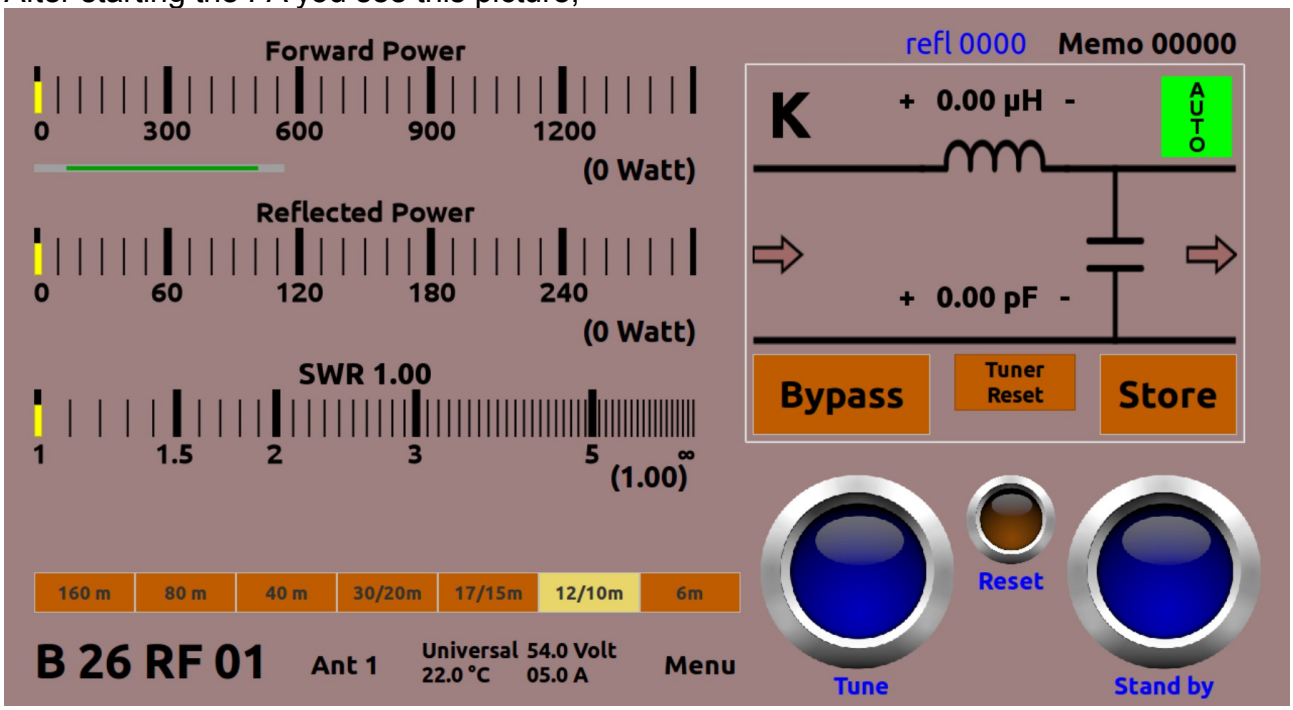
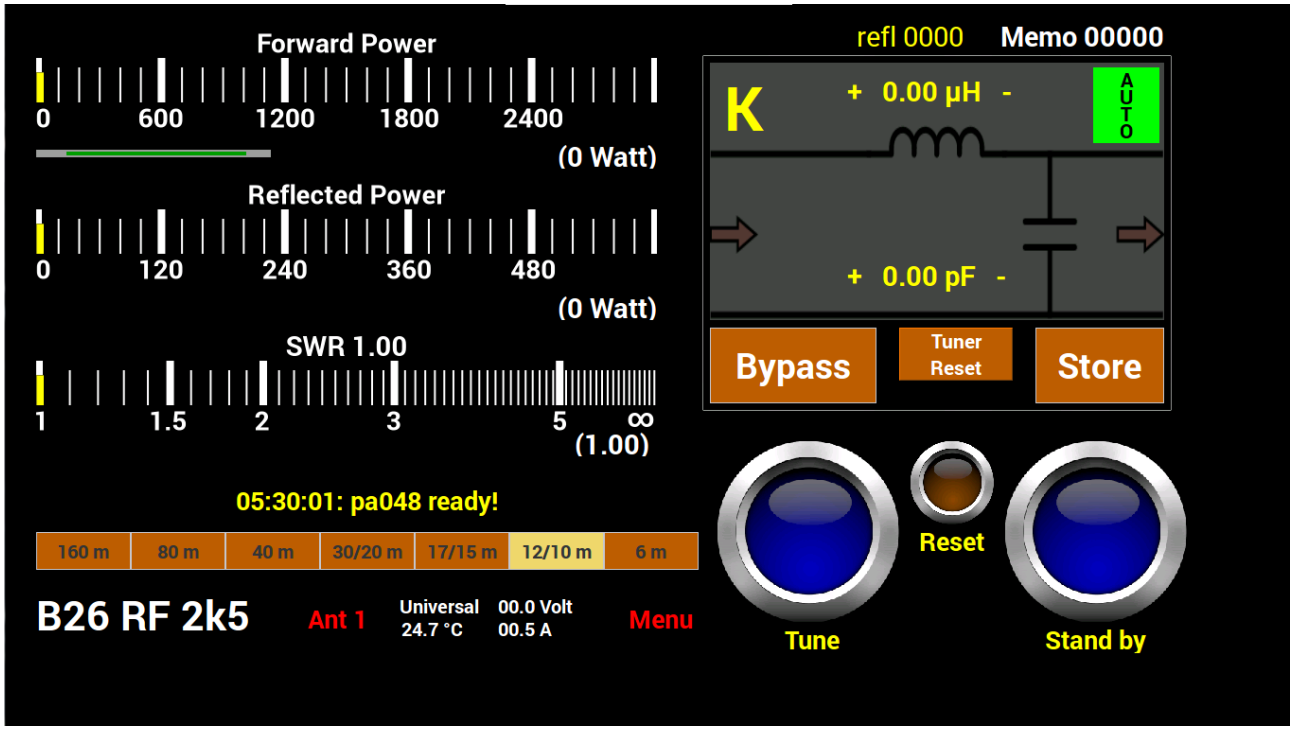
Specifications of the Software for the B26 PA
All versions of PA048
(Programming and Design by DL7NB)

After starting the PA you see this picture;



1k2 Version



2k5 Version

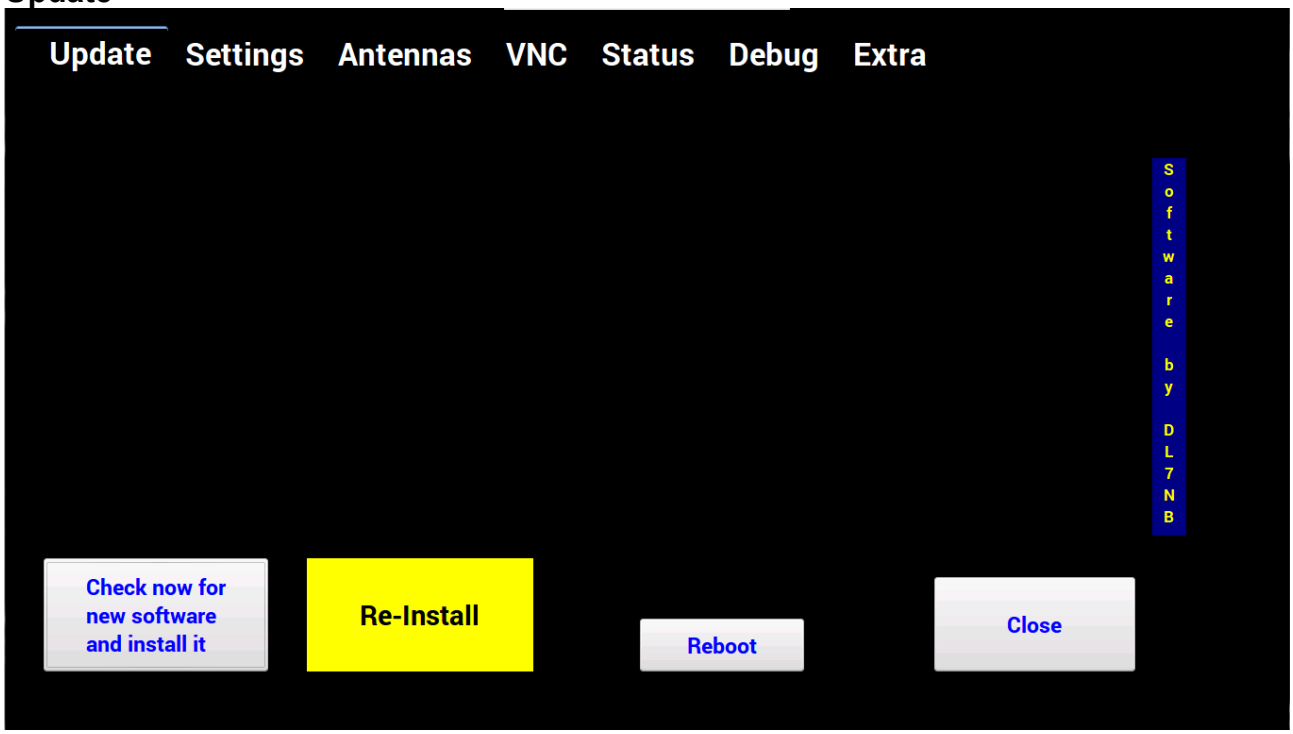
Power
Above we see the forward Power. The reflected Power and the SWR. The controls show the actual Power and SWR in a bluish color. A yellow pointer works as peak-hold. The values in brackets show the maximas of the last transmission- Direct below (in the empty space) there is a status-line.

Relative input Power
Below the Power bar there is a shorter green bar graph indicating how high your drive power is**.**

Tuner
This section is self explaining. You have three buttons that let you turn off the Tuner(Bypass), set all values to default/zero (Tuner reset) or let you store the latest settings to memory (store)
A special feature are the „+“ and „-“ signs. By touching them you will increase/decrease the value of either L or C. With that you can fine tune the rig. A click on „K“ toggles the K-relay. Auto/Locked locks the tuner.
In the headline you can see the reflected power in digits from 0 to 1023. (only in stand.by). Right of that you see the memory channel.

Menu
Pushing the “ Menu” button you’ll come into the Menu section.

Update



This – rather empty – page does everything for you to get the updates for your Arduino and Raspberry Pi.

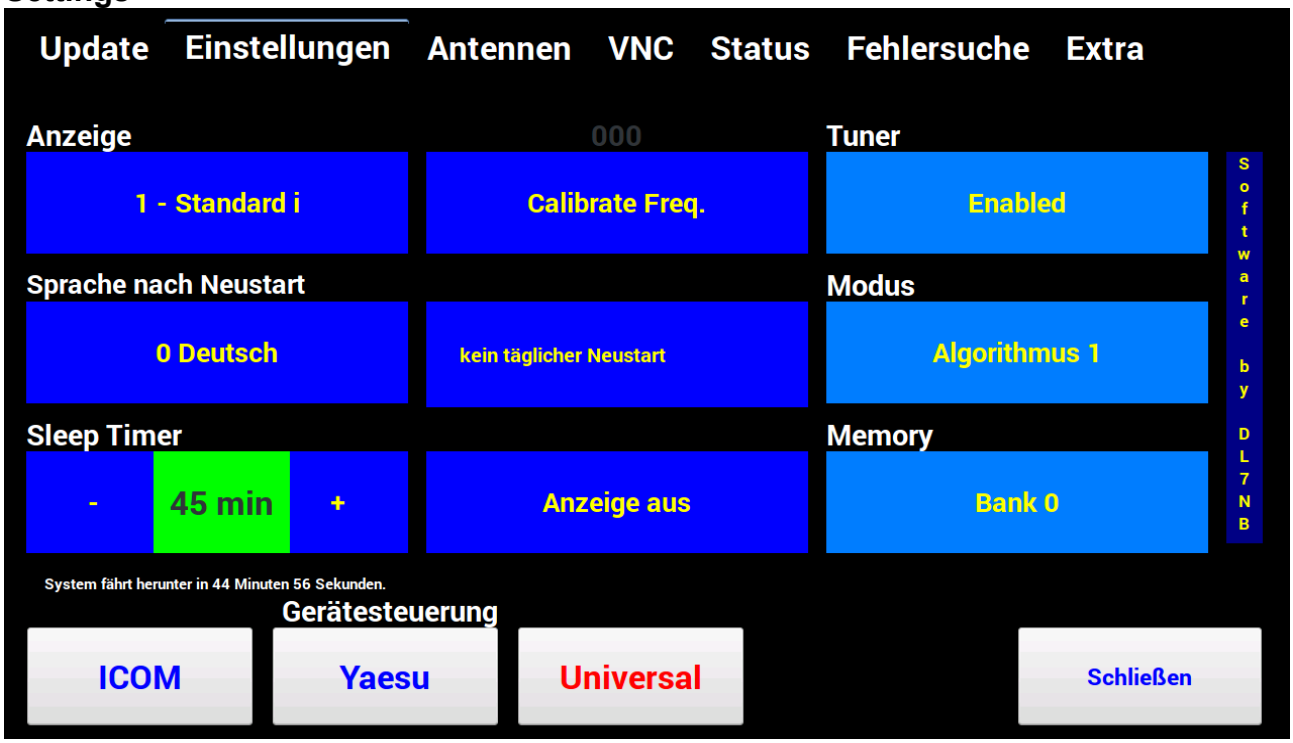
A click on „check for new software...“ starts every thing. If there is a new version you are prompted through the whole procedure.

„Re-Install“
If your Arduino has no programming, because it is brand new or has been changed. You can reprogram the whole system

„Reboot“

...reboots both processors (Raspberry Pi und Arduino).

Settings



„Power Meter“
toggles between „0 – Standard“, „1 – Standard -i“, „2 – Cross Needle“ und „3 – Cross Needle i“ .

„Language after reboot“
Select the language. (at the moment we have German and English... unless you support us for your language).

„Sleep Timer“
„+“ and „-“ sets the time. The „button“ in the middle toggles between active/green and inactive/red

„Calibrate Freq.“
leads you through a procedure to have a better frequency measurement
YOU MUST perform this once you start your amplifier first time, else the LPF switching will not work probably.

„daily reboot“
If you want to have your PA running 24/7 then you should have it rebooting every day. On remote places this prevents long journeys id the communication to the PA gets lost!

„Remote“
switches the whole screen off if you want to control your PA on a remote place where an active screen is not needed. Your PA is now just visible via VNC.
To get out of this mode you need to power cycle the PA.

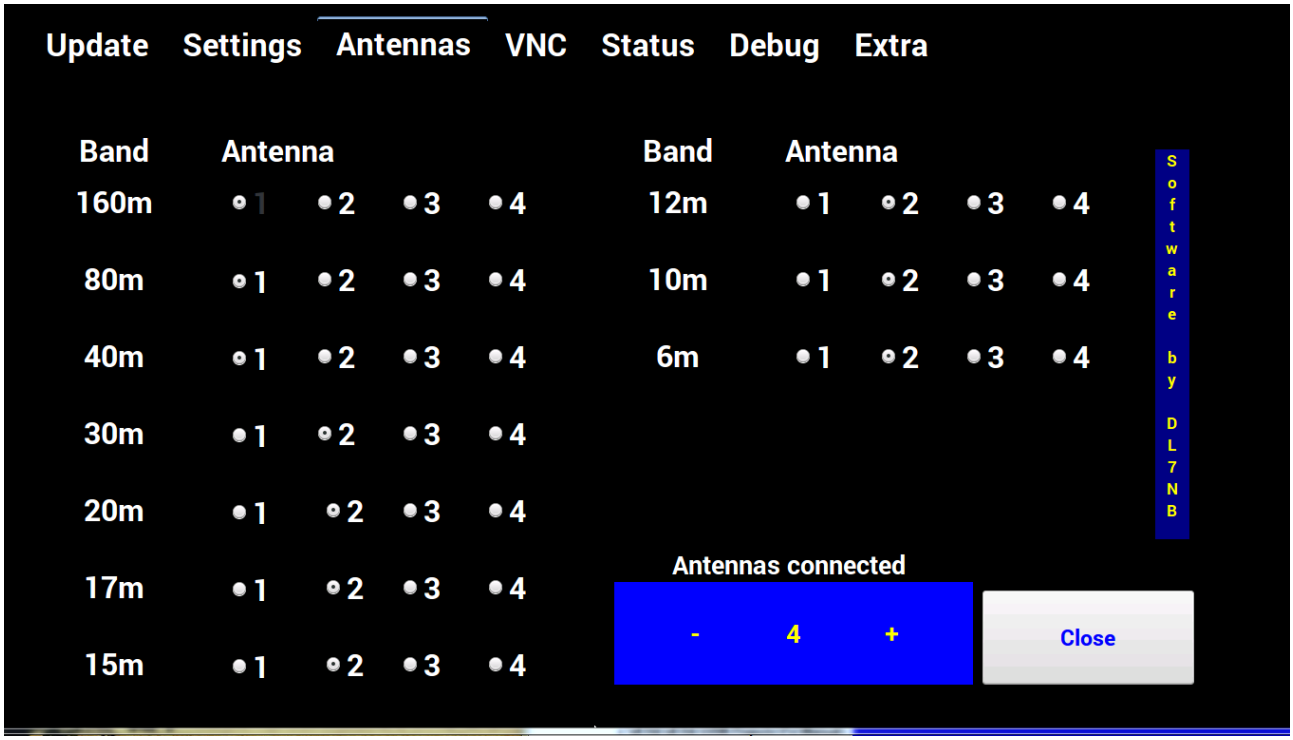
„Tuner“
switches the Tuner on/off.

„Mode“
selects the algorithm for the tuning.

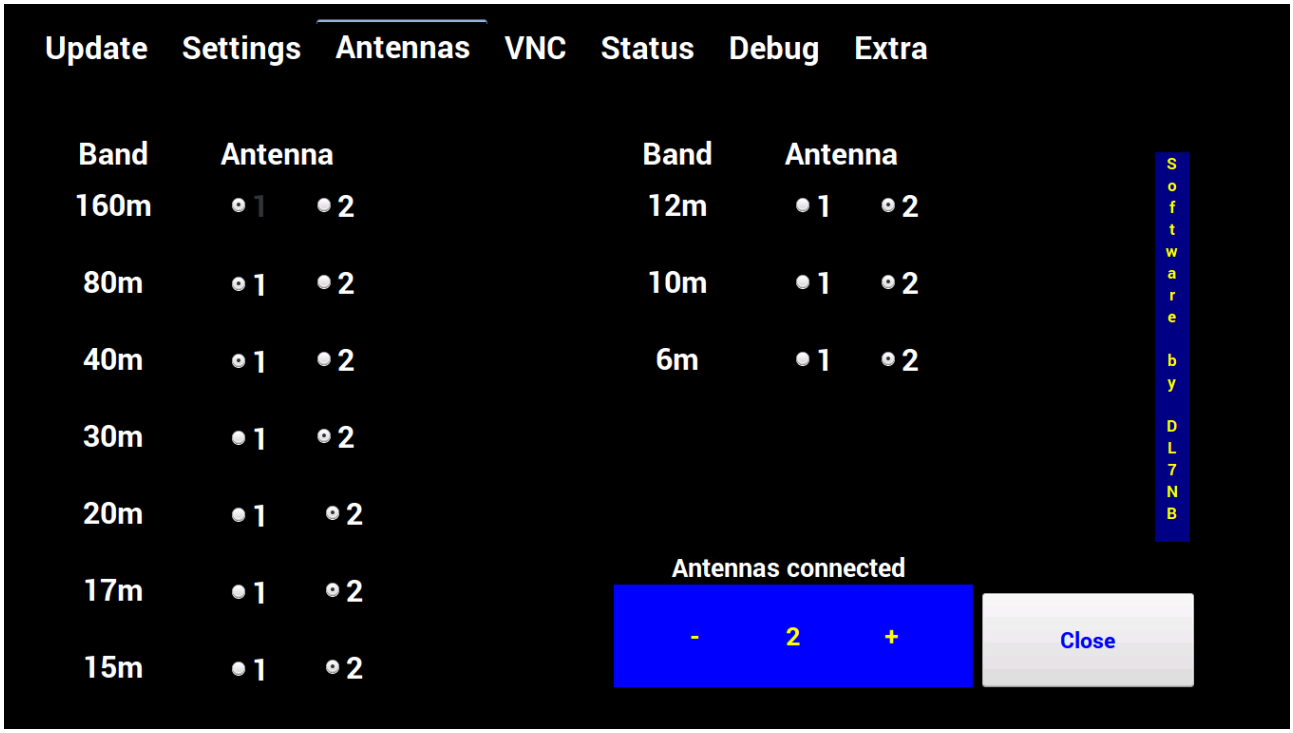
„Memory“
Toggles your Tuner (if present) and Memory let you select the memory bank.

„ICOM“, **„Yaesu“** and **„Universal“**
elects the interface for the low-pass filters. If there is nothing connected it will fall back to „universal“
The associated PTT input signal will be also activated.

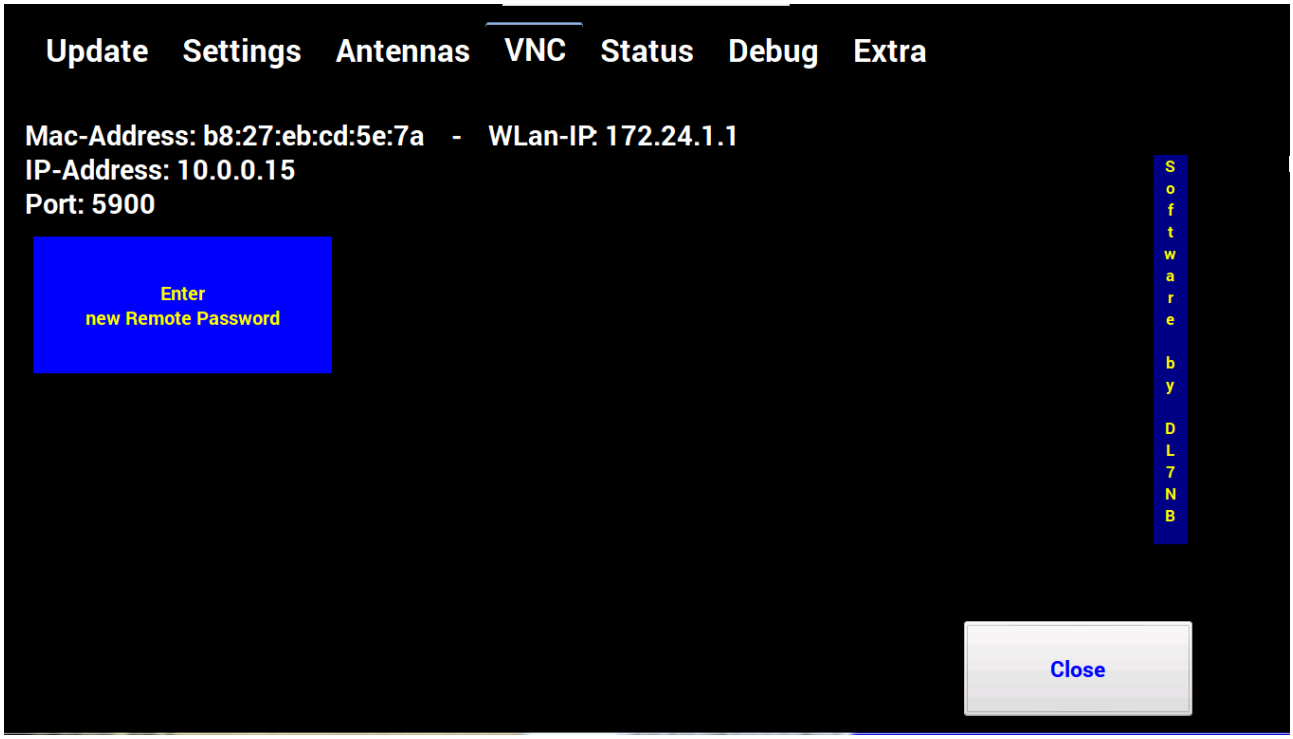
Antennas



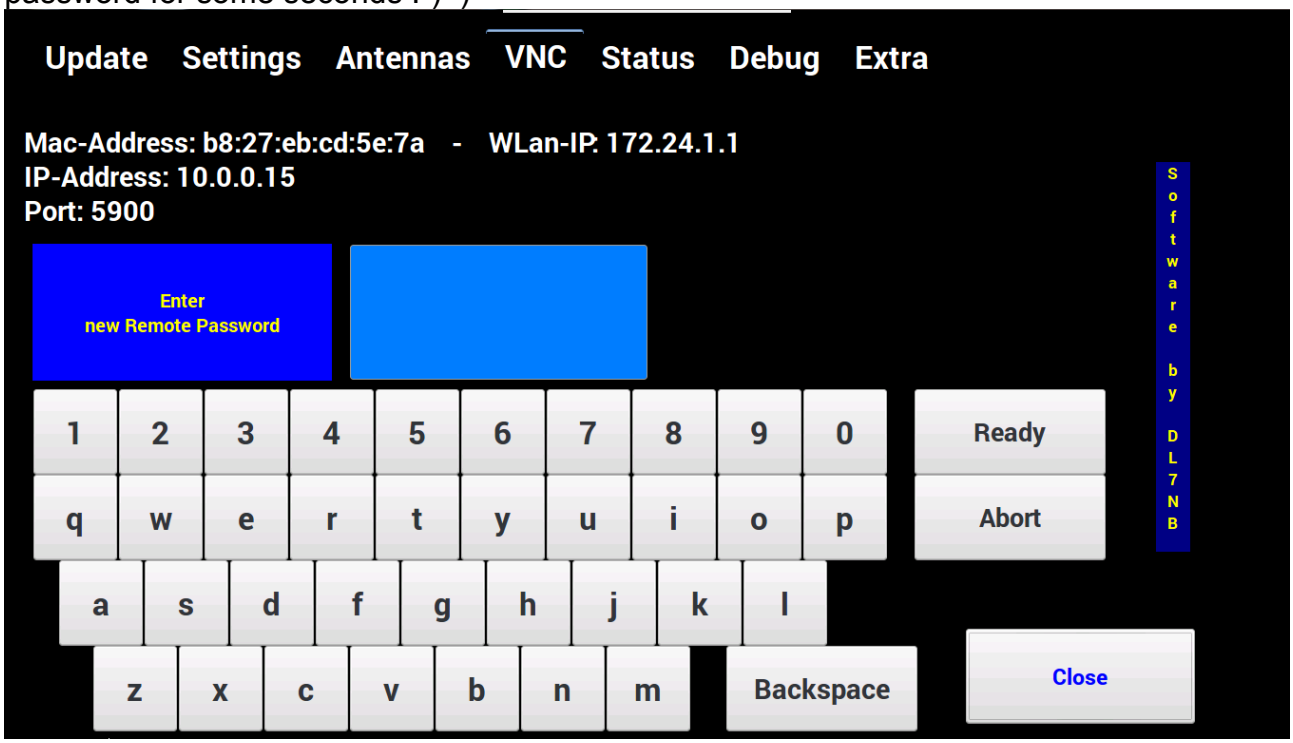
Here you set the correlation between bands and antennas. You can select how many antennas are active.



VNC



Parameters for the VNC-Clients.
(For „Old“ men: if you click the screen in the right upper corner five times, you will see the password for some seconds :-))



You can set your new password here.

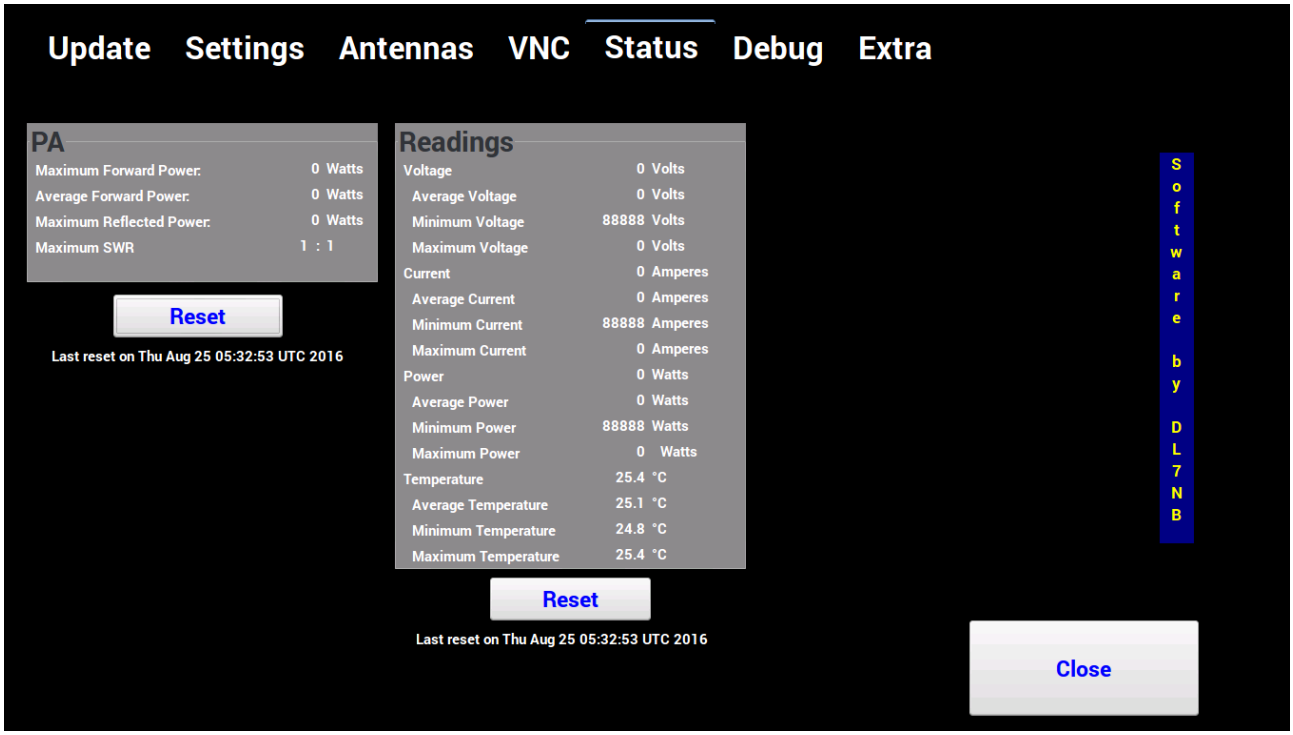
WLan IP

To use your wireless device like Tablet; iPhone ore Android with the Access-Point of the PA you first need to connect to it. The name of the Access-Point is „RF-Kit PA“

The password is raspberry

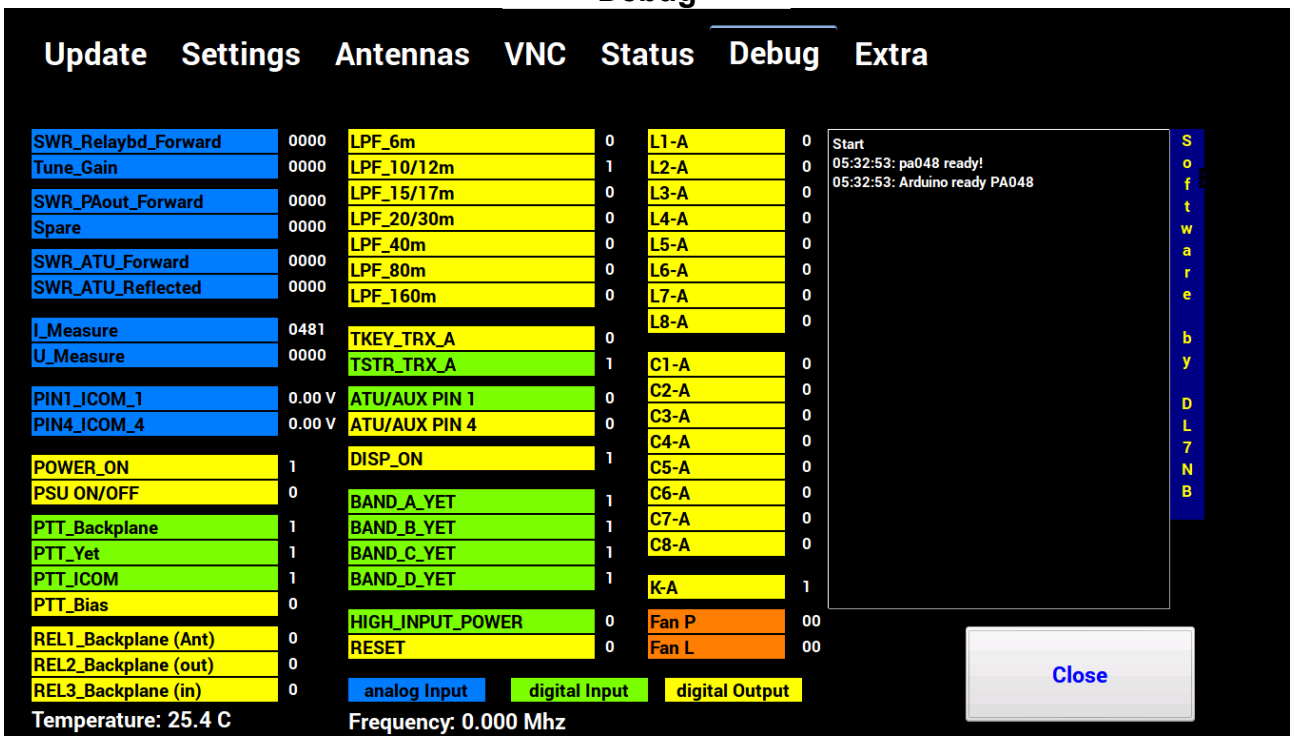
The address for the VNC is always 172.24.1.1 (Port 5900)

Status



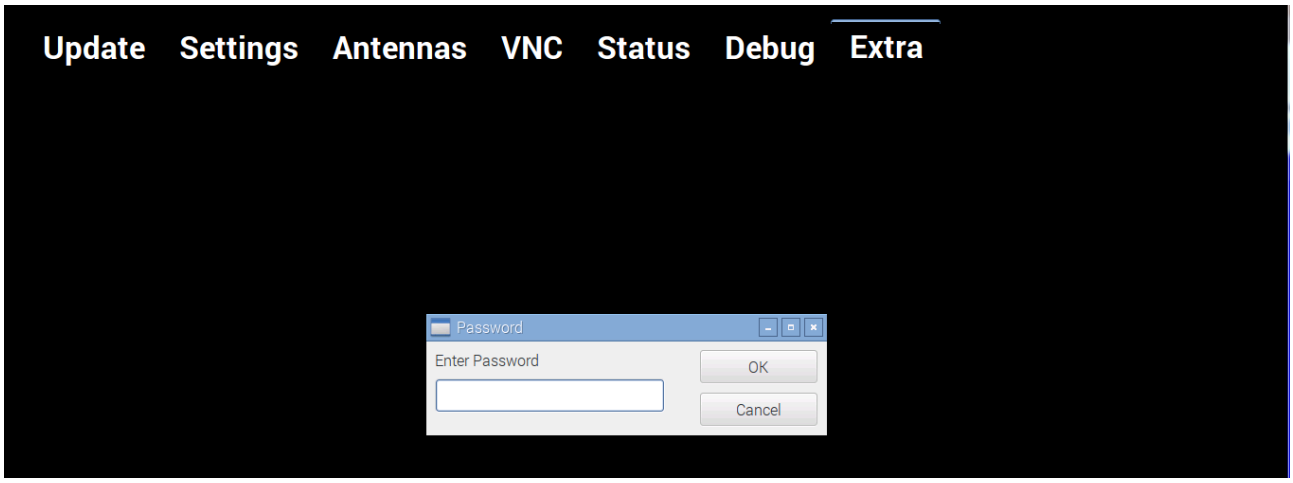
Some statistics are shown here.

Debug

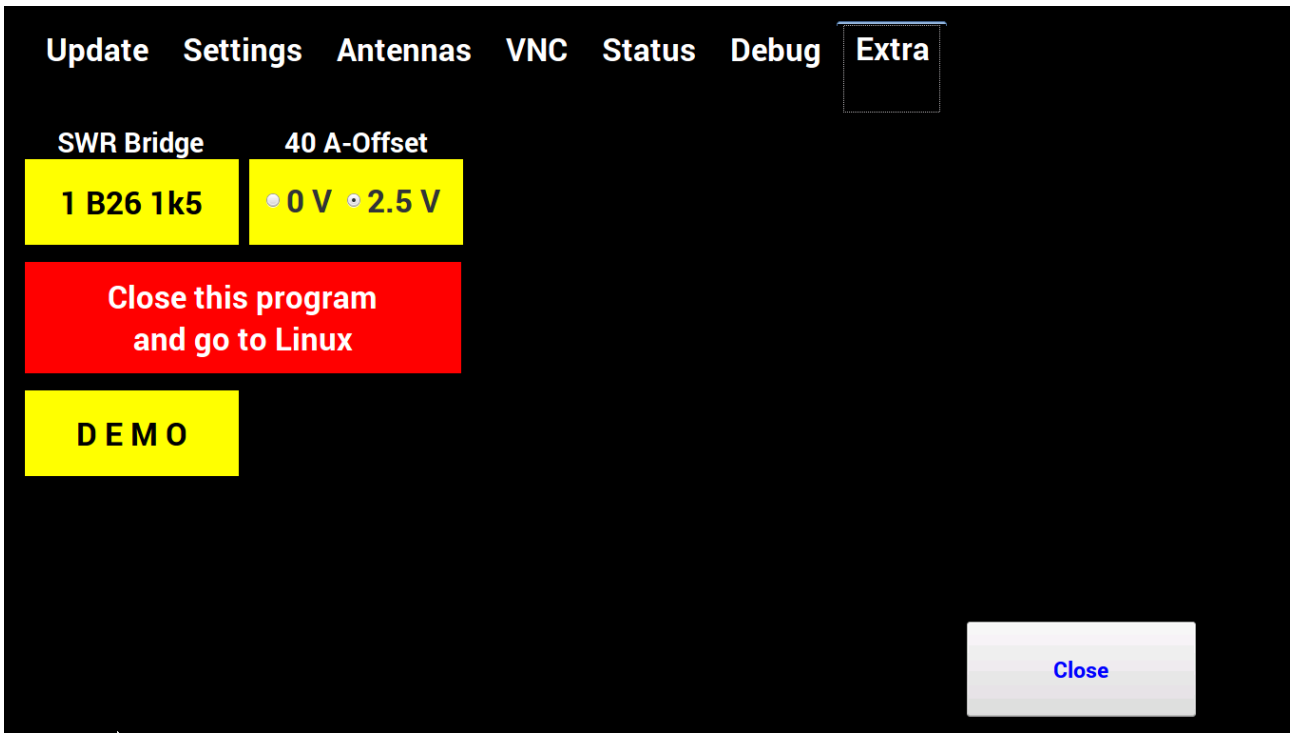


And here is the page for all of us who want to know „what's up on all the signaling Pins “

Extra



You enter this page with the password „Radio“. This is only to avoid a „wrong click“,,,



SWR Bridge
you can choose „0 Linear 1k5“, 1 B26 1k5“ and „2 Linear 3kW“

40/80A-Offset
Due to your modul for measuring the current you can set the offset here

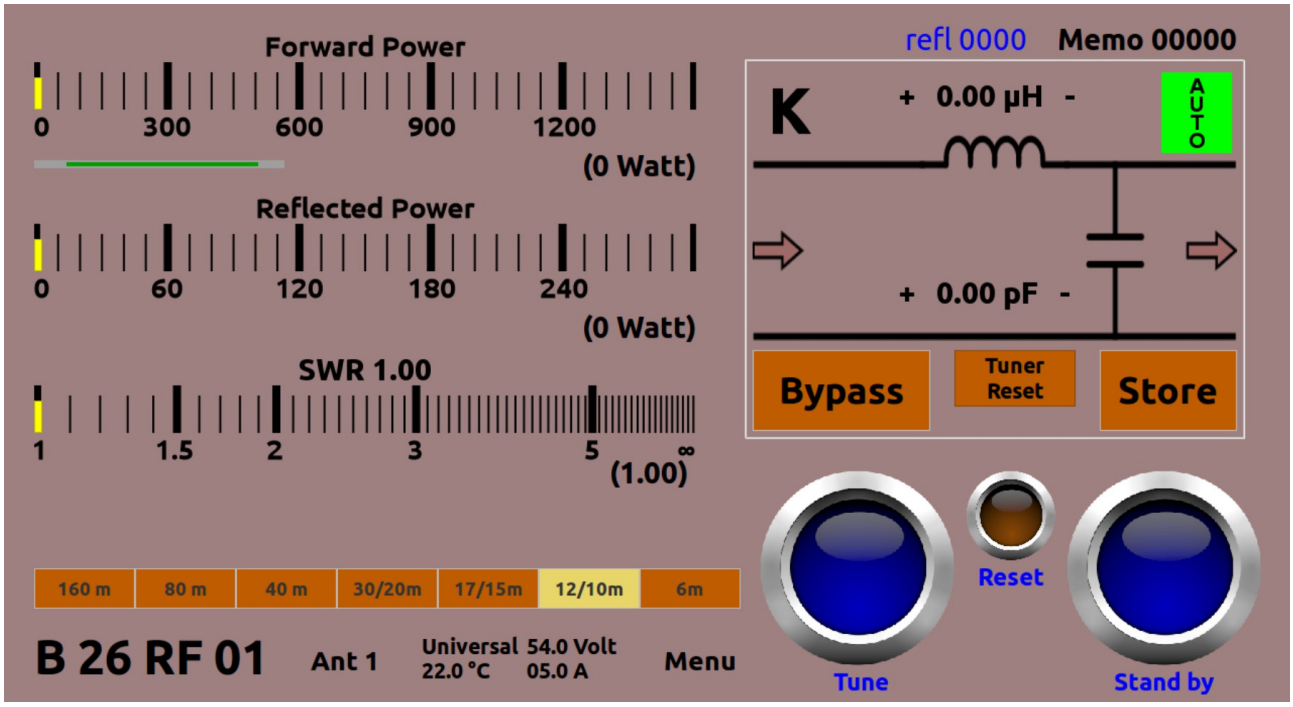
Close the program and go to Linux
An Exit for all who know what the do!

To use the PA controller with the RF2K5 pallet you need to make the following settings:

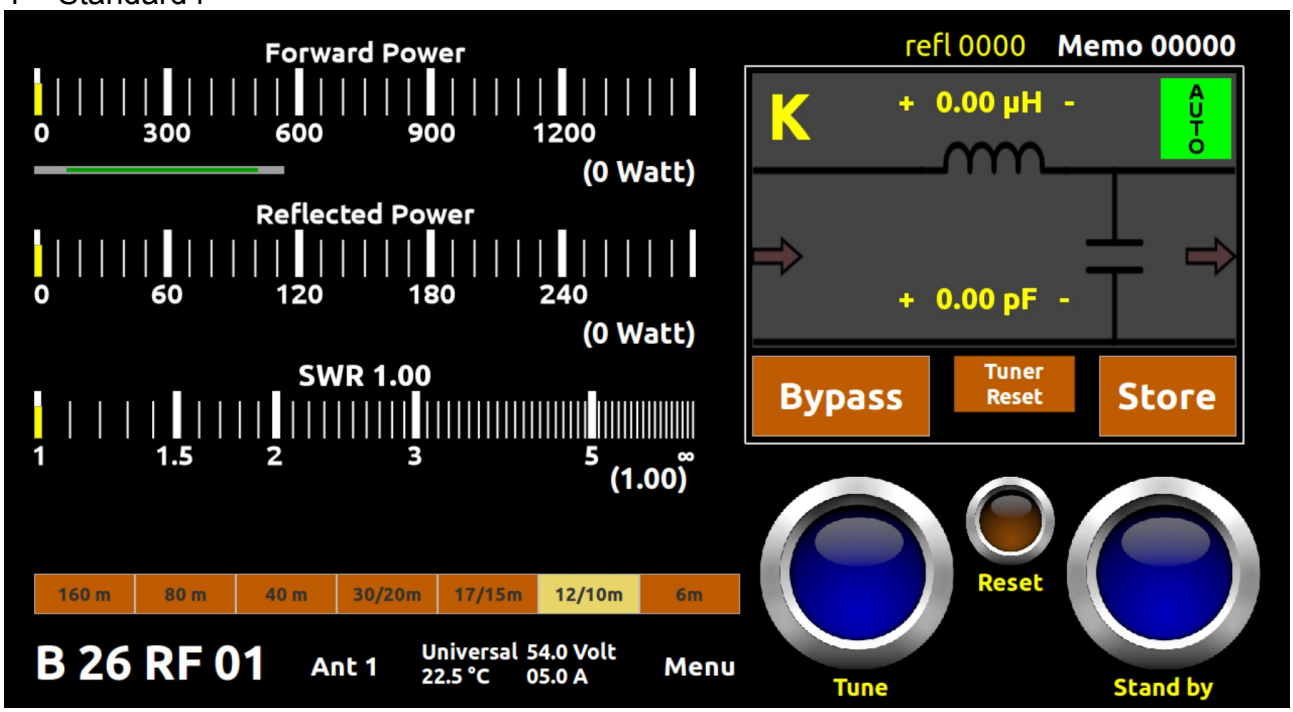
- Linear 3KW
- 0V offset

All surfaces:

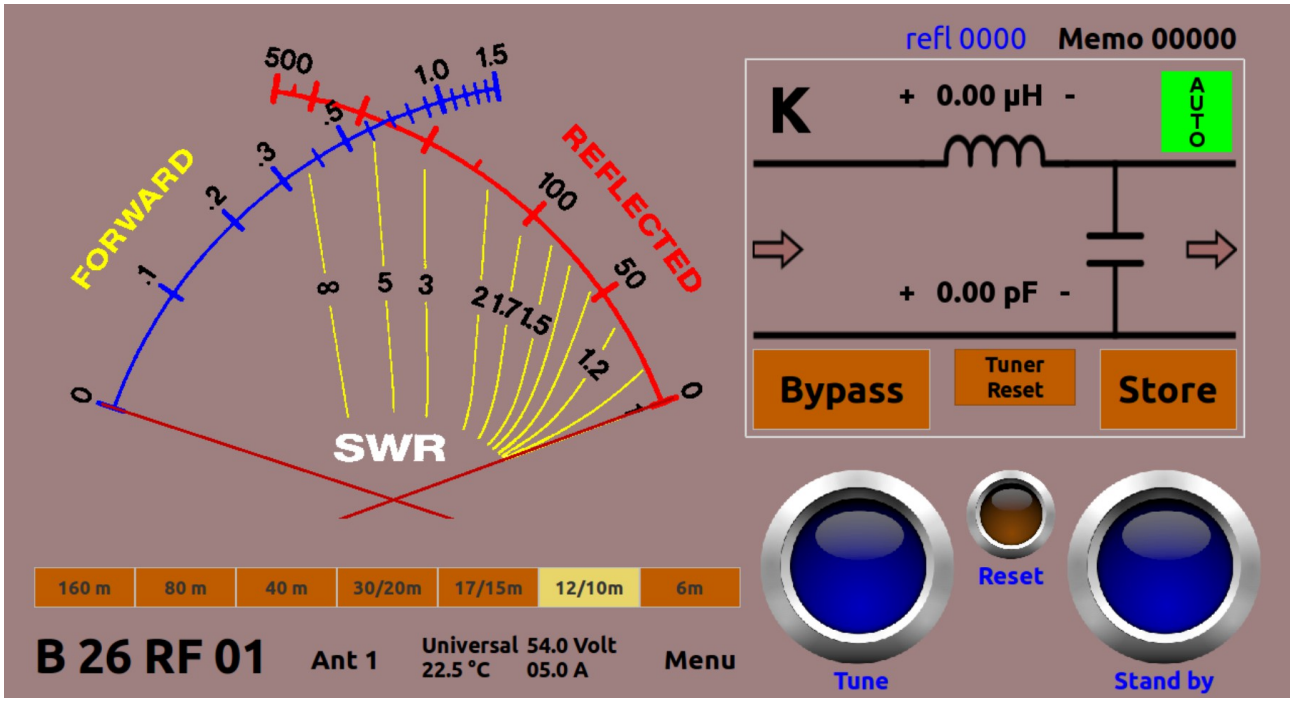
0 – Standard



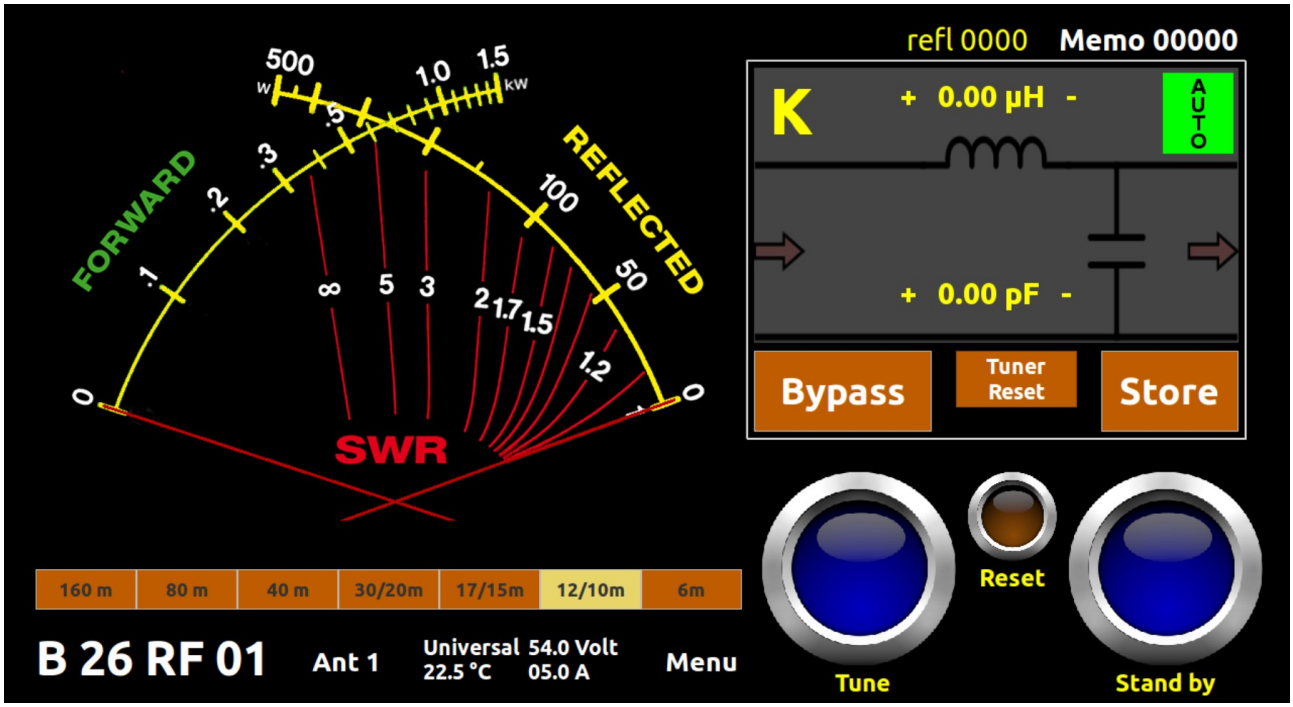
1 – Standard i



2 – Cross Needle



3 – Cross Needle i



These surface have the following buttons/switches_

Ant1/Ant2 Toggles the Antenna outputs.

Menu Call the menu.

Tune Tune the PA. A short press calls the memorized values – if there are some. If there are none a normal tuning will start.
A long pressing (> 1 Second) starts a complete tuning anyway incl. saving the settings

Reset resets the automatic power-down.

Stand by / Operate

TUNER

Bypass Tuner id OFF.

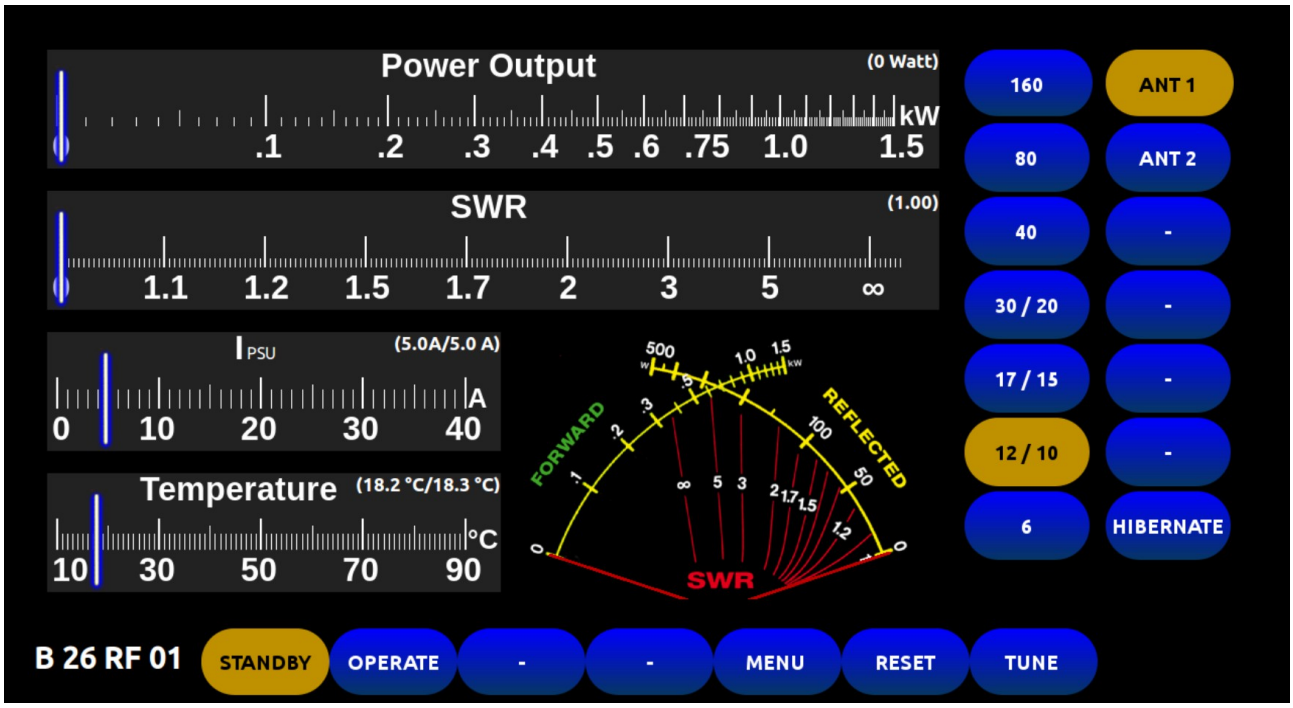
Reset all relays will go to their default settings.

+ / - Fine-tuning of L and C.

K toggles the „K“-Relay

auto/Locked Set the Tuner-Automatic to locked to prevent casual tuning.

Via the „button“ B 25 RF 01 you can toggle between the selected UI and the so called „Classic“-ui. In Classic there is no tuner to be seen, but it works „behind the scenes.“



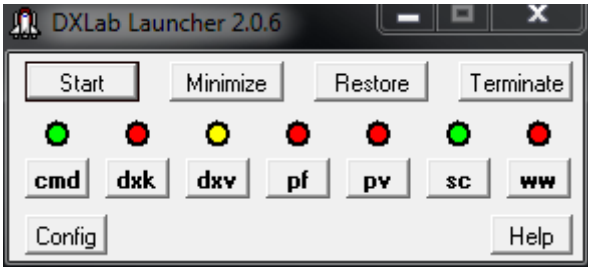
Hibernate the PA goes to a hibernate-mode. (Display off, but controllable via VNC.

That, what no one reads

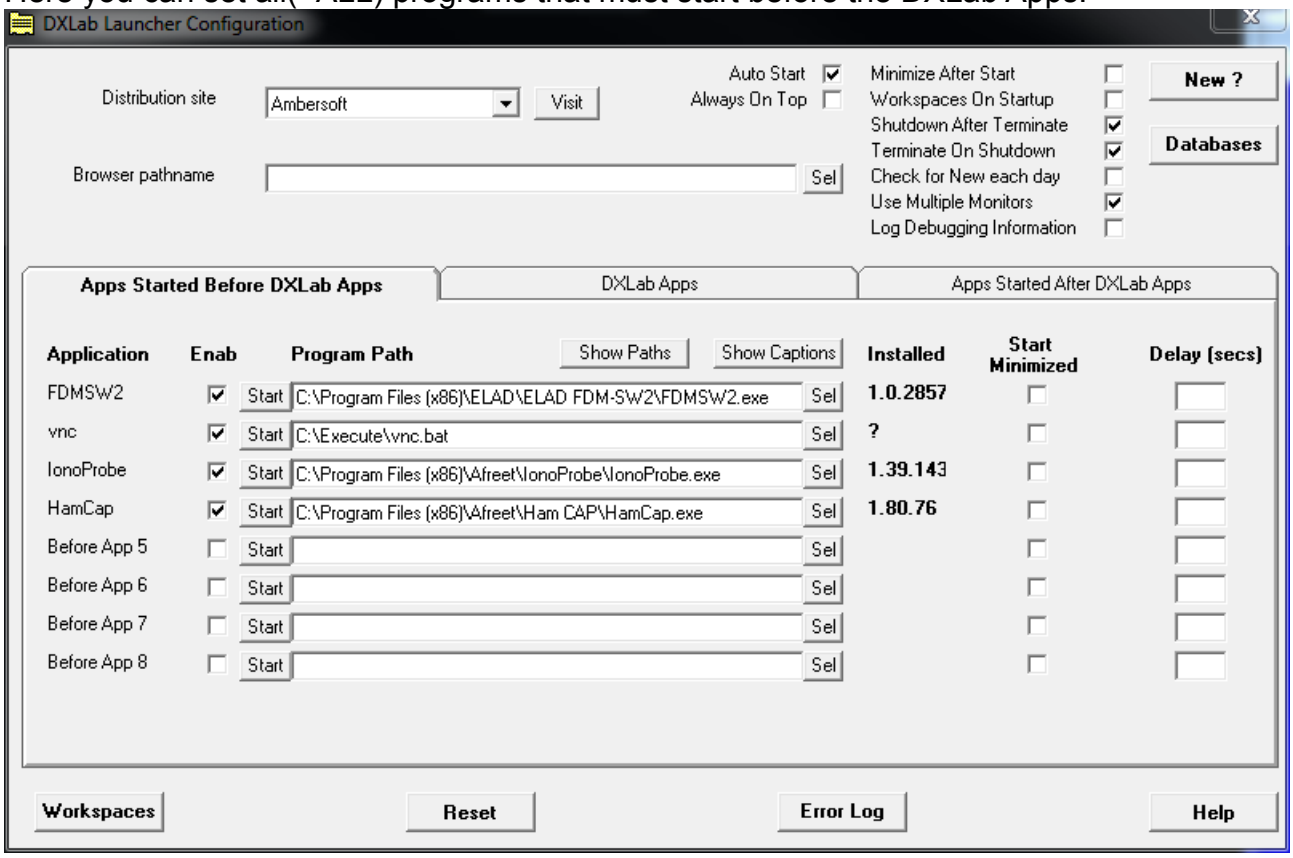
(aka FAQ)

How can I make the use of it all simple: specially the start of all necessary programs?

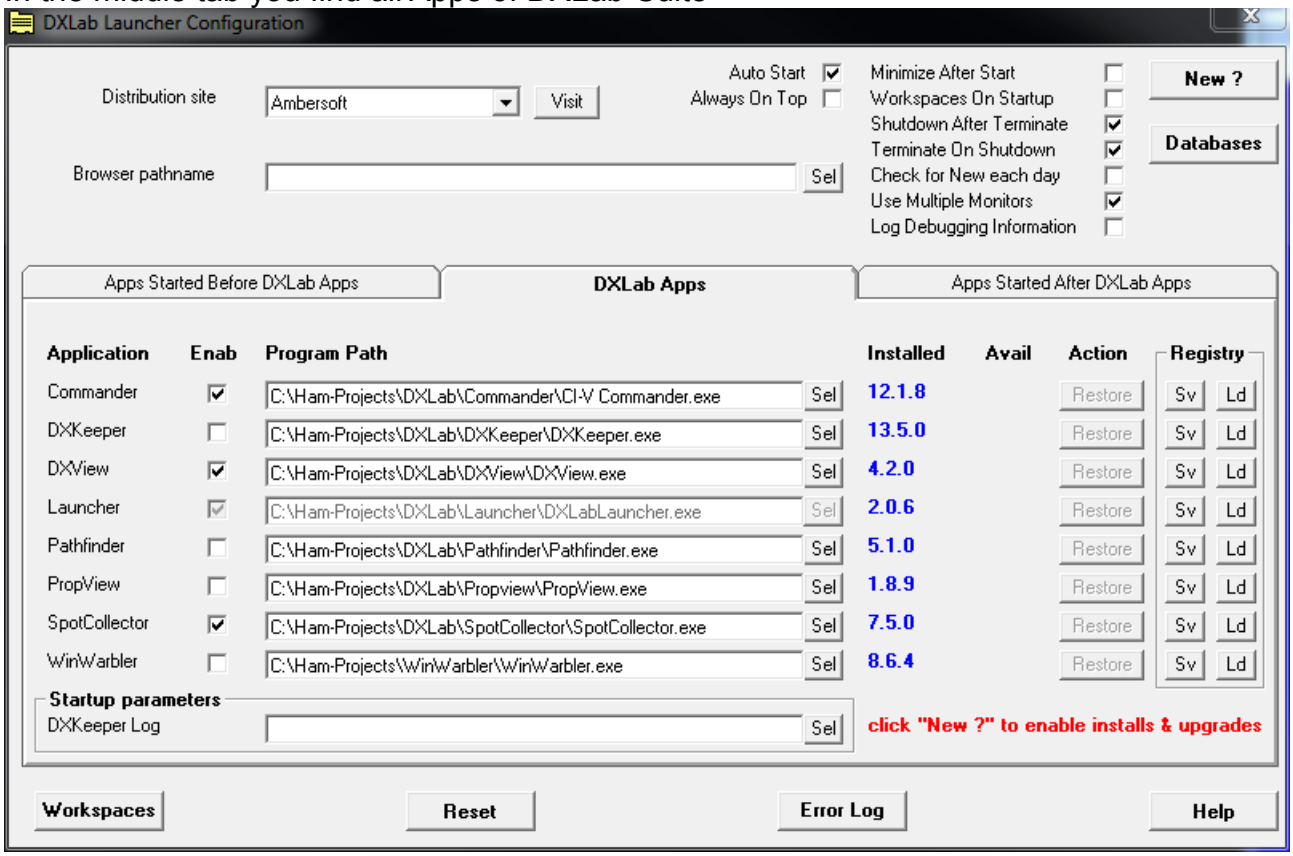
Those who use the PA-Bridge need the Commander from DXLab-Suite. In the manual to it we find the „Launcher“ that does everything needed. It looks like this:



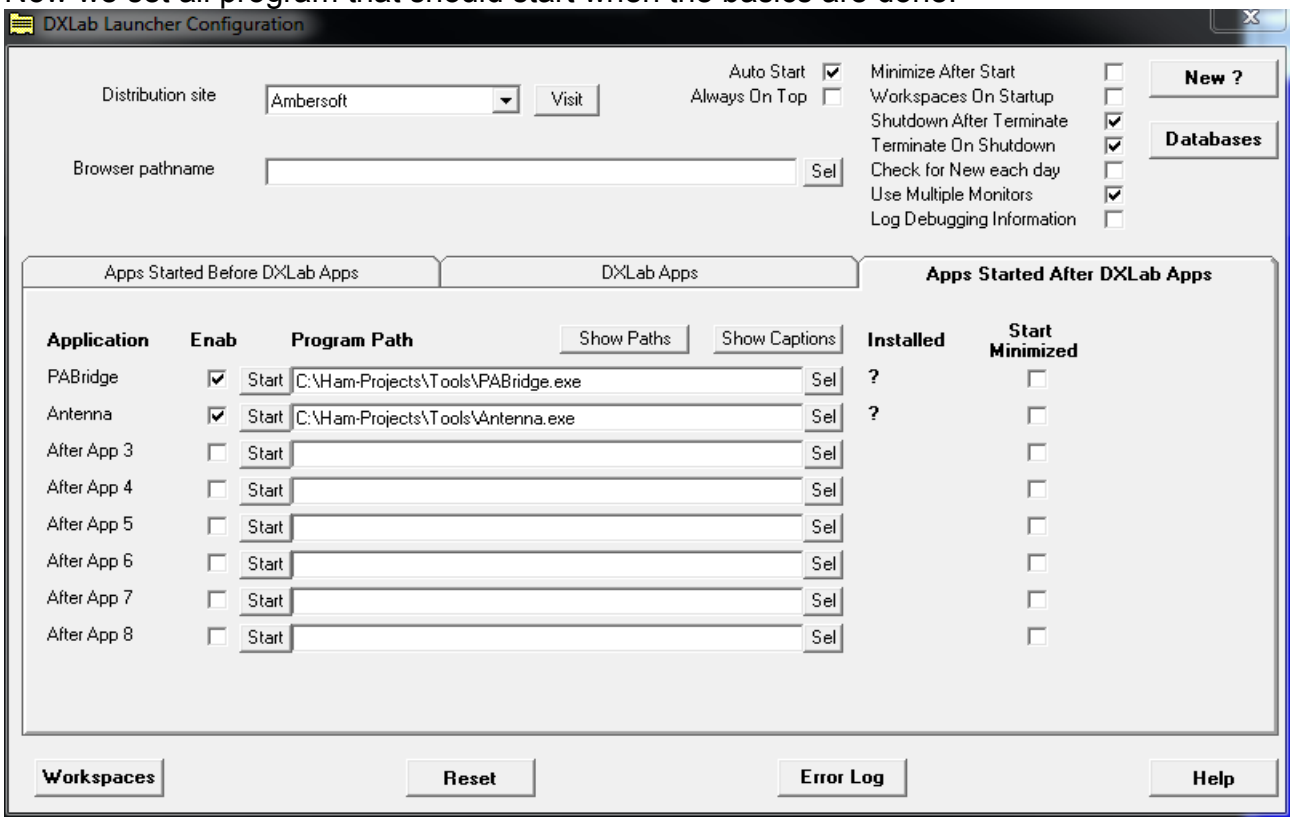
The secret lays – as always – in the config.
Here you can set all(=ALL) programs that must start before the DXLab Apps:



In the middle tab you find all Apps of DXLab-Suite



Now we set all program that should start when the basics are done:



Don't forget to set some switches (upper right) and now you start the whole bunch with one click at the Launcher!