

Application Note 3029

MHK1 and CITY MULTI Compatibility

Compatibility with CN105:

The MRCH1 Remote Controller uses the MIFH1 Wireless Receiver to connect to the CN105 5-pin connector on the indoor unit printed circuit board. All indoor units that have the CN105 connector are compatible with the MHK1 Remote Controller Kit.

Table 1 displays indoor units that have a CN105 connector present on all versions. The MHK1 kit can connect directly to these indoor units. All units made after the noted production date will have CN105.

Table 1: CITY MULTI Indoor Units with CN105

Model Names	From Production	Applicable Version	Serial Number	CN105 Present	Requires PAC-IT51AD-E PAC-IT52AD-E
PV FY-P**-E00*	Apr-2012	Ver. 10.02~	All	Yes	No
PC FY-P**NKMU-ER1.TH	Jun-2012	Ver. 10.02~	All	Yes	No
PE FY-P**NMSU-ER2.TH	Jun-2012	Ver. 10.02~	All	Yes	No
PK FY-P**NBMU-E2	Apr-2012	Ver. 10.02~	All	Yes	No
PK FY-P08NHMU-E2	May-2012	Ver. 10.02~	All	Yes	No
PK FY-P**NHMU-E2	Apr-2012	Ver. 10.02~	All	Yes	No
PK FY-P**NKMU-E2.TH	Jun-2012	Ver. 10.02~	All	Yes	No
PL FY-P**NBMU-ER2	Apr-2012	Ver. 10.02~	All	Yes	No
PL FY-P**NCMU-ER4.TH	Jun-2012	Ver. 10.02~	All	Yes	No
PM FY-P**NBMU-ER5	Apr-2012	Ver. 10.02~	All	Yes	No

NOTE: Production date does not correspond with purchase date. Please check the indoor unit printed circuit board for availability of CN105.

Table 2 displays indoor units with CN105 connector from a specific version and serial number.

Table 2: CITY MULTI indoor units with CN105 after a specific version.

Model Names	From Production	Applicable Version	Serial Number	CN105 Present	Requires PAC-IT51AD-E PAC-IT52AD-E
PE FY-P**NMAU-E2	Apr-2012	Ver. 10.03~	24W*****	Yes	No
PE FY-P**NMAU-E3	Oct-2013	All	3XW*****	Yes	No
PE FY-P**NMHSU-E	Apr-2012	Ver. 11.02~	24W*****	Yes	No
PE FY-P**NMHU-E	Apr-2012	Ver. 10.02~	24W*****	Yes	No
PE FY-P**NMHU-E2	Oct-2013	All	3XW*****	Yes	No
PFFY-P**NEMU-E	Apr-2012	Ver. 10.02~	24W*****	Yes	No
PFFY-P**NRMU-E	Apr-2012	Ver. 10.02~	24W*****	Yes	No

Compatibility without CN105:

For indoor units that do not have a CN105 connector on their printed circuit boards, there are two different IT signal adapters that allow a CITY MULTI indoor unit to be connected to the MHK1 Remote Controller Kit. The MHK1 Remote Controller Kit Restrictions still apply.

The PAC-IT51AD-E IT signal adapter is equipped with a CN100 and CN51 connectors.
The PAC-IT52AD-E IT signal adapter is equipped with a CN100 and CN52 connectors.

Note: The power source pin is different between the two IT signal adapters, therefore they are **NOT** interchangeable.

There are the functions and restrictions regarding MHK1 Remote Controller Kit when connecting with CITY MULTI indoor units.

Functions:

When using the CN105, the MRCH1 can change **AND** monitor the following points:

1. ON/OFF
2. Operation Mode (Auto/Cool/Dry/Fan/Heat)
3. Room temperature set point
4. Fan speed
5. Air flow direction

When using the CN105, the MRCH1 can **ONLY** monitor the following points:

1. Return temperature at the indoor unit
2. Error code (4 digit)
3. Model information
4. Prohibition of operation by remote controllers

Restrictions:

When using the CN105, the following items cannot be selected or used:

1. Extended temperature range
2. Auto dual set point mode
3. Setback mode
4. CN51 and CN52
5. Interlocking and cancelling Lossnay units
6. Detecting a communication error
7. Group operation, System controllers can only set one indoor unit per group
8. M-NET controllers cannot prohibit: Operation mode, scheduling, fan speed, and air flow direction
9. M-NET controllers cannot use the extended temperature range
10. If ON/OFF operation is prohibited by a system controller or connection to CN32, ON/OFF operation is also prohibited at the CN105 connection