

# AM8000-UIS (940-00218-00)

## TM8000 UIS Universal Interface

The AM8000-UIS is primarily a 4 Wire E & M board for the TM8000 range of mobile radios. By default, a standard AM8000-UIS board comes configured with the same type of input output configuration as the original A2000-UIS board with a A2000-UIK kit fitted to it. This means that the board has 4 wire 600 Ohm balanced audio lines and isolated E & M (gate & keying) lines with opto and relay.

The info contained here is cursory and advanced info that is only intended to serve as a guide when using one of the initial prototype UIS boards.

### Specifications

<b>Supply Voltage</b>	10.8V to 16V DC
<b>Supply Current</b>	10mA Nominal
<b>LINE OUT Level</b>	-20dBm to +10 dBm
<b>LINE OUT Impedance</b>	600 ohms
<b>LINE IN Level</b>	-20dBm to +10 dBm
<b>LINE IN Impedance</b>	600 ohms
<b>PTT IN</b>	Opto Coupled, Non Polarised, 11 to 50 Volt Input range
<b>GATE OUT</b>	Voltage Free N.O. Relay Contacts. Relay Contacts rated 1A @ 24V dc, or 400mA @ 50V dc
<b>Austel Approval</b>	The <i>AM8000-UIS</i> is <b>Not</b> Austel Approved
<b>PTT IN DIR</b>	Active Low (Pull to Ground)
<b>GATE OUT DIR</b>	Active Low, Open Collector, 50mA max.
<b>EXT_GPIO3 to 7</b>	Active Low (Pull to Ground) inputs or Active Low outputs.

Signals available on the I/O Signals Matrix:

1	LINE OUT	
2	/GATE OUT1	
3	GROUND	
4	/PTT IN1	
5	LINE IN1	
6	LINE IN2	
7	/PTT IN2	
8	/GATE OUT2	
9	LINE OUT2	
10	13V8_SW *	
11	AUX_MIC_AUD *	
12	RSSI *	
13	LINEIN_UNBAL	Direct un-balanced audio output. Output Z around 100 Ohms. Levels not know currently.
14	LINEOUT_UNBAL	Direct un-balanced audio input. Input Z around 50 kOhms. Levels not know currently.
15	GATE_OUT_DIR	Open Collector output (from a BC817-25).
16	PTT_DIRECT	Active Low pull to ground. Floats high to 3.3V. TTL 0 to 5V input is OK.
17	EXT_GPIO1	TTL 3.3V via a 470 Ohm resistor. Active Low only currently. Bidirectional.
18	EXT_GPIO2	TTL 3.3V via a 470 Ohm resistor. Active Low only currently. Bidirectional.
19	EXT_GPIO3	TTL 3.3V via a 470 Ohm resistor. Active Low only currently. Bidirectional.
20	EXT_GPIO4	TTL 3.3V via a 470 Ohm resistor. Active Low only currently. Bidirectional.
21	EXT_GPIO5	TTL 3.3V via a 470 Ohm resistor. Active Low only currently. Bidirectional.
22	TD	Currently only communicates with UIS PIC18LFxxx
23	RD	Currently only communicates with UIS PIC18LFxxx
24	RTS	Not available
25	CTS	Not available

Signals marked \* have the same I/O spec as the direct signals from the TM8000 options connector (internal?)



