

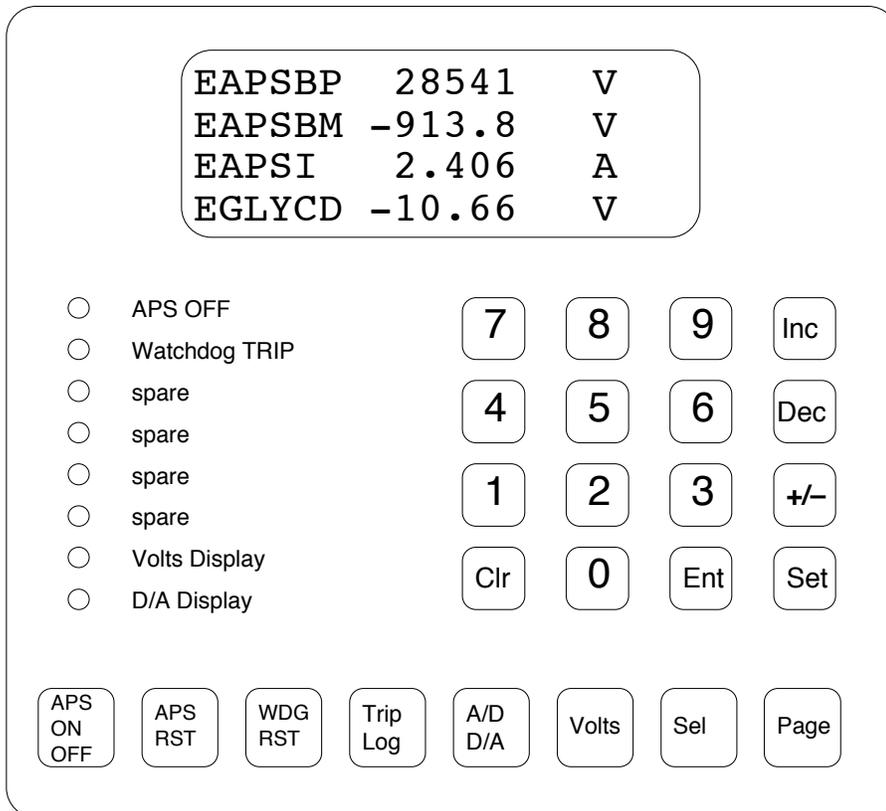
Local Control Box for RCC

Booster High Level RF

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The Booster high level RF system includes 18 individual RF stations and two remote control centers, or RCCs. A local control box for each individual station, replacing the former MIU crate, is described in the document *Local Control Box*. This document describes the similar local control box for the RCC that replaces the CCIU crate to provide some minimal local control functions. The control box purchased for this local control support is a DynaComp GreyLine 2200 Series operator panel that provides a four-line 20-character alphanumeric display, a numeric keypad that includes 6 additional keys, a row of 8 function keys, and a set of 8 labeled LEDs. The labels for the keys can be configured by the implementer. The box interfaces to the IRM serial port at rates up to 19200 baud.



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The choices for display of parameters are merely several sets of four parameters connected to the RCC. Each 20-character line provides for a 6-character name, a space, a 7-character numeric value field, a control marker character, a space, and a 4-character units text field.

The `clr` button on the numeric keypad is used as a "clear entry" when entering a numeric value. The `Ent` button is used to commit to an entered value and perform the setting. The `+/-` button allows entering an arbitrary signed decimal setting value. The `Inc` and `Dec` buttons permit incremental adjustment for an analog setting. In either case, the setting targets the parameter indicated by the control marker.

The labeled lights on the left side show whether the `APS` is `OFF`, whether there is currently a watchdog trip active, and whether volts and/or setting values are being displayed.

The bottom row of push buttons toggles between `ON/OFF` states of the `APS`, and it permits resetting the `APS` or Watchdog crate. The `Trip Log` button shows the summary trip counts plus the time of the last clearing of trip counts. Press the `Trip log` button again to return to the normal four-parameter list.

```
TRIPS    10/09/96 1415
APS=     2
WDG=     0
```

The `A/D D/A` button toggles between displaying reading values and setting values on the four-line parameter list. The `D/A display` light indicates when setting values are displayed. This mode is indicated by an engineering units field of "`v.` ". The `volts` button causes the display values to be in `A/D` (or `D/A`) volts units. Press the `volts` button again to revert back to normal engineering units display.

The `sel` button sequences the control marker through the controllable parameters of the current available set of four-parameters, in case more than one such parameter is controllable. The `Page` button sequences through the available four-parameter displays. If the control box isn't used for a period of time, it will revert to the first four-parameter list.

The functionality described above is supported via a local application called `BRCC` that was written by Bob Peters. See the following URL for more information:

http://garlic.fnal.gov/booster_controls/