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FOR ORDERS ONLY CALL TOLL
FREE IN CANADA AND THE U.S.A.

1-800-665-7888

FOR TECHNICAL SUPPORT AND
ASSISTANCE PLEASE CALL:

1-204-663-7692



COLLETTCOMMUNICATORS.COM



PLATINUM
COMMUNICATOR **900**

INSTRUCTION MANUAL

COLLETTCOMMUNICATORS.COM

We at Collett Electronics Ltd., appreciate your patronage and want you to derive as much enjoyment as possible from your Platinum 900 Communicator. You can ensure this by reading the entire manual and following the instructions carefully. If you have a problem we've provided a "troubleshooting" section. You can also send your questions or comments to us by email. Be confident and read on, we're with you all the way.



Hello Riders,

You have just purchased the most sophisticated helmet radio available today. The PLATINUM 900 is the result of over 20 years of dedication to providing the best in helmet radio communications. The PLATINUM 900 is the World's smallest helmet communicator, and has the most available features.

The very first COMMUNICATORS I made came as a result of watching helplessly as a friend of mine was nearly killed in a snowmobile accident. It was dark, he was about 500 feet in front of me, and when I tried to catch him he thought I wanted to race and went even faster. I knew what he didn't, that a guard rail lay directly across the way ahead.

He hit hard! Fortunately for him, so hard that he flew right over the rail and the storm sewer outlet it was guarding, and then made a soft landing in a big snowbank about 60 feet away. He survived, but the snowmobile was 3 feet shorter.

Deadly situations can develop in seconds when you're riding, and effective communication can literally mean the difference between life and death.

The PLATINUM 900 combines all the best features to insure you get the most out of your ride.

Please feel free to write, fax, or e-mail me regarding this subject. Enjoy your ride!

Les Collett

P.S. Please read and follow the instructions.

FCC Information
FCCID: UJMA0902
Your Communicator operates on a radio frequency subject to Federal Communications Commission (FCC) rules. This device complies with Part 15 of the FCC rules.
Operation is subject to the two following conditions:
1) This device may not cause harmful interference, and
2) This device must accept any interference received, including any interference that may cause undesired operation.
Modifications:
The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Collett Electronics Ltd., may void user's authority to operate the equipment.

Full 3-Year parts and Labour for defects in workmanship and material

We reserve the right to repair the parts which may become defective. This warranty does not apply to units which have been repaired or altered by the customer, nor to units which have been subject to misuse, neglect or accident. This warranty does not cover damage resulting from water penetrating the watertight integrity of the PLATINUM 900 Communicator through the speaker and audio inputs.

Ship Warranty returns to:

**COLLETT ELECTRONICS LTD.
90 DURAND ROAD
WINNIPEG, MANITIBA
CANADA R2J 3T2**

Please include short note describing the problem and \$10.00 for return postage. (Visa, Mastercard, American Express, cheque).

US Customers

U.S. customers must state on a "Customs Declaration" (available at any post office) that the item is being returned to the manufacturer for warranty work. When returning your PLATINUM 900 Communicator to the factory in Canada. **PLEASE USE THE U.S. MAIL ONLY!** Canada customers will not allow private carriers to deliver shipments directly to our factory.

REPLACEMENT PARTS AVAILABLE

- * Battery Pac
- * Speakers
- * Audio Cord
- * Co-pilot Curly Cord
- * Battery Charger
- * Velcro Strips

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FAX **1-204-663-7978**



Battery Pac

Your PLATINUM 900 comes equipped with its own high capacity NiMH Battery Pac. The best place to carry the battery pac is an inside pocket where the battery will stay warm. The battery pac comes with a belt clip which you can attach if you have no accessible inside pockets. This can be screwed into the back of the battery pac if required.

Battery Pac Charger

Your battery pac must be charged 10 hours prior to first use. However, regular charging should be about 8 hours. You may recharge your battery for a shorter length of time if necessary, example: After 4 hours of use you may recharge again for 4 hours.



Low Battery Alert

All PLATINUM 900's have this built in feature. When the battery is low on charge, you will hear 4 audible beeps in your speakers when you transmit or receive a signal. You will still be able to transmit and receive but, you will soon lose communication ability. You should recharge your battery as soon as possible.

Snowmobile Battery and Other Sources

Warning: Never attempt to use your snowmobile, motorcycle or ATV's battery or charging system to power your Platinum 900. The voltages are much too high and can immediately destroy the Platinum 900 micro-controller.

This is also true anytime more than 4.8 volts is used as a power source. **Excess voltage "burnout" is easy to detect and will void your warranty!**

Note: Reducing a vehicle's 12 volt system to a safe level will avoid harming the Communicator. However, being directly connected to the vehicle's high voltage system (through the battery charging alternator/regulator) injects a huge amount of ignition radio noise directly into the Communicator's receiver. This results in a drastically reduced operating range, if the Communicator works at all. **DON'T DO IT!**



Helmet Speakers

The speakers must be placed so they are directly opposite each ear canal. They should also be as close to your ears as is comfortable.

To find the proper spots, put your helmet on, then reach inside and pinpoint the location with your forefinger. Remove the helmet and mark the spot. Repeat for the other side.

If there isn't room, you'll have to make room. After locating where the speakers must go, lift up the inner fabric to expose the styrofoam liner. Put a speaker against the styrofoam and trace around it with a pen. Cut around this circle and then dig it out to the appropriate depth. To excavate this cavity you can use a combination of digging, compressing, and even melting the material with a soldering iron. However you do it, work carefully. Do the job right and you'll have great sound and a perfect fit.

Ear pockets

As a comfort feature many helmets now have "pockets" for your ears to fit into. These pockets are usually excellent places to put the speakers. If your helmet has them, simply press each speaker into its respective pocket. Remember, the speaker with the short cord goes on the left side of the helmet. the cord can then be tucked away into any convenient fold in the liner.

Helmets, noise and hearing loss

If your helmet doesn't reduce engine noise to a safe level, you are going to suffer hearing loss.

The PLATINUM 900 is designed to output high volume (113dB, as measured in the helmet) so a person with an existing hearing problem can communicate better. The high volume capability is not intended to overpower engine noise entering a badly designed or poorly fitting helmet.

Your best assurance of easy-to-understand communication at a safe sound level is a snug fitting full-face helmet, equipped with ear pockets, with the face shield in the closed position.

To keep voice message levels and music levels in proportional balance do as follows:

- 1) Adjust Communicator volume to the required level (i.e. "test" "test").
- 2) Adjust the sound level from the radio, tape or CD player to the desired level.
- 3) Readjusting the Communicator's volume control will now keep the voice and music levels in balance.

Never store the Communicator in your snowmobile, motorcycle or ATV's storage compartment (or anywhere else directly attached to the vehicle's frame.) Engine vibration can alter the very precise fine-tuning adjustments we make at the factory. This can cause the radio to gradually go "off-channel" resulting in less operating range.

Volume Control

Turning this knob adjusts the level of sound delivered by the speakers. Connecting the Battery Pac automatically "powers up" the Communicator. To turn it off, you must disconnect the Battery Pac. This way you always start with the volume set to where you had it last.

VOX (voice operated transmitter)

Adjusting this control prevents wind and engine noise from activating the Communicator's transmitter. Unintentional transmitting annoys others and prevents you from receiving incoming messages.

Begin with the control turned fully counterclockwise to LO. Then, while speaking directly into the voice tube in a firm voice "test...test...test" SLOWLY turn the knob toward HI. As soon as you hear yourself in your speakers, stop turning.

Hearing yourself in a strong, clear voice confirms your voice tube is positioned correctly and you are now also transmitting that strong, clear voice to anyone within radio range.

Once set for usual maximum speed you probably won't have to readjust this control. However changing vehicles, helmets, the use of face shields, and higher speeds may require you to make some readjustments.

Speaker Jack

As shown below, use a twisting motion to press the speaker connector as far as possible into the jack. **It's a tight fit and you'll have to press with some force.** Whenever you ride, the speaker connector must seal this opening properly. If moisture is allowed to penetrate because you improperly sealed the opening, you will void your warranty.

GENERAL INFORMATION

Frequency Modulated (fm) reception is always sharp and clear. It is the nature of an fm receiver to "lock" onto only the strongest signal present and exclude all others. The only time competing signals will garble each other, is when they are approximately the same strength.

You can usually talk over more distant signals.

TROUBLESHOOTING

PROBLEM	SOLUTION
1) Transmitter turns on and off when speaking	1) Voice tube is too far away, OR "hole" is not aligned properly OR microphone sensitivity is adjusted too low.
2) When receiving, communications sound choppy	2) Person transmitting is shouting OR person transmitting is experiencing problem 1.
3) Short Operating range or when receiving, you hear ignition noises (i.e. popping sounds).	3) Vehicle has high-voltage leaks, needs resistor spark plugs.
4) Garbled voice when transmitting.	4) Weak batteries. Recharge, or replace.

STILL HAVE A PROBLEM?

Well, don't worry, the answer is as close as your telephone. Call us, we're here to help.

1 (204) 663-7692

1-800-665-7888

RF noise is the most common problem associated with radio performance. It is very important to read this section and look for these trouble spots. It can even increase the performance of your machine.

On your very first ride, then periodically afterwards, you must check to see if your vehicle's ignition system is seriously interfering with the quality of your Platinum 900's reception. To do this, ride to a distance that you just barely receive an incoming communication and turn off your ignition. If there is little difference in the quality of the incoming signal, you do not have a problem. If there is a difference, however, this is very common and easy to fix. Read on...

To varying degrees, all spark plugs emit radio noise. If the noise is powerful enough, it will interfere with the radio's receiver resulting in a greatly reduced operating range.

Resistor spark plugs emit less radio noise than non-resistive ones. They can be identified by the "R" in their identification number. However, all resistor spark plugs are not equal. We have found the most popular factory installed resistor spark plugs to be extremely noisy. Sometimes, so noisy, it makes even short range communication impossible.

Snowmobile, motorcycle, and ATV connectors can be unscrewed from the ignition wire and a new one screwed in its place. In most cases, there is no need to replace the ignition wire.

You must also watch for and correct these 2 very common problems.

1.) Loose terminal Nuts

The terminal nut must be screwed down tight. If it is allowed to loose, a strong radio noise will be broadcast. We have found that the best way you can keep the engine vibration from loosening the nut is to use glue.

DO NOT cover the top of the terminal nut with glue. Just put a drop about half way down and then tighten the nut onto it. The nut will be permanently secured and the glue will not affect engine performance. The type of glue we have used successfully is the fast-bonding "super glue" type.

2) Loose Boot Connection

The ignition wire's boot must be pressed down as far as possible.

Check to see that the connector grips the spark plug tightly by trying to wiggle it. If you can feel any play in it, you should replace the connector and boot.

Here's something to watch out for:

Pull off the spark plug boot and examine the terminal nut. It should always be clean. If you find evidence of pitting or black deposit (as shown), you know you have a loose connection. This means sparks are jumping from the connector to the nut creating a tremendous radio noise. Such a noise so close to your Communicator's receiver can easily make communication impossible.

Weather Cap

Whenever the "audio cord" is not in use, the weather cap must be pressed securely into place. This prevents moisture from entering through the audio jack. You are responsible for properly sealing this opening at all times. Failure to do so will void your warranty.

Audio Input

The audio input lets you listen to music from personal radios, tape and CD players. The audio cord accessory provides the connection between the PLATINUM 900 Communicator and the audio source.

To connect, use force and a twisting motion to press the purple straight (same as the speakers) as far as possible into the Communicator. Insert the other end into your audio source headphone jack.

Whenever you are receiving an incoming message, the PLATINUM 900 Communicator automatically reduces the music level.

Warning: When using the audio cord, you are responsible for ensuring it is inserted sufficiently to seal out rain and moisture. Failure to do so will void your warranty.

Modes

The MODE button is for channel selection. When pressing the button, you will hear an audible beep in your speakers. One beep means you are on channel 1, 2 beeps means you are on channel 2.



The PLATINUM 900 Communicator attaches to the left side of your helmet, approximately across from your ear. It must be placed so that when the voice tube is properly adjusted, the microphone is directly centered **horizontally** in front of your lips.

Mounting Instructions

Here's an easy way to put it on:
Put your helmet on. While holding the radio against the left side of your helmet, bend the microphone tube up and underneath the helmet. Position the microphone tube so the foam tip is directly across from your lips. You want to make sure you have enough room for further adjustments of the microphone tip. Once you have found a good position, clean the contact area on your helmet. Place the supplied soft velcro onto the back of the Platinum 900 Communicator and peel off the backing. Place the radio onto the helmet and press firmly. You can peel the radio away from your helmet and press firmly on the velcro to make sure it makes a good contact. When re-installing the radio onto the helmet, take care to line up the velcro on both the radio and the helmet. This will ensure the radio fits as close as possible to your helmet.



Adjusting the Microphone Tube

This is the most important adjustment on your radio. To transmit a crisp, clear message you must channel your voice directly into foam covered microphone.

The microphone must be **horizontally** positioned across from your mouth. (i.e. like a harmonica)

The tip can be turned up or down to align the hole.



The hole must be **horizontally** oriented.

The PLATINUM 900 Communicator adds an exciting new dimension to any riding sport. Whether you ride a motorcycle, snowmobile or ATV, it's unique noise eliminated/voice activation system guarantees you clear, telephone quality communication in any situation. The PLATINUM 900 Communicator will communicate with any 900. (ch.1)

Families, Friends and Clubs

The PLATINUM 900 Communicator is perfect for group activities. However, you should avoid the situation where many in your group are using a Platinum 900 Communicator for the first time. This can result in much confusion. We have found it is best to bring people "on air" one or two at a time.

Here is the problem

If engine noise activates a Platinum 900 transmitter, an experienced person will recognize the problem and correct it. A first time user often doesn't realize what the problem is, and if you have several such individuals, it is difficult to know who is having the problem.

Remember, you are sharing a broadcast frequency. You must take turns and listening. A "stuck" transmitter will garble communication for others when they are trying to talk, as well as broadcast noise into everyone's receiver.

Learn before you ride

Getting ready for a ride is complicated enough without having to use new equipment. Therefore, we strongly recommend once you've read the instructions and installed the Platinum 900 Communicator, you should practice using it before sitting on your vehicle.

Safety

Communication makes your ride more enjoyable and safer. To be as safe as possible though, you should remember these rules:
1) Always keep your eyes on the way ahead.
2) Do not become so involved in conversation you forget to give first and foremost attention to the safe operation of the vehicle.
3) Do not operate the external audio source (radio, tape, or disc player) at a volume which prevents you from hearing traffic noises, etc.

Natural Source "Background Noise"

The sun emits a broad range of electro-magnetic radiation, of which visible light makes up a very tiny portion. The rest is spread over the entire range of the radio frequency spectrum and constitutes the "white noise" you hear when dialing between radio stations or when a squelch control isn't adjusted properly.

The level of "background noise" emitted by the sun changes from year to year with what's known as the "sunspot cycle". It also changes from season, and even from hour to hour throughout the day. The greater the noise level, the less the operating range.

Northern Lights

The northern lights (aurora borealis in the north and aurora australis in the southern hemisphere) are caused by particles, expelled by the sun, spiralling into the upper atmosphere at the earth's magnetic poles. When they do, they emit light and radio noise. The noise adds to the general level of background noise, further reducing operating range.

Variable Communicator operating range is a direct consequence of varying levels of background noise. And while you can't do anything about the noise from the sun or northern lights, you can stop your ignition system from creating background noise. (see page 2)

