INSIDE
CELESTRON ® STARSENSE CONTROLLERS

STAR SENSE

STAR SENSE USB

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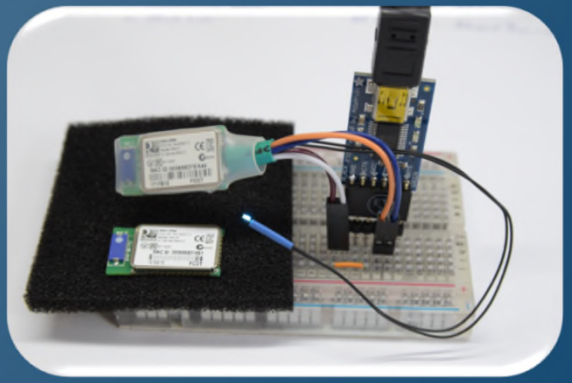
BLUETOOTH FOR TELESCOPE HANDCONTROLLERS



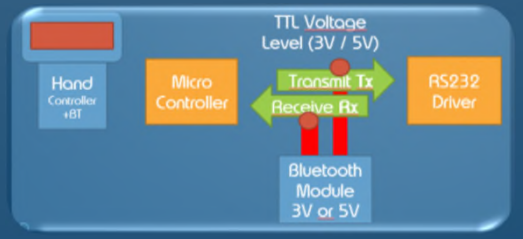
ALL INFORMATION, DOCUMENTS & VIDEOS

HANDCONTROLLER UPGRADE BIBLE

https://astro.marxram.de/handcontroller-upgrade-bible/

©Roland Marx

Version 1.0 (22.9.2018)



MY FREE APP:

SCOPE FRIEND

AVAILABLE @ GOOGLE PLAY STORE

Synchronize

Time

Date

Location

https://play.google.com/store/apps/details?id=de.marxram.astro.scopefriend

DISCALIMER

- This document is ment as a reference only
- It may also contain some errors like incorrect labels or voltages
- Please doublecheck if possible, check the electronic devices documentation, try to trace electricity (e.g. GND, VCC,…)
- To manipulate your Handcontroller may break it, or it's capabilities to communicate
- You should be experienced in soldering, before you start
- Everything you do, you do at your own risk!

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STAR SENSE

Important Facts

- 3V TTL Logic Levels
- Medium to upgrade

Display

Telescope Connector

12 -> 5 V
Voltage Regulator

12 -> 3 V
Voltage Regulator

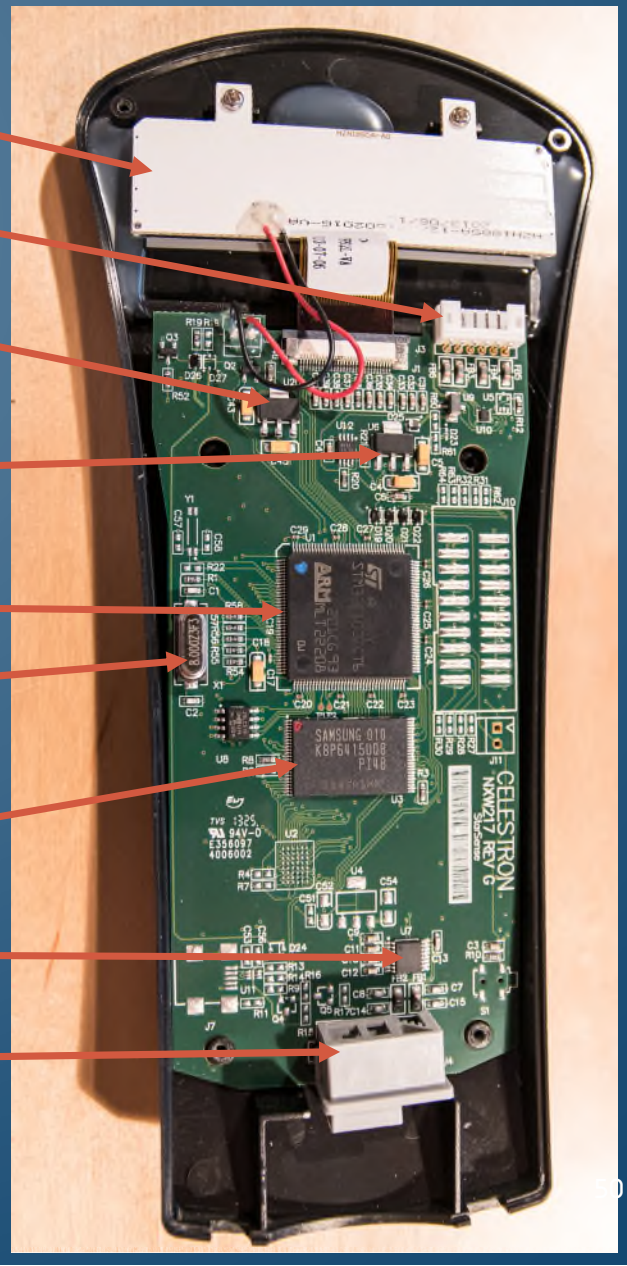
Micro-Controller

Crystal

Flash Memory

RS232 Driver

RS232 Connector



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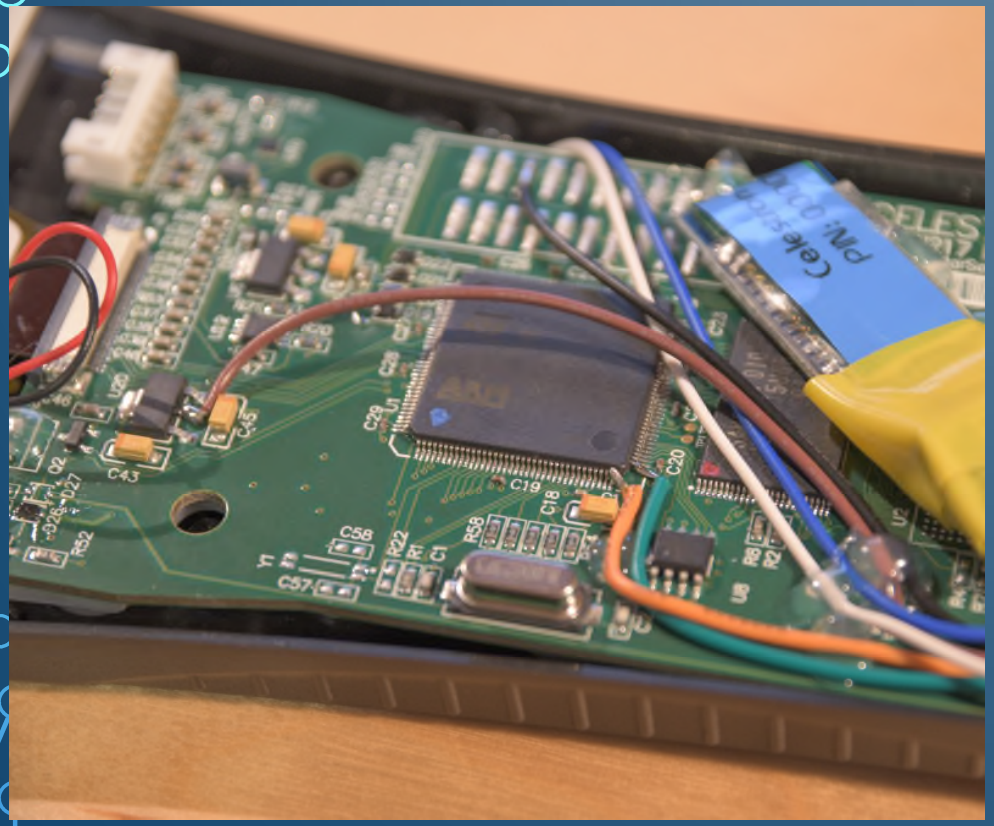
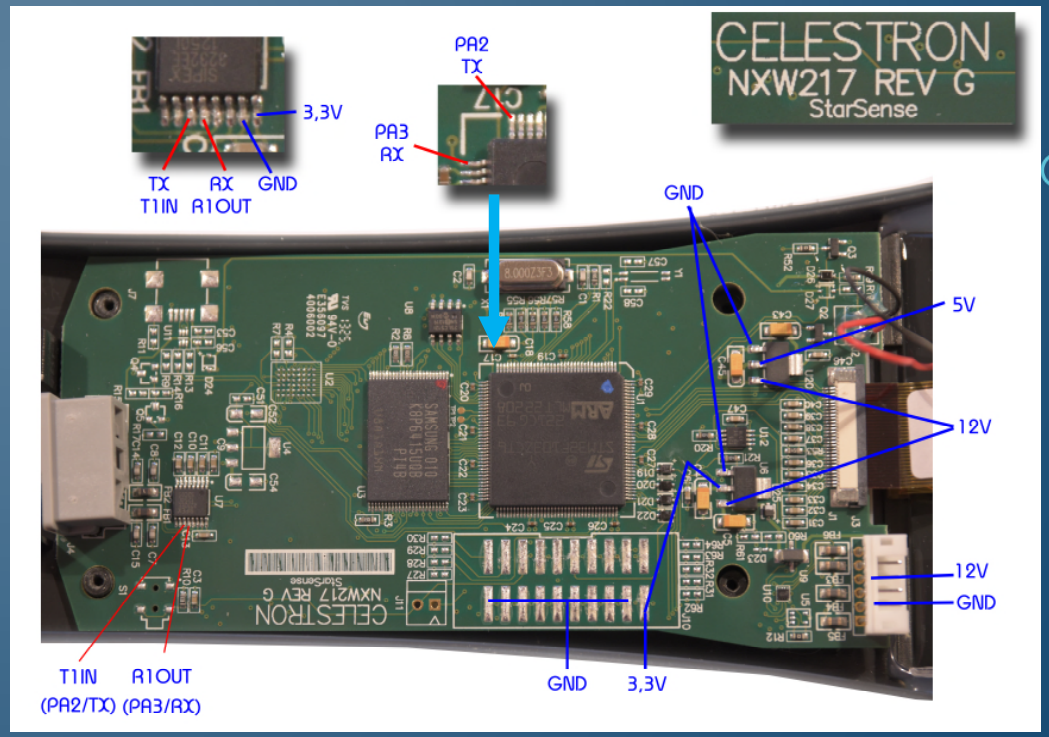
STAR SENSE




CELESTRON
NXW217 REV G
StarSense
3,3V
TX
T1IN
RX
R1OUT
GND
PA2
TX
PA3
RX
GND
5V
12V
12V
GND
T1IN
(PA2/TX)
R1OUT
(PA3/RX)
GND
3,3V

STAR SENSE USB

Important Facts

- 3V TTL Logic Levels
- Easy to upgrade

Display

Telescope Connector

12 -> 5 V
Voltage Regulator

12 -> 3 V
Voltage Regulator

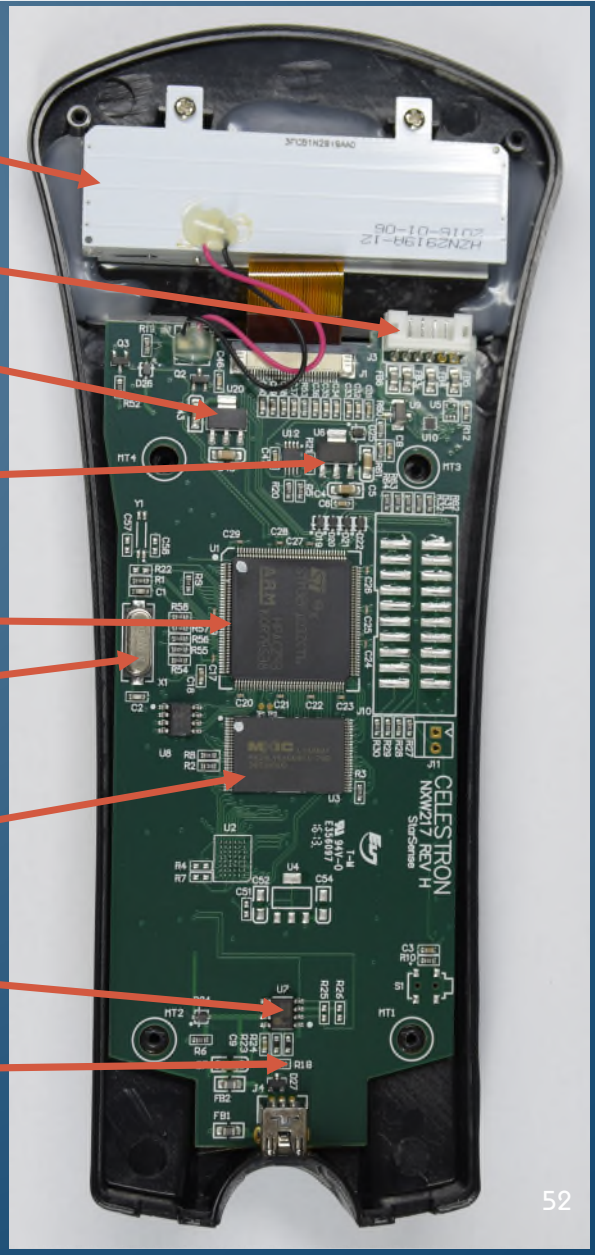
Micro-Controller

Crystal

Flash Memory

USB Driver

USB Connector



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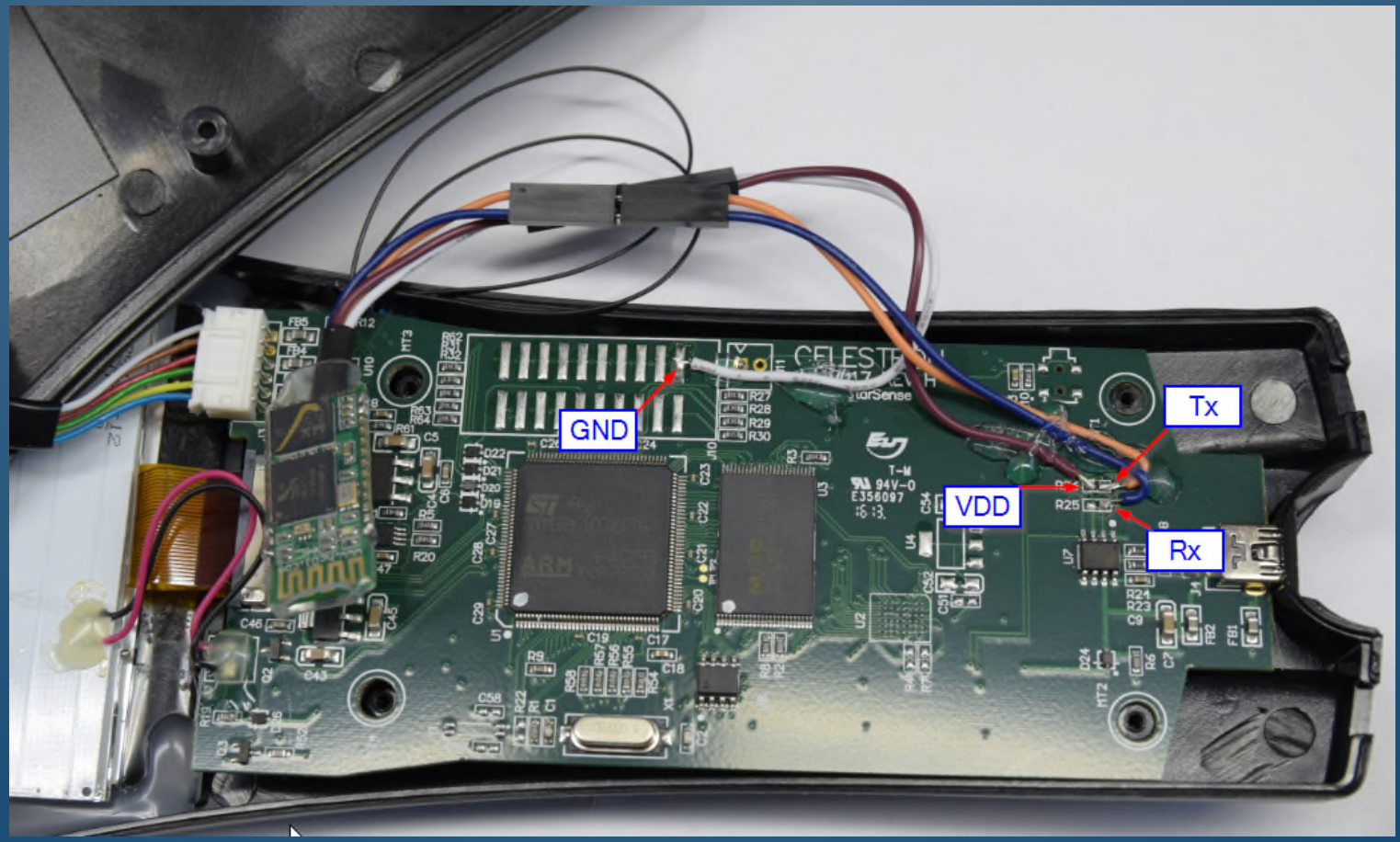
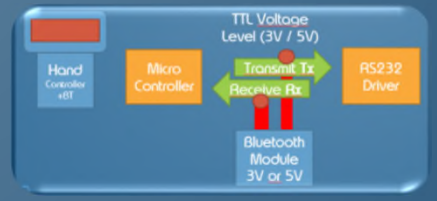
STAR SENSE USB ~ HC-05,RN41/42



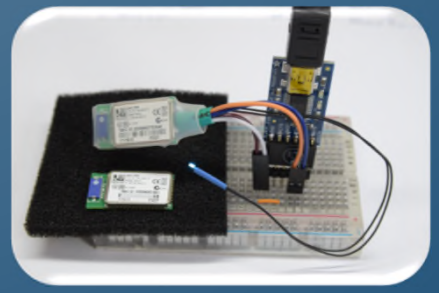
More Videos and Documents

https://astro.marxram.de/handcontroller-upgrade-bible/

1. General Information on Upgrading to BT



2. Bluetooth Modules
   - Specs
   - How to program BT Name, Pin ...
   - Status LED



3. Hand Controllers in detail
   - Skywatcher, MEADE, Celetsron
   - HowTo solder guide

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GOOD LUCK, CLEAR SKIES & THANKS FOR WATCHING

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http://youtube.com/c/AstroKanalMARXRAM

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PLEASE RATE & COMMENT

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