



ASPIRE-100 MAINTENANCE INTERFACE PANEL

QUICK REFERENCE GUIDE
(version 2.0)



Maintenance Panel Overview:

The Aspire-100 Maintenance Interface Panel (MIP) is a rack mounted unit with the ability to break out every interface available on the *Honeywell* Aspire-100 system. The unit fits into a standard 19” rack with a 3RU height. It gets powered by a built-in 24VDC power supply capable of driving 5 amps.

Equipment Part Numbers:

Description	Part Number
Aspire-100 MIP	DB10-1391-01

Incorporated Features:

Option	Included
ARINC 429 transmit	2 paralleled channels
Internal GPS	Yes
Internal compass	Yes
CEPT ports	CEPT-E1
ISDN ports	ISDN 1, ISDN 2
Ethernet ports	ETH 1, ETH 2, ETH 3
FX ports	FXS 1, FXS 2
RS232 ports	No
Keyed TX disable	No
Front I/O connector	Yes
External LRU power input	No

User Interface Firmware:

The Maintenance Interface Panel runs using our proprietary firmware package named *Obsidian*. Consult the *Obsidian* user’s manual for specific information on using this panel’s touchscreen interface.

Default Power Button Configuration:

Power Button Name:	Function:
CSU	External power to J3 - pin 37 External power to J3 - pin 45 External power to J3 - pin 46 External power to J3 - pin 53
	External power to J101 - pin 28 External power to J101 - pin 31
NDU	External power to J4 - pin 4 External power to J4 - pin 5

Default Discrete Out Button Configuration:

Discrete Out Number:	Pin:	Name:	Function:	Icon Image	Icon State
1	J3 - pin 22	TX MUTE	“DISABLED” = Grounded “ENABLED” = Open	Mute	Low
2	J3 - pin 14	W.O.W.	“ON GROUND” = Grounded “IN AIR” = Open	WOW	Low
3	J3 - pin 7	WIFI	“ENABLED” = Grounded “DISABLED” = Open	WiFi	Low
4	J3 - pin 2	DISCRETE 4	“GROUNDED” = Grounded “OPEN” = Open	X	X
5	J3 - pin 8	DISCRETE 5	“GROUNDED” = Grounded “OPEN” = Open	X	X
6	J3 - pin 24	DISCRETE 6	“GROUNDED” = Grounded “OPEN” = Open	X	X
7	J3 - pin 4	DISCRETE 7	“GROUNDED” = Grounded “OPEN” = Open	X	X
8	J3 - pin 9	DISCRETE 8	“GROUNDED” = Grounded “OPEN” = Open	X	X
9	J3 - pin 5	DISCRETE 9	“GROUNDED” = Grounded “OPEN” = Open	X	X
10	J3 – pin 6	WIFI CERT	“CERTIFIED” = Grounded “DISABLED” = Open	X	X
11	J3 – pin 1	DISCRETE 11	“GROUNDED” = Grounded “OPEN” = Open	X	X
12	J3 – pin 15	UNIT RESET	“RESETTING” = Grounded “NORMAL OP” = Open	X	X

Default Discrete In Button Configuration:

Discrete In Number:	Pin:	Name:	Function:	Icon Image	Icon State
1	J1 - pin 10	DISCRETE 1	“GROUNDED” = Grounded “OPEN” = Open	X	X
2	J1 - pin 9	DISCRETE 2	“GROUNDED” = Grounded “OPEN” = Open	X	X
3	J1 - pin 4	DISCRETE 3	“GROUNDED” = Grounded “OPEN” = Open	X	X
4	J1 - pin 8	DISCRETE 4	“GROUNDED” = Grounded “OPEN” = Open	X	X
5	J1 - pin 3	DISCRETE 5	“GROUNDED” = Grounded “OPEN” = Open	X	X
6	J1 - pin 14	DISCRETE 6	“GROUNDED” = Grounded “OPEN” = Open	X	X
7	J1 - pin 2	FAULT	“NORMAL” = Grounded “FAULT” = Open	Fault	High
8	J1 - pin 7	SATCOM	“AVAILABLE” = Grounded “NOT AVAIL” = Open	Data	Low

Panel Pinout Overview:

The next sections show all of the pinouts for the Maintenance Interface Panel. Items highlighted in yellow indicate a direct pass-through to the J101 connector. The pin designations are configurable through a loadable file; therefore, the pins may be used for any actual signals as desired. The ones listed here are suggested or named by default. Each signal must be below a maximum of 1 ampere each.

Panel J1 Connector Pinouts:

J1, 57 pin female CPC TE Connectivity, P/N: 1-796329-1			
<u>Mates With:</u> TE Connectivity, P/N: 206437-1 Pin P/N: M39029/64-369 pins			
<u>Backshell:</u> TE Connectivity, P/N: 182930-1			
Pin 1	No Connection	Pin 21	No Connection
Pin 2	Discrete 7 Input (from CSU)	Pin 22	Spare (J101, pin 9)
Pin 3	Discrete 5 Input (from CSU)	Pin 23	Ground
Pin 4	Discrete 3 Input (from CSU)	Pin 24	Spare (J101, pin 8)
Pin 5	No Connection	Pin 25	Spare (J101, pin 3)
Pin 6	No Connection	Pin 26	Forward ISDN 2 Port, Pin 4
Pin 7	Discrete 8 Input (from CSU)	Pin 27	Forward ISDN 1 Port, Pin 4
Pin 8	Discrete 4 Input (from CSU)	Pin 28	No Connection
Pin 9	Discrete 2 Input (from CSU)	Pin 29	No Connection
Pin 10	Discrete 1 Input (from CSU)	Pin 30	Ground
Pin 11	No Connection	Pin 31	Ground
Pin 12	No Connection	Pin 32	Spare (J101, pin 10)
Pin 13	No Connection	Pin 33	Spare (J101, pin 4)
Pin 14	Discrete 6 Input (from CSU)	Pin 34	Forward ISDN 2 Port, Pin 6
Pin 15	Spare (J101, pin 5)	Pin 35	Forward ISDN 1 Port, Pin 6
Pin 16	Spare (J101, pin 2)	Pin 36	No Connection

J1, 57 pin female CPC TE Connectivity, P/N: 1-796329-1			
Mates With: TE Connectivity, P/N: 206437-1 Pin P/N: M39029/64-369 pins			
Backshell: TE Connectivity, P/N: 182930-1			
Pin 17	Spare (J101, pin 17)	Pin 37	No Connection
Pin 18	Forward ISDN 2 Port, Pin 5	Pin 38	Forward FXS 2 Port, Pin 2
Pin 19	Forward ISDN 1 Port, Pin 5	Pin 39	Forward FXS 2 Port, Pin 3
Pin 20	No Connection	Pin 40	No Connection
Pin 41	No Connection	Pin 49	Forward CEPT-E1 1 Port, Pin 1
Pin 42	Forward ISDN 2 Port, Pin 3	Pin 50	Forward CEPT-E1 1 Port, Pin 2
Pin 43	Forward ISDN 1 Port, Pin 3	Pin 51	Forward CEPT-E1 1 Port, Pin 6
Pin 44	No Connection	Pin 52	No Connection
Pin 45	No Connection	Pin 53	No Connection
Pin 46	Forward FXS 1 Port, Pin 3	Pin 54	Forward FXS 1 Port, Pin 2
Pin 47	No Connection	Pin 55	Forward CEPT-E1 1 Port, Pin 3
Pin 48	No Connection	Pin 56	No Connection
		Pin 57	No Connection

Panel J2 Connector Pinouts:

J2, 28 pin female CPC TE Connectivity, P/N: 206038-1			
Mates With: TE Connectivity, P/N: 206039-1 Pin P/N: M39029/64-369 pins			
Backshell: TE Connectivity, P/N: 182661-1			
Pin 1	User modem 2 CTS (J101, pin 50)	Pin 12	FW HS 1 HS (J101, pin 41)
Pin 2	Spare (J101, pin 55)	Pin 13	FW HS 1 Rx+ (J101, pin 54)
Pin 3	FW HS 1 RI (J101, pin 48)	Pin 14	FW HS 1 Tx+ (J101, pin 53)

J2, 28 pin female CPC TE Connectivity, P/N: 206038-1 Mates With: TE Connectivity, P/N: 206039-1 Pin P/N: M39029/64-369 pins Backshell: TE Connectivity, P/N: 182661-1			
Pin 4	User modem 2 RTS (J101, pin 42)	Pin 15	User modem 2 DCD (J101, pin 12)
Pin 5	User modem 2 Tx (J101, pin 49)	Pin 16	Ground
Pin 6	User modem 2 DTR (J101, pin 51)	Pin 17	Ground
Pin 7	Spare (J101, pin 40)	Pin 18	Ground
Pin 8	FW HS 1 RX- (J101, pin 47)	Pin 19	Ground
Pin 9	User modem 2 DSR (J101, pin 35)	Pin 20	FW HS 1 Tx- (J101, pin 57)
Pin 10	Spare (J101, pin 43)	Pin 21	User modem 1 DSR (J101, pin 20)
Pin 11	Ground	Pin 22	User modem 1 RX (J101, pin 26)
Pin 23	User modem 1 CTS (J101, pin 27)	Pin 26	User modem 1 DCD (J101, pin 18)
Pin 24	User modem 1 RI (J101, pin 34)	Pin 27	User modem 1 RTS (J101, pin 11)
Pin 25	User modem 1 DTR (J101, pin 12)	Pin 28	User modem 1 Tx (J101, pin 10)

Panel J3 Connector Pinouts:

J3, 63 pin male CPC TE Connectivity, P/N: 206455-2 Mates With: TE Connectivity, P/N: 205842-1 Pin P/N: M39029/63-368 pins Backshell: TE Connectivity, P/N: 182930-1			
Pin 1	Discrete 11 Switched Lo (to CSU)	Pin 18	No Connection
Pin 2	Discrete 4 Switched Lo (to CSU)	Pin 19	No Connection
Pin 3	No Connection	Pin 20	ARINC 429 Rx - 1B (not available on this unit)
Pin 4	Discrete 7 Switched Lo (to CSU)	Pin 21	Ground
Pin 5	Discrete 9 Switched Lo (to CSU)	Pin 22	Discrete 1 Switched Lo (to CSU)

<p style="text-align: center;">J3, 63 pin male CPC TE Connectivity, P/N: 206455-2</p> <p style="text-align: center;"><u>Mates With:</u> TE Connectivity, P/N: 205842-1 Pin P/N: M39029/63-368 pins</p> <p style="text-align: center;"><u>Backshell:</u> TE Connectivity, P/N: 182930-1</p>			
Pin 6	Discrete 10 Switched Lo (to CSU)	Pin 23	Ground
Pin 7	Discrete 3 Switched Lo (to CSU)	Pin 24	Discrete 6 Switched Lo (to CSU)
Pin 8	Discrete 5 Switched Lo (to CSU)	Pin 25	No Connection
Pin 9	Discrete 8 Switched Lo (to CSU)	Pin 26	No Connection
Pin 10	ARINC 429 Tx - 1A (to CSU)	Pin 27	No Connection
Pin 11	ARINC 429 Tx - 1B (to CSU)	Pin 28	Ground
Pin 12	ARINC 429 Rx - 1A (not available on this unit)	Pin 29	Ground
Pin 13	Ground	Pin 30	Ground
Pin 14	Discrete 2 Switched Lo (to CSU)	Pin 31	Ground
Pin 15	Discrete 12 Switched Lo (to CSU)	Pin 32	Ground
Pin 16	No Connection	Pin 33	Ground
Pin 17	No Connection	Pin 34	Ground
Pin 35	No Connection	Pin 50	Ground
Pin 36	No Connection	Pin 51	FW HS 2 Rx+ (J101, pin 15)
Pin 37	24VDC Switched Power (CSU)	Pin 52	FW HS 2 Tx+ (J101, pin 44)
Pin 38	Ground	Pin 53	24VDC Switched Power (CSU)
Pin 39	Ground	Pin 54	Spare (J101, pin 16)
Pin 40	Ground	Pin 55	Spare (J101, pin 24)
Pin 41	Ground	Pin 56	Spare (J101, pin 7)
Pin 42	Ground	Pin 57	FW HS 2 HS (J101, pin 20)
Pin 43	Ground	Pin 58	Spare (J101, pin 52)

<p>J3, 63 pin male CPC TE Connectivity, P/N: 206455-2</p> <p><u>Mates With:</u> TE Connectivity, P/N: 205842-1 Pin P/N: M39029/63-368 pins</p> <p><u>Backshell:</u> TE Connectivity, P/N: 182930-1</p>			
Pin 44	FW HS 2 Tx- (J101, pin 36)	Pin 59	FW HS 2 Rx- (J101, pin 56)
Pin 45	24VDC Switched Power (CSU)	Pin 60	Spare (J101, pin 15)
Pin 46	24VDC Switched Power (CSU)	Pin 61	Spare (J101, pin 14)
Pin 47	Ground	Pin 62	Spare (J101, pin 22)
Pin 48	Spare (J101, pin 32)	Pin 63	FW HS 2 RI (J101, pin 46)
Pin 49	Spare (J101, pin 1)		

Panel J4 Connector Pinouts:

<p>J4, 9 pin male CPC TE Connectivity, P/N: 206486-1</p> <p><u>Mates With:</u> TE Connectivity, P/N: 206485-1 Pin P/N: M39029/63-368 pins</p> <p><u>Backshell:</u> TE Connectivity, P/N: 1-206062-6</p>			
Pin 1	No Connection	Pin 5	24VDC Switched Power (NDU)
Pin 2	No Connection	Pin 6	Ground
Pin 3	Ground	Pin 7	No Connection
Pin 4	24VDC Switched Power (NDU)	Pin 8	No Connection
		Pin 9	Ground

Panel J101 Connector Pinouts:

J101, 57 pin female CPC TE Connectivity, P/N: 1-796329-1			
<u>Mates With:</u> TE Connectivity, P/N: 206437-1 Pin P/N: M39029/64-369 pins			
<u>Backshell:</u> TE Connectivity, P/N: 182930-1			
Pin 1	Spare	Pin 27	User modem 1, CTS
Pin 2	Spare	Pin 28	28VDC switched
Pin 3	Spare	Pin 29	Ground
Pin 4	Spare	Pin 30	Ground
Pin 5	Spare	Pin 31	28VDC switched
Pin 6	Spare	Pin 32	Spare
Pin 7	Spare	Pin 33	Spare
Pin 8	Spare	Pin 34	Spare
Pin 9	Spare	Pin 35	User modem 2, DSR
Pin 10	Spare	Pin 36	FW handset 2, TX-
Pin 11	User modem 1, RTS	Pin 37	Ground
Pin 12	User modem 1, DTR	Pin 38	Ground
Pin 13	User modem 2, DCD	Pin 39	FW handset 2, HS
Pin 14	Spare	Pin 40	Spare
Pin 15	Spare	Pin 41	FW handset 1, HS
Pin 16	Spare	Pin 42	User modem 2, RTS
Pin 17	Spare	Pin 43	User modem 2, RX
Pin 18	User modem 1, DCD	Pin 44	FW handset 2, TX+
Pin 19	User modem 1, TX	Pin 45	FW handset 2, RX+
Pin 20	User modem 1, DSR	Pin 46	FW handset 2, CI

<p>J101, 57 pin female CPC TE Connectivity, P/N: 1-796329-1</p> <p><u>Mates With:</u> TE Connectivity, P/N: 206437-1 Pin P/N: M39029/64-369 pins</p> <p><u>Backshell:</u> TE Connectivity, P/N: 182930-1</p>			
Pin 21	Ground	Pin 47	FW handset 1, RX-
Pin 22	Ground	Pin 48	FW handset 1, CI
Pin 23	Ground	Pin 49	User modem 2, TX
Pin 24	User modem 1, RI	Pin 50	User modem 2, CTS
Pin 25	Spare	Pin 51	User modem 2, DTR
Pin 26	User modem 1, RX	Pin 52	Spare
Pin 53	FW handset 1, TX+	Pin 55	User modem 2, RI
Pin 54	FW handset 1, RX+	Pin 56	FW handset 2, RX-
		Pin 57	FW handset 1, TX-

Contact Us:

Please feel free to contact us if you need any additional help with the operation of this device.

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