

Technical update: external controlled shuttering modes

Name	Description	Comments	External signals needed	Applicable models
Restart-Reset by VD	Sensor keeps integrating light while readout and output are stopped/ restarted	First output depends on past illumination. 2 step process induces a delay. Useful for long-term integration	External HD Several external VD	Previously used in XC-77 Series, XC-75 Series, XC-73 Series Currently used in XC-55 Series, XC-ST Series, XC-ES Series XC-EI Series
Restart-Reset by trigger	As above	As above. Internal generation of several VD by menu or switch selection	Trigger only	Currently used in XC-7500 XC-8500CE
Donpisha	Sensor is kept empty with camera in wait mode. Integration starts immediately trigger is received. Picture is ready for output at end of integration	No capture delay		Generic description First implemented in XC-77RR/CE
S-Donpisha	Donpisha with integration time the difference between ext trigger and ext VD	Needs external hardware for accurate integration time control	External HD, external trigger, external VD. Special mode without ext VD, fixed shutter	Previously used in XC-75 Series XC-73 Series
E-Donpisha	Donpisha. Integration time can be selected internally or by trigger pulse width	Extended features. Dual integration time selection. Synchro reset and non-reset modes	External HD, external trigger, external VD. Simplified trigger by use of CMA-87	Currently used in XC-7500 XC-8500CE
E-Donpisha II	Donpisha. Integration time controlled by trigger pulse width	Simplified version. Reset mode only. Easy switch to non-triggered mode by trigger input	External HD, external trigger, external VD	Currently used in XC-55 series
Easy trigger	Donpisha. Integration time controlled by rear panel switches or by trigger pulse width	Ease of use. Dual integration time selection. Synchro reset and non-reset modes. Picture out may be delayed. Easy switch to non-triggered mode by trigger input.	External HD, external trigger, external VD. New reset mode with only one external signal: trigger	Currently used in XC-ST Series XC-ES Series XC-EI Series