

## NCT200 Four-Channel Counting Module

### Product Description

The NCT200 is a four-channel counting module that is designed to form part of a count management system. One or more NCT200 modules can be connected to the server PC of Nortech's count management software (Stadium Venue Counting System or NorParc).

NCT200 modules can be networked to the count management server via either RS485 or TCP/IP. Each NCT200 can drive multiple Variable Messages signs with up to eight count values using an RS485 bus. All count values displayed on the signs can be controlled centrally from the count management software, together with the state of up to eight alarm outputs per NCT200. The alarm outputs can be used to operate Space/Full signs, traffic lights or other external indicators as necessary.



### Features

- ▶ Provides up to 4 individual counters for recording the number vehicles or personnel entering or leaving a controlled area
- ▶ Each counter can count record values between -32500 and +32500
- ▶ Both increment and decrement inputs (up to 4 of each, depending upon configuration)
- ▶ Each counter can be individually configured to count up or down
- ▶ Alarm and Pre-alarm outputs when counts reach preset thresholds
- ▶ Drives up to four individual Variable Message Sign count values
- ▶ Drives up to eight individual Variable Message Signs when linked to count management software
- ▶ Can be programmed directly using a full numeric keypad and 2-line x 16-character LCD
- ▶ Can be managed remotely via an RS485 network
- ▶ Each counter can be reset to a predetermined value via a general reset input
- ▶ A time can be set when all counters will be reset to their predetermined values each day

### Specifications

#### Electrical

Supply voltage: 12 - 24V DC  
 Current reqt.: 100 mA quiescent, up to 230mA while all alarms are active

#### Physical

Display: 2 lines x 16 character LCD  
 Keypad: 12 button membrane. Keys 0 to 9 plus 'Program' and 'Enter'  
 Dimensions (mm): 190 x 130 x 43 (H x W x D)  
 Cable termination: Plug-in screw terminal blocks

#### Environmental

Operating temp: 0°C to 40°C  
 Storage temp: -20°C to 70°C  
 Relative humidity: 95% non-condensing

#### Capacity

Counting capacity: 4 counters, each counting up to 32500

#### Inputs

Count inputs: 4 counter increment inputs and 4 counter decrement inputs (clean contact pulse)  
 Master count reset: Single input to set all counters to their reset value (clean contact pulse)

#### Outputs

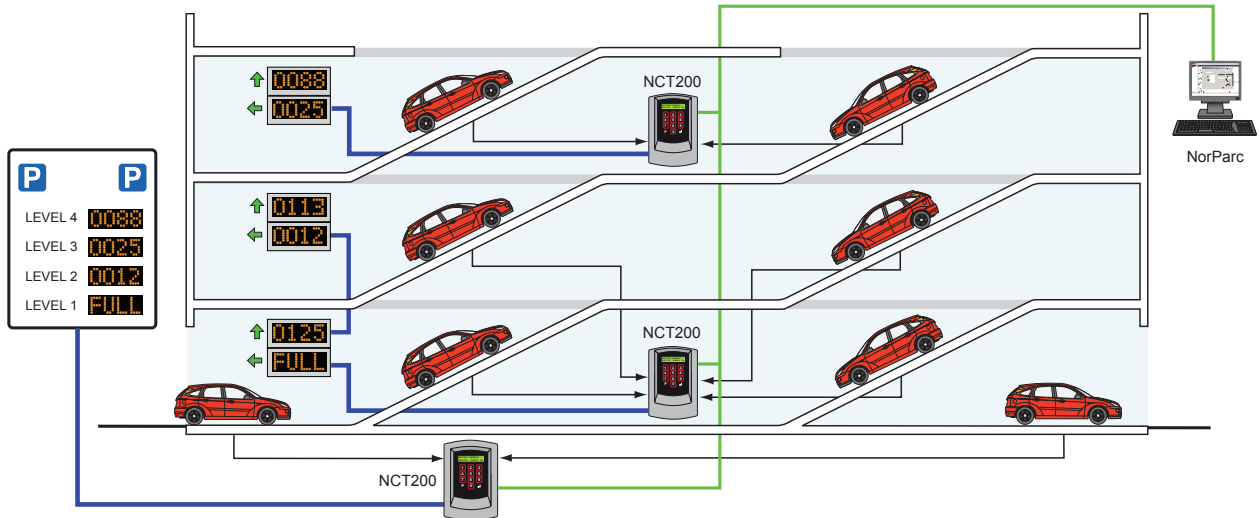
Alarm outputs: 2 independent voltage free changeover relays (2A, 30V DC) plus 2 open collector outputs  
 Pre-alarm outputs: 4 open collector outputs.  
 Message signs: RS485 communications port supporting 8 node addresses (8 individual count values)

#### PC Communication

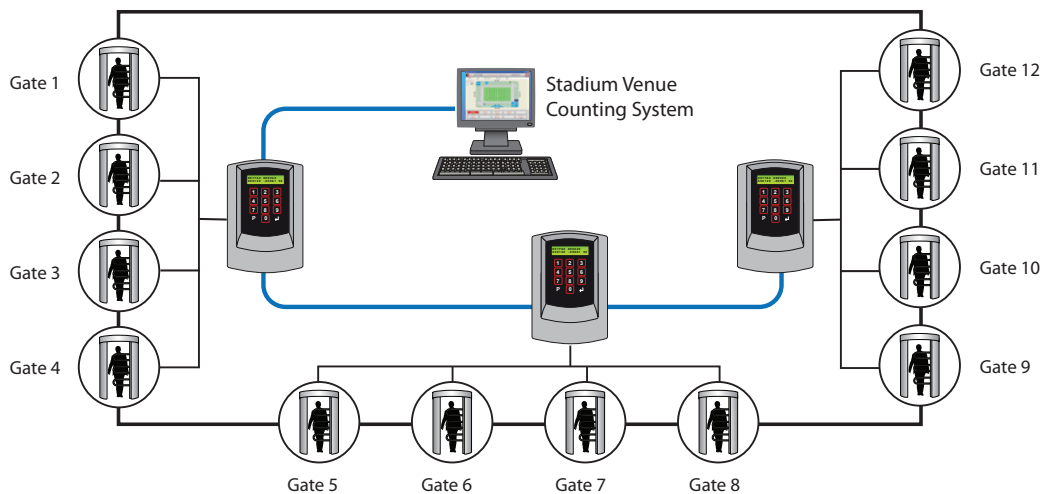
Management PC: RS485 communications port (option to connect to a TCP/IP network)

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### Example Car Park Application



### Example Stadium Application



## Ordering Information

<b>NCT200</b>	4-channel counting system with VMS control bus and PC communications bus. Can operate stand-alone or networked to counting system software.	<b>VMS-001-X*</b>	LED sign with 10cm high characters capable of displaying 4-character numeric value or 'FULL' when count = 0 or below. Controlled by NCT100 or NCT200 via RS485 bus.
<b>NCT200-48-ENC</b>	4-channel counting system with VMS control bus and PC communications bus. Can operate stand-alone or networked to counting system software. Complete with enclosure and 12V DC PSU.	<b>VMS-005-X*</b>	LED Sign with 10cm high characters, capable of displaying SPACE or FULL controlled by NCT100 or NCT200.
<b>NCT200-TCP-ENC</b>	4-channel counting system with VMS control bus and TCP/IP communications interface. Can operate stand-alone or networked to counting system software. Complete with enclosure and 12V DC PSU.	* 'X' = 'R' for Red LEDs or 'Y' for Yellow LEDs	