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Reference to 5.8 GHz A/V transmitter:

Black Mamba TX5820-V2 5.8 GHz A/V transmitter frequencies

Band	Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6	Ch 7	Ch 8
A	5865	5845	5825	5805	5785	5765	5745	5725
B	5733	5752	5771	5790	5809	5828	5847	5866
E	5705	5685	5665	5645	5885	5905	5925	5945
F	5740	5760	5780	5800	5820	5840	5860	5880

Differences between RP and non-RP connectors

	RP plug	RP jack	non-RP plug	non-RP jack
Screw	inside	outside	inside	outside
Pin	no	yes	yes	no
Hole	yes	no	no	yes



Lumenier RX5GDR V2 48CH 5.8G AV Diversity Receiver Item #4278
<https://www.getfpv.com/lumenier-rx5gdr-5-8g-av-diversity-receiver-with-raceband.html>
 48 channels: Covers A, B, E, F, R and D bands, 5362-5945MHz
 2x Diversity SMA Antenna connectors, separate A/V output A or B, or diversity output
 Compatible with Lumenier, Fatshark, ImmersionRC, Boscam, Foxtech and other generic branded FPV transmitters within the same frequency range.

Lumenier RX5GDR-V2 receiver frequencies

Band	Ch 1	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6	Ch 7	Ch 8
Band 1 A	5865	5845	5825	5805	5785	5765	5745	5725
Band 2 B	5733	5752	5771	5790	5809	5828	5847	5866
Band 3 C	5705	5685	5665	5645	5885	5905	5925	5945
Band 4 D	5740	5760	5780	5800	5820	5840	5860	5880
Band 5 E	5658	5695	5732	5769	5806	5843	5880	5917
Band 6 F	5362	5399	5436	5473	5510	5547	5584	5621

Band 4 D-FS/IRC
Band 5 E-Raceband
Band 6 F-Diatone

Operating Instructions

- Manual A** Manually set frequency for A Receiver.
 Long press "Channels" button to change band. Short press to change channel.
- Manual B** Manually set frequency for B Receiver.
 Long press "Channels" button to change band. Short press to change channel.
- Auto A** Auto search frequency for A Receiver.
 Long press "Channels" button to search active frequencies.
 Short press to cycle through active channels.
- Auto B** Auto search frequency for B Receiver.
 Long press "Channels" button to search active frequencies.
 Short press to cycle through active channels.
- Comp A Auto** Auto search frequencies for A and B Receivers (Diversity Mode).
 Long press "Channels" button to search active frequencies.
 Short press to cycle through active channels.
- Comp A Manual** Manually set frequencies for A and B Receivers (Diversity Mode).
 Long press "Channels" button to change bands.
 Short press to change channels.

Note: The auto search feature may find multiple channels that are close to the transmitting frequency. Make sure to cycle through to the correct channel.



IBCrazy 5.8 GHz 13dBic Pepperbox Antenna (RHCP)
 Item #2743 Manufacturer: Video Aerial Systems
<https://www.getfpv.com/fpv/antennas/ibcrazy-5-8-ghz-13dbic-pepperbox-antenna.html>
 • Gain: 13dbic • Axial ratio: 1.0
 • Beam width: 160 degrees • Beam height: 60 degrees



IBCrazy 5.8GHz 10dBic Crosshair Antenna (RHCP)
 Item #2675 Manufacturer: Video Aerial Systems
<https://www.getfpv.com/fpv/antennas/ibcrazy-5-8-ghz-10dbic-crosshair-antenna-rhpc.html>
 • Gain: 10dbic • Axial Ratio: .98
 • -3db point: +/- 35 degrees • Polarization: RHCP
 • Flight Beamwidth: 115 degrees • Connector type: SMA male



REV	DATE	REVISION DESCRIPTION	DRAWN	APP
7	3-16-18	Replaced 5.8 GHz receiver with Lumenier and IB Crazy antennas as recommended by Jason Howard K6DGN	MF Wright	
6	8-19-16	Re-arranged video inputs, changed LZ camera to 427 MHz.	MF Wright	
5	10-14-15	Changed note that 5.8 GHz antenna is large dish antenna.	MF Wright	
4	10-13-15	Updated drawing numbers.	MF Wright	
3	10-6-15	Corrected drawing numbers.	MF Wright	
2	10-5-15	Added specs and instructions for RC832 receiver.	MF Wright	
1	10-2-15	Added freq info on other A/V units, changed consultant.	MF Wright	
0	10-1-15	initial release	MF Wright	

PARACHUTE MOBILE "In The Air, On The Air"
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Parachute Mobile Communication Systems
Video Receive, Select, and Stream Wiring Diagram

DRAWN	CHK	INDEX	FSCM. NO.	LIMITS UNLESS NOTED
MF WRIGHT				
DESIGN ENGR	TEAM POSITION		DATE	
MF WRIGHT	Video Ops		3-16-18	
NEXT ASSY	USE ON	CONSULTANT	AS DWG NO	REV
		Jason Howard	Sheet 1 of 1	
APPLICATION	TEAM COORDINATOR	R. FENN	SCALE	
			NONE	

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