## (1) - Reader Settings

| Reader Type |  | Controller |
| :---: | :---: | :---: |
| SP-MINI | SP-KPV | $\mathbf{1 0 0 0 +}$ |
| RED (vcc) | RED (vcc) | N/A $^{1}$ |
| BLACK (0v) | BLACK (0v) | N/A $^{1}$ |
| GREEN (Data0) | GREEN (Data0) | CK $^{2}$ |
| WHITE (Data1) | WHITE (Data1) | DT $^{3}$ |
| BROWN (Led) | BROWN (Led) | LD $^{4}$ |
| N/A | YELLOW (Buzz) | BZ |

${ }^{1}$ Reader power wires should connect to the PSU Board ${ }^{2}$ The board is printed CK1 and CK2.
${ }^{3}$ The board is printed DT1 and DT2.
${ }^{4}$ The board is printed LD1, LD2, LD4 and LD5.

## (2) - Address Settings

Locate the DS1 switch at the bottom-middle of the panel. For most proximity and biometric readers, ensure that switch 6 is set to ON (right). All others should be OFF (left).

| Switch | Address | Switch <br> $\mathbf{1 2 3 3 4 5}$ | Address |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 2 3 4 5}$ | 00 | 00001 | 16 |
| 0000 | 0000 | 10001 | 17 |
| 10000 | 01 | 1001 | 18 |
| 01000 | 02 | 11001 | 19 |
| 11000 | 03 | 00101 | 20 |
| 00100 | 04 | 0101 | 21 |
| 10100 | 05 | 22 |  |
| 01100 | 06 | 01101 | 23 |
| 11100 | 07 | 11101 | 24 |
| 00010 | 08 | 00011 | 25 |
| 10010 | 09 | 10011 | 26 |
| 01010 | 10 | 01011 | 27 |
| 11010 | 11 | 11011 | 28 |
| 00110 | 12 | 00111 | 29 |
| 10110 | 13 | 10111 | 30 |
| 01110 | 14 | 01111 | 31 |
| 11110 | 15 | 11111 |  |

## (3) - Communication Settings

The cable connecting the USB-485 device to the controller is shielded. Always ensure that any RS485 wire shields are linked together, and that they are connected at the USB-485 interface end. Never connect the shielding at the controller end


