

Drivermate-GPIO Interface Operating Instruction

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1. Introduction

In order that you can use this product more safely and get full play to its functions and features, please read the operating instructions carefully before using this unit and keep it properly.

Drivermate has many kinds of product models with different I/O interface for satisfying customized connection requirement, such as GPIO, UART,RS232, each model has its own operating instruction. You need get the right product model's operating instruction, please notice that this one is only for GPIO interface product model.

The GPIO interface product model has a flying cable with 5 wires: VDDIN, VDDIO, S0, S1, GND. You can access the fatigue data by picking up the S0 signal, while access the distraction data by picking up S1 signal.

2. Hardware Interface Define

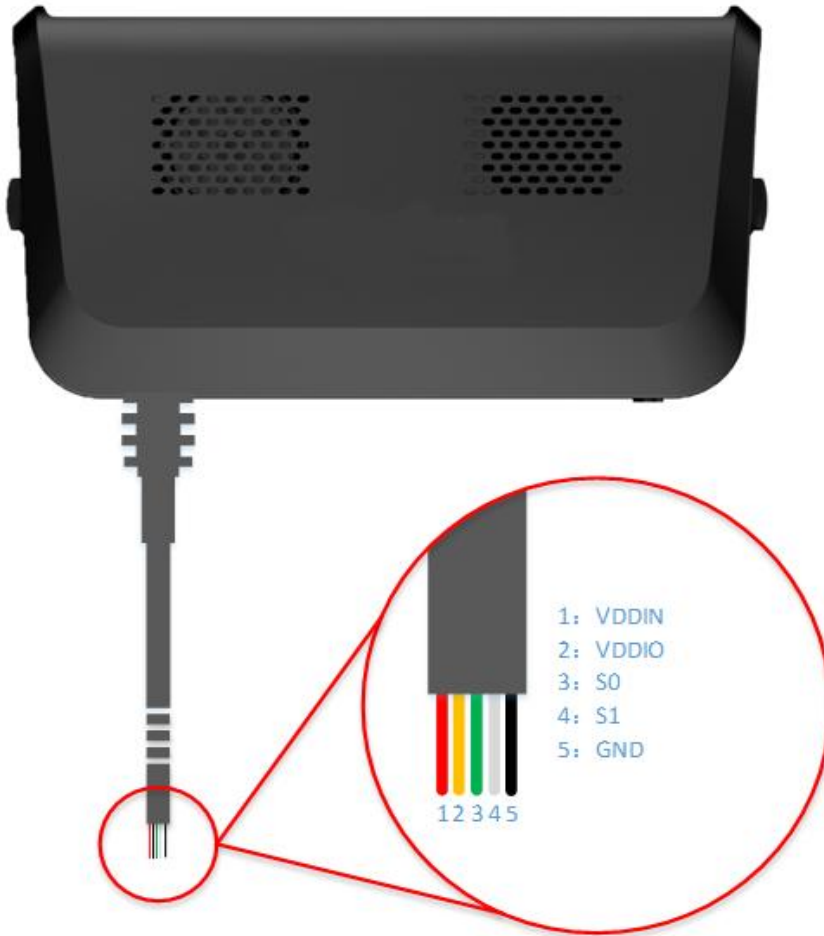


Figure 2-1, Hardware interface description

Pin #	Pin ID	Description	Symbol	Unit	Min	Typ	Max
1	VDDIN	Power supply for Drivermate	V_{DD}	V	7	12	24
			$I_{DD}(V_{DD}=12V)$	mA	300	400	600
2	VDDIO	Power supply for S0 and S1	VDDIO	V	4.8	5、12	18
3	S0	Low level: normal	S0_L	V	0	--	0.7
		High level: fatigue	S0_H	V	VDDIO-1	--	VDDIO
4	S1	Low level: normal	S1_L	V	0	--	0.7
		High level: distraction	S1_H	V	VDDIO-1	--	VDDIO
5	GND	Power ground		--	--	--	--

Table 2-1, Wire signal define

Symbol	operating	Unit	Min	Typ	Max
I_{OH}	$V_{OH}= (VDDIO-1)\sim VDDIO(V)$	mA	0.05	0.1	0.12
I_{OL}	$V_{OL}= 0\sim 1(V)$	mA	-50	--	-10

Table 2-2, Output clamp current (for S0 and S1)

3. Driver State Corresponding Output Description

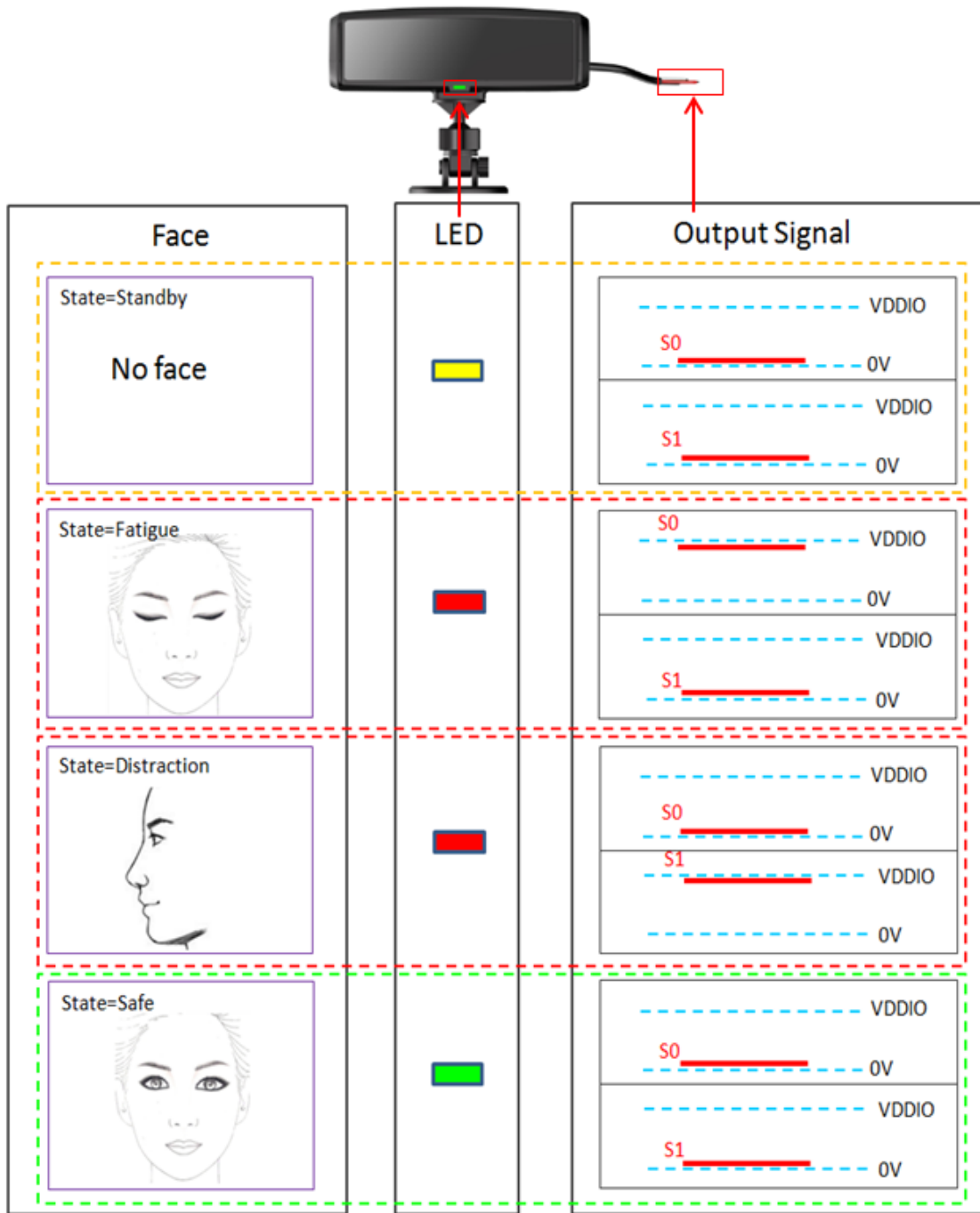


Figure 3-1, Driver state corresponding output description

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