

FIG. 2: RECEIVER WITH COVER REMOVED

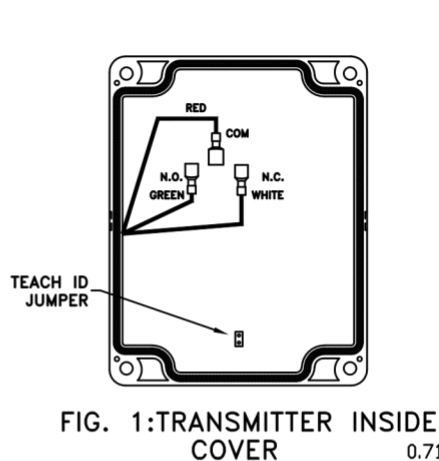
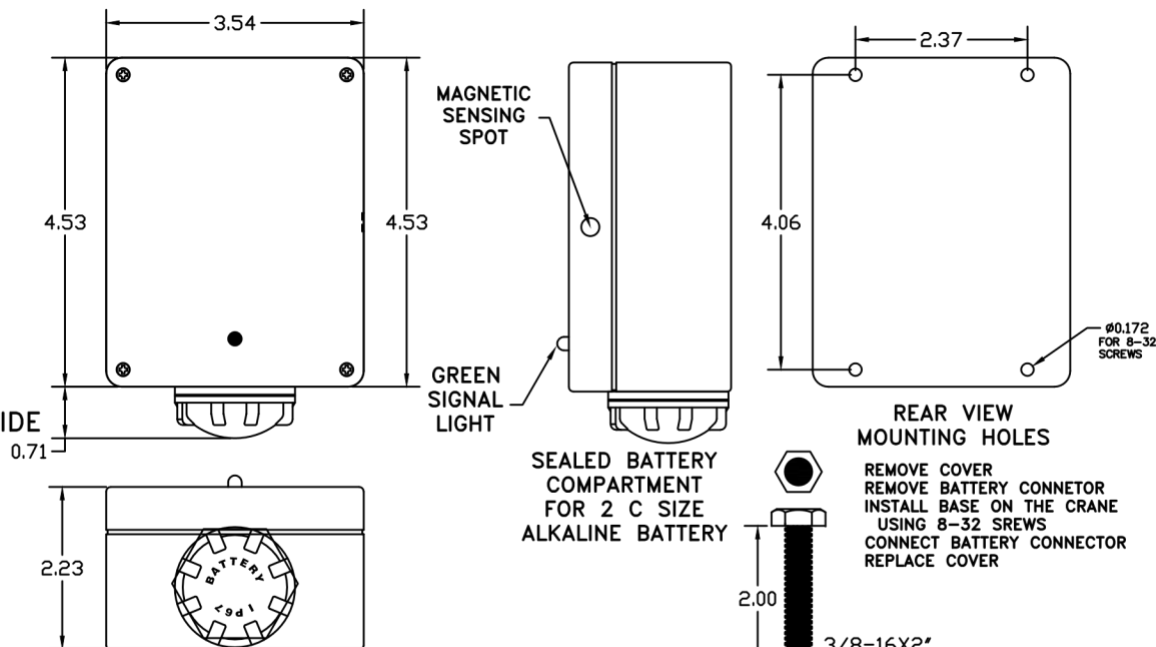
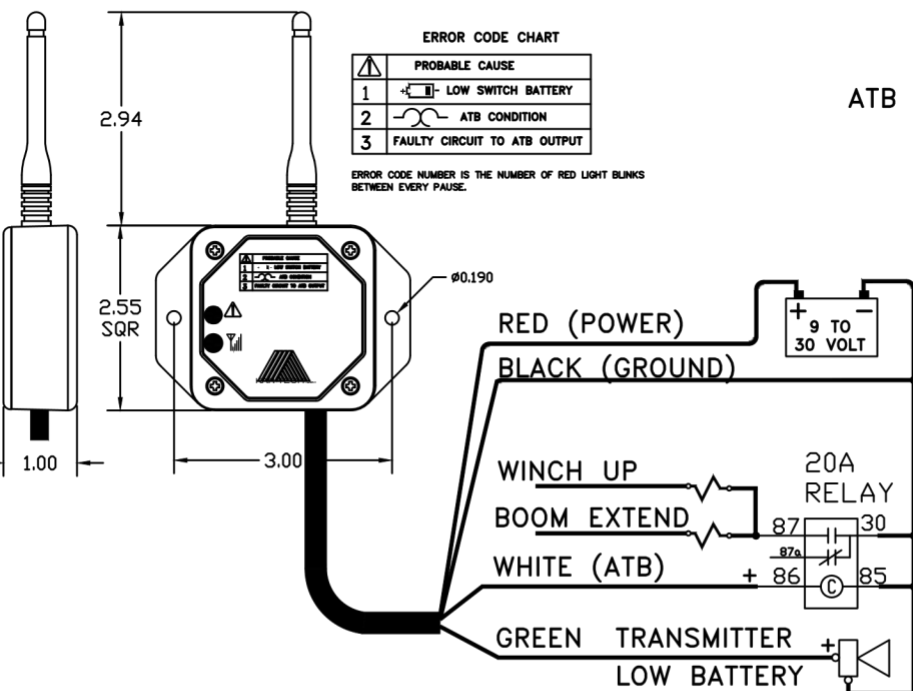


FIG. 1: TRANSMITTER INSIDE COVER



ATB SWITCH TRANSMITTER

MAGNET: (P/N: 225-100-0020)



ATB RECEIVER

ERROR CODE CHART	
PROBABLE CAUSE	
1	LOW SWITCH BATTERY
2	ATB CONDITION
3	FAULTY CIRCUIT TO ATB OUTPUT

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

INSTALLATION

- Choose whether the Anti Two Block (ATB) switch will operate in N.O. or N.C. switch mode:
 - N.O. (Normally Open): when ATB condition exists, the magnet is next to the transmitter sensing location
 - N.C. (Normally Closed): when ATB condition exists, the magnet is away from the transmitter sensing location
- Connect the terminal N.O. or N.C. to COM inside the transmitter enclosure (FIG. 1) per above
- Mount the transmitter on top of the boom
- Mount the magnet to the moving block mechanism
- Mount the receiver and connect the wiring as shown
 - The ATB output can be connected directly to the ATB input on a Kar-Tech system, or through a relay for a non-Kar-Tech system - see diagram
 - The LOW TRANSMITTER BATTERY output should be connected to an alarm or light

OPERATION

- Under normal conditions, the receiver ATB (white wire) output is ON. When the ATB condition is present (per above N.O. or N.C. setup), the ATB output will turn OFF
- LED indicators (lights)
 - TRANSMITTER:
 - Green blinking fast - normal condition
 - Green blinking slow - receiver is off
 - Green off - ATB condition present
 - RECEIVER:
 - Green blinking fast - normal condition
 - Green off - ATB or fault condition - see red LED
 - Red blinking - ATB or fault condition - count blinks and check receiver decal
- 1 blink - transmitter battery is below 2.5V and must be replaced
- 2 blinks - ATB condition
- 3 blinks - ATB output shorted or open

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:

- Remove transmitter and receiver cover
- Apply power to the receiver and be sure the batteries are installed in the transmitter
- In the receiver (FIG. 2), place the jumper across the TEACH ID pins wait for 5 seconds. At this point the red and green LEDs will toggle. Remove the jumper and place it on one pin
- Activate the ATB by removing the magnet from the sensing spot.
- In the transmitter (FIG. 1), place the jumper across the TEACH ID pins wait for 5 seconds. At this point the green LED will turn on steady. Remove the jumper and place it on one pin
- Wait until the green and red LEDs stop toggling on the receiver
- Place the magnet at the sensing spot.
- Teach complete

SPECIFICATIONS

RF: 900 MHz FHSS 10 mW
Temperature: Operation: -40 to +85°C Storage: -55 to 100°C
Output Rating: 5A maximum each (sourcing) 20A system maximum
Battery Life:
700 hours of crane operation
3,500 hours with switch active (magnet not at the sensing spot) and receiver off
3 years with switch not active (Magnet at the sensing spot)
Magnet range: ATB output on: 0.3" ±0.1" ATB output off: 0.5" ±0.1"
ATB output on 0.3"±0.1" ATB output off 0.5±0.1"
Encapsulated electronics inside ATB transmitter and receiver

REL	HK	09-20-11	CHANGED REVISION TO B
REL	HK	02-23-09	RELEASED
REV	BY	DATE	DESCRIPTION
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TITLE		IMPLIED TOLERANCE	
WIRELESS ANTI TWO BLOCK SYSTEM KIT		XX	± .1
CAD DRAWING DO NOT REVISE MANUALLY		XXX	± .06
SCALE FULL		XXXX	± .005
DATE 02-23-09		FUNCTIONAL	± 1/8
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