

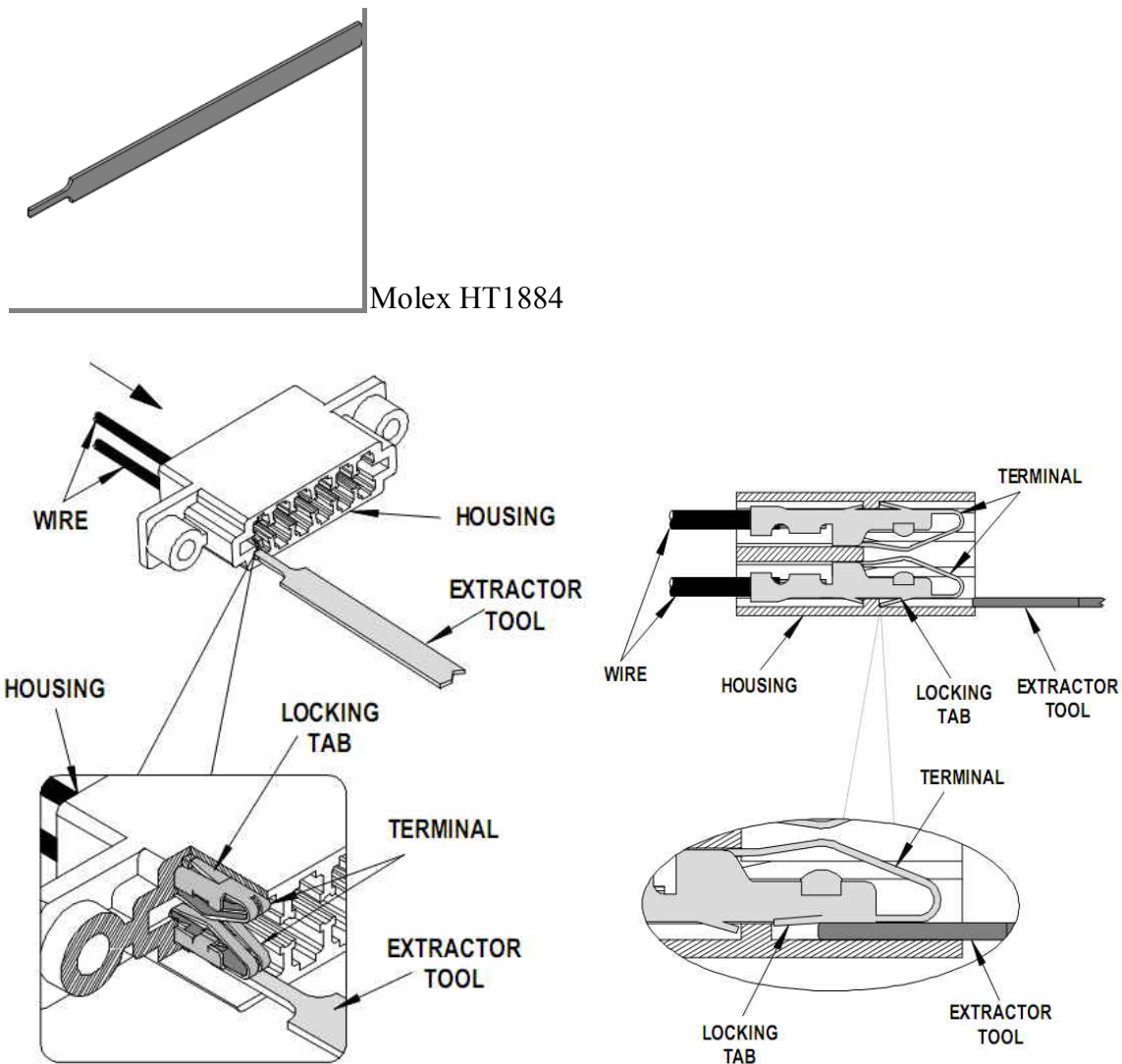
Transitioning PMA6000-Series to PMA7000B

The PMA6000M was produced from 1996 to 2000, and the original units are no longer supportable, due to parts obsolescence.

An airplane equipped with a PMA6000-series (Monaural) can be upgraded to use a PMA7000B by relocating the top connector pins shown in the table below.

A PMA7000B is a direct replacement for the Stereo PMA6000M-S.

The connector uses a Molex terminal, which is extracted with a Molex HT1884 extraction tool.



Top Connector Changes

As many as 14 connections in the PMA6000 top connector may need to be relocated to install the PMA7000B, depending on the number of passenger intercom stations, if a swap switch is installed, etc. In the table below, green represents connections that do not need changing, yellow is a critical change, and gray represents different functionality.

NOTES:

Passenger 1 through 3 of the four passenger microphone jacks can remain unchanged. If a fourth passenger position is used, it must be relocated.

The PMA7000B has cell phone capability, using COM 3. Grounding pin J of the top connector will make COM 3 a cell phone input. If pin L is grounded, the copilot will be on the phone. If pin M is grounded, the passengers will be on the phone. The COM 3 button serves as the pilot's hook switch.

Some PMA6000 units were capable of a push to talk intercom system. This function is not present in the PMA7000B.

NOTE: The copilot headphone ground on Pin C is the PMA7000B Expansion power. This pin MUST BE DISCONNECTED or damage to the PMA7000B may result.

This table shows changes needed to configure a PMA7000B as a monaural replacement.

Top Connector changes

From	To	Function
PMA6000M	PMA7000B	
3	3	Copilot phones hi
C	B	Copilot phones lo
1	11	Passenger Phones Hi
A	N	Passenger Phones Lo
5	5	Passenger Mic Hi
E	E	Passenger Mic Lo
6	6	Passenger Mic Hi
F	F	Passenger Mic Lo
7	7	Passenger Mic Hi
H	H	Passenger Mic Lo
8	4	Passenger Mic Hi
J	D	Passenger Mic Lo
12	V	Soft Mute Inhibit
N	Ground	Soft Mute Inhibit
9	8	Copilot Mic Audio Hi
10	9	Copilot Mic PTT
K	K	Copilot Mic Audio Lo
4	15	Music 1 Hi
D	T	Music 1 Lo
2	13	Music 2 Hi
B	R	Music 2 Lo
11	10	Swap
20	N/C	PAS ICS Key
21	N/C	Copilot ICS Key
22	N/C	Pilot ICS Key
19	N/C	Playback
N/C	L	Copilot Hook Switch
N/C	M	Passenger Hook Switch
N/C	J	Com 3 Duplex

Connector changes
No Changes
MUST change, or damage will result
Changed functions
Color Key

If the installer wants to use the PMA7000B as stereo, the following connections need to be made:

PAM6000	PMA7000B Top Connector	Function
N/C	1	Pilot HP Left
N/C	2	Copilot HP Left
N/C	12	Passenger HP Left
N/C	15	Music 1 Left
N/C	14	Music 2 Left

PS Engineering does not recommend adding a single wire for the added channel. Instead, replace the twisted pair with a twisted triple conductor, to prevent electrical noise.

Bottom Connector Changes

The bottom connector can remain unchanged. However, the PMA7000B does offer two additional unswitched inputs.

Bottom Connector			
PMA6000M		PMA7000B	Function
N/C		U	Unswitched #3
N/C		Y	Unswitched #4
11		22	External Marker (if equipped)
20		20	Remove dropping resistor in 28V installations
14		14	Was COM 3 speaker load. Now Alternate ICS control

If the PMA6000 does not have an internal marker beacon receiver (PMA6000, PMA6000C only), an external marker audio would be connected to Pin 11 of the bottom connector. This can remain, and the AUX button of the PMA7000B will then control the external marker audio. OR, Pin 11 can be relocated to Pin 21, which is controlled by the MKR button on the PMA7000B (Option 2, No Marker, only).

The 15Ω dropping resistor used in 28V aircraft PMA6000 installations can be removed.

The function of Pin 14 was changed from a speaker load for COM 3 (extremely rare situation) to a control line for the Alternate Intercom Mode. Refer to the PMA7000B Installation manual for more information.

Cell Phone input

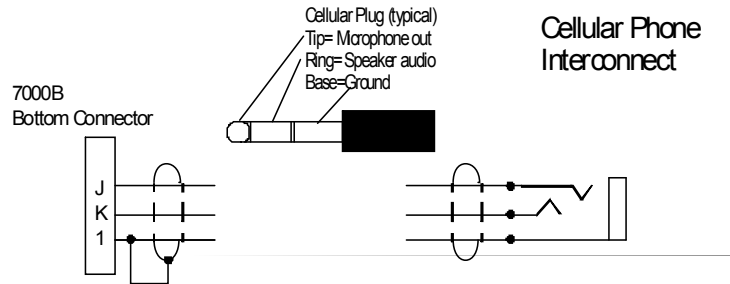
If the installer wants to add cellular telephone, it can be interfaced using the COM 3 input:

PMA6000		PMA7000B Top Connector	Function
J		J	COM 3 Audio Hi
K		K	COM 3 Mic Audio
15		N/C	COM 3 Mic Key

Pin J of the top connector must be grounded to enable the cell phone duplex mode.

A 3/32" cable (PS Part number) or

PS Engineering recommends a 3/32" jack be installed in the aircraft panel as shown:



**For Duplex (cell phone) operation
 Pin J of top connector MUST BE GROUNDED
 This is a typical interconnect
 PS Engineering does not guarantee
 compatability in all cases.**