

Crossover Guide



BTX generally recommends a square waveform for mammalian cell work, and an exponential decay waveform for bacteria and yeast applications. However, there are some exceptions, and crossover in the use of our electroporation generators. We highly recommend that you contact BTX regarding your application prior to purchasing a generator system to ensure that you are getting the best possible system for your needs.

For BTX Technical Support go to www.btxonline.com or call 800-272-2775 within the U.S.

ECM[®] 2001

This square wave pulse electroporator and electrofusion generator is primarily used for cell fusion work and mammalian cell transfection. It can also be used for transforming bacteria, but with lower efficiencies than with an exponential decay waveform.

ECM[®] 830

This square wave unit is engineered mainly for mammalian cell transfection. The 830 is also capable of performing certain cell fusion applications which will require the use of a manual cell alignment method. The basic transformation of bacteria to generate plasmids can be accomplished with 830 but with lower efficiencies compared to our exponential decay wave system (830/107-108 pfu/ug. vs. 630/108-1010 pfu/ug).

ECM[®] 630

This exponential decay wave pulse generator is primarily used for bacteria and yeast transformation applications. The exponential decay wave system is used for efficient transfection of mammalian cells but much lower cell viabilities compared to square wave pulse system, with the exception of mouse embryonic stem cells. Excellent transfection is achieved with the ECM 630.

ECM[®] 399

This exponential decay wave generator is our most economical unit for a lab doing mainly gram (-) bacteria and yeast applications. This unit is not recommended for mammalian transfection.