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Pacific Scientific 830 Serial Master Driver

Information Sheet for Crimson v2.0

Compatible Devices

Pacific Scientific PC830 or device that supports PC830 Simple ASCII Protocol.

Verified Device

Pacific Scientific PC834-001-N

Accessible Data

Identifier	Type	Access
AccelLmt	Real	R/W
ActiveAccelRate	Real	R
ActiveDecelRate	Real	R
ActiveDistance	Integer	R
ActiveDistOffset	Integer	R
ActiveDwell	Integer	R
ActiveHomeDir	Integer	R
ActiveHomeMode	Integer	R
ActiveMove	Integer	R/W
ActiveMoveType	Integer	R
ActiveRegSelect	Integer	R
ActiveRunSpeed	Real	R
ActualILmtMinus	Real	R
ActualILmtPlus	Real	R
ADF0	Real	R/W
ADOffset	Real	R/W
AIn1Map	Integer	R/W
Ain2Map	Integer	R/W
Ain3Map	Integer	R/W

Identifier	Type	Access
AInNull	Integer	R/W
AnalogILmt	Real	R
AnalogILmtFilt	Real	R/W
AnalogILmtGain	Real	R/W
AnalogILmtOffset	Real	R/W
AnalogIn	Real	R
AnalogOut1	Real	R/W
AnalogOut2	Real	R/W
ARF0	Real	R/W
ARF1	Real	R/W
ARZ0	Real	R/W
ARZ1	Real	R/W
AxisAddr	Integer	R/W
B1	Real	R/W
B2	Real	R/W
BlkType	Integer	R/W
Brake	Integer	R
CCDate	Integer	R/W
CCSNum	Integer	R/W

Identifier	Type	Access
CcwInh	Integer	R/W
CfgD	Integer	R
CmdGain	Real	R/W
CmdGain2	Real	R/W
CommEnbl	Integer	R/W
CommOff	Real	R/W
CommSrc	Integer	R/W
CosHarmCoeff1	Real	R/W
CosHarmCoeff10	Real	R/W
CosHarmCoeff11	Real	R/W
CosHarmCoeff13	Real	R/W
CosHarmCoeff14	Real	R/W
CosHarmCoeff16	Real	R/W
CosHarmCoeff17	Real	R/W
CosHarmCoeff19	Real	R/W
CosHarmCoeff2	Real	R/W
CosHarmCoeff4	Real	R/W
CosHarmCoeff5	Real	R/W
CosHarmCoeff7	Real	R/W
CosHarmCoeff8	Real	R/W
CwInh	Integer	R/W
DBG1	Integer	R/W
DBG2	Integer	R/W
DBG4	Integer	R/W
DbgI	Integer	R/W
DbgL	Integer	R/W
DbgVar0	Integer	R/W
DbgVar1	Integer	R/W
DbgVar2	Integer	R/W
DbgVar3	Integer	R/W
DbgVar4	Integer	R/W
DbgVar5	Integer	R/W
DbgVar6	Integer	R/W
DbgVar7	Integer	R/W
DecellLmt	Real	R/W
DigitalCmd	Integer	R
DigitalCmdFreq	Real	R
DM1F0	Real	R/W
DM1Gain	Real	R/W
DM1Map	Integer	R/W

Identifier	Type	Access
DM1Out	Real	R
DM2F0	Real	R/W
DM2Gain	Real	R/W
DM2Map	Integer	R/W
DM2Out	Real	R
DriveStatus	Integer	R
EEInt	Integer	R/W
ElecAngTau	Integer	R/W
Enable	Integer	R/W
Enable2	Integer	R/W
Enabled	Integer	R
EncAlignRampIcmd	Integer	R/W
EncAlignTestDist	Integer	R/W
EncAlignTime	Integer	R/W
EncFreq	Real	R
EncIn	Integer	R/W
EncInF0	Real	R/W
EncMode	Integer	R/W
EncOut	Integer	R/W
EncPos	Integer	R
ExtFault	Integer	R
Fault	Integer	R
FaultCode	Integer	R
FaultReset	Integer	R/W
FVelErr	Real	R
FwV	Integer	R
GearingOn	Integer	R/W
HallOffset	Integer	R/W
HallState	Integer	R
HomeSwitch	Integer	R
HSTemp	Real	R
HwV	Integer	R
I2tF0	Real	R/W
I2tFilt	Real	R
I2tThresh	Real	R/W
ICmd	Real	R
IFB	Real	R
ILmtMinus	Integer	R/W
ILmtMode	Integer	R/W
ILmtPlus	Integer	R/W

Identifier	Type	Access
ImMax	Real	R/W
Inp1	Integer	R
Inp2	Integer	R
Inp3	Integer	R
Inp4	Integer	R
Inp5	Integer	R
Inp6	Integer	R
InpMap1	Integer	R/W
InpMap2	Integer	R/W
InpMap3	Integer	R/W
InpMap4	Integer	R/W
InpMap5	Integer	R/W
InpMap6	Integer	R/W
InPosLimit	Integer	R/W
Inputs	Integer	R
IntgStopThresh	Real	R/W
Ipeak	Real	R
IqCmd	Real	R/W
IqFB	Real	R
IqIH	Real	R/W
IqMax	Real	R/W
ItDerateIntercept	Real	R/W
ItDerateSlope	Real	R/W
ItF0	Real	R/W
ItFilt	Real	R
ItThresh	Integer	R/W
ItThreshA	Real	R
IU	Real	R
IV	Real	R
IW	Real	R
K1	Real	R/W
K2	Real	R/W
KdEnc	Integer	R/W
KiEnc	Integer	R/W
Kii	Real	R/W
Kip	Real	R/W
KpEnc	Integer	R/W
Kpp	Real	R/W
Kvff	Real	R/W

Identifier	Type	Access
Kvi	Real	R/W
Kvp	Real	R/W
LoadCalTable	Command	W
MfgLock	Integer	R/W
Model	Integer	R
Motor1	Integer	R
Motor2	Integer	R
Move0AccelRate	Real	R/W
Move0DecelRate	Real	R/W
Move0Distance	Integer	R/W
Move0DistOffset	Integer	R/W
Move0Dwell	Integer	R/W
Move0HomeDir	Integer	R/W
Move0HomeMode	Integer	R/W
Move0RegSelect	Integer	R/W
Move0RunSpeed	Real	R/W
Move0Type	Integer	R/W
Move1AccelRate	Real	R/W
Move1DecelRate	Real	R/W
Move1Distance	Integer	R/W
Move1DistOffset	Integer	R/W
Move1Dwell	Integer	R/W
Move1HomeDir	Integer	R/W
Move1HomeMode	Integer	R/W
Move1RegSelect	Integer	R/W
Move1RunSpeed	Real	R/W
Move1Type	Integer	R/W
Move2AccelRate	Real	R/W
Move2DecelRate	Real	R/W
Move2Distance	Integer	R/W
Move2DistOffset	Integer	R/W
Move2Dwell	Integer	R/W
Move2HomeDir	Integer	R/W
Move2HomeMode	Integer	R/W
Move2RegSelect	Integer	R/W
Move2RunSpeed	Real	R/W
Move2Type	Integer	R/W
Move3AccelRate	Real	R/W
Move3DecelRate	Real	R/W

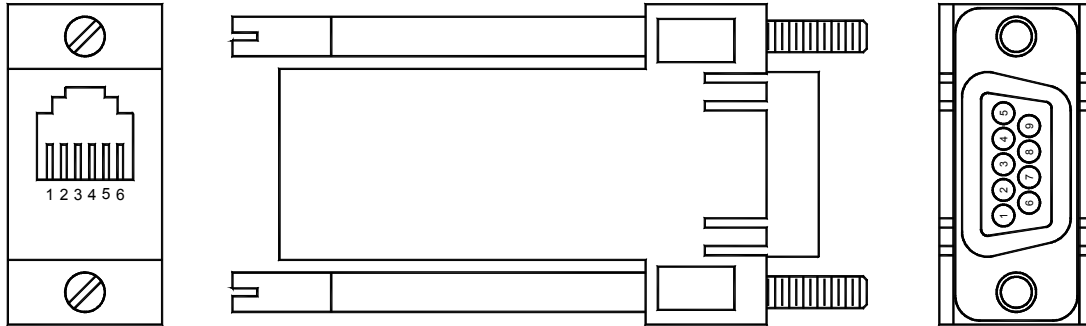
Identifier	Type	Access
Move3Distance	Integer	R/W
Move3DistOffset	Integer	R/W
Move3Dwell	Integer	R/W
Move3HomeDir	Integer	R/W
Move3HomeMode	Integer	R/W
Move3RegSelect	Integer	R/W
Move3RunSpeed	Real	R/W
Move3Type	Integer	R/W
Move4AccelRate	Real	R/W
Move4DecelRate	Real	R/W
Move4Distance	Integer	R/W
Move4DistOffset	Integer	R/W
Move4Dwell	Integer	R/W
Move4HomeDir	Integer	R/W
Move4HomeMode	Integer	R/W
Move4RegSelect	Integer	R/W
Move4RunSpeed	Real	R/W
Move4Type	Integer	R/W
Move5AccelRate	Real	R/W
Move5DecelRate	Real	R/W
Move5Distance	Integer	R/W
Move5DistOffset	Integer	R/W
Move5Dwell	Integer	R/W
Move5HomeDir	Integer	R/W
Move5HomeMode	Integer	R/W
Move5RegSelect	Integer	R/W
Move5RunSpeed	Real	R/W
Move5Type	Integer	R/W
Move6AccelRate	Real	R/W
Move6DecelRate	Real	R/W
Move6Distance	Integer	R/W
Move6DistOffset	Integer	R/W
Move6Dwell	Integer	R/W
Move6HomeDir	Integer	R/W
Move6HomeMode	Integer	R/W
Move6RegSelect	Integer	R/W
Move6RunSpeed	Real	R/W
Move6Type	Integer	R/W
Move7AccelRate	Real	R/W
Move7DecelRate	Real	R/W

Identifier	Type	Access
Move7Distance	Integer	R/W
Move7DistOffset	Integer	R/W
Move7Dwell	Integer	R/W
Move7HomeDir	Integer	R/W
Move7HomeMode	Integer	R/W
Move7RegSelect	Integer	R/W
Move7RunSpeed	Real	R/W
Move7Type	Integer	R/W
MoveDone	Integer	R
MoveSelectBit0	Integer	R/W
MoveSelectBit1	Integer	R/W
MoveSelectBit2	Integer	R/W
NVLoad	Command	W
NVSave	Command	W
Out1	Integer	R/W
Out2	Integer	R/W
Out3	Integer	R/W
Out4	Integer	R/W
OutMap1	Integer	R/W
OutMap2	Integer	R/W
OutMap3	Integer	R/W
OutMap4	Integer	R/W
Outputs	Integer	R/W
PoleCount	Integer	R/W
PosCmdSet	Integer	R/W
PosCommand	Integer	R
PosError	Integer	R
PosErrorMax	Integer	R/W
Position	Integer	R
PulsesFOut	Integer	R/W
PulsesIn	Integer	R/W
PulsesOut	Integer	R/W
PWMDeadBand	Real	R/W
PWMFreq	Real	R/W
RCalData	Integer	R
RCalMAng	Integer	R/W
RCalMode	Integer	R/W
RCalTime	Real	R/W
Reg1ActiveEdge	Integer	R/W
Reg1EncoderPosition	Integer	R

Identifier	Type	Access
Reg1ResolverPosition	Integer	R
Reg2ActiveEdge	Integer	R/W
Reg2EncoderPosition	Integer	R
Reg2ResolverPosition	Integer	R
RemoteFB	Integer	R/W
ResPos	Integer	R
RunStop	Integer	R/W
SaveCalTable	Command	W
SIAV	Integer	R
SinHarmCoeff1	Real	R/W
SinHarmCoeff10	Real	R/W
SinHarmCoeff11	Real	R/W
SinHarmCoeff13	Real	R/W
SinHarmCoeff14	Real	R/W
SinHarmCoeff16	Real	R/W
SinHarmCoeff17	Real	R/W
SinHarmCoeff19	Real	R/W
SinHarmCoeff2	Real	R/W
SinHarmCoeff4	Real	R/W
SinHarmCoeff5	Real	R/W
SinHarmCoeff7	Real	R/W

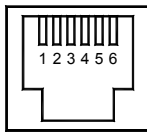
Identifier	Type	Access
SinHarmCoeff8	Real	R/W
StartMove	Integer	R/W
StopTime	Real	R/W
TableGen	Command	W
Unconfigure	Command	W
Vbus	Real	R
VbusFTime	Real	R/W
VbusThresh	Real	R/W
VdCmd	Real	R
VelCmd	Real	R/W
VelCmd2	Real	R/W
VelCmdA	Real	R
VelCmdSrc	Integer	R/W
VelErr	Real	R
VelFB	Real	R
VelLmtHi	Real	R/W
VelLmtLo	Real	R/W
Velocity	Real	R
VqCmd	Real	R
ZeroSpeedThresh	Real	R/W

Communication Cable, G3 / Modular Controller / Data Station Plus to Pacific Scientific 830 (RS232)



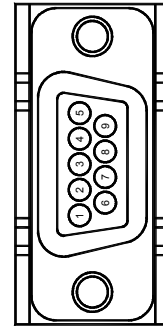
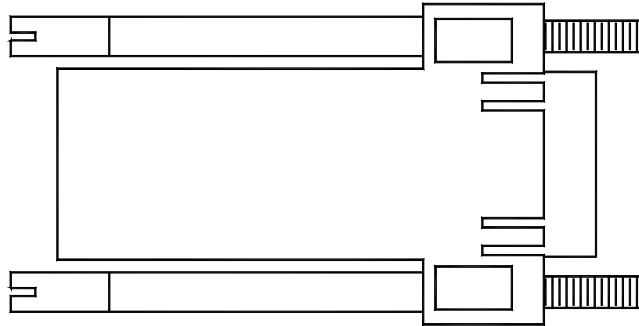
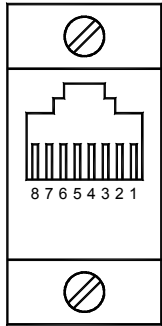
Connections			
FROM RLC UNIT	Name	CONNECTER PINOUT	
		RJ12	DB9 MALE
1	CTS	1	-
2	Rx	2	2
3	COMM	3	5
4	COMM	4	-
5	Tx	5	3
6	RTS	6	-

The above table denotes the pin names of the RS232 port. When connecting, the pin name at the RS232 port is connected to the opposite of that pin name at the destination device.

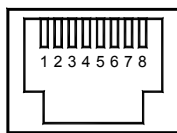


RS232 PORT
(FROM RLC UNIT)

Communication Cable, G3 / Modular Controller / Data Station Plus to Pacific Scientific 830 (RS485)



Connections			
FROM RLC UNIT	Name	CONNECTER PINOUT	
		RJ45	DB9 MALE
1	TxB	1	8
2	TxA	2	9
3	RxA	3	7
4	RxB	4	6
5	TxEN	5	-
6	COMM	6	5
7	TxB	7	-
8	TxA	8	-



RS485 PORT
(FROM RLC UNIT)

The above table denotes the pin names of the RS485 port. When connecting, the pin name at the RS485 port is connected to the opposite of that pin name at the destination device.