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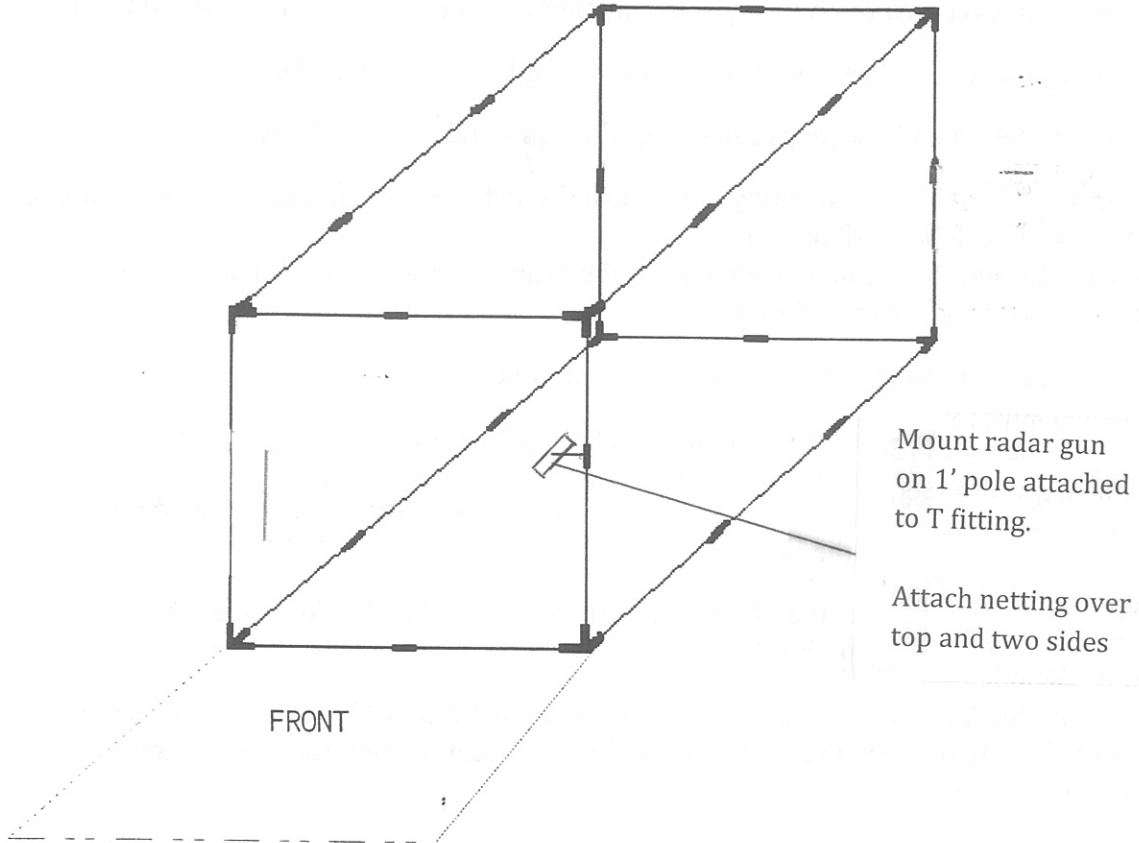
YOU WILL NEED TO SUPPLY STEP LADDERS

1. Select a level area to operate the game with plenty of room to allow for a line to form.
2. Assemble four 12' sections using three 4' lengths and two couplers each.
3. Assemble seven 8' sections using two 4' lengths and one coupler each
4. Assemble one 8' section using two 4' lengths and one "T" fitting. This section is to be used for the front right side. NOTE: Be sure to hand tighten the fittings so they don't slip out during assemble, possibly causing injury.
5. Add a corner piece to both ends of each 12' section.
6. Insert the 8' sections into the remaining two openings of each corner piece. When this is complete, it will create a 12'x8'x8' cube.
NOTE: Be sure that the 8' section with the T fitting is on the front right side with the T pointing into the opposite far left corner.
7. Toss the netting over the 12' side, across the top, and pull it down the other side. Adjust it so it is even on both sides.
8. Using bungee ball straps, attach the netting to the bottom 12' sections (the netting will stretch). Also attach the netting to the front left section, the front top section and the front right section.
9. Using the bungee ball straps attach the back-stop canvas to the back of the unit.
10. Insert the short piece of tubing into the T fitting and attach the radar unit to it using the two ball bungs that are attached to the radar unit.
11. Attach the banner to the front top section.
12. When re-packing the unit, distribute the tubing evenly between the cases (see content tags). Also roll up the netting as tightly as possible.
13. BATTERY MUST BE RE-CHARGED EVERY 3-4 HOURS.

SOCCER KICK

SPEED PITCH

SLAP SHOT



10' PITCH ZONE

Safety Instructions

1. Be sure that there is plenty of clearance between the pitcher and spectators.
2. Do not allow the pitcher to be more than 10' in front of the unit.
3. **NEVER ALLOW SPECTATORS TO CROSS IN FRONT OF PITCHING AREA AT ANY TIME.** It is advised that this area be roped off.
4. Make sure that the netting is securely fastened to the framework so no balls can slip through.
5. Keep spectators clear from the sides and back of unit to prevent them from being struck by a deflected or errant throw.
6. **NEVER USE THE GAME IN STRONG WINDS OR LIGHTENING!!**
7. Use caution when setting up or taking down the game. Once the bolts are loosened the sections of tubing can come apart and fall down causing injury.
8. Use only the soft baseballs included with the game.

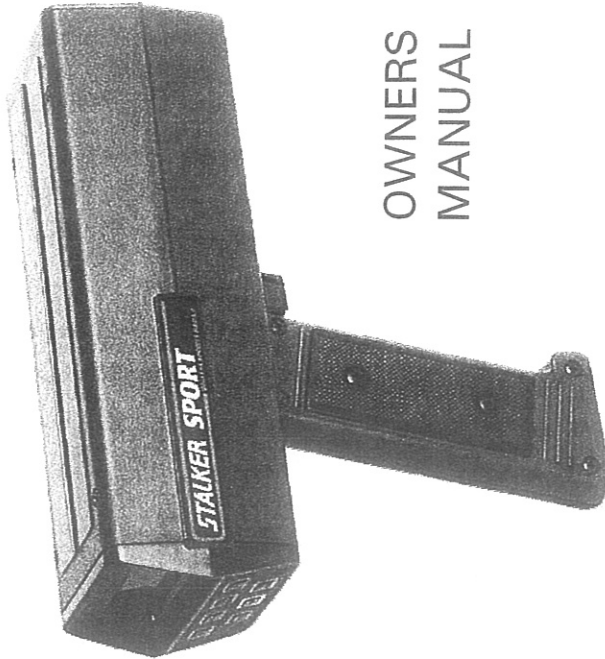
CANVAS CARE

1. If game becomes wet, dry thoroughly before storing.
 2. Fold the canvas INWARD to help protect and keep it clean.
 3. Canvas can be cleaned with rubbing alcohol when necessary. On the Velcro, clean the hook and loop fabric with dry brush to knock out the dirt.
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SPEED CAGE

STALKER Sport

DIGITAL SPORTS RADAR



OWNERS
MANUAL

NOT INTENDED FOR LAW ENFORCEMENT USE

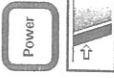
QUICK START INSTRUCTIONS

The Stalker Sport has several features that allow the gun to work well in a wide variety of applications. With some basic understanding, the gun is very simple to operate.

BASIC OPERATION

1. Slide the handle onto the bottom of the gun. The cordless version is powered by a battery that is built into the handle. If you have a corded handle, plug the cigar plug into the cigar socket on the portable battery pack.

2. Turn the gun ON by pressing the green Power button.
3. Squeeze the trigger to begin operating (transmitting).



IMPORTANT SETTINGS

There are three buttons that control how the radar gun functions.



Setup Menu - This feature "fine tunes" the radar to look for specific types of targets, and certain speed ranges. For example; b50 is for clocking balls above 50 mph. A sticker on the bottom of the gun body gives details to each menu setting. Page 8 in this manual provides the full explanation for the setup menu.



Range - This controls the sensitivity of the radar. Hi is the normal setting for maximum sensitivity and clocking distance. Lo is used to limit the clocking distance when background movement interference may be a problem. See Page 8.



Peak Hold - With the Peak Hold mode ON, the gun will only show the peak speed (this is the RELEASE SPEED when clocking a baseball pitch). With the Peak Hold OFF, the gun will continuously show the speeds as they change, updating about 25 times per second.

TURNING THE TRANSMITTER ON AND OFF

There are two ways to turn on the radar transmitter to begin operating.

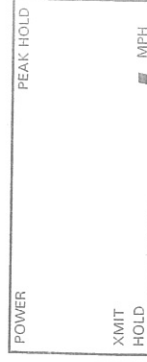


Trigger Transmit - Squeeze and hold the trigger to transmit. Release the trigger to stop transmitting.

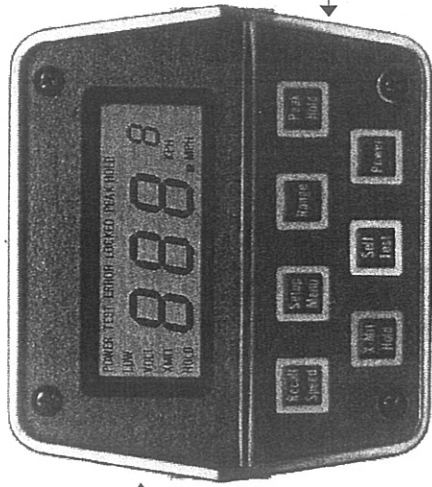
The X-mit / Hold Button - Press the red X-mit / Hold button to toggle the transmitter ON or OFF.

* The XMIT icon will be displayed when the gun IS transmitting.

* The HOLD icon will be displayed when the gun IS NOT transmitting.



CONTROLS AND INDICATORS



LCD DISPLAY ICONS

- POWER** - Indicates the gun is on
- TEST** - Activated during the diagnostic / calibration self test
- ERROR** - Indicates the self test found calibration or operational problems
- LOCKED** - Indicates the readings have been locked by the trigger
- PEAK HOLD** - Indicates that the Peak Mode is on and the peak speeds will be held
- LOW VOLT** - Indicates the battery or voltage is low
- XMIT** - Indicates the gun is transmitting and is able to take readings
- HOLD** - Indicates the transmitter is off and no new readings can be taken
- KPH** - Displayed speeds will be in Kilometers per Hour
- MPH** - Displayed speeds will be in Miles per Hour

KEYPAD BUTTONS

- Power** - turns the gun's power on or off
- Self Test** - performs a self-diagnostic and calibration test. It will check the guns calibration against a built in crystal. 80.0 mph indicates proper calibration.
- X-Mit / Hold** - this button is similar to the trigger. It toggles the transmitter ON or OFF.
- Recall Speed** - redisplay the most recent speed reading - in baseball mode, toggles between out-of-hand and plate speeds when Peak Hold is on. See tip at bottom of Page 7.
- Setup Menu** - selects the operational program settings
- Range** - selects the sensitivity level (high or low)
- Peak Hold** - turns the Peak Mode on and off. With Peak Mode ON, only the peak speeds are displayed. With the Peak Mode OFF, the current speeds are continuously updated.

DETAILED INSTRUCTIONS

PROVIDING POWER TO THE STALKER

There are several different handles available for the Stalker. The **Battery Handle** - The battery handle has a Ni-MH battery built into the handle. When fully charged, the battery handle will power the gun for about 3 hours of continuous transmitting, or up to 20 hours of normal trigger operation. Use the included Smart Charging platform to recharge the battery handle. The **Corded Handle** - The cigar plug on the bottom of the corded handle can plug into an automotive cigarette lighter, or into a 12 volt DC battery pack. The **Display Handle** - The display handle is used when connected to an external speed display readout board. The Stalker display boards are designed to power the radar gun through the communication cable that connects into the bottom of the display handle.

TURNING THE TRANSMITTER ON AND OFF

The radar transmitter must be turned ON in order to make any speed measurements. There are TWO ways to make the Stalker transmit.



Trigger Transmit - Squeeze and hold the trigger in to transmit. When the trigger is released, it will stop transmitting, and any readings that were on the readout will be left on the screen. Since the transmitter draws most of the power, trigger operating will help to save battery life.



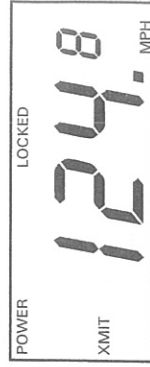
Press the X-mit / Hold Button - The red X-mit / Hold button toggles the transmitter ON and OFF. Each time you push this button it will switch between transmit and hold. Using this button to turn on the transmitter allows the gun to continually operate automatically, without the need to depress the trigger.



- * The XMIT icon will be displayed when the gun IS transmitting.
- * The HOLD icon will be displayed when the gun IS NOT transmitting.

USING THE TRIGGER TO LOCK SPEEDS

The trigger serves two functions. It can control the transmitter or be used as a speed locking device. When the gun is placed into continuous transmit mode using the red X-mit / Hold button, the trigger does not effect the transmitter. Instead, squeezing the trigger will lock the current displayed speed while displaying the LOCKED icon. Squeezing the trigger a second time will unlock the readout. This function is useful if the operator wishes to manually hold readings.

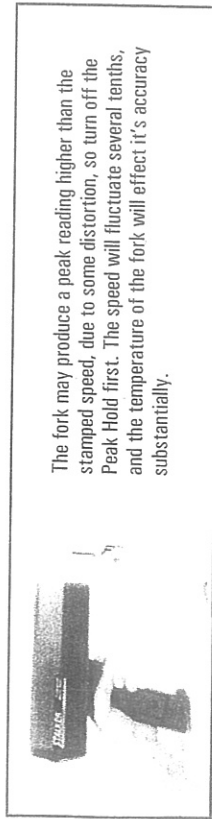


TESTING THE STALKER

There are two ways to test the accuracy and operation of your Stalker. The Self Test button test's the calibration precisely while the tuning fork verifies actual operation.

Self Test Button - Pressing the Self Test button will initiate a self diagnostic check. The gun will test several key components and check it's calibration against a built-in crystal. If the display shows 80.0 mph, it is calibrated correctly. If the self test finds any problems, or if it fails the calibration test, the ERROR icon will appear. This test does not verify the receiver components.

Tuning Fork Test - The tuning fork that was included with the Stalker is designed to ring at a specific frequency that is equivalent to the K band Doppler frequency at a certain speed. Strike the fork against a solid, non-metallic object so it audibly rings. Place the fork about two inches in front of the radar. The thin side of the fork should be closest to the gun. Then squeeze the trigger to



Make sure that the Setup Menu setting does not have a low speed cutoff that is higher than the tuning fork speed. For example, if the menu is set at b50, it will not read speeds below 50 mph so a fork speed of 40 mph would be too low to register. Also note that only the vehicle type setup menu settings will display the 1/10th digit.

THE PEAK HOLD FUNCTION

The Peak Hold button activates the automatic top speed lock. When the Peak Hold mode is on, the PEAK HOLD icon will appear on the display. Only the highest speeds will be displayed. When tracking a baseball pitch, the peak speed will be the same as the release speed since a ball only slows down after it is thrown. When the PEAK HOLD icon is OFF, the gun will continuously display speeds as they change. When tracking a baseball pitch, the display would start by showing the release speed, but then rapidly roll down and hold the last speed reading at the plate.

TIP - The Stalker keeps both the Peak and Last speeds in memory. As long as a reading is on the display (either by releasing the trigger to hold the reading, or pressing the Recall Speed button to bring it back on the display) you can switch back and forth between the last recorded speed, and the peak speed by changing the Peak Hold setting. For example: If you are clocking baseballs, and the Peak Hold is ON, after the pitch is thrown, change the Peak Hold setting to OFF to see what the speed was at the plate.

THE SETUP MENU

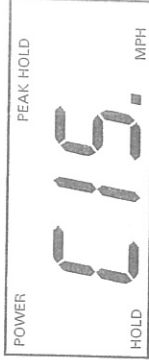
The Stalker radar gun has several different menu settings designed to optimize the gun's performance for specific uses. A boat and a baseball have different signal characteristics to a radar gun. By creating special programs (signal processing algorithms) for specific uses, the Stalker radar gun is able to achieve much higher levels of performance.

The Setup Menu Options

Mode	Application	Resolution	Speed Ranges
a	Vehicles and Boats	1/10th	5 - 250 mph
a25	Vehicles and Boats	1/10th	25 - 250 mph
b25	Baseballs (at long distances)	whole	25 - 110 mph
b50	Baseballs (at long distances)	whole	50 - 110 mph
c15	Carnival Use (balls at very close distances)	whole	15 - 100 mph
c25	Carnival Use (balls at very close distances)	whole	25 - 110 mph
d35	Tennis or Golf (balls with higher speeds)	whole	35 - 165 mph

CONFIRMING AND CHANGING THE SETUP MENU

By pressing the Setup Menu button one time, the current setting will be shown on the display. To keep this setting, you can wait for the screen to clear in a few seconds, or you can squeeze the trigger to clear the screen. To change the setting, press the Setup Menu button again to begin toggling through the seven options. When you reach the desired setting, pull the trigger to accept and clear the screen. The menu setting is stored by the gun, so it will always return to the last setting, even when the power is turned off. Most customers will set this menu once, and will never need to touch it again.



THE RANGE (SENSITIVITY) SETTING

The Range button effects the sensitivity (clocking distance) of the radar. The normal setting is HI. HI range lets the gun "look" as far away as possible for targets, and gives the gun the highest level of performance. Setting the range to LO, will decrease the gun's sensitivity, and shorten it's clocking distance. The LO range setting can be handy if you are clocking objects close to the gun and you want to restrict the gun from "seeing" objects farther out in the background.

THE RECALL SPEED FEATURE

The Recall Speed button will redisplay the last speed readings that were measured. Both the peak speed, and the last speed are kept in memory. So even if the peak hold function was off, the peak speed for the last tracking can be recalled. After recalling a speed, you can change the Peak Hold setting to view either the Peak speed or the Last speed.

FACTORY PRESET OPTIONS

WHAT IS A FACTORY PRESET OPTION?

There are two settings that are intended to be set at the factory and never changed again. However, these settings can be changed by the user under certain conditions.

Master Sensitivity Setting - The guns overall sensitivity setting.

Display Units - The gun can be set to display in MPH or KPH units.

ACCESSING THE PRESET OPTIONS MENU

A specific combinations of buttons need to be pressed to access the preset menu. This is intended to make accidentally changing the presets highly unlikely.

1. When the gun is on, press the Setup Menu button once. It should display the current setup menu option.
2. While the current setup menu option is displayed*, press the Range button once. While the current range option is displayed, press the Recall Speed and the Peak Hold buttons at the same time. (*step 2 needs to be done immediately after pressing the Range button, because the menu is only displayed for about 1 1/2 seconds)
3. If you are successful at accessing the preset option mode, the readout should display the master sensitivity setting (usually SEn8). To clear out of the preset option menu, squeeze and release the trigger. The gun will then return to normal operation.



CHANGING THE FACTORY PRESET OPTIONS

Once you have accessed the Preset Options Menu following the above steps, you can change the master sensitivity and the units settings. Warning: an incorrect master sensitivity setting will result in poor performance or ghost readings.



Master Sensitivity Setting

Use the Range key to toggle between these four different sensitivity levels.

SEn6 lowest setting - only used in extremely high noise environments

SEn7 lower than normal - use if the gun is giving random readings

SEn8 normal setting for the Stalker Sport

SEn9 highest setting - may cause random readings on many guns

Display Units Setting

Use the Peak Hold key to switch between MPH and KPH units. Note that the MPH or KPH icon will be displayed to show which units have been selected.



When you have reached the desired settings, squeeze the trigger. After a few seconds, the gun will return to normal operation, and it will retain any changes that were made.

BATTERY INFORMATION

OPERATIONAL TIME ON THE BATTERY HANDLE

The Stalker draws the most current when it is transmitting. So, the run time depends upon how often the gun is transmitting. The Stalker also has a sleep mode to conserve battery life when it is not being operated. The sleep mode is automatically initiated after about 15 seconds of inactivity with no speed display. Squeezing the trigger immediately "wakes the gun" and brings it back to operation.

Operational Status

Run Time

2-3 Hours

10-20 Hours

38 Hours

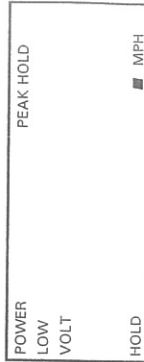
Continuous Transmitting

Typical Trigger Operation

In Sleep Mode

LOW BATTERY WARNING

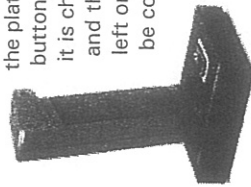
When the battery runs low, the LOW VOLT icon will begin to flash. At that time, the Stalker will only operate for a very short time. When the LOW VOLT icon is continuously displayed, the gun will no longer operate.



DO NOT CHARGE THE BATTERY HANDLE UNTIL THE GUN FLASHES LOW VOLT.

CHARGING THE BATTERY HANDLE

After the Stalker indicates the battery handle is low, remove the handle from the gun, and slide it into the Smart Charging Platform. Plug the wall adapter into the platform and then into a 110-120 volt wall outlet. Push the Start button on the platform to begin charging. The green light indicates it is charging. After about 8 hours, the green light should shut off, and the charger will drop to a trickle charger. The handle can be left on a trickle charge without damage. If desired, the handle can be completely trickle charged by not pressing the Start button. It takes about 24 - 36 hours to trickle charge the battery handle.



INTERFERENCE PROBLEMS

INTERFERENCE FREQUENCIES

The Stalker Sport radar transmits in the microwave frequency range (24,150,000,000 Hz), however the receiver is designed to read the Doppler frequency (the change in frequency) which is much lower (360 - 18,000 Hz). There are very few devices other than other radar guns that could cause interference in a radar gun's transmission frequency range. Unfortunately, in the receiver's frequency range, there are a number of devices that could interfere with radar guns.

WHAT DOES INTERFERENCE DO?

Interference can cause a radar gun to read random readings, or it can make it harder for the radar gun to "see" the intended target. Random readings are an obvious sign that there is interference. However, a loss of sensitivity can be subtle. A common situation occurs when a large number of professional baseball scouts operate many radar guns in close proximity. A loss of sensitivity can cause the radar gun to be unable to "see" far enough away to get the ball speed right when it leaves the pitchers hand. Then only as the ball gets closer to the plate is the radar able to get a reading (after it has slowed down some). The result - the peak speed is lower than it should be.

SOURCES OF INTERFERENCE

There are two main types of sources that can cause ghost (random) readings in radar guns; electrical devices and objects that move or vibrate. Electrical sources include television monitors, fluorescent lights, cellular phones, computers, some radio transmitters, and power transformers. Moving or vibrating objects like ventilation fans, motors, and blowing debris can tend to produce a somewhat constant speed reading.

WAYS TO ELIMINATE INTERFERENCE

If you are experiencing some erroneous readings, you may be able to change your position to effect where the gun is aimed. You could also lower the sensitivity by setting the Range to LO. If the readings are low speeds (often from motors) you may be able to change the Setup Menu setting to a setting with a higher low speed cutoff.

RECOMMENDED SETTINGS

SETTINGS FOR BASEBALL SCOUTS

It is important that the gun is set correctly when measuring baseballs. Check these settings.

Setup Menu	b50	(For balls above 50 mph)
Range	Hi	Maximum sensitivity is needed*
Peak Hold	ON	This is for "out of the hand" numbers

* You may want to see if your gun will operate okay with the master sensitivity setting at SEn9 (See page 9 for details)

SETTING FOR FASTBALL CARNIVAL USE

You can experiment with the Range setting depending upon what rides and motion is around the gun.

Setup Menu	C15 or C25	
Range	Hi	(change to Lo if you track outside motion)
Peak Hold	ON	

SETTINGS FOR TENNIS AND GOLF

You may need to position the radar so it does not "see" the racquet or club head during it's swing.

Setup Menu	D35
Range	Hi
Peak Hold	ON

SETTING FOR VEHICLE RACING

Using a low speed cutoff of 25 mph will help ignore anyone walking around, or other low speed motion.

Setup Menu	A25
Range	Hi
Peak Hold	OFF

You can always check the peak speed after a pass as long as there is a reading on the display.

HOW TO SAVE BATTERY LIFE

Since the transmitter has the highest current draw, you should put the transmitter into hold whenever you are not taking readings. If you use the trigger to start and stop transmitting, it's easy to save battery life. If you tripod mount the gun, (and use the X-mit Hold button to transmit) then turn the transmitter off between sessions. Lastly, when the gun is in hold, clear the display to allow the gun to fall into the Sleep Mode. You will know the gun fell asleep when the backlight turns off.

Quick Start Instructions

The *STALKER* SPORT 2 has several features that allow the gun's optimal performance in baseball applications. With some basic understanding, the gun is very simple to operate.

Basic Operation

Power is supplied from 6 AA batteries installed in the handle.
 Turn the gun **ON** by pressing the **ON/OFF** button.
 Squeeze the trigger to begin operating (transmitting).

Important Settings

There are four buttons that control the radar gun functions: The two blue buttons work together, and the two silver buttons work together. The blue buttons are used for changing the settings, while the silver keys are operational keys.

MENU (Blue Button)	This button enters the MENU system to select a feature to be changed.
SELECT (Blue Button)	Once the MENU button has selected a feature, use the SELECT button to change the setting for that feature.
TRANSMIT (Silver Button)	Toggles the transmitter on and off (instead of the normal trigger activation).
RECALL (Silver Button)	Displays the last 5 speeds recorded and stored.

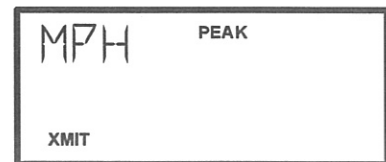
Turning the Transmitter ON and OFF

There are two ways to turn on the radar transmitter to begin operating:

- Trigger Transmit: Pull the trigger to transmit.
- Transmit Button: Press the silver TRANSMIT button to toggle the transmitter ON or OFF.

NOTE:

- * The XMIT icon displays when the gun **IS** transmitting.
- * The XMIT icon does not display when the gun **IS NOT** transmitting.



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