

Marble Antenna Local Operation

1 Aug., 2018.

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When local operation Is necessary?

1. ACU-FS9 communication hung up trouble.

We may have to ask you to switch OFF and ON the ACU.

2. To stop RFI emission from Network-camera(NC).

You can remove DC-power supply to the PoE device in the SC.
But we can switch off NC remotely.

3. Power line shutdown for maintenance or event.

When need cut power line source (tri-phase 400VAV), it is preferable to inform us to shutdown Linux system in advance.

4. If HDD member of Raid Disk array has broken.

This has not happen before in our experience, but just in case HDDs of Raid Disk array is broken, we have to ask replacement of HDD.

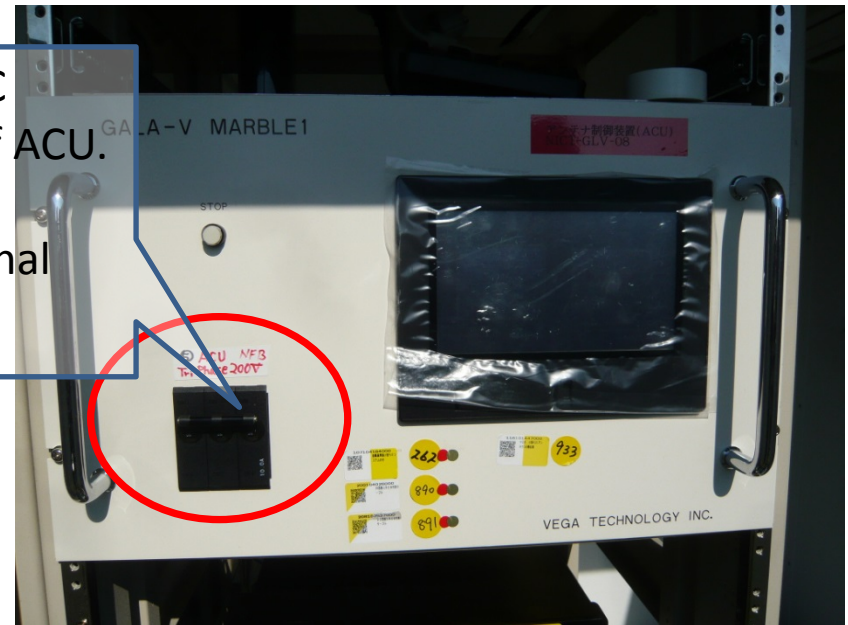
1. ACU-FS9 communication hung up trouble.

- Cause of this trouble:
 - ACU-FS9 communication hung up due to a bug of ACU firmware. We are sorry that we could not fix this before shipping. Communication module of ACU stops very rarely. We may have to ask you to restart ACU locally.
- Timing to operate
 - We may ask you by e-mail.
- Operation task
 - OFF and ON the power SW of ACU. No need of additional preparation.



Small Container(SC)

Tri-phase 200VAC
power switch of ACU.
You can Sw-OFF
without additional
preparation.

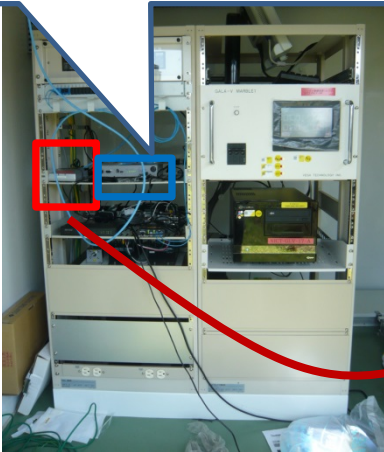


Antenna Control Unit(ACU)

2. To stop RFI emission from Network-camera(NC).

- We understand RFI emission from NC is affecting the array of INAF.
 1. We can SW-OFF the NC remotely most of time by AC power line witch. We may SW-ON only when antenna monitor is necessary.
 2. You can dis-connect DC-power supply cable to the NC power supply module

AC power line switch
controlled by Ethernet.

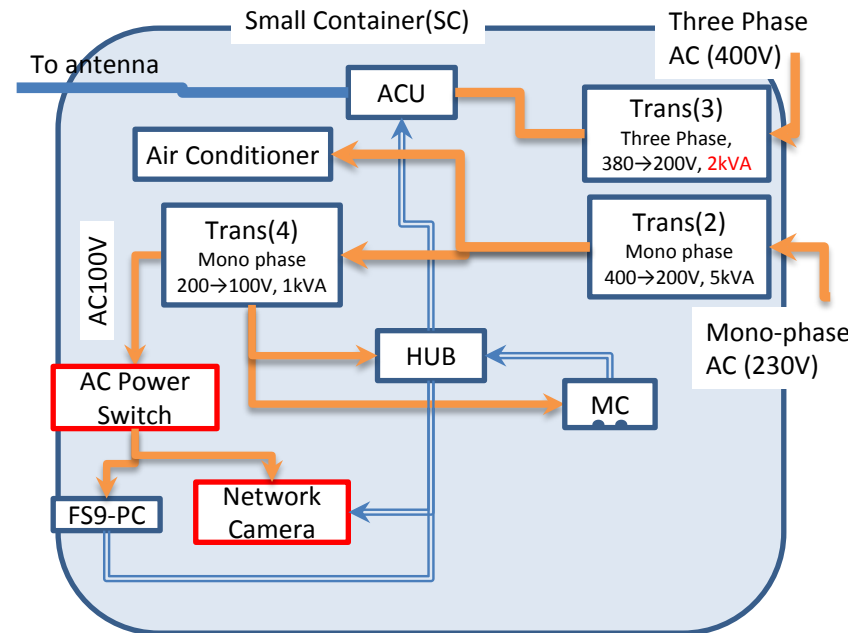


Small Container(SC)

DC power supply
cable to this module.



Power Supply to NC



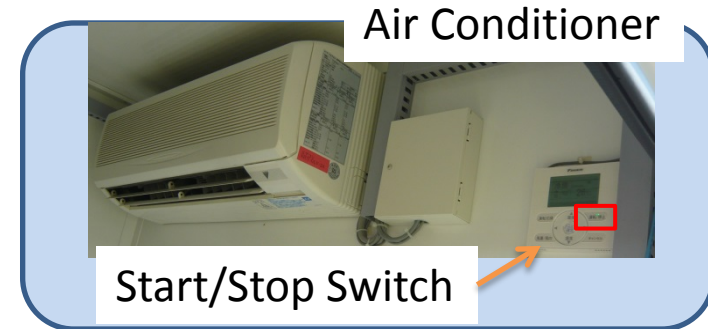
3. Power line shutdown for maintenance or event.

- If all power have to be down, take following procedure in order.

1. FS9 PC(Linux) to be shutdown
2. Air Conditioner (AC) to be off
3. ACU SW-OFF
4. Switch off NFB array in the order the number.
5. SW-OFF 400V Tri-phase NFB in the concrete cabin.

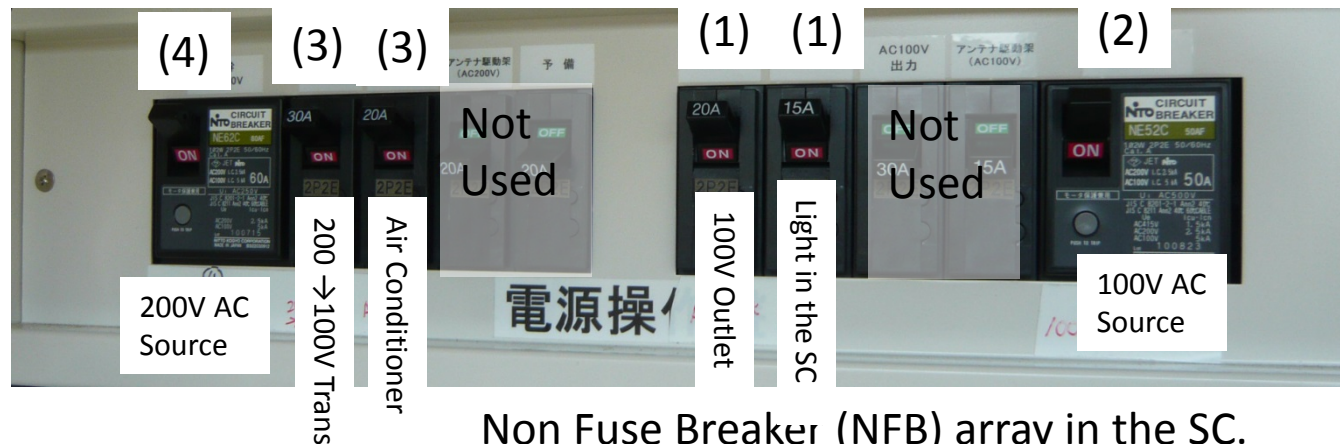
- For start up, please take the reverse order operation of shutdown.

– Please **DON'T FOREGT SW-ON the Air-Conditioner in Summer Time.**



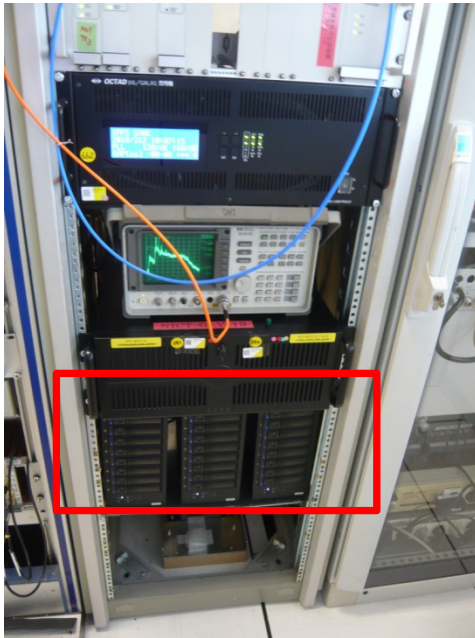
Small Container(SC)

Order to SW-oFF the NFB array



4. If HDD member of Raid Disk array has broken.

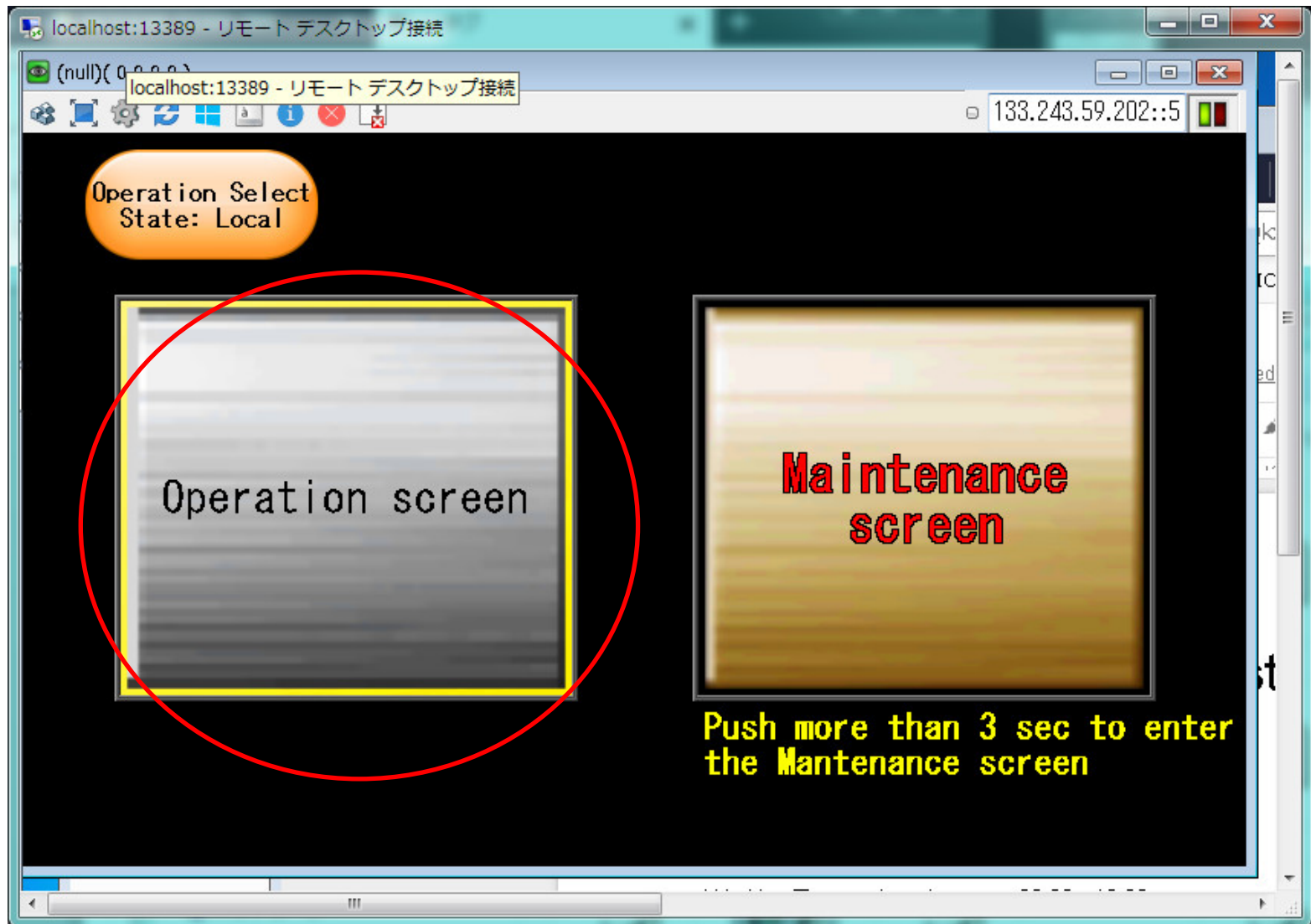
- This has not happen before in our experience. But just in case of broken HDD was found in Raid-disk array, we may have to ask you replacement of HDD. Please keep the spare HDD until then. We will send you detailed explanation of exchanging procedure at that time.



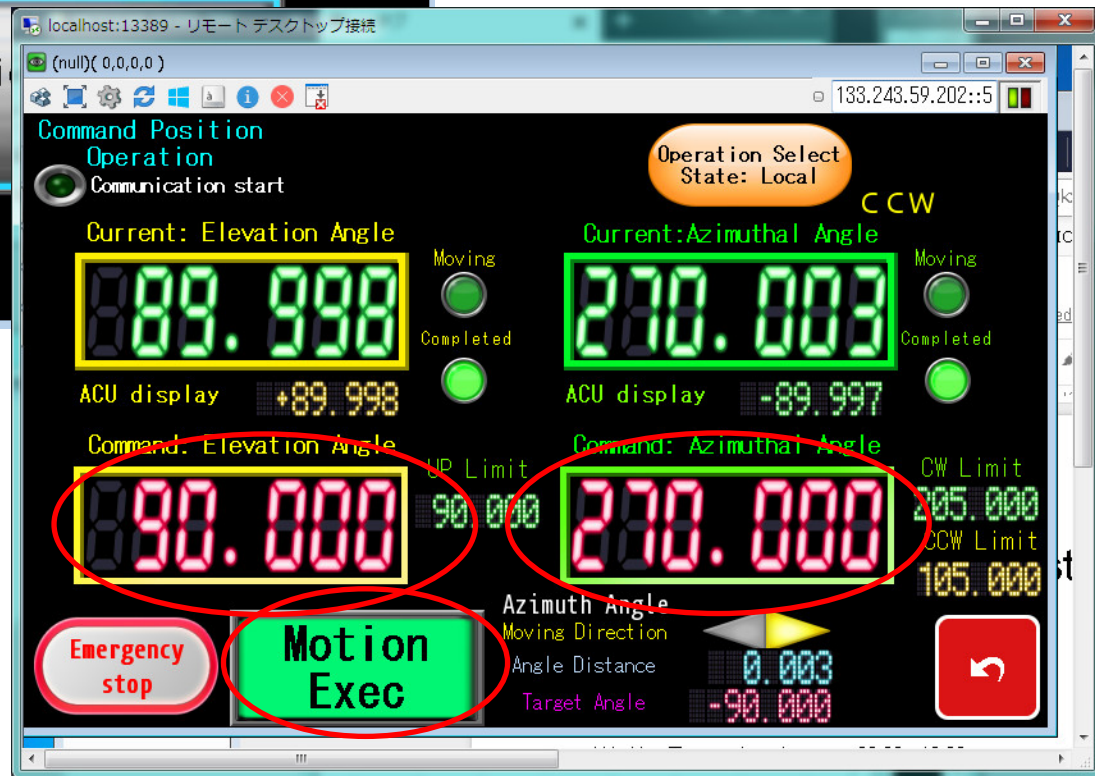
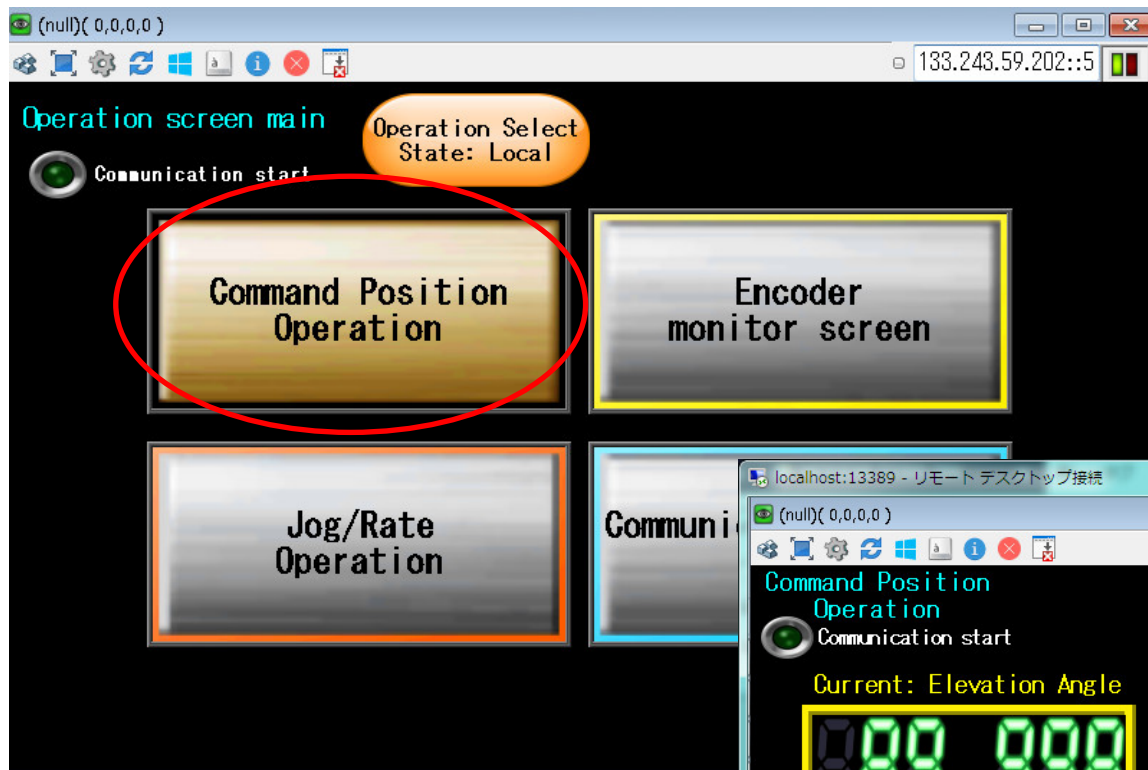
Spare of HDD for
the Raid Disk array.

Rack in Observation
Room of 32m telescope

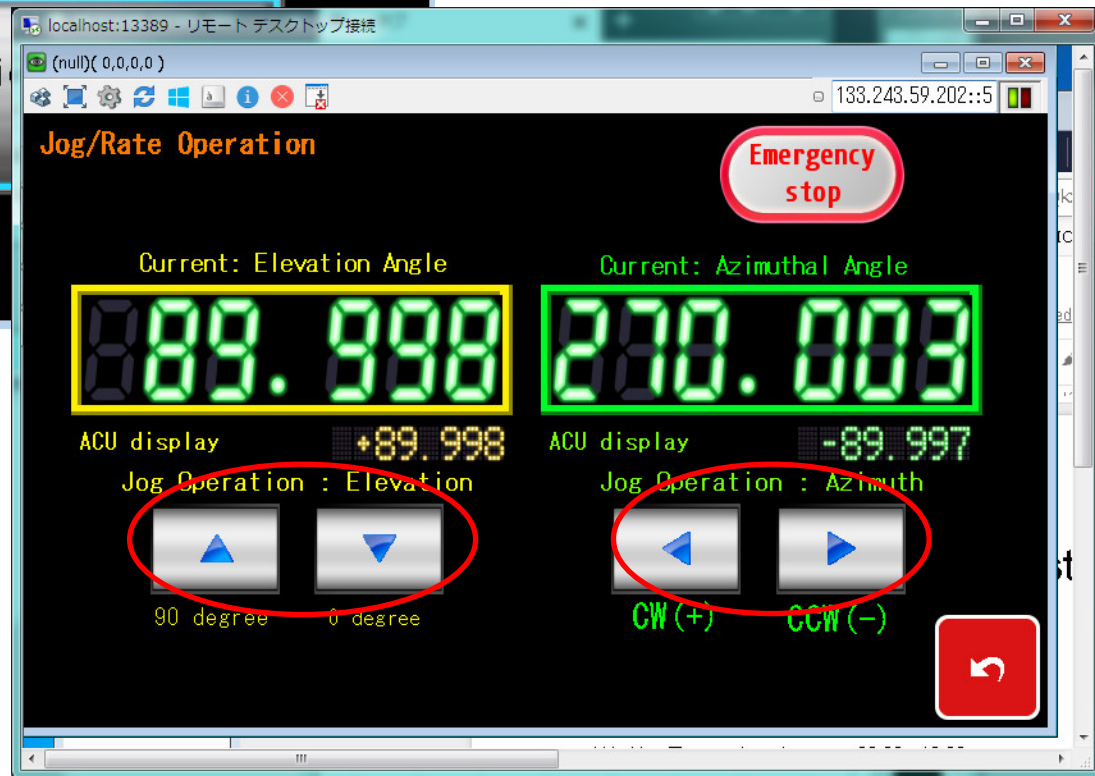
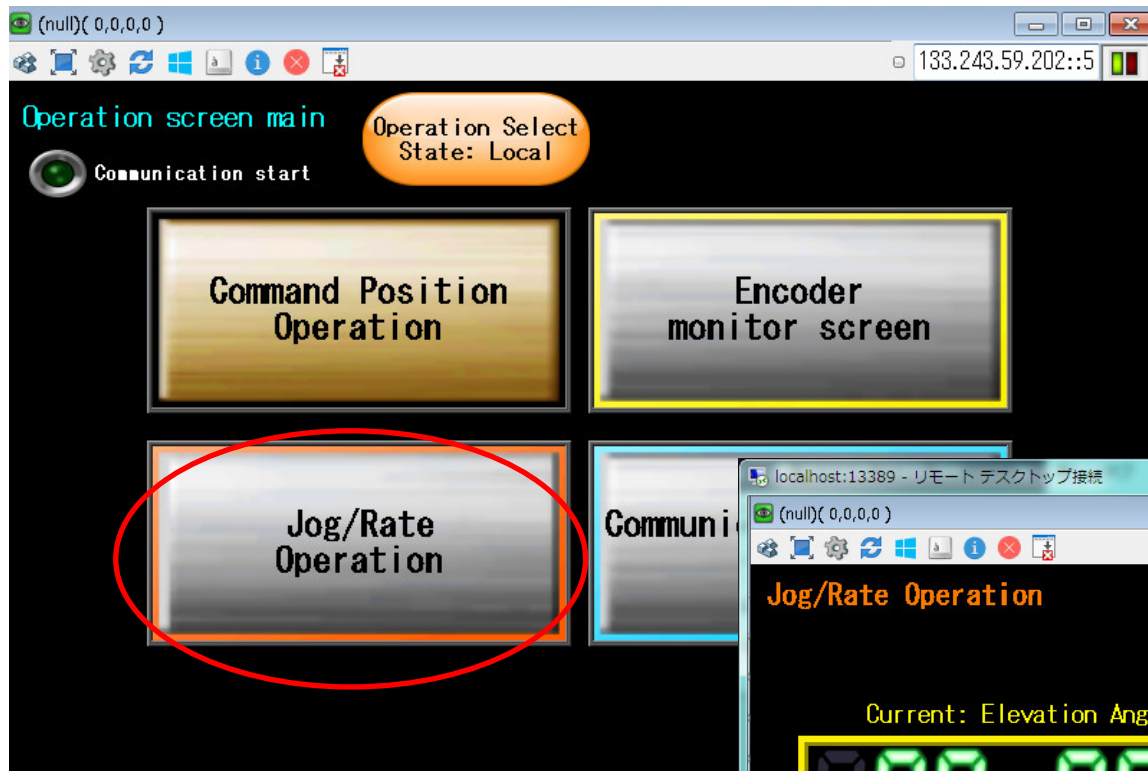
Local operation with ACU



Numerical positioning



Jog (slow) motion



Power Supply and Conversion in the SC

