Bridge Diagnostics and Useful Information

LED indication - Correct operation of a Bridge (WA WTC and WRA232) is indicated by a flashing blue LED. A double flash indicates the TCP port is available for connection via RASOFT. A triple flash indicates the TCP port is in use, connection via RASOFT will not be possible until the other device is disconnected.

Bridge wiring – A Rako Bridge comes with a short ethernet cable which is designed to plug into the RJ11 sockets on Rako devices such as the RAKLink and RAKStar. This cable actually forms a short spur on the network. The network can support a small number of short spurs but this cable should not be extended. Should it be required to mount a Bridge some distance from the RAKLink/Star then other connections to enable this form a part of the true daisy chain network, such as the WP-Con and WP-ConC are available. Contact Rako Controls for more details.

Bridge webpage diagnostic – The Bridge has an embedded webpage accessed by typing rakobridge into the browser bar of a PC/Mac. The config page shows the bus status which is determined by the number of messages successfully transmitted on the network. The status indicators give feedback on how stable the network is. The bus status can be:

Bus: Active – indicates a good network.
Bus: Active Tx warn – indicates some degree of intermittency
Bus: Passive Tx – indicates a high degree of intermittency

All messages other than 'Active' should prompt further investigation.

As the status is determined by a count of good message transmissions, once a fault has been corrected it will take a number of successful messages to change the status. Pressing a WCM button several times is the easiest way to achieve this.

Web page indicating the wrong Bridge type - If the web page indicates an RA or RTCBridge (wireless versions) when a WA or WTCBridge should be expected the Bridge is not connected to a CAN network. This will be caused by a cable fault to the RAKLink, or more likely the CAN network has crashed due to a cabling fault.

Bridge resets – Should it be required there are two states of Bridge reset available, soft and full.

Soft Reset - The soft reset restores all of the embedded web page configuration information to default settings. Note: Project information such as Rooms, Channels and Mappings will remain stored. The House number will be reset to 1.

Hard Reset The hard reset restores the firmware to factory default. This is normally only required if a firmware upgrade has failed.

To perform a reset remove power to the unit. Remove the lid and press the blue microswitch on the circuit board. Keeping this held restore the power. After about 5 seconds the LED will start to flash. Releasing at this point performs a soft reset. Keeping the switch held until the LED stops flashing (a further 10 seconds) will perform a hard reset.

Trigger Function - When programming timed events into an RTC or WTCBridge it is sometimes inconvenient to wait until the correct time before checking the results of the programmed events. Going into the webpage/Configuration/Events will list the events stored in the Bridge and these can then be triggered, regardless of the time, by clicking the button 'Trigger Event'.

Setting fixed IP addresses – Fixed IP addresses may be required for a Bridge, if for example, remote access is required for remote IP or App control of the network. It is highly advisable to configure the network with a dynamic address (default) and once the system has been programmed and shown to be working correctly and only then fix the IP address.