Jack Tip	+Ve Input



This form of triggering can be enabled by selecting menu item *Advanced->Triggering->External Trigger* on the Creamsource. Please see Creamsource User Manual for more information.

Shutter Synchronisation for Flash and Strobe effects

The Creamsource can be locked to an external source, such as a sync generator (e.g. Ambient ACL202CT Lockit box), to ensure that it is synchronised with the camera shutter. This can be used to solve the frame tearing / flash banding problem most digital CMOS (and in fact some CCD/ film) cameras can have with *any* flashing or strobing light source.



Setup

1. Make sure menu item *Advanced->Triggering->External Trigger* is DISABLED to use sync functionality
2. Set correct framerate and format on Lockit box [1] (see instruction manual for device). This should match the frame rate and format you intend to shoot at
3. Plug a BNC T adapter [2] into the VIDEO/WORD output of the Lockit box
4. Connect camera GENLOCK input [3] to Lockit box [2] with coaxial cable. Follow camera instructions to enable external genlock input, and make sure camera is receiving genlock signal
5. Plug Flashbandit adapter [4] into Accessories input on Creamsource [5]
6. Connect Flashbandit to Lockit Box using coaxial cable – blue light on Flashbandit should flash indicating valid signal
7. Check correct framerate is shown on Creamsource display

Calibration

Before the shoot it is necessary to calibrate the Creamsource with the camera. This simple step insures that the camera shutter and Creamsource are in phase.

1. Setup as above
2. Point camera directly at Creamsource light
3. Select *MENU->MODES->Calibrate Sync* on Creamsource. It will start to flash at the locked framerate
4. Use wheel to adjust phase on Creamsource. As you change the phase, a dark band should appear to move up and down on the camera monitor. Adjust until the dark band fills the monitor completely. Shooting with wide shutter angles and at higher speeds reduces the size of the dark band, making calibration more difficult.
5. The Creamsource is now calibrated. It can be now be set to desired mode (Normal, Strobe etc)
e.g. Select *MENU->MODES->Normal*

Shooting

Once the Creamsource has been calibrated, any of the modes may be used without the possibility of causing torn frames. The remote dimmer unit or DMX control can also be used safely.

If the framerate, shutter angle or the phase of the camera shutter is adjusted, you will need to re-calibrate.

Compatible BNC Input Sources

Bi-Level or Tri-Level NTSC, PAL, 480I/P, 576I/P, 720P & 1080I/P/PsF. BNC Input is terminated in 75Ω.

Note that the External Trigger Input cannot be used at the same time as the BNC Shutter Sync Input

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