COMLINK 10 ELITE INSTALLATION GUIDE

Equipment Mounting

The Intercom and Two-way Radio can be mounted anywhere. If space permits, it is ideal for the co-driver to be able to reach the controls on the intercom to adjust the volume and driver isolation if needed.

Always solid mount equipment to the chassis. Do not use rubber mounts. Keep electronics high to avoid water damage.

Power Connections

For best sound, run all communications, intercom and stereo grounds to the same spot on the chassis, not to an aluminum dash. This prevents excess noise by eliminating ground loops.

If the vehicle has a battery switch, run the power to the main lead that goes to the alternator. (Not battery switch 1 or 2) If no battery switch, run power cables directly to the battery.

Never run power cords near MSD or ignition equipment! Keep a minimum of 2 feet away!

Antenna Mounting

Mounting your antenna properly determines the range of your two way radio. Radios transmit the most range with a ground plane and a 3db gain antenna. An aluminum roof with an antenna mounted in the center with no obstructions (roof rack, light bar) 18" in every direction provides the farthest range.

When those conditions are not possible (UTV, roof racks) a No Ground Plane antenna is recommended. Mount the antenna at the highest point of the roof rack and use a No Ground Plane antenna. If you don't have a roof, pick a spot in the middle of the car. The intersection of two tubes can also act as a ground plane. Mount the antenna to a corner triangle tab and use a no ground plane antenna.

3DB GAIN

NO GROUND PLANE

9 Pin Molex

1	4	7
2	5	8
3	6	9

1	Audio In Left	Red
2	Audio In Right	White
3	Ground	Shield
4	Audio Out Lft	Green
5	Audio Out Rt	Black
6	Ground	Shield
7	Phone Mic	Yellow
8	Phone Spkr	Blue
9	Ground	Shield

LOW LEVEL STEREO INPUT RCA OUT FOR CAMERA

FLOATING GROUND ADAPTER

Audio Output

Use the 9 pin molex for intercom conversation and two-way radio transmissions. On the 9 pin molex, Pin 4 is Audio Out Right, Pin 5 is Audio out Left and Pin 6 is common ground for right and left. PCI offers RCA and 3.5 mm output cables to input into your cameras.

Other Tips:

The Power LED will change from Green to Orange when the PTT is pressed.

The Comlink 10 is a race intercom and does not have side tone. To eliminate noise and provide a quieter race, you will not hear yourself speak into the microphone.

Parity in the race car is important for the system to function as designed. If one passenger is using ear pieces, both should, as two-way radio volume is controlled on the radio, not the intercom, and may be too loud for the individual only running speakers in their helmet.

The quality of the sound should be the same with the vehicle powered on as it is when it is off. If there is extra noise, the problem may be in your wiring. Another cause could be that one or both of the helmet microphones may be too sensitive.

Proper antenna tuning is important for good communications. Bring your vehicle to PCI or to our service trailer at a race for us to check your antenna for free. If you have multiple vehicles, consider investing in a thru-line watt meter to test your antenna.

BLUETOOTH

The Bluetooth Intercom has a blue switch in the center of the intercom. This button is used to Sync your phone or other bluetooth MP3 device with the intercom. To pair your device, turn the Bluetooth OFF on your intercom. (Hold for three seconds or until the Blue light is off), Set your Bluetooth device into discoverable mode, and press the blue switch on the intercom for 10 seconds until the Blue LED starts blinking fast. Your phone should find PCI-INT. If it asks for a code, it is 0000. Your phone should sync within 2 minutes and the Blue LED will blink slowly when it is synced. Bluetooth range is very limited without an external antenna. Your phone will automatically disconnect when you are outside the vehicle.

When you receive an incoming call, simply press the Blue button once to answer the call and to also disconnect (hang up). You can also use the Blue button to skip to the next song in your music playlist. On some smart phones, this may pause the music instead of skipping.

DSP & DRIVER ISOLATION

The Digital Sound Processor and Driver Isolation intercom will have a black switch on the front of the box. The black button has two features:

Driver Isolation - To eliminate incoming and outgoing radio transmission from the driver's speakers, use the driver isolation feature. One press of the button will turn on the Driver Isolation feature and the LED will blink Orange.

DSP - Digital Sound Processing will eliminate most background and wind noise from the intercom. Since the signal is digitally processed, there is a slight robotic sound to your voice. We installed an ON/OFF to this feature so you can use it when you are in very loud environments only. Hold the Black button down for 3 seconds. The Green LED will blink and the intercom will make an audible tone when the DSP feature is on.

When both the DSP and Driver Isolation are on, the LED will alternate Green and Orange.

You can upgrade your Elite intercom at any time to add these features.

Cable Routing

Do not run radio coax and intercom helmet cables in the same wire loom. RF can bleed over when transmitting, putting noise into the system. Never run coax or power cables near MSD or ignition equipment. They create noise and if the coax is close to the MSD, the RF bleed when transmitting can turn the vehicle off!

When tie wrapping the coax to the frame, do not crush the coax. If your coax looks flattened, kinked, frayed, or worn, replace it.

The Driver PTT only activates the driver mic, same with the Co-driver PTT. If these cables are reversed, your voice will not be transmitted and volume controls will be backwards.

Route intercom cables down the co-driver's side of the car. Bring them behind the seats and snake them through the left shoulder harness hole in the seat. This puts the cable where it is easy to find.

We recommend using the 16' helmet cord for the driver port along with the velcro PTT, and the 12' cord for the co-driver with the panel mount PTT.

Audio Inputs

The 9 pin molex on the back of the Comlink 10 allows simple input of audio into your intercom. Remember the volume control on the intercom only controls your voice. Music volume will be controlled on the music device you feed into the intercom. The Comlink 10 does not mute the music with voice activation. We do not recommend music input for racing.

- For audio devices with their own volume control (iPod, mp3), and where bluetooth isn't an option, use the mp3 adapter with the 1/8" stereo jack and connect to the head phone port of your personal audio device.

- Stereo decks have two options for music input. A Floating ground adapter will hard wire your stereo in line with your speakers into the intercom and volume will be controlled on the stereo deck. A Low Level Stereo input is an easy adapter that connects your stereo via RCA outputs.

PCI also offers an inline amplifier to control music volume separately and provide additional volume from your device.
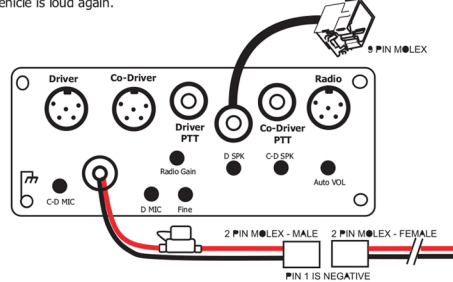
MP3 ADAPTER

Driver - Controls the volume of the driver side intercom communications. Does not change the volume of the radio or other audio inputs.

Co-Driver - Turn the knob to the right to power the intercom on. Controls the volume of the driver side intercom communications. Does not change the volume of the radio or other audio inputs.

Driver Isolation - With Driver Isolation on, the driver will not hear any incoming radio chatter. Driver can still hear the Co-Driver.

Auto Volume Control - With the Dip switch in the up position, the intercom will lower the volume of both the intercom and incoming radio transmissions when the truck is quiet. (This is helpful when pulling into a pit and volumes are loud from race speed/noise.) It will automatically increase the volume when the vehicle is loud again.

9 PIN MOLEX

2 PIN MOLEX - MALE   2 PIN MOLEX - FEMALE
PIN 1 IS NEGATIVE

Your intercom is tuned upon shipping. Should you desire more gain, turn the gain adjustments on the back of the intercom clockwise to increase gain and or sensitivity. Call us for questions or technical support.

STANDARD
Turn Co-Driver Knob to power on and for volume.
Turn Driver Knob to adjust volume for driver.
Press Black Button once to turn Driver Isolation ON/OFF
GREEN LED - Power On
ORANGE LED - Transmitting (via 2 way radio)
ORANGE Blinking LED - Driver Isolation is On

BLUETOOTH
Hold BLUE Button for 3 seconds to turn Bluetooth ON/OFF
Hold for 10 seconds to sync with Bluetooth Device
SOLID BLUE LED - No Device Connected
SLOW Blinking BLUE LED - Device is Connected

DSP & DRIVER ISO
Hold Black Button for 3 seconds to turn DSP ON/OFF
Press Black Button once to turn Driver Isolation ON/OFF
GREEN Blinking LED = DSP is On
ORANGE Blinking LED = Driver Isolation is On
ORANGE / GREEN Blinking LED = Both are On

BLUETOOTH, DSP & DRIVER ISO
Same Instructions as above

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