

**Simple & Powerful**

- Tough metal construction**
- Fully waterproof to IPX7**
- Standard clock and data output**
- Other outputs available**
- Easy to use reader**
- Superb modern aesthetics**

## Magstripe reader clock and data output

### Construction - metal

Metal readers manufactured by Paxton Access are made from tough metal. The electronics are encapsulated in a waterproof resin and the read head is constructed from stainless steel making it suitable for external use. The reader is waterproof to IPX7. A backplate is available to provide extra strong fixing. This can also be used to provide fixing onto irregular or weak substrates.

### Construction - plastic

The housing is made from 20% glass filled Noryl. This is a very tough and inert plastic. The reader is potted, making it fully waterproof.

### Suitability

The readers may be used in harsh weather conditions as it is waterproof to IPX7. The read head is durable and rated at over 1,000,000 swipes, making it suitable for all applications. The superb aesthetics of the reader make it a clear choice for sites where aesthetics are important. The reader is popular with architects and specifiers.

### Finishes

There are three metal finishes available; satin chrome (as pictured), black and brass. All finishes are hard wearing, but satin chrome is recommended for the harshest conditions. We also offer a plastic reader with a black finish.

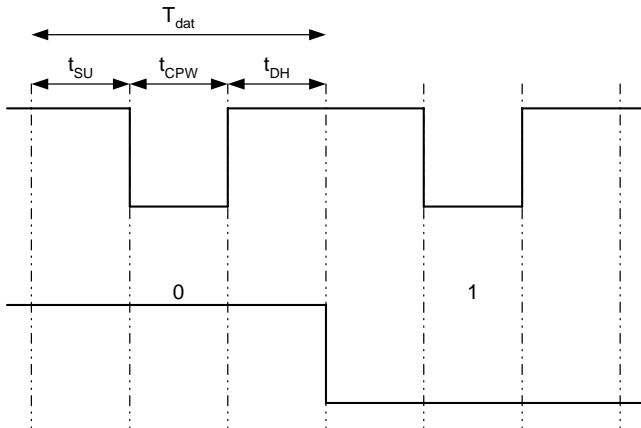
### Specifications:

Output.....	Open collector (pulled up internally to 5v with a 560 Ohm resistor)
Output drain.....	Max 20mA
Water resistance.....	High IPX7
Vandal resistance.....	High-mazak construction
Dimensions.....	34x89x34(WxHxD)
Weight (packaged).....	340g(400g)approx
Cable supplied.....	5m
Cable.....	9 core screened,7x0.15mm stranded.
Outer dia.....	4.6mm max
Insulation thickness.....	0.45mm
Swipes.....	>1,000,000
Temperature range.....	-20 to +70 C
Media speed.....	125<vcard<1250mms-1
Media acceleration.....	a card max=500mms-32
Magnetic stripe coercivity.....	50<H<6000Oe
Media amplitude.....	min=20%
Track read.....	2 as standard, others available on request

For further information please contact us or visit our internet web site:-

<http://www.paxton-access.co.uk>

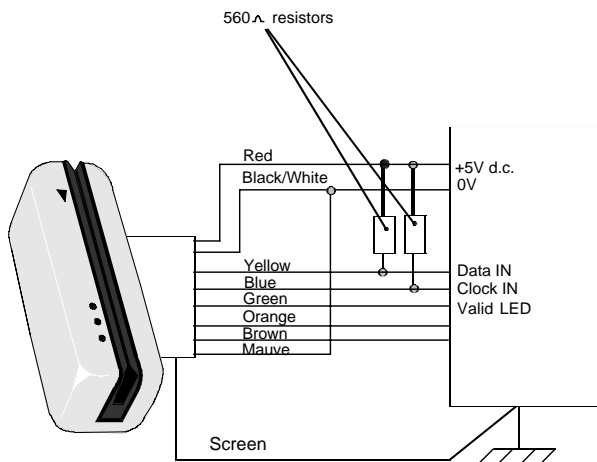
## Timing Diagram



Data period	$T_{dat}$	60-3000+
Data set-up time	$t_{SU}$	1
Clock pulse width	$t_{CPW}$	25-50% $T_{dat}$
Data hold time	$t_{DH}$	$T_{dat} - t_{CPW} - 1$

+ Dependent on card swipe speed  
Units are  $\mu s$  unless otherwise stated

## Typical Setup



## Cable distances

The drivers in the electronic circuitry allow for cables to control units to achieve distances of up to 150m. This needs to be verified by each manufacturer by their own control unit equipment.

## Connection details

Colour	Description	Notes
Red	+5V d.c.	$4.5 < V_{IN} < 5.5$
Black	0V	Connected internally to white
White	0V	Connected internally to black
Screen	Reader case	Isolated from 0V.
Yellow	!Data	Open collector.
Blue	Clock	Open collector.
Green	Green LED	Pull low to light LED
Orange	Amber LED	Pull low to light LED
Brown	Red LED	Pull low to light LED
Mauve	!Media detect/ Arrow LED	Pull low to light LED

## Ordering Information

Order code	Description
193-741SC	Magstripe reader clock and data output satin chrome
193-741BL	Magstripe reader clock and data output black
193-741BR	Magstripe reader clock and data output brass
122-992	Magstripe reader clock and data output black plastic
775-002	Backplate kit for magstripe readers

## Other standard OEM/ own label products

Magstripe reader 1000 user  
Bank Lobby reader  
Wiegand output card reader  
Matrix keypad  
Hitag 2 proximity reader  
Other OEM requirements are welcome

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