LETIsmart By SCEN

Unione Italiana dei Ciechi e degli Ipovedenti ONLUS-APS

www.letismart.it

be abled

DATASHEET TAG SEMAFORO PULS. DNV2000 – P/N° 7V2475.66

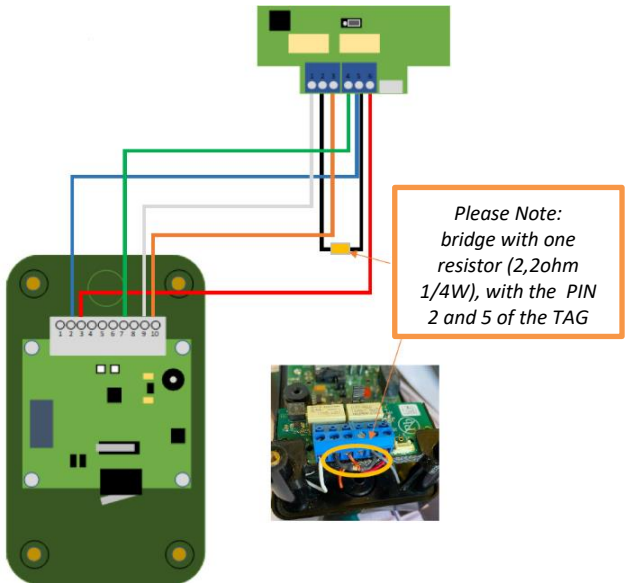
SAFE MOBILITY SCAE

DID YOU KNOW…

The TAG SEMAFORO is the device of the innovative LETIsmart system, that allows communication between sound traffic lights and the white cane, usually supplied to blind / visually impaired citizens, integrated by the LETIsmart VOCE system.
Bi-directional communication allows the user to receive audio information from the cane about the references of the pedestrian crossing and to INTERACT with the traffic light itself. Specifically, the system allows you to activate the directional sound of the device (LETIsmart TAG), to be guided to the exact crosswalk's point, and it provides the sound emission of green light WITHOUT looking for the pole and/or the button. It reduces the risks for the users to find themselves in the middle of the congested roadway and it cancels the time to look for the reservation button, avoiding getting dirty. The radio interface sends the encrypted communication on the 868Mhz LoRa band to make the system safe and it uses a dedicated protocol to avoid overlapping between the devices. The electronics is the result of a precise and in-depth engineering study, that has led to a significant miniaturization of the electronic circuit, in order to adapt it to the smallest mechanical boxes on sale, with zero visual impact and minimum size, without affecting its weight.

LAYOUT AND CONNECTIONS OF THE TAG SEMAFORO

Pin on TAG	Colour	Function	Connect to
1		Relay1	9 on the button control panel
2		Relaya1	5 on TAG with resistor
3		Relay2	10 on the button control panel
4		Relay2	7 on the button control panel
5		Alim-	2 on the button control panel and 5 on tag with resistor
6		Alim+	3 on the button control panel



Please Note: bridge with one resistor (2,2ohm 1/4W), with the PIN 2 and 5 of the TAG

SUPPORTED LANGUAGES

ITA GBR USA

ESP DEU FRA

RECOMMENDATIONS

- For a correct use it is required a proper training by a qualified Orientation & Mobility specialist
- Any replacement, updates, installation or maintenance must be carried out by an authorized LETIsmart service center by SCAE s.p.a.

TECHNICAL FEATURES

Power supply	**12Vdc (with peak protection)**
Energy consumption (stand-by)	**200mW (phrase transmission and waiting for VOCE commands)**
Energy consumption (active)	**600mW (active sound system)**
Radio connection	**Wireless LoRa**
Transmission band	**ISM – 868MHz**
Connector	**Screw terminal connector**
Relays technical features	**2A @ 30VDC, 0.3A @ 110VDC, 0.5A @ 125VDC**
Pulse timing Adviser activation	**Configurable**
Buzzer volume levels	**As SCAE's specifications**
Buzzer sound frequency	**2kHz**
Buzzer timing	**ON 1300ms, AT REST 300ms, 1900ms between series**
Traffic light reservation sound system	**Sound system integrated into the sound traffic light**
VOCE must be set in these modes to recognize the TAG	**- Urban information - Urban and commercial information**
Traffic light mode	**- Single traffic light crossing - Traffic lights group**
PCBA size and weight	**54,2x23,2x14 mm & 12gr**

COMPLIANCE

The manufacture is compliant with:

- **ETSI EN 300 220-1 V3.1.1 + ETSI EN 300 220-2 V3.1.1** for the radio transmission part (RED).
- **ETSI EN 301 489-1 V 1.9.2 + ETSI EN 301 489-3 V 1.6.1** for electromagnetic compatibility.
- Electromagnetic compatibility: **2014/30/EU**.
- **EN/IEC 62368-1:2014 + AC2015**.
- **EN 50385:2017**
- **IPC A 610 G Class III** assembly standards, ESD conformity CEI EN 61340 5 1, J STD 001 and J STD 033.
- **2015/863/EU RoHS III** (leadfree) Directive.
- **Reach 1907/2006/EU_reg453/2010/UE SVHC** art31 Registration, Evaluation, Authorization and Restriction of Chemicals.
- **Conflict Minerals Policy** Statement
- The TAG does not alter the characteristics of the traffic lights panels, which comply with the following standards:

CEI 214-7 e 214-7-VI; Legge n. 447 del 26/10/1995; DPCM del 14/11/1997; D.P.R. del 24/07/1996 n. 503 codice della strada; UNI EN 12368/2006