1. PURPOSE:

This document describes the procedure to successfully update the HMI (touch screen) software on a Tonewinder unit using a MAC PC (Apple). The problem with trying to update the touch screen software by saving the file to the micro SD card from a MAC is that when the card is inserted and the unit is switched on, the touch screen detects that there are several files on the micro SD card and does not update the software, when in fact there is only one file on the card.



Figure 1: Error displayed when you save the file with a MAC.



In some strange cases the screen can show that there is any TFT file in the micro SD Card.

Figure 2: Another kind of error using a MAC.



NOTE:

The usual procedure for updating the display software is described in section (6.5.6.7 Touch Screen Software Update) of the operator's manual. For this purpose, the use of a PC (with Windows operating system) is recommended.



Figure 3: Touch Screen software update instructions.

Only in case you can't use a PC for this task, you can follow this procedure.

2. <u>SCOPE:</u>

This procedure can be used to update the HMI software in every Tonewinder unit.



3. <u>REQUIERED PARTS:</u>

To carry out this procedure, you will need the following parts:

- 1x micro SD card (maximum 32 Gb).
- 1x MAC.

4. SOFTWARE VERSION:

For proper functioning of the winder, you need to have these software versions:

- Microcontroller ESP32 Software: 10.5 or higher.
- Touch Screen HMI Software: 10.5 or higher.

You can download both versions of software ESP32 and HMI from our website, www.tonewinder.es .

5. <u>UPDATE THE SOFTWARE:</u>

Due to the complex file recording system used by MAC devices a previous step must be taken to update the touch screen software., there are few options for this task. At Tonewinder, after some research, we have found three ways of doing this:

5.1. <u>Delete a Metadata file, with ".tft" extension :</u>

Basically you just copy the file the drive, then open the drive in the command line and remove the metadata file. Here you have the steps:

STEP 1: Open de command line and list the files inside the drive. For example, if the name of your drive is "NO NAME", you should write "cd /Volumes/NO\ NAME" to enter to the drive, and then write "Is –al", to list the files inside the drive:

	NO NAME — 100×30
dotto@rocinante ~ % cd /Volumes/NO\ NA dotto@rocinante NO NAME % ls -al	ME

STEP 2: Find the metadata file. It should be a file with the same name and extension as you recorded before, but almost no size:

dotto@rocina	an	te NO N	AME % 1:	s -al					
total 27264									
drwx@	1	dotto	staff	Θ	Sep	20	14:03		
drwxr-xr-x	5	root	wheel	160	Sep	20	14:00		
drwx	1	dotto	staff	16384	Sen	19	18:06	Spotlight-V100	
-rwx	1	dotto	staff	4096	Sep	20	14:03	HMI 10.7_ATC.tft	
drwx	1	dotto	staff	16384	Sep	20	14:00	.fseventsd	
-rwx@	1	dotto	staff	13885576	Sep	9	22:47	HMI 10.7_ATC.tft	

STEP 3: Remove the metadata file writing "sudo rm ._HMI\ 10.7_ATC.tft", and send the order:

dotto@rocinante NO NAME % sudo rm ._HMI\ 10.7_ATC.tft

STEP 4: List again the files inside the drive to verify that the metadata file has been removed, just writing "Is –al":

dotto@rocina	nt	e NO NA	AME % 19	s -al					
total 27232									
drwx@ 3	1	dotto	staff	Θ	Sep	20	14:04		
drwxr-xr-x	5	root	wheel	160	Sep	20	14:00		
drwx	1	dotto	staff	16384	Sep	19	18:06	.Spotlight-V100	
drwx	1	dotto	staff	16384	Sep	20	14:00	.fseventsd	
-rwx	1	dotto	staff	13885576	Sep	9	22:47	HMI 10.7 ATC.tft	

STEP 5: Once the file has been removed exit from the commands just writing "exit":



STEP 6: At this point, insert the sd card into the touchscreen and verify the software update process starts and completes successfully.

5.2. <u>Use a "Parallels" program:</u>

"Parallels" is a non-free program, which many MAC users have. This program generates an emulator of the Windows operating system on your MAC, and from this emulator it is possible to save the TFT file on the microSD card without the problems generated by the MAC file system. You can download a trial version for 14 day by free.



Figure 4: Parallels app.

- STEP 1: In MAC environment, format the micro SD card with FAT32 format. To do this, open the Disk Utility application, select the SD card, and click on "Erase", selecting the option to format in MS-DOS (FAT32).
- STEP 2: Download from our website the files for the software update (ZIP format) and unzip only the file with TFT extension on the MAC desktop. This file will be available on the desktop of the Windows emulator when we open it.
- STEP 3: Open the "Parallels" application, and once loaded, copy the file from the desktop (extension TFT) to the micro SD card, using windows explorer.
- STEP 4: Once saved on the micro SD card, you can remove it in safe mode and insert it into your Tonewinder unit, following the procedure described in the manual.



5.3. <u>Remote connection with us, using Anydesk:</u>

We found out that if you connect remotely from a Windows computer to another MAC computer, using the free application "Anydesk", you can transfer the file to the MAC, without the problems caused by decompressing and saving in the normal way with the MAC. Here you have the steps:

- STEP 1: In MAC environment, format the micro SD card with FAT32 format. To do this, open the Disk Utility application, select the SD card, and click on "Erase", selecting the option to format in MS-DOS (FAT32).
- STEP 2: Email us (info@tonewinder.es) and we will arrange a remote connection with you to carry out this work. Please give us a couple of time slots available to do this (please note the time difference with Spain). We will get back to you as soon as possible, setting a date and time.
- STEP 3: Before connecting remotely, you should download the free Anydesk application, and install it on your MAC.



Figure 5: How to download and install AnyDesk on MAC (Link)

- STEP 4: wait for us to connect to your MAC, and accept the permissions. Once the connection is made, we will transfer the TFT file you need for the update to your desktop. And then, save it in the micro SD card using a MAC
- STEP 5: Once saved on the micro SD card, you can remove it in safe mode and insert it into your Tonewinder unit, following the procedure described in the manual.



6. CONTACT FOR SUPPORTING:

If you face any kind of problem during this procedure, please contact us by email:

info@tonewinder.es