

AC Unison Quick Installation Guide

REVIEW ALL SAFETY INSTRUCTIONS BEFORE YOU BEGIN. For more detailed information on the installation and use of these products, please review the complete installation manuals online at http://bengsolar.com



Step 2 Plan Roof Top Layout

Single Row Male End Cap roof ridge roof ridge transition box transition box d d Female Male Female С Male/Female Extension Cable required if End Transition Cable Transition more than 2" space between modules Cap roof eave Cable roof eave Two Rows transition box roof ridge roof ridge transition bo d Female 0 Ы Male Transitio Transition Cab р Cable Male/Male . Extension Female/ Female Female Cable Extension Cable Male End Cap End Cap roof eave roof eave

Step 3 Preparing Modules

- 3.1 Attach the MCR Bracket to the top of the module frame with two included M5 screws.
- 3.2 Attach the mid-cable receptacle to the MCR bracket with two included M3 screws.
- 3.3 Attach cable clips to module frame as needed and secure cable in clips.
- 3.4 Remove one serial number sticker from the mid-cable receptacle and place it appropriately on the array maps.

BenQ Solar AC Unison System Layout Table

| System Installer: Site of Installation; Jate of Installation; | | | | | | | | | | |
|---|---|------------------|-----------------|-------------------|------------------|-------------------|--|--|--|--|
| | | String A | String B | String C | String D | String E | | | | |
| | 1 | 007854121030047 | 057051129000047 | 057551 \$29002047 | | | | | | |
| | 2 | 057551124050047 | 057651129000347 | 057051129000047 | 057051129000087 | 057057 129020047 | | | | |
| | 3 | 057251 (240/2047 | 057051129000047 | 057051129000457 | 057051 129020047 | 057051-1299000047 | | | | |
| | 4 | 057561 (2902564) | | 057561129595647 | | | | | | |
| | 5 | 05705112900047 | | | | | | | | |



Step 4 Module Installation

- 4.1 Remove the protective sticker from the Transition Cable and terminate the cable in the transition box per the National Electric Code.
- 4.2 Plug the first module into the Transition Cable. Make subsequent AC cable connections at the mid-cable receptacles. Press firmly until an audible "Click" in heard.
- 4.3 Use Extension Cable to connect module rows.
- 4.4 Insert the End Cap into the connecting plug or receptacle at the last module in each circuit. (up to 17 modules)
- 4.5 Use appropriate cable management equipment and Cable Clips to secure the Extension Cable off the roof.

AC Unison Accessories (※ is optional)

| P/N | Description | P/N | Description |
|--------------|------------------------|----------------|----------------------------------|
| 19.M2M01.002 | DATA LOGGER | 27.03112.005 | 10' FF EXTENSION CABLE |
| 27.03212.001 | 5' F TRANSITION CABLE | 27.03112.003 | 5' MM EXTENSION CABLE |
| 27.03212.002 | 10' F TRANSITION CABLE | 27.03212.005 | 10' MM EXTENSION CABLE |
| 27.03112.001 | 5' MF EXTENSION CABLE | 79.M2M03.003 | MALE END CAP |
| 27.03112.002 | 10' MF EXTENSION CABLE | 79.M2M03.002 | FEMALE END CAP |
| 27.03212.003 | 5' M TRANSITION CABLE | 74.M2M03.002 💥 | METAL BRACKET KIT (with 4 bolts) |
| 27.03212.004 | 10' M TRANSITION CABLE | 74.M2M03.005 💥 | Cable Clip |
| 27.03112.004 | 5' FF EXTENSION CABLE | | |

4.1

Transition box



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Sted 5 BenQ Data Logger Installation





Main Breaker Handle Branch Circuit **Breakers**





- I. Attach the Data Logger's mounting bracket to the wall.
- 2. Remove access cover and AC terminal block cover using No.I Phillips screwdriver.
- 3. Hang the Data Logger on the bracket and secure with screws.
- 4. Connect AC wiring to the Data Logger following the National Electric Code.
- 5. Reattach the AC terminal block cover. (Note difference in size between terminal block screws and access cover screws.
- 6. The suggested method of supplying power to Data Logger is via direct wire to a sub or PV distribution panel circuit breaker not to exceed 20A.



Connect to Internet (Need Support DHCP)

7. Remove the Consent to Share label. Please continue to follow the step 7 to 9 to complete the installation. Turn on the Data Logger and wait 5 minutes for boot sequence. DO NOT power cycle Data Logger during booting process. Data Logger will start reporting data to the server within I hour after plugging in the CAT5 cable.

At startup, the Welcome screen quickly changes to Mounting/filesystem and Starting Application, which remains until the internal software and database are available. Once all software components have started, the LCD display the home screen. The initial startup can take around 5 minutes. Please DO

To establish communications between the Data Logger and AC modules, select OPERATIONS ->

The numbers on left of home screen display are the number of modules that reported and the total

number of known modules (e.g., 37/37). In the center of the home screen is the total amount of power

Discovery can take up to I hour, but if all the modules are found, you can manually stop during the discovery process. If the initial discovery does not find all modules, discovery may be required up to 3 times. If all modules are still not discovered, verify all module to module connection on the roof top. Or

After plug in CAT5 cable to Data Logger, if the Data Logger has an Internet connection, the right side of the home screen displays "COMM". The system is now ready to be registered and set up on BenQ Solar web portal: http://www.benqsolar.com/?sn=1076&lang=zh-TW. After you complete the registration, you

In order to maintain the integrity and accuracy of the AC Unison modules energy production data, BenQ Solar recommends system owners to avoid frequent interruptions to the system Internet connection such