

Pre-Checks

- Check that 1pps cable is connected (backside)
- Check that 10MHz signal is connected (backside)
- Check that GPS signal is connected
- Check that GPS antenna is installed close to the window and that GPS satellites have been found (see below)
- Check that ethernet cables is connected (backside)
- Check that IFs are connected with LCP and RCP cables as labeled on the backside
- Check that optical fibre cables are connected to the Core3H boards inside the DBBC3 (for order see XXX).
- Check that optical fibre cables are connected to the Mark6 ethernet ports as labeled on the cables.
- Check that short cables connecting the pins "Out unfilt." "0-4 GHz In" on the backside are in place (see picture).

Startup

- **NOTE: System setup should be done a few hours ahead of the session to allow calibration to settle**
- Turn on main power switch (backside)
- Power on the electronics ("EL switch" on the backside)
- Wait at least one second before you proceed to the next step
- Power in the PC ("PC switch" on the backside)

Loading the firmware

Note: EHT and GMVA are using different firmware and control software packages. For details see the individual observation pages for the EHT or GMVA sessions.

Generic instructions common to both modes are given below:

- Either connect keyboard and monitor to DBBC3 (backside) or use remote desktop application.
- Log in as user "dbbc". For password contact Salvador/Helge
- On the DBBC3 desktop double click on the icon corresponding to the control software you want to load.
- Answer question "configure" with "y". Configuration will take 10-15 minutes. If firmware was already loaded you can answer "n" to proceed
- If you answered "n" on the previous question you will be asked whether to initialize the ADB3L/ Core3H". Answer "y". This will take around 5 minutes. This step does not reload the firmware, but re-reads all configuration files, clears settings etc.
- During initialization the LEDs on the front panel will change lighting. Check user manual to verify correct operations.

Communicating with the DBBC

- Communication with the DBBC3 can be done either by connecting a monitor/keyboard or by remote desktop.
- Log in as user "dbbc". For password contact Salvador/Helge
- Check that the control software is running and showing "waiting for connection on port 4000". See previous section.
- On the DBBC3 desktop double-click "DBBCClient v4.exe" (exact name may change with new software versions).
- Commands can be issued at the client prompt. See reference documentation for valid commands.

System verification

- python scripts (for the OCT and DDC modes) exist to validate the correct start-up of the DBBC3 systems. Please consult the pages that describe the EHT and GMVA observations for the details.