TRANSMITTER

1.76

0.65

GROOVE

2.75

1 2
3 4
5

2.78

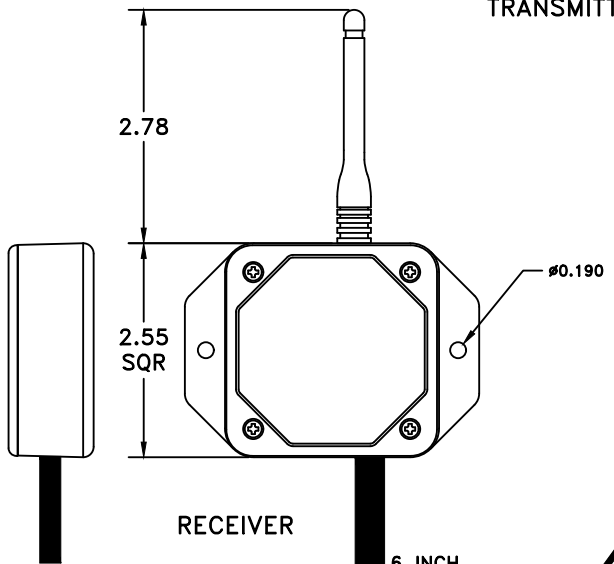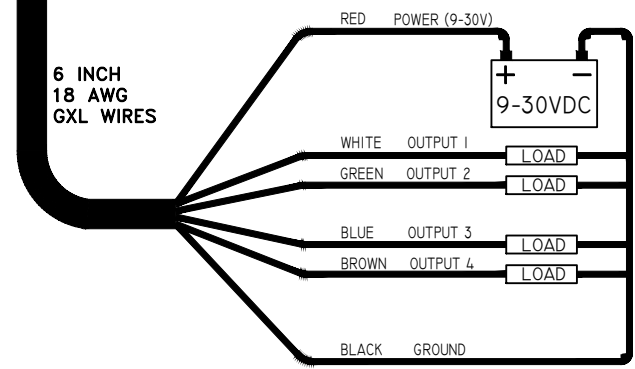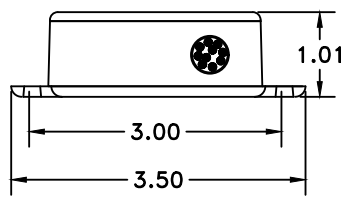2.55 SQR

⌀0.190

RECEIVER

6 INCH
18 AWG
GXL WIRES

1.01

3.00

3.50

TO REPLACE THE INTERNAL CR2032 DISPOSABLE BATTERY, REMOVE 4 ALLEN SCREWS USING A ⁵⁄₆₄" ALLEN WRENCH. LIFT BACK COVER USING GROOVE. DO NOT OVER TIGHTEN THE SCREWS WHEN RE-ASSEMBLING BACK COVER.

RED   POWER (9-30V)

+ −
9-30VDC

WHITE   OUTPUT 1   LOAD
GREEN   OUTPUT 2   LOAD
BLUE   OUTPUT 3   LOAD
BROWN   OUTPUT 4   LOAD

BLACK   GROUND

OPERATION
- Press any button to begin operation. This will turn on the transmitter and turn on the selected output at the same time. The transmitter remains on for additional 3 seconds after button is released and then turns off automatically.
- The green LED light on the transmitter will blink 2 times per second when the transmitter and receiver are communicating. It will blink 1 time per second if there is no communication (i.e. - no power to the receiver)
- The red LED light on the transmitter will blink if the battery is low and should be replaced.

SYNCHRONIZING TRANSMITTER AND RECEIVER
Each radio remote system is designed to operate with a unique radio ID code and RF channel sequence. Each receiver is programmed to respond only to the transmitter with the correct ID code/RF channel sequence. This feature allows multiple systems to work in close proximity to one another without interference. In the event that a transmitter becomes damaged and a new one is needed, the receiver can be reprogrammed to respond to the new transmitter. To teach the ID code to the receiver, use the following procedure:
1. Make sure the receiver and transmitter are OFF.
2. Press and hold button 5 and 1 for five seconds until both LEDs start blinking then release buttons.
3. Apply power to the receiver.
4. Wait for ~5 seconds or until the green LED on the transmitter starts blinking rapidly.
5. Teach complete.

CLONING TRANSMITTERS
WARNING! - ONLY ONE TRANSMITTER CAN BE ON AT A TIME, THEY CANNOT BE USED SIMULTANEOUSLY - use with CAUTION!

Occasionally, it is desirable to have more than one transmitter work with a single receiver. This is accomplished by a process called cloning. Cloning allows an additional transmitter (B) to have the same ID code as the original transmitter (A). If this feature is desired, use the following procedure:
1. Make sure both transmitters and the receiver are off
2. On Transmitter A, press and hold buttons 5 and 1 for five seconds until both LEDs start blinking then release buttons
3. On Transmitter B, press and hold buttons 5 and 2 for five seconds until both LEDs start toggling then release buttons
4. Wait for ~5 seconds until the green LEDs start blinking rapidly
5. Cloning complete

If the cloning feature has been invoked and is no longer desired, the ID code of one of the transmitters needs to be changed. This will unclone the transmitters. If this is desired, use the following procedure:
1. Make sure the receiver and transmitter are OFF
2. Press and hold buttons 5 and 4 for five seconds until both LEDs start toggling then release buttons
3. Press any button again to select a new ID
4. uncloning complete
5. Follow the SYNCHRONIZING TRANSMITTER AND RECEIVER procedure above to link the uncloned transmitter to a new receiver

RECEIVER OPERATION MODES
The NANO remote system can operate in one of 5 different modes:

Mode 1: Each output 1 to 4 is momentary corresponding to button 1 to 4. Press and hold buttons to turn on the outputs

Mode 2: Outputs 1 and 2 are latched using button 1 for ON and button 2 for OFF. Outputs 3 and 4 are latched using button 3 for ON and button 4 for OFF

Mode 3: Each output (1-4) is latched. Press the corresponding button for ON, press again for OFF

Mode 4: Outputs 1 and 2 are momentary as described in Mode 1. Outputs 3 and 4 are latched asdescribed in Mode 2

Mode 5: Outputs 1 and 2 are momentary as described in Mode 1. Outputs 3 and 4 are latched asdescribed in Mode 3

The factory default is Mode 1. To change the mode use the following procedure:
1. Turn the receiver and transmitter OFF
2. Press and hold buttons 5 and 3 for five seconds until the red LED starts blinking. Release buttons
3. Turn the receiver on
4. Press one button (1- 5) on the transmitter to select mode 1- 5
5. Mode programming complete

ENABLE BUTTON
The transmitter can be configured for Two-handed operation. In this way, button 5 must be held to allow a function to operate. To invoke this feature, use the following procedure:
1. Turn the receiver and transmitter OFF
2. Press and hold buttons 5 and 3 for five seconds until red LED starts blinking then release buttons
3. Turn the receiver on
4. Wait 10 seconds until the red LED turns off
5. Programming complete
6. Repeating steps 1-5 will deactivate this function

SPECIFICATIONS
Power:
- Transmitter: CR2032, 3V Lithium battery
- Battery life: 15 hrs of operation
- Receiver: +9VDC to +30 VDC

Receiver solid state output rating: 5A each (sourcing), 20A system maximum

RF: 902-928MHz FHSS 4mW

Environmental:
  Operating temperature:
- Transmitter: -20 to +60ºC
- Receiver: -40 to +85ºC

Ingress Protection:
- Transmitter: IP64
- Receiver: IP65

IMPLIED TOLERANCE	
XX	± .1
XXX	± .06
XXXX	± .015
FRACTIONAL	± 1/8
ANGULAR	± 0.5 deg

TITLE: NANO RADIO REMOTE SYSTEM

CAD DRAWING DO NOT REVISE MANUALLY

SCALE	DRAWN	DATE	CHECKED	APPROVED	DRAWING NO.	B
FULL	AP	10-23-12				