

# InfoWave Command Set

Version : C5

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## Introduction:

The following tables (Tables 1 to 4) list the commands and command responses for InfoWave. You can issue these commands from a terminal emulation program, such as HyperTerminal, to perform various tasks.

There are two response modes, set by WME command. The two modes are numerical response mode, which is intended for programmers to use, and the text response mode, which is for ordinary users.

## Command List:

Command	Description
WMAx	Set up the auto channel change function. 0= disable , 1=enable.
WMBx	Set up the default baud rate. x=1 : 115200 , 2 : 57600 , 3 : 38400 , 4 : 19200 , 5 : 9600.
WMCx	Set up the scan channel function. 0= disable , 1=enable.
WMD	Disconnect the radio link established previously.
WMEx	Set up echo and response function. x= 'A' ~ 'P'. For detailed definition, see Table 2.
WMFxxxx	Set up the maximum frame length. xxxx must be at most a 4-digit decimal number and ranging from 1 to 1024.
WMHx	Set up the RF channel .x=0~9 .This command will disable both scan channel and auto channel change function .
WMIxxxxxx	Set up the group identification code. xxxxxx must be exactly a 6-digit hexadecimal number. The group ID is used to ensure that each connection within the group can be created successfully only if the group ID is the same.
WMJxxx...	Change the identification name to xxx.... The length of xxx... cannot exceed 32 letters.
WML	List current setting. The format is as follows: Version=WAVE85.VB2 Date=03-07-1997 PN=B386A45E5F670D4848BECE1A1A917D9C ID=010203 My Address=2 Maximum Frame Length=512 Echo=On Response=On Scan Channel=On Auto Channel Change=On Current RF Channel=0

	Type of RS232 Port=DCE Current Baud Rate=115200 Default Baud Rate=115200 Wireless Link=Disconnected Identification Name=INNOMEDIA TECHNOLOGY INC .
WMMxxx	Set up my address. xxx must be at most a 3-digit decimal number and ranging from 1 to 255.
WMN	From command mode return to data mode.
WMOxxx...	Set up the partner PN code when creating wireless link. xxx... must be exactly a 32-digit hexadecimal number.
WMPxxx...	Set up own PN codes. xxx... must be exactly a 32-digit hexadecimal number.
WMSxxx	Create a radio link with the partner addressed by xxx. Xxx must be at most a 3-digit decimal number and ranging from 1 to 255. After establishing the link, the async. interface will enter data transmission mode until receiving ESCAPE sequence. The ESCAPE sequence consists of three contiguous ' ' characters and a <CR>. After the reception of ESCAPE sequence, the async. interface will re-enter into command mode.
WM&Bx	Set up the both idle time constant .x=1~255 minutes , If x=0 the BOTH_IDLE timer will be disable .
WM&Cx	Set up the create link time constant .x=1~255 second , If x=0 the CREATE_LINK timer will be disable .
WM&Wx	Set up the wakeup time constant .x=1~255 minutes ,If x=0 the WAKEUP timer will be disable .
WM&0	Restore the default setting .
followed by <CR> key	From data mode escape to command mode. A delay of 10 ms is needed between the return and any following data input.

Notice :

1. The command could be entered in low or upper case.
2. The timing of Escape sequence is shown below :  
'|' ← t1 → '|' ← t1 → '|' ← t2 → <cr> ← t3 → 'WM command'

t1 < 500 ms

t2 < 800 ms

50 ms < t3

Table 1. The Command Set Summary Used by the Asynchronous Interface

**Various WMEx Commands:**

	Save the WMEx Setting to EEPROM	Echo	Response or not	0: Text Response 1: Numerical Response
WMEA	0	0	0	-
WMEB	0	0	1	0
WMEC	0	0	1	1
WMED	0	1	0	-
WMEE	0	1	0	-
WMEF	0	1	1	0
WMEG	0	1	1	1
WMEH	1	0	0	-
WMEI	1	0	0	-
WMEJ	1	0	1	0
WMEK	1	0	1	1
WMEL	1	1	0	-
WMEM	1	1	0	-
WMEN	1	1	1	0
WMEO	1	1	1	1
WMEP	restore previous setting			

Table 2. The Definition of WME Command  
1 = Enable , 0 = Disable

**Numerical Response of WML Commands:**

	Length (byte)	Type
Version	12	ASCII
Date	4	Hex
Name	32	ASCII
PN code	16	Hex
ID	3	Hex
My Address	1	Hex
Max frame length	2	Hex
Baud rate	1	ASCII
Default baud rate	1	ASCII
Channel number	1	Hex
Flag1	1	Hex
Flag2	1	Hex

Flag1:  
 Bit 0: numerical response  
 Bit 1: response control  
 Bit 2: echo control  
 Bit 3:save to EEPROM  
 Bit 4:scan channel enable  
 Bit 5:auto channel change enable

Flag2:  
 Bit 0: during RF connection  
 Bit 1: async port type 1 :DTE ,0: DCE

Table 3. The Data Structure of Numerical Response of WML Command

**Command Responses:**

	Command	Condition	Numerical Response	Text Response
1	WMA		“x”	“x” “OK”
	WMAx	Disconnected	“0”	“OK”
	WMAx	Connected	“N”	“Can not set parameter during radio connection.” “OK”
2	WMB		“x”	“x” “OK”
	WMBx	Disconnected	“0”	“OK”
	WMBx	Connected	“N”	“Can not set parameter during radio connection.” “OK”
3	WMC		“x”	“x” “OK”
	WMCx	Disconnected	“0”	“OK”
	WMCx	Connected	“N”	“Can not set parameter during radio connection.” “OK”
4	WMD	Connected	“0”	pause “Disconnected !” “OK”
	WMD	Disconnected	“0”	“Disconnected !” “OK”
5	WME		“x”	“x” “OK”
	WMEx		“0”	“OK”

	WME <sub>x</sub>	Connected	“N”	“Can not set parameter during radio connection.” “OK”
6	WMF		“4x”	“4x” “OK”
	WMF <sub>x</sub>	Disconnected	“0”	“OK”
	WMF <sub>x</sub>	Connected	“N”	“Can not set parameter during radio connection.” “OK”
7	WMH		“x”	“x” “OK”
	WMH <sub>x</sub>	Disconnected	“0”	“OK”
	WMH <sub>x</sub>	Connected	“N”	“Can not set parameter during radio connection.” “OK”
8	WMI		“6x”	“6x” “OK”
	WMI <sub>x</sub>	Disconnected	“0”	“OK”
	WMI <sub>x</sub>	Connected	“N”	“Can not set parameter during radio connection.” “OK”
9	WMJ		“32x”	“32x” “OK”
	WMJ <sub>x</sub>	Disconnected	“0”	“OK”
	WMJ <sub>x</sub>	Connected	“N”	“Can not set parameter during radio connection.” “OK”
10	WML		See Table 3	“Version=WAVE85.E02” “Date=03-07-1997” “PN=B386A45E5F670D4848BECE1A1A917D 9C” “ID=010203” “My Address=2” “Maximum Frame Length=512” “Echo=On” “Response=On” “Auto Scan Channel=On” Auto Channel Change=On” “Current RF Channel=0” “Type of RS232 Port=DCE” “Current Baud Rate=115200” “Default Baud Rate=115200” “Wireless Link=Disconnected” “Identification Name=INNOMEDIA ....” “OK”

11	WMM		“x”	“x” “OK”
	WMMx	Disconnected	“0”	“OK”
	WMMx	Connected	“N”	“Can not set parameter during radio connection.” “OK”
12	WMN	Connected	“0”	“OK”
	WMN	Disconnect	“7”	“No Connection !” “OK”
13	WMO		“32x”	“32x” “OK”
	WMOx		“0”	“OK”
14	WMP		“32x”	“32x” “OK”
	WMPx	Disconnected	“0”	“OK”
	WMPx	Connected	“N”	“Can not set parameter during radio connection.” “OK”
15	WMS	Disconnected	0x0 (one-byte binary number)	“Disconnected !” “OK”
	WMS or WMSx	Connected with x (x is the current partner)	x (one-byte binary number)	“Connected with address x” “OK”
	WMSx	Create new wireless link and it is successful	“0”	“Connecting.....” pause “Connect to Address x” enter data mode
	WMSx	Create new wireless link but partner not found	“D”	“Connecting.....” pause “Partner Not Found !” “Disconnected !” “OK”
	WMSx	Create new wireless link but partner is busy	“E”	“Connecting.....” pause “Partner Busy !” “Disconnected !” “OK”
16	WM&B		“x”	“x” “OK”
	WM&Bx	Disconnected	“0”	“OK”
	WM&Bx	Connected	“N”	“Can not set parameter during radio connection.”

				“OK”
17	WM&C		“x”	“x” “OK”
	WM&Cx	Disconnected	“0”	“OK”
	WM&Cx	Connected	“N”	“Can not set parameter during radio connection.” “OK”
18	WM&W		“x”	“x” “OK”
	WM&Wx	Disconnected	“0”	“OK”
	WM&Wx	Connected	“N”	“Can not set parameter during radio connection.” “OK”
19	WM&0		“0”	“OK”
20	Invalid command		“Z”	“WM_ERROR”
21	“     “ <cr> escape sequence	Data mode	“0”	“OK”

Table 4. Command Responses

Notice :

1. “x” , “2x”, “3x”, and “4x” are the response of current status/state/argument. “2x” means it is 2-byte ASCII characters, “3x” means 3-byte ASCII characters, and so on.
2. The strings enclosed by “” are ASCII characters. In contrast, the number prefixed by 0x is a binary number.