



BS 4469 : 1973

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Specification for

# Car parking control equipment

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British Standards Institution



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The following BSI references relate to the work on this standard:  
Committee reference INE/18 Draft for comment 71/37891

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Ministry of Defence (Army Department)  
Ministry of Defence (Air Force Department)  
National Coal Board  
National Physical Laboratory (Department of Trade and Industry)  
Oil Companies Materials Association  
Scientific Instrument Manufacturers' Association

The following were directly represented on the committee entrusted with the preparation of this standard:

Association of London Borough Engineers and Surveyors  
Automobile Association  
British Parking Association  
Department of the Environment  
Greater London Council

Manufacturers of parking meters and discs  
Metropolitan Police  
Ministry of Transport  
Royal Automobile Club



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# BS 4469 : 1973

## Contents

|                            | Page               |
|----------------------------|--------------------|
| Co-operating organizations | Inside front cover |
| Foreword                   | 2                  |

## Specification

|                                                                                                                  |    |
|------------------------------------------------------------------------------------------------------------------|----|
| 1. Scope                                                                                                         | 3  |
| 2. Definitions                                                                                                   | 3  |
| 3. Common requirements to all equipment                                                                          | 4  |
| 4. Rising arm parking barriers                                                                                   | 4  |
| 5. Ticket dispensing mechanisms for control of entry into car parks                                              | 5  |
| 6. Multiple coin units to accept multiple coins to control operation of parking barriers                         | 7  |
| 7. Coin units to accept one size of coin to control operation of parking barriers (i.e. single coin, single fee) | 8  |
| 8. Parking ticket meters (electric)                                                                              | 9  |
| 9. Rising kerb parking barrier                                                                                   | 11 |
| 10. Collapsible plates                                                                                           | 11 |

## Foreword

This British Standard has been prepared under the authority of the Instrument Industry Standards Committee as the result of a request from the Department of the Environment.

While not within the scope of this standard, attention is drawn to the requirement by many government departments and local authorities that the aesthetic qualities of street furniture should be approved by the Council of Industrial Design.

Attention is also drawn to the fact that some authorities may require compliance with BS CP 1003 — Electrical apparatus and associated equipment for use in explosive atmospheres of gas or vapour other than mining application — Part 3 — Division 2 areas.

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British Standard Specification for

# Car parking control equipment

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## 1. Scope

This British Standard specifies requirements for the design of parking barrier equipment for car parks for private motor cars and light commercial vehicles in respect of the following items:

- Rising arm parking barriers
- Rising kerb parking barriers
- Collapsible plates
- Ticket dispensing mechanisms for control of entry into car parks
- Multiple coin units to control the operation of barriers
- Coin units to control operation of barriers to accept one size of coin
- Parking ticket meters (electric)
- Marking and usage of tickets

NOTE. The titles of the British Standards referred to in this standard are listed on the inside back cover.

## 2. Definitions

For the purposes of this British Standard, the following definitions apply:

(1) *Rising arm parking barrier.* This consists of a barrier arm arranged to move from the horizontal upwards through an arc in the vertical plane to permit entry or exit of vehicles into or from an area reserved for the parking of motor vehicles.

(2) *Ticket dispenser.* This is a mechanism designed to permit the automatic issue of a ticket at the entrance to a car park and to control the operation of a parking barrier or traffic light on the ticket being removed by the vehicle driver.

NOTE. This definition does not apply to pay and display meters which are covered separately.

(3) *Multiple coin units.* This is a device designed to accept one or more coins of different denominations or tokens to control the operation of a parking barrier.

(4) *Coin unit.* This is a device designed to accept one or more coins of the same denomination or tokens to control the operation of a parking barrier.

(5) *Parking ticket meter (electric).* An electrically operated mechanism designed to issue a ticket automatically on insertion of coinage or tokens of a preset total value.

(6) *Rising kerb parking barrier (formerly rising step barrier).* A device which can be arranged to lie flush with the road surface to permit entry or protrude above to prevent passage of vehicles.

(7) *Collapsible plate.* A device which protrudes from the road surface in order to prevent the passage of vehicles from one direction. It is hinged so that it will allow the passage of vehicles from the opposite direction.

# BS 4469 : 1973

## 3. Common requirements to all equipment

### 3.1 General

3.1.1 The equipment shall be capable of operation within an ambient temperature range of from  $-15^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  and in a relative humidity of up to 95 %.



**NOTE** The provision of protection against vandalism is subject to special agreement between purchaser and manufacturer.

### 3.2 Common electrical requirements

3.2.1 Systems shall normally operate from the standard 240 V supply. Other voltages may be used by agreement between purchaser and manufacturer.

A 3 phase 415 V supply may be used for rising kerb barriers, if desired.



3.2.2 All wiring shall be in accordance with IEE regulations and relevant British Standards where appropriate.

3.2.3 Equipment shall be designed so that external wiring is connected to a group terminal block which is readily accessible and clearly marked for identification purposes.

3.2.4 All items of metalwork shall be bonded together to ensure adequate earthing.

3.2.5 The design of equipment shall be such as to prevent telegraphic, telephonic or radio interference. The apparatus will be considered to meet this requirement, so far as radio interference is concerned, if the interference produced by it does not exceed the limits specified in BS 800.



**NOTE** Attention is also drawn to CP 1006, 'General aspects of radio interference suppression'.

3.2.6 All electrical equipment shall be fitted with an earth connection.

### 3.3 Housings

3.3.1 Mechanism and controls shall be fitted in housings providing easy access to all parts and ensuring adequate protection against extremes of weather.



3.3.2 Housings shall be protected by suitable finish both internally and externally to prevent corrosion. The finish shall be applied to a standard not less than that specified in BS 5493.

3.3.3 Housings shall be fitted with locking devices to prevent tampering or unauthorized operation.

3.3.4 Provision shall be made to give adequate access to mechanisms to permit cleaning, checking and adjustment.

3.3.5 Means shall be provided to minimise continuously or prevent condensation in housings.

### 3.4 Accuracy of recorded time

The accuracy of time recording mechanisms shall be such that the time printed on tickets shall be within  $\pm 2$  min over 24 h under normal operating conditions.

### 3.5 Marking

Car park control equipment manufactured as complying with the requirements of this standard shall be permanently marked with the number of this standard, i.e. BS 4469 : 1973\*.

\*Marking BS 4469 on or in relation to a product is a claim by the manufacturer that the product has been manufactured in accordance with the requirements of the standard. The accuracy of such a claim is therefore solely the manufacturer's responsibility. Enquiries as to the availability of third party certification to support such claims should be addressed to the Director, British Standards Institution, Marylands Avenue, Hemel Hempstead, Herts HP2 4SQ in the case of certification marks administered by BSI or to the appropriate authority for other certification marks.