Number	095a
Subject	Sanyo 3 Pipe eco-i Commissioning Guide
Date	23 July 2015

PLEASE NOTE THAT THIS IS FOR GUIDANCE ONLY. LOGICOOL WERE NOT A DISTRIBUTOR OF SANYO PRODUCT AND ONLY OFFER THIS INFORMATION AS AUTHORISED PANASONIC EQUIPMENT/SPARES AND SANYO SPARES DISTRIBUTOR. THEREFORE LOGICOOL CANNOT BE HELD RESPONSIBLE FOR ANY ERRORS CONTAINED IN THIS DOCUMENTATION.

Wiring

0.75mm² unless total wiring length is over 1000 metres

Control wiring

(C) Inter-unit (between outdoor and indoor units) control wiring			(D) Remote control wiring
0.75 mm² (AWG #18) Use shielded wiring*	or	2.0 mm² (AWG #14) Use shielded wiring*	0.75 mm² (AWG #18)
Max. 1,000 m		Max. 2,000 m	Max. 500 m

Changeover Boxes

Changeover boxes require no power supply. The power is taken from the Indoor Unit. A lead is supplied with the box but this is limited to **5 metres.** Longer leads are available at an additional cost.

Capacities of boxes are shown below. If the unit size exceeds 16kW (Example large ducted units) then two boxes are connected in Series.

Type of solenoid valve kit	Total capacity of indoor units (kW)
CZ-P160HR3	5.6 < Total capacity ≤ 16.0
CZ-P56HR3	2.2 ≤ Total capacity ≤ 5.6

The Panasonic Software can be used to help prepare vital commissioning data and also provide good data for O&M documents.

System Wiring

1 & 2 is the comms line. You will find **1 & 2** on every indoor and on the Outdoor terminal block. This needs to be wired to the first condenser only if you are using a modular system. The condensing units are then connected together via **3** & **4**.

LOGICOOL
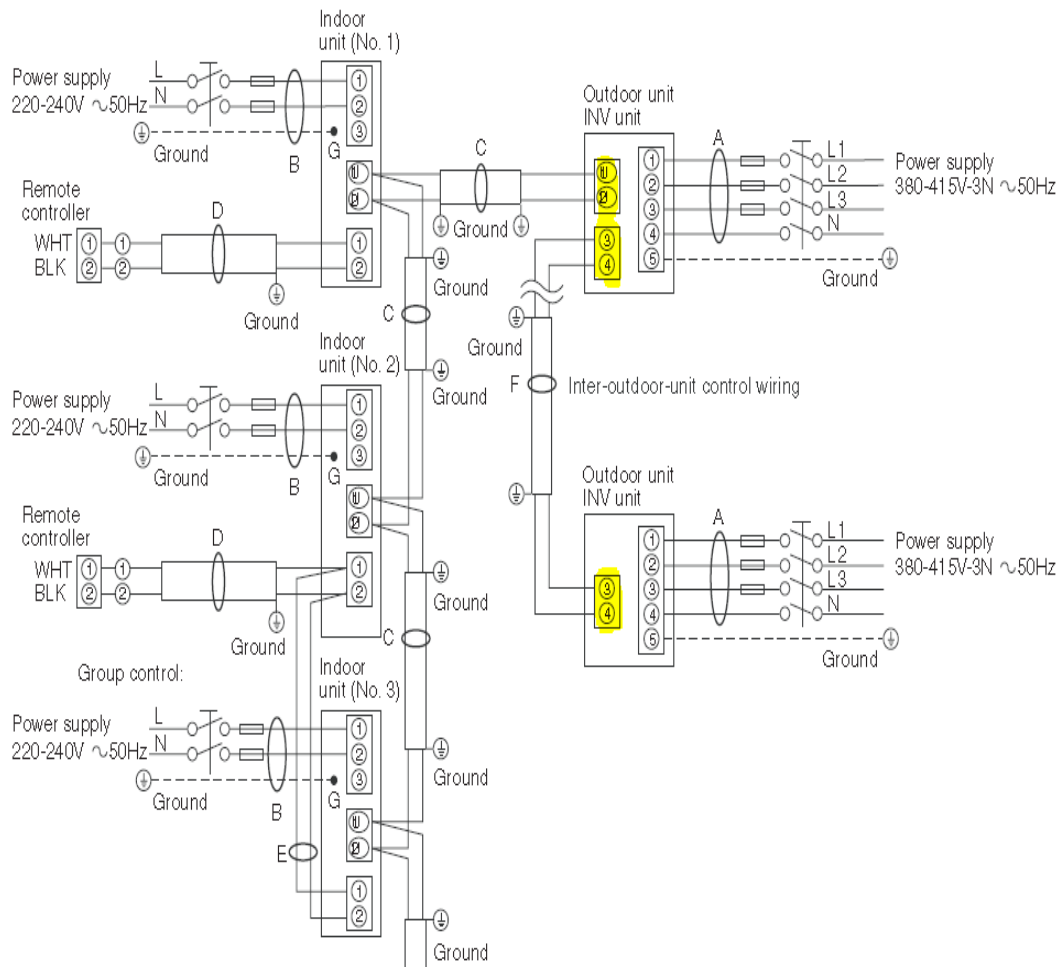
Addressing of systems

The Indoor Units can be auto addressed and we advise that this is the best way to proceed.

For the Outdoor Units, if you are using only one condensing unit then no action is required. If you are linking condensing units then these will need to be addressed via Rotary Switch **(S002)** only unless you have more than 10 condensing units in the system configuration.

No. of indoor units	Indoor unit setting (S005) (3P DIP switch, blue) 10 20 30	Indoor unit setting (S004) (Rotary switch, red)
1 unit (factory setting)	All OFF	Set to 1
11 units	1 ON	Set to 1
21 units	2 ON	Set to 1
31 units	3 ON	Set to 1
40 units	1 & 3 ON	Set to 0

LOGICOOL

You will then need to program the Master Condensing Unit (Address 1) with how many Outdoor Units are connected to the System via S006

| No. of outdoor units	Outdoor unit setting (S006) (3P DIP switch, blue)	
1 unit (factory setting)	1 ON	ON ⇕ OFF
2 units	2 ON	ON ⇕ OFF
3 units	1 & 2 ON	ON ⇕ OFF
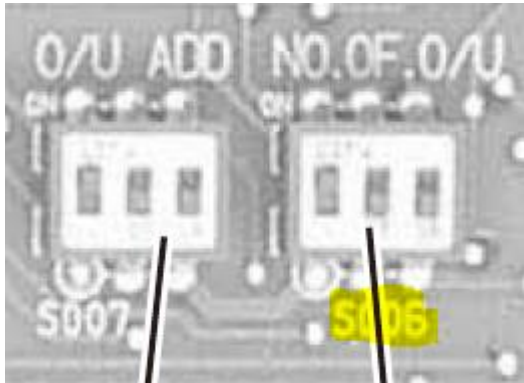
**The condensing units will also need to be address as MASTER and SLAVE via S007**

Keep Address 1 as MASTER

● Address setting of main outdoor unit (S007)

Unit No. setting	Address setting of outdoor unit (S007) (3P DIP switch, blue)	
Unit No. 1 (main unit) (factory setting)		ON ⇕ OFF

● Address setting of sub outdoor unit

Unit No. setting	Address setting of outdoor unit (S007) (3P DIP switch, blue)	
Unit No. 2 (sub unit) (factory setting)	2 ON	ON ⇕ OFF
Unit No. 3 (sub unit)	1 & 2 ON	ON ⇕ OFF

LOGICOOL
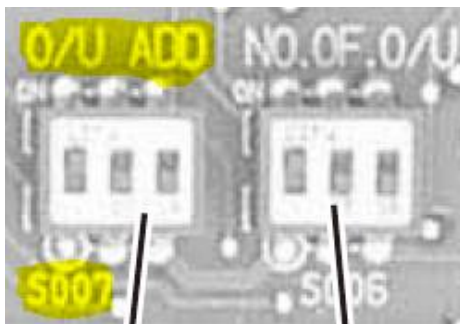
In the case of Two Condensing Units connected set up as follows

MASTER – DSW5 – 1 on, 2 & 3 off
SLAVE – DSW5 - 1 off, 2 on, 3 off

In the case of Three Condensing Units connected set up as follows:

MASTER – DSW5 – 1 on, 2 & 3 off
SLAVE 1 – DSW5 - 1 off, 2 on, 3 off
SLAVE 2 – DSW5 - 1 on, 2 on, 3 off

In the case of Four Condensing Units connected set up as follows:

MASTER – DSW5 – 1 on, 2 & 3 off
SLAVE 1 – DSW5 - 1 off, 2 on, 3 off
SLAVE 2 – DSW5 - 1 on, 2 on, 3 off
SLAVE 3 – DSW5 - 1 off, 2 off, 3 on

On the MASTER condensing unit use S003 Dipswitch and S002 Rotary to set the number of Indoor Units connected to the System.

| System address No.	System address (S003) (2P DIP switch, blue) 10 20	System address (S002) (Rotary switch, black)
System 1 (factory setting)	Both OFF	Set to 1
System 11	1 ON	Set to 1
System 21	2 ON	Set to 1
System 30	1 & 2 ON	Set to 0

LOGICOOL
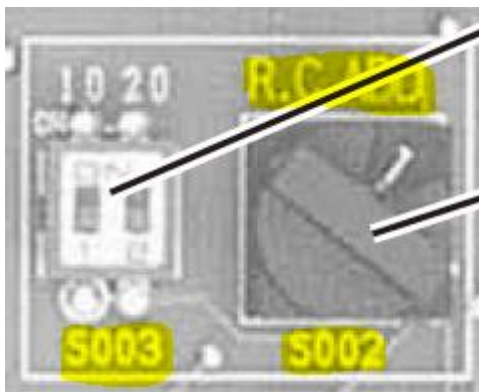
<u>Following all this, TURN POWER ON and wait for THREE MINUTES</u>

<u>Auto Address of Indoor Units</u>

With POWER ON, use a small screwdriver or coin to short out PINS **CN100**

This should be directly above and to the right of the top Rotary Switch.
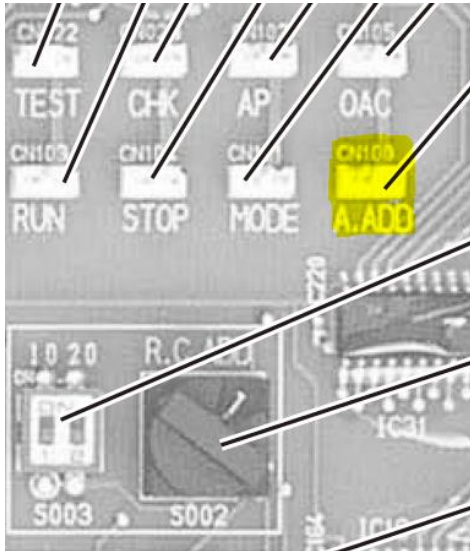
LED 1 and **LED 2** will start flashing alternately. You are now in **AUTO ADDRESS** mode. This will take up to TEN MINUTES.

During this procedure you will hear contactors clicking on and off. **LED 1** and **LED 2** will stay solid for a few minutes. When **LED 1** and **LED 2** go OFF then this is successful.

If **LED 1** and **LED 2** begin to flash in a sequence different to above then this is a fault code such as "no indoors found". You will need to contact Logicool for an explanation of the fault code on 01283 218277

Refer to Page 155 (or 5-17) of ECO-I 3 Way System Service Manual REFERENCE NO.TD831170-00

LOGICOOL

Test Run

Test run can be performed from the Outdoor Units by shorting out the **CHECK (CN23)** pins on the Outdoor PCB. However, this is complex as you also need to short out COOL or HEAT on **CN40**.

Alternatively go to Remote Controller. Put it into Heating or Cooling mode. Press and hold **SPANNER** button on remote controller for five seconds. This will put the system into a TEST RUN mode.