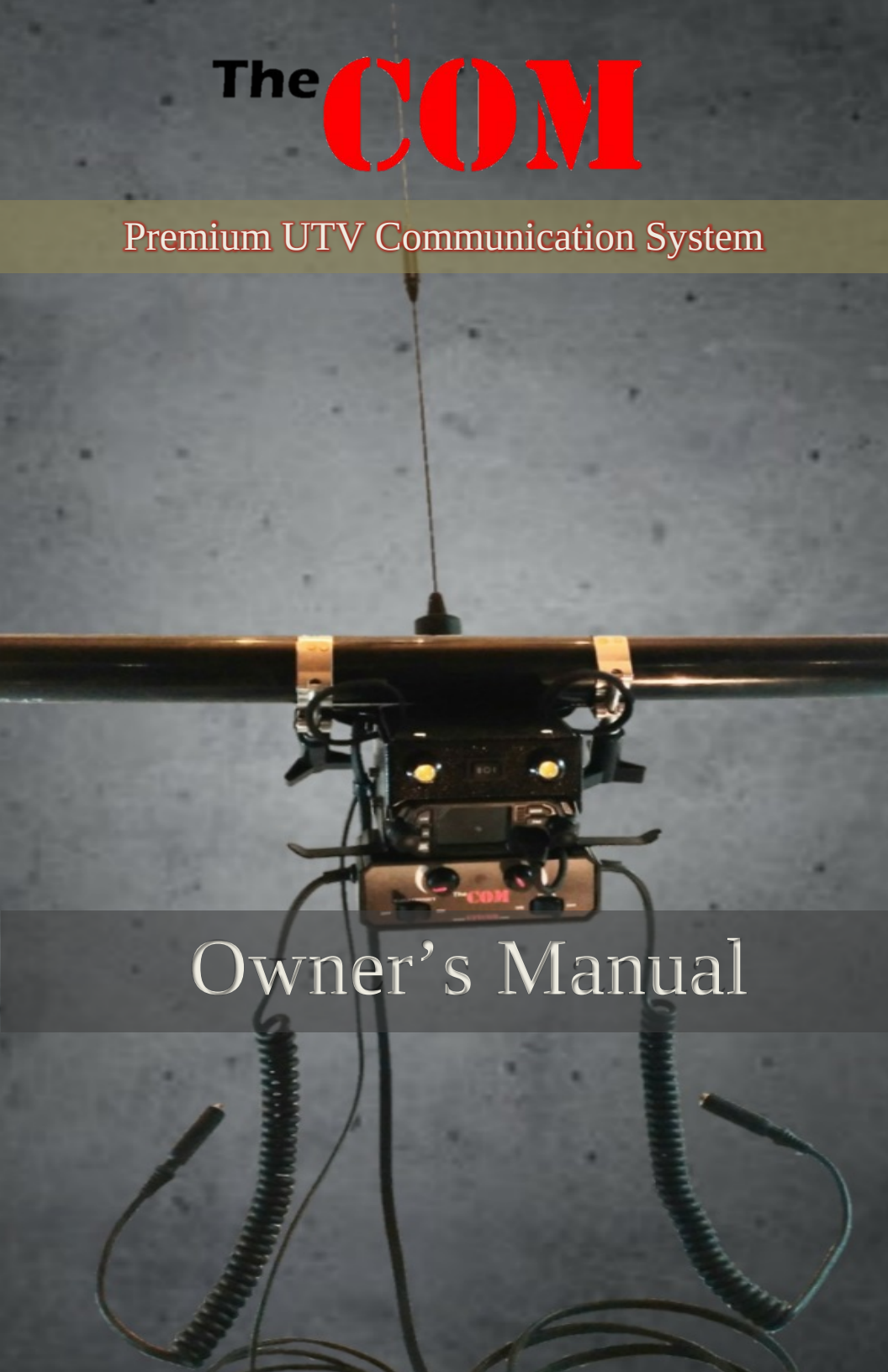
The COM

Premium UTV Communication System



Owner's Manual

Welcome to the **COM**plete Radio Inter**COM** **COM**munication family. We thank you for your purchase with care the unit should give you good service.

Please read these instructions carefully, by doing so you will get full use of the unit

Email if you have any questions or concerns that this manual does not address.

www.UTVCOM.com
info@UTVCOM.com

InterCOM

IMPORTANT NOTE: There are no serviceable parts in this unit. Damage may be caused if you open the case. These units do not have an internal battery.

Intercom or Amplifier

Main Features

- Automatic Volume Control - to prevent excessive volume in the headset
- Noise Reduction - to eliminate amplification of background noise
- Noise cancelling microphones - for improved sound reproduction
- 2 way radio connection with speaker cut-off switch, mic level control and PTT socket
- Audio input for music (CD/mp3) or auxiliary source (GPS etc.).
- Mobile phone connection with level selection to suit a wide range of phones
- Audio output socket to tape/mp3 recorder (to record pace notes) or connection to video camera. Switchable options to customize your **COM** to your requirements

Headsets

- Full face and open face headset options.
- Aviator headsets (without helmet), for crew **COM**munication on road sections or when preparing pace notes.

Introduction

The**COM** is an inter**COM** system designed to allow communication between both the driver, passengers and other cars through the Push To Talk (PTT) and allow connection to a variety of equipment for off-road recreation or racing.

The**COM** has engineered this model to provide greater audio quality and provide a better experience for the user by eliminating background engine noise and preventing excessive sound levels in the headsets. Additionally, greater connectivity has been provided to accommodate the increasing use of mobile phones and other audio devices in the car.

Thank you for purchasing this product, with care the unit should give you good service. Please read these instructions carefully, by doing so you will get full use of the unit and save a great deal of frustration!

Fitting the headset parts to your helmet

Speakers – Carefully fit the speakers inside the helmet so that they align exactly with your ear canal. The Velcro should stick to the helmet lining or if not, you can glue or stitch the Velcro loop fabric in place. (See helmet headset install video @ https://utvcom.com/thecom-tips-ticks/)

Microphone (Full face helmets) – Place the mic in the mouth guard as close to your lips as possible. The mic may be fastened by glue or stitching the Velcro loop fabric in place.

Microphone (Practice headsets & boom mics) – Practice headset and boom mics should be adjusted so that the mic is in line with your lips and no more than half an inch from your lips for the greatest audio performance. Note the further the mic is from your lips the more distant your voice will be and the less amplified it will be to the co-drivers.

Microphone (Open face) - Shape the microphone arm base to the shape of the helmet. Make sure that there are no gaps between the microphone arm base and the helmet. Set the boom and mic up inside the helmet so that the mic will be in-line with your lips. Note where the zip tie clips will secure the boom to the inside hard surface of the helmet. Wipe and clean the inside surface with a cloth to remove any dust and make sure that the helmet is clean. Fasten the microphone arm base in position on the helmet using the adhesive pad provided. The microphone MUST NOT be more than ½ inch from your lips. For right hand drive cars make sure that the driver's microphone is fastened to the left side of

the helmet and the co-driver's microphone is fastened to the right. (vice versa for left hand drive cars).

All headsets IMPORTANT - The white clip should be fastened to the side of the helmet to alleviate strain on the cables. If not used, premature failure of the headset may occur.

Installing TheCOM

Amplifier Unit - Mount TheCOM bracket between the driver and co-driver on the rear roll bar, position so that cables and the headsets do not obstruct operation of the vehicle and are kept clear of the steering wheel. The unit should be fastened to a roll bar with the provided clamps or in the case of an in-dash unit it should be mounted securely in the dash.

Connect the 12-volt power cord to a correct 12-volt power port. If you decide to hardwire the unit it is recommended that both the hot and ground wires be connected directly to the battery terminals to avoid interference and the cables should NOT be run together with other vehicle wiring. The hot wire should be fused with a 10 amp in-line fuse when snipping the S2 power receptacle. In-dash units do not require an additional in-line fuse.

Avoid proximity to pedals and other moving parts and use cable grommets to avoid chaffing where cables pass through the bulkhead. You must fit the fuse in the positive lead, directly after the positive terminal.

Using your **COM**

Toggle between Memory & Channel mode (for simple channel driven radio

Current band indicator (similar to AM and FM on your car radio

Toggle between FM radio and Ham (walkie-talkie) radio

Channel Selector or press to enter radio menu

25 watt radio

Radio Volume & press and hold to power down or power up

Exit from menu and Toggle bands

Hand mic dust plug

Power switch – The right-hand switch on TheCOM switches the unit on and off, push to the left to switch on.

Volume control – The volume control on the Radio affects the overall volume to TheCOM users. It is very sensitive and should be adjusted from minimum volume while someone else is broadcasting. For best results we suggest setting the radio to the local weather channel (see below common channels for weather frequency) and slowly turn the radio volume clockwise until desired volume is clear. Sometimes backing the volume on the radio slightly will give a clearer communication from outside signals. After the radio is set, fine tune the volume with the individual volume controls found on the InterCOM (see below) and the aviator headsets if purchased.

Individual Intercom Volume controls – The driver's side volume control affects the overall volume to the driver's side headset plug and the co-driver (passenger) side volume control affects the overall volume to the co-driver's side headset plug. Set these controls individually to give a comfortable level.

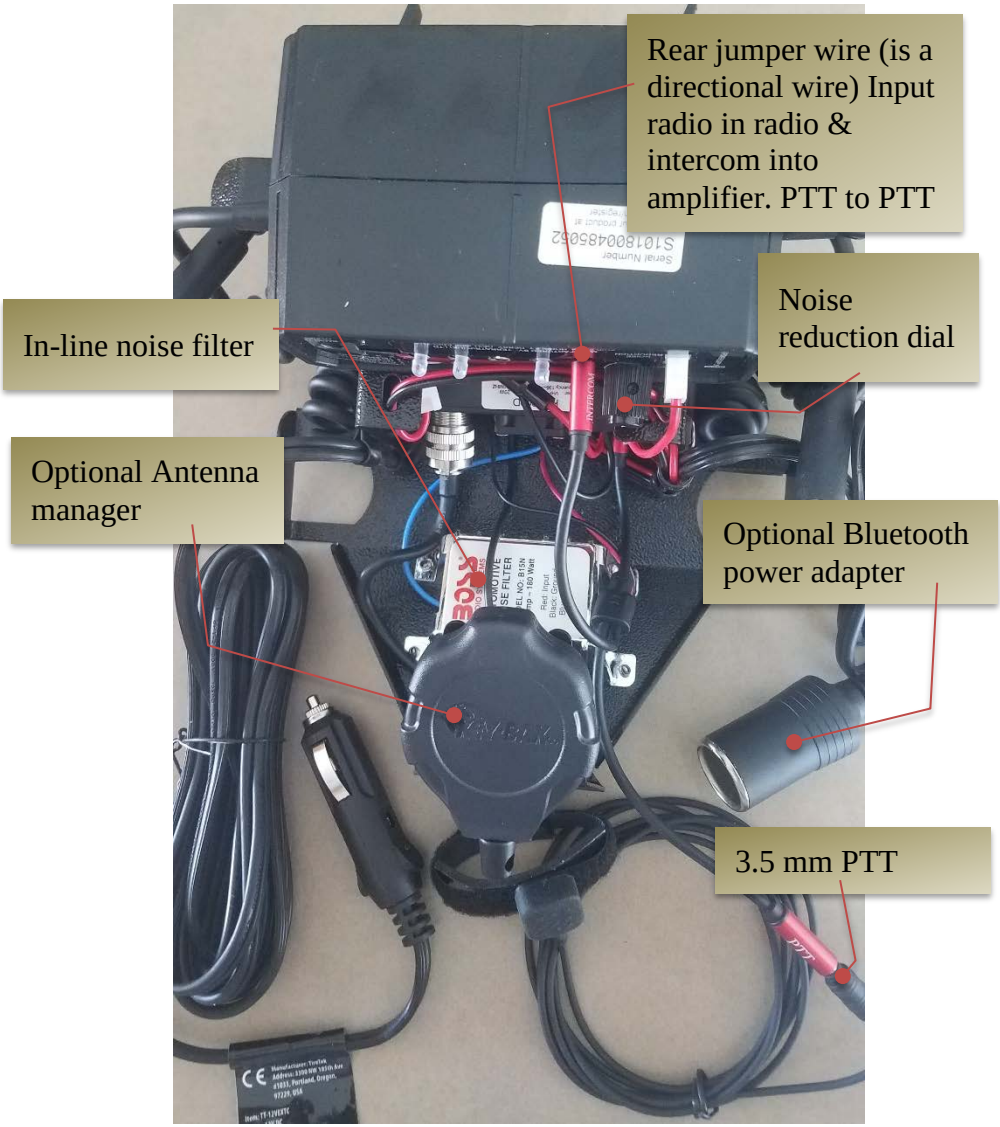
LED power indicator

Left Volume

Right Volume

Radio connect switch disconnects the radio from the intercom. If not receiving transmissions make sure this is on.

Intercom power switch (right is off / left is on) Red light led will come on when powered


Rear jumper wire (is a directional wire) Input radio in radio & intercom into amplifier. PTT to PTT
Noise reduction dial
In-line noise filter
Optional Antenna manager
Optional Bluetooth power adapter
3.5 mm PTT

Automatic Volume Control – The**COM** is equipped with an automatic volume control or “limiter”. This will raise normal speech levels to a constant level and prevent excessive volume in the headset. This can be disabled if not required by switching off the DIP switch marked LIMITER on the rear panel.

Rear Jumper Wire – There is one jumper wire on The**COM**. The rear jumper wire must be plugged in to communicate with the intercom (amplifier).

If you would like to use the radio hand mic and the radio independently of the intercom, you will need to unplug the rear jumper wire from the radio and remove the front dust plug from the front then plug in the hand mic. Once the rear jumper wire is removed the internal speaker on the radio will automatically turn on. Note that the volume on the radio will need to be increased when operating the radio independently of the intercom. You will need to re-connect the rear jumper wires before The**COM** will properly function as one unit.

The rear jumper wire is directional. Make sure the tip of the jumper wire marked as “Radio” is plugged into the 25-watt radio 3.5mm port that shows a headset symbol (the other port is marked “Data” and is plugged with a dust protector from the factory to prevent plugging the jumper wire in the wrong

port). The other end of the jumper wire is marked “Intercom” and should only be plugged into the intercom. TheCOM will not work properly unless the jumper wire is properly installed.

Noise Reduction - The**COM** is equipped with a noise reduction system that will eliminate amplification of background engine noise. The threshold at which this discriminates between background noise and your voice can be adjusted with the control on the rear panel marked NOISE REDUCTION. Rotating this adjuster clockwise will require a higher speech level to activate the microphone. Noise reduction can be disabled if not required by switching off the DIP switch marked “1” on the rear panel to the down position. The noise reduction switch is switched off from the factory. To turn it on switch the DIP switch marked “1” up then adjust the control dial to the desired setting.

Switch on Forehead of The COM assembly – The toggle switch on the front is for the lights. “I” is for the single cargo light in the back simply rock the switch to the “I” position. “II” is for the dual cabin lights in the front and “O” is for off. To turn off the lights rock the switch to the center position.

Switch to “II” for dual cabin lights

Switch to “I” for cargo light

9-watt LED cabin lights

“O” or in the center of the toggle switch is lights off

Transmit level setting - Make a call to another radio and confirm that your voice can be heard in the remote radio. The level of your voice can be adjusted by inserting a screwdriver in the slot marked RADIO TX LEVEL, this can be reduced if your voice is received at a particularly high or distorted level or it can be increased if you voice is faint. (Note turning the TX up to high may cause distortion on the receiving end of your transmission).

Audio output - The 3.5mm socket marked AUDIO OUT on the rear of the amplifier can be connected to a tape/mp3 recorder. The speech of both crew members can then be recorded along with any auxiliary input.

Audio input – The 3.5mm socket marked AUDIO IN on the rear of the amplifier can be connected to auxiliary equipment such as GPS

Mobile phone connection / Level setting – The 3.5mm jack socket on the back of the amplifier marked "TEL" can be connected to your mobile phone. (Suitable leads and adapters can be purchased from The**COM** or your local dealer). Adjust the amplifier for normal operating levels and then make a call with your phone and set the volume on the phone to give the required level in the headsets. The small "DIP" switch marked "Telephone RX" on the rear panel can be set to reduce or increase the received level if required. A similar switch marked "Telephone TX" can be used to set the microphone level into the mobile phone. This can be switched ON to reduce the mic level if excessive background noise or distortion is heard at the remote phone and should be left OFF if your voice is too faint.

DPI switches
(Down is off switch up for on)

3.5mm ports. Dust plugs are installed in “Audio in” & “Audio Out” ports and will need to be removed prior to use

TX adjust (is factory adjusted to ¼ turn clock wise from bottom)

Frequency coordination -The radio has been programmed with numerous frequencies (channels). Channels 1-7, 15-22 are GMRS frequencies and are commonly used across the nation. We ask you to be courteous and use good practices before selecting a channel for your area. Listen first to see if someone is using that channel. Do not interrupt or use offensive language. For more local information seek out your local frequency coordinator.
http://www.sbe.org/sections/freq_local.php

Channel	Band	Frequency	Name
1	UHF	462.5625	GMRS1
2	UHF	462.5875	GMRS2
3	UHF	462.6125	GMRS3
4	UHF	462.6375	GMRS4
5	UHF	462.6625	GMRS5
6	UHF	462.6875	GMRS6
7	UHF	462.7125	GMRS7
8			
9			
10			
11			
12			
13			
14			
15	UHF	462.5500	GMRS15
16	UHF	462.5750	GMRS16
17	UHF	462.6000	GMRS17
18	UHF	462.6250	GMRS18
19	UHF	462.6500	GMRS19
20	UHF	462.6750	GMRS20
21	UHF	462.7000	GMRS21
22	UHF	462.7250	GMRS22
23	VHF	444.1000	WB7HAM
24	VHF	162.4000	NOAA weather
25	VHF	162.4250	NOAA weather
26	VHF	162.4500	NOAA weather
27	VHF	162.4750	NOAA weather
28	VHF	162.5000	NOAA weather
29	VHF	162.5250	NOAA weather
30	VHF	162.5500	NOAA weather

Channel	Band	Frequency	Name
31	VHF	146.5050	VHF31
32	VHF	146.5100	VHF32
33	VHF	146.5150	VHF33
34	VHF	146.5300	VHF34
35	VHF	146.5350	VHF35
36	VHF	146.5400	VHF36
37	VHF	146.5450	VHF37
38	VHF	146.5500	VHF38
39	VHF	146.5550	VHF39
40	VHF	146.5600	VHF40
41	VHF	146.5650	VHF41
42	VHF	146.5700	VHF42
43	VHF	146.5750	VHF43
44	VHF	146.5800	VHF44
45	VHF	147.5200	VHF45
46	VHF	147.5250	VHF46
47	VHF	147.5300	VHF47
48	VHF	147.5350	VHF48
49	VHF	147.5400	VHF49
50	VHF	147.5450	VHF50
51	VHF	147.5500	VHF51
52	VHF	147.5550	VHF52
53	VHF	147.5600	VHF53
54	VHF	147.5650	VHF54
55	VHF	147.5700	VHF55
56	VHF	147.5750	VHF56
57	VHF	147.5800	VHF57
58	VHF	147.5850	VHF58
59	VHF	147.5900	VHF59
60	VHF	147.5950	VHF60

Channel	Band	Frequency	Name
61	VHF	147.6000	VHF61
62	VHF	147.6050	VHF62
63	VHF	147.6100	VHF63
64	VHF	147.6150	VHF64
65	VHF	147.6200	VHF65
66	VHF	147.6250	VHF66
67	VHF	147.6300	VHF67
68	VHF	147.6350	VHF68
69	VHF	147.6400	VHF69
70	VHF	147.6450	VHF70
71	VHF	147.6500	VHF71
72	VHF	147.6550	VHF72
73	VHF	147.6600	VHF73
74	VHF	147.6650	VHF74
75	VHF	147.6700	VHF75
76	VHF	147.6750	VHF76
77	VHF	147.6800	VHF77
78	VHF	147.6850	VHF78
79	VHF	147.6900	VHF79
80	VHF	147.6950	VHF80
81	VHF	147.7000	VHF81
82	UHF	445.9250	UHF82
83	UHF	445.9500	UHF83
84	UHF	445.9750	UHF84
85	UHF	446.0000	UHF85
86	UHF	446.0250	UHF86
87	UHF	446.0500	UHF87
88	UHF	446.0750	UHF88
89	UHF	446.1000	UHF89
90	UHF	446.1250	UHF90

Channel	Band	Frequency	Name
91	UHF	446.1500	UHF91
92	UHF	446.1750	UHF92
93	UHF	446.2000	UHF93
94	UHF	446.2250	UHF94
95	UHF	446.2500	UHF95
96	UHF	446.2750	UHF96
97	UHF	446.3000	UHF97
98	UHF	446.3250	UHF98
99	UHF	446.3500	UHF99
100	UHF	446.3750	UHF100
101	VHF	151.6250	Weatherman
102	VHF	151.7150	BFG Relay
103	VHF	154.9800	Baja Pits
104	VHF	151.6850	Network
105	VHF	151.9250	Checkers
106	VHF	150.8600	Fair
107	VHF	153.1100	Yokohama
108	VHF	152.9600	Campions
109	VHF	151.5050	Checkers Vegas
110	VHF	153.3950	BFG Pits
111	VHF	153.3800	Mag 7
112	VHF	155.1600	National Rescue
113	VHF	153.2450	Core
114	VHF	151.7750	Locos Mocos
115	VHF	151.4900	BITD
116	VHF	154.5150	PCI Relay
117	VHF	156.6750	RUGGED
118	VHF	152.5100	Sand Limo
119	VHF	157.4500	KOH1
120			

Channel	Band	Frequency	Name
121	VHF	162.5500	WX1
122	VHF	162.4000	WX2
123	VHF	162.4750	WX3
124	VHF	162.4250	WX4
125	VHF	162.4500	WX5
126	VHF	162.5000	WX6
127	VHF	162.5250	WX7
128	UHF	464.5000	1
129	UHF	464.5500	2
130	UHF	467.7625	3
131	UHF	467.8125	4
132	UHF	467.8500	5
133	UHF	467.8750	6
134	UHF	467.9000	7
135	UHF	467.9250	8
136	UHF	467.5750	9
137	UHF	462.6250	10
138	UHF	462.6750	11
139	UHF	464.3250	12
140	UHF	464.8250	13
141	UHF	469.2625	14
142	UHF	469.5000	15
143	UHF	469.5500	16

UHF = Ultra High Frequency

VHF = Very High Frequency

=Transmission disabled on weather frequencies.

=Popular Race radio frequencies.

For ham radio licensing help: https://hamstudy.org/

We hope you enjoy your new **COM**, *please contact The* **COM** *if you require any help. info@utvcom.com*