

Cycle Comm 1200/1400 CB

Important: Read all instructions before proceeding. Determine mounting locations before starting the installation. Route all wires away from sharp objects and ignition wires. Use tie wraps to secure wires where needed. Refer to wiring diagrams as an aid in understanding system layout. If a diagram has been supplied for your make of motorcycle, it will be easier to follow it when making connections. This installation requires some degree of dexterity. We have designed this Cycle Comm unit for do-it-yourself installation. Many thousands have installed these units themselves with great satisfaction so don't be afraid to try. However if you feel the system is beyond your capabilities, please consult a qualified dealer.

C.B. Control Panel Mounting

The control Panel is weather proof (avoid direct high water pressure) and may be installed using the template supplied in any area which has a somewhat flat 3" X 4" area. It may also be handlebar mounted (handlebar brackets are not supplied). Use care when washing the display window so that you do not ruin the seal. Some suggested mounting locations are:

Full sized Fairings: The sloping panels at the lower left or right fairing or in the left or right covers. The panel is sometimes mounted vertically if there is not sufficient width.

Honda Fairings: The sloping panels at the lower left or right side of the fairing (mounts vertically) or the right hand pocket door. (Main unit may be placed in fairing or in dummy tank.)

Yamaha Ventures: The right pocket door at the "Yamaha" nameplate location. (Main unit fits under the water bottle.)

Suzuki Cavalcade: The left pocket door. (Main unit fits inside the fairing)

Harley Davidson: The extreme left outer wing on the FLHT. The left pocket door on the FLT and FXRS.

BMW: The control panel will fit in the fairing panel covers on most "LT" and "RT"s. (The main unit will fit in the pocket below.) On later model "RT"s the control panel may be mounted on the center of the dash using the two screws that are already there. (The main unit has to be modified and an extension kit must be ordered to mount it in the tail section. If the factory radio is not installed, there is sufficient room to mount the CB in place of the stereo.

Note: In all installations check behind the area to be cutout to insure that there are no obstructions or wires that might be damaged. Seal the cut out area with black silicone sealant or the rubber gasket that has been supplied. Also be sure the 6-32 nuts and "U" bracket will be accessible when mounting. When mounting on a thin panel, you may have to use a shim to facilitate tightening. In cases where you do not have access, you can mount the control panel just using the silicone sealant. Usually you will have to wait over night for the sealant to cure.

General Wiring

Whenever possible, all wires should be routed away from ignition coils and coil wires. In many cases it is better to use a longer route rather than running alongside of these wires. Also, it is very important when you connect your power and ground wires that you use the same ground for all of your electronic items. Ground loops will result in a noisy system. Follow the recommended connections for your machine wherever possible. Always disconnect the negative terminal of your battery before doing any wiring. Some motorcycle manufacturers provide a special wiring harness for the addition of electronic equipment. Whenever possible these connections should be used.

D.C. Power Cable Wiring

The red +12 volt wire should be connected to a switched power source. The recommended connecting point if you have a motorcycle that does not have a special harness, would be either the front or rear running light.

Be careful not to use a wire that is the hot turn signal or the brake light. Use a test light to determine the correct hot wire. The wire selected should only be hot when the ignition is on. Connect the black wire to the corresponding ground wire of the same lamp. Use the blue "scotchlock" connectors to take an easy splice to the bike's wiring. After the "scotchlocks" have been connected, use the black tie wraps to secure all wires. The NF-721 noise filter has connectors that match the proper red and black wires. A pair spare of filter output wires should be used to connect the power for your stereo. If you purchased your stereo from us, the connectors will probably already be installed. The following tables indicate the standard colors that are used by some of the motorcycle manufacturers. Note: If you are using your lighting wires, you will still have to locate your particular wire color.

Following are charts of wire color codes for many of the motorcycle manufacturers. We have included later in the manual, a number of wiring diagrams for some typical installations to further help you in understanding how the units are wired to your motorcycle.

Honda +12 V Battery-Red	Cycle Comm Orange or Brown
Ground-Green	Black
+12V Switched-Light Blue/Black	Red
Yamaha +12 Battery-Orange	Cycle Comm Orange or Brown
Ground-Black	Black
+12v switched	
BMW	Cycle Comm
+12V Battery	Orange or Brown
Ground-Brown	Black
+12V Switched-Gray	Red
Harley-Davidson	Cycle Comm
+12V Battery-Red	Orange or Brown
Ground-Black	Black
+12V Switched-Yellow	Red

Antenna

Any good C.B. antenna which is capable of a low SWR when installed on a motorcycle may be used. Follow the Antenna Manufacturer's recommendations when installing the antenna and adjusting it for the lowest possible SWR. Generally antennas should be mounted to the rear of the motorcycle. Mount the bracket to some solid metal object which is grounded to the main frame. Route the cable along the frame under the seat and into the area where the Main Unit will be mounted.

Leave the antenna disconnected until after the SWR has been adjusted. Use tie wraps where needed. Follow the instructions supplied with the antenna when adjusting SWR.

Stereo Interface Relay Wiring

Refer to the Wiring Diagram for CC-1400 Series. If you have a previously installed stereo radio, proceed as follows: Locate the wires connected to your fairing speakers. Disconnect them and label the wires so you will know where they were connected.

Note: If the speakers do not have a (+) or red dot, wire so that they are the same physical location on each side. Connect the Cycle Comm speaker wires as follows:

Gray.....To Left Speaker(+)
Black.....To Left Speaker(-)
Green.....To Right Speaker(+)
White.....To Right Speaker(-)

Locate the "B" cable (4 conductor cable with the 4 pin plug on one end). It may be necessary to remove some of the jacket from the "B" cable. Connect the free ends to the wires previously disconnected from the speakers as follows:

Note: If the stereo is being supplied by Cycle Comm these connections have been made.

Cycle Comm "B" Cable Connects To Stereo

Green.....Left Channel(+)
Black.....Left Channel(-)
Red.....Right Channel(+)
White.....Right Channel(-)

Note: On some stereos the left (-) and the right (-) are the same wire.

The 4 Pin Plug end connects to the mating "B" socket of the SC-061 Stereo Interface Relay. (The SC-061 Interface Relay is located inside the Main Power Unit.)

Main Unit Mounting

Before installing the Main unit, it is suggested that preliminary systems test and SWR adjustment are made. Follow the SWR instructions provided the antenna. Connect the D.C. Power Plug, main cable, helmet/intercom cables, rider and passenger switches and antenna. Connectors should be tightened securely, but not over tightened. After SWR adjustments are made and all operations have been checked, mount the Main Unit.

The Main Unit can be placed in any location which can be reached by the large multi-conductor cable from the Control Panel. Brackets are supplied to mount the unit. However, in most motorcycle fairing installations, it needs only be wrapped in foam packing or some material to keep it secured in place. Do not secure the unit into place until the D.C. power, antenna and all other connections have been made.

Honda Gold Wings

On some Gold Wing Aspencades with air compressor controls there is not sufficient space available in the fairing to place the main CB/Intercom unit. An alternate location is under the dummy fuel tank cover. The unit will fit under the cover on the right side as far forward as possible. Another mounting location and probably the easiest is in place of the tool box. The cover must be removed, the unit positioned, and the cables run to the Control Panel, Dc power cable, and the CB antenna. The unit is a close fit so we recommend checking that the dummy cover can be reinstalled before doing your final wiring. An "A" extension cable and a longer "B" cable can be ordered to facilitate installation. An alternate method is to remove the stereo's power amplifier's frame. Then slide both it and the main unit into the fairing.

Driver Helmet/Intercom Cable

The driver's cable may be placed at any convenient location. Mounting depends on the driver's preferences.

There are two types of driver helmet cables available. The fairing mounted jack or the cable type with weather cap cover. The cable type is the same type as used for the passenger except for its length. If you are using a fairing mounted jack, it will be necessary to drill a 5/8" hole. Mount the jack where it will provide easy access for connecting the headset coil cord. Position it where it will not get water flowing into it. The cable type should be positioned where it gives easy access for connecting the headset cable. Position it so will drain if you get caught in the rain or when washing your motorcycle. Do not put the weather cap on if you already have gotten water into it. Allow it to air dry before putting the cap on.

Passenger Helmet / Intercom Cable

The passenger intercom cable should be placed at a convenient location near the passenger's left grab rail. If the intercom module is mounted in the front, route the passenger cable under the seat and fuel tank to the location of the intercom module. Plug the cable into either of the five pin din jacks. When securing the cable with tie wraps, leave the tie wrap slightly loose to avoid wear on the cable. Position the connector so that it will drain if it gets wet.

Drivers Push to Talk (PTT) Switch Mounting

Mount the PTT switch assembly on the left handle bar so it can be easily reached with your thumb. Route the wire along the handlebar, through the fork area of the motorcycle, and then to the intercom module. (Do not connect until you install the passengers switch. Turn to the handlebar lock to lock to be sure the cable will not be damaged.

On Japanese motorcycles the standard PTT switch bracket is designed to mount in the left handlebar mirror bracket and attached using the mirror stalk. On motorcycles where there is no mirror, you can obtain a short metric mounting bolt from your motorcycle dealer. The bracket may be bent slightly, if necessary, to position the PTT switch so it will be in easy reach of your thumb.

Special brackets are available for BMW, Honda ST 1100, and Harley Davidson motorcycles. If we did not supply you the correct brackets, give us a call and we will promptly ship it to you at no charge.

Passenger Push to Talk (PTT) Switch Mounting

Mount the passenger PTT switch assembly to the right or left passengers grab rail using the nylon straps and the 6-32 X 3/4 inch screws and nuts provided. Position the switch so that it is easily accessible to the passenger. Use tie wraps where needed to secure the cable. Another option for mounting is to remove the screws and straps and mount the switch with Velcro or double sided foam tape to any smooth surface.

Route the cable along with passenger headset cable to the area selected for the intercom module mounting. The passenger's PTT switch cable has both a male and female connectors. Connect the mating connector to the "C" connector at the read of the Control Panel. The driver's PTT cable plugs into the remaining mating passenger's connector.

Owners Operating Instructions

For Safety all controls should be adjusted when the motorcycle is stopped.

Note: There are no controls which will affect your transmit signal.

Volume Control

The "ON-OFF" Power Control switch is part of the C.B. Volume control. Turn the switch clockwise just past the "OFF" mark. When you have selected the desired operating channel, adjust the C.B. receiving volume up by turning the C.B. volume slowly clockwise. The volume should be adjusted while receiving a strong signal.

Squelch Control

This control is used to cut off or eliminate receiver background noise in the absence of an incoming signal. It is a threshold adjustment. For maximum receiver sensitivity, it is desirable that the control be adjusted to the point where the receiver background noise is eliminated. Adjust the knob until the noise disappears and then a slight bit more beyond that. Any signal received now must be slightly stronger than the average received noise. Further clockwise rotation will increase the threshold level which a signal must overcome in order to be heard. The squelch will automatically "mute" the stereo (Relay SC-061 and Stereo Interfaced Models Only) when it is adjusted counterclockwise or when receiving a signal.

DX-LO Switch

This switch controls the gain or receiving distance of the C.B. receiver. It is similar in function to the squelch control except it is very coarse adjustment. For maximum receiver sensitivity the switch should be in the DX (Distant) position. To eliminate noise or unwanted weak transmissions, the switch should be put in the LO (Local) position. In this position only close by transmitters will be heard. IT can be used for bike to bike intercommunication when riding in groups. Interference from electrically generated noise will also be eliminated in the LO position.

Channel 9 Switch (CC-1200 Series Only)

This switch is on the 1200 series models only. In case of an emergency, place the Emergency 9 Switch in the down position. No matter which channel had been previously selected, the C.B. will immediately go to Channel 9. Channel 9 has been reserved by the F.C.C. for emergency communications.

C.B. Transmitting

The receiver and transmitter are controlled by the Push-To-Talk Intercom (CB/INTCOM) Switch. Rider or passenger may operate the PTT/Intercom control switch to the "CB" talk position to activate the C.B. transmitter. Speak slowly and distinctly into the helmet microphone while depressing the PTT switch. Release the switch as soon as your transmission is completed. The Red LED indicator on the front Control Panel will light up when the PTT switch is depressed in the "CB" mode.

Intercom (CC-1400 Models Only)

To operate the Intercom, place the Headphone Speaker selector switch to the "HDPH" position. Depress the Intercom switch to the "INTCOM" position and speak into the helmet microphone. TO adjust the intercom volume turn the control clockwise to increase the listening volume and counterclockwise to decrease the volume. It is suggested that the volume be set only high enough to provide good communications between the passenger and rider. The rider's switch will lock in position while the passenger's switch is of momentary design and will have to be held in position when speaking. The rider's intercom switch should be turned OFF (center) when not using the intercom to allow for use of the C.B. and stereo. The Green LED on the front Control Panel will light when in the Intercom mode.

PA Mode (CC-1400 Models Only)

To use the fairing speakers as a Public Address, place the Headphone-Speaker selector switch in the "INTCOM" mode and, if necessary, adjust the Intercom Volume control to a level which will not cause feedback (loud whistle) between the microphone and the speakers. When you speak into your helmet microphone your fairing speakers will act as a Public Address System

Headphone-Spkr Selector Switch Operation

The HDPH-SPKR selector switch controls whether the fairing speakers or the helmet speakers will receive the C.B. and stereo.

C.B. Channel Selector

The channels may be changed up or down by momentarily pushing the Channel Switch up to advance or down to reduce the channels. Holding the switch position will cause the channels to advance or reverse quickly. The selected channel will remain in memory even when the ignition switch is turned off.

CC-1400 Series



CC-1200 Series



Troubleshooting Guide

See Wiring Diagram to aid in understanding the system wiring and layout.

All motorcycle or snowmobile installations must be resistor plugs. All wires and cables should be kept away from the plug wires and coils as much as possible. Intercom volumes should be kept as low as practical.

Noise Problems

The location of the power cable connections (red and black) is very important. The black or ground wire is the most important. The switched +12V connection should never be made to a +12V feed source to the ignition system. There are basically 2 types of noise generated by motorcycles and snowmobiles. The first and most common is alternator whine. This noise normally increases as RPM increases and tends to temporarily disappear when the brakes or some other heavy electrical load is applied. A good multi-stage filter will suppress most of this type of noise. You can try an automotive filter but often they do not work well on motorcycles. We recommend our Model NF-721. Usually it is best not to connect directly to the battery since most of the energy noise, produced by the alternator is the highest there. See our wiring notes for more information.

No power to C.B. or C.B./Intercom

Use a test light to aid in detection of bad fuse or connections. Defective fuse in the orange wire. Test and replace if necessary. Poor connection in the orange wire when connected to the motorcycle's wiring.

Note: should always have a +12V battery voltage. Poor connections in any of the power cable wires. Red, Orange, or Black. Use a test light to determine if power is available to the C.B. Power Connector.

Channel returns to 1 when ignition is turned off and then back on

Use test light to aid in detection of bad fuse or connections. Fuse or fuses in Orange wire may be open. Check and replace if necessary. This wire must have a constant source of battery voltage, check with a test light to insure that it's always 12 volts even when your key is off.

Intercom or C.B. Transmit Squeal:

Check helmet interface cables. Disconnect one at a time and recheck system. If water has gotten into connectors they must be totally air dried to remove all moisture otherwise it will cause a squeal. Substitute a known good cable and helmet system to aid in detection of a defective part.

Poor Transmit Or Receive Range

Usually this is always caused by an antenna problem. Antenna should be at least 3' long, and if possible, do not use an antenna splitter. We have found the antenna splitter to be very unreliable in motorcycle applications. Check the SWR (Standing Wave Ratio) to determine if the antenna and splitter (if used) is tuned to the antenna.

One audio speaker channel not working

Note: Be sure you have your squelch control turned fully clockwise. No audio in the fairing Speakers or to the helmet speakers on a new installation. Determine by swapping the helmet systems from front to back to see if the trouble is in the helmet system or in the helmet interface cable. Replace the defective item.

No audio in the fairing Speakers or to the helmet speakers on a new installation

Usually this is caused by miss wiring of the speaker wires or the "B" cable to the stereo. Be sure that you have disconnected the original speaker wires. There should be only 2 wires to each speaker. Gray to + left, Black to - left, Green to + Right, and white to -right. If the polarity of the "B" cable wires is not correct it will also cause a malfunction. The best way to determine if it is cross polarized is to connect only one channel at a time, i.e. connect as follows: Connect the "B" cables Green to left channel + output of the stereo and the black to left channel output (may be ground on some stereos). Recheck the system for proper audio switching to the fairing speaker and the helmet speaker. If it still does not function properly, reverse the Green and Black wires, again, recheck, if OK proceed to connecting the right channel Red and White in the same manner.

Warranty

Air Rider warrants all of its products to be free from defects and agrees to repair or replace the item (at our option) provided the item is delivered to us, transportation charges are prepaid, within two years from the date of sale from the original purchaser. If the item is of another manufacturer, then the original manufacturer's warranty applies.

To obtain warranty service, return the unit prepaid with a copy of your proof of purchase.

If you need additional information , please email cyclecomm@ooltewah.com or phone us at 1-800-251-6040

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