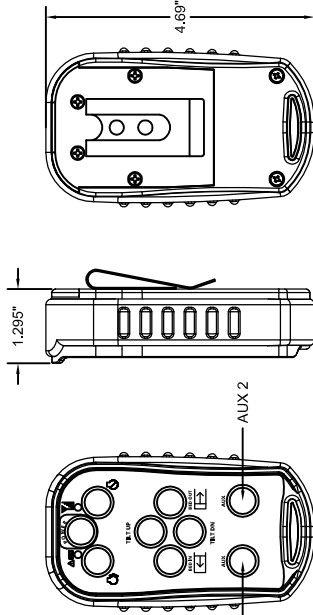


USES THREE (3) AAA ALKALINE BATTERIES



RECEIVER ERROR CODE CHART

CODE	PROBABLE CAUSE
1	RF COMMUNICATION PROBLEM
2	ENGINE START OUTPUT ERROR
3	ENGINE STOP OUTPUT ERROR
4	TILT UP OUTPUT ERROR
5	TILT DOWN OUTPUT ERROR
6	BED IN OUTPUT ERROR
7	BED OUT OUTPUT ERROR
8	AUX 1 OUTPUT ERROR
9	AUX 2 OUTPUT ERROR
10	TRANSMITTER NOT IN NEUTRAL MODE*

TRANSMITTER ERROR CODE CHART

CODE	PROBABLE CAUSE
1	LOW BATTERY

P/N: 3A4182A
TRANSMITTER, MACRO, 9 BUTTON

*TRANSMITTER IS NOT ACTIVE WHEN RECEIVER IS POWERED ON.

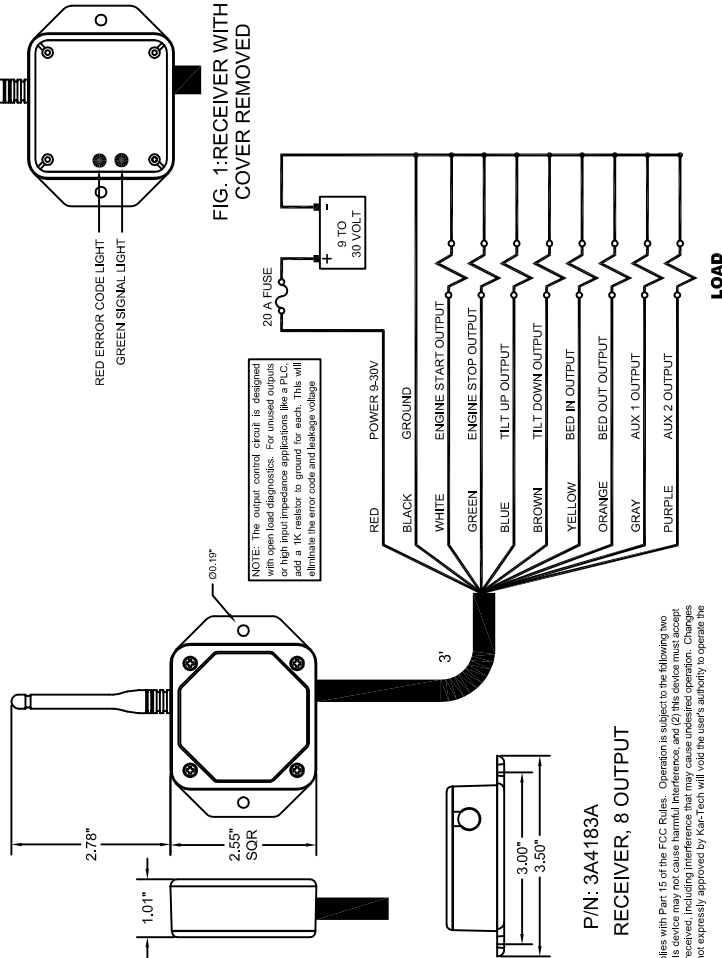


FIG. 1: RECEIVER WITH COVER REMOVED

P/N: 3A4183A
RECEIVER, 8 OUTPUT

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 to this document not expressly approved by Kar-Tech will void the user's authority to operate the equipment.

OPERATION

- Press and hold the POWER button for at least 2 seconds and release
- The transmitter is designed with a power saving feature which turns the transmitter off after 15 minutes if no buttons are pressed and receiver is off.
- There are red and green LEDs both on the keypad of the transmitter and inside the receiver case. The green LED 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 in the receiver will blink if there is a shorted or open output. Refer to the ERROR CODE CHART table and count the number of blinks to determine the output with the fault.
- The transmitter's red LED blinks 1 time per second

SYNCHRONIZING TRANSMITTER AND RECEIVER

There are over 64000 different addresses (ID codes) available for each transmitter and receiver pair. Each transmitter and receiver pair is synchronized together at the factory. If a new transmitter is needed, synchronizing is required. Refer to Figure 1 and use the following procedure:

1. Turn both transmitter and receiver off
2. With the transmitter off, press and hold the POWER button for more than 10 seconds. LEDs start blinking.
3. Turn on the receiver
4. Wait for a few seconds until just the green LED begins to blink rapidly on the transmitter
5. Teach complete

PROGRAMMING

The user can determine AUX 1 & 2 output functionality (momentary or maintained action) and program the system to respond as desired. This is determined by the following procedure:

1. Turn the receiver off. Turn the transmitter on (press and hold POWER until both LEDs turn on, then release)
2. Press and hold BED IN, TILT DOWN, and AUX 2 and release. Red LED should be blinking on the transmitter
3. Turn the receiver on. Be sure all outputs are connected to a load and that there are no error codes present (NOTE: outputs may cycle on and off while programming)
4. Act any outputs to be latched (push on/push off)? If yes continue. If no, skip to step 7 for outputs to be momentary.

5. Press AUX 1-2 button corresponding to output AUX 1-2 that is to be latched, until green LED goes on, then off
6. Repeat step 5 for any more outputs that are to be latched
7. Press POWER briefly. The receiver's red LED should blink, indicating that this step is accepted and complete. The red LED on the transmitter should stop blinking

NOTES:

- If the receiver does not blink the red LED after each sequence or the transmitter's red LED does not stop blinking as described above, the programming was not accepted for that section. Start from the beginning and go slowly. Keep a distance of 2-3 feet from the receiver when programming.
- The factory settings are: AUX 1 & 2 outputs are momentary outputs

SLEEP TIME

All transmitters have the ability to change the sleep time from the default to user's preference. The transmitter is factory set to turn off (sleep) after 15 minutes if the receiver is off. To change the time the transmitter waits before going to sleep, use the following procedure:

1. With the transmitter off, press and hold POWER and buttons ENGINE START, ENGINE STOP, and TILT DOWN
2. Release the buttons. At this point, both lights will blink once per second
3. On the transmitter, press one of the following buttons to adjust the sleep time:
 - a. ENGINE START = 15 minutes
 - b. ENGINE STOP = 30 minutes
 - c. BED IN = 1 hour
 - d. BED OUT = 2 hours
 - e. AUX 1 = sleep disabled
4. Sleep time programming 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 the POWER button for 10 seconds until LEDs blink, then release. Green and red LEDs will blink together at this point
3. On Transmitter B, press and hold buttons TILT UP, AUX 2, and POWER simultaneously until both LEDs start to blink
4. Wait for few seconds until the green LED starts to blink on transmitter A and transmitter B turns off.
5. Turn both of the transmitters off

6. Synchronize one of the transmitters to the receiver using SYNCHRONIZING TRANSMITTER AND RECEIVER instructions above
 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 BED IN, BED OUT, AUX 1, and POWER buttons simultaneously until both LEDs start toggling then release
3. Press any button again to select a new ID
4. Unclooning complete
5. Follow the SYNCHRONIZING TRANSMITTER AND RECEIVER procedure above to link the uncloned transmitter to a new receiver

SPECIFICATIONS

- RF: 902-928MHz FHSS 10mW
- Temperature: Receiver: -40 to +85°C, Transmitter: -18 to 55°C
- Output Rating: 5A each (grounding) 20A system maximum
- Encapsulated electronics inside receiver
- Power transmitter: 3 AAA Alkaline Batteries
- Battery life: 30-40 hours continuous

KAR-TECH Delafield, WI 53018		DATE	DATE	APPROVED	REVISION NO.
9 BUTTON MACRO SYSTEM		DATE	DATE	APPROVED	REVISION NO.
COPYRIGHT		DATE	DATE	APPROVED	REVISION NO.
DVS		DATE	DATE	APPROVED	REVISION NO.
COLD DRAWING DO NOT REUSE MANUALLY		DATE	DATE	APPROVED	REVISION NO.
FULL BK (05-14-16)		DATE	DATE	APPROVED	REVISION NO.
3A-418-1-A-3A		DATE	DATE	APPROVED	REVISION NO.