

# ARITECH® Smart Card Reader ATS1190/1192 Installation Guide

## Introduction

The ATS1190/1192 Smart Card Readers are multifunction, all-purpose proximity card readers suitable for all locations (including outdoors) requiring a short-range reader. The readers can be connected directly to the Advisor Master RS485 BUS (see Figure 2). They are configurable through a menu system accessible via the BUS or by configuration cards programmed through Titan and the Aritech Smart Card Programmer (ATS1620).

The readers operate from 9 to 14 VDC. They have a quiescent current consumption of less than 25mA and less than 80mA, when reading a card. The ATS1190 is supplied standard with a white removable cover, which can be interchanged with one of four other colours available.

Figure 1: Smart Card Reader

|               |                  |
|---------------|------------------|
| A - Blue LED: | - Door open      |
|               | - Disarmed       |
| B - Comms:    | - LED control    |
|               | - Buzzer control |
|               | - Power          |
| C - Red LED:  | - Door open      |
|               | - Armed          |

## Mounting

The readers can be mounted on any flat surface with two 3.0-3.5 mm diameter pan-head screws. A slightly reduced range will be experienced when mounted on metal surfaces. If mounting in an outdoor environment, ensure that the blue LED is at the top. The use of countersunk screws is not recommended. Remove the ATS1190 cover to expose the mounting screw by gently prying the sides away from the main body to release the retaining clips and gently pulling on the connection cord. Do not use excessive force or the reader can be irreparably damaged. After mounting, gently press the cover over the main body until it locks into place.

## RAS Addressing

The address of the reader for BUS operations is set to the default address, RAS 16. You can change this by using a configuration card or accessing its on-line menu system when it is connected to the RS485 BUS. See the Programming Guide, Reader Address, for further details.

Figure 2: BUS Connection Block

|       |         |                |          |
|-------|---------|----------------|----------|
| +12 V | - Red   | D-             | - Green  |
| 0 V   | - Black | Open collector | - Violet |
| D+    | - White |                |          |

## Tamper

The reader is provided with a tamper facility. When connected to the BUS, tamper data is transmitted to the Advisor Master with system data. An external Open Collector output (violet wire) can be configured as a tamper control for both on-line and off-line operation.

## Comms

Figure 3: Wiegand Connection Block

|       |         |        |          |
|-------|---------|--------|----------|
| +12 V | - Red   | L2     | - Brown  |
| 0 V   | - Black | L1     | - Yellow |
| D0    | - Green | BZ     | - Blue   |
| D1    | - White | Tamper | - Violet |

Figure 4: Four-Door Controller Local Bus

|       |         |        |          |
|-------|---------|--------|----------|
| +12 V | - Red   | D-     | - Green  |
| 0 V   | - Black | RTE    | - Yellow |
| D+    | - White | Tamper | - Violet |

## Reader Wiring

|         |                |  |
|---------|----------------|--|
| Red:    |                | Positive 9 to 14 VDC supply  |
| Black:  | 0 Volts        | DC supply ground   |
| Green:  | D0 / Clock     | RS485 Data - Wiegand Data 0<br>Absolute maximum, 12 V @ 10mA   |
| White:  | D1 / Data      | RS485 Data + Wiegand Data 1<br>Absolute maximum, 12 V @ 10mA   |
| Brown:  | LED 1          | Offline LED control configured to “Two Wire Control” will control the red LED only.<br>Wire grounded: red LED on<br>Wire open: red LED off<br>Wire at +5 V to +12 V: Red LED off or, offline LED control configured to “One Wire Control” will control both the red and blue LEDs<br>Wire grounded: blue LED on<br>Wire open circuit: Both LEDs off<br>Wire at + 5 V to 12 V: red LED on<br>Absolute maximum, 14 V |
| Yellow: | LED 2          | Configurable to control the blue LED when offline<br>Wire grounded: blue LED on<br>Wire open: blue LED off<br>Wire at +5 V to +12 V: blue LED off<br>Request to exit input when online to Advisor Master<br>This input may be connected to a simple push button connected to Ground with RTE Only selected on the option card or in Menu 10 (See Programming Guide for more details).                              |
| Blue:   | Buzzer         | Offline buzzer control.<br>Wire open or +5 V to +12 V: buzzer off<br>Wire grounded: buzzer sounding<br>Absolute maximum, 14 V  |
| Violet: | Open Collector | Configurable as: door relay, - tamper output, credit controlled pulsed, timed or latched output<br><b>Note:</b> <i>This is a low current output and must not be used to directly energize high current door openers.</i><br>Absolute maximum, 14 V @ 25mA  |

## Technical Specifications

|                       |                                    |
|-----------------------|------------------------------------|
| Current consumption   | 80mA max.                          |
| Input voltage         | 9VDC min., 14VDC max.              |
| Operating temperature | -31° F to 150° F (-35° C to 66° C) |
| Humidity              | 95% non-condensing                 |

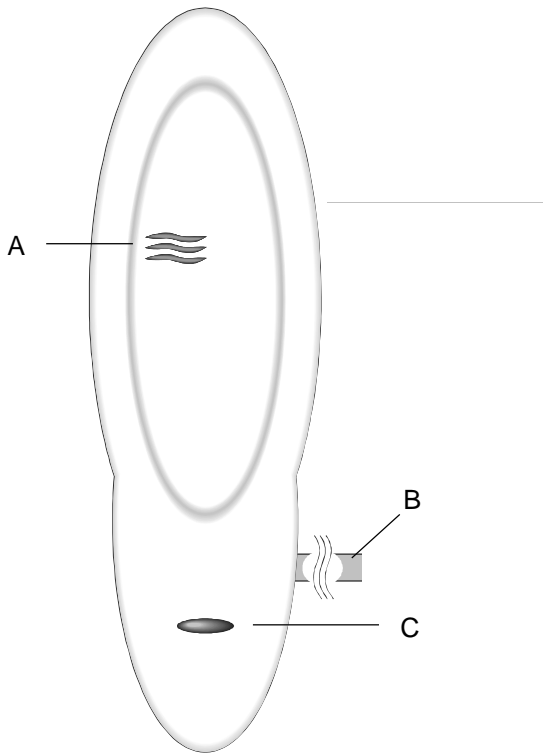
## FCC Complicance

- This device complies with Part 15 of the FCC rules. Operation is subject to the following three conditions:
1. This device may not cause harmful interference.
  2. This device must accept any interference received, including interference that may cause undesired operation.
  3. Changes or modifications not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

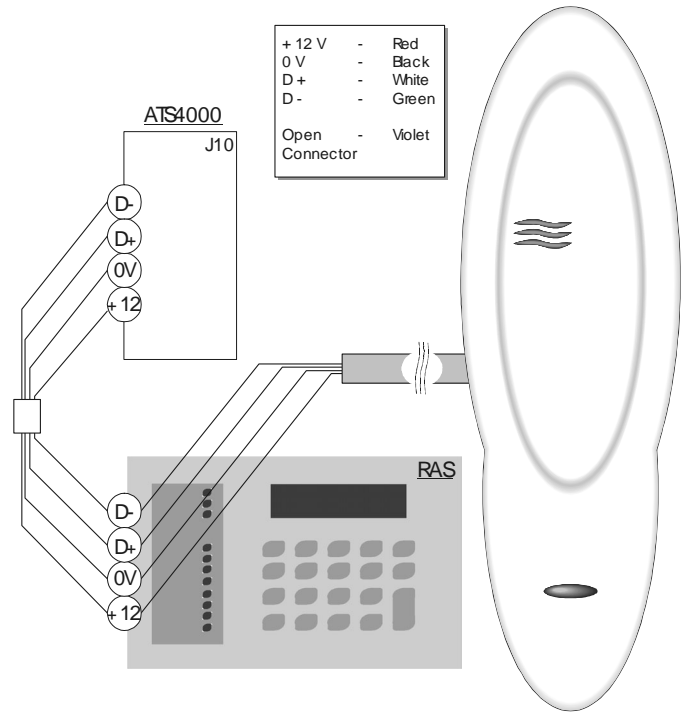
**FCC ID: CGGATS1190-1192**

# ATS1190

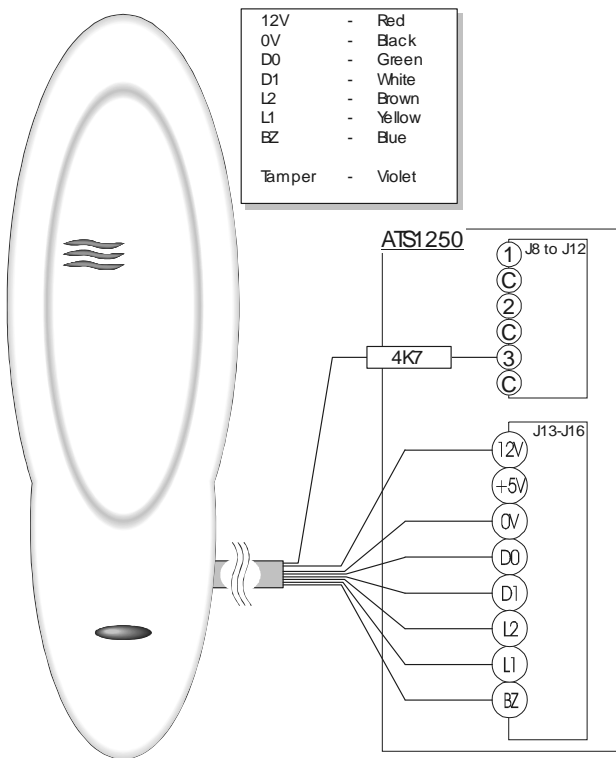
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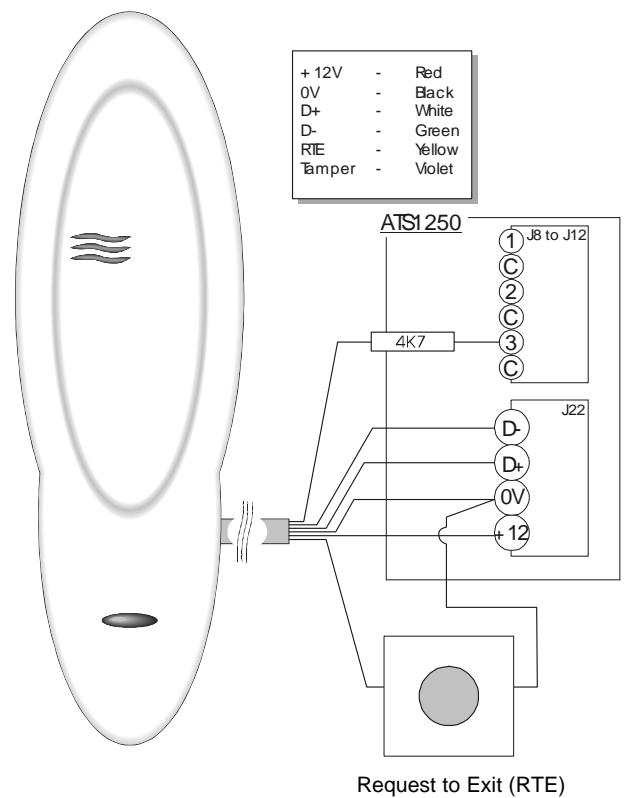
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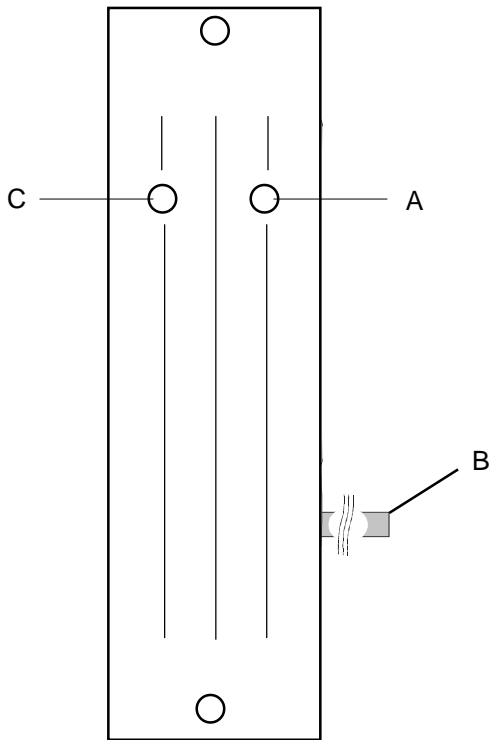


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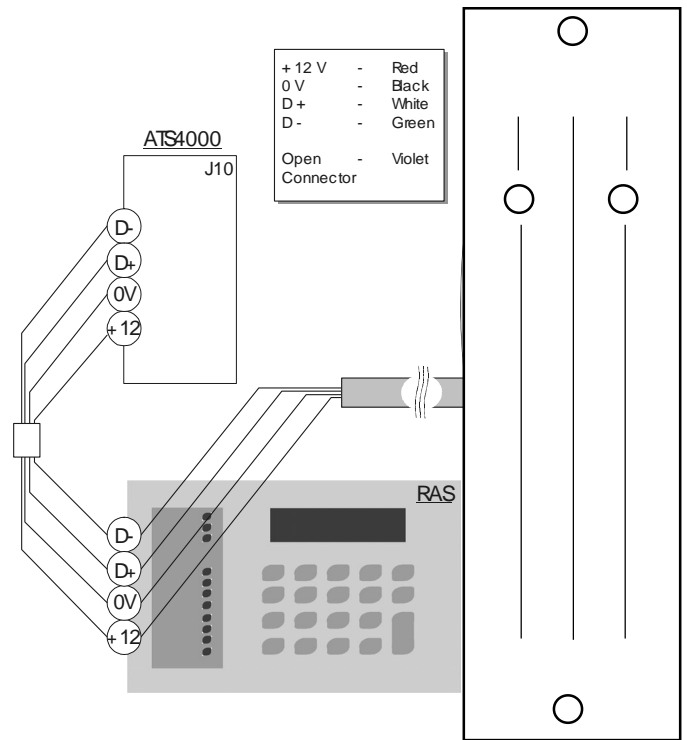


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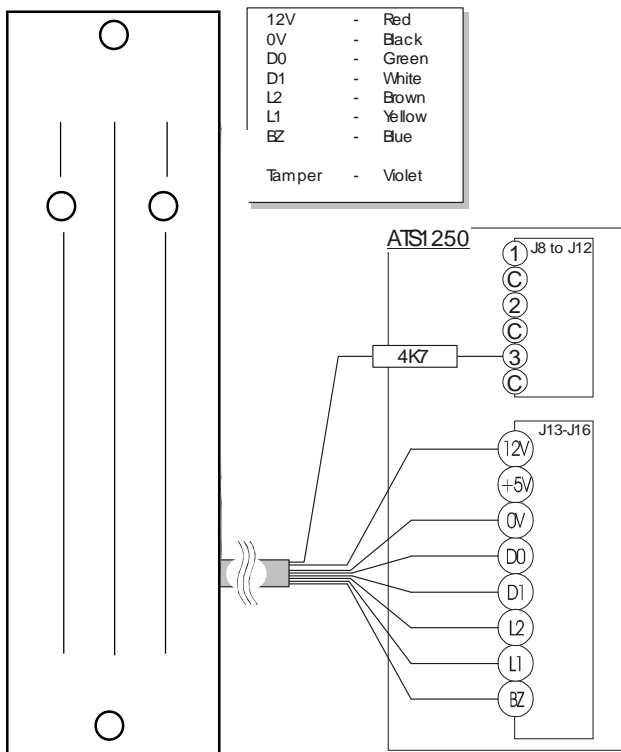
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