

### Selecting a Pulse Preamplifier/Discriminator for Given Detector.

DETECTOR		RECOMMENDED PREAMPLIFIER				
TYPE	MAX. COUNT RATE [MHz]	MODEL	MAX. COUNT RATE [MHz]	INPUT [mV]	OUTPUT TYPE	COMMENT
Scintillation Counter [NaI(Tl)]	1 MHz	F-1T	1 MHz	0.25	TTL	Low noise. Blind to PMT's high background count. Background count < 0.5 CPS. Built in PHA.
Channeltron® Electron multiplier.	10 MHz	F-100T F-100TD MTS-100	50 MHz	0.16	TTL	20 ns pulse pair resolution. High sensitivity low noise.
Pulse PMT and discrete dynodes electron multiplier.	>100 MHz	F-100E	>100 MHz	0.20	ECL	10 ns pulse pair resolution High sensitivity.
Microchannel Plate MCP type PMT	>400 MHz	F-400E F-400PECL	400 MHz 400 MHz	20 5	ECL PECL	2.5 ns pulse pair resolution. Lower sensitivity. Requires input pulse rise time < 2 ns.