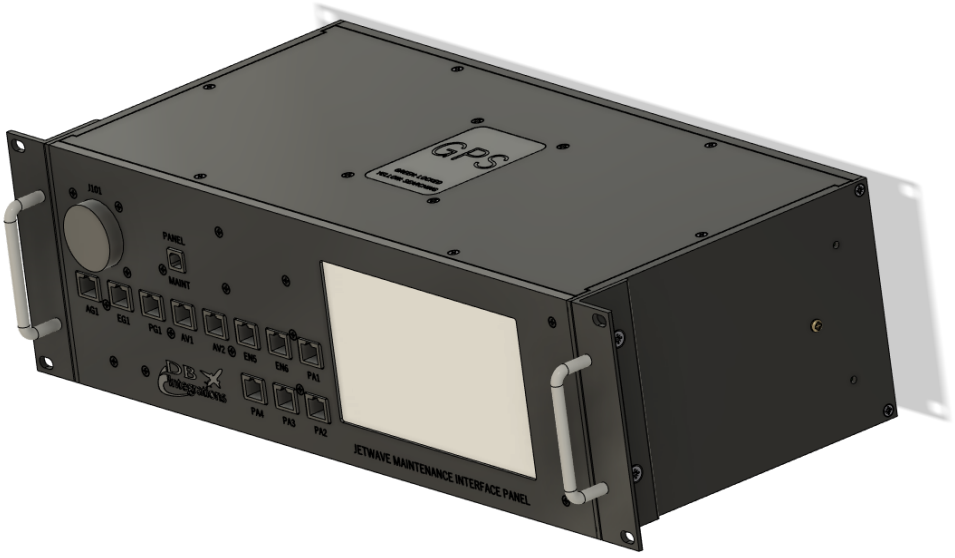
JETWAVE MAINTENANCE INTERFACE PANEL

QUICK REFERENCE GUIDE

(version 1.0)



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Maintenance Panel Overview:

The Jetwave Maintenance Interface Panel (MIP) is a rack mounted unit with the ability to break out every interface available on the *Honeywell* Jetwave system. The unit fits into a standard 19" rack with a 3RU height. It gets powered by 10-30VDC. Maximum current draw is 6 watts. **Do not exceed 30VDC or damage to the unit will occur.**

Equipment Part Numbers:

Description	Part Number
Jetwave MIP	DB10-1311-01

Incorporated Features:

Option	Included
ARINC 429 transmit	2 paralleled channels
Internal GPS	Yes
Internal compass	Yes
CEPT ports	No
ISDN ports	No
Ethernet ports	AG1, EG1, PG1, AV1, AV2, EN5, EN6, PA1, PA2, PA3, PA4
Additional Ethernet ports (through J101)	EN7, EN8, AV3
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 *Topaz*. Consult the *Topaz* user's manual for specific information on using this panel's touchscreen interface.

WOW Discrete:

The MIP accepts a weight on wheels (WOW) signal from the aircraft. It assumes that the aircraft is on the ground when pin 4 of the J1 connector is grounded.

- If the WOW button is set to automatic, the MIP will sink to ground or open pin 14 of the J3 connector as received from the aircraft.
- If the WOW button is set to override, it will either sink to ground or open pin 14 of the J3 connector depending on how the WOW SWAP button is depressed.

The MIP has the ability to save the WOW settings and employ them on subsequent startups.

ARINC 429 Discrete:

The MIP has a discrete that can control an external relay, so the user can switch between the aircraft's ARINC 429 sources or the panel's internal calculations. Pin 24 of the J3 connector will sink to ground when the user selects to use the panel's internal ARINC 429 calculations. This can then control a relay that would be relaxed in normal flight mode. This discrete is capable of sinking up to 350mA.

Default Discrete Out Button Configuration:

Discrete Out Number:	Pin:	Name:	Function:	Icon Image	Icon Green State
1	J3 - pin 22	TX CONTROL	"(TX MUTED)" = Grounded "(ENABLED)" = Open	Tx mute	High
2	J3 - pin 14	W.O.W.	"(ON GROUND)" = Grounded "(IN AIR)" = Open	WOW	Both
3	J3 - pin 7	GND TX CTL	"(ENABLED)" = Grounded "(DISABLED)" = Open	TX mute	Low
4	J3 - pin 2	PUBLIC SRVC	"(DISABLED)" = Grounded "(ENABLED)" = Open	RJ45	High
5	J3 - pin 8	FRONT PANEL	"(ENABLED)" = Grounded "(DISABLED)" = Open	RJ45	Low
6	J3 - pin 24	Available for future use	Available for future use	X	X
7	J3 - pin 4	Available for future use	Available for future use	X	X
8	J3 - pin 9	Available for future use	Available for future use	X	X
9	J3 - pin 5	ARINC 429	"(PANEL)" = Grounded "(EXTERNAL)" = Open	Data	Both
10	J3 - pin 6	Available for future use	Available for future use	X	X
11	J3 - pin 1	DATA LOAD	"(LOADING)" = Grounded "(NORMAL OP)" = Open	X	X
12	J3 - pin 15	MODEM RESET	"(RESETTING)" = Grounded "(NORMAL OP)" = Open	X	X

Default Discrete In Button Configuration:

Discrete In Number:	Pin:	Name:	Function:	Icon Image	Icon Active State
1	J1 - pin 10	DATA AVAIL	“(LOGGED ON)” = Grounded “(NOT AVAIL)” = Open	Data	Low
2	J1 - pin 9	SYS AVAIL	“(AVAILABLE” = Grounded “(NOT AVAIL)” = Open	System	Low
3	J1 - pin 4	A/C W.O.W.	“(ON GROUND)” = Grounded “(IN AIR)” = Open	WOW	Low
4	J1 - pin 8	Available for future use	Available for future use	X	X
5	J1 - pin 3	Available for future use	Available for future use	X	X
6	J1 - pin 14	Available for future use	Available for future use	X	X

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

Mates With:
TE Connectivity, P/N: 206437-1
Pin P/N: M39029/64-369 pins

Backshell:
TE Connectivity, P/N: 182930-1

Pin 1	No Connection	Pin 21	No Connection
Pin 2	No Connection	Pin 22	KANDU RS422 RX B (J101, pin 9)
Pin 3	No Connection	Pin 23	Ground
Pin 4	Discrete 3 Input (WOW from aircraft)	Pin 24	Ethernet EN8, TX+ (J101, pin 8)
Pin 5	No Connection	Pin 25	Ethernet EN8, TX- (J101, pin 3)
Pin 6	No Connection	Pin 26	No Connection
Pin 7	No Connection	Pin 27	No Connection
Pin 8	No Connection	Pin 28	No Connection
Pin 9	Discrete 2 Input (SYS AVAIL from MODMAN)	Pin 29	No Connection
Pin 10	Discrete 1 Input (DATA AVAIL from MODMAN)	Pin 30	Ground
Pin 11	No Connection	Pin 31	Ground
Pin 12	No Connection	Pin 32	Ethernet EN8, RX+ (J101, pin 10)
Pin 13	No Connection	Pin 33	Ethernet EN8, RX- (J101, pin 4)
Pin 14	No Connection	Pin 34	No Connection
Pin 15	KANDU RS422 TX A (J101, pin 25)	Pin 35	No Connection
Pin 16	KANDU RS422 TX B (J101, pin 2)	Pin 36	No Connection
Pin 17	KANDU RS422 RX A (J101, pin 17)	Pin 37	No Connection
Pin 18	No Connection	Pin 38	No Connection
Pin 19	No Connection	Pin 39	No Connection
Pin 20	No Connection	Pin 40	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 41	No Connection	Pin 49	Ethernet PA4, TX+	(PA4 port pin 1)
Pin 42	No Connection	Pin 50	Ethernet PA4, TX-	(PA4 port pin 2)
Pin 43	No Connection	Pin 51	Ethernet PA4, RX-	(PA4 port pin 6)
Pin 44	No Connection	Pin 52	Ethernet PA3, TX-	(PA3 port pin 2)
Pin 45	No Connection	Pin 53	Ethernet PA3, RX-	(PA3 port pin 6)
Pin 46	No Connection	Pin 54	No Connection	
Pin 47	No Connection	Pin 55	Ethernet PA4, RX+	(PA4 port pin 3)
Pin 48	No Connection	Pin 56	Ethernet PA3, TX+	(PA3 port pin 1)
		Pin 57	Ethernet PA3, RX+	(PA3 port pin 3)

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	No Connection	Pin 18	No Connection
Pin 2	Discrete 4 Switched Lo (PUBLIC SERVCE to MODMAN)	Pin 19	No Connection
Pin 3	No Connection	Pin 20	No Connection
Pin 4	No Connection	Pin 21	Ground
Pin 5	Discrete 9 Switched Lo (DATA LOAD ENABLE to MODMAN)	Pin 22	Discrete 1 Switched Lo (TX CONTROL to KANDU)
Pin 6	Discrete 10 Switched Lo (RESET to MODMAN)	Pin 23	Ground
Pin 7	Discrete 3 Switched Lo (GROUND TX CONTROL to MODMAN)	Pin 24	Discrete 6 Switched Lo (ARINC 429 RELAY to MODMAN)
Pin 8	Discrete 5 Switched Lo (FRONT PANEL ENABLE to MODMAN)	Pin 25	No Connection
Pin 9	No Connection	Pin 26	No Connection

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 10	ARINC 429 Tx - 1A (to MODMAN)	Pin 27	No Connection
Pin 11	ARINC 429 Tx - 1B (to MODMAN)	Pin 28	Ground
Pin 12	No Connection	Pin 29	Ground
Pin 13	Ground	Pin 30	Ground
Pin 14	Discrete 2 Switched Lo (WOW to MODMAN)	Pin 31	Ground
Pin 15	No Connection	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	Ethernet EN7, RX+ (J101, pin 45)
Pin 37	5-30VDC input power	Pin 52	Spare (J101, pin 44)
Pin 38	Ground	Pin 53	5-30VDC input power
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	Ethernet EN7, TX+ (J101, pin 39)
Pin 43	Ground	Pin 58	Spare (J101, pin 52)
Pin 44	Spare (J101, pin 36)	Pin 59	Ethernet EN7, RX- (J101, pin 56)
Pin 45	5-30VDC input power	Pin 60	Ethernet AV3, TX+ (J101, pIn 15)
Pin 46	5-30VDC input power	Pin 61	Ethernet AV3, TX- (J101, pin 14)
Pin 47	Ground	Pin 62	Ethernet AV3, RX- (J101, pIn 33)
Pin 48	Ethernet AV3, RX+ (J101, pIn 32)	Pin 63	Ethernet EN7, TX- (J101, pin 46)
Pin 49	Spare (J101, pin 1)		

Panel J101 Connector Pinouts:

J101, 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 1	Spare, J3 pin 49	Pin 27	No connection
Pin 2	KANDU RS422 TX B (actual LRU signal)	Pin 28	No connection
Pin 3	Ethernet EN8, TX- (actual LRU signal)	Pin 29	Ground
Pin 4	Ethernet EN8, RX- (actual LRU signal)	Pin 30	Ground
Pin 5	Spare, J3 pin 12	Pin 31	No connection
Pin 6	Spare, J3 pin 20	Pin 32	Ethernet AV3, RX+ (actual LRU signal)
Pin 7	Spare, J3 pin 56	Pin 33	Ethernet AV3, RX- (actual LRU signal)
Pin 8	Ethernet EN8, TX+ (actual LRU signal)	Pin 34	No connection
Pin 9	KANDU RS422 RX B (actual LRU signal)	Pin 35	No connection
Pin 10	Ethernet EN8, RX+ (actual LRU signal)	Pin 36	Spare, J3 pin 44
Pin 11	No connection	Pin 37	Ground
Pin 12	No connection	Pin 38	Ground
Pin 13	No connection	Pin 39	Ethernet EN7, TX+ (actual LRU signal)
Pin 14	Ethernet AV3, TX- (actual LRU signal)	Pin 40	No connection
Pin 15	Ethernet AV3, TX+ (actual LRU signal)	Pin 41	No connection
Pin 16	No connection	Pin 42	No connection
Pin 17	KANDU RS422 RX A (actual LRU signal)	Pin 43	No connection
Pin 18	No connection	Pin 44	Spare, J3 pin 52
Pin 19	No connection	Pin 45	Ethernet EN7, RX+ (actual LRU signal)
Pin 20	No connection	Pin 46	Ethernet EN7, TX- (actual LRU signal)
Pin 21	Ground	Pin 47	No connection
Pin 22	Ground	Pin 48	No connection
Pin 23	Ground	Pin 49	No connection
Pin 24	Spare, J3 pin 55	Pin 50	No connection
Pin 25	KANDU RS422 TX A (actual LRU signal)	Pin 51	No connection
Pin 26	No connection	Pin 52	Spare, J3 pin 58

J101, 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 53	No connection	Pin 55	No connection
Pin 54	No connection	Pin 56	Ethernet EN7, RX- (actual LRU signal)
		Pin 57	No connection

Contact Us:

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

DB Integrations, LLC
3405 Airport Road
Allentown, PA 18109

Phone: (610) 443-0201
Fax: (732) 486-0211

Email: support@dbiaero.com
Web: www.dbiaero.com