





GENERAL INFORMATION				
SIMPLWINDOWS NAME:	Powersoft Ottocanali v1.1.umc			
CATEGORY:	Amplifier			
VERSION:	V1.1			
SUMMARY:	The module allows the control of the Powersoft Ottocanali amplifiers through UDP communication and RS485.			
GENERAL NOTES:	The communication between Crestron and Powersoft is made by an UDP connection or RS485 serial port The module offers functionality to mute/unmute channels, adjust gain and retrieve channel information. It's possible to recall presets. Channels need to be defined in a recalled preset to report as a present channel.			
CRESTRON HARDWARE REQUIRED	2-series processor with Ethernet card 3-series processor			
CRESTRON HARDWARE REQUIRED:	C2I-COM, ST-COM, C2-COM-* or CNX-COM2			
SETUP OF CRESTRON HARDWARE:	UDP port 8002			
VENDOR FIRMWARE:	V1.1.0			
VENDOR SETUP:	MC-2E connected to the M-Series through standard UDP connection.			
CABLE DIAGRAM:	Standard CAT5 cable			

CONTROL:		
Info Req_	D	Pulse to request all the informations from the connected device
Req_VolStatus	D	Pulse to request the volume status of the active channels
PwrON	D	Pulse to turn on the device
PwrOFF	D	Pulse to turn off the device
PwrToggle	D	Pulse to toggle power on/off
[ReqAlarmStatus0]	D	Pulse to request the alarma status for module 0
ChMuteYes[1]	D	Pulse to mute the audio channel 1

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ChMuteNo[1]	D	Pulse to unmute the audio channel 1
ChMuteToggle[1]	D	Pulse to toggle mute/unmute the audio channel 1
ChVol_P[1]	D	A high level will regulate the volume channel 1 up
ChVol_M[1]	D	A high level will regulate the volume channel 1 down
ChMuteYes[2]	D	Pulse to mute the audio channel 2
ChMuteNo[2]	D	Pulse to unmute the audio channel 2
ChMuteToggle[2]	D	Pulse to toggle mute/unmute the audio channel 2
ChVol_P[2]	D	A high level will regulate the volume channel 2 up
ChVol_M[2]	D	A high level will regulate the volume channel 2 down
Preset1[1]	D	Pulse to recall preset1 on module 0
Preset1[2]	D	Pulse to recall preset2 on module 0
Preset1[3]	D	Pulse to recall preset3 on module 0
Preset1[4]	D	Pulse to recall preset4 on module 0
[ReqAlarmStatus1]	D	Pulse to request the alarma status for module 1
ChMuteYes[3]	D	Pulse to mute the audio channel 3
ChMuteNo[3]	D	Pulse to unmute the audio channel 3
ChMuteToggle[3]	D	Pulse to toggle mute/unmute the audio channel 3
ChVol_P[3]	D	A high level will regulate the volume channel 3 up
ChVol_M[3]	D	A high level will regulate the volume channel 3 down
ChMuteYes[4]	D	Pulse to mute the audio channel 4
ChMuteNo[4]	D	Pulse to unmute the audio channel 4
ChMuteToggle[4]	D	Pulse to toggle mute/unmute the audio channel 4
ChVol_P[4]	D	A high level will regulate the volume channel 4 up
ChVol_M[4]	D	A high level will regulate the volume channel 4 down
Preset2[1]	D	Pulse to recall preset1 on module 1
Preset2[2]	D	Pulse to recall preset2 on module 1
Preset2[3]	D	Pulse to recall preset3 on module 1
Preset2[4]	D	Pulse to recall preset4 on module 1
[ReqAlarmStatus2]	D	Pulse to request the alarma status for module 2

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ChMuteYes[5]	D	Pulse to mute the audio channel 5
ChMuteNo[5]	D	Pulse to unmute the audio channel 5
ChMuteToggle[5]	D	Pulse to toggle mute/unmute the audio channel 5
ChVol_P[5]	D	A high level will regulate the volume channel 5 up
ChVol_M[5]	D	A high level will regulate the volume channel 5 down
ChMuteYes[6]	D	Pulse to mute the audio channel 6
ChMuteNo[6]	D	Pulse to unmute the audio channel 6
ChMuteToggle[6]	D	Pulse to toggle mute/unmute the audio channel 6
ChVol_P[6]	D	A high level will regulate the volume channel 6 up
ChVol_M[6]	D	A high level will regulate the volume channel 6 down
Preset3[1]	D	Pulse to recall preset1 on module 2
Preset3[2]	D	Pulse to recall preset2 on module 2
Preset3[3]	D	Pulse to recall preset3 on module 2
Preset3[4]	D	Pulse to recall preset4 on module 2
[ReqAlarmStatus3]	D	Pulse to request the alarma status for module 3
ChMuteYes[7]	D	Pulse to mute the audio channel 7
ChMuteNo[7]	D	Pulse to unmute the audio channel 7
ChMuteToggle[7]	D	Pulse to toggle mute/unmute the audio channel 7
ChVol_P[7]	D	A high level will regulate the volume channel 7 up
ChVol_M[7]	D	A high level will regulate the volume channel 7 down
ChMuteYes[8]	D	Pulse to mute the audio channel 8
ChMuteNo[8	D	Pulse to unmute the audio channel 8
ChMuteToggle[8]	D	Pulse to toggle mute/unmute the audio channel 8
ChVol_P[8]	D	A high level will regulate the volume channel 8 up
ChVol_M[8]	D	A high level will regulate the volume channel 8 down
Preset4[1]	D	Pulse to recall preset1 on module 3
Preset4[2]	D	Pulse to recall preset2 on module 3
Preset4[3]	D	Pulse to recall preset3 on module 3
Preset4[4]	D	Pulse to recall preset4 on module 3

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PollEnable	D	A high level on this input enables the continuous poll of the device, a single pulse execute it just 1 time
Rx\$	S	Serial data arriving from the device, to be connected to the UDP Rx socket or to an RS485 Rx serial port
From_Device	S	Serial data signal to be routed from a 2 way com port.

FEEDBACK:		
SystemBusy_fb	D	High to indicate that the module is busy and no other commands can be sent
TxRxBusy_fb	D	High to indicate that there is activity on the communication link
ConnStatus\$	S	Indicates the status of the connection
DiscoveryStringOut\$	S	When a discovery string is received it is displayed here
FirmwareInfo\$	S	Here it is indicated the firmware version of the device
BoardSerial\$	S	Here it is indicated the serial number of the device board
PwrStatus_fb	D	High to indicate that the device is powered ON
Ready[1]	D	High to indicate that the module 0 is ready
VextState[1]	D	High to indicate that the external voltage is present on module 0
Imeter1[1]	А	Analog value containing the last current level in channel1 (Amp/10)
Vmeter1[1]	А	Analog value containing the last voltage level in channel1 (Volt/10)
Imeter2[1]	А	Analog value containing the last current level in channel2 (Amp/10)
Vmeter2[1]	А	Analog value containing the last voltage level in channel2 (Volt/10)
Temperature[1]	А	It indicates the internal temperature value of the module 0 (°C/10)
Irms1[1]	А	It indicates the effective current value on channel 1 (Amp/10)
lrms2[1]	А	It indicates the effective current value on channel 2 (Amp/10)
Impedance1[1]	А	It indicates the calculated impedance value on channel 1 (Ohm/10)
Impedance2[1]	А	It indicates the calculated impedance value on channel 2 (Ohm/10)
Vaux1[1]	А	It indicates the effective auxliary voltage value on channel 1 if present (Volt/100)
Vaux2[1]	А	It indicates the effective auxliary voltage value on channel 2 if present (Volt/100)
ProtVauxM[1]	D	If high it means that the Vaux- is outside a safe value







ProtVauxP[1]	D	If high it means that the Vaux+ is outside a safe value
Protlavg1[1]	D	If high it means that the Irms of channel1 is outside a safe value
Protlavg2[1]	D	If high it means that the Irms of channe2 is outside a safe value
TemperatureM1_Status\$	S	It indicates the temperature protection status on module 0
Ch1_Status\$	S	It indicates channel1 protection status
Ch2_Status\$	S	It indicates channel2 protection status
ChannelDisabled[1]	D	High level indicates that channel 1 is disabled, this signal is useful to blank the graphic of disabled channels
VoldB\$[1]	S	String Indicating the actual volume level of channel 1 in dB
Vol_fb[1]	А	Analog value of actual volume level of channel 1 in percent steps $0\% = -40dB 100\% = +6dB$
MuteStatus_fb[1]Ch1_InTone_Alarm	D	High level indicates channel 1 is muted
Ch1_InTone_Alarm	D	High level indicates channel 1 has an input tone alarm
Ch1_OutTone_Alarm	D	High level indicates channel 1 has an Output tone alarm
Ch1_Load_Alarm	D	High level indicates channel 1 has a Load alarm
Ch1_Trasfo_Present	D	High level indicates channel 1 has a transformer present on the output
ChannelDisabled[2]	D	High level indicates that channel 2 is disabled, this signal is useful to blank the graphic of disabled channels
VoldB\$[2]	S	String Indicating the actual volume level of channel 2 in dB
Vol_fb[2]	А	Analog value of actual volume level of channel 2 in percent steps 0% = -40dB $100% = +6$ dB
MuteStatus_fb[2]	D	High level indicates channel 2 is muted
Ch2_InTone_Alarm	D	High level indicates channel 2 has an input tone alarm
Ch2_OutTone_Alarm	D	High level indicates channel 2 has an Output tone alarm
Ch2_Load_Alarm	D	High level indicates channel 2 has a Load alarm
Ch2_Trasfo_Present	D	High level indicates channel 2 has a transformer present on the output
Preset1_fb[1]	D	High level indicates module 0 has preset 1 active
Preset1_fb[2]	D	High level indicates module 0 has preset 2 active
Preset1_fb[3]	D	High level indicates module 0 has preset 3 active
Preset1_fb[4]	D	High level indicates module 0 has preset 4 active
Ready[2]	D	High to indicate that the module 1 is ready
VextState[2]	D	High to indicate that the external voltage is present on module 1
Imeter1[2]	А	Analog value containing the last current level in channel3 (Amp/10)

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Vmeter1[2]	А	Analog value containing the last voltage level in channel3 (Volt/10)
Imeter2[2]	А	Analog value containing the last current level in channel4 (Amp/10)
Vmeter2[2]	А	Analog value containing the last voltage level in channel4 (Volt/10)
Temperature[2]	А	It indicates the internal temperature value of the module 1 (°C/10)
lrms1[2]	А	It indicates the effective current value on channel 3 (Amp/10)
lrms2[2]	А	It indicates the effective current value on channel 4 (Amp/10)
Impedance1[2]	А	It indicates the calculated impedance value on channel 3 (Ohm/10)
Impedance2[2]	А	It indicates the calculated impedance value on channel 4 (Ohm/10)
Vaux1[2]	А	It indicates the effective auxliary voltage value on channel 3 if present (Volt/100)
Vaux2[2]	А	It indicates the effective auxliary voltage value on channel 4 if present (Volt/100)
ProtVauxM[2]	D	If high it means that the Vaux- is outside a safe value
ProtVauxP[2]	D	If high it means that the Vaux+ is outside a safe value
Protlavg1[2]	D	If high it means that the Irms of channel3 is outside a safe value
Protlavg2[2]	D	If high it means that the Irms of channe4 is outside a safe value
TemperatureM2_Status\$	S	It indicates the temperature protection status of module 1
Ch3_Status\$	S	It indicates channel3 protection status
Ch4_Status\$	S	It indicates channel4 protection status
ChannelDisabled[3]	D	High level indicates that channel 3 is disabled, this signal is useful to blank the graphic of disabled channels
VoldB\$[3]	S	String Indicating the actual volume level of channel 3 in dB
Vol_fb[3]	А	Analog value of actual volume level of channel 3 in percent steps 0% = -40dB $100% = +6dB$
MuteStatus_fb[3]	D	High level indicates channel 3 is muted
Ch3_InTone_Alarm	D	High level indicates channel 3 has an input tone alarm
Ch3_OutTone_Alarm	D	High level indicates channel 3 has an Output tone alarm
Ch3_Load_Alarm	D	High level indicates channel 3 has a Load alarm
Ch3_Trasfo_Present	D	High level indicates channel 3 has a transformer present on the output
ChannelDisabled[4]	D	High level indicates that channel 4 is disabled, this signal is useful to blank the graphic of disabled channels
VoldB\$[4]	S	String Indicating the actual volume level of channel 4 in dB
Vol_fb[4]	А	Analog value of actual volume level of channel 4 in percent steps 0% = -40dB $100% = +6$ dB
MuteStatus_fb[4]	D	High level indicates channel 4 is muted

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Ch4_InTone_Alarm	D	High level indicates channel 4 has an input tone alarm
Ch4_OutTone_Alarm	D	High level indicates channel 4 has an Output tone alarm
Ch4_Load_Alarm	D	High level indicates channel 4 has a Load alarm
Ch4_Trasfo_Present	D	High level indicates channel 4 has a transformer present on the output
Preset2_fb[1]	D	High level indicates module 1 has preset 1 active
Preset2_fb[2]	D	High level indicates module 1 has preset 2 active
Preset2_fb[3]	D	High level indicates module 1 has preset 3 active
Preset2_fb[4]	D	High level indicates module 1 has preset 4 active
Ready[3]	D	High to indicate that the module 2 is ready
VextState[3]	D	High to indicate that the external voltage is present on module 2
Imeter1[3]	А	Analog value containing the last current level in channel5 (Amp/10)
Vmeter1[3]	А	Analog value containing the last voltage level in channel5 (Volt/10)
Imeter2[3]	А	Analog value containing the last current level in channel6 (Amp/10)
Vmeter2[3]	А	Analog value containing the last voltage level in channel6 (Volt/10)
Temperature[3]	А	It indicates the internal temperature value of the module 2 (°C/10)
Irms1[3]	А	It indicates the effective current value on channel 5 (Amp/10)
Irms2[3]	А	It indicates the effective current value on channel 6 (Amp/10)
Impedance1[3]	А	It indicates the calculated impedance value on channel 5 (Ohm/10)
Impedance2[3]	А	It indicates the calculated impedance value on channel 6 (Ohm/10)
Vaux1[3]	А	It indicates the effective auxliary voltage value on channel 5 if present (Volt/100)
Vaux2[3]	А	It indicates the effective auxliary voltage value on channel 6 if present (Volt/100)
ProtVauxM[3]	D	If high it means that the Vaux- is outside a safe value
ProtVauxP[3]	D	If high it means that the Vaux+ is outside a safe value
Protlavg1[3]	D	If high it means that the Irms of channel5 is outside a safe value
Protlavg2[3]	D	If high it means that the Irms of channe6 is outside a safe value
TemperatureM3_Status\$	S	It indicates the temperature protection status on module 2
Ch5_Status\$	S	It indicates channel5 protection status
Ch6_Status\$	S	It indicates channel6 protection status
ChannelDisabled[5]	D	High level indicates that channel 5 is disabled, this signal is useful to blank the graphic of disabled channels

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VoldB\$[5]	S	String Indicating the actual volume level of channel 5 in dB
Vol_fb[5]	А	Analog value of actual volume level of channel 5 in percent steps $0\% = -40dB$ $100\% = +6dB$
MuteStatus_fb[5]	D	High level indicates channel 5 is muted
Ch5_InTone_Alarm	D	High level indicates channel 5 has an input tone alarm
Ch5_OutTone_Alarm	D	High level indicates channel 5 has an Output tone alarm
Ch5_Load_Alarm	D	High level indicates channel 5 has a Load alarm
Ch5_Trasfo_Present	D	High level indicates channel 5 has a transformer present on the output
ChannelDisabled[6]	D	High level indicates that channel 6 is disabled, this signal is useful to blank the graphic of disabled channels
VoldB\$[6]	S	String Indicating the actual volume level of channel 6 in dB
Vol_fb[6]	А	Analog value of actual volume level of channel 6 in percent steps 0% = -40dB $100% = +6$ dB
MuteStatus_fb[6]	D	High level indicates channel 6 is muted
Ch6_InTone_Alarm	D	High level indicates channel 6 has an input tone alarm
Ch6_OutTone_Alarm	D	High level indicates channel 6 has an Output tone alarm
Ch6_Load_Alarm	D	High level indicates channel 6 has a Load alarm
Ch6_Trasfo_Present	D	High level indicates channel 6 has a transformer present on the output
Preset3_fb[1]	D	High level indicates module 2 has preset 1 active
Preset3_fb[2]	D	High level indicates module 2 has preset 2 active
Preset3_fb[3]	D	High level indicates module 2 has preset 3 active
Preset3_fb[4]	D	High level indicates module 2 has preset 4 active
Ready[4]	D	High to indicate that the module 3 is ready
VextState[4]	D	High to indicate that the external voltage is present on module 3
Imeter1[4]	А	Analog value containing the last current level in channel7 (Amp/10)
Vmeter1[4]	А	Analog value containing the last voltage level in channel7 (Volt/10)
Imeter2[4]	А	Analog value containing the last current level in channel8 (Amp/10)
Vmeter2[4]	А	Analog value containing the last voltage level in channel8 (Volt/10)
Temperature[4]	А	It indicates the internal temperature value of the module 3 (°C/10)
Irms1[4]	А	It indicates the effective current value on channel 7 (Amp/10)
Irms2[4]	А	It indicates the effective current value on channel 8 (Amp/10)
Impedance1[4]	А	It indicates the calculated impedance value on channel 7 (Ohm/10)

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Impedance2[4]	А	It indicates the calculated impedance value on channel 8 (Ohm/10)
Vaux1[4]	А	It indicates the effective auxliary voltage value on channel 7 if present (Volt/100)
Vaux2[4]	А	It indicates the effective auxliary voltage value on channel 8 if present (Volt/100)
ProtVauxM[4]	D	If high it means that the Vaux- is outside a safe value
ProtVauxP[4]	D	If high it means that the Vaux+ is outside a safe value
Protlavg1[4]	D	If high it means that the Irms of channel7 is outside a safe value
Protlavg2[4]	D	If high it means that the Irms of channe8 is outside a safe value
TemperatureM4_Status\$	S	It indicates the temperature protection status on module 3
Ch7_Status\$	S	It indicates channel7 protection status
Ch8_Status\$	S	It indicates channel8 protection status
ChannelDisabled[7]	D	High level indicates that channel 7 is disabled, this signal is useful to blank the graphic of disabled channels
VoldB\$7]	S	String Indicating the actual volume level of channel 7 in dB
Vol_fb[7]	А	Analog value of actual volume level of channel 7 in percent steps $0\% = -40 dB 100\% = +6 dB$
MuteStatus_fb[7]	D	High level indicates channel 7 is muted
Ch7_InTone_Alarm	D	High level indicates channel 7 has an input tone alarm
Ch7_OutTone_Alarm	D	High level indicates channel 7 has an Output tone alarm
Ch7_Load_Alarm	D	High level indicates channel 7 has a Load alarm
Ch7_Trasfo_Present	D	High level indicates channel 7 has a transformer present on the output
ChannelDisabled[8]	D	High level indicates that channel 8 is disabled, this signal is useful to blank the graphic of disabled channels
VoldB\$[8]	S	String Indicating the actual volume level of channel 8 in dB
Vol_fb[8]	А	Analog value of actual volume level of channel 8 in percent steps 0% = -40dB $100% = +6$ dB
MuteStatus_fb[8]	D	High level indicates channel 8 is muted
Ch8_InTone_Alarm	D	High level indicates channel 8 has an input tone alarm
Ch8_OutTone_Alarm	D	High level indicates channel 8 has an Output tone alarm
Ch8_Load_Alarm	D	High level indicates channel 8 has a Load alarm
Ch8_Trasfo_Present	D	High level indicates channel 8 has a transformer present on the output
Preset4_fb[1]	D	High level indicates module 3 has preset 1 active
Preset4_fb[2]	D	High level indicates module 3 has preset 2 active
Preset4_fb[3]	D	High level indicates module 3 has preset 3 active







Preset4_fb[4]	D	High level indicates module 3 has preset 4 active
Tx\$	S	Serial data going towards the device, to be connected to the UDP Tx socket or to an RS485 Tx serial port

PARAMETERS:		
Device_ID	Dec	2 decimal digits indicating the device ID, it depends on the aplifier itself, useful for RS485 connections, but anyway it must be set correctly also on UDP connections or the device will not respond
Poll_Interval	Sec	Time between 2 poll pulses (not less than 10 secs)

TESTING:		
OPS USED FOR TESTING:	PRO2 4.007.004 (Oct 04 2010) MC3 1.008.0040	
SIMPL WINDOWS USED FOR TESTING:	V4.02.38	
DEVICE DB USED FOR TESTING:	V55.00.002.00	
CRES DB USED FOR TESTING:	V44.05.005.00	
SYMBOL LIBRARY USED FOR TESTING:	889	
SAMPLE PROGRAM:	Powersoft Ottocanali v1.1 PRO2 Demo.smw Powersoft Ottocanali v1.1 MC3 Demo.smw	
REVISION HISTORY:	v1.1	