

Charger Diagnostic Tool

① Install the CDT software to Pc/laptop

②



Connect the USB-serial cable to the PC

③ Connect the USB-serial cable to the c-Go charger. **Please note the color sequence**



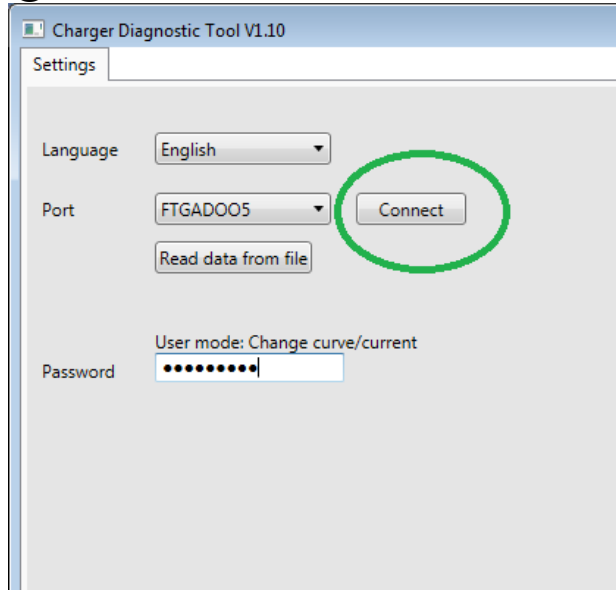
④



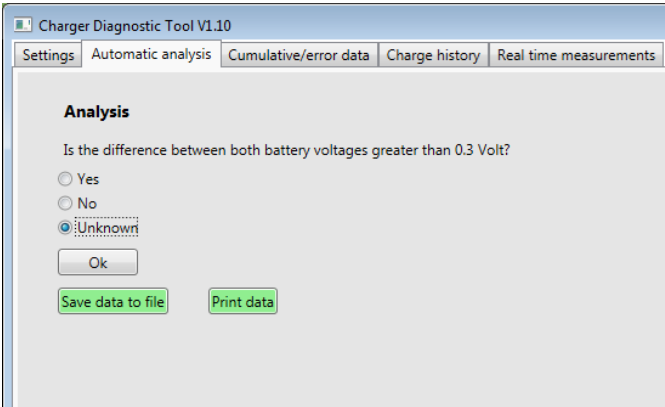
Connect the charger to the mains

⑤ Start the CDT software

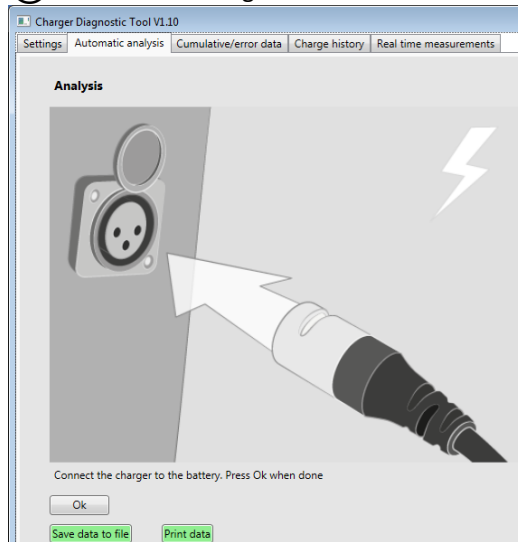
⑥ Select the port and click on Connect



⑦ Select the tab "Automatic analysis". Answer the question and click on Ok.



⑧ Connect the charger



9 The charger test lasts 1 minute. During the test the voltage and current is drawn in a graph.



10 After 1 minute the conclusions are displayed, containing warnings

Conclusions

Replace the charger

The user should charge after every use to prevent deep discharge

The user should not interrupt the charge

Condition of the battery is unknown

Save data to file Print data

11 Or without warnings

Conclusions

No problems detected at the charger

No user errors detected

Condition of the battery is unknown

Save data to file Print data

12 At the tab Cumulative/error data, the cumulative data and error history is displayed

Software version c-Go 24V,12A->10A B1.22 15122015 Nominal voltage 24V Max. current 12A

Power ups 8 Cycles started 31 Charged Ah 652 Charge current 10

Hours standby 230 Batt. disconnected 12 Deep discharges 8 Charge curve AGM

Hours charging 98 Mains disconnected 2 Contact problems 0 Voltage cal. value 4

Hours float 156 Cycles completed 17 Current cal. value 22

Error history

No.	CycleNr	ChgHours	Cycle time	Cycle state	Voltage	Current	U-PWM	Charger temperature	Error
1	22	98	6:12	Absorption	27.65V	0.00A	71.9%	51.9 °C	Control loop
2	22	98	0:00	Standby	25.60V	4.61A	0.0%	18.8 °C	Current offset high
3	22	98	0:00	Standby	9.73V	4.35A	0.0%	14.5 °C	Current offset high
4	23	98	0:00	Bulk	22.53V	0.22A	71.9%	20.1 °C	Control loop
5	31	98	0:00	Standby	10.24V	2.30A	0.0%	20.1 °C	Current offset high
6	0	0	--	--	--	--	--	--	--
7	0	0	--	--	--	--	--	--	--
8	0	0	--	--	--	--	--	--	--
9	0	0	--	--	--	--	--	--	--
10	0	0	--	--	--	--	--	--	--

Save data to file Print data Erase all data

13 At the tab Charge history up to the last 512 charge cycles are shown

Charger Diagnostic Tool V1.10

Settings Automatic analysis Cumulative/error data **Charge history** Real time measurements

No.	Ah	Cycle time	Voltage	Completed	Error
1	0 Ah	0:00	25.36 V	No	--
2	11 Ah	17:36	32.27 V	Yes	--
3	14 Ah	22:00	32.72 V	Yes	--
4	35 Ah	1d 0:12	29.39 V	Yes	--
5	25 Ah	2:28	29.33 V	No	--
6	24 Ah	6:00	29.39 V	Yes	--
7	26 Ah	4:56	29.39 V	Yes	--
8	16 Ah	3:16	29.39 V	No	--
9	43 Ah	15:24	29.39 V	Yes	--
10	20 Ah	2:00	29.14 V	No	--
11	70 Ah	14:16	29.39 V	Yes	--
12	19 Ah	15:24	29.33 V	Yes	--
13	57 Ah	17:36	29.39 V	Yes	--
14	63 Ah	15:24	29.39 V	Yes	--
15	12 Ah	16:28	29.39 V	Yes	--
16	8 Ah	12:04	31.89 V	Yes	--
17	25 Ah	13:12	31.57 V	Yes	--
18	51 Ah	14:16	29.39 V	Yes	--
19	40 Ah	16:28	29.39 V	Yes	--
20	11 Ah	8:12	32.21 V	Yes	--
21	24 Ah	13:12	31.89 V	Yes	--
22	59 Ah	6:00	29.33 V	No	Current offset high
23	0 Ah	0:04	18.00 V	No	Control loop
24	0 Ah	0:00	18.00 V	No	--
25	0 Ah	0:00	18.00 V	No	--
26	0 Ah	0:00	18.00 V	No	--
27	0 Ah	0:00	18.00 V	No	--
28	0 Ah	0:00	18.00 V	No	--
29	0 Ah	0:00	18.00 V	No	--
30	0 Ah	0:00	18.00 V	No	--
31	0 Ah	0:00	18.00 V	No	Current offset high
32	--	--	--	--	--
33	--	--	--	--	--
34	--	--	--	--	--

Save data to file
Print data
Erase all data
Save data to CSV file

14 If the correct password is entered at the tab Settings, the charge current and curve can be changed

Charger Diagnostic Tool V1.10

Settings Automatic analysis Cumulative/error data **Charge history** Real time measurements

Software version c-Go 24V,12A 2.10 20062017 Nominal voltage 24V Max. current 12A

Power ups 54 Cycles started 0 Charged Ah 0 Charge current 12A

Hours standby 2 Batt. disconnected 0 Deep discharges 0 Charge curve 12A

Hours charging 0 Mains disconnected 0 Contact problems 0 Voltage cal. value 11A

Hours float 0 Cycles completed 0 Current cal. value 10A

9A
8A
7A

Change curve/current

Charger Diagnostic Tool V1.10

Settings Automatic analysis Cumulative/error data **Charge history** Real time measurements

Software version c-Go 24V,12A 2.10 20062017 Nominal voltage 24V Max. current 12A

Power ups 54 Cycles started 0 Charged Ah 0 Charge current 12A

Hours standby 2 Batt. disconnected 0 Deep discharges 0 Charge curve Gel

Hours charging 0 Mains disconnected 0 Contact problems 0 Voltage cal. value Gel

Hours float 0 Cycles completed 0 Current cal. value AGM

AGM-IU
LiFePO4

Change curve/current