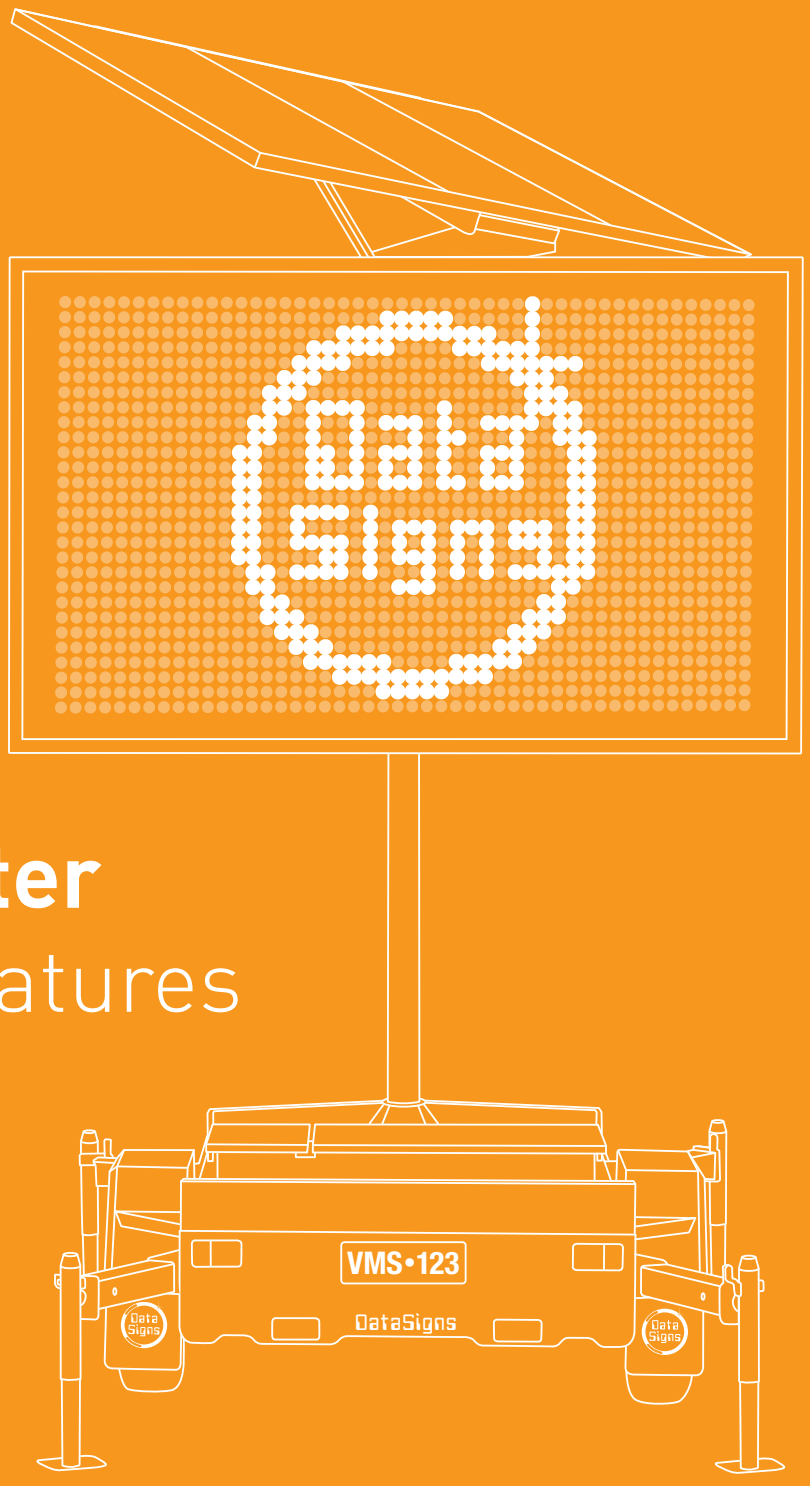
Data Signs®



VMS Computer
Advanced Features

SERIES-II

VMS Controller Advanced Features

SERIES-II

VMS Computer

This manual covers the Advance features of the VMS Product.
For further Training for this product contact Data Signs on 1300 785 850.
This User Manual applies to Controllers operating on firmware xx.xx.xx or later.

THE VARIABLE MESSAGE SIGN SHOULD ONLY BE OPERATED BY QUALIFIED TRAFFIC MANAGERS.

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Advanced VMS Computer Functions

For this manual's convention, Sign means Data Signs Variable Message Signs or VMS.
This manual only deals with the more advance features of your VMS Computer – Series-II.
For all other functionality refer to the *"VMS COMPUTER QuickStart Guide Series-II"*.

Advanced VMS Computer Functions

To setup the Radar Options on a Sign fitted with an *optional* Radar Gun supplied by Data Signs, complete the following steps, as a guide.

Note: Make sure that you have the correct VMS Password set on the VMS COMPUTER before trying to update the Sign. Refer to "Security Settings" section of the QuickStart guide.

Navigating via the ↑ and ↓ keys, select the **'Radar Options'** menu item from the main **MENU**.

Once the cursor is on the **'Radar Options'**, push the ENTER button. The following screen(s) will be displayed

R	A	D	A	R		O	P	T	I	O	N	S		-		p	g		1
*		S	e	t	u	p		R	a	d	a	r							
		S	e	t		L	o	/	H	i		M	S	G					
		V	i	e	w		R	a	d	a	r		S	e	t	u	p		

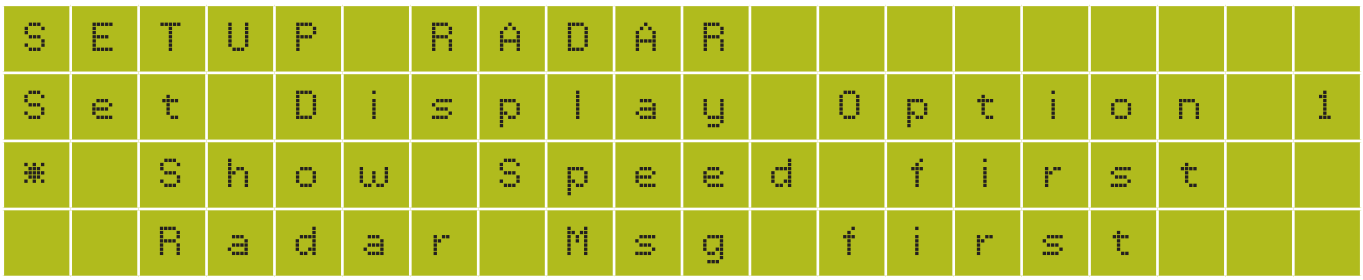
Select the **'Setup Radar'** option and push the ENTER button.

1. Select the **'Message Interrupt'** option in this instance and push the ENTER button.
   - If 'Disable Radar' was selected then this is the end of the Radar Setup. The Radar Functionality of the Sign has been Disabled.
   - If 'Radar Only' was selected the Signs' Normal message is NOT shown.

     Only when a valid speed is detected by the Radar Gun does the Sign display something, it will be **BLANK** at all other times.
   - As the 'Message Interrupt' was selected, the Normal message is shown on the Sign, when a speed is detected by the Radar, the Sign displays a message or speed depending on other Radar settings following this selection.

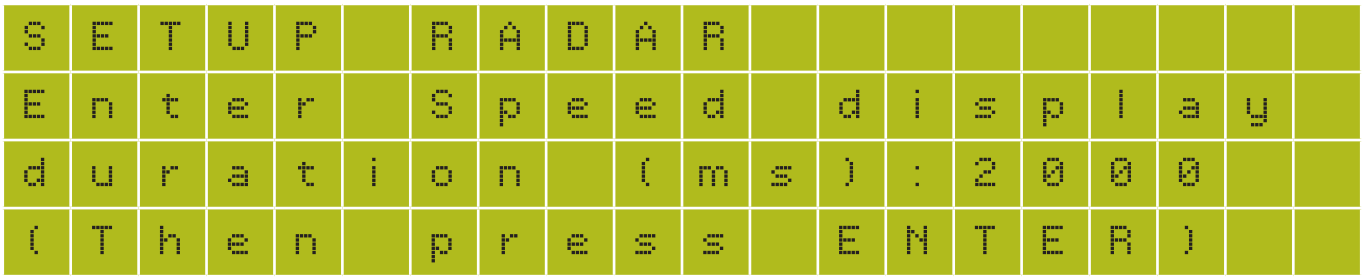
S	E	T	U	P		R	A	D	A	R							
		D	i	s	a	b	l	e		R	a	d	a	r			
		R	a	d	a	r		O	n	l	y						
*		M	e	s	s	a	g	e		I	n	t	e	r	r	u	p	t	

2. On the next screen select 'Show Speed First' as the 1st display option and push the ENTER button.
    - Because 'Show Speed first' was selected, the Sign will show the detected speed on the Sign first.
    - If 'Radar Msg first' was selected, the Sign would first display either the RadarHi / RadarLo message on the Sign when a speed was detected by the Radar Gun.

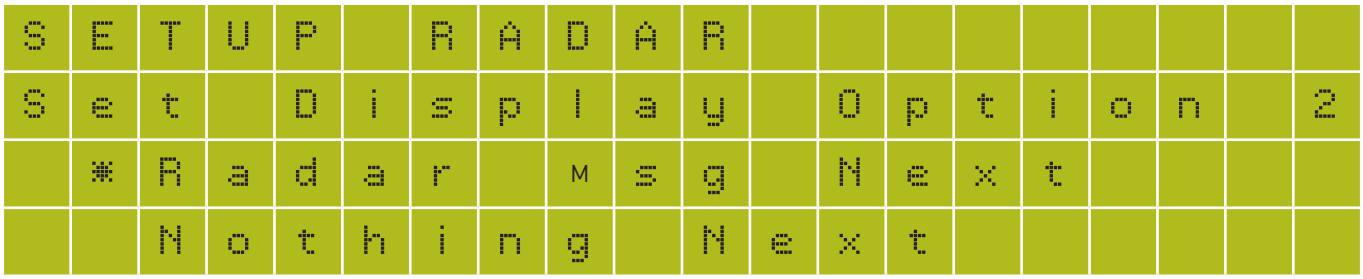


Now enter a Speed display duration time, 1 to 9999. This determines how long the detected speed is displayed on the Sign. Note: The Frame display time for the Radar Speed is set in 1/1000 of a second, the default time is 2000 which is 2 Seconds

3. Then push the ENTER button to continue.

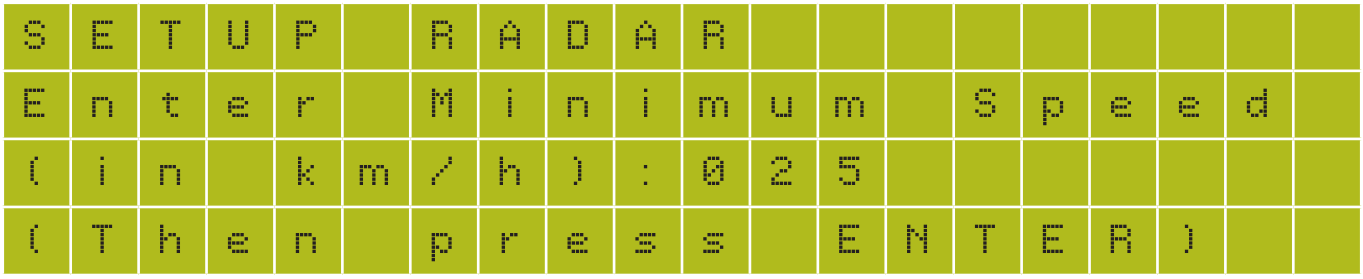


4. Select the **'Radar Msg Next'** option as the 2nd Display Option and push the ENTER button.



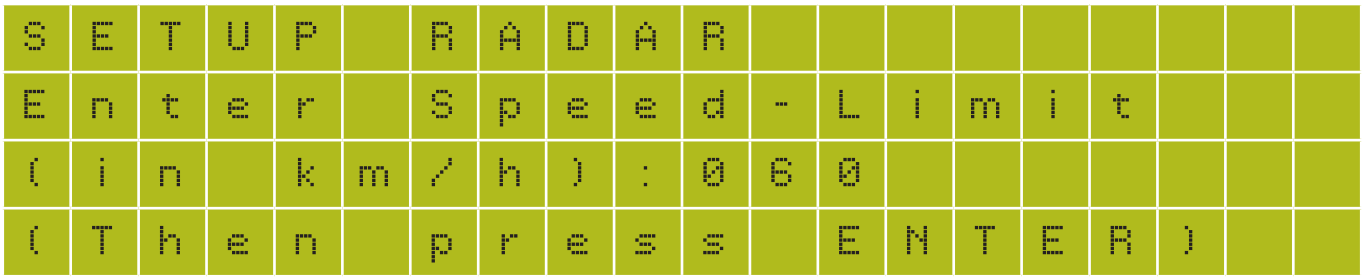
5. Next, set the Minimum speed and push the ENTER button to continue.
   This is the speed **above** which the Sign will display the speeds detected by the Radar Gun.

   For example, if the speed zone where the Sign is positioned is 60 km/h, you may only want to show detected speeds on the Sign greater than 25 km/h. Therefore, set the Minimum Speed to '25'.
   Setting the Minimum speed too low i.e. 10K Km/h may cause false and annoying speed displays.



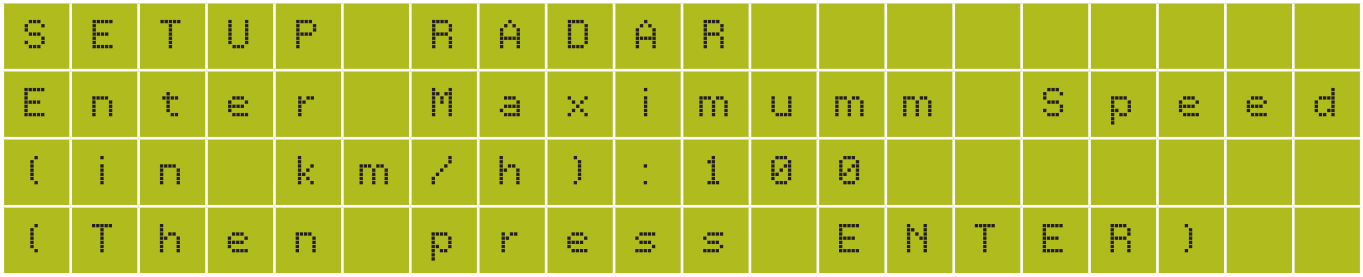
6. On the next screen enter the **Speed-Limit** and push the ENTER button to continue.
   *Note: if for the 2nd display option 'Nothing Next' was chosen, the **'Speed-Limit'** step would be bypassed.*

   - The **Speed-Limit** is usually set to the current road speed limit.
     *For example, in a 60 km/h speed zone, make the **Speed-Limit** '60'.*
   - If the speed detected by the radar gun is lower or equal to the **Speed-Limit** the Sign will display the RadarLo message.
     The RadarLo message is usually something like 'THANK YOU DRIVE SAFELY'.
   - Otherwise, if the speed detected is greater than the **Speed-Limit** then the Sign will display the RadarHi message.
     The RadarHi message is usually something like 'TOO FAST SLOW DOWN'.

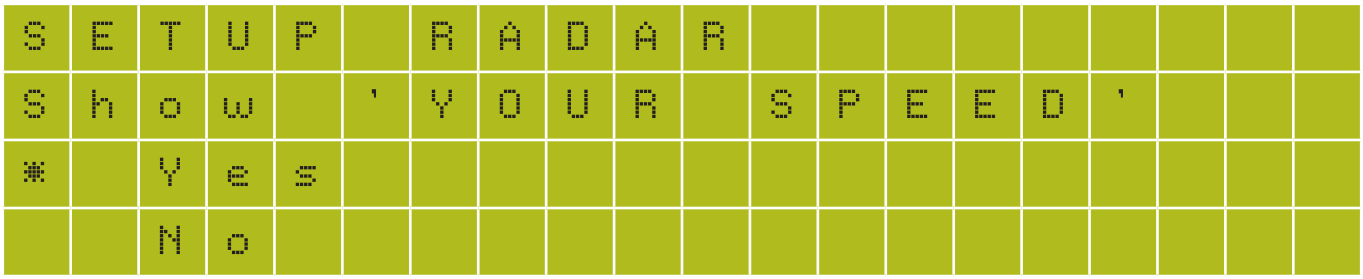


7. On the next screen set the Maximum speed and push the ENTER button to continue. Any speeds detected that are higher than the Maximum speed you set will not be shown by the Sign.

   For example 100, this is to prevent encouraging drivers to 'drag race' in the streets and use the Sign as a speed readout.



- On the next screen select the **'Yes'** option to show **'YOUR SPEED'** and push the ENTER button to continue.
- When this option is set, the Sign will display the text "YOUR SPEED" above the detected speed value. Otherwise the detected speed is shown as a larger font size on the sign.



- To send the radar settings to the Sign, push ENTER .
  Communications with the Sign will occur to update the Sign with the new Radar settings.
- The Radar Setup is now complete.

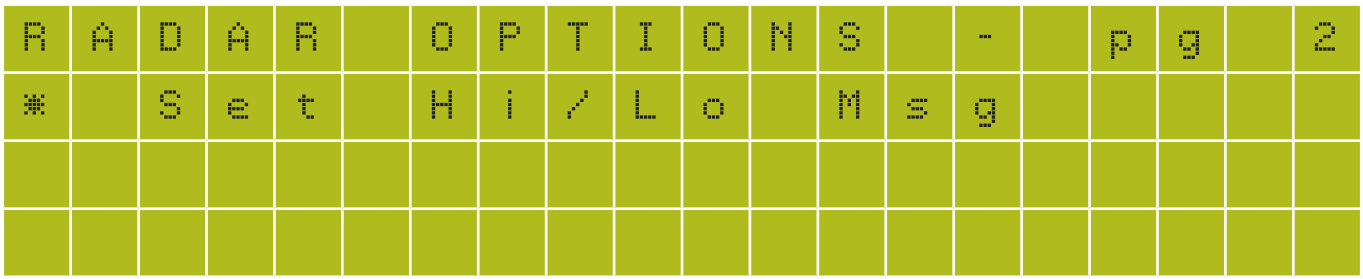
Set RadarHi Speed or RadarLo Speed Messages

From the Radar Options main MENU, you can also set the Radar Hi and Radar Lo messages.
These messages are displayed on the Sign when you selected **'Show Radar Msg...'** in the Radar Setup.
For example, you have selected to **'Show Speed first'** then **'Radar Msg next'.**

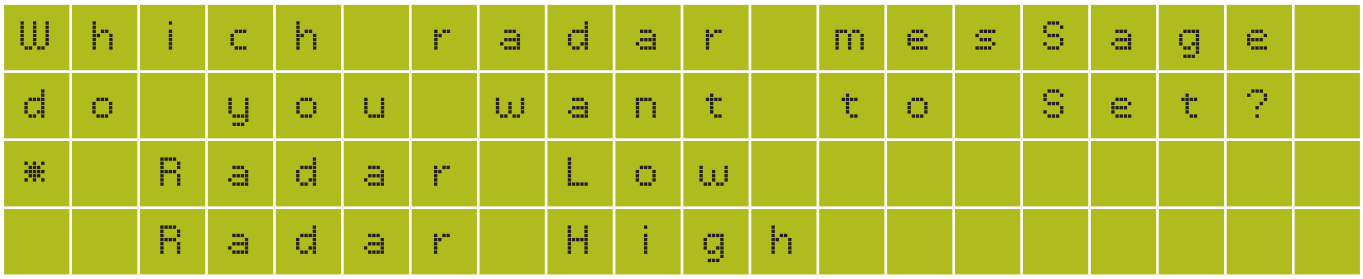
- When a speed is detected, the speed is displayed on the Sign. Then either the Radar Hi or Radar Lo message is displayed.
- The Radar Hi message is displayed when the detected speed is above the Speed-Limit (i.e. TOO FAST SLOW DOWN).
- The Radar Lo message is displayed when the detected speed is at or below the Speed-Limit (i.e. THANKS DRIVE SAFELY).

You need to create both the Radar Hi and Radar Lo messages using the **'Create New Message'** main menu item. Appropriate names would be: RADARHI and RADARLO.

1. Select the **'Set Hi/Lo Msg'** option, push the ENTER button.



2. Select which type of message you want to set. Push the ENTER button.

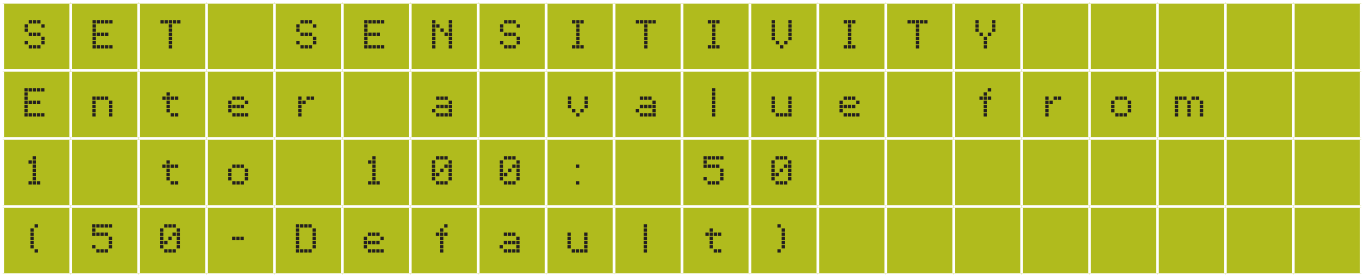


3. Select the saved message from the list. Push the ENTER button.
Follow the same for process for both messages.

Set Radar Gun Sensitivity

It may be useful to set the Sensitivity where the radar unit is picking up false readings from trees for example (so, too sensitive) or where the radar unit is not picking up cars from far enough away (not sensitive enough).

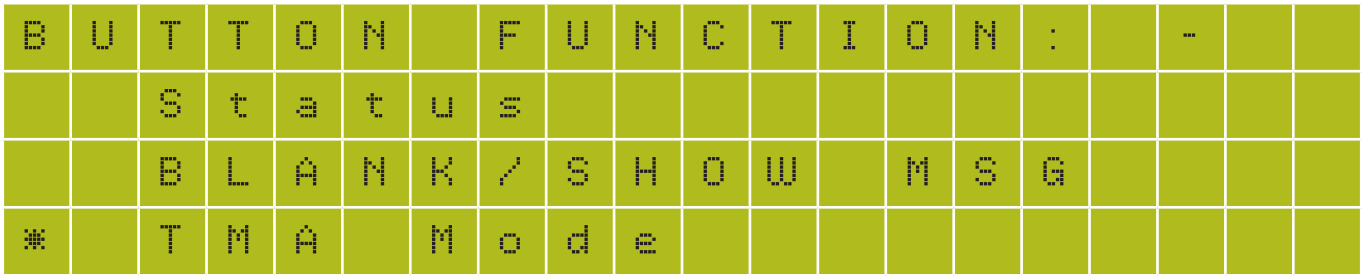
Select **'Radar Sensitivity'** from the Page 2 Main menu.



This is a percentage value, where 100 is the most sensitive and 1 is the least sensitive. This applies to Signs with RM-32B or Later Version Controllers.

Sign Status / BLANK or TMA Mode Button

From the **'VMS Computer Optns'** Main Menu, select the **'Status Btn Func'** sub-menu item to change the functionality associated with the SIGN STATUS / BLANK button on the VMS COMPUTER.



Normally, the button function is set to display the Sign Status when it is pressed. To change the button function to BLANK or SHOW Message when pressed, select the **'BLANK / SHOW Message'** option and press the ENTER button.

To allow the VMS COMPUTER to display TMA Mode, select the 'TMA Mode' option and press the ENTER button.

For the TMA Mode change, a self-adhesive label can be fitted to the VMS COMPUTER overlay over the top of the button so that this change is noted.

TMA Mode (Truck Mounted Attenuator)

TMA Mode is used when the DataSign-VMS is mounted on the back of a TMA.

Set the SIGN STATUS button from the **'VMS Computer Optns'** menu, and go to **'Status Btn Func'** sub-menu item. The sticker as shown on the left can be placed over the SIGN STATUS button to show the operator that this button is now used to enter TMA Mode.

When in TMA Mode, the VMS COMPUTER does not turn off.

The screen displays the current state of the Sign, either running a Message or Blank.

T	M	A		M	O	D	E		-									
S	i	g	n	:		M	E	S	S	A	G	E						
P	r	e	s	s		E	N	T	E	R		T	O		B	L	A	N	K
P	r	e	s	s		M	E	N	U		t	o		e	x	i	t	.	

The operator presses the ENTER button to blank or re-awake the Sign.

T	M	A		M	O	D	E		-									
M	S	G		I	S	:		B	L	A	N	K						
P	r	e	s	s		E	N	T	E	R		T	O		S	H	O	W	
P	r	e	s	s		M	E	N	U		t	o		e	x	i	t	.	

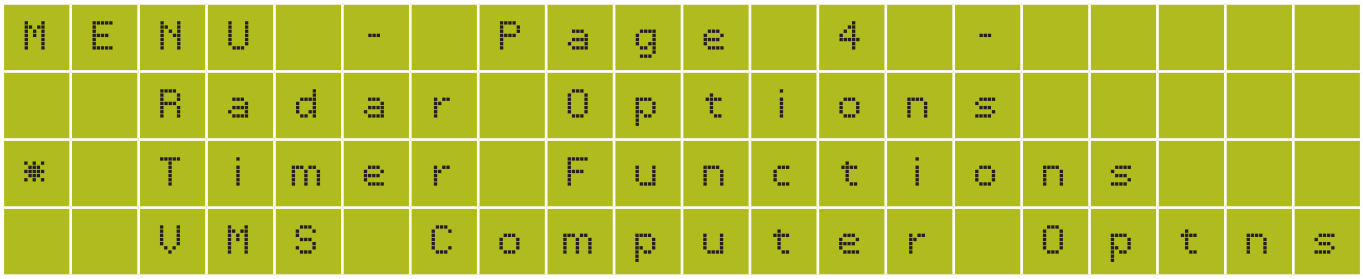
Timer Functions

Timer functions will allow you to display the current date & time on the Sign, or to set a timer to count up or to count down like a stop-watch.

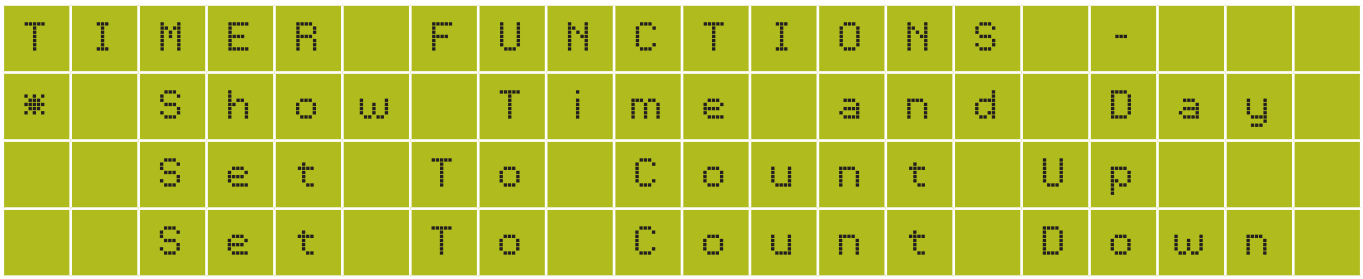
This function is very useful for Public Event, Like Marathons etc.

To display the current date & time on the Sign complete the following steps:

1. Navigating via the ↑ and ↓ keys, select **'Timer Functions'** option from the main MENU and press the ENTER button.



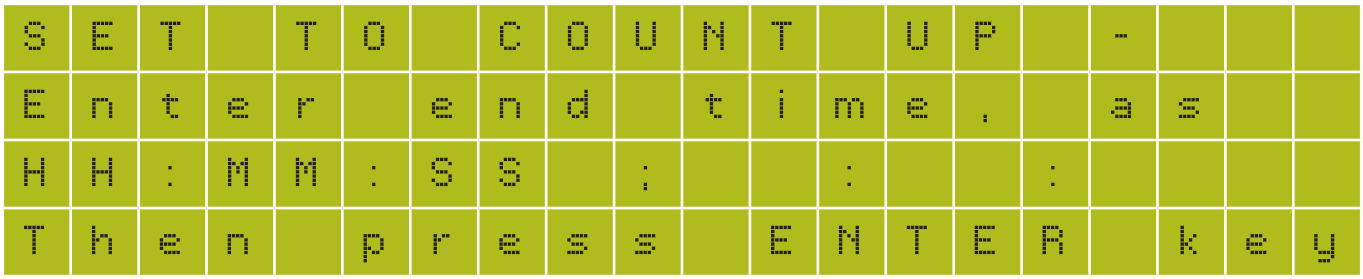
2. In the **'Timer Functions'** menu select the **'Show Time Day'** option and press the ENTER button.



3. In the **'Show Time Of Day'** menu select the time format you want the time to be displayed in and press the ENTER button. The current date & time will now be displayed on the Sign.

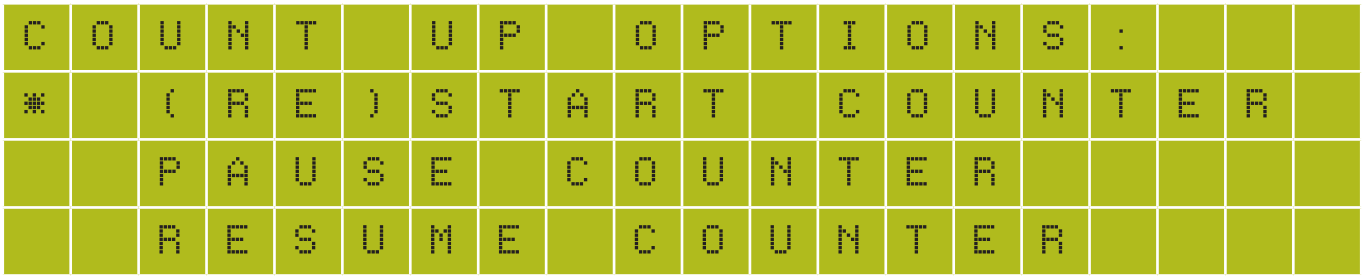
To set and display the count up options on the Sign complete the following steps from the **'Timer Functions'** menu option.

1. Navigating via the ↑ and ↓ keys, select **'Set to Count Up'** option and press the ENTER button.
2. In the **'Set To Count Up'** screen use the keys on the VMS COMPUTER to enter the time to count up to. For example, enter 00:00:10. This will set the timer to count up to 10 seconds. Then press the ENTER button. *Note: You cannot set the timer to less then 5 seconds.*

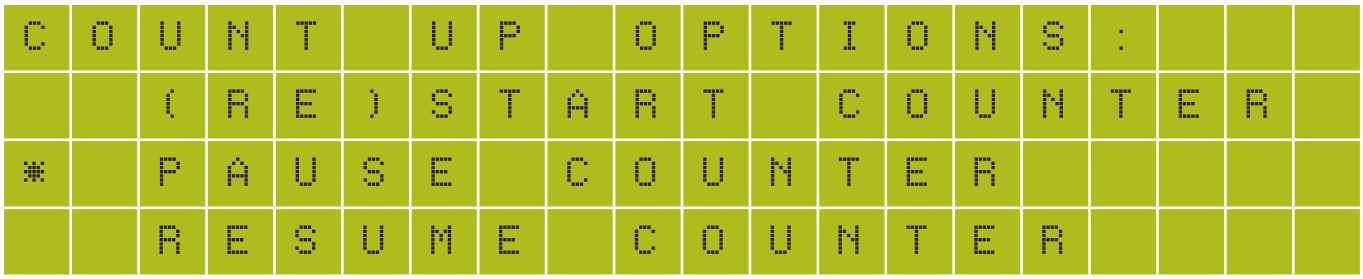


3. Once the counter has been set, the **'Count Up Options'** screen shows. To start or re-start the counter select the **'(RE) Start Counter'** option and press the ENTER button.

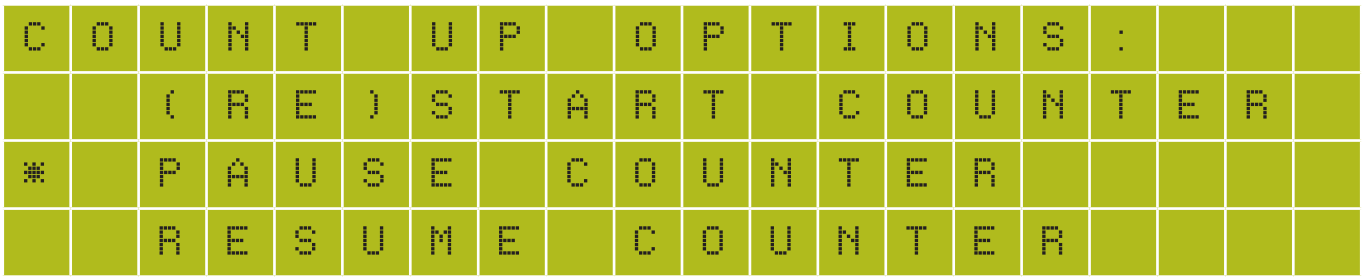
   Any message showing on the sign will complete, and then the counter will start counting up on the Sign.



4. To pause the counter, select the **'Pause Counter'** option and press the ENTER button. The counter will now pause on the Sign.



5. To resume the counter, press the ENTER button. The counter will now resume on the Sign. Press the ENTER button again and the counter will Pause again, and so on.



6. To resume the previous message on the sign, scroll down to select the **'Resume Normal Msg'** option and press the ENTER button. The previously displaying VMS message will now be displayed on the Sign again.

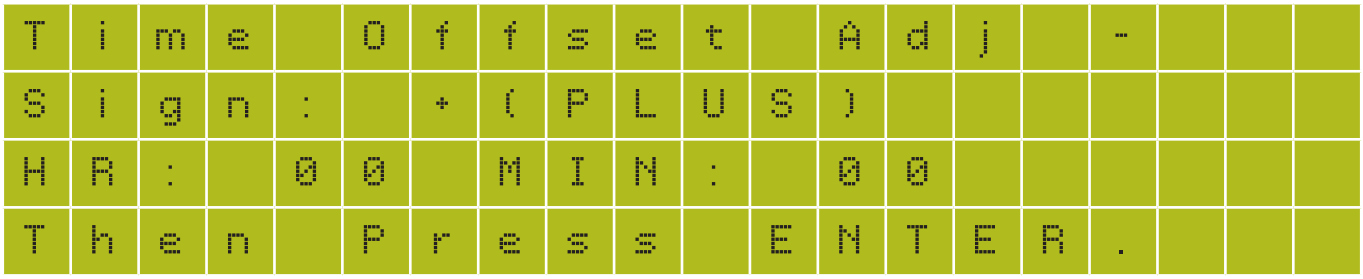
To set and display the count down options on the Sign, complete the above 6 steps from the **'Timer Functions'** menu, and instead select the *count down* options rather than the count up options.

For the count down options, you will need to set a number to count down too, i.e. count down from 30 minutes to 0.

Time of Day Offset Adjustment

This advanced function is to offset the GPS time in the Sign from GMT (Greenwich Mean Time) to set the actual time for your region.

It is generally only needed if the SIM card is not fitted and no connection back to WebVMS server is available. The sign is controlled from another source. i.e. *Streams® from Transmax*, or another third party controller fitted to the Sign.



Use the the ↑ and ↓ keys to select a PLUS or MINUS offset time, then press ENTER.

After this select the number of HOURS and Minutes to offset the time by.

Note: Daylight saving if applicable must be taken into consideration.

If a SIM card is fitted to the VMS sign controller, the correct time will be automatically set.

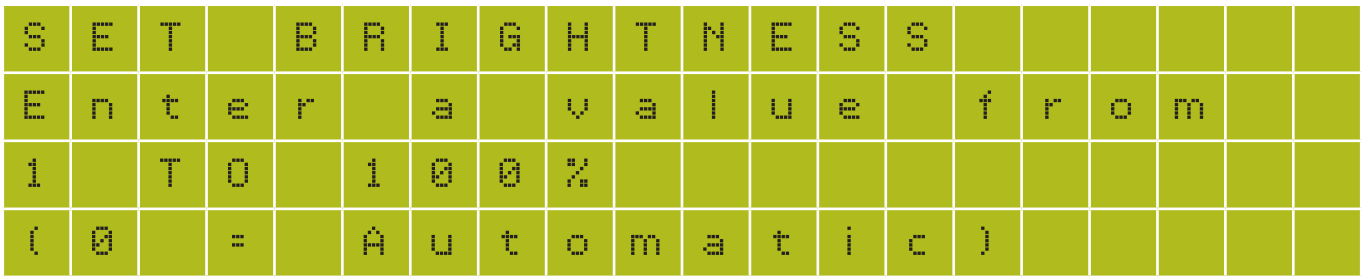
Setting the Sign Brightness Level

This is an Override advanced function for the Brightness level of the output of the LED's on the Sign. ***This level is normally managed automatically by the Sign Controller and will set the Brightness depending on the detected ambient or environmental light conditions and the Signs' battery voltage.***

However, if you wish to alter this brightness level, you can set a specific level using this menu item.

This menu is selected via the **'VMS Computer Optns'** Menu

NOTE THAT SETTING THE BRIGHTNESS LIGHT LEVEL TOO HIGH MAY HAVE A NEGATIVE EFFECT ON THE SIGN BATTERY VOLTAGE AND MAY VOID YOUR WARRANTY FOR THE BATTERIES. USE WITH CAUTION!



Enter the Brightness level as a percentage value. For example, 25% will mean the LED's will be ¼ as bright as their maximum output.

To change back to Automatic Brightness Control, enter 0 and press ENTER.

Sign Status

This will show the Status of the sign, including:

1. Serial Number, WW,Y,NN, Week of year, Year letter (A=2017, B=2018 ect), Unit number that was manufactured that week
2. VMS Sign Controller Firmware version xx.xx.xx. (The VMS Computer serial number is displayed on start-up)
3. Message Showing
4. Battery Voltage i.e. 12.8V
5. Sign Head Internal Temperature (Celcius)
6. LDR-F 0000-9999 Front Light sensor, 0000 - is full light level, 9999 is no light level
7. LDR-R 0000-9999 Rear Light Sensor, 0000 - is full light level, 9999 is no light level
8. Sign Brightness Level , 1 to 100%, 100% is full brightness.
9. Tamper condition (OK)
10. Radar (ON) (Enabled)
11. Controller Time (derived from GPS) – if offset show (+or – HH,MM)
12. GPS Co-ordinates
13. GSM Status (online) (offline) SIM fitted
14. GSM Signal strength xx/31
15. Aux Output Supply (on) (off) (timed)

Suggestions & Improvements

Data Signs develops its products with the end users in mind. As such, we are always open to suggestions for product improvement. Contact Data Signs, Head Office in Australia at: dsinfo@datasigns.com.au

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