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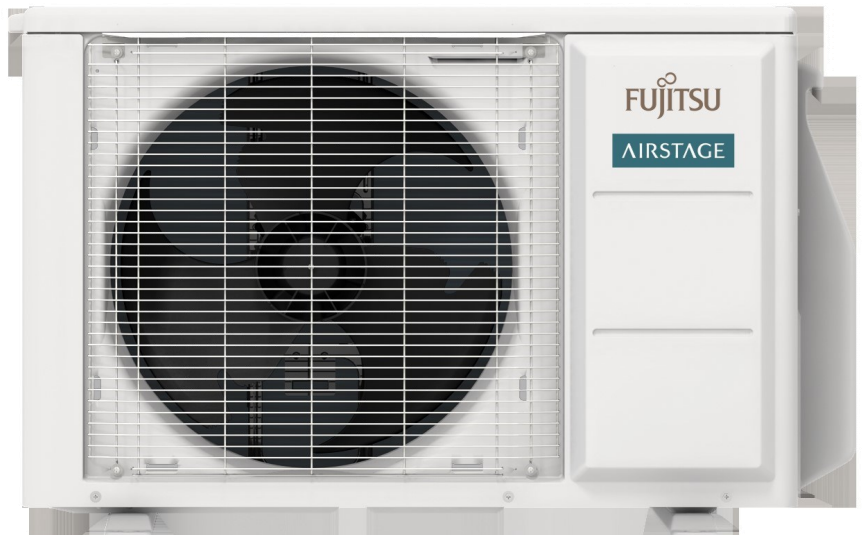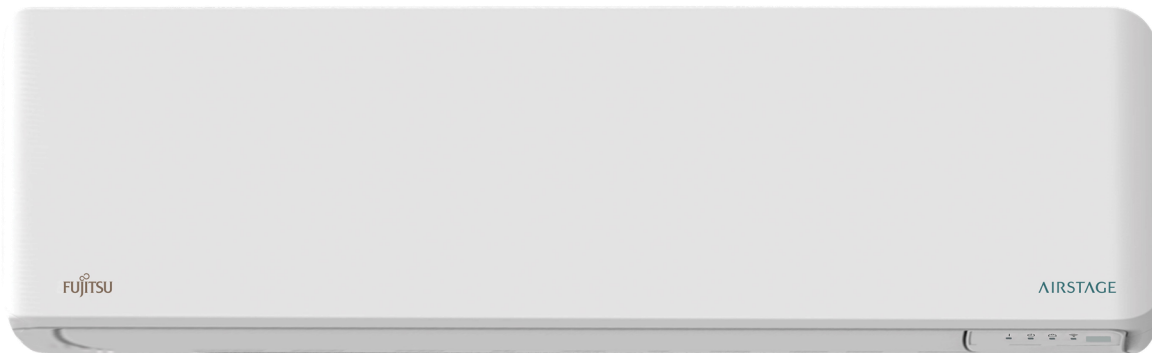
Quick Start Guide
Airstage H-Series Systems

Quick Start Guide for Indoor Unit Function Settings

Time saving tutorials to maximize H-Series efficiency

FUJITSU GENERAL AMERICA, INC.

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1. Introduction

The purpose of this Quick Select Guide is to provide a comprehensive explanation of available indoor unit function settings. It is important for the installing contractor to be able to select the correct setting options at start up to maximize Fujitsu H-Series system operation and configure auxiliary heat settings, when applicable.

As many of the function settings affect the system operation, it is important to ensure the setting options for each model are reviewed and configured correctly upon start up of each H-Series Single-Zone and Multi-Zone system. This guide will assist the technician in selecting function setting and to help understand how the setting affects the system to maximize delivered efficiency.

2. Guide use

The table on the next page provides the H-Series indoor unit model series, along with the available function settings. For ease of selection, the table separated by unit type; cassette, ducted, floor mount or wall mount. Columns within each section provide the indoor unit series, with rows to detail available settings specific to each series type.

3. Function setting explanation

Gray shaded areas indicate the function setting is not available for the indoor unit model.

Bulleted, green shaded areas indicate the function setting applies to the selected indoor unit series and should be reviewed at start up and adjusted as necessary.

Click on the function setting description in the left column, to advance to the desired explanation page. Each function setting is explained in detail and the setting options are provided.

For example, if you want to change the duct static setting for an ADUH24LUAS1, click on the "Duct static setting" box, in the table on the next page, to advance to the setting description and setting option explanations.

Function description / Click function for explanation and options	Function Number	DUCTED				CASSETTE			WALL MOUNT									CEIL	FL
		ADUH07-24LUAS	ARUH12-36LUAS	ARU42-48RGLX	AMUG24-48LMAS	ACUH07-18LUAS	AUUH18-36LMAS	AUU42-48RGLX	ASUH09-12LMAS	ASUH18-24LMAS	ASUH07-36LPAS	ASU18-24RLF	ASU18-24RLB	ASU30RLE	ASU9-12RLF1	ASUG09-15LZBS	ASU30-36RLXB	ABUH18-36LUAS	AGU9-15RLF
RC address setting	00													•					
Filter sign	11	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
High ceiling	20					•	•	•										•	
Outlet direction	22					•	•	•											
Upper vane setting	23						•												•
Duct static setting	26	•	•	•															
Condensation prevention	28																	•	
Return temperature sensor offset– cooling	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Return temperature sensor offset– heating	31	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RC temperature sensor offset– cooling	35	•	•	•	•	•	•		•	•	•			•		•		•	•
RC temperature sensor offset– heating	36	•	•	•	•	•	•		•	•	•			•		•		•	
Auto restart	40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

4. Accessing function settings

All indoor unit function settings are accessed by means of either a compatible Fujitsu 3-wire or 2-wire remote control, RC. In order to access function settings, please refer to the RC "Installation Manual" as procedures vary between RC models.

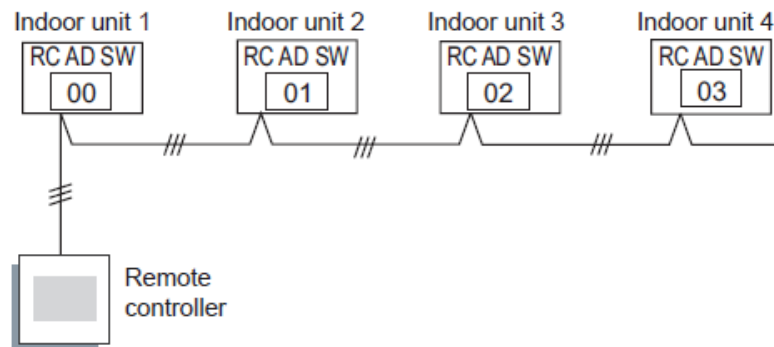| Function description / Click function for explanation and options	Function Number	DUCTED				CASSETTE			WALL MOUNT									CEIL	FL
		ADUH07-24LUAS	ARUH12-36LUAS	ARU42-48RGLX	AMUG24-48LMAS	ACUH07-18LUAS	AUUH18-36LMAS	AUU42-48RGLX	ASUH09-12LMAS	ASUH18-24LMAS	ASUH07-36LPAS	ASU18-24RLF	ASU18-24RLB	ASU30RLE	ASU9-12RLF1	ASUG09-15LZBS	ASU30-36RLXB	ABUH18-36LUAS	AGU9-15RLF
RC address setting	00													•					
Filter sign	11	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
High ceiling	20					•	•	•										•	
Outlet direction	22					•	•	•											
Upper vane setting	23						•												•
Duct static setting	26	•	•	•															
Condensation prevention	28																	•	
Return temperature sensor offset– cooling	30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Return temperature sensor offset– heating	31	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
RC temperature sensor offset– cooling	35	•	•	•	•	•	•		•	•	•			•		•		•	•
RC temperature sensor offset– heating	36	•	•	•	•	•	•		•	•	•			•		•		•	•
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DIP SW. 101-2– Auto louver setting			•																
DIP SW. 101-3– Auxiliary heat fan OFF delay		•	•	•	•														

Setting 00– RC Address setting

Applicable only when using a 3-wire RC.

This "Group Control" function setting is only used when more than (1) indoor unit is connected to the 3-wire RC, up to (16) indoor units total.

Example below: If there are (4) indoor units to be controlled from a single 3-wire RC, adjust the second IDU setting value to 01, third IDU to setting 02 and the fourth IDU to setting 03. The first IDU should be left at the default setting of 00.

◆ Factory setting

Function Number	Setting Value	Setting Description
00	00	Unit no. 0 ◆
	01	Unit no. 1
	02	Unit no. 2
	03	Unit no. 3
	04	Unit no. 4
	05	Unit no. 5
	06	Unit no. 6
	07	Unit no. 7
	08	Unit no. 8
	09	Unit no. 9
	10	Unit no. 10
	11	Unit no. 11
	12	Unit no. 12
	13	Unit no. 13
	14	Unit no. 14
	15	Unit no. 15

Indoor unit 1 — RC AD SW 00
Indoor unit 2 — RC AD SW 01
Indoor unit 3 — RC AD SW 02
Indoor unit 4 — RC AD SW 03

Remote controller

Note: If different indoor unit types are connected to the same 3-wire RC, for example, wall mount and cassette, ducted and floor mount, some unit functions may no longer be available.

Setting 11– Filter setting

The "Filter setting" function is a time-based RC notification based upon accumulative indoor unit fan operation time. The filter setting is not based upon actual filter pressure drop, thus the setting is a reminder only to check the filter cleanliness; it is not an indication of actual filter accumulation.

If the end user would like to have an indication displayed on the RC as a reminder to check the filter cleanliness, adjust the time interval to the approximate setting that is best representative of the indoor environment. Indoor conditions with less particulate can have a longer interval; conversely an indoor environment with more particulate (dust, dirt, animal dander, etc.) will require shorter interval reminders.

Example below: If the end user would like to have a filter reminder with the longest interval between alerts, select setting value 01.

◆ Factory setting– no indication

Function Number	Setting Value	Setting Description
11	00	Standard (Interval varies upon model)
	01	Longer (Interval varies upon model)
	02	Short (Interval varies upon model)
	03	Disabled- No indication ◆

Note: **The setting hours will vary** between indoor unit model. Please refer to the IDU Installation Manual for specific hour interval options.

Setting 20– Ceiling height

The "High ceiling" function is applicable to select cassette units only. Selection of the heigh ceiling mode will increase fan power to deliver the airflow to the floor when the cassette unit is located higher than the "standard" setting. The default ceiling height is either 8' or 9', depending upon cassette model number, and enabling the ceiling height function will provide an additional 1' (12") of throw.
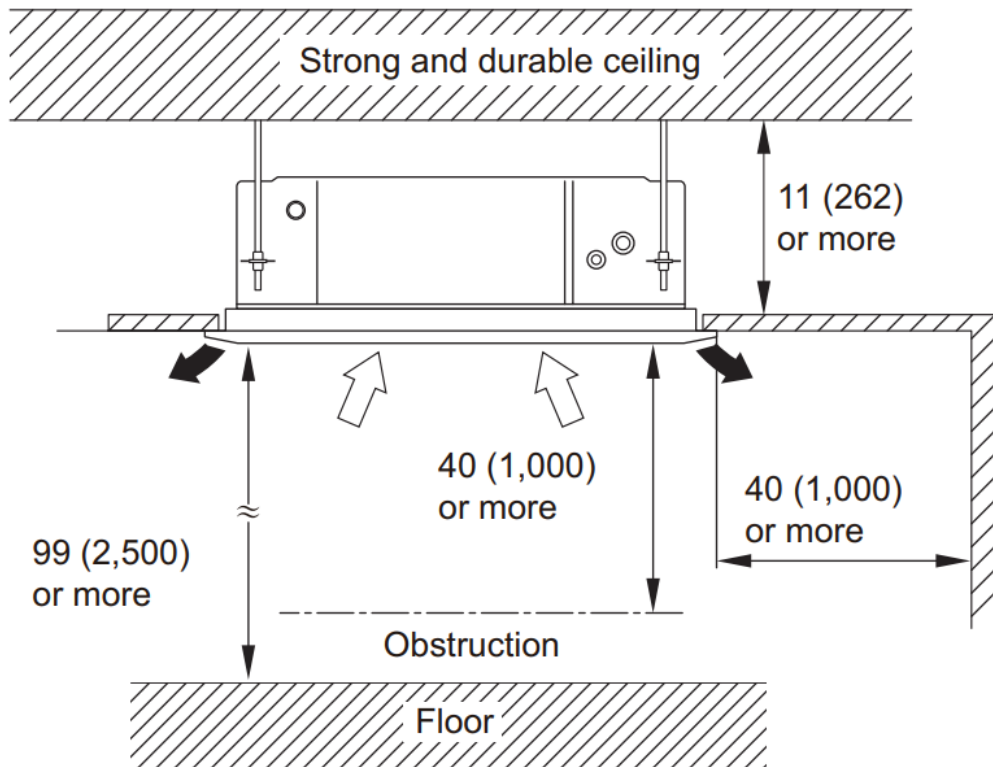
Example below: If the cassette unit is installed 9' above the floor, change the setting option to 01.

◆ Factory setting– Standard height

Function number	Setting value	Setting description	
20	00	Standard	◆
	01	High ceiling	

Notes:

1. The high ceiling option is not available with all model capacities, for example, the ACUH07LUAS, 7,000 BTU/h model cannot be installed in a high ceiling condition. Please refer to the IDU Installation Manual for details of standard and high ceiling elevations.

2. 3-outlet option (Function setting 22) When the 3-way outlet direction option is enabled, the high ceiling setting is automatically disabled.

3. ACUH**LUAS Design & Technical Manual high ceiling distribution example below. (Standard height = 8') If the ACUH unit is installed 9' above the floor, as measured from the grille bottom face, adjust function setting 20 to setting value 01.

Setting 22– Outlet direction

The "Outlet direction" function can be used when one dimension of the cassette unit is in close proximity to a wall. This function must be used in conjunction with the selected Air Outlet Shutter Plate, which is a separate accessory item.

Example below: If the cassette unit is installed 4" or more from a wall, with the air outlet shutter plate installed, change the setting option to 01 for a 3-way airflow pattern.

◆ Factory setting– 4-way

Function number	Setting value	Setting description	
22	00	4-way	◆
	01	3-way	

Notes:

1. When the high ceiling option (Function setting 20) is enabled, the outlet direction setting will be prohibited.

2. Provide at least 4" from the cassette grille to the wall for service clearance.

3. The correct air outlet shutter plate must be installed to provide a 3-way airflow pattern.
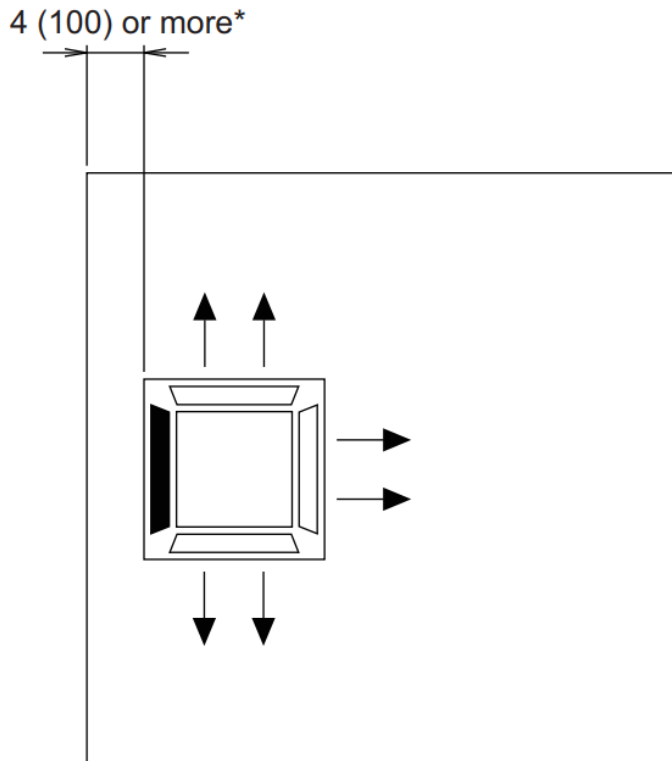
Setting 23– Upper vane setting

The "Upper vane setting" is applicable to Floor type units only. When the AGU**RLF units are recessed or concealed in a wall, the vertical range of the airflow should be restricted to prevent turbulent airflow when the horizontal vane is in position 1 through 4 below. If Setting 23 is not adjusted, air turbulence if the upper outlet louver is in positions 1 through 4 will result is heat may buildup inside the unit and prevent adequate heating and cooling performance.

Example below: If the floor unit is installed in any type of recessed application, change Changing function setting 23 to option 02 to set the horizontal louver in position 5 only, as illustrated below.

Setting Description	Function Number	Setting Value
Standard		00 ◆
(Setting forbidden)	23	01
In a wall		02

◆ Factory setting– Standard (positions 1 though 5)

Notes:

1. When the upper vane setting (Setting value 02) is enabled, the upper outlet is fixed to position 5 only.

2. Ensure this setting is explained to the end user, as upper vane positions 1 through 4 ill not be available.
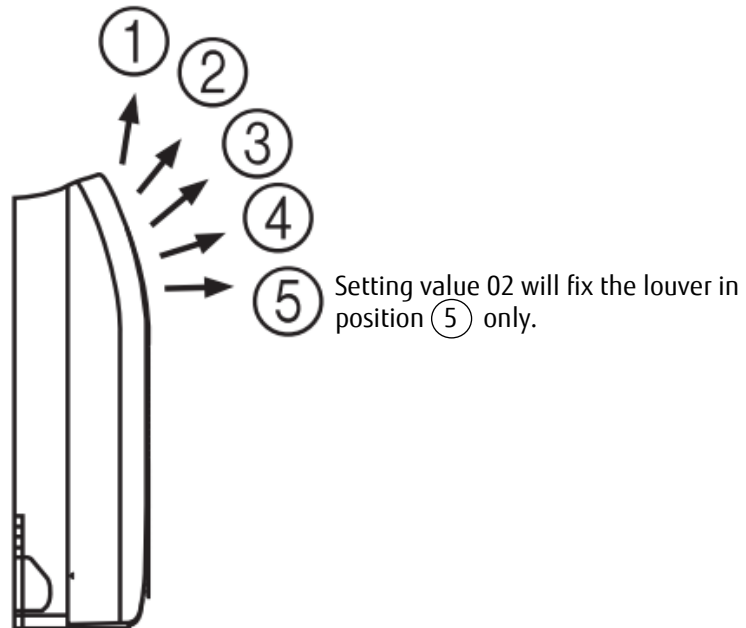
Setting value 02 will fix the louver in position ⑤ only.

Setting 26– Duct static setting

IMPORTANT– DUCT STATIC SETTINGS VARY BETWEEN INDOOR UNIT MODEL SERIES AND CAPACITIES.

Prior to changing the duct static setting, select the model series below by clicking on the unit to be adjusted; the correct table will then be displayed. Anytime ductwork installed, the static setting should be checked and adjusted to match the total ESP of the ductwork and any added airside accessories, e.g. air filters, electronic air cleaners, etc.

- **ADUH07-24LUAS**– Table 1 below

- **ARUH12-36LUAS**– Table 2

- **ARU42-48RGLX**– Table 3

Table 1– ADUH07-24LUAS

Function number	Setting value	Setting description
26	00	0 in WG (0 Pa)
	01	0.04 in WG (10 Pa)
	02	0.08 in WG (20 Pa)
	03	0.12 in WG (30 Pa)
	04	0.16 in WG (40 Pa)
	05	0.20 in WG (50 Pa)
	06	0.24 in WG (60 Pa)
	07	0.28 in WG (70 Pa)
	08	0.32 in WG (80 Pa)
	09	0.36 in WG (90 Pa)
	31	♦ 0.10 in WG (25 Pa) [Standard]

♦ Factory setting– 0.10" w.g.

Setting 26– Duct static setting

IMPORTANT– DUCT STATIC SETTINGS VARY BETWEEN INDOOR UNIT MODEL SERIES AND CAPACITIES.

- **ARUH12-36LUAS**– Table 2 below

Function Number	Setting Value	Setting Description
26	03	0.12 in. WG (30 Pa)
	04	0.16 in. WG (40 Pa)
	05	0.20 in. WG (50 Pa)
	06	0.24 in. WG (60 Pa)
	07	0.28 in. WG (70 Pa)
	08	0.32 in. WG (80 Pa)
	09	0.36 in. WG (90 Pa)
	10	0.40 in. WG (100 Pa)
	11	0.44 in. WG (110 Pa)
	12	0.48 in. WG (120 Pa)
	13	0.52 in. WG (130 Pa)
	14	0.56 in. WG (140 Pa)
	15	0.60 in. WG (150 Pa)
	16	0.64 in. WG (160 Pa)
	17	0.68 in. WG (170 Pa)
	18	0.72 in. WG (180 Pa)
	19	0.76 in. WG (190 Pa)
	20	0.80 in. WG (200 Pa)
	31	Standard 0.18 in. WG (45 Pa): 12/18/24 model 0.23 in. WG (57 Pa): 30/36/42 model 0.28 in. WG (70 Pa): 48 model
	32	Automatic airflow adjustment

◆ Factory setting– Based upon model number, see Setting 31 for default values

Automatic airflow adjustment, Setting 32– When selected, the ARUH unit will attempt to provide a near constant nominal CFM within the SP range for each model as listed in setting 31. For example, ARUH36 will deliver ~1,200 CFM between 0.12" to 0.80" w.g.

Setting 26– Duct static setting

IMPORTANT– DUCT STATIC SETTINGS VARY BETWEEN INDOOR UNIT MODEL SERIES AND CAPACITIES.

- **ARU42-48RGLX**– Table 3

Function Number	Setting Value	Setting Description
26	03	0.12 in. WG (30 Pa)
	04	0.16 in. WG (40 Pa)
	05	0.20 in. WG (50 Pa)
	06	0.24 in. WG (60 Pa)
	07	0.28 in. WG (70 Pa)
	08	0.32 in. WG (80 Pa)
	09	0.36 in. WG (90 Pa)
	10	0.40 in. WG (100 Pa)
	11	0.44 in. WG (110 Pa)
	12	0.48 in. WG (120 Pa)
	13	0.52 in. WG (130 Pa)
	14	0.56 in. WG (140 Pa)
	15	0.60 in. WG (150 Pa)
	16	0.64 in. WG (160 Pa)
	17	0.68 in. WG (170 Pa)
	18	0.72 in. WG (180 Pa)
	19	0.76 in. WG (190 Pa)
	20	0.80 in. WG (200 Pa)
	31	Standard 0.18 in. WG (45 Pa): 12/18/24 model 0.23 in. WG (57 Pa): 30/36/42 model 0.28 in. WG (70 Pa): 48 model
	32	Automatic airflow adjustment

◆ Factory setting– Based upon model number, see Setting 31 for default values

Automatic airflow adjustment, Setting 32- When selected, the ARU unit will attempt to provide a near constant nominal CFM within the SP range for each model as listed in setting 31. For example, ARU48 will deliver ~1,600 CFM between 0.12" to 0.80" w.g.

Setting 28– Condensate prevention

The "Condensation prevention" setting is applicable to Ceiling type units only. When the ABU18-36LUAS units are operating in the cool or dry mode, position setting 4 may result in condensation collection on the vane, which may also result in condensate dripping on below surfaces. The default Setting value 00 will assist in preventing condensation from forming on the vanes by limiting vane positions to 1 though 3.

Example below: If condensation on the vanes is not applicable in cool and, change Setting value to 01 to allow vane positioning 4, as illustrated below.

◆ Factory setting– 00

Function number	Setting value	Setting description
28	00	Adjust to dew condensation limit position ◆
	01	Adjust to cooling standard position
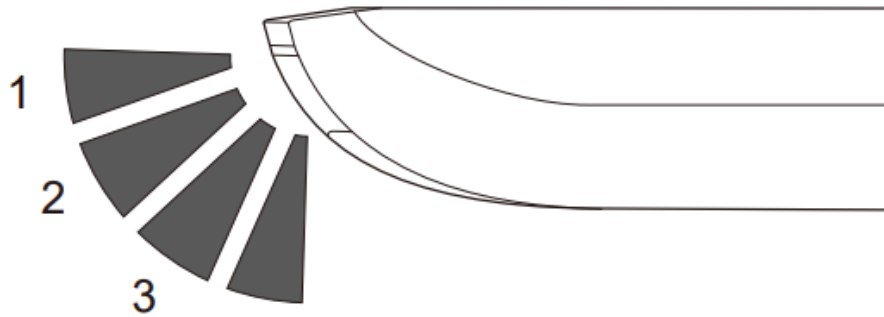
Setting 4 is prohibited in the cool / dry modes with the default setting value 00

Setting 30– Room temperature (Return) sensor offset– COOL mode

In some installation locations, the return air temperature may not be representative of the average room temperature. Function setting 30 provides an offset to the return air temperature thermistor inside the indoor unit when in the COOL mode only. The default Setting value 00 does not apply any temperature correction.

"More Cooling"- Use setting values 02-09 when there is temperature overshoot. (Room is too warm) Subtracting a (-) negative value in the Setting results in an INCREASE of actual return temperature. To illustrate, Setting value 04 has a (-3° F.) value; when subtracted from the actual return sensor value, will INCREASE the return temperature by 3° F. This will result in longer runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 04 applied) = 75° - (-3°) = 78° F.

"Less Cooling"- Use setting values 10-17 when there is temperature undershoot. (Room is too cold) Subtracting a (+) positive value in the Setting results in a DECREASE of actual return temperature. To illustrate, Setting value 13 has a (+4° F.) value; when subtracted from the actual return sensor value, will DECREASE the return temperature by 4° F. This will result in less runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 13 applied) = 75° - (+4°) = 71° F.

◆   Factory setting– 00

Function number		Setting value	Setting description	
30 (For cooling)		00	Standard setting	◆
		01	No correction 0 °F (0.0 °C)	
		02	-1 °F (-0.5 °C)	More Cooling
		03	-2 °F (-1.0 °C)	
		04	-3 °F (-1.5 °C)	
		05	-4 °F (-2.0 °C)	
		06	-5 °F (-2.5 °C)	
		07	-6 °F (-3.0 °C)	
		08	-7 °F (-3.5 °C)	
		09	-8 °F (-4.0 °C)	
		10	+1 °F (+0.5 °C)	Less Cooling
		11	+2 °F (+1.0 °C)	
		12	+3 °F (+1.5 °C)	
		13	+4 °F (+2.0 °C)	
		14	+5 °F (+2.5 °C)	
		15	+6 °F (+3.0 °C)	
		16	+7 °F (+3.5 °C)	
		17	+8 °F (+4.0 °C)	

Setting 31– Room temperature (Return) sensor offset– HEAT mode

In some installation locations, the return air temperature may not be representative of the average room temperature. Function setting 31 provides an offset to the return air temperature thermistor inside the indoor unit when in the HEAT mode only. The default Setting value 00 does not apply any temperature correction.

"Less Heating"- Use setting values 02-09 when there is temperature overshoot. (Room is too warm) Subtracting a (-) negative value in the Setting results in an INCREASE of actual return temperature. To illustrate,, Setting value 04 has a (-3° F.) value; when subtracted from the actual return sensor value, will INCREASE the return temperature by 3° F. This will result in less runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 04 applied) = 75° - (-3°) = 78° F.

"More Heating"- Use setting values 10-17 when there is temperature undershoot. (Room is too cold) Subtracting a (+) positive value in the Setting results in a DECREASE of actual return temperature. For example, Setting value 13 has a (+4° F.) value; when subtracted from the actual return sensor value, will DECREASE the return temperature by 4° F. This will result in longer runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 13 applied) = 75° - (+4°) = 71° F.

◆ Factory setting– 00

Function number	Setting value	Setting description	
31 (For heating)	00	Standard setting	◆
	01	No correction 0 °F (0.0 °C)	
	02	-1 °F (-0.5 °C)	Less Heating
	03	-2 °F (-1.0 °C)	
	04	-3 °F (-1.5 °C)	
	05	-4 °F (-2.0 °C)	
	06	-5 °F (-2.5 °C)	
	07	-6 °F (-3.0 °C)	
	08	-7 °F (-3.5 °C)	
	09	-8 °F (-4.0 °C)	
	10	+1 °F (+0.5 °C)	More Heating
	11	+2 °F (+1.0 °C)	
	12	+3 °F (+1.5 °C)	
	13	+4 °F (+2.0 °C)	
	14	+5 °F (+2.5 °C)	
	15	+6 °F (+3.0 °C)	
	16	+7 °F (+3.5 °C)	
	17	+8 °F (+4.0 °C)	

Setting 35– Wired Remote Control (RC) sensor offset– COOL mode

In some installation locations, the air temperature at the Wired RC may not be representative of the average room temperature. Function setting 35 provides an offset to the room temp thermistor inside the wired RC, in the COOL mode only. The default Setting value 00 does not apply any temperature correction.

"More Cooling"- Use setting values 02-09 when there is temperature overshoot. (Room is too warm) Subtracting a (-) negative value in the Setting results in an INCREASE to the RC temperature sensor. To illustrate, Setting value 04 has a (-3° F.) value; when subtracted from the actual RC sensor value, will INCREASE the RC temperature by 3° F. This will result in longer runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 04 applied) = 75° - (-3°) = 78° F.

"Less Cooling"- Use setting values 10-17 when there is temperature undershoot. (Room is too cold) Subtracting a (+) positive value in the Setting results in a DECREASE to the RC temperature sensor. For example, Setting value 13 has a (+4° F.) value; when subtracted from the actual RC sensor value, will DECREASE the RC temperature by 4° F. This will result in less runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 13 applied) = 75° - (+4°) = 71° F.

◆ Factory setting– 00

NOTES:

1. Function 42, Setting 01 "Both" must be selected before Function 35 setting changes can be changed.
2. Set RC sensor to "Used" within the RC Initial Setting menu.

Function number		Setting value	Setting description	
35 (For cooling)		00	No correction	◆
		01	No correction 0 °F (0.0 °C)	
		02	-1 °F (-0.5 °C)	More Cooling
		03	-2 °F (-1.0 °C)	
		04	-3 °F (-1.5 °C)	
		05	-4 °F (-2.0 °C)	
		06	-5 °F (-2.5 °C)	
		07	-6 °F (-3.0 °C)	
		08	-7 °F (-3.5 °C)	
		09	-8 °F (-4.0 °C)	
		10	+1 °F (+0.5 °C)	Less Cooling
		11	+2 °F (+1.0 °C)	
		12	+3 °F (+1.5 °C)	
		13	+4 °F (+2.0 °C)	
		14	+5 °F (+2.5 °C)	
		15	+6 °F (+3.0 °C)	
		16	+7 °F (+3.5 °C)	
		17	+8 °F (+4.0 °C)	

Setting 36– Wired Remote Control (RC) sensor offset– HEAT mode

In some installation locations, the air temperature at the Wired RC may not be representative of the average room temperature. Function setting 36 provides an offset to the room temp thermistor inside the wired RC, in the HEAT mode only. The default Setting value 00 does not apply any temperature correction.

"Less Heating"- Use setting values 02-09 when there is temperature overshoot. (Room is too warm) Subtracting a (-) negative value in the Setting results in an INCREASE to the RC temperature sensor. For example, Setting value 04 has a (-3° F.) value; when subtracted from the actual RC sensor value, will INCREASE the RC temperature by 3° F. This will result in less runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 04 applied) = 75° - (-3°) = 78° F.

"More Heating"- Use setting values 10-17 when there is temperature undershoot. (Room is too cold) Subtracting a (+) positive value in the Setting results in a DECREASE to the RC temperature sensor. For example, Setting value 13 has a (+4° F.) value; when subtracted from the actual RC sensor value, will DECREASE the RC temperature by 4° F. This will result in longer runtime compared to the default setting.

Example: Actual room temp = 75° F. (Setting value 13 applied) = 75° - (+4°) = 71° F.

◆ Factory setting– 00

NOTES:

1. Function 42, Setting 01 "Both" must be selected before Function 35 setting changes can be changed.
2. Set RC sensor to "Used" within the RC Initial Setting menu.

Function number		Setting value	Setting description	
36 (For heating)		00	No correction	◆
		01	No correction 0 °F (0.0 °C)	
		02	-1 °F (-0.5 °C)	Less Heating
		03	-2 °F (-1.0 °C)	
		04	-3 °F (-1.5 °C)	
		05	-4 °F (-2.0 °C)	
		06	-5 °F (-2.5 °C)	
		07	-6 °F (-3.0 °C)	
		08	-7 °F (-3.5 °C)	
		09	-8 °F (-4.0 °C)	
		10	+1 °F (+0.5 °C)	More Heating
		11	+2 °F (+1.0 °C)	
		12	+3 °F (+1.5 °C)	
		13	+4 °F (+2.0 °C)	
		14	+5 °F (+2.5 °C)	
		15	+6 °F (+3.0 °C)	
		16	+7 °F (+3.5 °C)	
		17	+8 °F (+4.0 °C)	

Setting 40– Auto restart

Function setting 40 for "Auto Restart", is used to allow the system to restart automatically, upon restoration of power in the event of an outage. The system will restart in the same mode with the same set point prior to loss of power. This function is especially helpful during periods of outdoor temperature extremes or where loss of power may occur frequently.

Disabling Auto Restart is not normally required, however could be disabled to protect the equipment by preventing the system to resume operation if an unstable power source is present. For example, in areas where power quality is very poor, or if the equipment operation is being provided by a temporary source such as a generator.

◆ Factory setting– 00

Function number	Setting value	Setting description	
40	00	Enable	◆
	01	Disable	

IMPORTANT– Disabling Auto Restart can result in loss of indoor temperature control as the system will not restart automatically when power is restored following power loss.

Setting 42– Room temperature sensor switching

Function setting 42 for "Room temperature sensor switching", is used has (2) separate uses that affect the following Function settings:

1. RC temperature sensing- Set value to 01 for "Both", when it is desired to use the RC temperature sensor instead of the return sensor. See also Function setting 48, Setting value 01.

2. RC temperature offset- Set value to 01 for "Both", used to allow temperature offset values applied to the RC via function settings 35 and 36. See also Function setting 35 and 36.

◆ Factory setting– 00

Function number	Setting value	Setting description	
42	00	Indoor unit	◆
	01	Both	

Setting 43– Cold air prevention (Heating only)

The "Cold air prevention" setting is enabled by default to help eliminate cool air drafts from being distributed into the room. Upon the start of each heating cycle, the fan will remain OFF until the indoor coil temperature sensor detects the coil is warm enough to start fan operation.

During heating operation, with the fan in the AUTO mode, the maximum fan speed will be limited by coil temperature to prevent cool air drafts, with exception to a defrost cycle.

In some instances, such as when it desired to provide constant air circulation when in the heat mode, the "Cold air prevention" setting should be disabled. When disabled, the fan will follow the fan speed setting as selected at the RC.

◆ Factory setting– 00

Function Number	Setting Value	Setting Description	
43	00	Enable	◆
	01	Disable	

NOTE– If disabled, there may be instances where cool air is introduced into the room upon the start of each heating cycle.

Setting 44– RC custom code

Function setting 44 for the "RC custom code" applies to wireless RC use only. When there are (2) or more Fujitsu H-Series systems in a home or business using wireless RCs, each RC is capable of controlling any indoor unit with the default Setting value (00) "A".

Changing the RC custom code will limit the wireless RC from being able to operate other H-Series systems. For example, if there are (2) Single-Zone H-Series systems in a home, either wireless RC can operate either system by default. By changing one of the indoor unit Setting values to (01) "B", this will allow the wireless RC to operate the "B" unit only.

◆ Factory setting– 00 "A"

Function number	Setting value	Setting description	
44	00	A	◆
	01	B	
	02	C	
	03	D	

## Setting 46– External input control

Function setting 46 is applicable only when an external input function is used. Optional external input functions will initiate OFF operation of an indoor unit, depending upon the setting option selected. All external input commands are from a 3rd party device, such as a window proximity switch or occupancy sensor, and require a dry contact operation.

◆   Factory setting– 00

| Function Number	Setting Value	Setting Description	
46	00	Operation/Stop mode 1	◆
	01	(Setting prohibited)	
	02	Forced stop mode	
	03	Operation/Stop mode 2	

Setting value description:

00– Operation/Stop mode 1– Unit is ON when the input is CLOSED. Unit is OFF when input is OPEN, however the end user can override operation to ON from the RC.
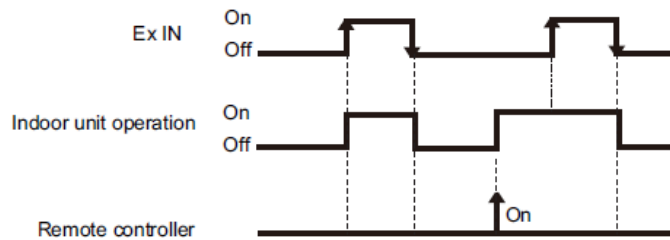
02– Forced stop mode- Unit is ON when the input is OPEN. Unit is OFF when input is CLOSED, however end user can override operation to ON from the RC
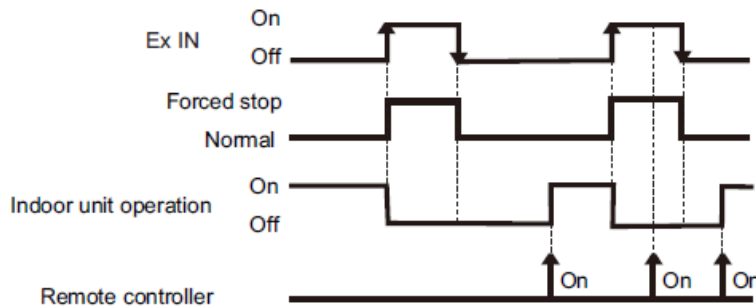
03– Operation/Stop mode 2– Unit is ON when the input is CLOSED. Unit is OFF when input is OPEN. The RC is prohibited from overriding the operation to ON.

FUJITSU GENERAL AMERICA, INC.
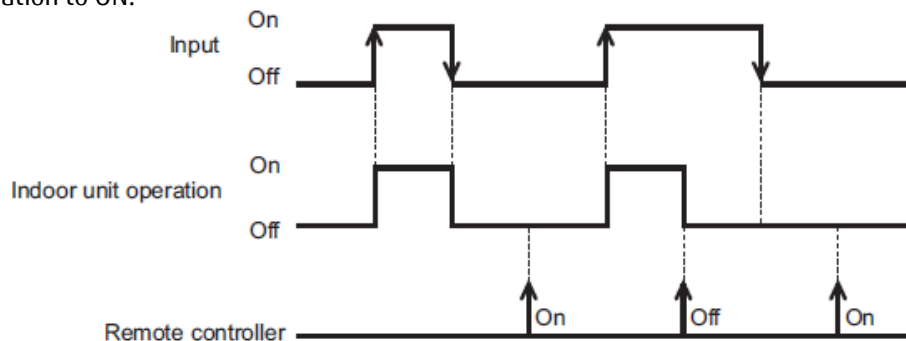
Setting 48– Room temperature sensing switching

Function setting 48 is used to determine which sensor value is used for system operation.

01– Wired Remote Control- When it is desired to use the RC temperature sensor exclusively, change Setting value to 01. NOTE– Function 42 must be changed to Setting value 01 to enable RC sensor use.

00– Both– Regardless of the Function 42 Setting value, if the temperature control criteria is out of range at the wired RC, for example, from poor RC location, drafts, etc., the temperature sensing will automatically switch to the return sensor in order to maintain stable room temperature control. After 30 minutes from automatically switching to the return sensor, if the temperature criteria at the RC becomes stabilized, temperature sensing at the RC will resume.

◆ Factory setting– 00

Function Number	Setting Value	Setting Description	
48	00	Both	◆
	01	Wired remote controller	

Setting 49– Indoor unit fan control (Energy saving for cooling)

Function setting 49 is used for indoor unit fan operation in the cool mode only.

00– Disabled– When the outdoor unit stops (cooling demand is satisfied) the indoor unit fan will operate continuously according to the FAN setting on the RC.

01– Enabled– When the outdoor unit stops (cooling demand is satisfied) the indoor unit fan will operate intermittently a the lowest speed available for the unit model.

02– Remote controller*- This is the default setting, which allows the enable or disable selection directly from the Wired RC, where indoor unit function setting access is not required.

◆ Factory setting– 02

*NOTE: The default configuration of the RC selection (enable or disable) depends upon how the RC is configured at start up as "Commercial" or "Residential". See also RC Installation Manual table below.

Function Number	Setting Value	Setting description	
49	00	Disable	
	01	Enable	
	02	Remote controller	◆

RC example– excerpt from UTY-RNRUZ5 Installation Manual

Function (*: Items that indoor unit does not support are not displayed.)	Enable (Commercial)	Disable (Residential)
Auto Off Timer	On	Off
Weekly Timer	On	Off
Set Temp. Auto Return	On	Off
Set Temp. Range Setting	On	Off
Anti Freeze*	On	Off
Away Setting	On	Off
Human Sensor (Occupancy Sensor) Setting*	On	Off
Fan Control for Energy Saving*	On	Off
Initial Setting	On	Off
Maintenance	On	Off

Setting 60– External output switching control (Indoor unit PCB CN47 only- External I/O PCB not used)*

H-Series indoor units incorporate a 12 VDC switched output from connector CN47 on the indoor unit PCB, based upon unit status as detailed in the table below. This output can be used for numerous pilot duty control functions depending upon the required application. For example, interlocking 3rd party devices, such as an intake or exhaust fan, humidifier or an external auxiliary heat source such as hot water baseboard. The output may also be used for status indication via LED, etc.

Output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

Function Number	Setting Value	Setting Description
60	00	Operation status ◆
	01-04	Cooling thermostat status
	05	Heating operation status
	06	Operation status
	07-08	Cooling thermostat status
	09	Error status
	10	Fresh air control
	11	Auxiliary heater

Function 60 setting description for IDU PCB output CN47. Output ON = 12 VDC

00 & 06– Operation status– ON anytime the indoor unit is ON, regardless of mode or function.

01-04, 07-08– Cooling thermostat status– ON when there is an active COOL demand
- CN47 output is the same for settings 60-01 though 04
- CN47 output is the same for settings 60-07 and 08

05– Heating operation status– ON when there is an active heat demand

09– Error status– ON anytime there is an indoor or outdoor unit error

10– Fresh air control- ON anytime the indoor unit fan is ON

11– Auxiliary heater– ON anytime the conditions set for aux heat function operation are met

Fujitsu accessory required:
(1) UTY-XWZXZG– External connect kit

3rd party devices required:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

*AMUG**LMAS– This setting is not required when using the RXBH series factory auxiliary heater.

Setting 60– External output switching control (External I/O PCB used)

H-Series indoor units, when using the UTY-XCXS "External connect kit" accessory, incorporate a set of (3) dry contact, switched outputs from the output PCB terminals, based upon unit status as detailed in the table below. The advantage of using the UTY-XCXS is, it provides multiple outputs where CN47 provides a single output. The (3) outputs can be used for numerous pilot duty control functions depending upon the required application. For example, interlocking 3rd party devices, such as an intake or exhaust fan, humidifier or an external auxiliary heat source such as hot water baseboard. The output may also be used for status indication via LED, etc. Factory setting–00

Output status:

ON– Output 1-3 is CLOSED depending upon Rotary switch position, function setting and output function status.

- IMPORTANT– I/O PCB contacts maximum load of 3A (5 to 30 VDC) or (30 to 250 VAC)

OFF– Output 1-3 is OPEN

Example: 60-01, Rotary SW position 3-

- Output 1– CLOSED when an indoor unit error is present
- Output 2– CLOSED anytime the indoor unit fan is ON
- Output 3– CLOSED when auxiliary heat conditions are met (as configured in F61, 62, 71-73, 75)

Mode	Function setting	External input and output PCB (Rotary SW)	External output		
			External input and output PCB		
			Output 1	Output 2	Output 3
0-1	60-00	1	Operation/Stop	Error status	Indoor unit fan operation status
0-2	60-00	2	Error status	Indoor unit fan operation status	External heater output
1	60-01	3	Error status	Indoor unit fan operation status	External heater output
2	60-02	4	Error status	Remote controller output	External heater output
3	60-03	5	Cooling high/low output	Remote controller output	External heater output
4	60-04	6	Error status	Remote controller output	Cooling high/low output
5	60-05	7	Error status	Indoor unit fan operation status	External heater output
6	60-06	8	Error status	Indoor unit fan operation status	Heating thermostat On
7	60-07	9	Error status	Heating thermostat On	External heater output
8	60-08	A	Heating thermostat On	Remote controller output	External heater output
9	60-09	B	Operation/Stop	Indoor unit fan operation status	External heater output
10	60-10	C	Operation/Stop	Error status	External heater output
11	60-11	D	Operation/Stop	Indoor unit fan operation status	Error status
12	60-12	D	Operation/Stop	Indoor unit fan operation status	Error status

*AMUG**LMAS– This setting is not required when using the RXBH series factory auxiliary heater.

Setting 61– Auxiliary heat operation (Switching control of external heater)

Function setting 61 determines the method used for auxiliary heat control. To summarize, the Setting Value options provide the means to allow aux heat operation based only upon setpoint differential, inhibiting aux heat (or heat pump) operation based upon outdoor temperature or to use the aux heat the only heat source. See function summaries below, or for a complete description, refer to the applicable system Design & Technical Manual.

Output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

Function number	Setting value	Setting description	Factory setting
61	00	Auxiliary heater control 1	◆
	01	Auxiliary heater control 2	
	02	Heat pump prohibition control	
	03	Auxiliary heater control by outdoor temperature 1	
	04	Auxiliary heater control by outdoor temperature 2	
	05	Auxiliary heater control by outdoor temperature 3	
	06	Auxiliary heat pump control	
	07	Auxiliary heat pump control by outdoor temperature 1	
	08	Auxiliary heat pump control by outdoor temperature 2	
	09	Auxiliary heat pump control by outdoor temperature 3	

IMPORTANT NOTES–

1) Function 60– **Must be set to setting option 11** to enable the auxiliary heat output from indoor unit connector CN47.

2) Function 71- "Standby time for auxiliary equipment operation". When F71 is adjusted to any setting other than default, the standby time selected will override F61 settings to initiate auxiliary heat operation.

Fujitsu accessory required:
(1) UTY-XWZXZG– External connect kit

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-00- Auxiliary heater control 1

The heat pump is primary heat source, with the auxiliary source a secondary. The auxiliary heat ON condition is based upon the setpoint differential set in Function 62. Default temperature differential shown below.

NOTE: If the room temperature is 21.6° F. less than the heating setpoint, the aux heat output will be OFF until differential is ≥ 18° F. This is a hard coded feature of F61-00 and cannot be adjusted.
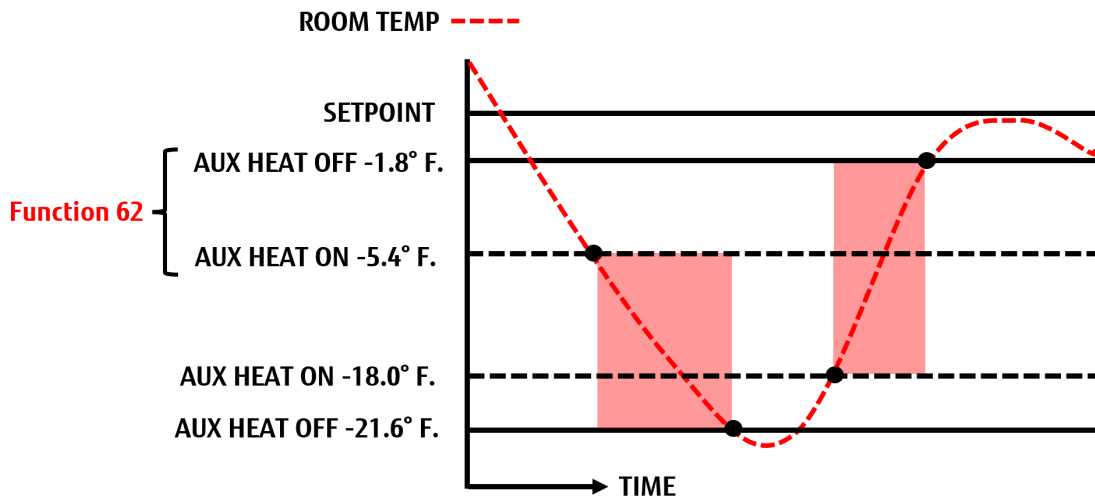
Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

Function number	Setting value	Setting description	Factory setting
61	00	Auxiliary heater control 1	♦
	01	Auxiliary heater control 2	
	02	Heat pump prohibition control	
	03	Auxiliary heater control by outdoor temperature 1	
	04	Auxiliary heater control by outdoor temperature 2	
	05	Auxiliary heater control by outdoor temperature 3	
	06	Auxiliary heat pump control	
	07	Auxiliary heat pump control by outdoor temperature 1	
	08	Auxiliary heat pump control by outdoor temperature 2	
	09	Auxiliary heat pump control by outdoor temperature 3	

ROOM TEMP - - - -

SETPOINT

AUX HEAT OFF -1.8° F.

Function 62

AUX HEAT ON -5.4° F.

AUX HEAT ON -18.0° F.

AUX HEAT OFF -21.6° F.

TIME

Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-01- Auxiliary heater control 2

The heat pump is primary heat source, with the Auxiliary source a secondary. The Auxiliary heat ON condition is based upon the setpoint differential set in Function 62. Default temperature differential shown below.

IMPORTANT: When using F61-02, please adjust Function 62 as the default setting will allow the auxiliary heat to turn ON at the same temperature condition as the heat pump, +/- 0.9° F.
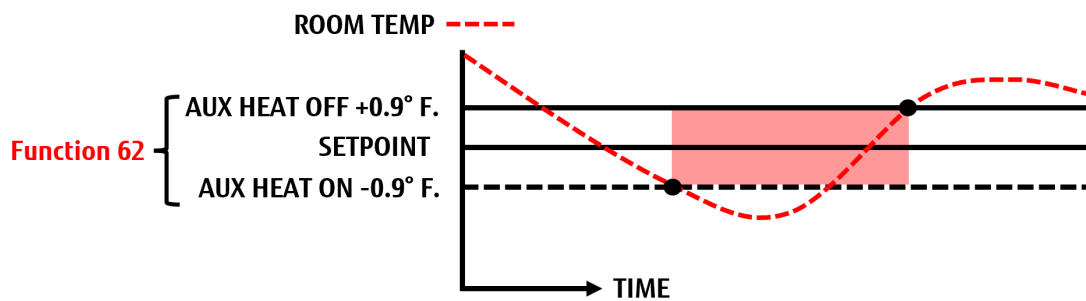
Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

Function number	Setting value	Setting description	Factory setting
61	00	Auxiliary heater control 1	♦
	01	Auxiliary heater control 2	
	02	Heat pump prohibition control	
	03	Auxiliary heater control by outdoor temperature 1	
	04	Auxiliary heater control by outdoor temperature 2	
	05	Auxiliary heater control by outdoor temperature 3	
	06	Auxiliary heat pump control	
	07	Auxiliary heat pump control by outdoor temperature 1	
	08	Auxiliary heat pump control by outdoor temperature 2	
	09	Auxiliary heat pump control by outdoor temperature 3	

ROOM TEMP ----

Function 62 {
AUX HEAT OFF +0.9° F.
SETPOINT
AUX HEAT ON -0.9° F.

TIME

Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-02– Heat pump prohibition control

The heat pump is locked out and not used for heating. The primary heat is the Auxiliary source, without secondary heat. The Auxiliary heat ON condition is based upon the setpoint differential set in Function 62. Default temperature differential shown below.
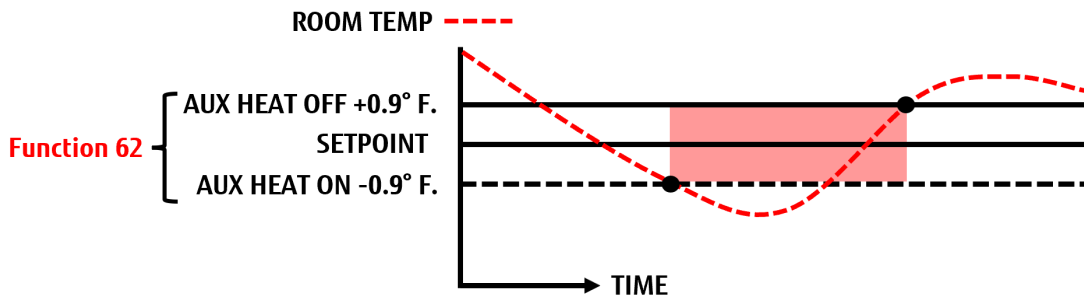
Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

Function number	Setting value	Setting description	Factory setting
61	00	Auxiliary heater control 1	♦
	01	Auxiliary heater control 2	
	02	Heat pump prohibition control	
	03	Auxiliary heater control by outdoor temperature 1	
	04	Auxiliary heater control by outdoor temperature 2	
	05	Auxiliary heater control by outdoor temperature 3	
	06	Auxiliary heat pump control	
	07	Auxiliary heat pump control by outdoor temperature 1	
	08	Auxiliary heat pump control by outdoor temperature 2	
	09	Auxiliary heat pump control by outdoor temperature 3	

ROOM TEMP - - - -

Function 62 { AUX HEAT OFF +0.9° F.
SETPOINT
AUX HEAT ON -0.9° F.

TIME

Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-03- Auxiliary heater control by outdoor temperature 1

This setting provides a 3 tier heating structure.

1) Heat pump only– Only the heat pump will be allowed to operate (auxiliary heat locked out) when the outdoor temperature is at or above boundary "B" +3.6° F., as set by function setting 67.

2) Combination (Boundary "B")- An integrated operation is allowed (heat pump and auxiliary heat) when:

   • The outdoor temperature is below boundary "B"

   • The room temperature is below the setpoint as adjusted in Function setting 62.

3) Auxiliary heat only (Boundary "A") - Only the auxiliary heat source will be allowed to operate (outdoor unit locked out) when the outdoor temperature is at boundary "A", as set by function setting 66.

IMPORTANT: When using F61-03, please adjust Function 62 as the default setting will allow the auxiliary heat to turn ON at the same temperature condition as the heat pump, +/- 0.9° F. until changed. See also Function 71.

Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00
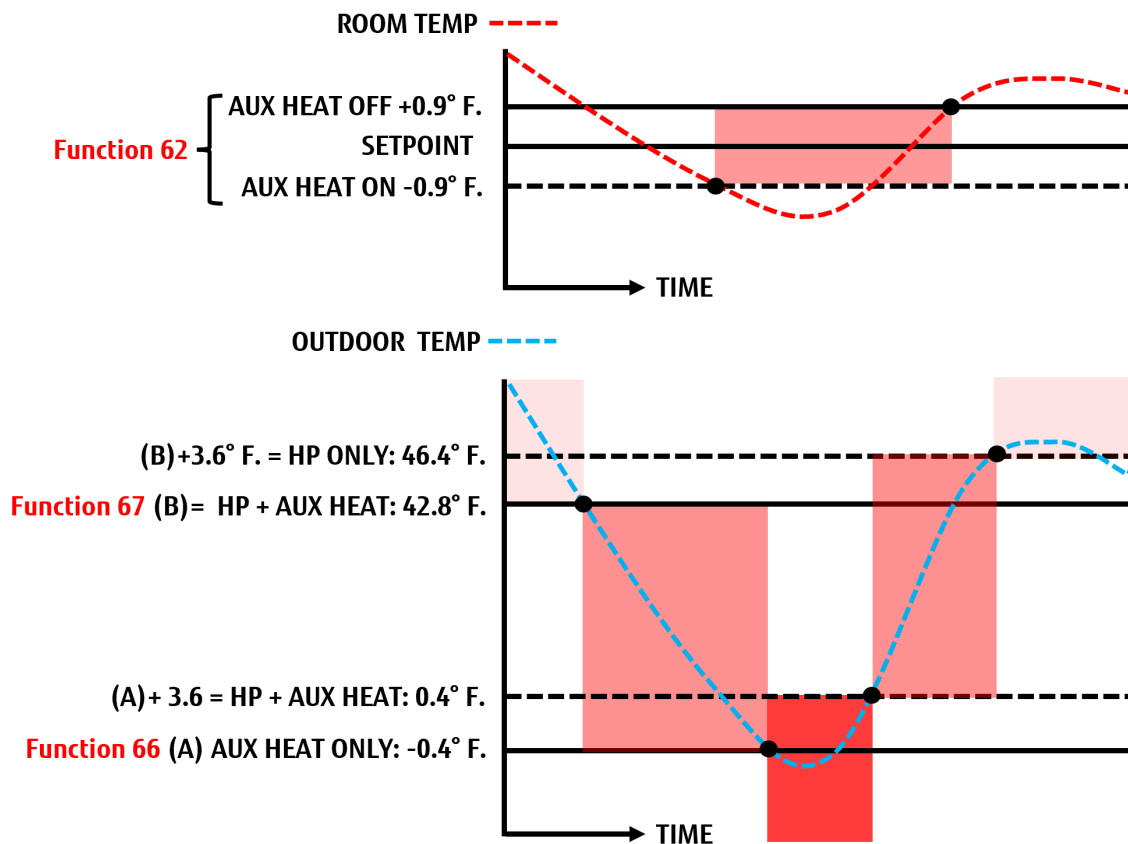
Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-04- Auxiliary heater control by outdoor temperature 2

This setting provides a 2 tier heating structure.

1) Combination- An integrated operation is allowed (heat pump and auxiliary heat) when:

   - The room temperature is below the setpoint as adjusted in Function setting 62.

3) Auxiliary heat only (Boundary "A") - Only the auxiliary heat source will be allowed to operate (outdoor unit locked out) when the outdoor temperature is at boundary "A", as set by function setting 66.
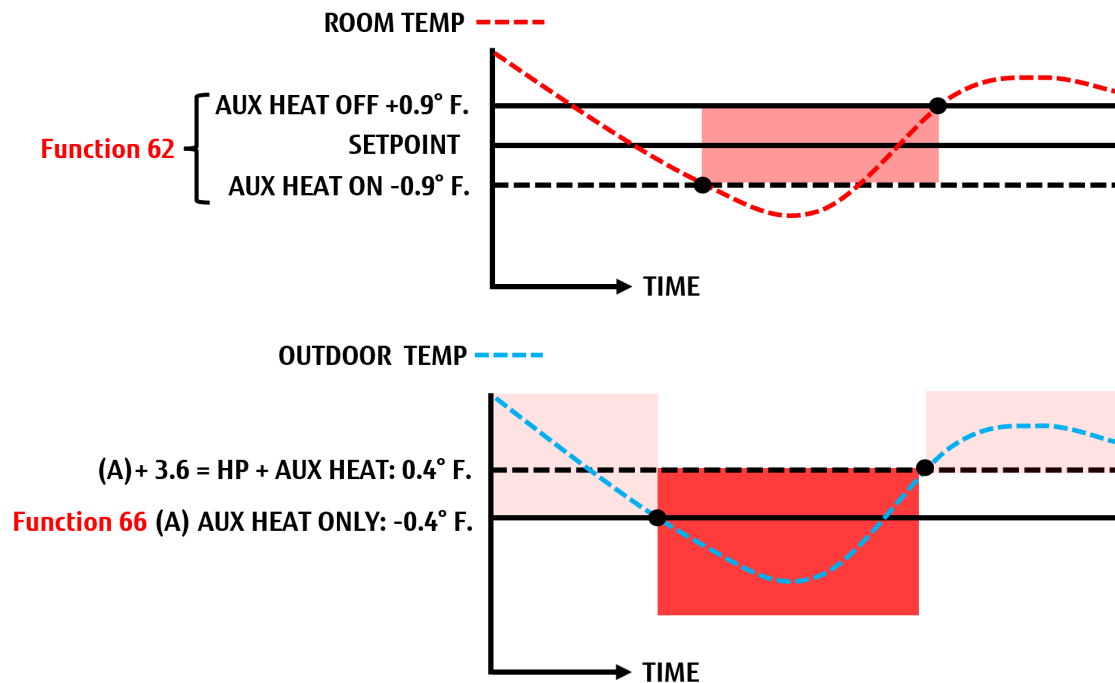
IMPORTANT: When using F61-04, please adjust Function 62 as the default setting will allow the auxiliary heat to turn ON at the same temperature condition as the heat pump, +/- 0.9° F. until changed.

Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

ROOM TEMP ----

AUX HEAT OFF +0.9° F.

Function 62 — SETPOINT

AUX HEAT ON -0.9° F.

TIME

OUTDOOR TEMP ----

(A)+ 3.6 = HP + AUX HEAT: 0.4° F.

Function 66 (A) AUX HEAT ONLY: -0.4° F.

TIME

Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-05- Auxiliary heater control by outdoor temperature 3

This setting provides a 2 tier heating structure.

1) Heat pump only– Only the heat pump will be allowed to operate (auxiliary heat locked out) when the outdoor temperature is at or above boundary "B" +3.6° F., as set by function setting 67.

2) Combination (Boundary "B")- An integrated operation is allowed (heat pump and auxiliary heat) when:

- The outdoor temperature is below boundary "B"

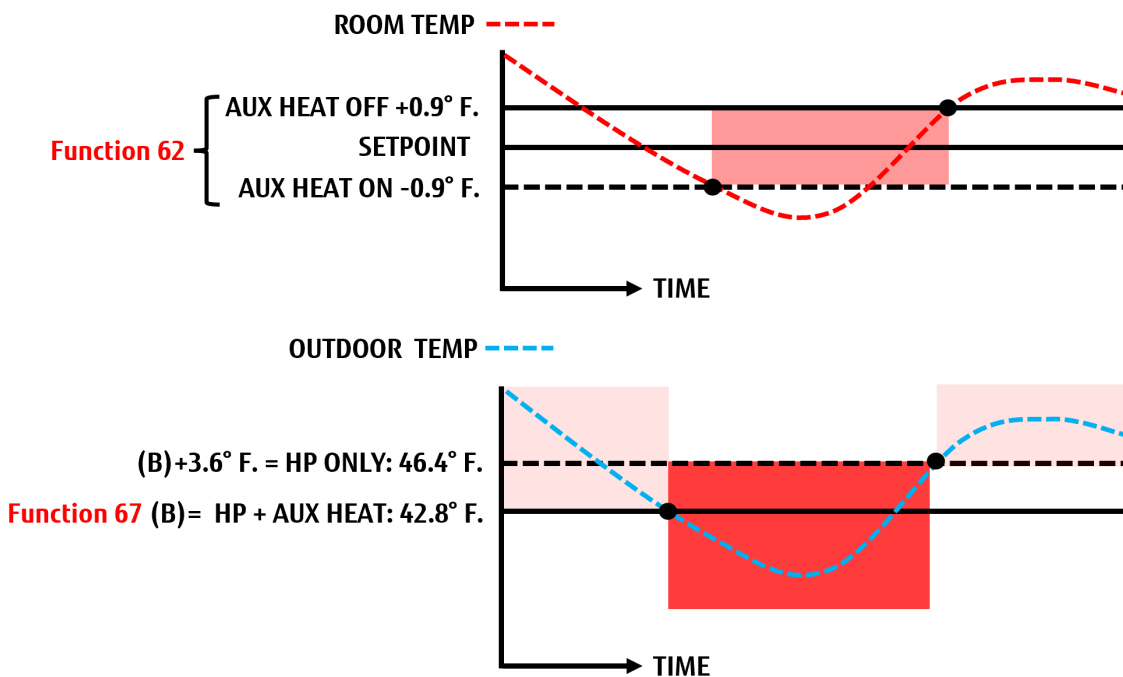- The room temperature is below the setpoint as adjusted in Function setting 62.

IMPORTANT: When using F61-05, please adjust Function 62 as the default setting will allow the auxiliary heat to turn ON at the same temperature condition as the heat pump, +/- 0.9° F. until changed.

Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

ROOM TEMP ----

AUX HEAT OFF +0.9° F.

Function 62 — SETPOINT

AUX HEAT ON -0.9° F.

TIME

OUTDOOR TEMP ----

(B)+3.6° F. = HP ONLY: 46.4° F.

Function 67 (B)= HP + AUX HEAT: 42.8° F.

TIME

Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-06– Auxiliary heat pump control

The primary heat is the auxiliary source, with the heat pump serving as secondary heat. The (secondary) heat pump ON condition is based upon the setpoint differential set in Function 62. Default temperature differential shown below.

IMPORTANT: When using F61-06, please adjust Function 62 as the default setting will allow the heat pump to turn ON at the same temperature condition as the auxiliary heat source, +/- 0.9° F. until changed.

Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00
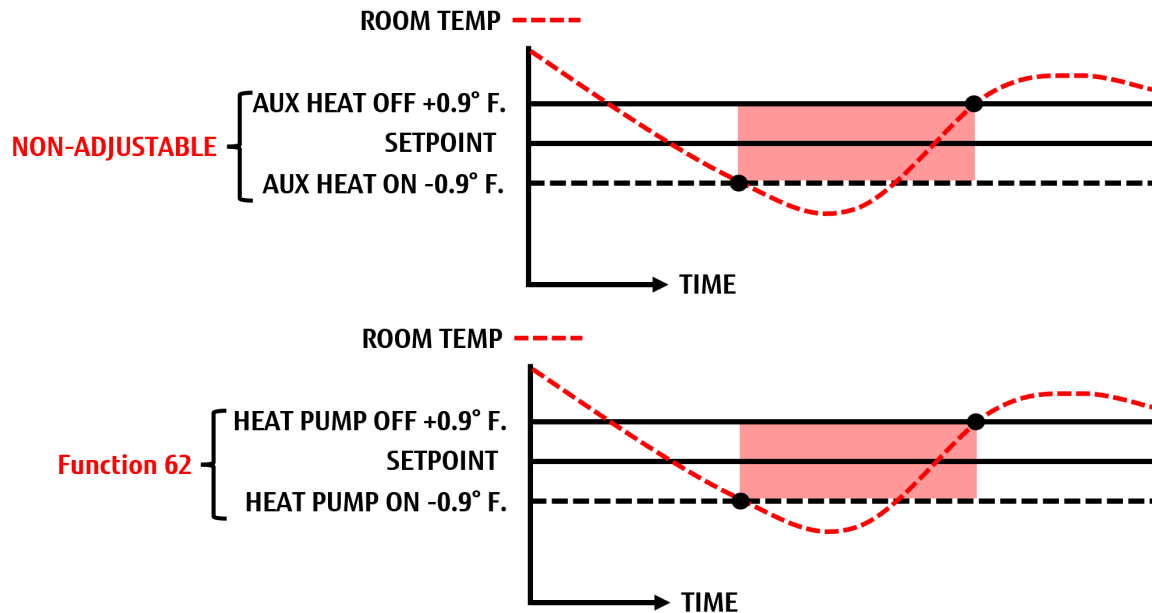
Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-07- Auxiliary heat pump control by outdoor temperature 1

This setting provides a 2 tier heating structure.

1) Combination- The auxiliary heat is the primary heat source, with the heat pump as secondary.

   - The heat pump (secondary) ON condition is based upon the setpoint differential set in Function 62.

2) Auxiliary heat only (Boundary "A") - Only the auxiliary heat source will be allowed to operate (outdoor unit locked out) when the outdoor temperature is at or below boundary "A", as set by function setting 66.
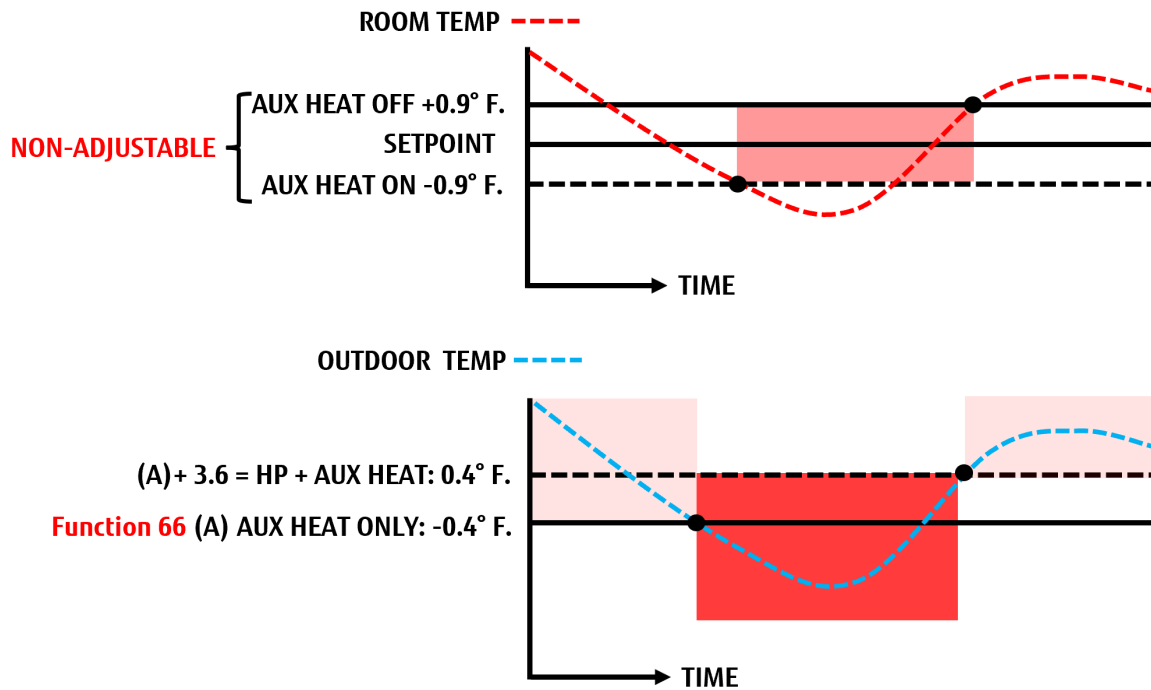
IMPORTANT: When using F61-07, please adjust Function 62 as the default setting will allow the heat pump (secondary) to turn ON at the same temperature condition as the auxiliary heat (primary) +/- 0.9° F. until changed.

Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00

ROOM TEMP – – – –

AUX HEAT OFF +0.9° F.
NON-ADJUSTABLE
SETPOINT
AUX HEAT ON -0.9° F.

TIME

OUTDOOR TEMP – – – –

(A)+ 3.6 = HP + AUX HEAT: 0.4° F.

Function 66 (A) AUX HEAT ONLY: -0.4° F.

TIME

Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-08- Auxiliary heat pump control by outdoor temperature 2

This setting provides a 2 tier heating structure.

1) Auxiliary heat only– Only the auxiliary heat source will be allowed to operate (heat pump locked out) when the outdoor temperature is at or above boundary "B" +3.6° F., as set by function setting 67.

2) Combination (Boundary "B") - The heat pump will be allowed to operate as secondary heat when:

- The outdoor temperature is at or below boundary "B", as set by function setting 67.
- The room temperature is below the setpoint as adjusted in Function setting 62.

IMPORTANT: When using F61-08, please adjust Function 62 as the default setting will allow the heat pump (secondary) to turn ON at the same temperature condition as the aux heat (primary) +/- 0.9° F. until changed.

Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00
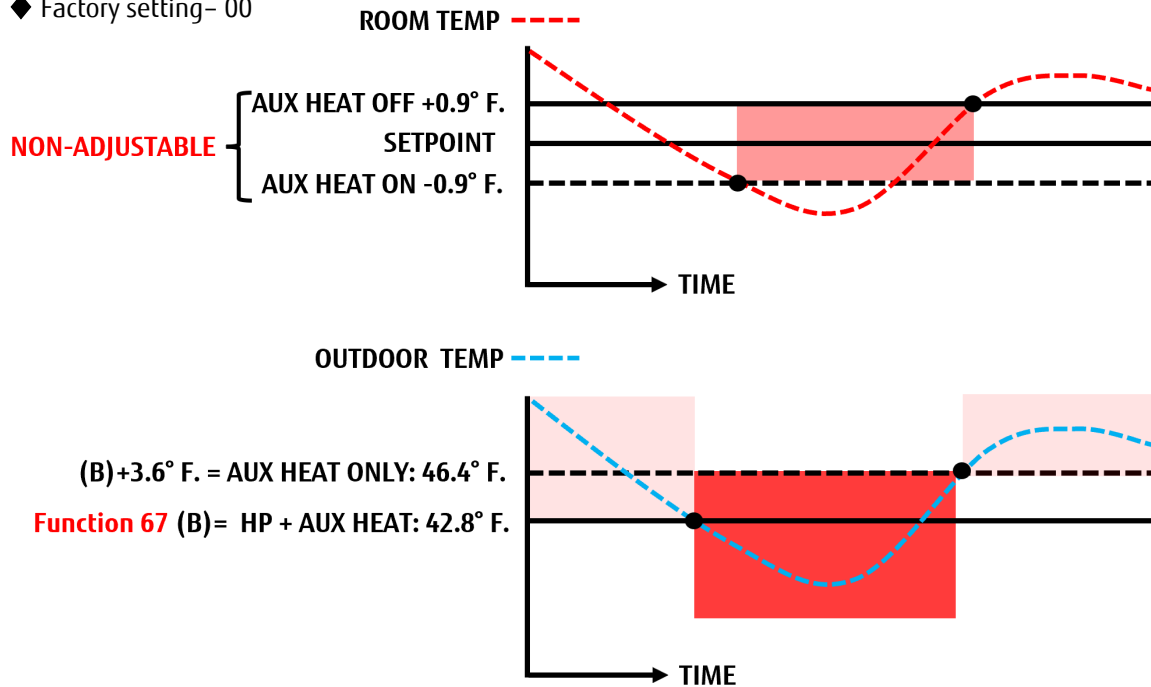
Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

Setting 61-09- Auxiliary heat pump control by outdoor temperature 3

This setting provides a 3 tier heating structure.

1) Auxiliary heat only– Only the auxiliary heat will be allowed to operate (heat pump locked out) when the outdoor temperature is at or above boundary "B" +3.6° F., as set by function setting 67.

2) Combination (Boundary "B")- The heat pump will be allowed to operate as secondary heat when::

   - The outdoor temperature is below boundary "B"

   - The room temperature is below the setpoint as adjusted in Function setting 62.

3) Auxiliary heat only (Boundary "A") - Only the auxiliary heat source will be allowed to operate (outdoor unit locked out) when the outdoor temperature is at boundary "A", as set by function setting 66.

IMPORTANT: When using F61-09, please adjust Function 62 as the default setting will allow the heat pump (secondary) to turn ON at the same temperature condition as the aux heat (primary) +/- 0.9° F. until changed.

Auxiliary heat output status:

ON– 12 VDC output is provided through the indoor unit PCB connector CN47 . The maximum load current is 50 mA DC.

OFF– 0 VDC from the indoor unit PCB.

◆ Factory setting– 00
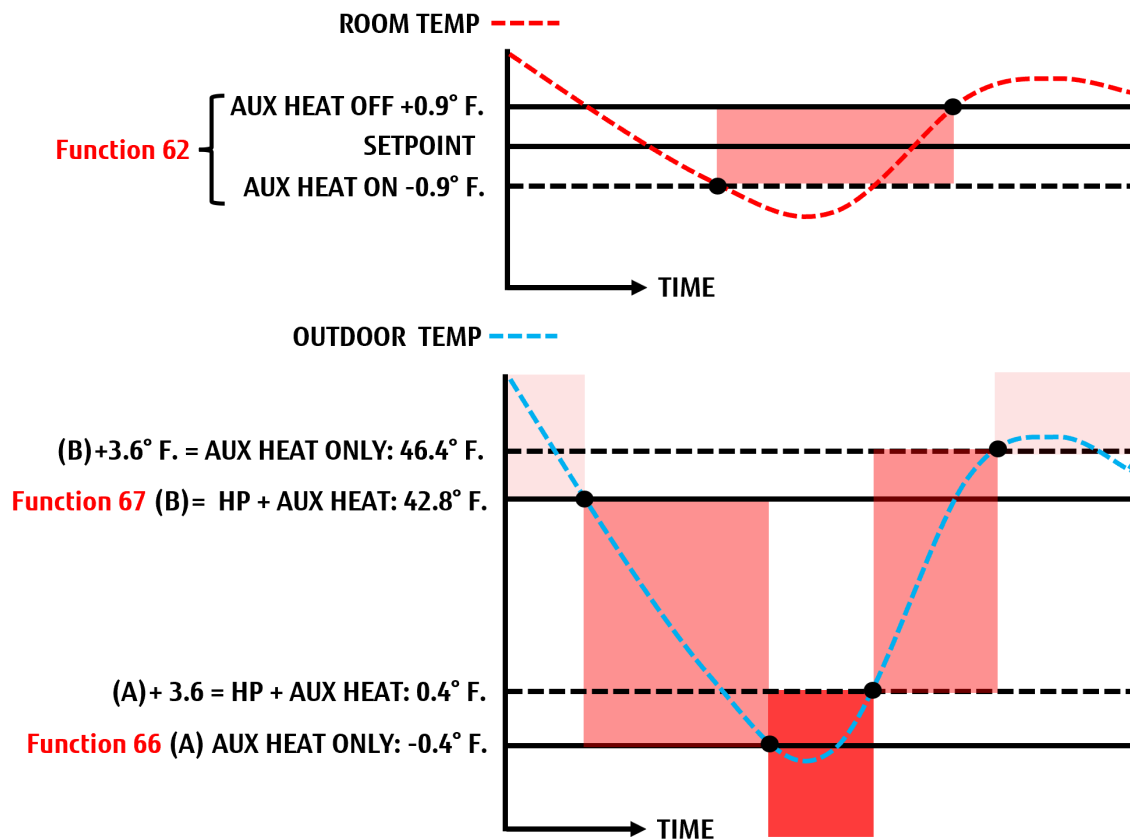
Required accessories:

Fujitsu cable:
(1) UTY-XWZXZG– External connect plug for CN47

Suggested 3rd party devices:
(1) RIBU1C- "RIB" relay or equivalent. 12 VDC coil with a 50mA DC maximum holding current

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Setting 62– Auxiliary heat temperature differential

Function setting 62 determines the difference between the room temperature and the heating setpoint to determine when the auxiliary heat (secondary heat) turns ON.

Function setting 61 has a direct effect on which set of columns are referenced for the setpoint differential.

- F61-00– The auxiliary heat will cycle ON and OFF based upon column header "00".

- F61-01 though F61-09*- The auxiliary heat will cycle ON and OFF based upon column header "01 to 09".

*Any change to the default function 61 will shift the setpoint differential to the "01 to 09" columns. Thus it is critical to adjust F62 auxiliary heat ON and OFF temperatures when F61 is adjusted between 01 to 09, otherwise the auxiliary heat will cycle at the same differential as the primary heat.

◆ Factory setting– 00

		Set value of function: 61			
		00		01 to 09	
		ON	OFF	ON	OFF
Set value of function: 62	00	t < -5.4°F (-3°C)	t ≥ -1.8°F (-1°C)	t ≤ -0.9°F (-0.5°C)	t ≥ +0.9°F (+0.5°C)
	01	t < -3.6°F (-2°C)	t ≥ -1.8°F (-1°C)	t ≤ -1.8°F (-1°C)	t ≥ +0.9°F (+0.5°C)
	02	t < -3.6°F (-2°C)	t ≥ -1.8°F (-1°C)	t ≤ -3.6°F (-2°C)	t ≥ +0.9°F (+0.5°C)
	03	t < -5.4°F (-3°C)	t ≥ -1.8°F (-1°C)	t ≤ -5.4°F (-3°C)	t ≥ +0.9°F (+0.5°C)
	04	t < -7.2°F (-4°C)	t ≥ -1.8°F (-1°C)	t ≤ -7.2°F (-4°C)	t ≥ +0.9°F (+0.5°C)
	05	t < -9.0°F (-5°C)	t ≥ -1.8°F (-1°C)	t ≤ -9.0°F (-5°C) t	t ≥ +0.9°F (+0.5°C)
	06	t < -5.4°F (-3°C)	t ≥ -0.9°F (-0.5°C)	t ≤ -0.9°F (-0.5°C)	t ≥ 0°F (0°C)
	07	t < -3.6°F (-2°C)	t ≥ -0.9°F (-0.5°C)	t ≤ -1.8°F (-1°C)	t ≥ 0°F (0°C)
	08	t < -3.6°F (-2°C)	t ≥ -0.9°F (-0.5°C)	t ≤ -3.6°F (-2°C)	t ≥ 0°F (0°C)
	09	t < -5.4°F (-3°C)	t ≥ -0.9°F (-0.5°C)	t ≤ -5.4°F (-3°C)	t ≥ 0°F (0°C)
	10	t < -7.2°F (-4°C)	t ≥ -0.9°F (-0.5°C)	t ≤ -7.2°F (-4°C)	t ≥ 0°F (0°C)
	11	t < -9.0°F (-5°C)	t ≥ -0.9°F (-0.5°C)	t ≤ -9.0°F (-5°C)	t ≥ 0°F (0°C)
	12	t < -5.4°F (-3°C)	t ≥ 0°F (0°C)	t ≤ -0.9°F (-0.5°C)	t ≥ -0.9°F (-0.5°C)
	13	t < -3.6°F (-2°C)	t ≥ 0°F (0°C)	t ≤ -1.8°F (-1°C)	t ≥ -0.9°F (-0.5°C)
	14	t < -3.6°F (-2°C)	t ≥ 0°F (0°C)	t ≤ -3.6°F (-2°C)	t ≥ -0.9°F (-0.5°C)
	15	t < -5.4°F (-3°C)	t ≥ 0°F (0°C)	t ≤ -5.4°F (-3°C)	t ≥ -0.9°F (-0.5°C)
	16	t < -7.2°F (-4°C)	t ≥ 0°F (0°C)	t ≤ -7.2°F (-4°C)	t ≥ -0.9°F (-0.5°C)
	17	t < -9.0°F (-5°C)	t ≥ 0°F (0°C)	t ≤ -9.0°F (-5°C)	t ≥ -0.9°F (-0.5°C)

IMPORTANT– See also Function 71, "Standby time for auxiliary equipment operation". When F71 is adjusted to any setting other than default, the standby time selected will override F61 settings to initiate auxiliary heat operation.

Setting 66– Outdoor unit lockout temperature, "Boundary A"

Function setting 66 determines the outdoor temperature which locks out the heat pump operation. This is also referred to as the "Heater only zone" or "Heat pump prohibition zone", where the system will provide heat from the auxiliary source only.

The outdoor temperature is determined from the outdoor unit temperature sensor (thermistor).

F66-00– The default setting of –4.0° F. (-20° C) will lock out the heat pump and operate only from the auxiliary heat source. The auxiliary heat source is provided by a 3rd party, with exception to the AMUG air handler, when the factory RXBH Series auxiliary heater option is used.

F66 is enabled only enabled when the following 61 Function settings are used:

- 61-03- Auxiliary heater control by outdoor temperature 1

- 61-04- Auxiliary heater control by outdoor temperature 2

- 61-07- Auxiliary heat pump control by outdoor temperature 1

- 61-08- Auxiliary heat pump control by outdoor temperature 2

- 61-09- Auxiliary heat pump control by outdoor temperature 3

1) Auxiliary heater control- Heat pump is primary, auxiliary heat is secondary

2) Auxiliary heat pump control– Auxiliary heat is primary, heat pump is secondary

◆ Factory setting– 00

Function number	Setting value	Setting description
66	00	-4.0 °F (-20 °C)
	01	-0.4 °F (-18 °C)
	02	3.2 °F (-16 °C)
	03	6.8 °F (-14 °C)
	04	10.4 °F (-12 °C)
	05	14.0°F (-10 °C)
	06	17.6 °F (-8 °C)
	07	21.2 °F (-6 °C)
	08	24.8 °F (-4 °C)

IMPORTANT– See also Function 71, "Standby time for auxiliary equipment operation". When F71 is adjusted to any setting other than default, the standby time selected will override F61 settings to initiate auxiliary heat operation.

Setting 67– Auxiliary heat lockout temperature, "Boundary B"

Function setting 67 determines the outdoor temperature which locks out the auxiliary heat source. This can be thought of as an auxiliary heat "balance point" where the system will operate on the heat pump only when at or above the temperature se selected from F67.

The outdoor temperature is determined from the outdoor unit temperature sensor (thermistor).

IMPORTANT– See also Function 71, "Standby time for auxiliary equipment operation". When F71 is adjusted to any setting other than default, the standby time selected will override F67 settings to initiate auxiliary heat operation.

F67-00– The default setting of 42.8° F. (6° C) will lock out the auxiliary heat source when the outdoor unit temperature is at or above this setting. The auxiliary heat source is provided by a 3rd party, with exception to the AMUG air handler, when the factory RXBH Series auxiliary heater option is used.

F67 is enabled only enabled when the following 61 Function settings are used:

- 61-03- Auxiliary heater control by outdoor temperature 1
- 61-05- Auxiliary heater control by outdoor temperature 3
- 61-08- Auxiliary heat pump control by outdoor temperature 2
- 61-09- Auxiliary heat pump control by outdoor temperature 3

1) Auxiliary heater control- Heat pump is primary, auxiliary heat is secondary

2) Auxiliary heat pump control– Auxiliary heat is primary, heat pump is secondary

◆ Factory setting– 00

Function number	Setting value	Setting description
67	00	42.8 °F (6 °C)
	01	14.0 °F (-10 °C)
	02	17.6 °F (-8 °C)
	03	21.2 °F (-6 °C)
	04	24.8 °F (-4 °C)
	05	28.4°F (-2 °C)
	06	32.0 °F (0 °C)
	07	35.6 °F (2 °C)
	08	39.2 °F (4 °C)
	09	42.8 °F (6 °C)
	10	46.4 °F (8 °C)
	11	50.0 °F (10 °C)
	12	53.6 °F (12 °C)
	13	57.2 °F (14 °C)
	14	60.8 °F (16 °C)
	15	64.4 °F (18 °C)

Setting 71– Auxiliary heat standby time setting

Function setting 71 is used as a timed override to turn the auxiliary heat source ON, regardless of any Function 61 and related outdoor temperature settings

The default setting of 00 disables any time initiated operation of the auxiliary heat source. When a timed override is desired, setting values 01 through 99 provide a time increment in respective minutes, to turn the auxiliary heat output ON. The setting time references continuous operation of the heat pump in a given cycle.

◆ Factory setting– 00

Function number	Setting value	Setting description	Factory setting
71	00	Disable	◆
	01	1 minute	
	02	2 minutes	
	•	•	
	•	•	
	•	•	
	98	98 minutes	
	99	99 minutes	

Setting 72– Heat pump backup setting (Emergency heat enable)

Function setting 72 is used in order to enable an "Emergency heat" mode for the system. Emergency heat is manually selected at the RC by the end user, when compressor operation is not possible for any reason to include an outdoor unit malfunction, loss of refrigerant charge, etc. When an "Emergency heat" mode is selected from the Fujitsu RC, the heat pump will be locked out and all heating operation is provided by the auxiliary heat source.

◆ Factory setting– 00

Function number	Setting value	Setting description
72	00	Disable
	01	Enable

Setting 73– Emergency heat external output

When Function 72 is changed to allow an emergency heat operation, function setting 73 needs to be changed is to setting value 01. This will enable the CN47 output to cycle ON and OFF when there is an active heat demand. (No compressor operation will occur during "Emergency heat")

◆ Factory setting– 00

Function number	Setting value	Setting description
73	00	Disable
	01	Enable

Setting 74– Heater fan delay

Function 74 is used to assign the fan OFF delay when the auxiliary heater output (CN47) is turned OFF. The setting is adjustable from 60 to 30 seconds.

NOTE– This setting only applies to the fan delay when auxiliary heat is cycled OFF. And does not affect the fan OFF delay during compressor only operation.

◆ Factory setting– 00

Function number	Setting value	Setting description
74	00	1 minutes
	01	50 seconds
	02	40 seconds
	03	30 seconds

Setting 75– Auxiliary heat use in defrost

Function 75 is used to turn the auxiliary heat source ON when the outdoor unit is in a heating defrost mode. When the auxiliary heat is located in the supply duct, operating during defrost will help temper the supply air into the conditioned space.

NOTES:

1) Ducted units- The auxiliary heat source is not required to operate during defrost, however will help reduce cool or cold air drafts experienced by the end user.

2) Non-ducted units- When using other than ducted indoor units, such as wall mount, cassettes, etc., operating the decoupled auxiliary heat source (hot water baseboard, etc.) is not required but can be changed based upon user requirement.

◆ Factory setting– 00

Function number	Setting value	Setting description
75	00	Disable
	01	Enable

Setting 92– CFM adjustment (compressor modes of operation)

NOTE: Applicable to AMUG**LMAS ducted indoor units only

Function 92 is used when adjustments are required. Heat and cool airflow can be adjusted together or independently. The heating airflow setting references heat pump operation; when airflow adjustment is required for auxiliary heat, refer to Function setting 93.

◆ Factory setting– 00

Function Number	Setting Value	Setting Description	
		Cooling setting	Heating setting
92	00	Standard (no change)	Standard (no change)
	01	Standard (no change)	+10% up
	02	Standard (no change)	-10% down
	03	+10% up	Standard (no change)
	04	+10% up	+10% up
	05	+10% up	-10% down
	06	-10% down	Standard (no change)
	07	-10% down	+10% up
	08	-10% down	-10% down

Setting 93– Auxiliary heat CFM adjustment

NOTE: Applicable to AMUG**LMAS ducted indoor units only

Function 93 is applicable only when using the Fujitsu RXBH Series auxiliary heater. The setting value is adjusted to match the kW of the installed heater.

◆ Factory setting– 00

Function Number	Setting Value	Setting Description
		Heater output range
93	00	No heater
	01	0 - 3.4 kW (Min. CFM)
	02	3.4 - 6.8 kW (350 CFM)
	03	6.8 - 10.4 kW (710 CFM)
	04	10.4 - 13.7 kW (1070 CFM)
	05	13.7 - 17.1 kW (1410 CFM)

Setting 92– Wired Remote Control (RC) sensor offset– COOL mode

In some installation locations, the air temperature at the Wired RC may not be representative of the average room temperature. Function setting 92 provides an offset to the room temp thermistor inside the wired RC, in the COOL mode only. The default Setting value 00 does not apply any temperature correction.

"More Cooling"- Use setting values 02-09 when there is temperature overshoot. (Room is too warm) Subtracting a (-) negative value in the Setting results in an INCREASE to the RC temperature sensor. For example, Setting value 04 has a (-3° F.) value; when subtracted from the actual RC sensor value, will INCREASE the RC temperature by 3° F. This will result in longer runtime compared to the default setting.

"Less Cooling"- Use setting values 10-17 when there is temperature undershoot. (Room is too cold) Subtracting a (+) positive value in the Setting results in a DECREASE to the RC temperature sensor. For example, Setting value 13 has a (+4° F.) value; when subtracted from the actual RC sensor value, will DECREASE the RC temperature by 4° F. This will result in less runtime compared to the default setting.

◆ Factory setting– 00

NOTES:

1. Function 42, Setting 01 "Both" must be selected before Function 35 setting changes can be changed.
2. Set RC sensor to "Used" within the RC Initial Setting menu.

Function number		Setting value	Setting description	
92 (For cooling)		00	No correction 0.0°F (0.0°C)	♦
		01	No correction 0.0°F (0.0°C)	
		02	-1°F (-0.5°C)	More Cooling
		03	-2°F (-1.0°C)	
		04	-3°F (-1.5°C)	
		05	-4°F (-2.0°C)	
		06	-5°F (-2.5°C)	
		07	-6°F (-3.0°C)	
		08	-7°F (-3.5°C)	
		09	-8°F (-4.0°C)	
		10	+1°F (+0.5°C)	Less Cooling
		11	+2°F (+1.0°C)	
		12	+3°F (+1.5°C)	
		13	+4°F (+2.0°C)	
		14	+5°F (+2.5°C)	
		15	+6°F (+3.0°C)	
		16	+7°F (+3.5°C)	
		17	+8°F (+4.0°C)	

Setting 93– Wired Remote Control (RC) sensor offset– HEAT mode

In some installation locations, the air temperature at the Wired RC may not be representative of the average room temperature. Function setting 93 provides an offset to the room temp thermistor inside the wired RC, in the HEAT mode only. The default Setting value 00 does not apply any temperature correction.

"Less Heating"- Use setting values 02-09 when there is temperature overshoot. (Room is too warm) Subtracting a (-) negative value in the Setting results in an INCREASE to the RC temperature sensor. For example, Setting value 04 has a (-3° F.) value; when subtracted from the actual RC sensor value, will INCREASE the RC temperature by 3° F. This will result in less runtime compared to the default setting.

"More Heating"- Use setting values 10-17 when there is temperature undershoot. (Room is too cold) Subtracting a (+) positive value in the Setting results in a DECREASE to the RC temperature sensor. For example, Setting value 13 has a (+4° F.) value; when subtracted from the actual RC sensor value, will DECREASE the RC temperature by 4° F. This will result in longer runtime compared to the default setting.

◆ Factory setting– 00

NOTES:

1. Function 42, Setting 01 "Both" must be selected before Function 35 setting changes can be changed.
2. Set RC sensor to "Used" within the RC Initial Setting menu.

Function number		Setting value	Setting description	
93 (For heating)		00	No correction 0.0°F (0.0°C)	◆
		01	No correction 0.0°F (0.0°C)	
		02	-1°F (-0.5°C)	Less Heating
		03	-2°F (-1.0°C)	
		04	-3°F (-1.5°C)	
		05	-4°F (-2.0°C)	
		06	-5°F (-2.5°C)	
		07	-6°F (-3.0°C)	
		08	-7°F (-3.5°C)	
		09	-8°F (-4.0°C)	
		10	+1°F (+0.5°C)	More Heating
		11	+2°F (+1.0°C)	
		12	+3°F (+1.5°C)	
		13	+4°F (+2.0°C)	
		14	+5°F (+2.5°C)	
		15	+6°F (+3.0°C)	
		16	+7°F (+3.5°C)	
		17	+8°F (+4.0°C)	

Setting 95– High Insulation Setting

Function 95 can be used when the area to be conditioned has minimal infiltration and/or is very well insulated. Adjusting the setting value for F95 will result in the system responding more slowly, as the temperature difference between the setpoint and room temperature (or RC temperature) will be reduced, compared to the default Function 95 setting value 00. This will also help reduce or eliminate temperature overshoot and undershoot (system running to long).

Function setting 95 can be used instead of the "Less cooling" and "Less heating" function settings below:

- Function 30- Room temperature (Return) sensor offset– COOL mode
- Function 31- Room temperature (Return) sensor offset– HEAT mode
- Function 35 or 92- Wired Remote Control (RC) sensor offset– COOL mode
- Function 36 or 93- Wired Remote Control (RC) sensor offset– HEAT mode

IMPORTANT: Changing Function 95 setting value to 01 will reset ALL setting values for return temperature and RC temperature sensor offsets in the above settings to +/-0° F., "No correction". Any desired setting value changes in Functions 30, 31, 35 and 36 will need to be adjusted again.

◆ Factory setting– 00

Function number	Setting value	Setting description
95	00	Standard insulation
	01	High insulation

Setting 96– Server room control switching

Server room switching control is used for small data room applications. It is important to note that Fujitsu systems respond to sensible temperatures only and are not intended for direct humidity control. Each indoor unit is to have a separate setting value assigned to determine its role as a Primary of Secondary unit.

The Server Room function provides (3) operation sequences:

1. Unit rotation– provide alternating system operation as defined by timer scheduling function.

2. Backup operation– In the event of an error in the operating system, the secondary system will assume operation.

3. Lag operation– If the load is not able to be satisfied with the operating system, the secondary system will turn ON when the room temperature is greater than 5° F. from the cooling setpoint or more than 7 minutes.

Additional notes:

1. Lag operation– available when using the Wireless RC only

2. Indoor unit PCB– Ensure a jumper is present on "JM9" on the indoor unit PCB. Please contact the Fujitsu Service Department for a modified PCB.

Set each system setting to designate the system as Primary or Secondary

•   Primary unit- Setting value 01

•   Secondary unit– Setting value 02

◆   Factory setting– 00

Function number	Setting value	Setting description
96	00	Normal control
	01	Server room control (Primary unit)
	02	Server room control (Secondary unit)

Field provided accessories:

Interconnecting cable– 22 AWG, 3 conductor minimum

### DIW SW. 101-1 Condensate pump disable

NOTE: DIP SW 101-1 for condensate pump disable applies to select ducted units only.

DIP switch 101-1 is used to disable the factory installed condensate pump, when the lower drain connection is used (image below). It is important in this drain configuration to disable the pump to prevent any residual condensate from being forced out the top (capped) drain connection with the possibility of leaking.
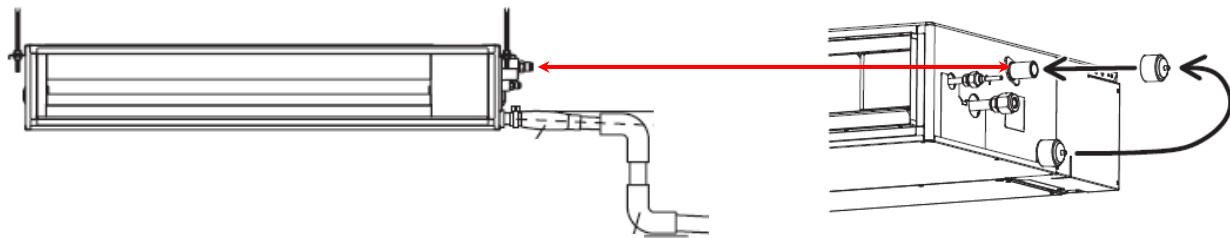
◆ Factory setting– Enable (DIP SW. OFF)

IMPORTANT– When changing the DIP switch position, ensure the unit line voltage power is OFF.

	DIP switch 101	DIP SW state		Details
		ON	OFF	
(1)	1	Disable	Enable ♦	Drainage function setting
(2)	2	Enable	Disable ♦	Auto louver grille setting
(3)	3	Enable	Disable ♦	Fan delay setting
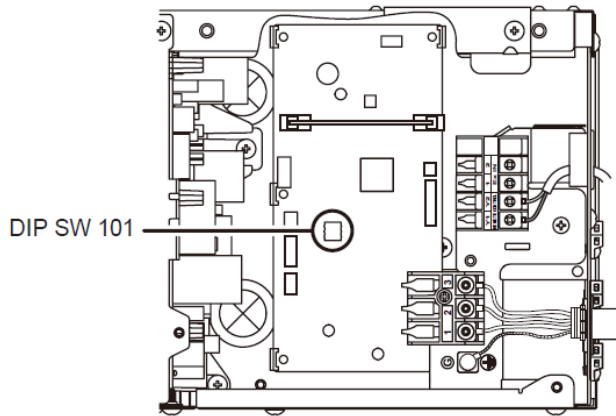
ADUH**LUAS model shown for PCB DIP SW 101 reference

Ensure the lower cap is relocated to the upper drain connection!

**DIW SW. 101-2 Auto louver grille**

NOTE: DIP SW 101-2 for auto louver use applies to select ducted units only.

DIP switch 101-2 is used to enable the factory auto louver grille option. If DIP SW 101-2 is not set correctly, the auto louver will not operate.

◆ Factory setting– Disabled (DIP SW. OFF)

IMPORTANT– When changing the DIP switch position, ensure the unit line voltage power is OFF.

	DIP switch 101	DIP SW state		Details
		ON	OFF	
(1)	1	Disable	Enable ♦	Drainage function setting
(2)	2	Enable	Disable ♦	Auto louver grille setting
(3)	3	Enable	Disable ♦	Fan delay setting
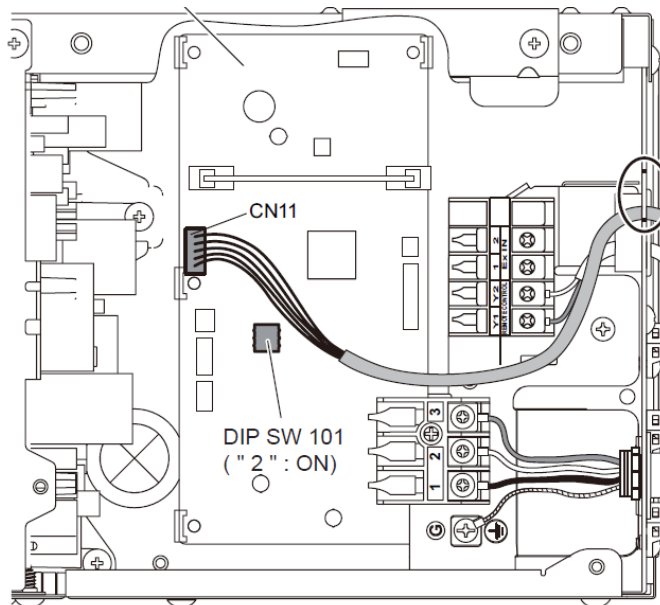
ADUH**LUAS model shown for PCB DIP SW 101 reference

DIW SW. 101-3 Auxiliary heat fan OFF delay

NOTE: DIP SW 101-3 to assign a (1) minute auxiliary heat fan delay applies to select ducted units only.

DIP switch 101-3 is used to enable a fan OFF delay upon completion of an auxiliary heat cycle. This setting may be disregarded when the auxiliary heat source is not in the ducted unit airstream, e.g. hot water baseboard, etc.

◆ Factory setting– Disabled (DIP SW. OFF)

IMPORTANT:

1) When changing the DIP switch position, ensure the unit line voltage power is OFF.

2) Operate the system though an auxiliary heat cycle to confirm fan OFF delay setting.

	DIP switch 101	DIP SW state		Details
		ON	OFF	
(1)	1	Disable	Enable ♦	Drainage function setting
(2)	2	Enable	Disable ♦	Auto louver grille setting
(3)	3	Enable	Disable ♦	Fan delay setting
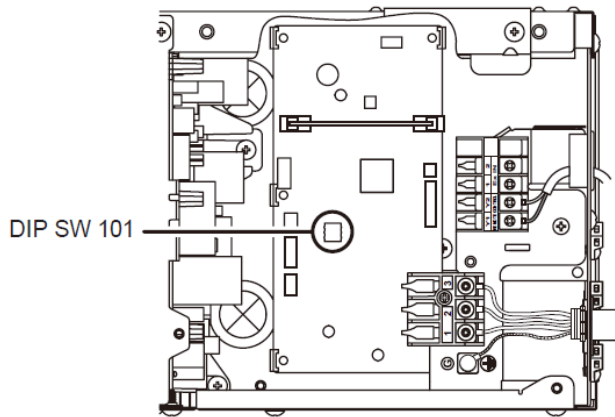
DIP SW 101

ADUH**LUAS model shown for PCB DIP SW 101 reference

Additional resources

For complete Airstage product documentation, please visit the Fujitsu Connect site: CONNECT

For additional applications support, please contact the Applications Engineering Department: Applications Support