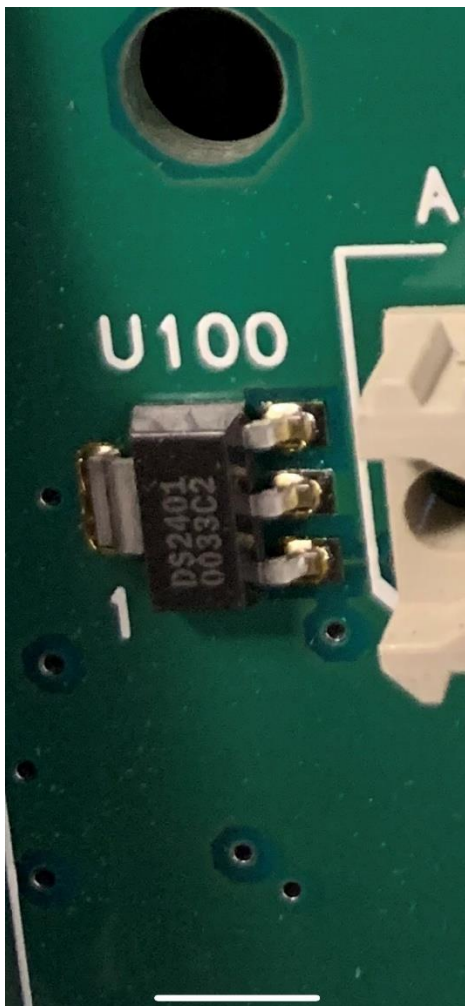


## Manual to change Station ID of Motorola MTR2000 for firmware upgrade via RSS.

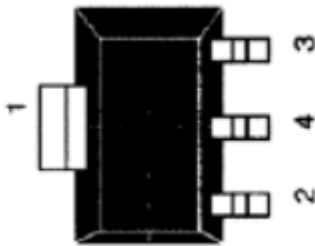
Every MTR2000 got an individual firmware package from motorola. It contains:

- mtr\_bpuid-file (containing Station-ID); file is not needed
- firmware-file (i. e. ocr30403.cmp)
- feature definition string-file (i.e. ocr30403.enc, individual file; needed to identify Serial-ID Chip U101 in MTR2000)

1. To use an firmware-file with feature definition string-file from another MTR2000 you have to save your codeplug first
2. You should install i. e. Oracle VM Virtual Box and Windows XP 32 bit in newer systems (tested even with Windows 11) and use an older RS232-USB-adapter, that will work under Windows XP (!!!)
3. Install Motorola MTR2000 RSS
4. Download the codeplug and save it! Take screenshots of every alignment data (!!!)
5. Install putty and create a serial connection to your MTR2000 with 9600 baud
6. Send commands (you'll see nothing during input!):
7. dorss <enter>
8. get bpn <enter>
9. write down your backplane number (you can also see it in RSS as station ID)
10. Remove Backplane cover

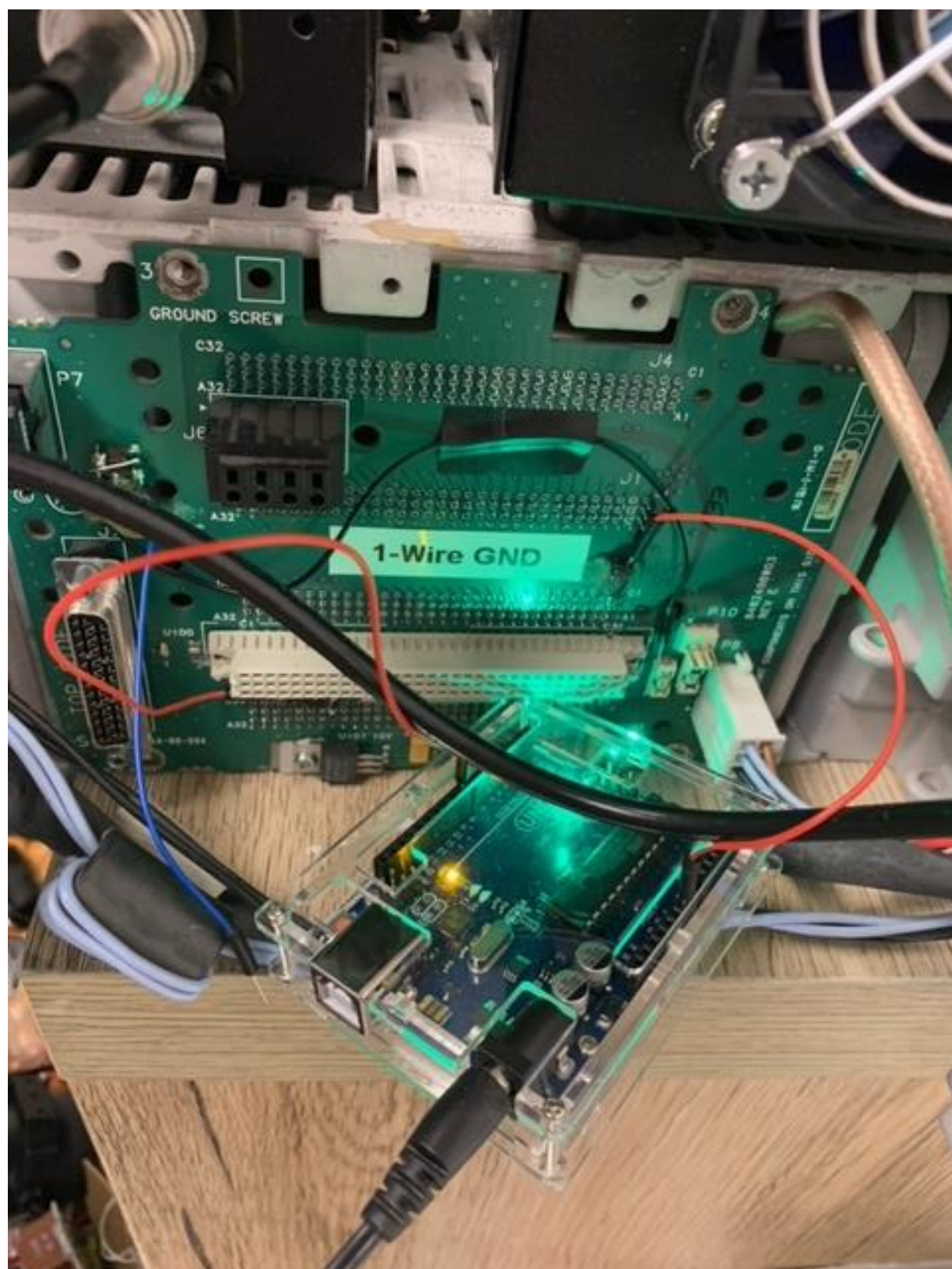


11. You can see „U100“ Dallas serial IC. Be careful and desolder it. You should install it later. Otherwise your repeater will work with Station ID „0000000“. If you destroy the connection of PIN 2 on PCB it's not so serious; you can find U100-connections on other place as well
12. Take an Arduino and connect it to your PC. You have to install Arduino IDE on PC. Load MTR2000-DS2401.ino sketch into Arduino IDE and integrate „OneWireHub\_library.zip“ in Arduino IDE as library as well
13. In MTR2000-DS2401.ino-sketch you can modify the DS2401 string: adapt all of the 4 positions
14. 0x01, 0x1C, 0x11, 0xF1, 0x08, 0x00, 0x00 (for Station ID 8F11111C); first 0x01 is family code, last two 0x00 are always 0x00
15. Connect pin 1 of U100 IC location on PCB to a ground-pin of Arduino Uno
16. Connect pin 2 of U100 IC location on PCB to PIN 8 of Arduino

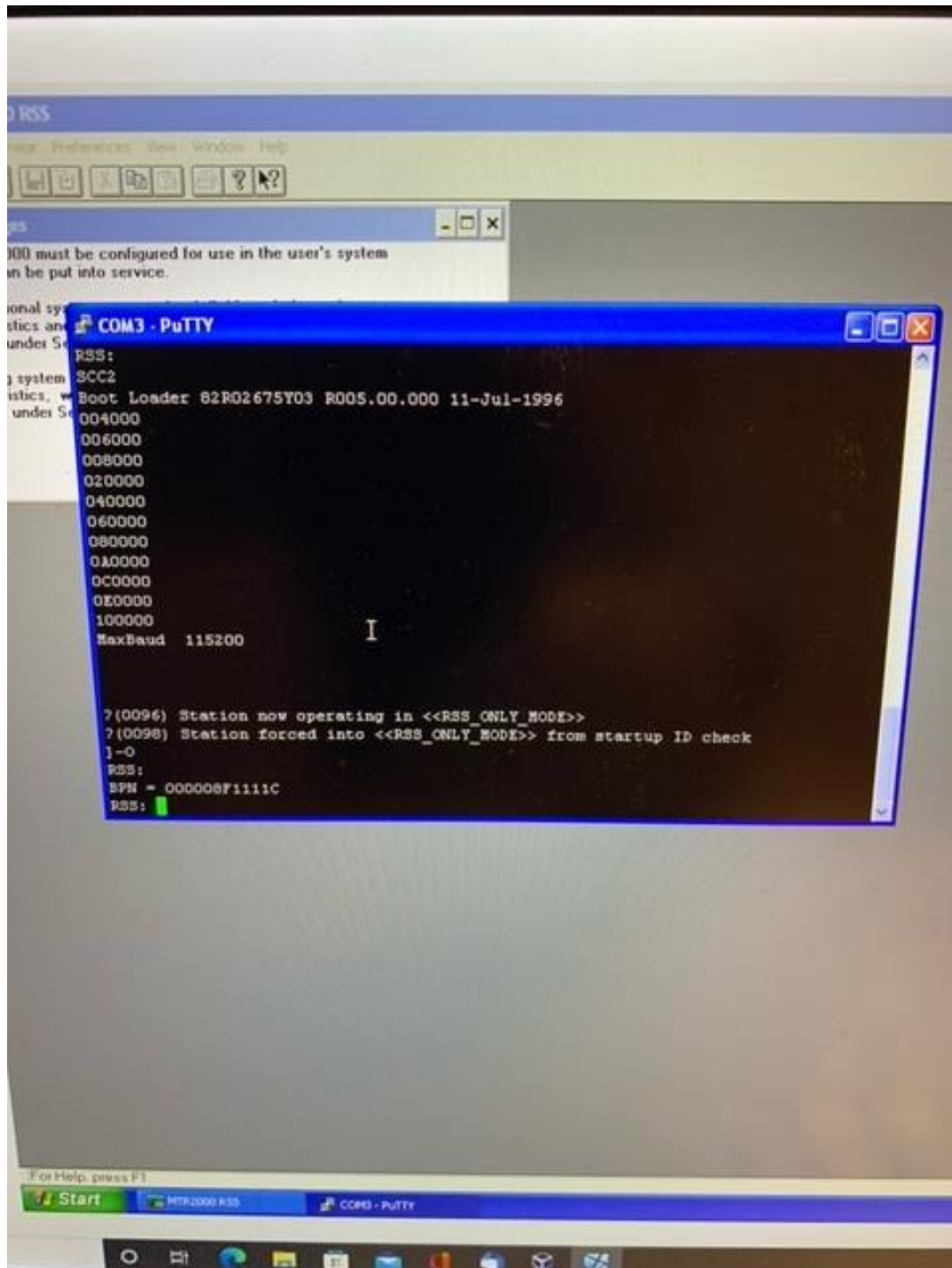


**DS2401 1-Wire Ground-pin: first line of 3rd connector, pin Nr. 2 from right**  
**DS2401 1-Wire signal-pin: first line of last connector, pin nr. 8 from left**





17. Disconnect Arduino from PC (!) and give it an external power supply; otherwise you'll have signal problem
18. Power up your MTR2000 again; MTR2000 should recognise your Arduino as DS2401 and load its station ID alias backplane number; You have to power down every time for more than 15 seconds that MTR2000 forgets the loaded bpn from ds2401 in controller and can load another bpn out of another DS2401
19. You can check actual station ID via Putty and serial commands  
dorss  
get bpn



20. You should see i. e. BPN = 000008F1111C
21. Load RSS and use upgrade function
22. You need firmware file .ocr and feature definition file .enc for Station ID 8F11111C in this example
23. After flashing firmware you can reinstall your DS2401 again
24. Reload your saved codeplug again and check alignment data from screenshots!

Good luck!!!

You should do that on your own risk only if you have to upgrade firmware or repair your MTR2000.

Station ID seems to be only relevant during firmware upgrade.

To unlock a locked MTR2000 just temporarily until next power cycle you can use the following commands via Putty:

dorss

hw\_id\_check\_off

reset