Halcyon by FUJITSU

Service Tips

Group Control for Multi-Zone Models

F.G.A.I. is pleased to announce that we now allow for group connections or “daisy chaining” of multiple evaporators in a grouped multi-zoned system. The group connection feature allows for ease of operation and usage among multiple evaporators wired in sequence with each other.

For the list of compatible evaporator models that can operate under a grouped control setting, see below models:

Indoor Models						
ASU9RLS2	ASU7RLF1	ASU15RLF1	AGU9RLF	ARU9RLF	ARU24RLF	AUU18RLF
ASU12RLS2	ASU9RLF1	ASU18RLF	AGU12RLF	ARU12RLF	AUU9RLF	
ASU15RLS2	ASU12RLF1	ASU24RLF	AGU15RLF	ARU18RLF	AUU12RLF	

Examples of allowable group connection.

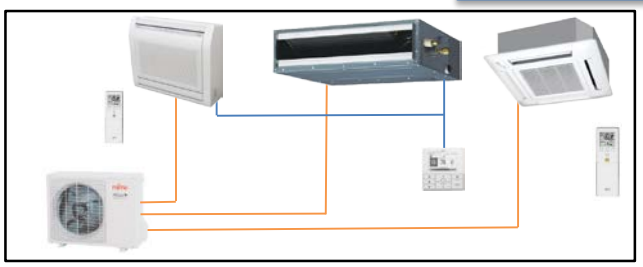

Fig. 1) Multiple evaporators in a single multi-zone system.

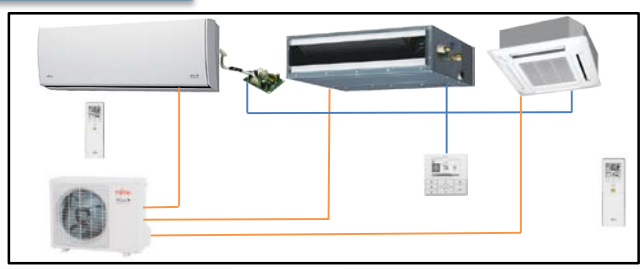

Fig. 2) Multiple evaporators in a single multi-zone system.

Piping

Wired remote controller wiring

Example of non-allowable group connection.

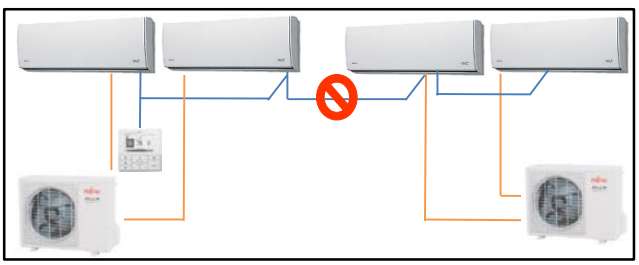

Fig. 3) Cannot daisy chain multiple multi-zone systems together.

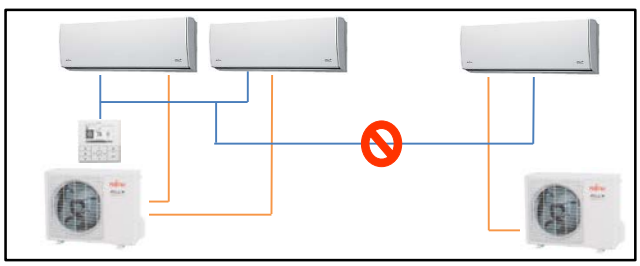

Fig. 4) Cannot daisy chain a multi-zone system with a single zone system.

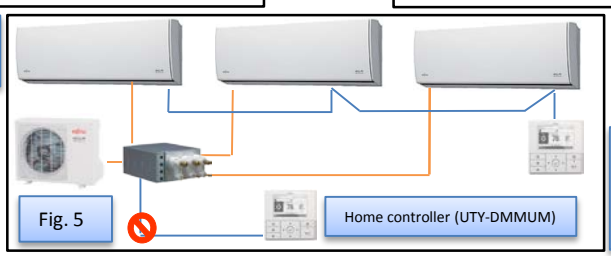

Fig. 5

Fig. 5) Daisy chaining is allowed on a HFI system however, the UTY-DMMUM home controller cannot be connected simultaneously.

Disclaimer:

In order to perform some of these tests an electrical and/or refrigerant license is required. We strongly advise to check the Service manual for more detailed explanation. If you are not sure about these recommendations please contact us at 866-952-8324.

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Wiring Installation Method

Installation work must be performed in accordance with the N.E.C. by an authorized personnel.

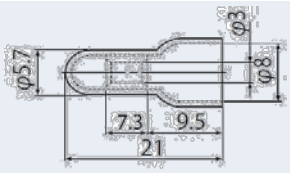
- Maximum wiring length of the remote controller cable is 984ft. (300m)

When the total wiring length is more than 328ft. (100m), the cable diameter needs to be changed. See below chart.

Total wiring length of remote controller cable	Cross section of cable
328ft. (100m) or less	AWG 18-22 (0.3-0.8mm²)
328 - 656ft. (100-200m)	AWG 18-20 (0.5-0.8mm²)
656 – 984ft. (200-300m)	AWG 18 (0.8mm²)

Specifications of the closed-end splice.

For the closed-end splice, please be sure to use the following parts or equivalent parts.

Manufacture	J.S.T. MFG. CO., LTD.	
Closed-end splice	Part Number	CE2 (CE-230V)
	Dimensions	
	Materials and surface processing	Oxygen-free copper coated
	Insulating material	UL 94-0
	Contact resistance	1.2m Ω or less
	Tension strength	40N or more
	Ratchet hand tool for closed-end splices.	YS-1614 

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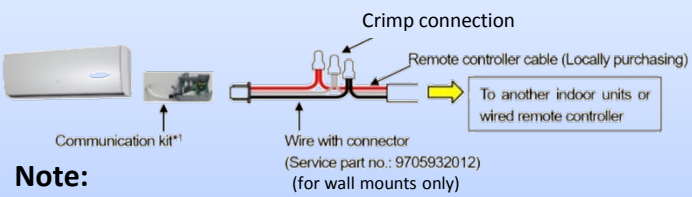
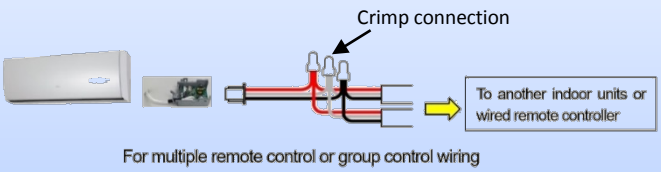
Wiring Installation Method (cont'd)





Note:

- Bury the wiring in the wall or store it in an insulation case of 1mm or over. When using the communication kit for wall mounted evaporators, store the closed-end splice inside the communication kit. For group connection of wireless type, RC address can be set using wireless remote controller. When turning on the power after wiring but before function setting, an error code is displayed. The error will be eliminated automatically carrying out setting as it is. Bundle with a cable tie so that any direct force is not applied to the splicing position.

Communication Kits

UTY-TWBXF1	UTY-XCBXZ2	N/A	N/A	N/A
ASU9RLS2	ASU7RLF1	AGU9RLF	ARU9RLF	AUU9RLF
ASU12RLS2	ASU9RLF1	AGU12RLF	ARU12RLF	AUU12RLF
ASU15RLS2	ASU12RLF1	AGU15RLF	ARU18RLF	AUU18RLF
	ASU15RLF1			

Indoor Unit addressing: Function Settings / Dip Switches

To daisy chain units, each indoor unit must have it's own address. Cassette and ducted units are done via dip switches and wall and floor mount are done via function settings through the remote.

How to change the remote controller address setting of indoor unit using a wireless remote controller:

- Enter the Function Setting mode of the wireless remote controller. (Refer to the installation manual of the indoor unit for instructions).
- Select the function number '00' and set the setting value to '15'. (Factory setting value is '00') From '00' to '015'.

How to address units using dip switches:

- With power off to disconnect, slide the appropriate dip switches on the indoor control board to a setting of '00' and upward to '01', '02'. etc. on each corresponding evaporator's control board.

Indoor Unit Address Setting	Dip Switch Number			
	1	2	3	4
00	OFF	OFF	OFF	OFF
01	ON	OFF	OFF	OFF
02	OFF	ON	OFF	OFF
03	ON	ON	OFF	OFF
04	OFF	OFF	ON	OFF
05	ON	OFF	ON	OFF
06	OFF	ON	ON	OFF
07	ON	ON	ON	OFF
08	OFF	OFF	OFF	ON
09	ON	OFF	OFF	ON
10	OFF	ON	OFF	ON
11	ON	ON	OFF	ON
12	OFF	OFF	ON	ON
13	ON	OFF	ON	ON
14	OFF	ON	ON	ON
15	ON	ON	ON	ON

Note:

Grouped connections will force all evaporators wired in sequence with each other to operate under the same temperature setting, fan speed, and mode.