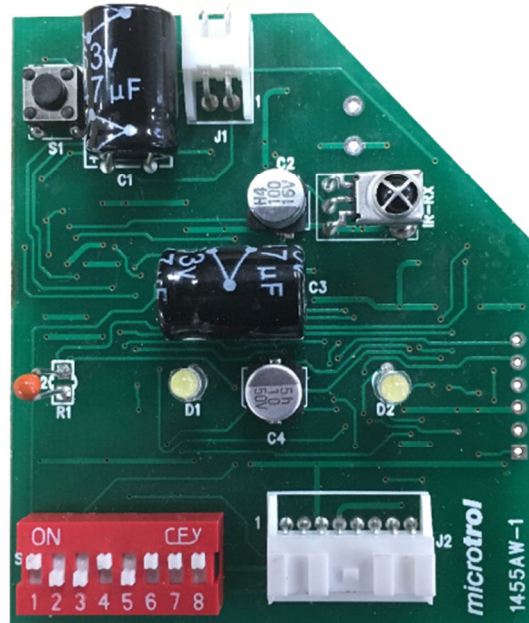




*Pocket Quick  
Reference For the*  
**TOSHIBA**  
*RBC-RASNC  
RAS Network Interface*

The **TOSHIBA** / Microtrol RBC-RASNC is a Replacement PCB for the TOSHIBA "**MIRAI**" range of indoor units, RAS##BKV-E, allowing for the RAS system to be integrated into a "Toshiba" Central Control Device.



The new interface replaces the factory fitted IR Receiver PCB, referred to on the wiring diagram as "Wireless Unit Assembly, WP-033", when installed the "Mirai" unit will have local IR control as well as central control, via Toshiba's central Control Devices, BMS-CM/SM-1280## - 128 zone central remote controller, RBC-TBPTS – 64 zone colour Smart Touch Screen Central Remote, plus, many other devices.

**PLEASE NOTE: This interface will ONLY work with the "MIRAI" RAS-##BKV-E**

Installation Instructions.

### **ISOLATE THE UNIT.**

- 1) Carefully remove the existing IR receiver PCB in its plastic housing, separate the housing and remove the PCB, disconnect the 8-way white connector (CN10)
- 2) On the new interface plug in both the 8-way connector (J2) and the supplied 2 pin TCC-Link connector (J1)
- 3) Refit the new interface into the plastic housing removed earlier, re-assemble the housing ensuring that both leads exit through the provided side holes.
- 4) Fit the 2-way TCC-Link terminal block (U3/U4) into the space adjacent to the main supply connector, secure with the supplied screws.

## Setting the bit switches:

S1-1 – End of line resistor. On = 100-ohm terminator connected across the TCC-Link.

Off = No terminal resistor, (Default.)

Note: Only one terminal resistor should be enabled per network.

S1-2 - Auto Restart. On = Auto Restart.

Off = No Auto Restart. (Default.)

Note: S1-2 Overrides the normal auto restart feature.

S1-3 to S1-8 – Central Address. (Default all OFF, Central address 1)

| Toshiba RAS Unit Address Setting |       |       |       |       |       |       |         |       |       |       |       |       |       |
|----------------------------------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|-------|-------|-------|
| Address                          | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 | Address | SW1-3 | SW1-4 | SW1-5 | SW1-6 | SW1-7 | SW1-8 |
| 1                                | 0     | 0     | 0     | 0     | 0     | 0     | 33      | 1     | 0     | 0     | 0     | 0     | 0     |
| 2                                | 0     | 0     | 0     | 0     | 0     | 1     | 34      | 1     | 0     | 0     | 0     | 0     | 1     |
| 3                                | 0     | 0     | 0     | 0     | 1     | 0     | 35      | 1     | 0     | 0     | 0     | 1     | 0     |
| 4                                | 0     | 0     | 0     | 0     | 1     | 1     | 36      | 1     | 0     | 0     | 0     | 1     | 1     |
| 5                                | 0     | 0     | 0     | 1     | 0     | 0     | 37      | 1     | 0     | 0     | 1     | 0     | 0     |
| 6                                | 0     | 0     | 0     | 1     | 0     | 1     | 38      | 1     | 0     | 0     | 1     | 0     | 1     |
| 7                                | 0     | 0     | 0     | 1     | 1     | 0     | 39      | 1     | 0     | 0     | 1     | 1     | 0     |
| 8                                | 0     | 0     | 0     | 1     | 1     | 1     | 40      | 1     | 0     | 0     | 1     | 1     | 1     |
| 9                                | 0     | 0     | 1     | 0     | 0     | 0     | 41      | 1     | 0     | 1     | 0     | 0     | 0     |
| 10                               | 0     | 0     | 1     | 0     | 0     | 1     | 42      | 1     | 0     | 1     | 0     | 0     | 1     |
| 11                               | 0     | 0     | 1     | 0     | 1     | 0     | 43      | 1     | 0     | 1     | 0     | 1     | 0     |
| 12                               | 0     | 0     | 1     | 0     | 1     | 1     | 44      | 1     | 0     | 1     | 0     | 1     | 1     |
| 13                               | 0     | 0     | 1     | 1     | 0     | 0     | 45      | 1     | 0     | 1     | 1     | 0     | 0     |
| 14                               | 0     | 0     | 1     | 1     | 0     | 1     | 46      | 1     | 0     | 1     | 1     | 0     | 1     |
| 15                               | 0     | 0     | 1     | 1     | 1     | 0     | 47      | 1     | 0     | 1     | 1     | 1     | 0     |
| 16                               | 0     | 0     | 1     | 1     | 1     | 1     | 48      | 1     | 0     | 1     | 1     | 1     | 1     |
| 17                               | 0     | 1     | 0     | 0     | 0     | 0     | 49      | 1     | 1     | 0     | 0     | 0     | 0     |
| 18                               | 0     | 1     | 0     | 0     | 0     | 1     | 50      | 1     | 1     | 0     | 0     | 0     | 1     |
| 19                               | 0     | 1     | 0     | 0     | 1     | 0     | 51      | 1     | 1     | 0     | 0     | 1     | 0     |
| 20                               | 0     | 1     | 0     | 0     | 1     | 1     | 52      | 1     | 1     | 0     | 0     | 1     | 1     |
| 21                               | 0     | 1     | 0     | 1     | 0     | 0     | 53      | 1     | 1     | 0     | 1     | 0     | 0     |
| 22                               | 0     | 1     | 0     | 1     | 0     | 1     | 54      | 1     | 1     | 0     | 1     | 0     | 1     |
| 23                               | 0     | 1     | 0     | 1     | 1     | 0     | 55      | 1     | 1     | 0     | 1     | 1     | 0     |
| 24                               | 0     | 1     | 0     | 1     | 1     | 1     | 56      | 1     | 1     | 0     | 1     | 1     | 1     |
| 25                               | 0     | 1     | 1     | 0     | 0     | 0     | 57      | 1     | 1     | 1     | 0     | 0     | 0     |
| 26                               | 0     | 1     | 1     | 0     | 0     | 1     | 58      | 1     | 1     | 1     | 0     | 0     | 1     |
| 27                               | 0     | 1     | 1     | 0     | 1     | 0     | 59      | 1     | 1     | 1     | 0     | 1     | 0     |
| 28                               | 0     | 1     | 1     | 0     | 1     | 1     | 60      | 1     | 1     | 1     | 0     | 1     | 1     |
| 29                               | 0     | 1     | 1     | 1     | 0     | 0     | 61      | 1     | 1     | 1     | 1     | 0     | 0     |
| 30                               | 0     | 1     | 1     | 1     | 0     | 1     | 62      | 1     | 1     | 1     | 1     | 0     | 1     |
| 31                               | 0     | 1     | 1     | 1     | 1     | 0     | 63      | 1     | 1     | 1     | 1     | 1     | 0     |
| 32                               | 0     | 1     | 1     | 1     | 1     | 1     | 64      | 1     | 1     | 1     | 1     | 1     | 1     |

Key: 0 = OFF, 1 = ON.

The address set by S1-3 to S1-8 is used for both the central TCC-Link address and the Unit address. The line address (i.e. Outdoor unit) for the RAS Interface is always 30 and cannot be altered.

### Operation.

With the new PCB installed the IR hand held remote, (Supplied with the indoor unit.), will operate as normal.

When the unit is connected to a Black Pear Interface (BMS) or to a Smart Touch Controller (Colour Touch Screen) it will be possible to view and control the following;

Return Air (TA), Setpoint, Mode and Fan Speed.

An error resulting in the LEDS, (On the front of the indoor unit), flashing will be reported as a P30 fault.

Louvre position is NOT controllable and will either appear as "Hold" or be absent.

Contact details:

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**Toshiba Air Conditioning**

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**Text back service**

**07624 803 017**

**(Type fault code in lower case no spaces)**



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