

# Transcan<sup>®</sup> Advance

## User Reference Manual



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# Transcan<sup>®</sup> Advance

## User Reference Manual

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*This manual applies to all firmware versions available from TSA-T800.020*



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### 1.0 Introduction

#### 1.1 Product Overview

The Transcan Advance has been designed specifically to meet the recommendations of Food Hygiene Regulations for the transport and delivery of chilled and frozen food products in refrigerated vehicles.

The Transcan Advance is available in three styles:



Transcan Advance Rigid for in-cab installation in a standard DIN sized radio slot



Transcan Advance Cab for in-cab installation on a vertical surface or bulkhead



Transcan Advance Trailer in weatherproof enclosure for external installation on trailers

#### 1.2 Inputs and Outputs

Transcan Advance supports the following inputs and outputs:

- Eight channels of temperature measurement using precision thermistor sensors
- Eight status or ON/OFF inputs derived from switch (volt-free) contacts
- Audible alarm in case of out of range temperature conditions
- Recorder must be powered from a DC voltage supply between 9 to 36 volts
- One humidity sensor using a digital interface

#### 1.3 Principle of Operation

Wiring diagram TWD1117 shows these connections.  
( See addendum )

Transcan Advance measures temperatures and status switch conditions and automatically stores these in the form of internal files. A new file is normally created for each day. Transcan Advance may then provide a record of the day's measurements or any previous journey file retained in its memory as either a paper ticket printout or in a form that can be transferred to a PC via a USB device in a csv file format. The user can choose to print information in either Delivery Ticket (current temperatures) or Journey Ticket (recorded temperature and status conditions) formats.

When the data memory is full, new recordings automatically replace the oldest recordings. The number of recordings that can be retained at any one time depends on the memory size, recording period and number of temperature channels in use.

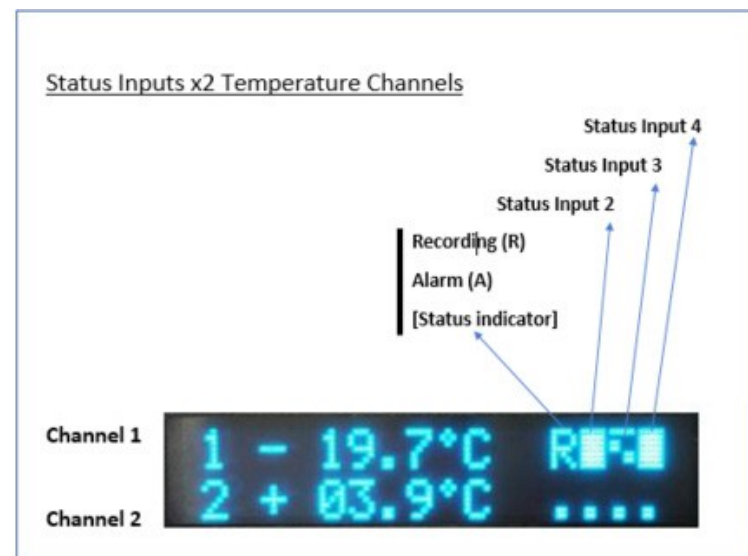
(More details on 6.7)

#### 1.4 Main Components

Transcan Advance comprises three main components: the Display, the Operator Keys and the Printer.

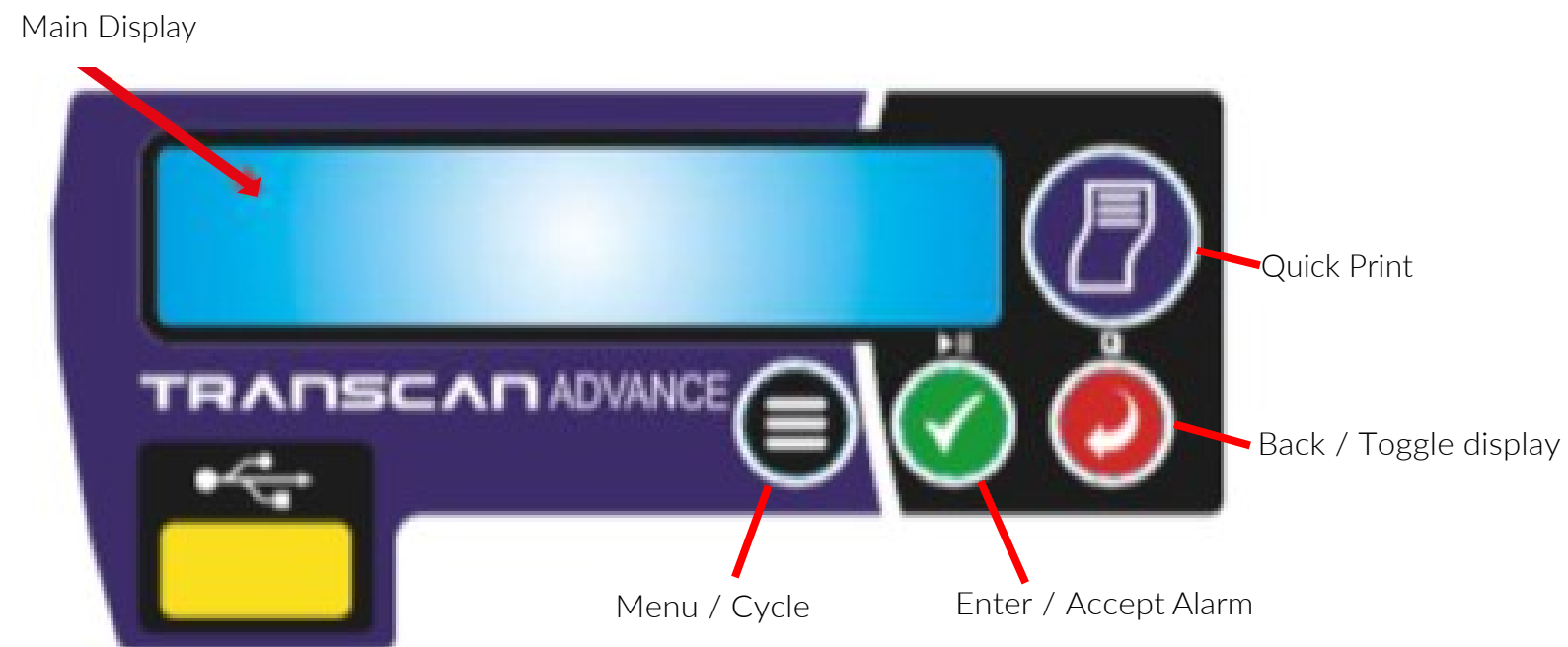
### 1.4.1 The Display

Normal mode is set to two channels showing temperature in 0.1°C and a secondary option of four channels showing temperature in 1°C. Status symbols indicate the current state of each enabled switch input.



### 1.4.2 The Operator Keys

The operator keys are colour coded and identified with symbols to indicate their function.



### 1.4.3 The Printer

The printer is fitted to the right of the Transcan display and uses a thermal paper roll and printer. When a ticket is requested the paper feeds automatically.

Replacement rolls and printers are available through the Seven Telematics sales team. Please contact +44 (0)331112636 or [sales@seventelematics.co.uk](mailto:sales@seventelematics.co.uk) to order your paper rolls.

To replace the roll, pull on the tab on the right-hand side of the unit to open the drawer and remove the empty roll core. Drop in the new roll of paper, trailing the end of the paper roll over the roller on the door. Shut the door, ensuring that both sides of the door are fully shut. If you run out of paper mid-print or if printing is disturbed, please discard the current print and re-print.

When a red line appears during the print-out the paper needs to be replaced. **Caution: beware of sharp edges inside the printer drawer.**

### 1.4.4 How to replace the printer paper roll

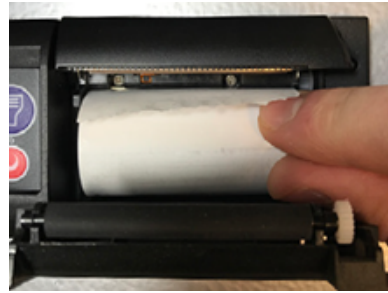
1- Open the printer cover



2- Remove the empty spindle



3- Insert the new paper roll supplied by Seven Telematics



4- The paper must be positioned so that it spools out from the top



5- The paper roll has now been properly replaced



6- Print out a test ticket to check that the paper roll is fitted properly



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### 2.0 Getting Started

Before operating your Transcan Advance recorder for the first time ensure that it is set to operate to your requirements by carrying out a few simple checks in the following order:

### 2.1 Set the Language of Operation

If a language other than pre-set is required:

Press four times. The Display will show: **User Options**.

Then press . The **Language** message is displayed.

Press again to access the language menu. Press to run through the alternatives available.

Press once to confirm your selection and twice to return to the normal display.

### 2.2 Print a Journey Ticket

Press once and the display shows **Print Menu**.

Then press again for the display to show **Journey Ticket**. To print, press

Examples of Journey Ticket printouts are shown below

<pre> Company name More details  Vehicle: VEH12345 Recorder: TA00000000  JOURNEY TICKET  Sign: -----  Temperature units = °C Update = 10mins  2019-04-26 07:22:26 to 2019-04-26 09:46:07  ooo 1 Front *** 2 Rear  40----- 30 . . . . . 20 . . . . . 10-----  Temp. Alarm Door Sw. DeIce  ----- Date of report 2019-04-26 09:46:09 ----- Transcan Advance                 </pre>	<pre> Company name More details  Vehicle: VEH12345 Recorder: TA00000000  JOURNEY TICKET  Sign: -----  T1 = Front T2 = Rear Temperature units = °C Update = 10mins  2019-04-26 07:22:26 to 2019-04-26 08:04:24  Events          None = o Temp. Alarm     x Door Sw.        a DeIce           b Spare 1         c Spare 2         d Spare 3         e Spare 4         f Spare 5         g  T1  T2     2019-04-26 08:03:01 °C + 34.7 + 23.6  Events oabooooo 2019-04-26 07:55:00 °C + 34.7 + 23.7  Events oabooooo 2019-04-26 07:45:00 °C + 34.7 + 23.7  Events oabooooo 2019-04-26 07:35:00 °C + 34.7 + 23.7  Events oabooooo 2019-04-26 07:25:00 °C + 34.7 + 23.7  Events oabooooo  2019-04-26 07:22:53 °C  ----- Date of report 2019-04-26 08:04:29 ----- Transcan Advance                 </pre>
---	---

*Journey Ticket  
(Graph)*



*Journey Ticket  
(Values)*



### 2.3 Check the Vehicle Identifiers

Check that the 'title' and 'vehicle description' are set correctly. The **Title 1 / Title 2** is a total of 24 characters that is usually set to the vehicle operator's company name, and is printed on the first two lines of each report. The Vehicle number is an 8-character descriptor normally used for the registration number or trailer number. It is factory set to AA00 AAA for type "C" and "R" recorders and TRL 1234 for type "T" recorders. To change the Title and Vehicle descriptions, see section 5.2.5.

### 2.4 Check the Time and Date

The time and date printed at the end of the Journey and Delivery Ticket are set at the factory. Once set the date should never need adjusting during the lifetime of the recorder. The clock includes automatic adjustment for summer/ winter time. This automatically adjusts the time at 02:00 on the last Sunday in March and 02:00 on the last Sunday in October. To check the time and date you can press  once from the default display screen if the unit is in two channel view. However, you will need to press  twice if the unit is in four channel view.

*To adjust the time and/or date see 4.3*

### 2.5 Check that all required inputs are being monitored

Transcan Advance supports up to eight temperature channels and eight switch inputs. Check the display (see 1.4.1) to determine if e.g. door monitoring is enabled by exercising these inputs (e.g. by opening and closing the compartment door) and that the input sensors are working correctly. When the switch is open a full square symbol will be displayed and when the switch is closed a hollow square symbol will be shown. (This signal can be reversed) **Please note that it takes a few seconds for these switches to update on the display.**

Input 1 is dedicated to external alarm configuration (**Ext. Alarm Cfg**) e.g. refrigeration unit ON or OFF, and will display either a flashing R or a fixed A (if alarms are enabled), this means that only switch inputs 2-8 should be otherwise used.



### 2.6 Check that recordings are being made

Transcan Advance is factory set to record continuously 24 hours a day, 7 days a week. Data is recorded in separate complete 24-hour periods, or daily files, for ease of access. Although many different recording schedules are possible, this standard setting is very widely used. No action or adjustment is required to start or stop the recording process.

Check display to confirm that recording is in progress and shows a flashing **R** or **A**

### 2.7 Check the Recording Period


The current recording period is shown in minutes. Transcan Advance is factory set to record every 10 minutes.


To check the recording period, press the back button twice  from the default display if it's in two channel View. Otherwise you will need to press  three times.

To change the recording period, follow the next steps:



Press  three times and the display will show **Recording Config**.

Then press  to accept. Introduce the PIN code and press  again.

The **'Recording Period'** message will be shown. Press  to enter and adjust the recording period.

Once you are in the adjust recording menu press  and the display shows the different alternative times available:

**1, 2, 5, 10, 15, 20, 30, 60** minutes.

Press  to confirm your selection and return to the normal display pressing the back button  twice.

Please note the default temperature unit used is Celsius. To change to Fahrenheit

press  three times, the screen shows **Recording Config** press , enter the

PIN code  **Recording Period** is displayed.

Press  **Temp Units** is displayed, press  **Degree Celcius** is displayed,

press  to scroll between *Celsius* and *Fahrenheit*.

Press  to confirm the chosen temperature unit. **OK** will be displayed.

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### 3.0 Basic Operation

Basic operation covers the most commonly used facilities such as using the display, setting the print style, obtaining printouts, checking the time and date and setting/accepting alarms.  
For additional operational information see 4.0 (Advanced Operation).









#### 3.1 To Print a Delivery Ticket

A delivery ticket shows the temperatures as measured at the time it is printed and may be used to provide printed confirmation of these temperatures at the time of delivery. You can print a delivery ticket in two ways:

*Quick Print mode:*

Press  once and a **Delivery ticket** will be printed.

*Menu Access Mode:*

Press  once and the display shows **Print Menu**   
 Press  to enter this menu.   
 Press  once and  again.   
 The display shows **Delivery ticket**.  
 Then press  again and a **Delivery Ticket** will be printed.

```

Food supply
CO

Vehicle: ABCD1234
Recorder: TA00000000

DELIVERY TICKET

T1   Front   + 05.5°C
T2   Rear    + 06.7°C
T3   Air Ret + 23.7°C
T4   Product + 23.7°C

Sign:

-----
Date of report
2018-01-24 15:46:46
-----

TranScan Advance
    
```



#### 3.2 To Print a Journey Ticket







A Journey Ticket shows the recorded temperature and status conditions. To print a Journey Ticket:

Press  once, the display shows **Print Menu**. Press 

again, the display shows **Journey Ticket**.

Then press  again and a journey ticket will be printed.  
See 2.2 examples.



Once the journey ticket has been printed you can wait around 30 seconds to get the unit back to the main screen or you can just press  button. Whilst a ticket is printing, the **Cancel Print** message will show on the screen. Press  to cancel the print.



To set the printing format for a Journey Ticket, press  once and then  to enter the menu. Then press  x4 times and unit displays **Print Graphs** and then press  again and display shows current option. e.g. **Values** and then press  again and TSA will show the other available option **Graphs**. Then press  to select.

#### 3.3 To Print any File from Memory

Transcan Advance stores data as Journey Files, each of which normally covers a complete 24-hour period. Other types of recording regimes are available to cover specific requirements.  
(see section 5.2.2).  
Individual Journey Files and multi-day tickets may be printed from the memory as often as required.


#### 3.4 To Print a specific date range from Memory

Transcan Advance provides the feature to print a specific Journey Tickets over a specified range of stored dates. This menu option will be accessed in the following menu option:  
Press  once and the display shows **Print Menu**  
Press  to enter this menu

Press three times  and display shows History > Range  
Print Menu  
Select the "Start" date Press  once



### 3.4 To Set the Display Mode

To change the display mode, press the back  from the default display to bring up different display modes.

The Transcan Advance display can be set to any of the following options:



#### Summary Display (2 x temperature channels per screen) - Default Mode -


All enabled temperature channels are displayed two per screen (to 0.1 degree precision) together with symbols representing the enabled ON/OFF inputs.



#### Summary Display (4 x temperature channels per screen)

All enabled temperature channels are displayed four per screen (to 1.0 degree precision) together with symbols representing the enabled ON/OFF inputs. This is the factory default setting.

To set the display mode, press  four times and **user options** will be shown on the screen.



Then press  to enter in this menu. Pressing  twice will show **display mode** message.

Then press , display will show the active setting (**Summary x2** or **Summary x4**)

Pressing  you will have the option to set **Summary x4**, **Summary x2**, **Date & Time** and **Recording Period**. This order may vary. Press  to select your preference.

### 3.5 To set Alarm Operation

The default settings for Transcan Advance is alarms disabled unless specifically requested. To check if temperature alarms are enabled:

Press  six times and the display shows **Alarms Config**. Press  to enter in **Alarms Config** menu. The screen will ask for a PIN code. The default **PIN** code is 1111


Press  to cycle through the **PIN** code digits and then press  to confirm. The screen will then show **Ext. Alarm Cfg** menu. Press


 again and the screen will show **Alarm Sets** menu.



Press  to accept.


There are four different alarm sets available.

Press  to cycle through Alarm Set 1 - 8.

Once you have selected the required alarm set press  to confirm. The display shows **Alarm Enable** menu.

Then press  again to access this menu.

Display will show the active setting, to scroll between OFF and ON press  and  to confirm.

Pressing back button  four times will restore the main screen. Otherwise the unit will automatically return to the main screen after around 30 seconds.

*NOTE: It is usual to automatically disable alarms when the refrigeration system is switched off. This is to minimise the risk of false alarms. The disable signal is normally provided by a contact within the fridge control panel and must be connected to ON/OFF input #1 on Transcan Advance.*

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### 4.0 Advanced Operation

*NOTE: Advanced operation covers the less commonly used facilities such as selecting data from memory and printing/offloading data to a USB device, setting user options, adjusting the time and date and programming out of range temperature alarms.*

#### 4.1 Transferring Data to a Computer

To copy data from the unit onto a USB device, first insert the device into the front of the unit. Note: this must be formatted to FAT32.

Press  twice to reach the file transfer menu. Then   
Press  to cycle through the options and then press  to select your required option. The first option shown will be **Download New**. This option will download all new data since the last time data was downloaded. The other **Download All** option will download all data created since the beginning of the recording period.

Once all the data has been downloaded ( after a while ) the unit will show “Download OK” message if the download process was successful and the files on the USB device can be analysed in a PC - open these in Seven Telematics TSXpress Advance program which is available at Seven Telematics website or Microsoft Office software to open csv files.

If a USB device has not been plugged into the Transcan Advance it will show an **error** message.

If the process to download the data is not finished properly, the Transcan Advance will show a **Download Error** message.

Please note: the USB socket present on the Transcan Advance should only be used for data transfer using USB devices specified by Seven Telematics. This port should not be used for any other purpose. It is not suitable for charging USB peripherals and you should only use a compliant USB device.

Once all the data has been downloaded ( after a while ) the unit will show “Download OK” message if the download process was successful and the files on the USB device can be analysed in a PC - open these in Seven Telematics TSXpress Advance program which is available at Seven Telematics website or Microsoft Office software to open csv files.

If a USB device has not been plugged into the Transcan Advance it will show an **error** message.

If the process to download the data is not finished properly, the Transcan Advance will show a Download Error message.

Please note: the USB socket present on the Transcan Advance should only be used for data transfer using USB devices specified by Seven Telematics. This port should not be used for any other purpose. It is not suitable for charging USB peripherals and you should only use a compliant USB device.

#### 4.2 Setting User Options

It is possible to customise the operation of Transcan Advance through the **User Options** feature.

#### 4.3 Adjusting the Time and Date

Transcan Advance displays the current time and date. The time and date are set prior to despatch from the factory. The clock includes automatic adjustment for winter/summer time. This automatically adjusts the set time between 02:00 on the last Sunday in March and 02:00 on the last Sunday in October. However this option can be turned OFF.



##### 4.3.1 Clock Protect

Adjustment of the real-time clock can be security protected by the Configuration Parameter **Clk Protect**. This is factory set to ‘OFF’ but can be set to ‘ON’ to allow adjustment of the time. To check if the clock protect feature is enabled check in the **Eng Display** mode in the menu.

When the clock protect is enabled the clock can only be adjusted by using the PIN-protected **Eng Display**.



##### 4.3.2 Clock Adjustment (clock protect not enabled)

When clock protect is not enabled:

Press  four times to reach the user options menu, and then press  to confirm.

Press  once and press  to enter time and date.

Press  once to enter the set clock function.

Adjust the clock by pressing  to adjust the hour/min and pressing  to accept the changes.

To cancel the new parameters press the  button.

### 4.3.3 Clock Adjustment (clock protect enabled)

When clock protect is enabled:

Press  four times and then press  to confirm. Press



 once and press  to confirm. Enter PIN 1111 Press



 once to enter the set clock function.

### 4.3.4 Date Adjustment

The date is factory set and can be adjusted following the steps in the user options configuration menu.

Example:

Press  four times, the display will show **User Options**, press  to confirm.

Press  once and the display shows **Language**, press  once and the screen will show **Time and Date**.



Press  to access.

If clock protect is enabled Enter PIN 1111, If not enabled the display will not show this PIN message.

Once the PIN code has been introduced the screen shows **Set Clock**.

Press  again and the screen shows **Set Date** menu.

Press  to enter.

Adjust the date by pressing  to select the year and pressing  to accept the changes. Press  to move to month and day.

To cancel the new choices, just press  button.

## 4.4 Temperature Alarms

Up to four alarm sets are available for each temperature channel (**Channel 1-8 Alarm**) and can be selected through the options in the **Alarms Config** menu.

All temperature alarms are recorded in the memory. An alarm will be triggered if the temperature is not within the acceptable ranges defined by these alarm sets.

### 4.4.1 Alarm Sets

Each temperature channel (**Channel 1-8 Alarms**) can be linked to one of 4 alarm sets to advise the customer when a particular channel is out of the required range.

Each alarm set contains the below parameters:

**Alarm High** – upper threshold

**Alarm Low** – lower threshold

**Alarm wait** – time delay before an alarm becomes active

**Graph High** – maximum value when printing in graphical format

**Graph Low** – minimum value when printing in graphical format

**Alarm Name**

#### To configure Alarm Sets

To configure an alarm set (up to 4 individual sets):







Press  six times, **Alarms Config** will be displayed. Press  and **PIN code** will be displayed. Enter PIN Code and **Ext. Alarm Cfg**

will be displayed. Press  and **Alarm Sets** will be displayed.

Press  and **Config. Limits** will be displayed.

Press  and the names of the pre-set alarms will be displayed. i.e.

**Frozen, Chill, Fresh** and **Ambient**.

Scroll using , to select the required pre-set alarm range using . **Alarm High** will be displayed.  scroll +/- and values using  and  to select. Once selected, confirm with  **OK** will be displayed.





Press  to access **Alarm Low** and repeat the above procedure.

Press  to access **Alarm wait** and repeat the above procedure.

Press  to access **Graph High** and repeat the above procedure.

Press  to access **Graph Low** and repeat the above procedure.









Press  to access **Alarm Name** if customer requires a different name ( *if customer requires a different name* ) to the pre-set alarm names. i.e. **Frozen, Chill, Fresh, Ambient** then select the **User Defined** option.

Press  to select required pre-set name and these can be edited using 8 characters. Scroll characters using  &  and press  to confirm.



### Assign Alarm to Temperature Channel

It is possible to assign one of the pre-set alarms to each temperature channel. These are selected as described below:

Press  six times, **Alarms Conf9** will be displayed. Press  and **PIN code** will be displayed. Enter **PIN Code** and **Ext. Alarm Cf9** will be displayed. Press  and **Alarm Sets** will be displayed, press  and **Channel 1 Alarm** is displayed. Then select the channel required ( **Channel 1 Alarm–Channel 8 Alarm** ) pressing  to confirm, and **Alarm enable** is displayed. Press  and **Alarm Limits** is displayed, press  and pre-set alarm names will be displayed. i.e. **Frozen, Chill, Fresh** and **Ambient**. Select the required Alarm set (e.g. **Chill**) then press  and the selected range will be assigned to **Channel 1 Alarm**. If alarm monitoring is required for another channel repeat the above process.

#### 4.4.2 Enabling/Disabling Alarms

The Transcan Advance is factory set to record 24hrs/day.

When the fridge system is switched off for extended periods or when the vehicle is not in use to prevent false alarms we recommend that any alarms are deactivated.

To automate the process of disabling alarms, it's possible to connect an ON/OFF switch to status input 1 ( on the back of the TSA labelled as "Status Input 1") **Ext. Alarm Cf9** so the alarms will only be active when the fridge is operational.

Refer to wiring diagram TWD1117.

**Ext. Alarm Cf9.** Factory default settings is set to OFF.





However in case the customer requires to change the logical control signal we provide the **Alarm Control Reverse** option (factory default setting is set to ON).

This enable action may be extended for a period after an off signal is received (e.g. to allow the fridge to be switched off briefly during delivery) via the parameter **Extended Time**.

#### To set up the External Alarm Control

Press  six times and then  once and key in the PIN code. The screen should now show the **Ext. Alarm Cf9** message.

#### Control Enable:



Press  again, the screen shows **Control Enable**, press , the current status will be displayed. To change the status (ON/OFF) use the . Press  to accept the change

#### Control Reverse:

Although the option exists to reverse the signal but it is not recommended

#### Extended Time:

Extended time can be used to enable the alarms to remain active for a given period once the refrigeration unit is switched off e.g. to facilitate door openings for deliveries or to turn off the fridge during delivery for this extended period of time.


Press  twice and the screen will show Extended Time. Then press  to enter this mode.

Now you can set the extended time and then revert to the main screen.

When recording is in progress and the alarm control is activated the recording indicator on the display shows a flashing 'A' ( rather than a flashing 'R' ) when alarms are activated.

#### 4.4.3 Alarm Indicator Light and Buzzer

The Transcan Advance can be supplied with an optional alarm indicator light. Please contact the Seven Telematics sales office for more information. Refer to the wiring diagram TWD1117 for connection details for this option.

All Transcan Advance recorders include an audible alarm which becomes active when an alarm condition occurs. To mute the buzzer press the  button.

**Please note this will only mute the buzzer and not cancel an active alarm.**

A ticket will be printed to confirm acknowledgement of alarms. If utilised, the external alarm light will only turn off when the alarm condition is cancelled (i.e. when temperature returns to within an acceptable range or when the alarm is set to 'OFF').


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### 5.0 Configuration Parameters


#### 5.1 Printing the Parameters

Before attempting to adjust any of the configuration parameters a printout of the parameters should be made.

Press  once and the screen shows **Print Menu**

Press  once to confirm

Now  five times and the screen shows: **Parameter List**

Then press  to confirm and print the actual parameters for which the Transcan Advance has been programmed.

#### 5.2.1 Product Description and Sign-on Message

The product description and sign-on message appear on the parameter printout (see 5.1), but are not accessible in configuration mode. The initialising message appears whenever the power to the recorder is restored and is of the following format:



#### 5.2.2 Recording Regime

Start time > 00:00

Stop time > 00:00

These define the daily start and stop times for recording and represent factory settings.

These settings can be adjusted if required but this is not recommended as this provides 24/7 monitoring.

Log by Day > OFF

The Transcan recorder may be set to start and stop recording automatically according to the day of the week as specified by the day code parameter. To use this facility the Log by Day parameter must be set to ON.

Day Code > CCCCCC

Each of the seven character codes in this parameter control the recording action for a corresponding day of the week starting with Sunday.

The permitted characters and their meaning for each daily code are as follows:

0: not recording

1: record for 24 hours

S: start recording at Start time


T: terminate recording at Stop time



C: start and stop recordings as defined by the start and stop times

Using these codes a variety of operating regimes may be user defined.

#### 5.2.3 ON/OFF Inputs

Press  seven times and the display will show **Inputs Config.**

Press  to gain access to **Input 1** in the menu (physically **Input 2** on the back of the Transcan Advance).




Press  to go through the remaining menu options (**Input 2-7**) press  and to enter each menu.





Each of these inputs can be configured as required, see below examples:

**Door switch** (**Door Sw** – default on **Input 1** (physically **Input 2** on the back of the Transcan Advance )

ON means that the status input is to be used as the main door switch contact. A normally closed contact represents a closed door.

To set an alternative input as a Door switch input, please follow the below instructions:

**Input 7** ( menu options ) : At this menu the screen shows **Input Enable**. Press  to enter menu, the screen will show the current status (ON/OFF). To select a different option press  and then press  to confirm.

**Door Switch Reverse:** In **Inputs Config** menu press  button once and the screen shows **Input Reverse**. Press  to confirm, the screen will display the current status (ON/OFF). To select a different option press  and then press  again to confirm.

**De-Ice switch** (De-Ice – default on **Input 2** menu options) ON means that the status input is to be used as the De Ice (Defrost ON/OFF) switch. A normally closed contact represents defrost on. This can be reversed as required.



### Inputs 3-7

Please follow the above instructions for additional switch inputs e.g. Side Door etc.





When in switch **Inputs 3-7**, to select the required name and symbol follow the below instructions:

#### Input name

An 8-character description can be entered for user defined inputs.

Press  3 times and **Input Name** is displayed, scroll through the 8 characters using  and  to name the input, press  to confirm name and screen displays **OK**

#### Input symbol

A symbol can be selected from the following characters for user defined inputs. After naming the input and confirming, press  once **Input Symbol** is displayed, press  enter menu, scroll through options using  and select required symbol using . The options are: **0, 1, 2, \*, #, !, .**

## 5.24 Temperature Channels and descriptions

Temperature **Channel 1** input (T1) will be measured and displayed when set to ON. An OFF reply to this prompt will turn the measurement off and there will be no display for T1 on the display or in reports.


The name of **Channel 1** In main display will be represented as number **1**.

The name of **Channel 2** In main display will be represented as number **2**.

For channel configuration menu press

 five times and the screen shows **Channel Config**.

Then press  to accept.

The PIN 1111 is required to enter this menu. To scroll through the channels press 

Once the desired channel is selected, press  to enter menu.

The screen shows **Channel Enable**. Then press 

The screen displays the current channel status (ON/OFF).


To select a different option press  and then press  to confirm.

The printed ticket can have an 8-character description.

Other channels (T2 to T8) are similarly programmed using below instructions.


#### Channel 2-8 name

To name a temperature channel, follow below instructions:

Enter channel configuration menu, press  five times and the screen shows **Channel Config**.

Then press  to accept.

The PIN 1111 is required to enter this menu.

**Channel 1** is displayed, to scroll through required channels press 

A 8-character description can be entered for each channel



Once the required channel is selected, press 

**Channel Enable** shows on the screen.

Press  once and **Channel Name** is displayed.


Press  to select a pre-set names (**Front, Rear, Air Ret,**

**Product, Fr A Ret, Centre, Chill, Freeze, User Defined**), scroll

using  and select required name using 



If a bespoke name is required, scroll to **User Defined**,


press , scroll through the 8 characters using  and 



to name the channel, press  to confirm name and screen displays **OK**



## Humidity Sensor








Displays the reading from the external humidity probe. To activate, press  three times and then press  to access the menu.





Enter PIN code (1111), press  to accept.

The screen displays **Recording Period**. Press  three times and the screen will show **Humidity Enable**. To enter this menu, press  and the current status is displayed. The screen displays the current status (ON/OFF).


To select a different option press  and then press  to confirm.

It is possible to set alarms for the Humidity Sensor. If these are required please follow the below instructions.

Press  six times, **Alarms Conf9** will be displayed. Press  and **PIN code** will be displayed. Enter PIN Code and **Ext. Alarm Cfg** will be displayed. Press  three times and **Humidity Alarm** will be displayed. Press  and **Alarm Enable** will be displayed, press  and the current status will be displayed (ON/OFF). Edit using  and press  to confirm.



Press  and **Alarm Limits** is displayed, press  and **Alarm High** is displayed, press  to set parameters as a numerical percentage and press  to confirm. **OK** is displayed.

Press  **Alarm Low** is displayed, repeat the above process.

Press  **Alarm Wait** is displayed, repeat the above process.

The Humidity Alarm is now configured.

### 5.2.5 Engineering Display

To enter press  eight times from the default display and then press  **Eng Display** is shown.

The PIN 1111 is required to enter this menu.  
SetPIN > 1111 (Factory default value)

**View System ID** is shown.

**View System I/D**> TA00000001

This is an individual 10-character identifier which is always set to the serial number of the recorder. The identifier is recorded with the data. The unit ID is printed on each report. This parameter can't be changed.

See 5.2.1





Press  the screen shows **View System ID**, Press  the screen shows **Set Vehicle ID**

**Set Vehicle ID**> VEH12345

This is an 8-character identifier which may be used to identify the vehicle registration or trailer ID number which is printed on each report.

*NOTE: When the vehicle ID is changed a new recording is started and the message **NEW FILE** will appear on the display.*

The screen is showing **Set Vehicle ID**





Press  and scroll characters using   and press  to confirm

A further two 12-character identifiers are used together to specify a user-defined 24-character title line which is printed as lines 1 and 2 of each report.

To change the title and vehicle descriptions:





Press  the screen shows **Set Title 1**

Title 1>XXXXXXXXXXXX

Press  and scroll characters using   and press  to confirm.

Press  to scroll to **Set Title 2**





Title 2>XXXXXXXXXXXX

Press  and scroll characters using   and press  to confirm

The screen shows **OK**, press , the screen shows **Set PIN**

**Set PIN** > 1111 (factory default value)

The PIN can consist of any four digits in the range 0-9

To adjust the PIN, press  and scroll characters using  . Press  to confirm.

**Baud Rate** > 19200

This is the speed of communication when the recorder is connected to a PC or other device via the serial port, this cannot be adjusted.

**Clk Protect**

Set the clock protect function to on or off using the  and

 See 4.3.1

### Auto Clk Adjust> ON

Set this parameter to ON to automatically adjust the time by one hour at 02:00 on the last Sunday in March (add 1 hour) and 02:00 on the last Sunday in October (subtract 1 hour). See 4.3.2

### Other menus

The following four menus contain information accessible by Seven Telematics only.

[Upload config](#)  
[Upgrade Access](#)  
[View access code](#)  
[Manufacturing ID](#)


### 5.2.6 Print Reason Code

The reason code for file creation is printed on the file list.

The reason code appears within the printed file/upload list on the right side column of the ticket:

- E Recording start (initiated by start time or day code)
- H Activation/Deactivation of any channel
- C Clock changed
- B Clock set back
- W Clock set forward
- A Firmware version change
- N Channel name change (1-8)
- V Vehicle identity change (vehicle registration)
- I Recording period change (1-60minutes)
- U Unit ID change
- K To indicate that the humidity sensor is enabled or disabled

### 5.2.7 Reboot

In the unlikely event that the Transcan should require a reboot, press and hold  for 7 seconds and then release. The Transcan will reboot and normal operation will be restored.

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### 6.0 Specification

Transcan temperature recorders are designed to meet the requirements of EN12830, WELMEC and other national standards to support the objectives of Directive 92/1/EEC (amended by 93/43/EEC), the Quick Frozen Food Directive.

*Please note: there is a risk of fire if the recorder is not installed as per instructions (including fuse and power supply specifications)*

### 6.1 Type of Application

Transcan temperature recorders are suitable for recording storage temperatures and transport temperatures.

### 6.2 Temperature Measuring Range

Temperature Recording Range and Accuracy:

- 50 to +50C accurate to ±1C
- 40 to +40C accurate to ±0.5C
- Resolution: 0.1°C

### 6.3 Autonomous Power

The battery powers the real-time clock. The battery is not user-replaceable and the Transcan should be returned to the manufacturer before the end of the 10-year expiry period for the battery to be replaced.

### 6.4 Environment

In the event of the printer being subject to drips or spillage, it should be allowed to dry out before use. To ensure that printouts can be made on demand, a spare printer roll should be carried at all times.

- Recording Operating Temperature: -30 to +70C
- Printing Operating temperature: -10 to +50C
- Storage Temperature: -40 to +85C
- Vibration – meets requirements of EN 60068: 1993
- Degree of protection:

- IP65 for Trailer version – suitable for outdoor use
- IP20 for rigid version – suitable for indoor use only.

## 6.5 Power

The DC supply should be either from a vehicle battery fused in-line with an automotive spade type 2A fuse or from an approved mains-operated SELV power supply rated for 3A peaks and either rated as a limited power source (LPS) or limited to 65VA. The mains-operated power supply should be suitable for IEC installation category II.

Power:

Input Voltage: 9-36V DC

Input Power: 25W

USB Output Voltage: 5V USB Output

Current: 0.5A

## 6.6 Recording Period

This may be set from 1 minute to 60 minutes. The default (and recommended) recording interval is 10 minutes. To ensure full compliance with relevant legislation (in particular the requirements of EN12830 2019 Class 0.5), users should ensure that the recommended (default) recording interval is set at all times. may be set from one minute to 60 minutes. For the installation to comply with current legislation, the user must not set the recording period less frequently than 10 minutes.

## 6.7 Recording Duration

The memory capacity for the Transcan is 4MB. This allows for all eight temperature probes to be recorded continuously with the following capacity: 10 minute recording interval provides up to 599 days internal storage.

## 6.8 Data Archiving

To satisfy the requirements of national legislation, data must be retained for at least one year. The files may be printed, stored locally upon the recorder or transferred via a USB device to a PC. With regards to USB backups, it is advised that data is backed up at least once a month. Failure to follow this guidance may (over time) result in older files not being available for download to USB and other retrieval options would need to be adopted. Printed records should be kept in a clean dry place to ensure that they remain legible after one year.

## 6.9 Time Recording Error

Relative error over seven days, maximum one minute.

## 6.10 EMC

TUV Rheinland.

Test Report Num: 21276432\_001

## 6.11 Power Surge

Conforms with BS AU 243 (ISO7637-1) grade 4.

## 6.12 Electrical Safety

Conforms with EN 61010-1. Safety may be impaired if installation instructions are not adhered to.

## 6.13 Periodic Verification

In accordance with EN13486

## 6.14 IEC Symbols Used

 Direct current

 Consult manual

 Caution

## 6.15 Power Consumption

Transcan Advance: 58mA

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## 7.0 Cleaning and Maintenance

Visible surfaces may be cleaned with a damp cloth and mild detergent. No general maintenance procedures are required.