

## 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.