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RADIO CREW MONITORING

Tactica Int

A

POWER

B A+B RADIO VOLUME

MIC MUTE

### **INTERCOM** SYSTEM

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CREW MUTE

GVAI-COM

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INTERCOM VOLUME

PTT

SCALABLE ANALOG INTERCOM

VERSATILE MILITARY COMMUNICATIONS

# GVA1 – RCU



### GVAI – COM







#### **GVA1-RCU OVERVIEW**

The GVA1-RCU acts as a gateway switch and allows for two radio transceivers or two Afracal 1's power amplifier to be connected. The RCU is powered by 12V generated by the interfacing radio/Afracal 1 power amplifier or can be powered externally by 12V-24V. The RCU provides two networks connections for controlling Radio A and Radio B.

The external power Jack is equipped with revers polarity projection and can be used to power radio A and B if connected directly to the RCU.

#### **GVA1-RCU FUNCTIONALITY**

- Input audio impedance 600 ohm, and set to 1Vpp.
- Output audio impedance 600 ohm, and set to 1Vpp.
- Allows for two radios/Afracal One power amplifiers to be connected
- Provides two networks for monitoring radio A and B
- Provides an external powering point
- Power ON [Green LED Indication]

#### GVA1-COM OVERVIEW

The GVA1-COM, also referred to as the "Commander", is the main user controlling interface of the intercom unit. Two GVA1-COM's can be connected to the GVA1-RCU allowing for control of radio A and B. The radios can be PTT'd using the headset/handset or the easy access PTT button.

The GVA1-COM has a headset/handset connector, three dedicated volume controls for audio A, B and intercom and has selector switches to enable audio A and B onto the network. The GVA1-COM can easily select between radio A and B for communication without effected the secondary network. The GVA1-COM has both a crew mute and self-isolate function to allow for private communication on radio A and B without distraction. Additionally the GVA1-COM has semi VOX to allow for a quieter intercom experience.

The COM can allow up to 10 crew unites to be connected [daisy chaining].

#### **GVA1-COM FUNCTIONALITY**

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- Dedicated headset/handset volume control for audio A, B and intercom.
- Intercom semi VOX.
- Selection capability between Radio A and B
- Dedicated PTT button [Red LED Indication]
- PTT Active Low, Nominal 3.3V
- Crew Mute [Red LED Indication]
- Self-Mute [Red LED Indication]
- Power On [Green LED Indication]
- Audio A and B selector switch
- Headset/handset connector
- Red Backlight

#### **GVA1-CRR OVERVIEW**

The GVA1-CRR, also referred to as the "Gunner", is a reduced version of the GVA1-COM unit, featuring only one volume control for the headset/handset, an audio selector switch and a self-mute switch. The CRR has the ability to monitor incoming transmission from radio A and B, along with semi VOX for a quieter intercom experience.

#### **GVA1-CRR FUNCTIONALITY**

- Intercom semi VOX.
- Selection capability between Radio A, B, intercom and ALL
- Self-Mute switch [Red LED Indication]
- Power On [Green LED Indication]
- Headset/handset volume control
- Headset/handset connector
- Expansion via daisy chaining
- Red Backlight

GVA1 – CRS







#### **GVA1-CRS OVERVIEW**

The GVA1-CRS, also referred to as the "Driver", is a reduce version of the GVA1-CRR unit, featuring only one volume control for the headset/handset and a self-mute switch. The CRS only has access to intercom audio with semi VOX for a quieter intercom experience.

#### **GVA1-CRS FUNCTIONALITY**

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- Intercom semi VOX.
- Self-Mute switch [Red LED Indication]
- Power On [Green LED Indication] 0
- Headset/handset volume control 0
- Headset/handset connector •
- Expansion via daisy chaining
- Red Back light

#### **GVA1-SRS/SRR OVERVIEW**

The GVA1-SRS/SRR/PWR is the slip ring interface unit. The GVA1-SRS conveniently takes the bus line and outputs intercom audio In and audio Out to two N-Type connectors. The GVA1-SRR takes the intercom audio In and Out along with the power generated by the GVA1-PWR to conveniently start a new bus line and to allow daisy chaining of GVA1-CRS units.

#### **GVA1-SRS/SRR FUNCTIONALITY**

- Creates new bus line С
  - Allows daisy chaining of GVA1-CRS units Powers GVA1-CRS units



#### **BACK LIGHTING AND LED'S INDICATORS**

All intercom units except for the GVA1-RCU and GVA1-SR have a red back light feature. This allows the user to easily identify and control the device. Along with the back lighting there are LED indicators to assist the user visually of the power, mute and PTT status [where applicable].

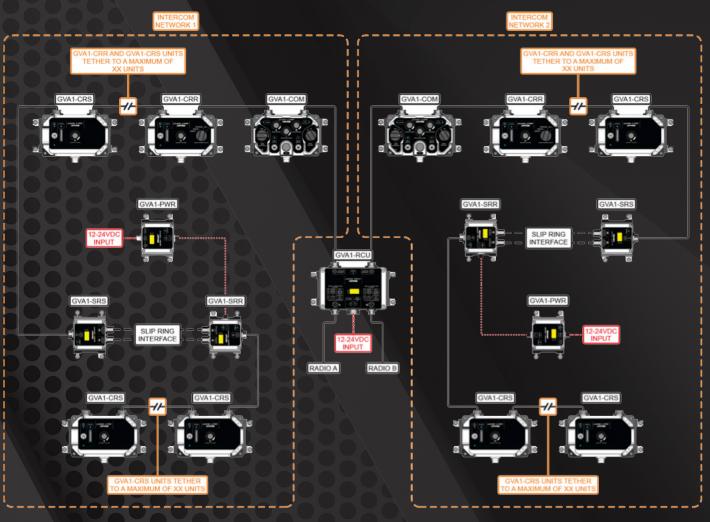
#### **MOUNTING BRACKETS**

All intercom unites have 1.5mm stainless steel mounting brackets to allow for a quick and easy installation whilst being reliable and rugged.



## Analog Intercom Interfacing Block Diagram.

Below is a block diagram illustrating the interfacing and interconnecting of the Analog Intercom units.



POWER CONSUMPTION	WATT	
GVA1-RCU	1.0	
GVA1-COM	5.0	
GVA1-CRR	4.0	
GVA1-CRS	3.0	

HEADSET/HANDSET CONNECTOR	
Mic Input Level	1mVpp to 10mVpp
Max Audio Output Level	20Vpp
Speaker Loads	4 Ohm, 8 Ohm and higher

INPUT, OUTPUT AUDIO AND PTT LEVELS		
Input audio impedance	600 ohm	
Nominal Input audio level	1Vpp	
Output audio impedance	600 ohm	
Nominal Output audio Level	1Vpp	
Max PTT Voltage	5V 0 0 0 0 0	

Product specifications are correct at time of print. Please verify specifications with our sales department.



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