LA SEMAFORICA

TRACK 100/200

Special Vehicle Identification System

GENERAL CHARACTERISTICS

Track 100 and Track 200 are vehicle identification systems designed for the control and priority of public means of transport, buses, and any other vehicle that needs priority on a traffic lights installation.

Track 100 is a single frequency system, while Track 200 can work with four different codes of frequency, giving four possible identifications both for receiver and for transmitter modules.

Transmitter module is installed inside the vehicle and supplied by vehicle battery.

Receiver is connected to an inductive loop spire placed under the road surface: the loop interacts with the transmitter through inductive action.

The working mode is simple: the transmitter sends a lowpower message that is picked up and controlled by the receiver which supplies an output signal.

This system allows for identification of vehicles fitted with the transmitter device, while unequipped vehicles are ignored by the receiver.

IMPLEMENTATIONS

- Traffic priority systems
- Selective entrances
- Industrial automations

In order to offer the best possible service, La Semaforica reserves the right to modify at any moment and without any warning the features of the products described in this document. This document has the only purpose of illustrating the products. If you need detailed technical data, please do not hesitate to contact us.

TRANSMITTER

The Transmitter Track 100 and Track 200 is studied for an easy connection to the frame of any vehicle and can operate with any environmental condition, even the most difficult.

The power produced is considerable low and therefore regular concerning radio emission.

Output signals are in function of the frequency used, and it is possible to enable them connecting or disconnecting the operating frequency.

RECEIVER

The Receiver receives and controls the signal emitted by the transmitter. If it receives the signal within the inductive field, the receiver will supply an exit signal for the whole period of vehicle presence.

The receiver is able to classify 4 different codes, as additional controls have been foreseen for each frequency.

TECHNICAL DATA

Transmitter	
Track 100	Single code (one frequency)
Track 200	Multiple codes (four frequencies)
Transmitter frequency	133 KHz (long term stability)
Method of code selection	Through single frequencies 1847 Hz 1511 Hz 1279 Hz 1108 Hz
Frequency selection	4 external wire combinations (only for Track 200)
Power supply	11 - 40 Vcc @ 10mA
Mechanical details	
Dimensions	Cone shaped base Ø 85 mm, height 87 mm
Material	Polypropylene
Mounting	Single bolt Ø 20 mm
Connection	Connected cable
Detection speed	0 -120 km/h
Detection height	0,1 - 2,0 meters
Operating temperature	-10°C +70°C

Receiver	
Track 100	Single code (one frequency)
Track 200	Multiple codes (four frequencies)
Loop tuning range	10 - 1000 µH
Sensitivity	3 steps (MAX, NORM, MIN)
Receiver frequency	133 KHz
Output interface	1 relay for each code
Indications	Receivers are provided on the front side of: - 1 green LED (indicating the starting up) - 1 red LED (detector) - 1 red LED for each frequency and channel
Protection	Insulated loop and a protecting zener diode at loop input
Output relay	6 A @ 250 V c.a.
Mechanical details	
Dimensions	H 113 mm W 56 mm D 127 mm
Connector	Single on the back side with 11 pin (86CP11)
Coils lenght	MAX 300 mt
Operating temperature	-10°C +70°C
Circuit	Non condensing circuit

LA SEMAFORICA
Via Ponticello, 17 - 35129 Padova (PD) - ITALY
+39 049 773055 +39 049 8074002
www.lasemaforica.com info@lasemaforica.com