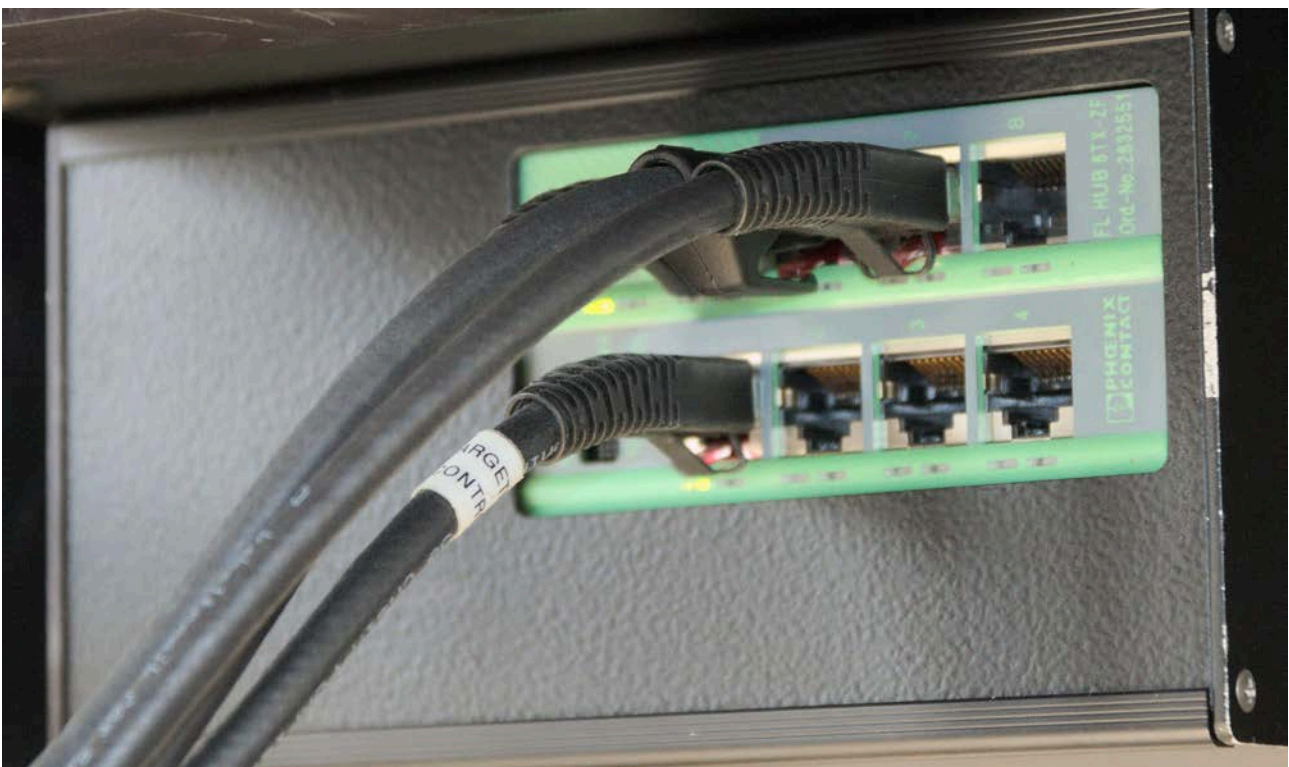


## Technocrane 22 (15) with Targeting system basic setup

*This manual describes a basic initial procedure, which is necessary to properly activate and set up the Technocrane 22 and 15 with its inovating targeting system and tracking data output.*

- 1) Before start the operation, make sure that all cables are correctly connected. Apart from the video BNC cables and the power cables, connect a RJ45 communication cables from the telescopic box, head box, panbar and targeting unit to a green hub placed under the middle of the BT axis.



*Img.1: Communication HUB connections*

Especially make sure, that you have connected the communication cable from the head box to the port nr. 5 on the hub. This port allows you to switch between the cross and straight Ethernet connection, which is necessary to keep compatibility among the different HW version of the head box.

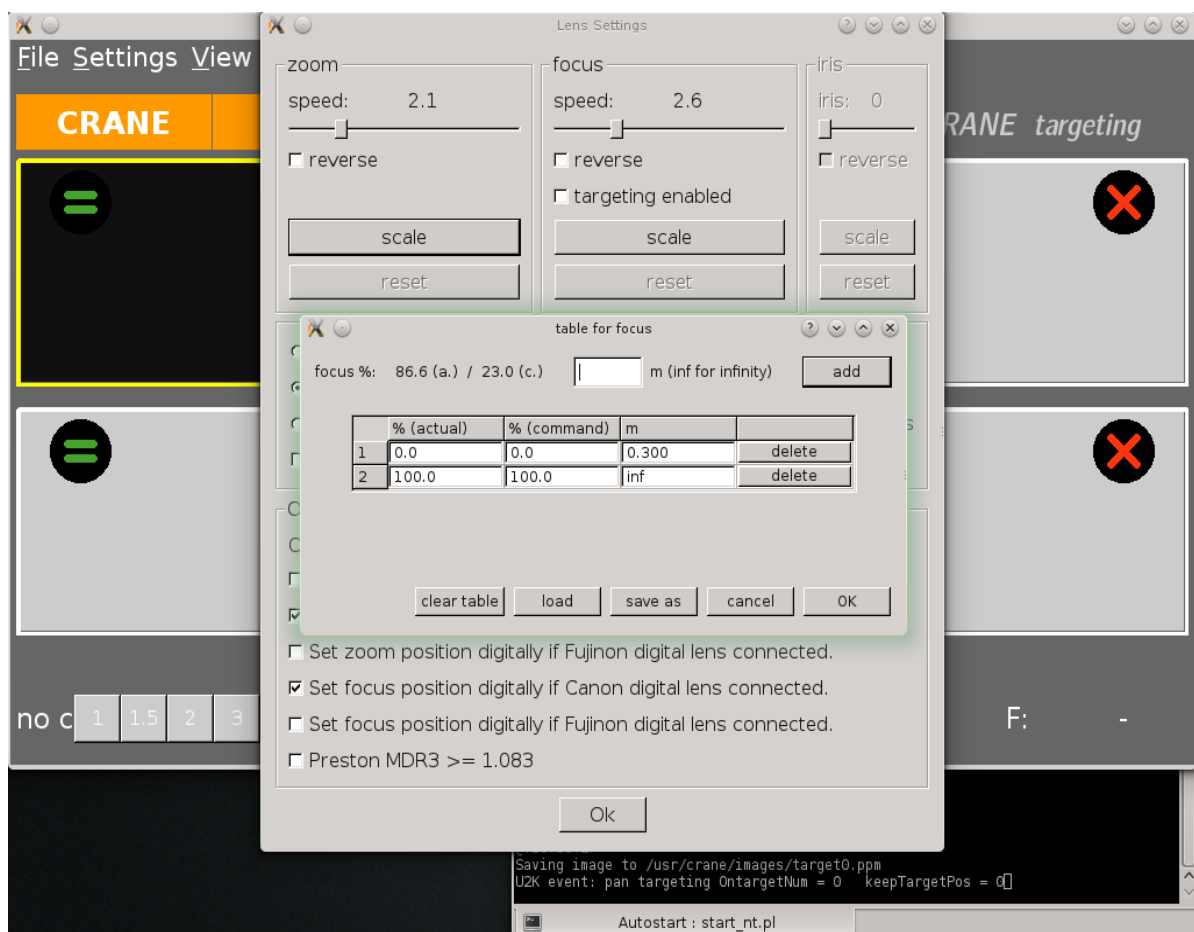
- 2) Turn on the fuse on crane boxes, panbar and targeting unit. On the hub you should now see a green LED above each of the used port. If there is no green LED above the port nr. 5 (Head box), try to change the configuration of the Cross/Straight switch.

After a while you should see also an orange LED blinking above each port. This indicates that a communication has been established. As the targeting unit turn-on procedure needs a bit longer time than the rest of the system, corresponding orange LED can be activated after a bit longer time. Now you can turn on the motor power by pressing the red button. Green LED should appear.

*Note: If the crane is used with one man operation joystick or pickles control, it is not necessary to connect panbar unit – the communication will be always established.*

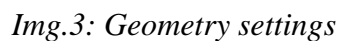
3) Now you are ready to start to use the targeting system, but first you have to do two initial steps:

- *Lenses calibration* – targeting system is based on focal length. For the proper function, every lenses have to be calibrated first. The procedure is described in paragraph 4.



*Img.2: Lens Calibration table*

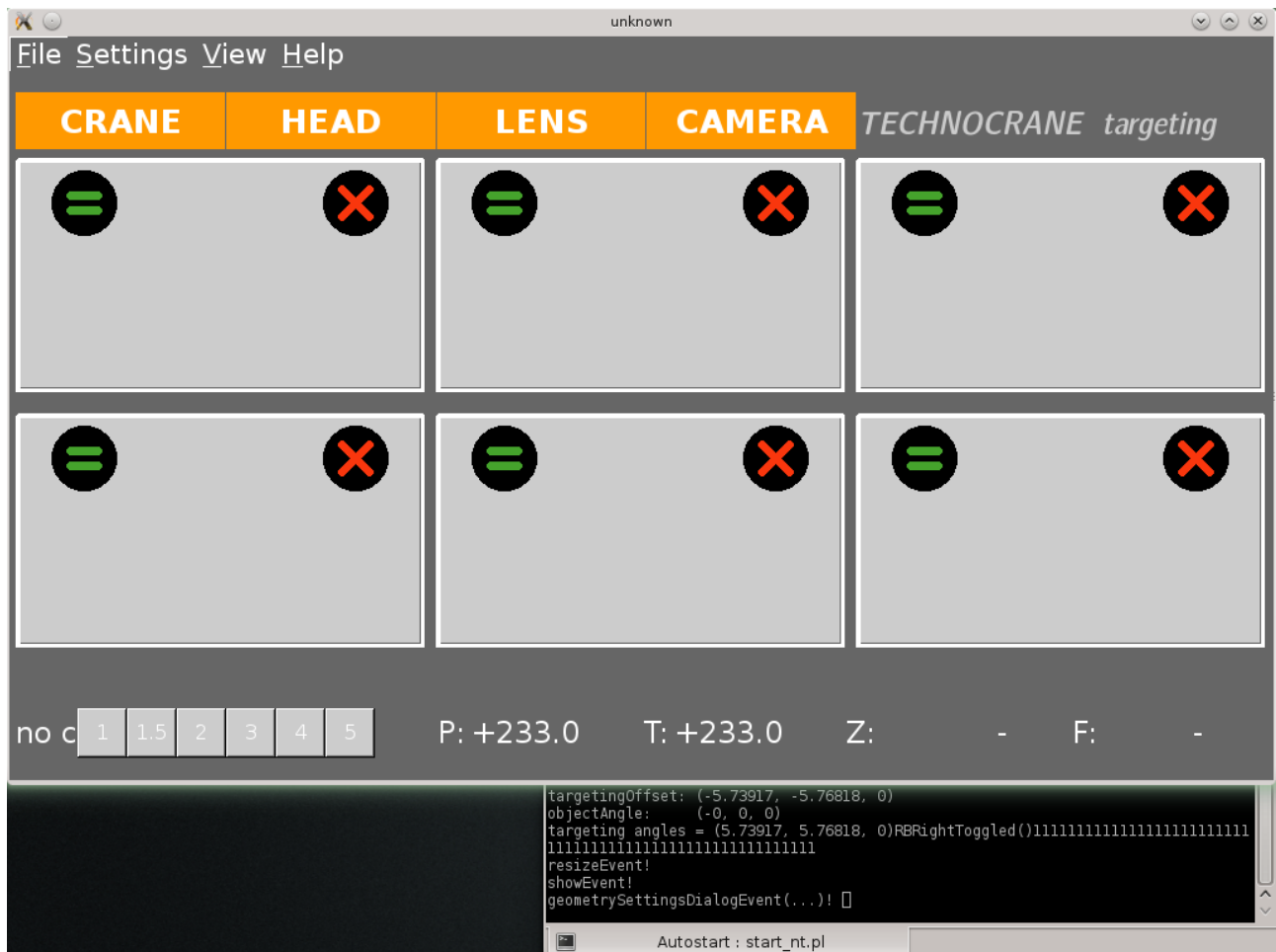
- *Set the camera position offsets* - go to menu Settings → Geometry settings. Under the tab L4, L5, L7 and L8, you have to add the measured parameters according to the drawings provided on the corresponding tab.



4) Lens calibration is made by measuring of a simple table. Click on yellow LENS button, then in the focus area press the button *scale*. Now proceed as follows:

- Note: The number of the table lines shall not exceed 16 lines.*

- 5) As you can see on the base screen, there could be saved up to six different targets, and they could be switched during the operation. When creating the target, you can use either pickles, one man operation joystick or the panbar, as well as for the head move override during the operation.



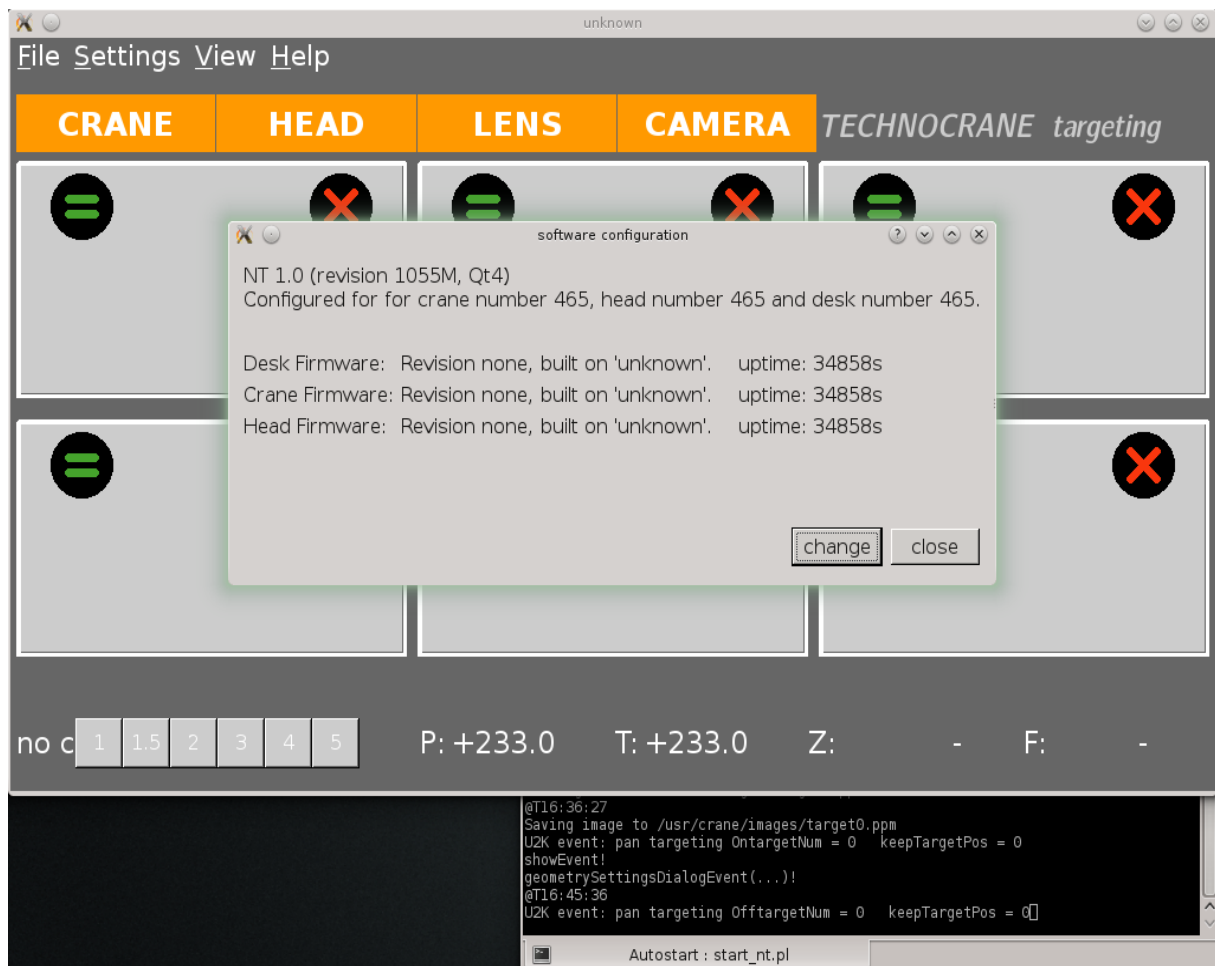
Img.4: Targeting base screen

- When 3-axis one man operation joystick is used, the center button on the joystick switches between the zoom and focus control, and the chosen function is indicated by a green LED. Green LED indicates a zoom control. Under LENS menu you can set the behaviour of the system when center button has been pressed.
- 6) Tracking data output is provided on either head box or the panbar. Among the crane accessories you can find also two serial data cables, one for RS232 and one for RS422.

The format of the data frame you can find in the document accesible from [www.supertechno.com](http://www.supertechno.com) sites. In the control SW under Settings → Data export settings, you can set some data output properties.

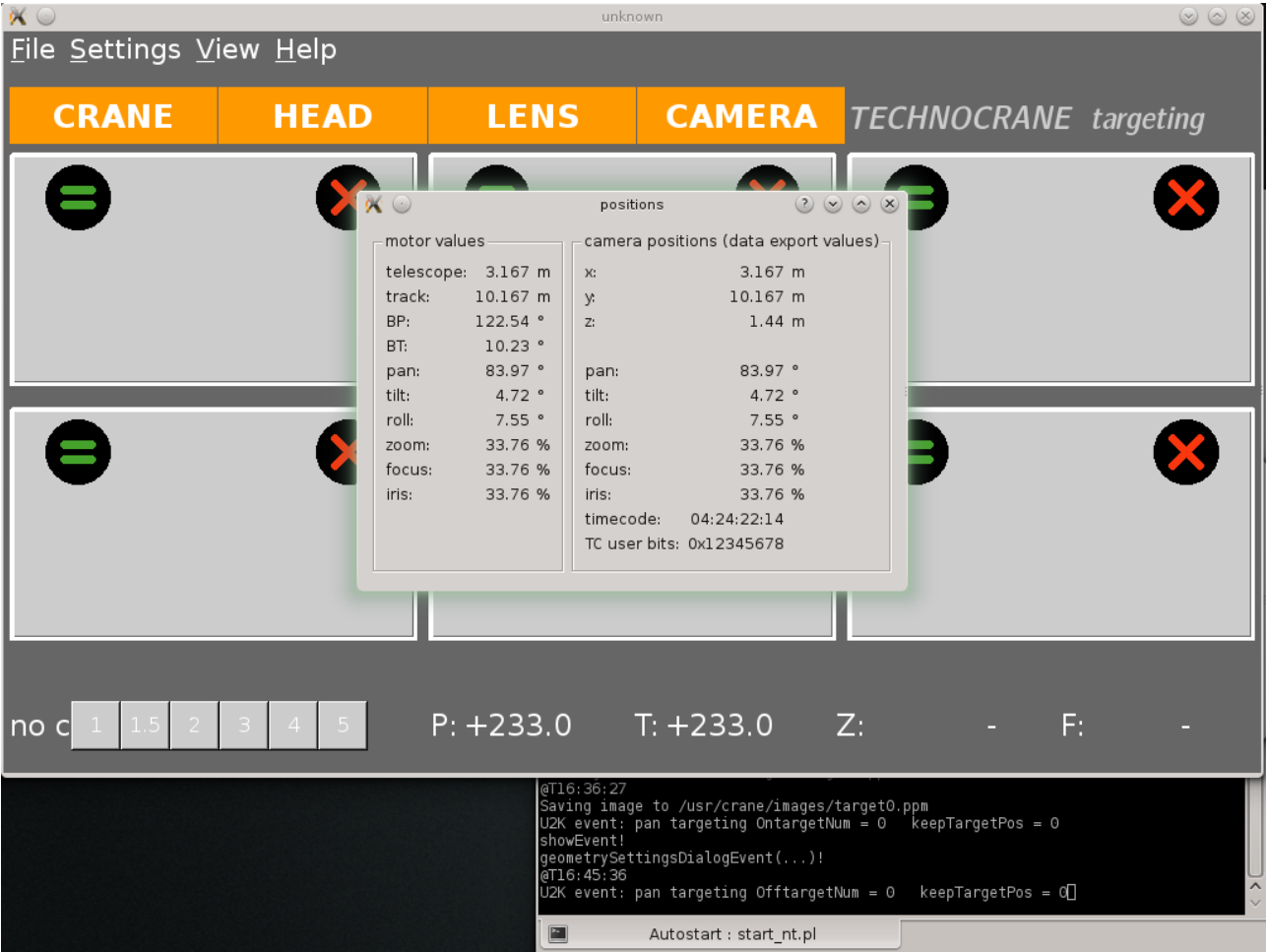
7) Other SW features:

- *Menu Help* → *About*. Here you can find the current SW version. If you reffer any problem with the crane or the targeting system, you should include the SW version to the problem report.



Img.5: Installed sw version info

- *Menu File* → *Software update*. Control SW can be updated by the customer itself. The update file provided by the Technocrane is to be stored on the USB stick, and then choosen in the dialogue window.
- *Menu View* → *Positions window*. This command shows up the table with the crane coordination system values.



Img.6: Positions window