

# INTEGRATED TACTILE EQUIPMENT ITE200

# INSTRUCTION MANUAL

## Incorporating Type Approval Maintenance Provisions

### APPLICATION

Integrated Tactile Equipment for use at crossings, which have no flashing green man period and use 48V near side signals (e.g. Puffin & Toucan).

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## 1 DESCRIPTION

The ITE200 Integrated Tactile Crossing Indicator for the visually impaired is specifically designed for use at traffic light controlled pedestrian crossings that employ near side signals running at 48V, such as Puffin and Toucan installations. **It must not be used at crossings employing a flashing green man period.**

It is exceptionally easy and quick to fit, either on site, or prior to installation. The whole assembly, motor, drive mechanism and control electronics, fits into any approved near side signal/ push button box on a universal bracket. Its power input is then wired in parallel with the 48V 50Hz driving the Green Man. No further wiring is needed.

The patented electronic control circuit requires very low power, operating over dimmed or undimmed voltage, with full safety interlocks against accidental operation, precisely controlling the speed and torque of the Tactile Cone.

- Patent Nos: GB 2222011.B  
GB 2379287.B

## 2 SPECIFICATIONS & EU DIRECTIVES

This Equipment has been designed to conform to:

Low Voltage Directive	73/23/EEC
Electromagnetic Compatibility Directive	89/336/EEC
BS 7671: 2001 AMD 9781	
BS EN 60204-1: 1998	
BS EN 50293: 2001	
TR 0157B	
TRG 0500C	

## 3 MODIFICATIONS

There are no approved modifications.

## 4 GREEN MAN LAMP MONITORING

Each Tactile Control Unit is connected in parallel with a green man lamp drive and will consume a nominal 3.5VA. If a Green Man Monitoring Facility is fitted, please contact Radix Systems Limited should further information be required.

## 5 REPAIRS

The ITE200 Integrated Tactile Equipment is entirely self contained and is mounted in or adjacent to the near side signal from which it is powered. Should it prove faulty, no repair shall be attempted but it shall be replaced by another **of the same type**. All suspect or faulty equipment shall be returned to the supplier for repair.

## 6 WARNING

**Use of components other than those permitted herein, or modifications or enhancements that have not been authorised by Radix Systems Limited, may invalidate the Type Approval and Warranty of this product.**

**This equipment must only be used in conjunction with Near Side Signals driven from a nominal 48V and at crossings where there is no Flashing Green Man period (e.g. Puffin and Toucan controllers).**

**This equipment may only be used in conjunction with controllers that include an approved road red lamp failure monitoring facility.**

## 7 INSTALLATION

**CAUTION Ensure that all proper safety precautions are taken. The controller must be switched off whilst working on any street furniture, and provisions should be made to ensure safe operation of the crossing/junction at all times.**

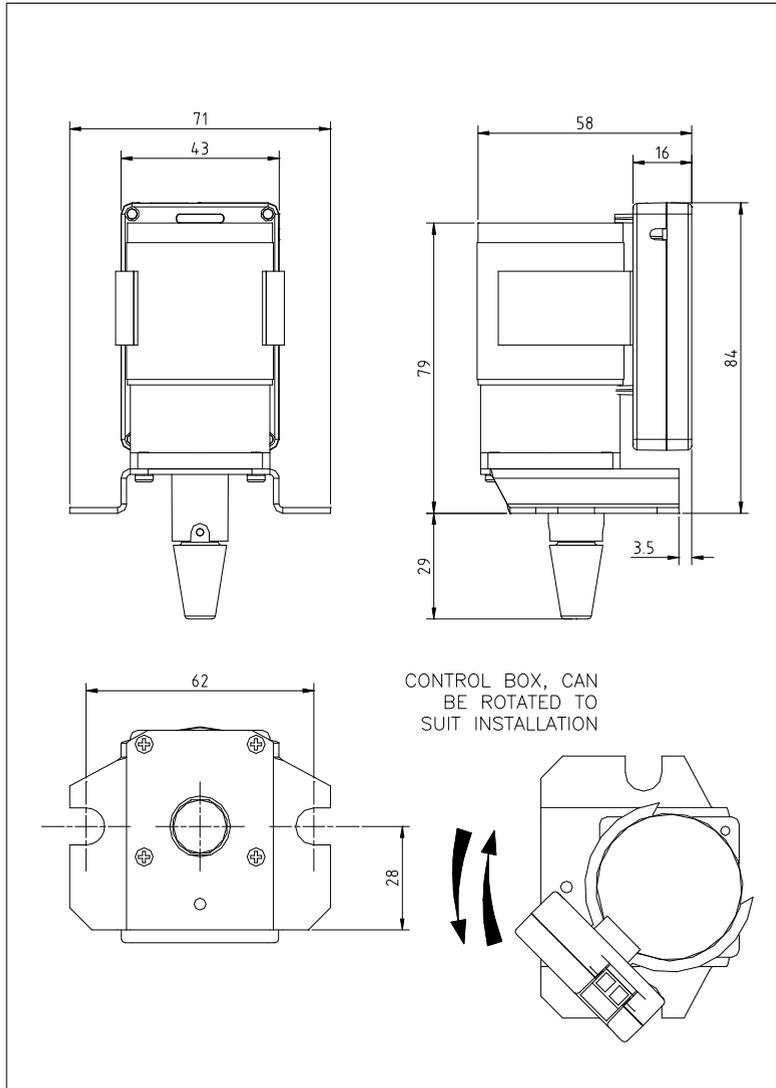
Make certain that the controller includes an approved road red lamp failure monitoring facility which will extinguish the "Green Man" Signal for the duration of the red lamp failure.

### 7.1 PREPARATION AND INSTALLATION (see figure 1)

Push Button and Signal enclosures designed for use in near side signal applications are already capable of housing traditional Tactile Units. The ITE200 will fit into the same space but it is necessary to ensure that the position of the control electronics box is such that it will not foul the front of the enclosure when closed. For this reason, the ITE200 control electronics box can be swivelled on its mounting clip.

7.2 Remove any blanking plate and gasket or audible device and fixings that are present in the position where the Tactile Equipment is to be fitted. Ensure that the hole into which the cone is to be inserted is clear and free from obstructions. Discard any wiring associated with any audible device that has been removed.

7.3 Fit the ITE200 with the cone projecting through the existing hole, and the motor body away from you, using the two M6 x 10 socket head screws, two plain washers and two shakeproof washers provided. The sealing grommet must be positioned around the cone so as to form a seal between the mounting plate and the inner face of the box.



**FIGURE 1**

## 7.4 WIRING

**REMINDER:** Make absolutely certain that the power is off before commencing any wiring. See the CAUTION section at the beginning of the installation instructions.

**It is essential for the safety integrity of the crossing that the installer must ensure both the 48V neutral and live connections of the Tactile Equipment are connected directly to the 48V neutral and live connections of the Green Man! Under no circumstances may other connections be made!**

Connect the 48V input on the ITE200 control box in parallel with the 48V Green Man signal input in the near side signal head, using suitable wire, and allowing for the control box to be swivelled into a position where it will not foul the front of the enclosure when in the closed position. Swivel the control box into that position.

## 8 TESTING

**IMPORTANT: THIS EQUIPMENT IS NOT SUITABLE FOR USE AT CROSSINGS THAT EMPLOY A FLASHING GREEN MAN PERIOD.**

8.1 Check that the Tactile Cone is free to be rotated manually at all times except during the steady green man period. The Tactile Cone must not rotate by itself at any time other than during the steady green man period.

8.2 Check that during the steady green man period:

- the Tactile Cone rotates at approximately 60 rpm;
- the Tactile Cone continues to rotate at approximately 60 rpm when lightly gripped between finger and thumb;
- the Tactile Cone stops when firmly gripped but still tries to turn in the same direction. It should be very difficult to rotate in the opposite direction.



## DECLARATION OF INCORPORATION

**Manufacturer (Responsible Person):**

Radix Systems Ltd  
 D3D4 Premier Centre  
 Abbey Park  
 Romsey  
 Hampshire SO51 9AQ  
 England

Telephone: +44 1794 830240  
 Fax: +44 1794 830143

**Product:** INTEGRATED TACTILE EQUIPMENT  
**Model:** ITE200  
**Serial Number:** 200-ddd-mnn  
**T.F. Reference:** See ITE200 Integrated Tactile Equipment Technical File

**THIS PRODUCT CONFORMS TO THE ESSENTIAL REQUIREMENTS OF:-**

Electromagnetic Compatibility Directive	89/336/EEC
Low Voltage Directive	73/23/EEC

Signed: *W. D. King* Date: 8/9/02

Position: Director

Authorised signatory on behalf of the Manufacturer (Responsible Person).



<b><i>ELECTRICAL</i></b>	
Supply Voltage:	<b>Nominal: 48V 50Hz Operating Range: 21.0V to 52.8V</b>
Power Consumption:	Nominal 3.5VA
<b><i>MECHANICAL</i></b>	
Rotation Speed:	60 rpm $\pm$ 20%
Stopping Torque:	Less than 0.08 Nm
Unpowered Spin Torque:	Less than 0.02 Nm
<b><i>ENVIRONMENTAL</i></b>	
Operating Temperature Range:	-15°C to +70°C
Storage Temperature Range:	-20°C to +80°C
<b><i>SHIPPING</i></b>	Size: 215mm x 165mm x 90mm
<b><i>(TWO PER BOX)</i></b>	Weight: 0.9kg

***RADIX TRAFFIC LIMITED***

D3 Premier Centre, Abbey Park  
 Romsey, Hampshire SO51 9DG, England  
 Tel: 01794 511388  
 email: [info@radixtraffic.co.uk](mailto:info@radixtraffic.co.uk)  
 web: [www.radixtraffic.co.uk](http://www.radixtraffic.co.uk)