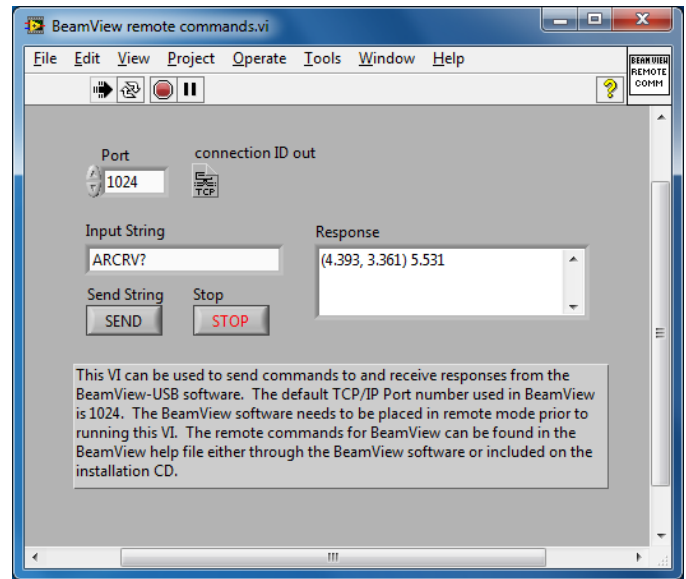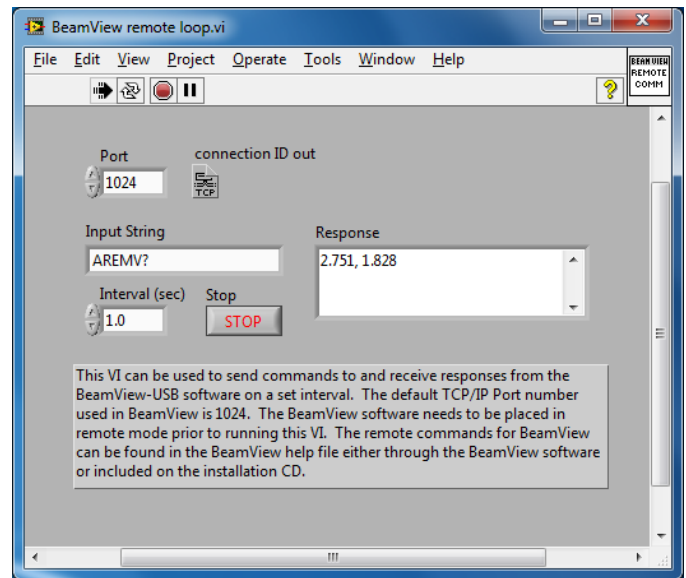BeamView LabVIEW example info

This set of LabVIEW examples includes a couple of very basic VIs that can be used to communicate with the BeamView-USB software. Copies of these examples were saved in LabVIEW versions 8.6 and 10. The examples are exactly the same between those two versions, so either version should work depending on the copy of LabVIEW being used. The "remote mode" in BeamView needs to be set for TCP/IP communication and needs to be enabled in order to use these examples. The remote commands and error codes compatible with these VIs can be found in the BeamView help file either through the BeamView software or included on the installation CD.

The main VI included here is the "BeamView remote commands.vi", which sends commands and receives responses from BeamView when the "send" button is pressed. The screen shot to the right shows this VI while querying BeamView for centroid location (using the ARCRV? command.) Basic BeamView remote commands like CMODE;R; and CMODE;S; can be used to start and stop image collection. Then commands like ARCRV? can be used to query for calculation data from the software.

Also included is the "BeamView remote loop.vi" which sends commands and receives a response on a set interval. The screen shot to the right shows an example of this running on a one second interval while querying the elliptical axis calculation from BeamView (using the AREMV? command.) If this VI is set to run on an interval faster than the BeamView calculations are updating, the response string will return the same value until the BeamView calculation has updated.

The other two VIs included are lower-level VIs. The "BV TCPIP comm.vi" is used to send and receive remote commands to BeamView once a TCP/IP connection has been established. The "UTIL – ASCII Fix.vi" is used to format the replies that are being returned by BeamView into valid response strings.