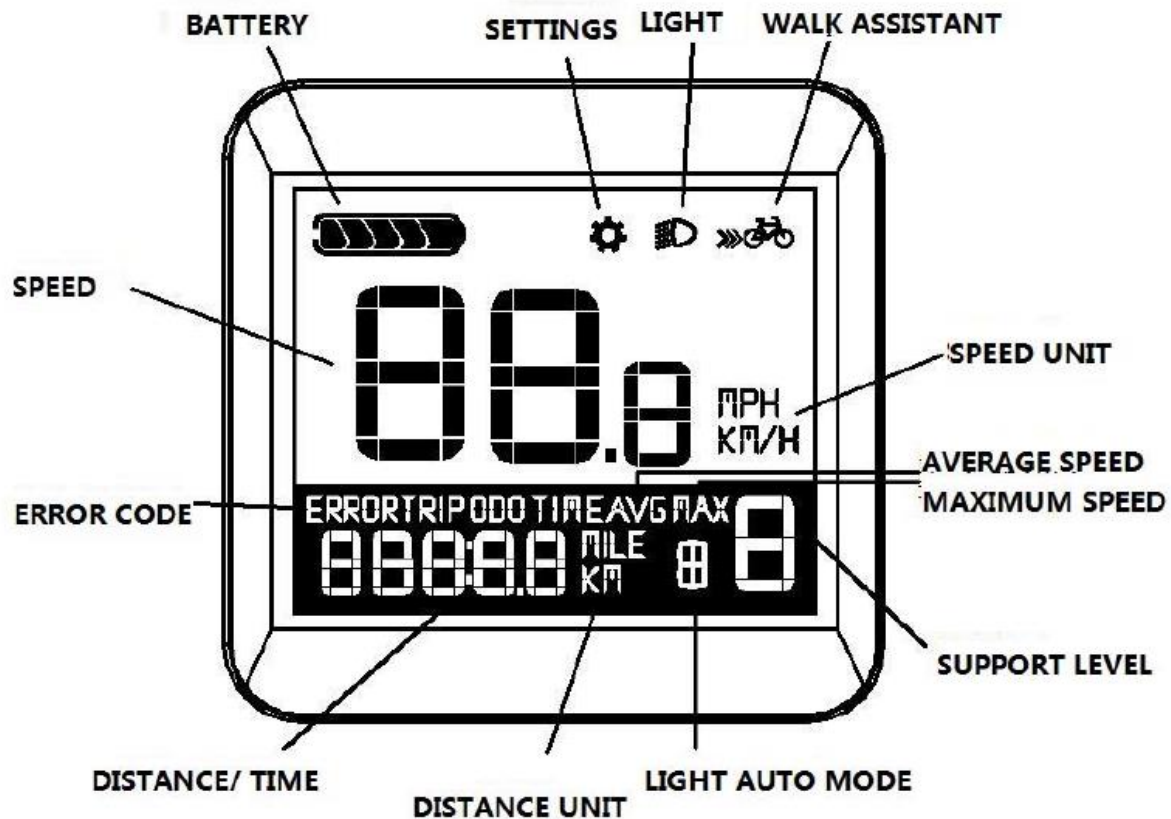# Reid E-Trail 2.0 Display/Control information

Ver 1.1 Nov 27 2022 by "raptordesigns"
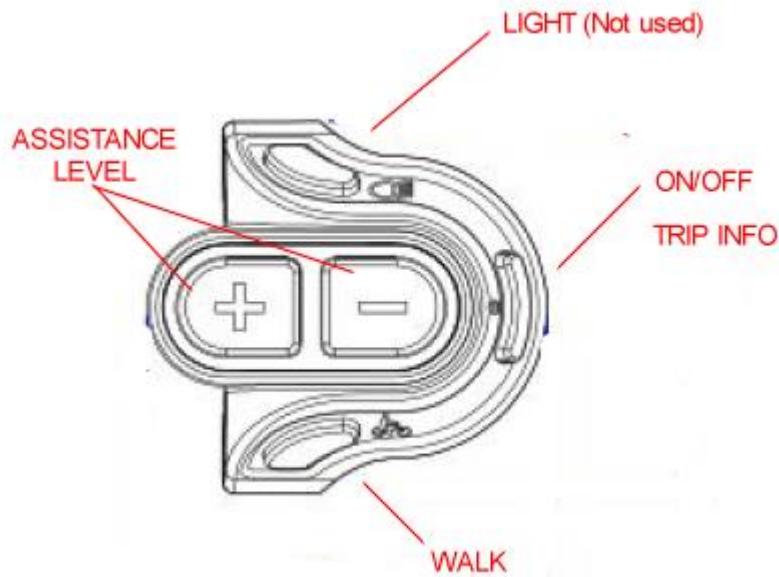
The Reid E-Trail uses the Ananda D10 display. This display has the following basic functions

- Battery remaining capacity level
- Speed（current, trip average, trip maximum）
- Distance（ODO distance/TRIP distance）
- Trip time
- Support levels (1-5)
- Light (Not installed as standard on E-Trail 2.0)
- 6km/h walk assistant
- Error codes
- Basic Settings: speed limit, backlight, speed/distance units
- Advanced settings: Battery voltage, software version, ambient light sensor
- Automatic backlight brightness (set by ambient light intensity)

Controls

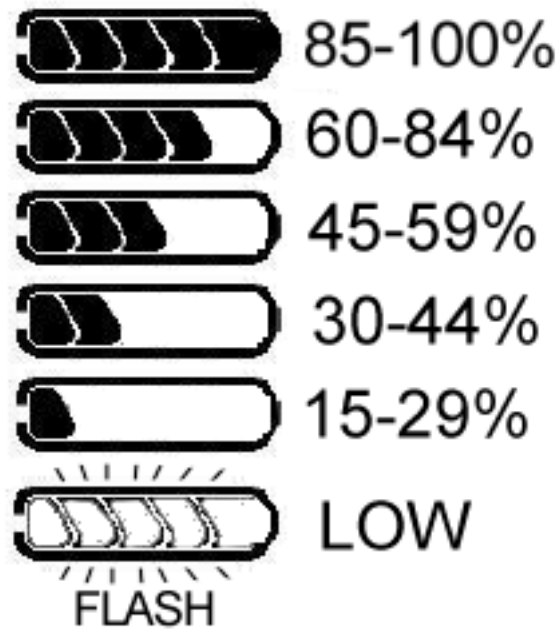The Control button unit buttons have the displayed basic functions. Buttons are also used during setting mode

⏻	**[POWER]**	Hold for 2 seconds to turn display on or off. Press briefly to display trip information (trip distance, time, maximum and average speed) on following screens.
⊕	**[+]**	Press briefly to increase assistance level between 1 and 5 (Always 1 on start-up)
⊖	**[-]**	Press briefly to decrease assistance level between 0 and 5 Press and hold to reset trip data (distance, time, max speed and average speed).
🚴	**[WALK]**	Press and hold to move bike forward at about 6km/hr
⧉D	**[LIGHT]**	Short press turns light on and off (No light supplied as standard). Press and hold to switch to and from Auto light mode (No significance without a light!)
⊕⊖	**[+]+[-]**	Press both together and hold to enter basic setting mode. In basic settings mode, press both together to enter advanced settings mode

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Battery level

The remaining battery capacity is roughly indicated by the bar graph as follows. Additional battery information (actual voltage) is available using Advanced settings.
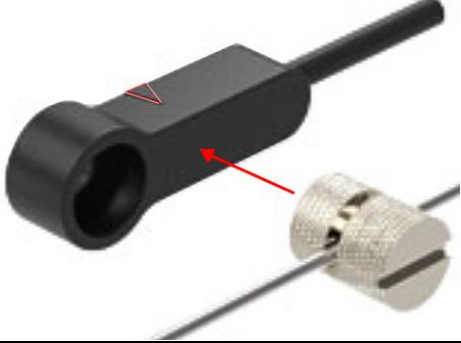
WARNING: prolonged use of the battery in LOW (under voltage) condition may cause damage. The bike should be switched to assistance level 0 or turned off and charged immediately.

Bar graph	Capacity
▰▰▰▰▰	85-100%
▰▰▰▰	60-84%
▰▰▰	45-59%
▰▰	30-44%
▰	15-29%
FLASH	LOW

Error Codes:

The following error codes are listed in various sources for the D10 display. Error code 28 is the most likely in normal operation.

Error code	Error type	Failure Solution
21	Abnormal current	Contact supplier
22	Throttle Error	Contact Supplier
23	Motor phase failure	Contact Supplier
24	Motor hall failure	Contact Supplier
25	Brake abnormal	Contact Supplier
28	**Speed Sensor Error**	**Check that the wheel magnet is correctly aligned. The magnet flat end should be opposite the raised arrow on the speed sensor, not the circular bulb.**
30	Communication	Check that the display connector is secure
31	POWER button stuck	Check button not fouled or stuck down.
32	Display voltage error	
33	Self-check failed	Contact Supplier
34	Walk Assist button sticky	Check button is not fouled/stuck

Settings

Note that the settings available are limited compared with other versions of the D10 display, as the firmware enforces the 25km/hr speed limit imposed by Australian E-bike regulations

Basic settings

With the bike stationary, turn on the display press and hold both the **[+]** and **[-]** buttons.

Press **[+]** or **[–]** to cycle between:

- Backlight brightness (1-3)
- Units (km/miles)
- Speed limit (from 12-25km/hr, 7.5-15.5mph)

Backlight   Speed/distance units   Speed Limit

Press **[POWER]** to adjust each setting when selected, use **[+]** or **[-]** buttons to change setting, press **[POWER]** to end and save the setting

Advanced Settings Menu

In Basic Settings, press and hold both the **[+]** and **[-]** buttons

When you get the "**PSd**" prompt to enter "**6262**".
Use the **[+]** or **[-]** buttons change digits up and down, and the **[POWER]** button to select the next digit.

Passcode

short press **[+]** button to switch between:
- Battery information (St1)
- Software version (St 2)
- Photosensitive threshold (St 3)

Press **[POWER]** to adjust/display each setting when selected, use **[+]** or **[-]** buttons to change setting, press **[POWER]** to end and save the setting

Battery Information (St 1)

(Note: Battery voltage should always be measured with the bike stationary.)
From the St1 display, short press **[POWER]** button to enter battery information mode.
In this mode, short press **[+]** or **[-]** to switch between the different battery displays.
Press **[POWER]** button again to exit battery information mode.

Code	Information
1b	Cycles
2b	Full charge % Cap
3b	Remaining % Cap
4b	**Battery Voltage see below**
5b …etc	Cell voltages (displays available but no data.)

Approximate capacity by voltage (generic 36V L-ion battery)

Charge %	Volts	Charge %	Volts
100	42.0	50	36.0
95	41.4	45	35.4
90	40.8	40	34.8
85	40.2	35	34.2
80	39.6	30	33.6
75	39.0	25	33.0
70	38.4	20	32.4
65	37.8	15	21.8
60	37.2	10	31.2
55	36.6	5	30.6

Battery Voltage

Software version (St2)

From the St2 display, press the **[POWER]** button to display the current software version. This may be useful if service is required.

Press **[POWER]** to exit this mode.

Photosensitive threshold setting (St3)

NOTE: If no headlight is installed this function is redundant.
Adjust this parameter to adjust the sensitivity of the automatic headlight function to ambient light. The higher the value is, the lower the sensitivity is.

From the St3 display, press the **[POWER]** button to enter the Photosensitive threshold setting mode.

Short press **[+]** or **[-]** to change the photosensitivity levels.
Press **[POWER]** to save the change and exit

LIGHT NOTES:

There is no light installed on the E-Trail 2.0, but there is a connector under the plastic motor housing for a light connection. Unfortunately, there is no cable running through the frame to allow easy connection of a light, and you would need to run a cable externally along the frame to use it.