

User Manual

May 2012

914-928 MHz Frequency Hopping Transceiver Module

Model: PCB-LPA-MAIN1

FCC ID: R73LPA1

Introduction:

This module is only authorized to be installed in fixed mount installation and may not be installed in a mobile or portable device.

The LPA-MAIN1 RF module is to be used in Sapling Analog Clocks such as the SAL Series Clocks and equivalent models.

The module is only to be connected to other Sapling products.

Specifications:

The maximum output power will be 10 dBm.

The transmit cycle is a sequence of 57 data strings on 51 different frequencies, each transmitted for 10 msec.

Every transmit cycle is 570 msec in duration (57 x 10ms).

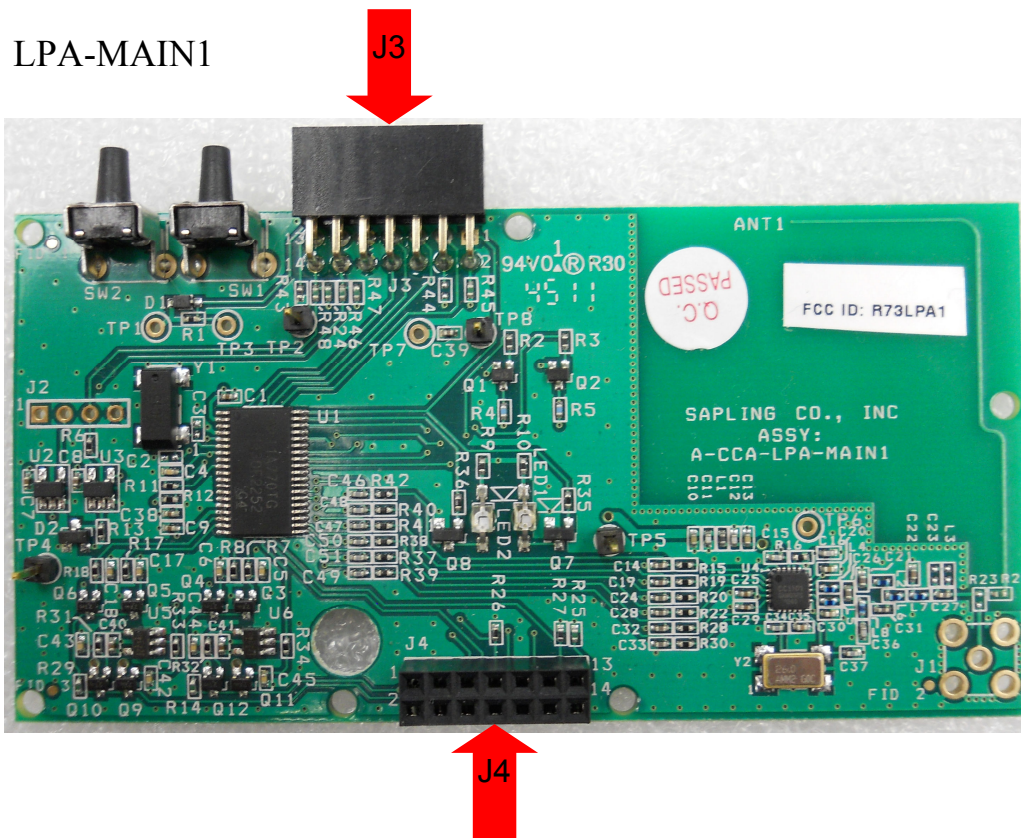
The frequency hopping pattern is proprietary to Sapling and covers the range from 914.688 to 927.488 MHz.

Connections:

The module should only be connected to and installed in other Sapling products.

The picture shows the LPA-MAIN1 RF module and connectors.

LPA-MAIN1



LPA-MAIN1 RF Connectors:

J3 PROGRAMMING CONNECTOR	
PIN 1	TDO/TDI
PIN 2	3.3 VOLTS
PIN 3	TDI
PIN 4	3.3 VOLTS
PIN 5	S2 DRV (TMS)
PIN 6	1.8 VOLTS
PIN 7	TCLK
PIN 8	TEST
PIN 9	GROUND
PIN 10	GROUND
PIN 11	RST
PIN 12	TXD
PIN 13	SHIELD
PIN 14	RXD
* PIN 1 IS SQUARE PAD	

J4 GEARBOX CONNECTOR	
PIN 1	MOT SEC 1 1.8 VOLTS
PIN 2	MOT SEC 2
PIN 3	MOT MIN 1 1.8 VOLTS
PIN 4	MOT MIN 2
PIN 5	GRBX SEL A
PIN 6	GRBX SEL B
PIN 7	PWR DET
PIN 8	S1
PIN 9	GROUND
PIN 10	S2
PIN 11	3.3 VOLTS
PIN 12	GRBX DET
PIN 13	1.8 VOLTS
PIN 14	GROUND
* PIN 1 IS SQUARE PAD	

Operation:

The module will transmit the time for 570 ms, as specified. Line powered version will transmit once a minute. Battery powered version will transmit every 2 hours.

FCC Statement:

This device 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.

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.