

# DZM3 Interconnect Wiring Diagrams

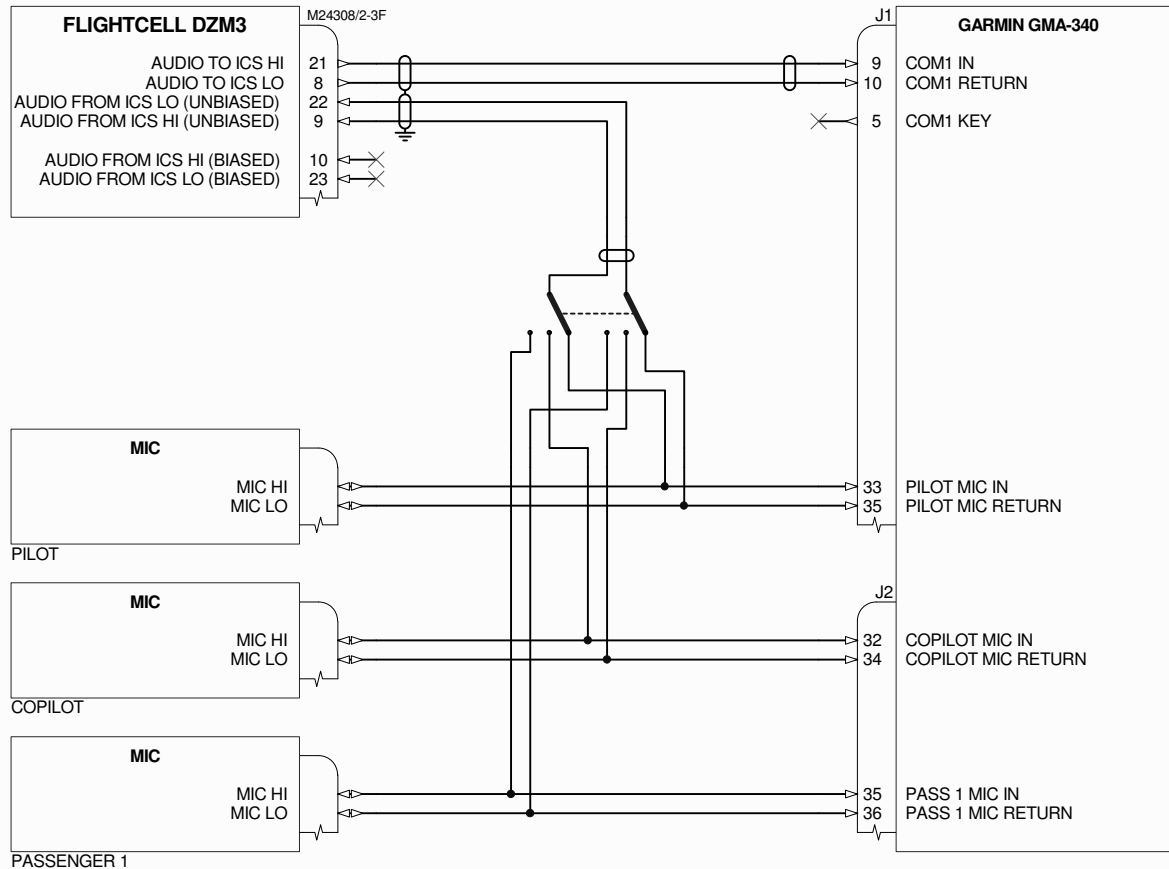
## Direct Microphone ICS Interconnections with GMA-340

Where a dedicated COM port is not available, it is possible to share a COM port with another device. As shown in the drawing, the output of the DZM is connected directly in parallel with a radio. Since the output impedance of the DZM is nominally 600 ohms, this does not apply a significant extra load to the radio output, and the DZM is tolerant of a signal being fed into its output. Therefore any headset that is listening to the COM1 input will also receive audio from the DZM when a satphone/cellular call is taking place.

The mic input to the DZM is taken directly from the microphones (i.e. not via the ICS) using a selector switch, which can be located close to the DZM. As shown, one microphone can be selected at a time; voice from this microphone will be sent both to the DZM and the ICS. Note that the DZM is essentially 'hot mic' whenever a call is taking place, so the operator doesn't need to operate their PTT. Therefore a COM channel can be left selected while a sat/cell call is taking place - if the operator presses their PTT then they will transmit on the radio, but if the PTT is not pressed then their voice is transmitted on the sat/cell call only.

Note that the unbiased DZM input is recommended when connecting to a COM port, but the biased input is preferred when connecting directly to a microphone. For high impedance systems (used on most GA aircraft) the microphones require a bias voltage to activate them; this may be provided by the ICS but the DZM is able to provide its own bias voltage if required.

If the ICS does provide a bias voltage the unbiased microphone connection should be used. However, if the ICS does not provide a bias voltage the biased microphone connection should be used.



**NOTES:**

- ALL POWER CABLES SHOULD BE 22AWG STRANDED UNLESS OTHERWISE NOTED e.g. M22759/34-22-9  
OTHER CABLES SHOULD BE 22AWG STRANDED, SCREENED WHERE INDICATED e.g. M27500/-24SB2T14.
- IT IS RECOMMENDED THAT THE POWER GROUND CONNECTIONS BE RUN
- SYMBOL DESIGNATIONS

- SHIELDED PAIR  
SHIELD TERMINATED TO DC GROUND
- SHIELDED PAIR  
SHIELD FLOATING
- UNIT GROUND



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Product:	Flightcell DZM3		
Sheet:	Direct MIC ICS Interconnections 1 of 1		
Issue:	1.0		
Drawn By:	James Glasgow		
Filename:	Direct MIC Connections.SchDoc		
Date:	19/06/2012 Drawing No: WRL_DZ3_004		
1.0	Document created (C/N FCN0224)	20/06/11	JG
REV	DESCRIPTION	DATE	APPD