



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

Cool Designs Ltd

Raising the Standards in Air Conditioning Distribution

www.cdlweb.info



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.



Cool Designs Ltd

Raising the Standards in Air Conditioning Distribution

Setting the bit switches:

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

Off = No terminal resister, (Default.)

Note: Only one terminal resister 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.

Cool Designs Ltd

Raising the Standards in Air Conditioning Distribution



Contact details:

Cool Designs Ltd Technical Support

07590 775510 / 07706 293028

Monday – Friday 07.30 to 19.30

Email: support@cooldesignsltd.co.uk

Web site: www.cdlweb.info



Toshiba Air Conditioning

24/7 technical support

0870 843 0333 (Option 7)

Text back service

07624 803 017

(Type fault code in lower case no spaces)



Try our on-line training videos on YouTube.

Cool Designs Ltd reserves the right to change the product specifications, data and images without notice



Cool Designs Ltd

Raising the Standards in Air Conditioning Distribution

www.cdlweb.info