

SRF: Troubleshooting

The SRF has a number of indicator and control pins that can be used for testing and diagnosis.

See the [technical data section](#) for the pin-out specification.

SRF Indicator pins

Various pins are set to output and give indication of activity

- **HEARTBEAT** - This pulses once a second and indicates that the main software loop is functioning, connecting this pin to an LED via a 330R (or above) resistor is a very useful indicator that the SRF is running properly.
- **TX LED** - This pin is high whilst the SRF is transmitting, connecting this pin to an LED via a 330R (or above) resistor is a very useful indicator that the SRF is transmitting.
- **ON/SLEEP** - This pin is steady high whilst the SRF is awake and steady low whilst the SRF is asleep, connecting this pin to an LED via a 330R (or above) resistor is a very useful indicator that the SRF is awake or asleep.
- **RTS** - is low whenever the SRF is ready to receive serial data. By default this function is disabled, it is enabled by using the **ATFC**

command - see the section on [configuration](#) for more details.

Control pins

These pins are set to input and are used to control the XRF

- **SLEEP** - this pin is used to request the SRF to go to sleep and conserve power. The use of this pin is disabled by default and enabled using the **ATSM** command - see the section on [configuration](#) for more details.
- **CTS in** - this pin is used to control the serial output from the SRF. When high the SRF will buffer data until the pin goes low. By default this function is disabled, it is enabled by using the **ATFC** command - see the section on [configuration](#) for more details.