

# TRACK

BASED ON INDUCTIVE LOOP TECHNOLOGY, TRACK SYSTEMS ARE SUPERIOR VEHICLE IDENTIFICATION SYSTEMS DESIGNED TO IDENTIFY PRIORITY-MOVING VEHICLES.

BY FIXING THE DURABLE, WATER RESISTANT TRANSMITTER TO THE CHASSIS OF THE VEHICLE, AND CONNECTING THE RECEIVER TO THE CONVENTIONAL LOOP BURIED IN THE ROAD SURFACE YOU ARE ABLE TO IDENTIFY VEHICLES AT HIGH SPEED WITHOUT ANY PERFORMANCE IRREGULARITIES.

AS THE VEHICLE PASSES OVER THE ROAD LOOP, THE TRANSMITTER TRANSMITS A LOW POWER SIGNAL THAT IS RECEIVED AND VERIFIED BY THE RECEIVER, WHICH IN TURN RESPONDS WITH THE APPROPRIATE OUTPUT.



## TRACK

### AUTOMATIC VEHICLE IDENTIFICATION

Available in two forms - Track100 and Track2000, the Track 100 system works on the basis that all the transponders have the same code, while the more advanced Track 2000 system incorporates unique coding, enabling the individual identification of specific vehicles. Both receiver types are capable of reading the transmitters at a height of up to 1m above the loop, therefore making Track appropriate for heavy articulated vehicles with higher than normal road clearance.



T100-TX

T100-RX

#### Track100

##### Transmitter

- Uses a batch code system i.e. one code per system
- Small rugged water resistant units, suitable for the harshest environments
- Easily attached to vehicles
- Powered by vehicle battery

##### Receiver

- Works at speeds of up to 120kph
- Responds with a control output. The output of the receiver may be used, for example to automatically open a barrier or gate or allow priority in a traffic control situation
- On sensing a valid transmitter within the loop field the receiver will continue to provide a relay output for the duration of the vehicle presence
- Unequipped vehicles are ignored by the receiver

#### Track2000

##### Transmitter

- Track2000 has unlimited number of pre-programmed unique transmitter codes to identify and prioritise vehicles
- Small rugged water resistant units, suitable for the harshest environments
- Easily attached to vehicles
- Powered by vehicle battery

##### Receiver

- Identify vehicles at speeds of up to 180kph
- Capable of processing an unlimited number of pre-programmed transmitters codes
- Outputs the code in one of the standard industry formats of Wiegand, RS232 or clock & data
- Serial communications facilitates automatic data collection for optimised access management

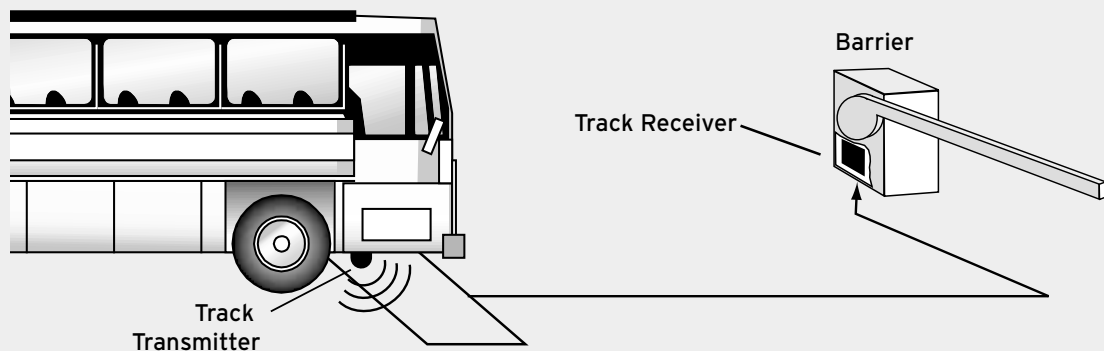
#### Applications

- Traffic priority e.g. ambulances, buses, fork truck
- Selective access e.g. airports
- Industrial Automation e.g. automatic roller shutter doors
- Vehicle Access Control e.g. distribution centres, car rental depots



# TECHNICAL SPECIFICATIONS

## Typical Configuration for the Track



Receiver									
Track100:	Single code per system								
Track2000:	unlimited codes								
Loop tuning range:	10-1000uh								
Receiver frequency:	133 kHz (carrier)								
Output configurations:	Track100: one relay per code Track2000: Serial Output: (RS232, Weigand, Clock & Data)								
Indications:	<table border="0"> <tr> <td>Track100:</td> <td>Track2000:</td> </tr> <tr> <td>1 Green on (run) LED</td> <td>1 Red power indicator</td> </tr> <tr> <td>1 Red detect LED</td> <td>1 Yellow detect indicator</td> </tr> <tr> <td>1 Red code LED per channel</td> <td>1 Green valid code indicator</td> </tr> </table>	Track100:	Track2000:	1 Green on (run) LED	1 Red power indicator	1 Red detect LED	1 Yellow detect indicator	1 Red code LED per channel	1 Green valid code indicator
Track100:	Track2000:								
1 Green on (run) LED	1 Red power indicator								
1 Red detect LED	1 Yellow detect indicator								
1 Red code LED per channel	1 Green valid code indicator								
Protection:	Loop isolation transformer and zenor diode clamping								
Power requirement:	Track100: 24V DC +/- 10% Track2000: 24V DC +/- 10% 2,4VA max@ 24V DC.								
Operating temperature:	-10°C to 70°C (circuit sealed against condensation)								

Mechanical Detail	
Material:	High Heat ABS blend
Dimensions (mm):	Track100: 113 x 56 x 127 (H x W x D) Track2000: 76 x 40 x 78 (H x W x D)
Mounting:	Track100: Shelf Track2000: Shelf or DIN-rail socket
Connectors:	Single rear mount II-pin submagnal (86CP11)

Transmitter	
Track100:	Single code system per unit
Track2000:	Unlimited codes
Transmitter frequency:	133kHz (carrier)
Coding method:	Track100: Batch Code Track2000: Unique code per transmitter
Method code selection:	Track100: Factory Preset Track2000: Factory Preset
Power supply:	Track100: 11 - 40V DC @ 10mA Track2000: 11-40V DC (1 VA @ 24V DC)
Environmental protection:	Sealed - waterproof
Operating temperature:	Track100: -10°C to + 70°C Track2000: -40°C to + 80°C

Mechanical Detail	
Material:	Polypropylene
Dimensions (mm):	Cone shaped - 85 x 87 (D x H)
Mounting:	Single bolt Track100: 20mm hole Track2000: 22mm hole
Connection:	Integral cable - 2 core
Reading speed:	Track100: 0-120kph Track2000: 0-180kph
Reading height:	up to 1.2 meters (refer to user manual)

Order Information	
T100/TX:	Single Code Transponder, vehicle chassis mount with bracket
T100/RX:	Single code receiver
T2000/TX:	Multi- code transponder, vehicle chassis mount with bracket
T2000/RX:	Multi-code Receiver
T100-BR	Track transponder chassis mounting bracket

## Supplied By:

Nortech Control Systems Ltd  
42 Llantarnam Business Park  
Cwmbran, South Wales, UK, NP44 3AW  
Phone: +44 (0) 1633 485533  
Fax: +44 (0) 1633 485666  
email: info@nortechcontrol.com  
web: www.nortechcontrol.com

