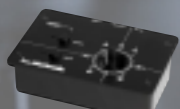# Technical Specifications

User Interface

Although the TC Icon's full color touch screen is an integral part of the System 6000 user interface, Computer Keyboard, mouse and an external VGA screen output are also featured to really adapt to your set-up and working style. PC and Mac Editor will also be available in the very near future.
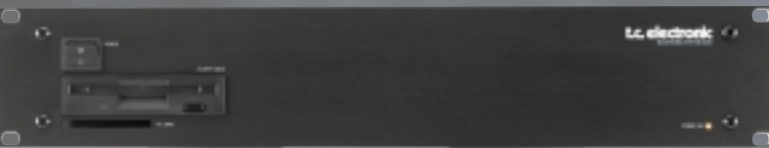
Networking facilities

A 7.5 meter TC Electronic cable from the TC Icon to its CPU 6000 and a X-coupled Ethernet cable from the CPU 6000 to the Mainframe are both provided. Using the System 6000 Windows NT based Networking facilities, you can connect a number of mainframes to a number of TC Icons. For instance, keep your mainframe in the machine room and have a number of TC Icons in different locations or have one TC Icon to control a number of Mainframes. Handling System 6000 project data over a Windows NT based network makes a tremendous difference to existing Windows NT users.

TC Electronic cascadable external SP-1 joystick.

LAN Ethernet to Mainframe | Mouse Keyboard | VGA Output | TC Electronic cable to TC Icon 7.5m (Provided) | USB

The Power Supply automatically accepts and adjusts itself to the voltage supplied between 100-240V, 50/60Hz.
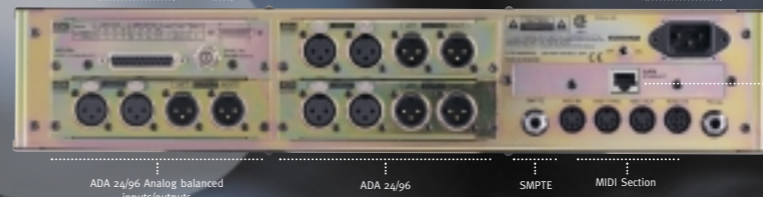
PCMCIA Slot | Floppy Drive

TC Icon and Remote CPU 6000

Display Type:	6.5" TFT active matrix color LCD display, 640 x 480 pixels resolution. High luminance (300 cd/m2, typ.)
Touch Screen:	Resistive, 20 gram activation force
Faders:	Six (6), 90mm motorized with touch sensitivity
Connection:	36-pin MDR connection for Remote CPU 6000
EMC Complies with:	EN 55103-1 and EN 55103-2, FCC part 15 class B, CISPR 22 class B
Safety Certified to:	IEC 60065, EN 60065, UL 6500 and CSA E65

Environment
Operating Temperature:	32° F to 122° F (0° C to 50° C)
Storage Temperature:	-22° F to 167° F (-30° C to 70° C)
Humidity:	Max. 90 % non-condensing

General
Finish:	Black anodized aluminum Stand plate in brushed stainless steel
Dimensions:	D: 279mm W: 198mm Hfront: 33mm Hback: 100mm
Weight:	5.56 lb (2,51 kg)

Warranty
Parts and Labor:	1 year

Remote CPU 6000

CPU:	Embedded Cyrix GXM-200 processor
System Disc:	32MB CompactFlash Card
System Memory:	32MB SODIMM Ram
Operating System:	Windows NT embedded version 1.0

Connections:
Ethernet Interface:	10/100 Mbits/s, Base-T, IEEE 802,3 pico protocol compatible. RJ-45 connector
USB Interface:	Two Universal Serial Bus ports, USB 1.0 compliant
Keyboard/Mouse:	Mini-DIN connector supports standard PC/AT keyboard and a PS/2 mouse.
Remote:	36-pin connection for TC Icon
EMC Complies with:	EN 55103-1 and EN 55103-2, FCC part 15 class B, CISPR 22 class B
Safety Certified to:	IEC 60065, EN 60065, UL 6500 and CSA E65

Environment
Operating Temperature:	32° F to 122° F (0° C to 50° C)
Storage Temperature:	-22° F to 167° F (-30° C to 70° C)
Humidity:	Max. 90 % non-condensing

General
Finish:	Black anodized aluminum face plate Painted and plated steel chassis
Dimensions:	1.75" x 19" x 8.2" inches (483 x 44 x 195 mm)
Weight:	4.7 lb. (2,13 kg)
Mains Voltage:	100 to 240 VAC, 50 to 60 Hz (auto-select)
Power Consumption:	50 watts
Backup Battery Life:	>10 years

Warranty
Parts and Labor:	1 year

AES/EBU Eight channel | Sync in word clock | The Power Supply automatically accepts and adjusts itself to the voltage supplied between 100-240V, 50/60Hz.

LAN Ethernet

ADA 24/96 Analog balanced inputs/outputs | ADA 24/96 | SMPTE | MIDI Section

ADA 24/96 Analog I/O

Mainframe

Digital Inputs and Outputs
Connectors:	D-SUB, 25 pole (8 channels AES/EBU in/out)
Formats:	AES/EBU (24 bit)
Word Clock Input:	BNC, 75 Ohm or Hi-Z, 0.6 to 10 Vpp
Internal Sample Rate:	96 kHz, 88.2 kHz, 48.0 kHz, 44.1 kHz
Internal Clock Precision:	+/- 30 ppm
Jitterrejection at External Sample Rates:	30 to 34 kHz, 42.5 to 45.5 kHz, 46.5 to 48.5 kHz, 85 to 91 kHz and 93 to 97 kHz.
Rejection Filter (4'th order):	< -3 dB @ 50 Hz < -65 dB @ 500 Hz < -100 dB @ 1.4 kHz
Rejection Filter Peak (jitter gain)	< 1 dB @ 2 Hz
Intrinsic Interface Jitter:	< 1 ns peak, BW : 700 Hz to 100 kHz
Digital Output Phase:	< 3 % of sample period
Input variation before Sample Slip:	+27 % / -73 % of sample period
Output Dither:	HPF/TPDF dither 8-24 bit, mono, stereo, inverted
Processing Delay:	0.15 ms + 0.21 ms per engine @ 48 kHz, 0.07 ms + 0.1 ms per engine @ 96 kHz
Frequency Response DIO:	DC to 23.9 kHz +- 0.01 dB @ 48 kHz, DC to 47.9 kHz +- 0.01 dB @ 96 kHz

PCMCIA Interface
Connector:	PC Card, 68 pin type 1 cards
Standards:	PCMCIA 2.0, JEIDA 4.0
Card Format:	Supports up to 2 MB SRAM
Floppydrive:	DOS compatible, 3 1/2", 1.44 Mb

Control Interface
MIDI:	In/Out/Thru: 5 Pin DIN
GPI, Pedal, Fader:	phone jack, 0 ohm to 50 kohm
Remote:	Custom MIDI In & Out
SMPTE:	Input for Cuelist Management
Ethernet:	10/100 Mbits/s, Base-T

EMC
Complies with:	EN 55103-1 and EN 55103-2, FCC part 15 class B, CISPR 22 class B
Safety Certified to:	IEC 60065, EN 60065, UL 6500 and CSA E65

Environment
Operating Temperature:	32° F to 122° F (0° C to 50° C)
Storage Temperature:	-22° F to 167° F (-30° C to 70° C)
Humidity:	Max. 90 % non-condensing

General
Finish:	Black anodized aluminum face plate Painted and plated steel chassis
Dimensions:	3 1/2 x 19 x 12 inches
Weight:	19 lbs. (8.6 kg)
Mains Voltage:	100 to 240 VAC, 50 to 60 Hz (auto-select)
Power Consumption:	45 watts
Backup Battery Life:	>10 years

Warranty
Parts and Labor:	1 year

25 pin D-Sub cable from DSP 6000 provided

Basic Package:
TC Icon, CPU 6000, Mainframe incl DSP 6000, No Dynamics software (optional)

Full Analog Package:
TC Icon, CPU 6000, Mainframe incl DSP 6000, 3xADA24/96 cards, No Dynamics software (optional)

Full Surround Package:
TC Icon, CPU 6000, Mainframe incl DSP 6000, 3xADA24/96 cards and MD5.1, MD3 & Toolbox5.1

TC Icons with CPU 6000, Mainframes, ADA24/96 and software licences (MD5.1, MD3, VP8 and more) can be ordered separately.

ADA 24/96 Analog I/O

Analog Input
Connectors:	XLR balanced (pin 2+, pin 3-)
Impedance:	10/3 kohm (Balanced/unbalanced):
Selectable Full Scale Input level:	6, 12, 18, 24, 30 dBu
Dynamic Range (A-In: 12, 18, 24, 30 dBu):	> 113 dB (unweighted), BW: 20-20kHz
THD+N:	< -105 dB @ 1 kHz, -3 dBFS

Frequency Response,
(*with linear filter):	Output Sample Rate:			
	@32 kHz	@44.1* kHz	@48* kHz	@96 kHz
+0/-0.1 dB:	1.2 Hz - 14.8 kHz	1.2 Hz - 19.9 kHz	1.2 Hz - 20.3 kHz	1.2 Hz - 44.4 kHz
+0/-3 dB:	0.2 Hz - 15.6 kHz	0.2 Hz - 20.6 kHz	0.2 Hz - 21.2 kHz	0.2 Hz - 46.8 kHz

Crosstalk:	< -120 dB, 20 Hz to 20 kHz
CMRR (A-In: 24 dBu, Rs: 2 x 20 ohm):	> 80 dBØ 50/60 Hz & > 90 dB @ 1 kHz
A to D Conversion:	24 bit (Dual bit delta sigma sampling at 4.1/5.6/6.1/6.1 MHz)

Analog Output
Connectors:	XLR balanced (pin 2+, pin 3-)
Impedance:	40/20 ohm (Balanced/unbalanced)
Impedance Balance:	> 60 dB, @ 20-20kHz
Signal Balance:	> 40 dB, @ 20-20kHz
Selectable Full Scale Output level:	6/0, 12/6, 18/12, 24/18 dBu (Balanced/unbalanced)
Dynamic Range (A-Out: 18, 24 dBu):	> 113 dB (unweighted), BW: 20-20kHz
THD+N:	< -95 dB @ 1 kHz, -3 dBFS

Frequency Response,
(*with linear filter):	Input Sample Rate:			
	@32 kHz	@44.1* kHz	@48* kHz	@96 kHz
+0/-0.3 dB:	4.6 Hz - 14.8 kHz	4.6 Hz - 19 kHz	4.6 Hz - 19 kHz	4.6 Hz - 19 kHz
+0/-3 dB:	0.7 Hz - 15.6 kHz	0.7 Hz - 20.5 kHz	0.7 Hz - 21.2 kHz	0.7 Hz - 44 kHz

Crosstalk:	< -110 dB, 20 Hz to 20 kHz
D to A Conversion:	24 bit (Multi-bit delta sigma sampling at 4.1/5.6/6.1/6.1 MHz)

Selectable Sample Conversion Filters
In/Out Sample Rate 32/96 kHz:	Fixed filter
In/Out Sample Rate 44.1/48 kHz:	Filter choices: Linear, Natural, Vintage, Bright & Standard

"FINALLY, a commercially-available A/D that beats all other high-end stand alone converters I have heard! You can quote me on that! System 6000's ADA 24/96."

Bob Katz, President, Digital Domain