Gain Settings for seismic recording systems (recorder + sensor)

Modern digital data recorders are characterized by a large dynamic range. However, depending on the sensor (i.e. the generator constant) and the expected signal strength (small or big depending on the application and experiment characteristics) the gain setting of the recorder can be set in order to record signals with the appropriate amplitude (e.g. without clipping).

The following table provides suggestions for gain setting for typical experiments and their expected signal ranges (which proved appropriate in past experiments).

CUBE3 +	Trillium Compact broadband sensor	Mark geophone	4.5Hz geophone
Noise-measurements/small seismic events	8	4 or 8	32
Unclipped observation of strong events at small distances (e.g. M4 within 10 km)	1	1	4
universally/comprimise (i.e. controlled source)	4	2	16

(without guarantee)