High Voltage System for the IE

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1 Description of HVOLT Entries:

The IE has a total of 808 channels of HV, supplied by a total of 5 different LeCroy 1440 Main Frame systems. In HVCOP, entries IE-3 to IE-812 are for the main lead glass array of the IE. Note that there are a total of 802 channels numbered from 1 to 812. So, there are 10 channels missing in the database corresponding to the corner blocks of the IE. 812 spigots in the 1440 system are used even though only 802 are connected.

IE-813 to IE-816 are reserved for use with the reference PMTs. IE-813 for the tube in the flasher box, IE-814 for the isolated Hamatsu tube in the reference box, IE-815 for the Hamatsu tube and lead glass block in the reference box, and IE-816 for the standard tube and lead glass block in the reference box.

IE-817 supplies positive low voltage to the flasher. This should be set at +200V. IE-818 supplies positive high voltage to the flasher. This should remain set at +2000V.

2 Location of HV supplies:

See Figure 1 for the location of the 1440 Main Frames used by the IE. MFs 8, 9 and 10 are used exclusively by the IE to supply high voltage to channels IE-97 to IE-816. MF 6 is used to supply HV to IE-3 to IE-96. This MF is shared with the IMH counters, so care should be taken not to disturb those detectors when making changes to the IE HV system. Slot 14 of MF 5 is used to supply the flasher with its positive HV requirements. This main frame is shared with C3 and OE, so care should be taken not to disturb those detectors when making changes to the IE HV system.

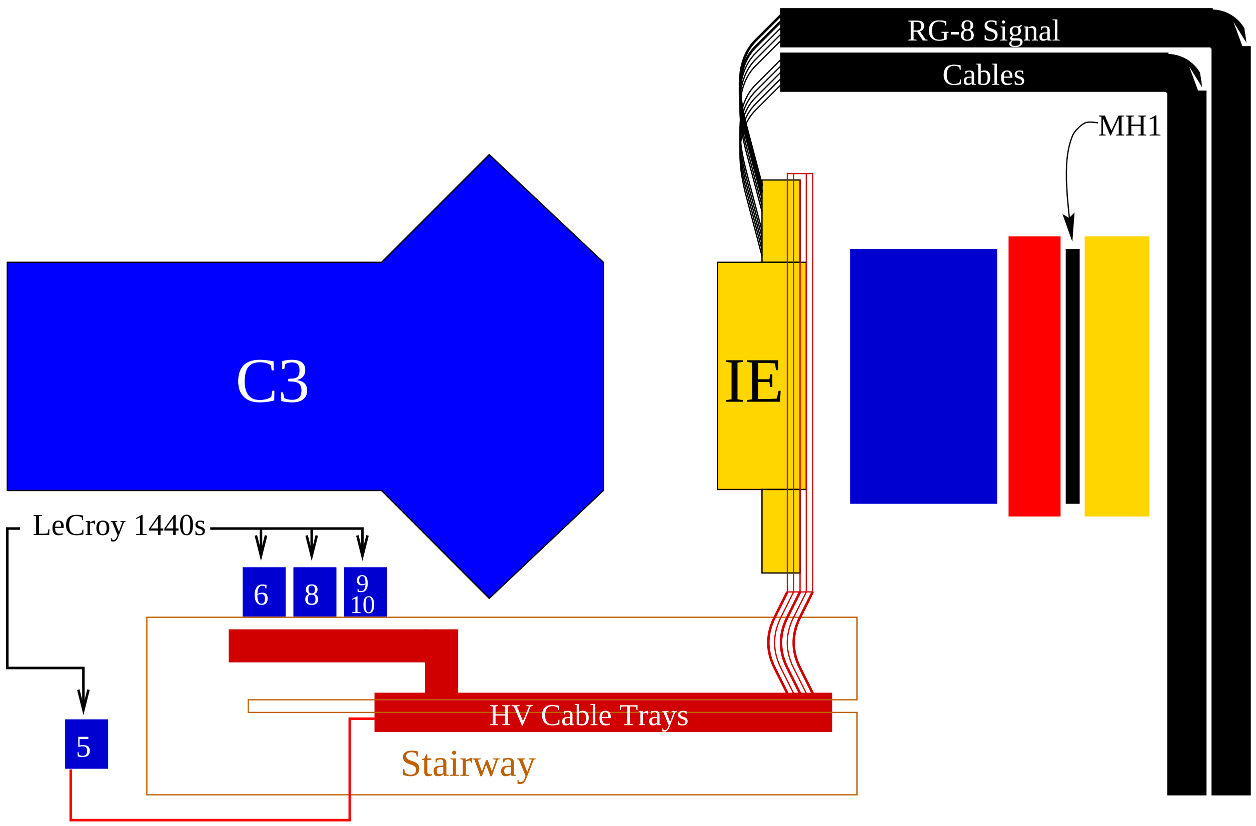

Figure 1: Location of IE parts in PB7