



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

RBC-AMSU51-ES

Remote Controller



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# **Quick Reference Guide**

To assist service engineers working on Toshiba air conditioning equipment, there is a large quantity of data available via the remote controller the RBC-AMSU51-ES, this data is **NOT** available via an Infra-red remote or the RBC-AS41E simplified remote controller.

Accessing the data is a simple process of entering into the on-board menu of the remote controller.



# Controller Layout (RBC-AMSU51-ES).

1 - ON/OFF button

Illuminates when system is running.

#### 2 - Temperature up button

Used in the menu screen to select menu items

#### 3 - Temperature down button Used in the menu screen to select menu items

#### 4 – Menu Button

Displays the menu screen.

#### 5 - F1 button

Varies its functions according to the setting screen.

#### 6 – F2 button

Varies its functions according to the setting screen

# 7 – Cancel button

Functions as indicated on the screen

#### 8 – Monitor button

Displays the monitor screen

Individual On/Off temperature control. Individual control of VRF indoor units via single or multi outlet Flow Selector boxes, <u>"e" series Heat Recovery VRF ONLY</u>).



#### Setting Present Time and Day of Week

- Press the " [ MENU] " button to display the "Menu screen".
- Press the " [ ∧ ∧]/[ ∨ ∨] " button to select option "10 Initial Setting" then
   Press the " Set Set [F2]" button.
- Select "1 Clock" then press
   " Set Set [F2]" button.
- 4) Press the " [ ∧ ∧ ] / [ ∨ ∨ ] " button to select the year, month, date & time.
  Press the " F1 ] or F1 ] or F2]" button to set the value.
- 5) Press the " [ MENU] " button.



Initial setting	g(1/3)
1.Clock	
2.Name of room	
3.Screen contrast	
4.Backlight	
5.Key lock	
> Return	
	Set

Clock	
Date	01
Month	01
Year	2010
Hour	00
Minute	00
5 Return 🗐 Fix	
	+

- Setting ON and OFF Times (scheduled operations)
  - Press the " [ MENU] " button to display the "Menu Screen".
  - Press the " [ ^ ^]/[ V ]" button to select option "5 Schedule timer" then press the " Set Set" [F2] button.
  - Press the " F1]" button to turn
     On or " F2]"to turn off the schedule timer.

2.Individual louver 3.Louver setting 4.Off reminder timer 5.Schedule timer	1.Wind direction	
4.Off reminder timer 5.Schedule timer	2.Individual louve	r
5.Schedule timer	3.Louver setting	
	4.Off reminder tim	ner
5 Return	5.Schedule timer	
	5 Return	

Schedule timer	
1.Schedule timer ●ON / OFF	
2.Condition setting 3.Holiday setting	
🗩 Return 🔳 Fix	<u>~</u> ]^
$\leftarrow \bullet \qquad \bullet \rightarrow$	

<u>Setting Timer Operation Mode.</u> In order to utilise the "Mode" facility in the scheduled timer function, i.e. set the mode of operation, the "Operation Mode" needs enabling. (Factory setting is "OFF. The equipment will turn on at the scheduled time, but the mode of operation would be at the last setting on the remote at the time of the previous "OFF" schedule).

#### Entering the "Field Setting Menu"

- 1) Press " [ MENU] and [ V V] " together for 4 seconds.
- 2) Press " [ ^ ]/[ V ]" to select option "6" "Setting Timer Operation Mode"
- 3) Press " Set [F2]"
- 4) Select "ON time of the select "on the select of the selection of the sele



**<u>Condition Setting</u>** (Day, time, mode & temperature settings)

Press the "  $[ \land \land ]/[ \lor \lor ]$  "button to select option

"2 Condition setting" then press the "Set Set Set" [F2] button.

The current settings appear.

- a) Press the " The Day [F1]" button to confirm the settings for each day
  - b) Press the " Next [F2]" button to confirm the current settings, 8 different settings appear
- 1) Press the "[ MENU] " button
- Press the " [ ^ ^]/[ V V]" button to select the day to set then press the " [F1]" button.
- 3) Press the "[ ^ ^ ]/[ V V] " button to select "ON / OFF" Select "ON" to set start time and set temperature settings. Select "OFF" to set the stop time.
  "- "indicates that item has not been set.
- Press the" → [F2]" button to select time or temperature. When "- - "is displayed, time or temperature cannot be selected.



	Scheo	lule timer(	(1/3)
Day	: Monday	/	
1.		:	–−°C
2.		:	–−°C
3.		:	−−°C
4.		:	−−°C
5	Return	🔳 Set	
	Day		Next

	Sche	edule timer	(1/3)
Day	:	Monday	
1.		:	−−°C
2.		:	−−°C
3.		:	−−°C
4.		:	−−°C
5	Return	🙂 Fix	
	Ļ		Reset

	Sche	dule time	r(3/3)
Day	: Mono	day	
5.	ON	13:00	25°C
6.	OFF	17:00	–−°C
7.	ON	22:05	25°C
8.	OFF	23: <mark>45</mark>	-−°C
5	Return	🔳 Fix	
	Ļ		$\rightarrow$

- Press the "[ ∧ ∧]/[ ∨ ∨] " button to set time or temperature.
- Press the " [F1]" to program the next pattern.
   Up to 8 patterns per day can be programmed.
- Press the " [ MENU] "button. Screen returns to the day selection screen.
- 8) Press the "[ ^ ^ ]/[ V V] " button to select the next day to set.
  Repeat steps 3 to 8 above to program the running patterns for each day.
- 9) Press the " [ B MENU] "button.
   Press the " Press the " Press the " No [F2]" to return to the setting screen.

#### To delete the settings for each day

- 1) Press the " **Reset** [F2]" button on the day selection screen.
- Press the "Yes [F1]" button.
   The schedule for the day selected is deleted.
- 3) Press the " **No** [F2]" button to Return to the "Condition setting screen"

#### To copy the settings of the previous day.

- Press the " [ MONITOR] " button on the day selection screen.
- Press the "Yes [F1]" button.
   The schedule for the previous day is copied.
- Press the " No [F2]" button to Return to the "Condition setting screen"

	Sche	dule timer	(3/3)	
Day	: Mond	lay		
5.	ON	13:00	25°C	
6.	OFF	17:00	–−°C	
7.	ON	22:05	25°C	
8.	OFF	23: <mark>45</mark>	_−°C	
5	Return	🔳 Fix		$\sim   \land$
	Ļ		$\rightarrow$	



			Reset	
5	Return	Fix		
8.	OFF	11:45	°C	
7.	ON	10:13	25°C	
6.	OFF	10:00	°C	
5.	ON	06:00	25°C	
Day	: Mono	lay		
1.1	Sche	dule timer	(3/3)	







#### Holiday (Day omit) setting.

- From the "Scheduled timer screen" Press the " [ ^ ^]/[ V V] "button to Select option "3 Holiday setting"
- 2) Press the " Set [F2]" button.
- 3) Press the "Day [F1] button to select the day, and then press the "Set [F2]" button to set.
   Press "Set [F2]" button

So that "  $\bullet$  "is displayed on the day when the Schedule timer is **NOT** used







# Fault Code Guide

Current fault codes are displayed automatically at the top of the LCD display, (Warning symbol, Code: \*\*\* along with the affected unit no.)

Main power switch flashes "Green".

Fault code history can be accessed by accessing the "Field Setting Menu"

- 1) Press the "[ MENU] " button to display the menu screen
- 2) Press and hold the" [■ MENU]" button and the"[ ∨ ∨]"button at the same time for more than 4 seconds to display the "Field setting menu"
- 3) Scroll down to item "3" using the[ ∨ ∨] button.
- 4) Press "F2" Set

		Me	enu(1/3)	
1.0	/ind di	rection	1	
2.In	dividu	al louv	er	
3.L	ouver	setting		
4.0	ff rem	inder ti	mer	
5.S	chedu	le time	r	
5	Ret	urn		
			Set	
		Field	settina menu	
<b>1</b> T	est m		Setting mena	
1000		er servi	no info	
		nistory		
_		r functio	nn.	
	N set		211	
-	Ret			
-	itter	um	Se	
			58	t.
		A.I	an Internet	
	11:10		m history	
1.00			Date	Time
1.	1-2	E04	31/12/2010	12:25
2.	-	-	-	-
3.	-	-	-	-
4.	-	-		-
5	Ret	turn	1.1.2.2	$\sim$
			Res	set

A list of the latest 10 alarm codes along with date, time and unit are displayed.

The oldest data are deleted in order to record the newest, the date and time when the error occured for the first time are displayed for any repeated alarms.

Refer to the Technical Handbook for fault code diagnosis and descriptions

#### To erase the fault code history.

- 1) Press the "**Reset** [F2]" button whilst the list of alarm codes is displayed.
- When the display has changed press the "Yes [F1]" button.



#### Sample fault codes.

Code	Description
E01	No communication between remote controller and indoor unit. (Master indoor unit maybe switched off)
E02	Local controller failure – unable to transmit
E03	Master indoor unit receives no data to A-B (Could also show as E01 fault)
E04	Indoor unit (except twin slave) receives no communications from outdoor unit; can also include klixon on discharge pipe of outdoor unit
E08	Duplicated indoor unit address
E09	2 local controllers connected on a group – both configured as masters
E10	Indoor unit PCB failure
E18	Communications failure between master indoor unit and slave indoor unit or units
F01	Indoor unit TCJ (Liquid) sensor error (Open or Closed circuit – resistance is measured in k $\Omega$
F02	Indoor unit TC2 (Vapour) sensor error (Open or Closed circuit – resistance is measured in kΩ
F04	Outdoor unit TD (Discharge) sensor error (Open or Closed circuit – resistance is measured in kΩ
F06	Outdoor unit TE (Coil) sensor error (Open or Closed circuit – resistance is measured in k $\Omega$
F08	Outdoor unit TO (Ambient) sensor error (Open or Closed circuit – resistance is measured in k $\Omega$
F10	Indoor unit TA (Return Air) sensor error (Open or Closed circuit – resistance is measured in kΩ
F29	Indoor unit PCB failure
H01	Outdoor unit Inverter compressor over current detected
H02	Master outdoor unit over current detected shortly after start up
H03	Current detected on Master outdoor unit whilst idle
H06	Outdoor unit Low pressure detected by Ps sensor (0.2 bar – 2.9 psig)
L03	Indoor unit Duplicated master indoor units in a group
L07	Indoor unit in a group of units previously addressed as a single unit – check addressing
L08	Indoor units addresses not set – check addressing
L09	Indoor units' capacity not set (check DN Code 11)
L29	Outdoor unit IPDU error (Number of detected IPDU units is reduced)
L30	Input on indoor PCB CN80 circuit for 1 minute
L31	Outdoor unit PCB error
P01	Indoor unit fan motor error
P03	Outdoor unit High discharge temperature (TD1 exceeded 115 °C)
P04	Outdoor unit High pressure switch activated (Detected by high temperature on TE sensor on digital/super digital inverter units)
P07	Outdoor unit PCB heat sink overheated (Temperature over 90 °C recorded)
P10	Indoor unit Float switch activated
P12	Indoor unit fan motor error – detected by feedback circuit
P19	Wrong change in temperature recorded (4 way valve error)
P22	Outdoor unit fan motor IPDU error
P26	Outdoor unit Giant transistor short circuit
P29	Outdoor unit Compressor error detected by feedback circuit
P30	Indoor unit Group control follower unit error / duplicated central control addresses
P31	Indoor unit PCB error
C05	Central control Sending error in TCC-Link central control device
C06	Central control Receive error in TCC-Link central control device
C12	Batch alarm for general purpose equipment interface
	Fig 3

Fig 3

More detailed listings are available in the technical handbook or relevant service literature

# Data Retrieval Guide

There are two levels for system data, the first level is the monitor mode, which shows basic temperatures indoor and outdoor, filter time and system running hours.

#### To access this data press the [ MONITOR] button

	Monitor	
)	Set temp.	27°C
	Indoor temp.	27°C
	Outdoor temp.	35°C
I	Filter remaining hour	2500
	Total running hour	60000

- 1) Display's the set temperature.
- 2) Display's the temperature measured by the TA return air sensor within the indoor unit. If the system is programmed to use the room sensor in the remote controller this will be displayed replacing the TA data.
- 3) Display's the temperature measured by the TO ambient air sensor within the outdoor unit.
- 4) Display's the remaining time until the filter sign is displayed.
- 5) Display's the accumulated operating time of the system.

To access the second level of data display.

- Press the [ MENU] button to display the "Menu screen"
- 6) Press and hold the " [■ MENU] " button and the "[ ∨ ∨] "button at the same time for more than 4 seconds to display the "Field setting menu"
- 7) Scroll down to item "4" using the "[ $\checkmark$   $\checkmark$ ] "button.
- 8) Press "F2 Set Set



 Press the " [ ∧ ∧]/[ ∨ ∨] " to scroll through the codes, for details of codes refer to the following charts.

#### 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)

Fig 4

#### Digital/Super digital "4,5,7 – 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)

#### Fig 5

#### 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)

Fig 6

### 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)	*Е	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 obt	ain data	a 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
*В	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
*E	Compressor 3 Current (A)	obtain	data from respective outdoor unit.
*F	Outdoor Fan Current (A)		d be replaced with either 5, 6, 7, 8 to data from outdoor units 1,2,3 or 4

Fig 8

# VRF Outdoor data for SMMSe & SHRMe equipment

Code	Outdoor Data	Code	Outdoor Data
*0	Pd – High Pressure Sensor (MPa)	#0	PMV 1 Opening (Pls)
*1	Ps – Low Pressure Sensor (MPa)	#1	PMV 3 Opening (Pls)
*2	Td1 – Compressor 1 Discharge Temp. (°C)	#2	PMV 4 Opening (Pls)
*3	Td2 – Compressor 2 Discharge Temp. (°C)	#3	1 Fan model: Compressor 1 current
			2 Fan model: Comp. 1 and Outdoor fan current (A)
*5	TE1 – Outdoor Coil Temp. (°C)	#4	1 Fan model: Compressor 2 current
5		π-+	2 Fan model: Comp. 2 and Outdoor fan current (A)
*6	TE2 – Outdoor Coil Temp. (°C)	#6	Compressor 1 Revolutions (RPS)
*7	TG1 – Outdoor Coil Temp. (°C)	#7	Compressor 2 Revolutions (RPS)
*8	TG2 – Outdoor Coil Temp. (°C)	#9	Outdoor Fan mode
*9	TO – Outdoor Ambient Temp. (°C)	#A	Compressor IPDU 1 heat sink temp. (°C)
*A	TS1 – Suction Temp. (°C)	#B	Compressor IPDU 2 heat sink temp. (°C)
*C	TS3 – Suction Temp. (°C)	#D	Outdoor Fan IPDU 1 heat sink temp. (°C)
*D	TL1 – Liquid Temp. (°C)	#E	Outdoor Fan IPDU 2 heat sink temp. (°C)
*Е	TL2 – Liquid Temp. (°C)	#F	Outdoor Unit Size (HP)
*F	TL3 – Liquid Temp. (°C)	Note.	* Would be replaced with 1, 2 or 3 to
		obtain	data from respective outdoor unit.
		# woul	d be replaced with either 5, 6, 7 to obtain
		data fr	om 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)
	Note * Would be replaced with 1=U1, 2=U2, 3=U3, 4=U # Would be replaced with 6=U		·

Fig 10

#### For more detailed descriptions please refer to the relevant technical service manual.

# **Common Configurable Control Options**

\*Accessed via Toshiba hard wired remote controller RBC-AMS51E-ES/54E/55E-ES

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

- 1. Press the "[ MENU]" button to display the "Menu screen"
- Press and hold the "[■ MENU]" button and the "[ ∨ ∨]" button at the same time for more than 4 seconds to display the "Field setting menu"
- 3. Scroll down to page 2, item no. " 7 DN Settings" using the "[ ∨ ∨] "button.
- 4. Press "F2" Set
- 5. Select "Indoor Unit I.DN" Press "F2 Set







6. Code (I.DN) 0010 is displayed on the left.

- Change "Data" from "0000" to "0001" by pressing the "[ ∧ ∧]/[ ∨ ∨] "
- 2. Press " Follow on screen instructions.

#### Automatic restart after power failure

- 1. Press the "[ MENU] " button to display the "Menu screen"
- Press and hold the "[ MENU] " button and the "[ V] "button at the same time for more than 4 seconds to display the "Field setting menu"
- 3. Select "Indoor Unit I.DN" Press "F2 Set
- Change "Data" from "0000" to "0001" by pressing the "[ ∧ ∧]/[ ∨ ∨] "
- 6. Press " Fillow on screen instructions.





1.Wind direction	
2.Individual louver	
3.Louver setting	
4.Off reminder timer	
5.Schedule timer	
5 Return	
	Set
Field setting menu (2 6.Setting timer operation mo	
7.DN Settings	
8.Reset power consumption	data
5 Return	

Menu(1/3)







#### **Energy Saving Function.**

- Press the "[ MENU] " button to display the "Menu screen"
- Press the " [ ^ ^]/[ V V] " button to Select option "9 Energy Saving"
- 3) Press the " Set [F2]" button.

Energy saving operation	
3, 3, 1	<0N>
2.Set temp. range limit	
3.Return back	
	<off></off>
5 Return	$\sim$
	Set

	Item	Function
1.	Energy Saving Operation	Perform the power saving operation of the air conditioner
2.	Set temp. Range limit	Set the temperature range limit of the remote controller operation
3.	Return Back	Set the function that changes the temperature back to the specified temperature automatically if the temperature has been changed at the remote controller

#### Energy Saving Ratio.

- Press the " [ ^ ^]/[ V ] " button to Select option "2 Energy Saving Ratio"
- 2) Press the " %+ %+ [F1] or
  " %- %- [F2] to set the value. The energy saving ratio can be set within the range from 50% to 100% by 1% increments. The lower the value is set, the higher the power saving effect, default is 75%

	Energy s	saving oper	ation
1.En	ergy savir	ng operation	1
42036	5,		
2.En	erav savir	na ratio	
3.En	ergy savir	ng schedule	-
5	Return	🔳 Fix	$\checkmark$
			Set
_			
	Energ	y saving ra	tio
Ener	gy saving	ratio	
	75%	6	
5	Return	E Fix	
_	%+	-	07

 Press the " [ MENU] " button.
 " Z Setting" appears, and then the screen returns To the "Energy saving operations" screen.

#### **Energy Saving Temperature Setting.**

- Press the " [ ^ ^]/[ V V] " buttons to Select "2.Set temp range limit" on the "Energy Saving" Screen, and then press the " Set [F2]" button.
- 2) Press the " [ ∧ ∧ ]/[ ∨ ∨ ] " button to set the temperature.
  Press the " [F1] or → [F2] "button to set the value.
- 3) Press the " [■ MENU] "button. The screen returns to the "Energy Saving Screen"
   " ∑ Setting" appears, and then the screen returns to the "Energy saving operations" screen.

Energy s	saving
1.Energy saving ope	eration
and the second	<0N>
2.Set temp. range li	mit
3.Return back	
	<off></off>
5 Return	
	Set

	Minimun	1~1	Maximum	
Cool	18.0°C	~	29.0°C	
Heat	18.0°C	~	29.0°C	
Dry	18.0°C	~	29.0°C	
Auto	18.0°C	~	29.0°C	
5 R	eturn 📧	a F	ix	$\checkmark$
-	2 <u>-</u>			

**<u>Return Back</u>**, This function returns the system to a pre-set temperature for both heating and cooling, after a programmed period of time between 10 minutes and 120 minutes in 10-minute increments.

- Press the " [ ^ ^]/[ V V] " buttons to Select "3. Return Back " on the "Energy Saving" Screen, and then press the " Set [F2]" button.
- 2) Press the " [F1]" button to select ON.
- 3) Press the "[ ∧ ∧]/[ ∨ ∨] [F1] "button to select "Return Time". then press " + [F1] - [F2]" buttons to set the duration (10 – 120 Minutes)
- 4) Press the "[ ∧ ∧]/[ ∨ ∨] [F1] "button to select "Return temp (cool) or Return temp (heat)". then press " + [F1] [F2]" buttons to set the temperature.
- 5) Press the "[ MENU] " button, to fix and return to the "Energy Saving Screen".

#### **Saving Operation**

- Press the " [ ^ ^]/[ V V] " buttons to select "4. Saving Operation" on the "Energy Saving" screen, and then press the " Set [F2]" button.
- 3) Press the "[ MENU] " button, to fix and return to the "Energy Saving Screen".

#### Note.

The saving operation is performed by determining a comfort state within the room from data such as the average room temperature, air speed, outdoor temperature for the past 20 minutes and then automatically correcting the temperature set point within a range in which there will be no significant variation in the level of comfort.

The temperature ranges for automatic correction are  $+1.5^{\circ}$ C to  $-1.0^{\circ}$ C when cooling and  $-1.5^{\circ}$ C to  $+1.0^{\circ}$ C when heating. The temperature set point indication on the remote controller does not change.

"
" is displayed on the remote controllers display screen during the saving operation.

The saving operation is performed when Auto (cooling/heating automatic operation), cooling operation and heating operation. The saving operation may be possible depending on the indoor unit that is connected.

The saving operation cannot be set on the follower remote controller when a dual remote controller is used.

Energy sav	ing(1/2)
1.Energy saving ope	ration
	<on></on>
2.Set temp, range lin	nit
3.Return back	
	<off></off>
5 Return	
	Set
Return t	back
Return back	
ON/	OFF
Return time	60mi

28°C

20°C

~~

Return temp.(Cool)

Return temp.(Heat)

S Return Fix

Return back	
Return back ON / OFF	
Return time	60min
Return temp.(Cool)	28°C
Return temp.(Heat)	20°C
5 Return 🔳 Fix	$\sim$
+	-

Return bac	k
Return back	
ON/ O	FF
Return time	60min
Return temp.(Cool)	28°C
Return temp.(Heat)	20°C
🗩 Return 🔳 Fix	
	-





**<u>KEY LOCK</u>** The controller is equipped with a "Key Lock" function, this is NOT a password protected function, best described as being a "Child Lock".

To activate the "Key Lock", press and hold the "[ **Solution** CANCEL]" button for more than 4 seconds.

To de-activate, press and hold the "[ **[] CANCEL**]" button for more than 4 seconds.



<u>Additional information</u>. On the top part of the RBC-AMSU51ES controllers display, during certain conditions a symbol maybe displayed.

- It may be displayed depending on the model when "<sup>(1)</sup> Preparing to operate" is displayed.



In addition to the functions and facilities listed above the RBC-AMSU51-ES also has the capacity to control a number of functions when coupled with appropriate ventilation units. <u>NOTE: Not suitable for connection "1 on 1" with Toshiba VN-M\*\*\*HE/HE1 units.</u>

#### Ventilation.

- 1) Press the " [ ∧ ∧]/[ ∨ ∨] " button, scroll menu and select "11 Ventilation".
- 2) Then press the " Set "[F2]" button.
- 3) Press the " [ ^ ^]/[ V V] " button to select the item to set
- 4) Press the " Set [F2]" button.



Item		Function
1.	ON/OFF	Run and Stop operation of the ventilation unit
2.	Fan Speed	Setting of the fan speed
3.	Mode	Setting of the ventilation units mode of operation
4.	24H Ventilation OFF	Setting of the 24 hour ventilation operation stop time

Note.

• "Impossible" appears on the display when no ventilation unit is connected or the individual operation for the ventilation unit is not actived.

- "2 Fan Speed" or "3 Mode", "4 24H Ventilation off" is available only for the air conditioning system using the Toshiba Air to Air Heat Exchanger VN-M\*HE series.
- " Appears on the detailed display during the ventilation operation when the ventilation unit other than the Toshiba Air to Air Heat Exchanger VN-M\*HE series is used and the individual operation for the ventilation unit is activated.

#### Additional facilities available on the RBC-AMSU51-ES

#### **Dual Set Point.**

In dual set point settings, it is possible to set the temperature set point of individual modes. Subject to connected equipment, please refer to fig 2, earlier in this publication.

- Press the " [ ^ ^ ]/[ V ]" button to switch the display shown on the right.
- 2) To set the cooling temperature set point, press "Cool" and adjust the setting with the" [ ^ ^ ]/[ V ] " a box will surround " [ Cool] " and temperature set point. To set the heating temperature set point press "Heat" and adjust the setting with the " [ ^ ^ ]/[ V ] " a box will surround " [ \* Heat] " and temperature set point.
- 3) Press " [ BRNU] " button to confirm settings and return to normal display.
- 4) Press " [ **D** CANCEL]" button to cancel the settings and return to the normal display.

#### Note

When connected to a system which does not support dual set point, the temperature set point, a value half of the heating and cooling temperature set point is displayed.

When temperature setting has been changed by the "Unsupported controller", the cooling and heating set point displayed will be set automatically.

**Increased fan speeds** Available on 6 and 7 series units, fan speeds increase from 3 to 5, when used on earlier models with 3 speed fans, only 3 options are displayed.

**<u>Refrigerant Leak Indication</u>**, visual indication of refrigerant leak when coupled with one of the Toshiba leak detection systems.

Individual On/Off temperature control. Individual control of VRF indoor units via single or multi outlet Flow Selector boxes, <u>New "SHRMe" series ONLY</u>)





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