



*Pocket Quick
Reference Guide
On the **TOSHIBA***

RBC-AMTU31-E

Remote Controller

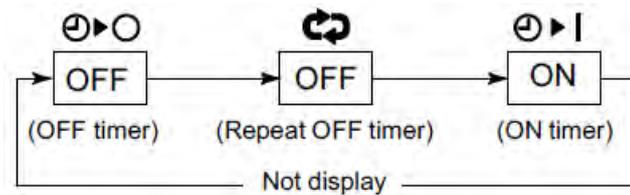


Quick Reference Guide

NOTE: The “Timer Function” on the RBC-AMTU31-E is a “ON or OFF” timer which can be utilised to control the connected air conditioning unit in ONE of the following ways.

- 1) **OFF Timer** - Stops the unit after a specific period, (From 0.5hr to 168hr) ONCE ONLY
- 2) **Repeat OFF Timer** – Stops the unit after the specific period, ever time the unit is used
- 3) **ON Timer** – Starts the unit after the specific period, (From 0.5hr to 168hr) ONCE ONLY

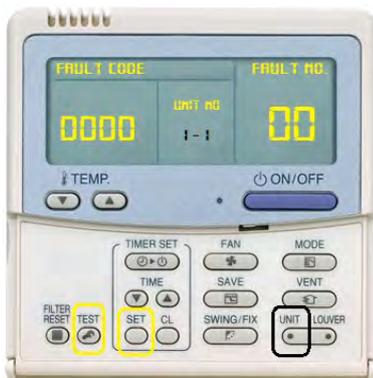
Each time the “timer” button is pressed, the timer mode and Indication change in the Following order.



To assist service engineers working on Toshiba air conditioning equipment, there is a large quantity of data available via the standard remote controller, the RBC-AMTU31E, this data is **NOT** available via an Infrared remote or the RBC-AS21E2 simplified remote controller.

Accessing the data is a simple process of pressing a sequence of buttons on the remote controller.

Fault Code Guide



Current fault codes are displayed automatically on the left of the remote controller, (Four figure display) fault code history can be accessed by pressing “**Test and Set**” (The two yellow buttons) together and holding for 4 seconds.

Each controller will hold four fault codes per unit controlled, units can be scrolled through via the “Unit” button, the first displayed fault code is the youngest and the fourth will be the oldest.

To scroll through the faults use the “**TEMP▲▼**” buttons.

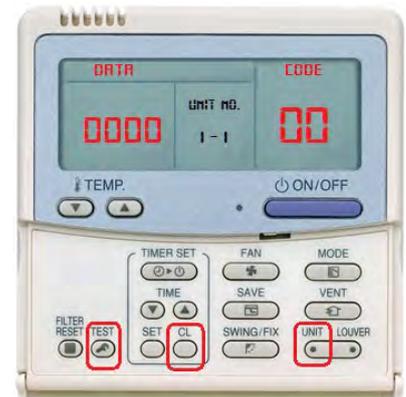
- Refer to the Technical Handbook for fault code diagnosis and descriptions

Data Retrieval Guide

System data can be obtained by pressing “**Test and CL**” together and holding for 4 seconds

Codes are displayed on the right of the remote display two digits
To scroll through the codes, use the “**TEMP▲▼**” buttons.
Data is displayed on the left of the remote controller four digits.

Data is available for “0, 1, 2, 3 & 4 Series” Digital/Super Digital Inverter and VRF equipment (Mini VRF*, SMM*, SHRM*).



Digital/Super digital “0-1-2-3 – R410A” series data

Code	Indoor Data	Code	Outdoor Data
00	Room Temp (Control Temp) (°C)	60	TE Sub-cooled Liquid Temp. (°C)
01	Room Temp. (Remote Controller) (°C)	61	TO Ambient Temp. (°C)
02	TA Return Air Temp. (°C)	62	TD Discharge Temp. (°C)
03	TC Coil – Vapour Temp. (°C)	63	TS Suction Temp. (°C)
04	TCJ Coil – Liquid Temp. (°C)	65	THS – Inverter Heat Sink Temp. (°C)

Digital/Super digital “4 – R410A & 1 – R32” series

Code	Indoor Data	Code	Outdoor Data
00	Room Temp (Control Temp) (°C)	60	TE Sub-cooled Liquid Temp. (°C)
01	Room Temp. (Remote Controller) (°C)	61	TO Ambient Temp. (°C)
02	TA Return Air Temp. (°C)	62	TD Discharge Temp. (°C)
03	TC Coil – Vapour Temp. (°C)	63	TS Suction Temp. (°C)
04	TCJ Coil – Liquid Temp. (°C)	65	THS – Inverter Heat Sink Temp. (°C)
07	Fan Speed (rpm)	6A	Operation Current (A)
F2	Fan Run Time (x 100h)	70	Compressor Frequency (Hz)
F3	Filter Duration Timer (x 1h)	72	Fan Speed (Lower) – (rpm)
F8	Discharge Temp. (Indoor – If fitted) (°C)	73	Fan Speed (Upper) – (rpm)
		F1	Compressor Run Time (x 100h)

VRF indoor data for Mini SMMS / SMMS / SMMSI & SHRM equipment

Code	Indoor Data	Code	Indoor Data
00	Room Temp (Control Temp) (°C)	06	Indoor Discharge Temp (If Used) - (°C)
01	Room Temp. (Remote Controller) (°C)	08	PMV Position (0 – 10)
02	TA Return Air Temp. (°C)	0A	Number of Connected Indoor Units (No.)
03	TCJ Coil – Liquid Temp. (°C)	0b	Indoor Capacity (x 10 = HP)
04	TC2 Coil – PMV Pipe Temp. (°C)	0C	Number of Outdoor Units (No.)
05	TC1 Coil – Vapour Temp (°C)	0d	Outdoor Capacity (x 10 = HP)

VRF Outdoor data for Mini SMMS / SMMS & SHRM equipment

Code	Outdoor Data	Code	Outdoor Data
*0	Td1 - Compressor 1 Discharge Temp. (°C)	*8	TU – Low Pressure Saturated Temp. (°C)
*1	Td2 - Compressor 2 Discharge Temp. (°C)	*9	Compressor 1 Current (A)
*2	Pd – High Pressure Sensor (MPa)	*A	Compressor 2 Current (A)
*3	Ps - Low Pressure Sensor (MPa)	*b	PMV1 + 2 Opening (0 – 100)
*4	TS – Suction Temp. (°C)	*d	Compressor 1, 2 ON/OFF
*5	TE - Outdoor Heat Exchanger Temp. (°C)	*E	Outdoor Fan Mode (0 – 31)
*6	TL – Liquid Temp. (°C)	*F	Outdoor Unit Size (HP)
Note. * Would be replaced with 1, 2, 3 or 4 to obtain data from respective outdoor unit.			

VRF Outdoor data for SMMSi / SHRMi equipment

Code	Outdoor Data	Code	Outdoor Data
*0	Pd – High Pressure Sensor (MPa)	#0	Compressor 1 Revolutions (rps)
*1	Ps – Low Pressure Sensor (MPa)	#1	Compressor 2 Revolutions (rps)
*2	Td1 – Compressor 1 Discharge Temp. (°C)	#2	Compressor 3 Revolutions (rps)
*3	Td2 – Compressor 2 Discharge Temp. (°C)	#3	Outdoor Fan Mode
*4	Td3 – Compressor 3 Discharge Temp. (°C)	#4	Compressor IPDU 1 Heat Sink Temp. (°C)
*5	TS – Suction Temp. (°C)	#5	Compressor IPDU 2 Heat Sink Temp. (°C)
*6	TE1 – Outdoor Coil Temp. (°C)	#6	Compressor IPDU 3 Heat Sink Temp. (°C)
*7	TE2 – Outdoor Coil Temp. (°C)	#7	Outdoor Fan IPDU Heat Sink Temp. (°C)
*8	TL – Liquid Temp. (°C)	#8	Heating / Cooling Recovery Controlled
*9	TO – Outdoor Ambient Temp. (°C)	#9	Pressure release
*A	PMV 1 + 2 Opening	#A	Discharge Temp. Release
*B	PMV 4 Opening	#B	Follower Unit Release
*C	Compressor 1 Current (A)	#F	Outdoor Unit Size (HP)
*D	Compressor 2 Current (A)	Note. * Would be replaced with 1, 2, 3 or 4 to obtain data from respective outdoor unit. # Would be replaced with either 5, 6, 7, 8 to obtain data from outdoor units 1,2,3 or 4	
*E	Compressor 3 Current (A)		
*F	Outdoor Fan Current (A)		

VRF Outdoor data for SMMSe/SHRMe equipment

Code	Outdoor Data	Code	Outdoor Data
*0	Pd – High Pressure Sensor (x100) (MPa)	#0	PMV 1 Opening
*1	Ps – Low Pressure Sensor (x100) (MPa)	#1	PMV 3 Opening
*2	Td1 – Compressor 1 Discharge Temp (°C)	#2	PMV 4 Opening
*3	Td2 – Compressor 2 Discharge Temp (°C)	#3	1 Fan model : Comp. 1 Current (x10) (A)
*5	TE1 – Outdoor Coil Temp (°C)		2 Fan model ; Comp. 1 and Fan current (x10) (A)
*6	TE2 – Outdoor Coil Temp (°C)	#4	1 Fan model : Comp. 1 Current (x10) (A)
*9	TO – Outdoor Ambient Temp (°C)		2 Fan model ; Comp. 1 and Fan current (x10) (A)
*A	TS1 – Suction Temp (°C)	#6	Compressor 1 revolutions
*B	TS2 – Suction Temp (°C)	#7	Compressor 2 revolutions
*D	TL – Liquid Temp (°C)	#9	Outdoor fan mode
		#A	Compressor IPDU 1 Heat Sink Temp (°C)
90	Heating/cooling recovery controlled	#B	Compressor IPDU 2 Heat Sink Temp (°C)
91	Pressure release	#D	Outdoor Fan IPDU 1 Heat Sink Temp (°C)
92	Discharge temperature release	#E	Outdoor Fan IPDU 1 Heat Sink Temp (°C)
93	Follower unit release	#F	Outdoor unit horsepower (HP)
Note. * Would be replaced with 1, 2 or 3 to obtain data from respective outdoor unit. # Would be replaced with either 5, 6, 7 to obtain data from outdoor units 1,2 or 3			

VRF Outdoor data for SMMSu equipment

Code	Outdoor Data	Code	Outdoor Data
*0	Pd – High Pressure Sensor (x100) (MPa)	#0	TK1 – Compressor oil temp. (°C)
*1	Ps – Low Pressure Sensor (x100) (MPa)	#1	TK2 – Compressor oil temp. (°C)
*2	Td1 – Compressor 1 Discharge Temp (°C)	#2	PMV1 – Opening (pls)
*3	Td2 – Compressor 2 Discharge Temp (°C)	#3	PMV2 - Opening
*4	TS1 – Suction Temperature (°C)	#4	PMV3 - Opening
*5	TS3 – Suction Temperature (°C)	#5	PMV4 - Opening
*6	TE1 – Outdoor Coil Temp (°C)	#6	Compressor 1 current (x10) (amps)
*7	TE2 – Outdoor Sub heat exchanger temp.	#7	Compressor 2 current (x10) (amps)
*8	TE3- Outdoor Sub heat exchanger temp.	#8	Compressor 1 revolutions (x10) (rps)
*9	TO – Outdoor Ambient Temp. (°C)	#9	Compressor 2 revolutions (x10) (rps)
*A	TL1 – Liquid Temp. (°C)	#A	Outdoor fan mode
*B	TS2 – Suction Temp. (°C)	#B	TH1 - Inverter of compressor 1 heat sink temp.
*C	TS3 – Suction Temp. (°C)	#C	TH2 - Inverter of compressor 2 heat sink temp.
*D	TG1 – Outdoor coil Temp (°C)	#D	TH fan1 -Inverter of outdoor fan 1 heat sink
*E	TG2 – Outdoor coil Temp (°C)	#E	TH fan2 -Inverter of outdoor fan 1 heat sink
*F	TG3 – Outdoor coil Temp (°C)	#F	Outdoor unit horsepower (HP)
<p>Note * Would be replaced with 1=U1, 2=U2, 3=U3, 4=U4 & 5=U5 to obtain data from respective outdoor unit. # Would be replaced with 6=U1, 7=U2, 8=U3, 9=U4 & A=U5.</p>			

For descriptions that are more detailed please, refer to the relevant technical service manual.

Common Configurable Control Options

*Accessed via Toshiba hard wired remote controller RBC-AMTU31-E

Relocation of room temperature sensing from return air to remote controller sensor

Press and hold the **TEST + ▼** simultaneously for 4 seconds

NOTE: DO NOT press the UNIT button.

The Engineering Menu is accessed at item code 10 on the right.

Use the **Temperature ▲▼ Buttons** to navigate to item code 32

Use the **Timer ▲▼ Buttons** to adjust the value from 0000 to 0001

Press **SET** to acknowledge the change

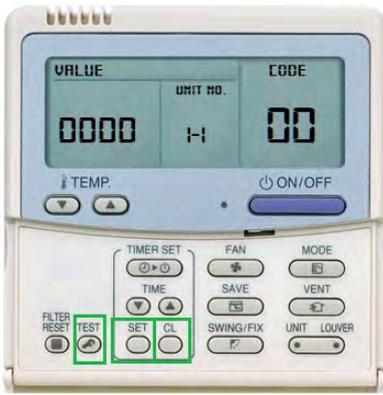
Press **Test** to exit the Engineering Menu

The display will go blank and then flash SETTING whilst the system reconfigures

When SETTING stops flashing press **ON/OFF Button** to restart the operation



Accessing the engineering (DN) Codes for the Indoor Unit



Press and hold the **TEST, SET & CL Buttons** simultaneously for 4 seconds

The Engineering Menu is accessed at item code 10 on the right. The fan and louver of the selected unit will start.

Use the **Temperature ▲▼ Buttons** to navigate to the required code

When accessing the new 3 figure codes, the third digit will be displayed where the Unit No, (Centre) was displayed, to change the unit no. press the left hand "UNIT" button, Unit No flashes three times then returns to the third digit.

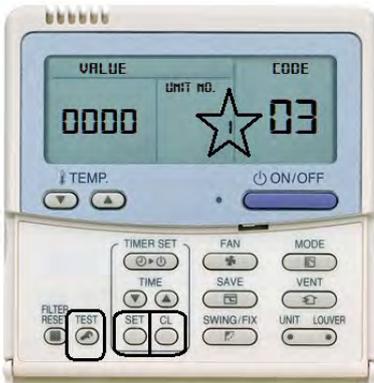
Use the **Timer ▲▼ Buttons** to adjust the value from 0000 to 0001

Press **SET** to acknowledge the change

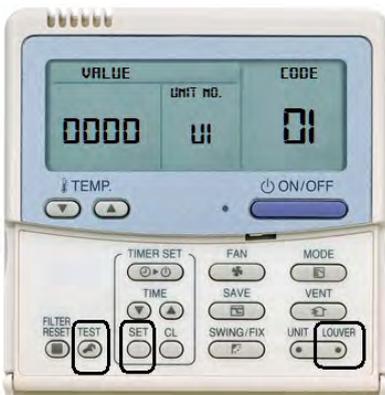
Press **Test** to exit the Engineering Menu

The display will go blank and then flash SETTING whilst the system reconfigures

When SETTING stops flashing press **ON/OFF Button** to restart the operation



Accessing the engineering (DN) Codes for the Outdoor Unit (SMMSU – Only)



Press and hold the **TEST, SET & Louver Buttons** simultaneously for 4 seconds

The Engineering Menu is accessed at "U1" item code "01" on the right.

To move from outdoor unit "U1" to "U2, U3 or U4" press the "Unit" button (Left Hand), the fan will start on the selected unit.

Use the **Temperature ▲▼ Buttons** to navigate to the required code

Use the **Timer ▲▼ Buttons** to adjust the value from 0000 to 0001

Press **SET** to acknowledge the change

To check new settings, press the "Unit" button left hand.

Press **Test** to finish and exit the Engineering Menu

The display will go blank and then flash SETTING whilst the system reconfigures

When SETTING stops flashing press **ON/OFF Button** to restart the operation

If the outdoor unit does not support outdoor DN codes, (Currently ONLY SMMSU supported), after pressing "Test, Set, Louver, the display will change, but the value nor the code will be displayed, and the display will revert to the original display.

Automatic restart after power failure

Press and hold the **TEST, SET & CL Buttons** simultaneously for 4 seconds

The Engineering Menu is accessed at item code 10 on the right.

Use the **Temperature ▲▼ Buttons** to navigate to item 28

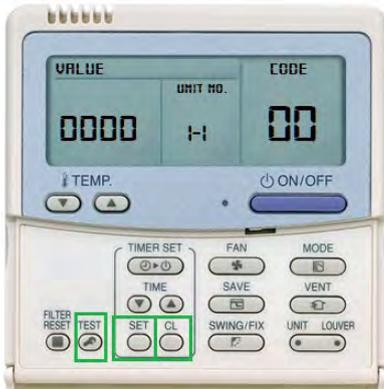
Use the **Timer ▲▼ Buttons** to adjust the value from 0000 to 0001

Press **SET** to acknowledge the change

Press **Test** to exit the Engineering Menu

The display will go blank and then flash **SETTING** whilst the system reconfigures

When **SETTING** stops flashing press **ON/OFF Button** to restart the operation



Power Save

With the system powered but not operating, green light OFF.

Press and hold the **SAVE button** for 4 seconds

Setting flashes and code C2 is displayed on the right.

Select the indoor unit required using the **UNIT (Left) button**

Adjust the power save settings using the **Temperature ▲▼ Buttons** each press changes the power level by 1%, within the range of 50% to 100%, **factory default is 75%**

Press **SET** to acknowledge the change

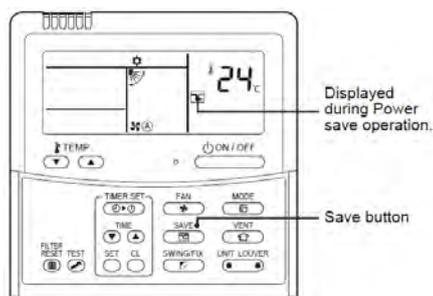
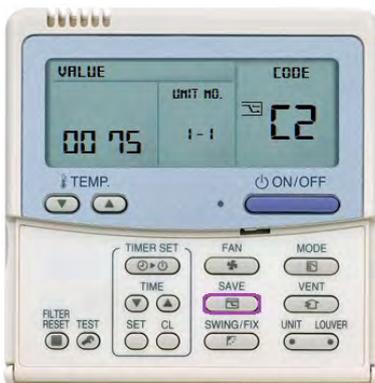
Press **Test** to exit the Engineering Menu

The display will go blank and then flash **SETTING** whilst the system reconfigures

When **SETTING** stops flashing press **ON/OFF Button** to restart the operation

To turn on Power Save mode, with the unit in operation, briefly press **SAVE**, power save icon is displayed on the right, Power Save mode stays in effect until cancelled.

To cancel power save mode, with the unit operating and the power save icon displayed, press **SAVE**, power save icon is removed and power save mode is cancelled.



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Toshiba Air Conditioning

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(Type fault code in lower case no spaces)



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