

About This Manual

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 $\label{eq:link} Introduction \acute{N} Vjg"Vk og"Eqfg"Fkuvtkdwvkqp"Ejcuuku."jqy"kv" yqtmu."yjgtg"vq"wug"kv."kvu" ockp"hgcvwtgu0 Basic Installation \acute{N} Jqy "vq"eqppgev."eqpLiwtg"cpf"vguv" {qwt"fkuvtkdwvkqp"ejcuuku0 Console Port \acute{N} Fguetkrvkqp"qh"vjg"eqpuqng"eqoocpfu"hqt"wug"qxgt"vjg"ugtkcn" rqtv"qt"qrvkqpcn"pgvyqtm" rqtv0 \\$

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Warranty

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Limitation of Warranty

 $Vjg"hqtgiqkpi"gzrtguu"ycttcpv{"ujcm"pqv"crrn{"vq"fghgevu"tguwnvkpi"htqo"kortqrgt"qt"kpcfgswcvg" ockpvgpcpeg"d{"Dw{gt"qt"Wugt."Dw{gt/uwrrnkgf"uqhvyctg"qt"kpvgthcekpi."wpcwvjqtk|gf"oqfkLecvkqp"qt" okuwug."qrgtcvkqp"qwvukfg"qh"vjg"gpxktqpogpvcn"urgekLecvkqpu"hqt"vjg"rtqfwev."qt"kortqrgt"ukvg"rtgrc/tcvkqp"qt" ockpvgpcpeg0$

VQ"V J G"GZVGPV"RGTOKVVGF"D ["NCY."V J KU" YCTTCPV ["CPF"TGOGOFKGU"UGV"HQTV J " CDQXG"CTG"GZENWUKXG"CPF"KP"NKGW"QH"CNN"QV J GT" YCTTCPVKGU."TGOGFKGU"CPF" EQPFKVKQPU" Y J GV J GT"QTCN"QT" Y TKVVGP."UVCVWVQT [."GZRTGUU."QT"KORNKGF0""CU" RGTOKVVGF"D ["CRRNKECDNG"NCY."GPFTWP"URGEKHKECNN ["FKUENCKOU"V J G"KORNKGF" YCTTCPVKGU"QH"OGTE J CPVCDKNKV ["QT"HKVPGUU"HQT"C"RCTVKEWNCT"RWTRQUG0 Warranty Repair

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CHAPTER ONE

Free FLASH Upgrades

CHAPTER ONE

End

TDC3303 Physical Description

Rqygt"ClD"NGFu"	$\label{eq:Vjgug} Vjgug"tgflitggp"NGFu"kpfkecvg"rqygt"kprwv"uvcvwu0"" I tggp" o gcpu"vjg" rqygt"uwrrn{"ku"iqqf0""Tgf" o gcpu"vjg"rqygt"uwrrn{"ku"kpuvcnngf"dwv"jcu" hckngf0""Qhh" o gcpu"vjg"qrvkqpcn"rqygt"uwrrn{"ku"pqv"kpuvcnngf0""Rqygt"D" ku"qp"uvcpfd{"yjgp"dqvj"uwrrnkgu"ctg" iqqf0$
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FE"Rqygt"Kprwv"Dnqem" "	Vjku"qrvkqpcn"5/rqukvkqp"vgt o kpcn"dnqem" rtqxkfgu"eqppgevkqp"vq"vjg FE"rqygt"uqwteg."cpf"tgrncegu"vjg"CE"rqygt"kprwv"lcem0""Ugg"fgvcknu kp" <i>Crrgpfkz"F"/"Urgekhkecvkqpu</i> 0
CE"Rqygt"Kprwv"Lcem"	Vjku"KGE"542"uvcpfctf"vjtgg/rtqpi"eqppgevqt"rtqxkfgu"CE"rqygt0
Ukipcn"Qwvrwv"3/32"Lcemu"	Vjgug"vgp"DPE"eqppgevqtu"rtqxkfg"vjg"cpcnqi"vkog"eqfg"ukipcn"qwvrwvu0~production and the second se

Installing the TDC3303

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Mount the TDC3303

Wukpi"uvcpfctf"3;ö"tcem" o qwpvkpi" j ctfyctg." o qwpv"vjg"wpkv"kp"vjg" fguktgf"nqecvkqp0

CAUTION

Ground the unit properly with the supplied power cord.

The socket outlet should be installed near the equipment and be easily accessible.

Power cord is used as a disconnection device. To de-energize equipment, disconnect the power cord. If your TDC3303 has dual power supplies, then multiple power cords may be installed. To de-energize this equipment, disconnect all power cords from the device.

Do not install the TDC3303 where the operating ambient temperature might exceed 122ÅF (50ÅC).

Connecting the DC Power Option

 $Eqppgev"vjg"uchgv{"itqwpf"vgtokpcn"vq"gctvj"itqwpf0""Eqppgev"vjg"o-o"vgtokpcn"vq"vjg"rqukvkxg"qwvrwv" qh"vjg"FE"rqygt"uqwteg0""Eqppgev"vjg"o/o"vgtokpcn"vq"vjg"pgicvkxg"qwvrwv"qh"vjg"FE"rqygt"uqwteg0"" Pqvg"vjcv"vjg"VFE5525"jcu"c"ołqcvkpio"kpvgtpcn"rqygt"uwrrn{."vjgtghqtg"gkvjgt"vjg"rqukvkxg"qt"pgic/vkxg"qwvrwv"qh"vjg"FE"rqygt"uqwteg"ecp"dg"tghgtgpegf"vq"gctvj"itqwpf0""Vjku"wpkv"ykn"pqv"qrgtcvg"kh" vjg"-1/"eqppgevkqpu"ctg"tgxgtugf="jqygxgt"kv"ykn"pqv"dg"fcocigf"d{"c"tgxgtug"eqppgevkqp0$

SHOCK / ENERGY HAZARD

Install in Restricted Access Location.

Use 10-14 AWG copper wire only.

Terminal block screw torque: 9 in-lbs (1 nM).

Branch circuit must have circuit breaker, 15A or less.

Power must be sourced via two-pole disconnect device.

Install terminal block cover after wiring.

Connect Serial I/O to Host Computer

Wukpi"vjg"uvcpfctf"pwnn/oqfgo"FD;H/vq/FD;H"ecdng"rtqxkfgf."eqppgev"qpg"gpf"vq"vjg"

CONTROL AND STATUS COMMANDS

disablemode

 $\label{eq:Vjku} Vjku"eq o ocpf"cmq yu" \{qw"vq"ugngev"gzvgtpcn"cnct o "kprwvu"htq o "vjg"tghgtgpeg"uqwteg"*kh"cp {+"cu"urgek/Lgf"kp"Crrgpfkz"F0""*Vjgug"kprwvu"ctg"ncdgngf"õFkUCDNG"kPö"qp"vjg"tgct/rcpgn0+""Yjgp"vjg"gzvgtpcn" cnct o "kprwv"ku"cuugtvgf"kv" yknn" fkucdng"vjg"eqttgurqpfkp i "tghgtgpeg"uk i pcn"kprwv"cpflqt"ugv"c"u {uvg o "cnct o 0""kh" {qw"ctg"pqv"wukp i "gzvgtpcn"cnct o u"vjgp"ugv" fkucdng o qfg?p.p0 }$

Vjg"ejtbcmfnpef"u{pvcz"ku"ejtbcmfnpef>b-c-y" y jgtg"Rctcogvgt"b" oc{"dg" ["*{gu+"qt"P"*pq+"hqt" y jgvjgt"vq"wug"vjg"Fkucdng"C"kprwv"qt"pqv0""Rctcogvgt"c" oc{"dg" ["qt"P"hqt" y jgvjgt"vq"wug"vjg"Fku/ cdng"D"kprwv"qt"pqv0""*Fgrgpfkpi"wrqp"vjg"txjudinpef"ugvvkpi."gkvjgt"vjg"b"qt"c"ugvvkpi"eqwnf"dg"c" õfqpøv"ectgö"cpf" y qwnf"dg"kipqtgf0""Hqt"gzcorng."kh"txjudinpef>b"."vjgp"rctcogvgt"c"kp"vjg"ejt. bcmfnpef"eq o ocpf" y qwnf"dg"kipqtgf0+""Rctcogvgt"y"vgnnu"vjg"ejcuuku" y jcv"cevkqp"vq"vcmg" y jgp"vjgtg" ku"pq"iqqf"kprwv"ukipcn"vq"u y kvej"vq0""y?QP"vq"ngcxg"vjg"ncuv"ugngevgf"kprwv"u y kvejgf"qp."qt"y?QHH" vq"u y kvej"vjg"ncuv"ugngevgf"kprwv"qhh0""V jku"rctcogvgt"ecp"dg"nghv"dncpm"kh"dqvj"fkucdng"kprwvu"ctg"vq"dg" kipqtgf0"

Kh"ejtbcmfnpef>o-o"vjg"ejcuuku" y knn"k i pqtg"vjg" Fkucdng"C"cpf" Fkucdng"D"kprwvu0qvj" fkucdng

CONTROL AND STATUS COMMANDS

switchmode

Vjku"eq o ocpf"ugvu"vjg"u y kvejkpi" oqfg"kp"ecug"c"hcwnv"ku" fgvgevg f0""C"hcwnv"ku"gkvjgt"ncem"qh"uki/ pcn"rtgugpeg"qt"c"nqike"jkij"ngxgn"qp"Fkucdng"C"qt"Fkucdng"D."rtqxkfgf"vjgug"jcxg"dggp"eqpŁi/ wtgf"rtqrgtn{"*ugg"ejtbcmfnpef+0""U{pvcz"ku<"txjudinpef>y." yjgtg"y"ku" O

RS-232 Serial I/O Port Signal Definitions

Vjg"TU/454"FD; O"eqppgevqt"qp"vjg"tgct" rcpgn"qh"vjg" fkuvtkdwvkqp"ejcuuku"ku" y ktgf"cu"ujqyp"dgnqy0"" Kp"qtfgt"vq"eqppgev"vjg" fkuvtkdwvkqp"ejcuuku"vq"cpqvjgt"eq o rwvgt. "c"pwnn/oqfgo" cfcrvgt" o wuv"dg"wugf0"" Vjg"ugtkcn"ecdng" rtqxkfgf" y kvj"vjg"ujkr ogpv"ku" y ktgf"cu"c"pwnn/oqfgo" cfcrvgt"cpf"ecp"dg"wugf"vq"eqp/ pgev"vjg" fkuvtkdwvkqp"ejcuuku"vq" {qwt"eq o rwvgt0

Output LEDs

I tggp	Vjg"qwvrwv"ku"rtgugpv0
Tgf	Vjg"qwvrwv"ku"cdugpv."ujqtvgf."qt"vjg"qwvrwv"ftkxgt"jcu"hckngf0

Alarm LED

I tggp	Pq"cnct o "eqpfkvkqp"gzkuvu0
Tgf	Cp"cnct o "eqpfkvkqp"gzkuvu0""Ugg"eq o o cpfu"bmbsnmjtu"cpf"
	bmbsntubu"hqt" o qtg"kphqt o cvkqp0

vqmpbe=DS?=MG?

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Problems with the Upgrade

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netreset

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"	Eqoocpf<" "	"	ofusftfu
"	Ejcuuku"tgurqpug<"	"	Sftfuujoh!ofuxpsl!qpsu//////

netsnmp

Vjku"eq o o cpf"gpcdngu"qt"fkucdngu"UPOR0""U{pvcz"ku<""pgvup o r"?"z"yjgtg"z"ku"qp"qt"qhh0"""

"	Ugv<" "	"	ofutonq>po
"	Ejcuuku"tgurqpug<"	"	PL
"	Swgt{<" " "	"	ofutonq
"	Ejcuuku"tgurqpug<"	"	ро
"	Hcevqt{"fghcwnv"ugvvkpi<"	"	pgg

netsnmpro

 $Vjku"eqoocpf"uguu"vjg"UPOR"tgcf/qpn{"eqoowpkv{"uvtkpi0""Vjg"eqoowpkv{"uvtkpi" owuv"dg"cv"ngcuv": "cpf"nguu"vjcp"54"ejctcevgtu0""Ejctcevgtu" owuv"dg"cnrjcpwogtke"qt"vjg"wpfgtueqtg": aø0""Gpvgtkpi"eqp/vtqn/E"ykm"swkv" ykvjqwv"ejcpikpi"vjg"eqoowpkv{"uvtkpi0""Vjgtg"ku"pq"swgt{"oqfg"hqt"vjku"eqoocpf0"$

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Jgv<" " " "	

netsnmprw

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 $\label{eq:chvgt} Chvgt"tg/eqppgevkpi"xkc"Vgnpgv."kuuwg"vjg" wfs"eqoocpf"cpf"xgtkh{"vjcv"kv"ku"kpfggf"vjg"Ltoyctg"vjcv" {qw"kpvgpfgf"vq"wrnqcf"vq"vjg"fkuvtkdwvkqp"ejcuuku0""Kh"kv"ku."{qw"jcxg"uweeguuhwnn{"writcfgf"vjg"Lto/yctg0 } yctg0 \\ \end{tabular}$

Problems with the Upgrade

$$\label{eq:stormalised} \begin{split} & \mbox{Kp}^{"}igptcn."kh^{"}\{qw^{"}hckn^{"}vq^{"}writcfg^{"}vjg^{"}toyctg^{"}uweeguuhwm\{."\{qw^{"}ykn^{"}pggf^{"}vq^{"}wug^{"}vjg^{"}TU/454^{"}rqtv" vq^{"}tgeqxgt0""Ujqwnf^{"}\{qw^{"}jcxg^{"}fkhLewnvkgu^{"}ykvj^{"}vjg^{"}wrnqcf^{"}fwg^{"}vq^{"}c^{"}eqttwrv"Lng."rqygt"hcknwtg^{"}fwtkpi" wrnqcf."qt^{"}qvjgt"ceekfgpv."fq^{"}pqv^{"}dg^{"}cnctogf0""Gxgp^{"}vjqwij^{"}\{qw^{"}oc\{"jcxg^{"}nquv"vjg^{"}gzkuvkpi"crrnkecvkqp" rtqitco."vjg^{"}fkuvtkdwvkqp^{"}ejcuuku"dqqvnqcfgt"rtqitco"yknn"tgockp"kpvcev0""Qp^{"}dqqv"wr."kv"yknn"ejgem"vq" ugg"kh"c"xcnkf"crrnkecvkqp"rtqitco"ku"kp"vjg"+Eø"ejctcevgt"gxgt{"vjgg"ugeqpfu0""[qw" oc{"}vjgp" tgvt{"}vjg"wrnqcf"rtqgfwtg."chvgt"{qw}"oc{"}vjg"qtkikpcn"rtqdngo0 \end{split}$$

Kv"ku" rquukdng"hqt"vjg"dqqvnqcfgt" rtqitco"vq"dg"hqqngf"d{"c"eqttwrvgf"crrnkecvkqp" rtqitco"vjcv" jcu" dggp" rtgxkqwun{"fqypnqcfgf"kpvq"HNCUJ0" "Kp"vjku"ecug."kv" y knn"cvvgorv"vq"uvctv"vjg"crrnkecvkqp" rtq/ itco0""Igpgtcnn{"vjku" y knn"tguwnv"kp"c"hcknwtg"vjcv" y knn"hqteg"c" y cvejfqi"kpkvkcvgf" tgdqqv0""Vjku" rtqeguu" y knn"dg"tgrgcvgf"kpfgŁpkvgn{"wpnguu" {qw"kpvgtxgpg0

Kh"vjg"dqqvnqcflcrrnkecvkqp"ncwpej"ugswgpeg"crrgctu"vq"dg"ecwijv"kp"c"nqqr."vjgp"{qw" y knn"pggf"vq"wug" vjg"ugtkcn"rqtv"vq"eqttgev"vjg"rtqdngo0""Rngcug"ugg"*Crrgpfkz"D'/"Writcfkpi"vjg"Hktoyctg."Tgeqxgt*0 Tgct/rcpgn"TL/67"lcem0 321322Dcug/V"gvjgtpgv0

VERIKR UU J Vgnpgv F J ER UP OR"x3"cp f "x4" y kvj "eq o o wpkv{ "uvtkp i u0""Nk o kvg f "k o rng o gpvcvkqp"/" OKD/KK"qpn {0

;2/486"XCE."69/85" J |."07"C" Ocz0" B "342"XCE."047"C" Ocz0" B "462"XCE0 332/592"XFE."207C" Ocz" B "342"XFE0 5/Rkp"KGE"542"qp"tgct"rcpgn."4" o gygt"nkpg"eqtf"ku"kpenwfgf0

34"XFE"*32/42"XFE+."7C" oczkowo0 46"XFE"*3;/58"XFE+."407C" oczkowo0 6:"XFE"*5:/94"XFE+."307C" oczkowo0 347"XFE"*92/382"XFE+."2097C" oczkowo0 5/rqukvkqp"vgtokpcn"dnqem"qp"tgct"rcpgn<" - FE"KP."UCHGV ["ITQWPF."/FE"KP0 " *Hnqcvkpi"rqygt"kprwv<""Gkvjgt"õ-ö"qt"õ/ö"ecp"dg"eqppgevgf"vq"gctvj"itqwpf0+

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Qrgtcvkpi"Vgorgtcvwtg<""	"	2Å"vq" - 72Å"E
Uvqtcig"Vgorgtcvwtg<"""	"	/62Å"vq" - : 7Å"E
Cpvgppc"Qrgtcvkpi"Vgorgtcv	wtg<"	/62Å"vq" - : 7Å"E
Qrgtcvkpi"Jwokfkv{<"""	"	7 ' "vq";2 ' ."T J ."pqp/eqpfgpukpi
Uvqtcig"Jwokfkv{<" "	"	7 ' "vq";7 ' ."T J ."pqp/eqpfgpukpi
Oczkowo "Qrgtcvkpi "Cnvkvwfg	g<"	CE<" " ""35.347"hv0"1"6222" o gvgtu
	"	34146"XFE<" "35.347"hv0"1"6222" o gvgtu
	"	6: "XFE"*>83"XFE"Ocz0+<""35.347"hv0"1"6222" o gvgtu
	"	$6: "XFE" * @82" XFE" Ocz { < """"" 8.784" hv0"1" 4222" o gvgtu$
	"	347"XFE<" """"8.784"hv0"1"4222" o gvgtu

EG."HEE0"TqJU."YGGG0

SPECIAL MODIFICATIONS