

R-0066-5370
User Manual
Colorado Time Systems

Overview

The R-0066-5370 is a wired to wireless data transceiver and can be used in any product that uses serial transmission or discrete data transmission. The device includes everything needed on board, including power regulation, microcontroller, oscillator and RF stages.

Power

The power supply on board will supply the devices local power of 3.0VDC from an input of 3.2VDC-16VDC. All filtering is done on board, so no external filtering is required. Power consumption of the R-0066-5370 is less than 50mA when transmitting.

Inputs

The R-0066-5370 provides inputs for a full SCI interface, SPI interface and IIC interface, all at 3.0VDC levels. **IMPORTANT!** Do NOT connect a full RS232 serial port to the device. Voltage levels must be 0-3.0VDC on the SCI. In addition, access is provided for 19 discrete microcontroller i/o pins and 1 IRQ line.

Connections

P2

1	Ground
2	+V
3	Ground
4	+V
5	PTC6
6	PTD0
7	IRQ
8	PTD4
9	PTA0
10	PTB7
11	PTA1
12	PTB6
13	PTA2
14	PTB5
15	PTA3
16	PTB4
17	PTA4
18	PTB3
19	PTA5
20	PTB2
21	PTA6
22	PTB1
23	PTA7
24	PTB0

JP2

1	Ground
2	Slave Select (SPI)
3	MISO
4	MOSI
5	SPI Clock
6	IIC_SCL
7	IIC_SDA
8	SCI_RX
9	SCI_TX
10	Ground

Wireless

The R-0066-5370 operates in the 902-928MHz band. The device channel output is configurable with 32 discrete channels, with a .75MHz jumps between channels. Channels are configurable from the RS232 port and the SPI port.

Antenna

The device has been tested for compliance with the following antennas:

- Linx Technologies ANT-916-CW-HWR-RPS
- Linx Technologies ANT-916-CW-RH

The connector is a RPSMA header for connection to the antenna. An extension cable is permitted with the ANT-CW-HWR-RPS antenna, but no others.

FCC Compliance

For compliance with the FCC requirements, the following statements must be included in the end device's user manual. The device must also be clearly marked as containing this device.

- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Once this device is installed into the end device, the final device must be further tested by an FCC approved laboratory for intentional radiation.

Labeling

The following label is located on the device and must not be removed by the user.

Label:



Location:

