
DESCRIPTION

Trantek **LanDisplay** products provide all the facilities of conventional display systems, along with the advantages of TCP/IP network connection, system wide synchronisation, web enabled control and management.

The **LanDisplay** includes a real time clock, with better than one minute per year accuracy. More accurate time control is available through GPS, network time protocol (NTP) or manual over-ride.

Communication with the **LanDisplay** is achieved through a number of physical interfaces. Fail-over configurations are available for high reliability installations.

The **LanDisplay** includes an annunciator function, where audio messaging is required. The **LanDisplay** range is available for both indoor and outdoor use.

APPLICATIONS

The **LanDisplay** product range is ideally suited for situations where the information should be displayed and updated in many geographically distributed locations and where it is important that information is synchronised over a network.

Suitable applications include:

- Transport Terminals: eg. Train Stations, Bus Terminals, Ferry Wharves, Airports
- Large Complexes: eg Hospitals, Schools, Office Towers, Sporting Complexes, Shopping Centres
- Large Control Centres: Power Stations, Co-ordinated Control Rooms, Transport System Control Rooms



REFERENCE INSTALLATION

CIRCULAR QUAY, SYDNEY, AUSTRALIA

Circular Quay, the main ferry terminal in Sydney Harbour, is used daily by many thousands of commuters and tourists to embark on trips around Sydney Harbour.



As with all transport terminals, it is vital that the schedule and time display is accurate so that the passengers know when the next service will depart or arrive.

Trantek installed a **LanDisplay** to meet these needs.

Trantek Pty Ltd

Unit 3, 99-101 Anzac Ave

West Ryde, NSW 2114

Phone: +61 2 9808 6166

Fax: +61 2 9808 6199

Email: sales@trantek.com.au

TECHNICAL OVERVIEW

The Trantek **LanDisplay** product family of Network attached Public Information Displays comprises

- Network attached controller with open OS
- Comprehensive and secure LAN / WAN support
- Arrays of LEDs in character or graphics formats
- Power supply
- Enclosures
- Network configuration and management tools

These display products are ideally suited to Public Information Display applications. They are Open Systems and implement a variety of formats and functions including alpha and graphics displays, time of day and calendar.

As an Open System, user specific applications can be readily integrated in the display platform. Management of the system is very flexible, and may be web enabled through a **LanDisplay** management tool. The platform supports Linux like applications and devices, and other Unix variants.

DISPLAY

Character Formats

Characters can be chosen in standard sizes of 40mm 50mm or 75mm high or ordered to suit special applications.

Display features include left, right, up and down scroll, curtain update effects, character flashing and reverse background.

Graphic Formats

Grey scale graphic images with animation.

CONTROLLER SPECIFICATION

Network Interface

The network attached ucLinux-equipped controller includes the following network interface features:

- Web delivered, with in-built server. Configurable from a web browser
- Upload and download of configuration files for automated central system management, using Telnet and FTP access
- Advanced network security
- Remote firmware management, through Telnet and FTP

Hardware Overview

A network attached ucLinux-equipped controller includes the following hardware

- Realtime clock with battery and low-battery detect, standard accuracy better than one minute / year
- 10/100 base TX/FX Ethernet port

- Optional FLASH based disk visible as device to network
- Watchdog reboot
- 4 serial ports with modem control
- 16 bit CardBus (PCMCIA) support
- Audio codec with line out
- Optional display controller with composite PAL output
- Optional LibertyLink magnetic wireless interface for compatible mobile phones, including the Ericsson T-28, T-39, T-68 series
- LED array power control with current measure
- Pulse interface to GPS

System Software

The ucLinux-equipped controller includes the following system software

- JFFS2 file system (journaling, encryption, and compression for hi-reliability)
- Full Linux secure networking facilities
- System level support for 802.11b and Bluetooth PCMCIA devices
- Support for serial port / RAS modem as required (dial out, dial in)

LanDisplay Management

- Automatic link set-up
- Serves web-pages
- Management tools to control alarm stack, display and audio functions, local storage, programmed events and self test
- Alarm and status condition can be interrogated remotely, to provide diagnostic information on serviceability of each display sub-system, LED sub-module, security tamper input and other functions

Audio System

- Audio out
- Stores and replays sound wavefiles
- Up to CD quality audio
- Voltage 1 Volt RMS
- Minimum output load 300 Ohm
- RCA connectors

Ancillary Devices

Ancillary devices that can be attached to the controller

- Inductive loop Line-out attachment device
- ADSL modem option (Ethernet attached)
- GSM, GPRS modem options (serial port attached)

Power Supply

- 240 V, 50 Hz standard, other power options on application

Operating Environment

- Temperatures: 0° to 55° Celsius
- Humidity: 5% to 95% Non Condensing

INTEGRATED APPLICATION SUITE

The **LanDisplay** platform includes a range of integrated applications and management services:

- Optional support for Trantek's redundant messaging software as required
- Support for network backup via ppp
- Support for low battery
- Web Page with https for configuration and status (diagnostic results)
- 'Backward Compatible' modes to handle older ASCII serial display protocols
- Automatic time synchronisation through network time protocol (NTP) client
- Configurable as NTP server and with GPS interface for automatic time source
- Email based diagnostic system for notification of events
- NWAnnounce! Suite of audio file management code



DISPLAY ARRAY

Displays may be configured using a number of options for customer delivery, ex-works. These include a range of LED array geometry, packaging, and power supply options. Additional custom variations can be specified as required in consultation with our product engineers.

Sub Modules

Standard Character sub-modules of LEDs have a product-order code based on the diameter, pitch, array dimension, color, and type of led.

Prefix	LED Array	LED Diam	LED Pitch	LED Type	LED Color	LED Angle
TRDSM	- 5x7	- 3	- 6	- 1	- 1	- 22
	5x7 8x8	3 = 3mm 5 = 3mm	6=6mm 10=10mm	1=standard 2=high efficiency 3=ultrabrite	1 = RED 2 = AMBER 3 = Y/GREEN 4 = GREEN 5 = BLUE 6 = WHITE	Viewing angle in degrees

Character Based Displays

Standard Character Displays are constructed from a backboard plus Sub modules.

There is space between the characters and rows, and displays can be stacked vertically and maintain constant row spacing.

Prefix	Lines	Chars	Char Pitch	Row Pitch	Sub Module
TRDBP	- 4	- 32	- 27	- 34	- 5x7-3-6-1-1-22
	Number of Lines of Characters	Number of chars per row	Character Pitch in mm	Row pitch in mm	Sub Module Part Number

Character sub-modules are field replaceable by the user.

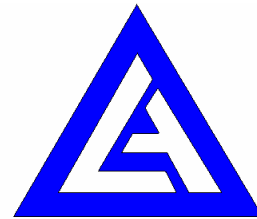
Graphics Based Displays

Graphic displays are built from 8x8 sub-modules and use a similar order code to character based displays.

Prefix	Lines	Chars	Char Pitch	Row Pitch	Sub Module
TRDBP	- 4	- 32	- G	- G	- 8x8-3-6-1-1
	Number of rows of sub-modules	Number of 8x8 sub-modules per row	Graphic	Graphic	Sub Module Part number

Character sub-modules are field replaceable by the user.

CONTACT



TRANTEK

Trantek Pty Ltd
Unit 3, 99-101 Anzac Ave
West Ryde, NSW 2114
Phone: +61 2 9808 6166
Fax: +61 2 9808 6199
Email: sales@trantek.com.au