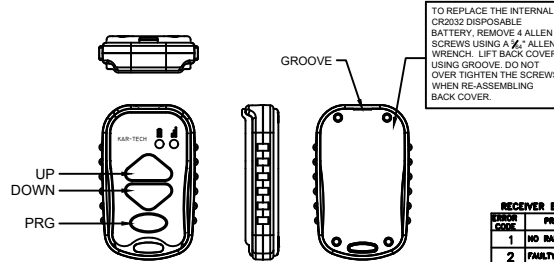


P/N: 3A4741B  
 KIT, NANO PROGRAMMABLE, 3 FUNCTION  
 INCLUDING:  
 1 3A4742A TRANSMITTER  
 1 3A4743B RECEIVER  
 1 240-011-0012 POWER SWITCH



ERROR CODE	PROBABLE CAUSE
1	NO RADIO COMMUNICATION
2	FAULTY CIRCUIT TO UP COIL
3	FAULTY CIRCUIT TO DOWN COIL
4	FAULTY CIRCUIT TO PUMP

ERROR CODE NUMBER IS THE NUMBER OF RED LIGHT BLINKS BETWEEN EVERY PAUSE.

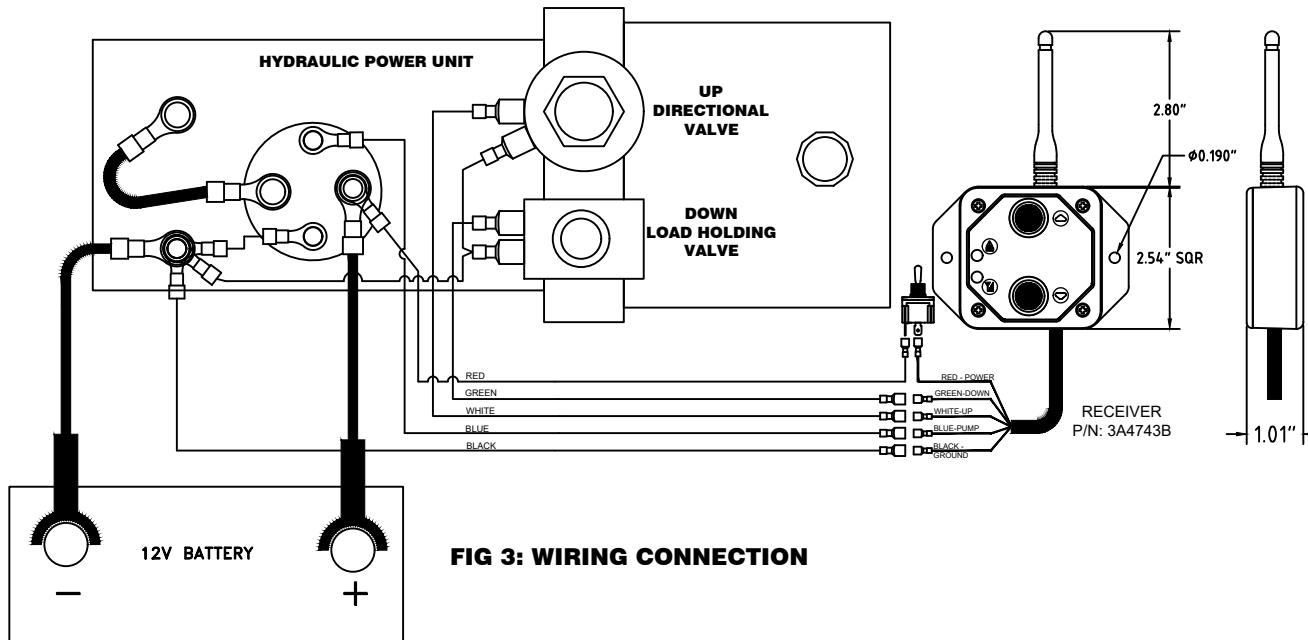


FIG 3: WIRING CONNECTION

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.  
 Changes or modifications not expressly approved by Kar-Tech will void the user's authority to operate the equipment.

**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 release 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 UP and PRG buttons 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!** - This feature can pose a safety hazard for operators if both transmitters are 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 UP and PRG buttons for five seconds until both LEDs start blinking then release buttons
  3. On Transmitter B, press and hold UP and DOWN buttons 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 UP, DOWN and PRG buttons 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:**

NANO remote system can operate in two different modes:  
 Mode 1: Pump output turns on with UP or Down. (DEFAULT MODE)  
 Mode 2: Pump output turns on with UP only.

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 Down and PRG buttons for five seconds until the red LED starts blinking. Release buttons
3. Turn the receiver on
4. Press UP button for Mode 1 and DOWN button for MODE 2
5. Mode programming complete

**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 +60°C
  - Receiver: -40 to +85°C
- Ingress Protection:
- Transmitter: IP64
  - Receiver: IP65

		IMPLD TOLERANCE	
		XX	: J
		XXX	: M
		XXXX	: H5
		FRACTIONAL	: 1/8
		ANGULAR	: 0.5 deg.
CAD DRAWING DO NOT REVISE MANUALLY			
SCALE	DRAWN	DATE	CHECKED
FULL	HK	03-03-19	APPROVED
			DRAWING NO.
			APP-061