Manual name

V0.0.1_English

Revision history

Version	Description	Name (githubname)
V0.0.1	initial release • Created a layout and added the first chapters	Peter (traffic_light)
	Total working time: 02:35:39	

0 Introduction

Thank you for downloading this manual. We hope that this manual will help you to understand things like GIT, compiling your firmware, change you're marlin configuration and many more.

With this first release I hope that you guys understand what I'm trying to teach you. When you don't understand it, please send me a message with some hints and tips to make this manual better.

I hope you guys find this manual useful. Let me know what you think!

0.1 How to read this manual

This is just a short how to for now. This will be changed in the next release. This release is only for the layout and some text to see if you guys understand my writing style.

Okay. Now the how to read. In this manual you will sometimes find words you think: What is this word. To explain this, the first time this word will be found it looks like this: *difficult word*[romaine number].
Where [romaine number] indicates the location in the reference chapter.

At the end of this manual there is a reference for all these words, see *chapter **4 References** on page **10***. There is a small explanation what it means. When pressing the word you will be brought to this page.
When you click on the name (example: *difficult word)* at the reference page, it brings you back to where you came from.

When text in blue and is underlined, its a link. When you click this it will bring you to a websites.
Example: example text with URL *This is not a link*

0.2 Give feedback or submit idea's

To make it easy to see all feedback and idea's what should be in the manual you should use the issue function on GitHub.
See chapter ***1.4 Create issues on GitHub*** *on page **7*** for an explanation how to create an issue.

When creating an issue, for this manual, you should use the right tag:

- For new idea's use the idea tag
- For feedback use the feedback tag
- For faulty information use the Faulty information tag

Thank you in advance!

Table of Contents

1 Using GIT

In this chapter you will read how to download a *GIT*[I] repo[II], clone it to your computer and keep it updated. Some basic GIT commands and tools will also be explained.

In *chapter* ***2 Compiling your firmware*** *on page* ***8*** you can read how to compile the firmware (which you want to download after my explanation perhaps)

1.1 Download an repo from git via a website

Downloading the complete git repo knows two way's. The first one is via the website and the other one is through a *clone*[III] of the repo.

This chapter describes the way to do it via the website.
For cloning a repo and the benefits of doing this, see *chapter* ***1.3 Clone and update a repo*** *on page* ***6***.

> ***Note:*** The screenshots that are used in this manual are from GitHub. Other git websites may locate the things differently.

1.1.1 Download the complete repo

When you want to download an repo you have to be in the root of the project. In the root of the folder there is this a green button above the repo content on the right.
Pressing this button will open the menu to download the repo (*see* ***Figure 1 - Download menu git repo*** *on page* ***5***)
In this menu, press the button *Download zip* to download the complete repo.

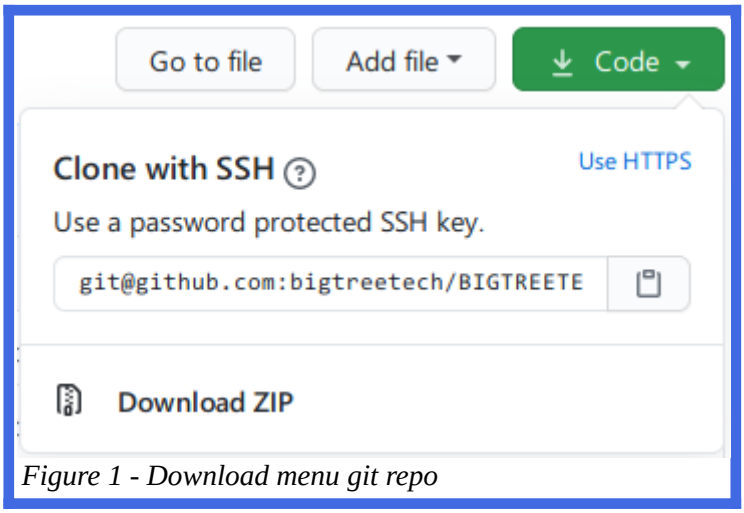

Figure 1 - Download menu git repo

1.1.2 Downloading a folder

Downloading a specific folder from git is not possible. The only way to do this is downloading the complete repro. *See chapter* ***1.1.1 Download the complete repo*** *on page* ***5***.

1.1.3 Download a single file

When you need just a single file to download browse to the file via git. You can do this by clicking the correct folders. When you've found the correct file, click on its name. Now you see the raw file.
There is a preview of the file. This only occurs when this is a known text, image or PDF file recognized by GitHub. When this is neither of them it will display the text "view raw".
To download the file, press the button Download int the upper right corner.
*See **Figure 2 - Download button single file** on page **5***

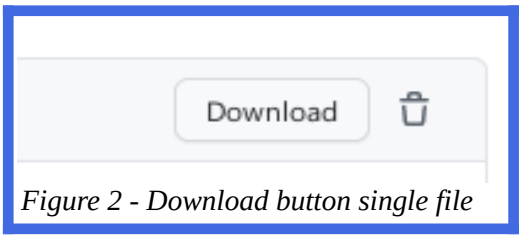

Figure 2 - Download button single file

1.2 Install git on your computer

There's a lot of programs you can use for downloading and maintain a repo on your computer, and if needed online. This chapter will describe two program types you can use. A more graphical way and a text based version.

1.2.1 Graphical git software - GitKraken

I've chosen to explain gitkraken as a graphical interface for downloading and maintain your git repo. The reason for the is the easiness of use and the possibility to use on Windows, Mac and Linux.

1.2.2 Command line version

The command line version is a more complex but, when you understand it, easy and fast way to download and maintain your git repo. The software we need is the original Git software.

1.3 Clone and update a repo

Cloning a repo from git is a little bit tougher then just download it from GitHub. But when you know how to do this it's pretty useful and can help you updating you're firmware without changing the default config.ini to your needs. This chapter will explain how to do it and in the end the benefits.

Please read chapter ***1.2 Install git on your computer*** *on page* ***6*** before reading this chapter.

1.3.1 Clone the git

- Go to the root of the repository you want to download
- Press the green button above the repo content on the right
- Copy the URL that's inside the text field

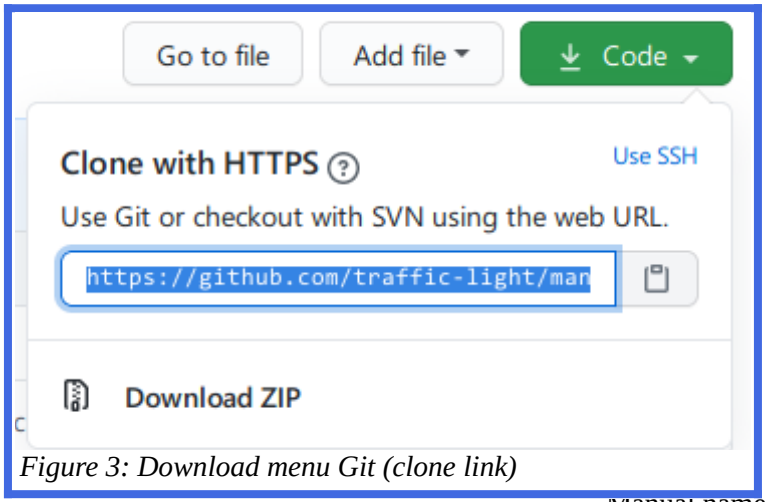

Figure 3: Download menu Git (clone link)

- Paste this link in you're preferred tool for cloning
  - Command line: git clone https://github.com/user_name/examplegit
  - Graphical interface:
- When cloning is done you will be notified

> ***Note:*** *There is also the possibility to use ssh (see the link in* ***Figure 3: Download menu Git (clone link)*** *"Use SSH"). Using SSH is only possible when you did setup SSH keys on you're computer and GitHub. This is out of scope for this manual and will not be explained here.*

1.3.2 Update you're clone

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1.3.3 The benefits

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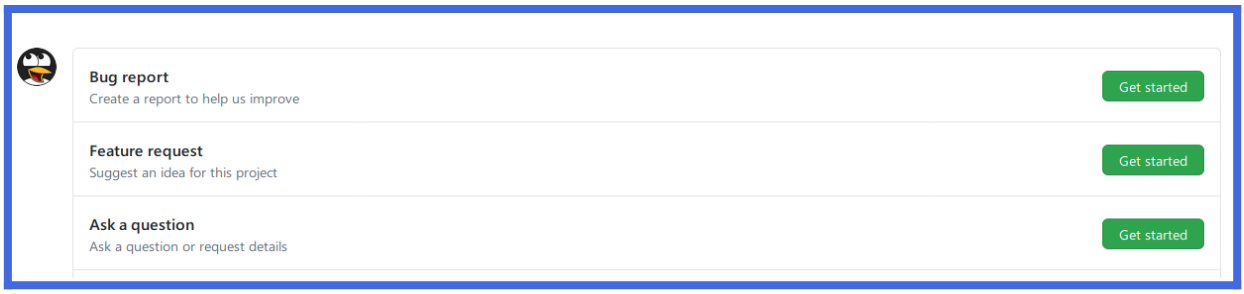
1.4 Create issues on GitHub

When you noticed a bug, have a question or a feature request for the git project, you can use issues. You can also do this for this manual 🙂
For making issues on GitHub you need a GitHub account. You can create one for free at GitHub.com
At the https://github.com you immediately see a form for creating a GitHub account.

- Go to the issue tab on the git repo you wan't to create one.
- Press the green button that describes "New issue"
- Most repo's have predefined labels for a issue. Choose the one that fit's what you want to do.
  For example:



- Use a title that describes your problem, question or whatsoever as short as possible
- Fill out the form with the things the repository want's to know
- Press the button "Submit new issue" at the end of the form toe create the new issue

> ***Note:*** *You can use markdown in you're message to make things more clear or whatsoever. For a small manual about markdown, see the special GitHub page.*

2 Compiling your firmware

When download the new firmware for you mainboard or TFT screen you need to compile it. When it’s done compiling it you can update it with the generated .bin file.
To do this you need to have vs code with platform io and the knowledge how to compile the software.

In this chapter this will be explained step by step.

2.1 Install vs code and platform io

1. Download VS-code from https://code.visualstudio.com/
2. Install it by opening the executable.
3. Install platform IO
4. This was it for now. I’ve got to switch to windows for it….

3 FAQ

In this FAQ you can find all Frequently Asked Questions on Facebook and GitHub. This FAQ is specifically made for bigtreetech and marlin related questions.

3.1 BTT's TFT screen related questions

Q When rotating the rotatory encoder the print speed changes. How to solve this?

Answer: This problem happens because the encoder is hard wired to mainboard. So every turn and click will be received by Marlin. When Marlin is in the home screen it will change the print speed according to the turns of the rotatory encoder movement.
At this moment there is no good solution for it. There is only a dirty fix. See issue #915 for the fix.
WARNING: When you click the wheel/ rotate the wheel this can bring unsuspected behavior, depending to the screen Marlin is in. Use with care!

Q Switching to Marlin mode is giving me a blue screen. What to do?

Answer: Check your ribbon cable connections to the TFT screen.
When this problem doesn't occur when first booting in Marlin mode, you should try rotating the encoder wheel. This way Marlin is forced to redraw the screen.

Q Touchscreen doesn't respond/ stay's in the "Choose mode" selection.

Answer: The screen is touching the frame where it's mounted in. Create more clearance in between the touchscreen and the frame where you mounted it.

Q uestions

Answer:

4 References

On the next page will be all references made in the main text. These reference try to make clear what a certain word means. With reading this references it could become easier to understand the main text.

Is there a word you don’t understand? Let us know

I **GIT**

This is a program that can manage big projects for you. There are many websites where you can host all you git-files. (GitHub, GitLab, bitbucket and many more).
For more information about git: https://en.wikipedia.org/wiki/Git

II **Repo**

This is just the shorten version of repository. In a repository you can find all the files needed.

III **Clone**

This is an option in git. It's possible to clone a repository to your local computer. See *chapter **1.3 Clone and update a repo** on page **6*** to learn how to clone a repository.