



# Mark6 recording

## Preparation

- Make sure R2DBE slot0 channel 0 output is connected to Mark6 eth3 interface
- Make sure R2DBE slot0 channel 1 output is connected to Mark6 eth5 interface
- Install the most recent Mark6 software ([instructions](#))
- make sure `dplane` and `cplane` programs have been started
- cabling is described in [Single-dish backend setup](#)

## Module loading

- insert 4 modules into the 4 slots of the Mark6 recorder
- connect the miniSAS cables. Make sure the number on the cable tray matches the slot number. Make sure the red and yellow dots on the cables match the dots on the recorder.
- Turn the key into the horizontal position on slot 1. **Be patient...there will be LED activity on the module finally the "Ready" LED on the slot should light up in green. Now proceed to the next module until all 4 modules are in the "Ready state"**

## Module initialization

**Note: This procedure will delete all the content on the disk modules. Make sure you have loaded the correct modules!**

Login into MK6 as user oper:

now start the da-client, by typing

```
>da-client
```

in da-client execute:

```
mod_init=1:8:MPIH%008:sg:new
```

This will initialize the module in slot 1 with the MSN: MPIH%008 (substitute with the MSN found on the sticker of the module in slot 1). During initialization the LEDs on the module in slot 1 should light up one by one. If you see activity in a different slot you have an error in the cabling and need to review the mini-SAS connections on the backside of your Mark6 unit.

Now do the initialization for the other 3 modules:

```
mod_init=2:8:MPIH%005:sg:new
mod_init=3:8:MPIH%007:sg:new
mod_init=4:8:MPIH%006:sg:new
```

Check that initialization was successful:

```
mstat?all
```

This should something like this:

```
!mstat?0:0:-:1:MPIH%008/48008/4/8:8:8:-:48008:initialized:null:sg:-:2:MPIH%005/48008/4/8:8:8:0:48008:closed:unprotected:sg;
```

Make sure the MSNs are correct and that all modules have the state "initialized"

**Important: PUT A STICKER on the disk modules now** (see [labeling instructions](#))

## Create a 4-module group

in da-client execute:

```
group=new:1234
```

```
mstat?1
mstat?2
mstat?3
mstat?4
```

This should list:

```
!mstat?0:0:1234:1:MPIH%008/48008/4/8:8:8:0:48008:closed:unprotected:sg;
!mstat?0:0:1234:2:MPIH%005/48008/4/8:8:8:0:48008:closed:unprotected:sg;
!mstat?0:0:1234:3:MPIH%007/48008/4/8:8:8:0:48008:closed:unprotected:sg;
!mstat?0:0:1234:4:MPIH%006/48008/4/8:8:8:0:48008:closed:unprotected:sg;
```

Make sure the 3rd column contains the newly formed group 1234 and that the state is "closed" for all 4 modules.

## Define input streams

in da-client execute:

```
input_stream=add:STREAM12:vdif:8224:50:42:eth3:172.16.3.1:0:12
input_stream=add:STREAM34:vdif:8224:50:42:eth5:172.16.5.1:0:34
input_stream=commit
input_stream?
```

this should output:

```
!input_stream?0:0:STREAM12:vdif:8224:50:42:eth3:172.16.3.1:0:12:STREAM34:
```

## **Open the group for recording**

in da\_client execute:

```
group=open:1234
mstat?all
```

All 4 modules should now be in the "open" state.

**The modules are now ready for recording.**

Quit da-client:

```
quit
```