RF DIGITAL CORPORATION
2029 Verdugo Blvd. Suite 750 • Montrose • CA • 91020
Tel: (818) 541-7622 • Fax: (818) 541-7644
www.rfdigital.com • sales@rfdigital.com

UYIRFD10 900 MHz Transceiver Manual 03/08/07

Description:
The (R210) UYIRFD10 is a 900 MHz GFSK transceiver module with an integrated microcontroller and antenna. Using the 5 digital general purpose IO lines a user can send or receive switch on-off commands or serial data between two similar modules.

Frequency of operation: 902-928 MHz

Module factory configured general purpose IOs for 5 switch inputs: (RFD21134)
-Connect power to the +3V and GND pins.
-Connect up to 5 logic outputs to the 5 inputs on the module, they are all internally pulled down to ground.
-Any high on any of the 5 inputs causes the module to transmit that bit state to the receiver.

Module factory configured general purpose IOs for 5 switch outputs: (RFD21138)
-Connect power to the +3V and GND pins.
-Connect up to 5 logic inputs to the 5 outputs, these are push-pull outputs and are at 3V logic.
-Any high on the 5 inputs on the transmitter causes the associated output to go high on this receiver.

Module factory configured general purpose IOs for 1 serial input and 1 serial output: (RFD21130)
-Connect power to the +3V and GND pins.
-To transmit, apply 3V logic, 9600, N, 8, 1 serial data into the TXD pin.
-The module's steady state is receive, so to receive simply do apply signal to the TXD pin and any data sent by a transmitter that is in range will be outputted by the RXD pin.

The on air-communication and processing is the same for all the modules, the only thing that is different is how the user IOs handle based on factory configuration. All IO pins are connected to the same processor and are general purpose and run at 3V logic.

RF DIGITAL CORPORATION
2029 Verdugo Blvd. Suite 750 • Montrose • CA • 91020
Tel: (818) 541-7622 • Fax: (818) 541-7644
www.rfdigital.com • sales@rfdigital.com

LABELING REQUIREMENT FOR USA

FCC CERTIFICATION

This device has a modular approval from the FCC. When this module is used inside another product where the FCC ID number located on the module itself is not in an obvious place to be viewed by the user. Then you must place the following label outside, on your product in an obvious location.

Permanently attached label in a conspicuous location with the following statement:

> This device contains an FCC ID: UYIRFD10 RF module that complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
>
> (1) This device may not cause harmful interference and
> (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTES:

1. The FCC does not specify the size of the label or the lettering thereon. The only requirement is that the text be legible.

2. If the entire label can not be placed on the unit due to space constraint (e.g. Pacemaker), only "contains an FCC ID: UYIRFD10" may be displayed on the unit. In such cases, the compliance statement will have to be included in the "instruction to the user."

******* It is the users responsibility to determine if their device requires additional approvals *******

RF DIGITAL CORPORATION
2029 Verdugo Blvd. Suite 750 • Montrose • CA • 91020
Tel: (818) 541-7622 • Fax: (818) 541-7644
www.rfdigital.com • sales@rfdigital.com

INSTRUCTION TO THE USER (if device contains a digital device)

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

* Reorient or relocate the receiving antenna.

* Increase the separation between the equipment and receiver.

* Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

* Consult the dealer or an experienced radio/TV technician for help.

This equipment has been verified to comply with the limits for a class B computing device, pursuant to FCC Rules. In order to maintain compliance with FCC regulations, shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.