TimeFrame®

GPS Date And Time Stamp With Annotation

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Description

TimeFrame® overlays GPS (Global Positioning System) date and time with user defined messages onto a self-generated blue screen or any incoming video source such as a black-and-white or color camera. The video output can be transmitted or recorded for an exact, permanent record of when events occur. TimeFrame® requires a NMEA 0183 compatible GPS receiver like the Garmin GPS35-PC. NTSC and PAL versions available.

Specifications

Dimensions:	4 1/4" x 3 1/2" x 1 1/4"
Weight:	6.7 oz.
Input voltage:	8.0 to 14.0 volts DC (65 ma max.)
DC jack:	2.1 mm x 5.5 mm, center tip positive
Operating temperature:	-10 C to +70 C
Video level:	1 volt peak to peak
Video impedance:	Input 75 ohm, output 75 ohm resistively terminated
GPS input:	NMEA 0183 4800 baud GPRMC sentence
User custom messages:	2 messages, 15 characters each

Connections

TimeFrame® has five connectors (see figure 2.)

Connector	Hookup
VIDEO IN (optional)	•Attach noise free NTSC (or optional PAL) video source if "overlay" mode selected •Leave disconnected if "blue screen" mode selected
VIDEO OUT	•Attach to monitor, VCR, DVR, video transmitter, etc.
GPS IN	•Pin 2 - Attaches to GPS receiver serial out •Pin 5 - Attaches to GPS receiver serial ground
GPS OUT	•DB-9 male to female cable to loop through to additional TimeFrame® devices
DC IN	•+8 to +14 volts DC •2.1 mm x 5.5 mm DC coax plug, center tip positive

Configuration

TimeFrame® configuration is performed through an on-screen menu system. At any time press the "MENU" button to enter the on-screen menu configuration. The "UP, DOWN, and ENTER" buttons move the cursor and change the values (see figure 1.)

Main Menu:

Menu Option	Action
Screen Options	Displays Screen Options Menu
Time Options	Displays Time Options Menu
Date Options	Displays Date Options Menu
User Messages	User Messages Menu
Save Changes and Exit	Save all the options that have been changed in non-volatile memory
Discard Changes and Exit	Discard all the option changes that have been made since entering the menus

Screen Options Menu:

Menu Option	Action
Screen Mode	• SELF-GEN - TimeFrame® generates its own blue background screen. No video camera required. • OVERLAY - Overlay the on-screen text on the incoming camera video source
Translucent Text	• OFF - Do nothing • ON - Allows the on-screen text to be see-through (less intrusive)
Manual Adjustment	• OFF - Do nothing • ON - Allows the on-screen text and background brightness to be adjusted via internal potentiometers
Main Menu	Exit to Main Menu

Fig 1.0 - Front view of TimeFrame®

Fig 2.0 - Back view of TimeFrame®

Time Options Menu:

Menu Option	Action
Time	• OFF - Do not display the time • ON - Display the time
UTC Offset	Time offset from UTC (-12 through +12) e.g. -5 EDT
Hour Format	12 or 24 hour format
Seconds	• OFF - Do not display seconds • ON - Display seconds
Horz Position	Select the horizontal screen position (1 - 28)
Vert Position	Select the vertical screen position (1 - 11)
Backgnd Frame	• OFF - Do not display a black frame • ON - Display a black frame behind the text
Main Menu	Exit to Main Menu

Date Options Menu:

Menu Option	Action
Date	• OFF - Do not display the date • ON - Display the date
Format	Date format mm/dd/yy, mm/dd/yyyy, dd/mm/yy, dd/mm/yyyy, mon dd yyyy
Horz Position	Select the horizontal screen position (1 - 28)
Vert Position	Select the vertical screen position (1 - 11)
Backgnd Frame	• OFF - Do not display a black frame • ON - Display a black frame behind the text
Main Menu	Exit to Main Menu

User Messages Menu:

Menu Option	Action
Disp Msg 1	• OFF - Do not display user message 1 • ON - Display user message 1
Horz Position	Select the horizontal screen position (1 - 28) for Msg 1
Vert Position	Select the vertical screen position (1 - 11) for Msg 1
Message 1	Select a 15 character message • up/down buttons to cycle through characters • menu button to insert a space character • enter button to advance to the next character position
Disp Msg 2	• OFF - Do not display user message 2 • ON - Display user message 2
Horz Position	Select the horizontal screen position (1 - 28) for Msg 2
Vert Position	Select the vertical screen position (1 - 11) for Msg 2
Message 2	Select a 15 character message • up/down buttons to cycle through characters • menu button to insert a space character • enter button to advance to the next character position
Main Menu	Exit to Main Menu

Operation

Upon power-up TimeFrame® will display a satellite dish icon until a valid GPS signal is received.

Trouble Shooting Tips

Problem	Solution
Green LED off (won't power up)	• Verify power supply output (8 to 14 VDC). • Verify polarity of supply to TimeFrame®. • Verify the 250 ma internal fuse is good.
Screen is unreadable	• Verify the TimeFrame® "VIDEO IN" has a valid, noise free, video signal.
No date/time information on-screen or data doesn't update	• Verify GPS receiver has been configured to send 4800 baud NMEA 0183 data. • Verify GPS receiver is receiving valid signal.

Warranty & Service

If the product fails to perform as described in our product description or specification, within 90 days from the date of shipment to the buyer, we will repair or replace the product and/or accessories originally supplied. Failure due to improper installation, misuse, abuse or accident is not covered by this warranty. Incidental and consequential damages are not covered by this warranty. The buyer must obtain a Return Material Authorization by calling (248) 524-1918, and shipping the defective product to Intuitive Circuits, 2275 Brinston, Troy, MI 48083, freight prepaid. After the warranty expires, we will promptly supply an estimate for the repair cost.

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