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Whilst every effort has been made to ensure that the content of this document is accurate, Ingenico will not accept responsibility for any loss, damage or injury that may be incurred as a result of any such errors or inaccuracies. The product is varied to suit acquirer's requirements and as such some features may vary or be disabled, this document should be accepted as a guide only to the use of the product.

In an effort for continued improvements in design and quality; products, features and information regarding the setting up, installation and use of all Ingenico products is subject to change without prior notice.

1. Introduction

Thank You

Thank you for choosing an Ingenico iST150 Contactless Reader.

Your reader includes a variety of different functions and features to help you accept contactless card transactions in a speedy and efficient manner.

This User Guide

We recommend you thoroughly read this User Guide, together with any other documentation that came with your terminal, as this will help you to quickly make the best use of all the capabilities of your new terminal and contactless reader.

The conventions used with this User Guide are as follows:

enter - This is a button on the terminal (ie. the "Enter" key in this case).

❖ **THIS IS A SHORTCUT TO A MENU OPTION.**



This is a piece of important advice.

Keeping Records

Copies of all transaction receipts and your corresponding End of Day reports should be kept together in a safe place (preferably in date order) for a minimum of 6 months, or longer depending on the requirements of the card company.

Helpdesk Information

Should you need to; details on how to contact the terminal Helpdesk can be found on the contact sticker on the reverse of your contactless reader. If appropriate, you may also find these details on the inside cover of this User Guide.

You may be asked for your terminal's TID (Terminal IDentification number) or your terminal's Serial Number. The TID can be found at the top of each receipt from your terminal; and the Serial Number (S/N) can be found at the top of some reports and on the underside of your terminal.

The Serial Number of your contactless reader can be found under the cover on the reverse of your reader.

Security of Your Contactless Reader

Upon receipt of your contactless reader you should check for signs of tampering of the equipment. It is strongly advised that these checks are performed regularly after receipt.

You should check, for example: that the security seals are in place and undamaged; that there is no evidence of unusual wires that have been connected to any ports, or any other part, of your reader.

Such checks would provide warning of any unauthorised modifications to your terminal, and other suspicious behaviour of individuals that have access to your terminal.

Caring for Your Contactless Reader

You should take care not to spill liquids on any part of your contactless reader, terminal or any associated parts and equipment.

You should clean the contactless reader with a soft clean cloth. To ensure safety, only clean your reader when it is completely powered off. Do not use water or cleaning agents on your terminal, doing so may lead to damage.

Any damage incurred will be your responsibility and any repair or replacement costs will be charged as appropriate. We therefore recommend that you insure your reader and terminal accordingly.

Starting to Use Your Contactless Reader

In order to get up and running as quickly as possible your contactless reader is pre-configured to work out of the box. There are some basics that you should cover before using your reader:

- Before starting to use your reader, please read all sections of this guide, together with any other documents that came with your reader, carefully.
- You should ensure that the reader you have received is the model you were expecting
- Set up your reader in a convenient location close to your terminal, and familiarise yourself with the basics. The following section, entitled ***Your Contactless Reader***, will cover all of the detail required to install and understand the basic operation of your reader.
- Step-by-step instructions for all types of contactless sales and refunds are given in the section entitled ***Transactions***; for clarity these are provided with screenshots of the terminal and reader to guide you.
- If, in the unlikely event that you encounter any problems or have any questions relating to the operation of the reader, read through the section entitled ***Troubleshooting***. If you cannot resolve your problem you should call the terminal Helpdesk.

2. Your Contactless Reader

Contents of Box

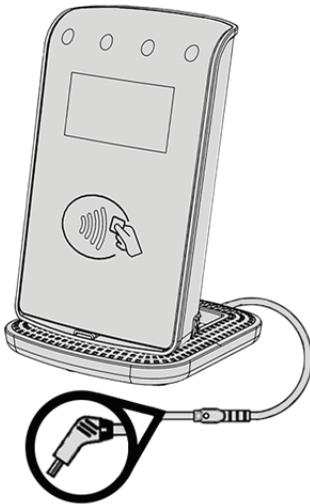
The contents of the box are shown below:



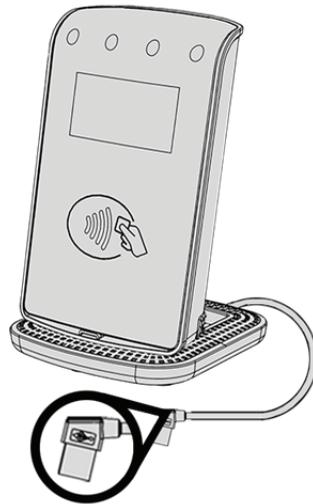
*This User
Guide*

*iST150 Contactless Reader
with pre-installed cable for
connection to EFT930 series
Counter Top terminals*

*iST150 Contactless Reader
with pre-installed cable for
connection to iCT200 series
Counter Top terminals*



or



Contactless Reader Model

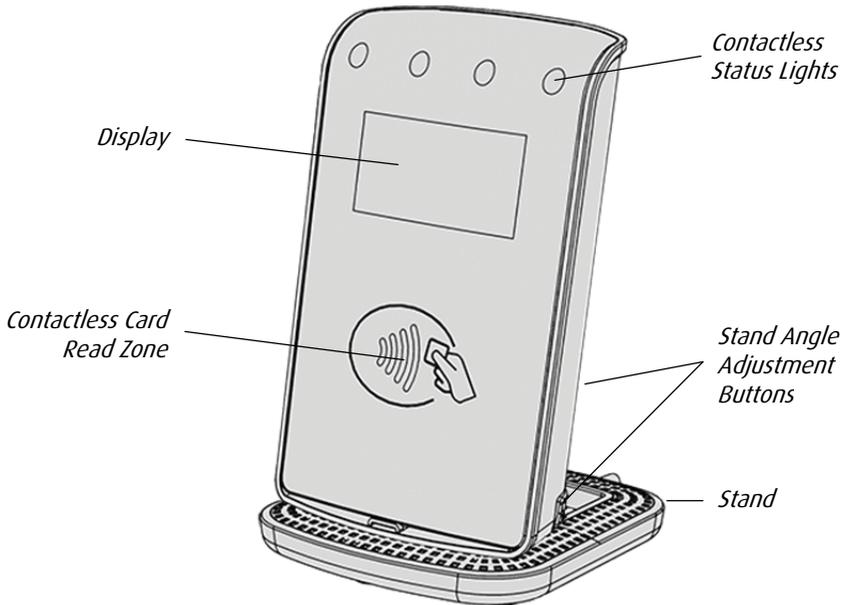
The Ingenico iST150 model comes in two configurations:

- For connection with EFT930 series Counter Top terminals
- For connection with iCT200 series Counter Top terminals

This User Guide covers both configurations so you should read this guide carefully in order to understand the features of your particular reader configuration.

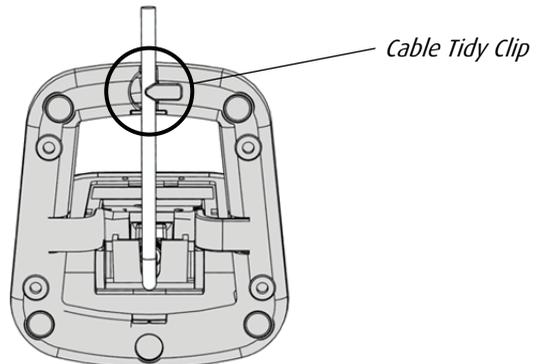
Contactless Reader Overview

An overview of your contactless reader is shown below:



To adjust the stand angle you should press the two stand angle adjustment buttons firmly whilst altering the angle of the contactless reader. Care should be taken not to apply undue pressure; to avoid damage the stand angle must not be altered when the stand angle adjustment buttons are not depressed.

A cable tidy clip is included within the stand, as shown below:



Installation (EFT930 Series Counter Top Terminals)

In order to connect your contactless reader to an EFT930 series Counter Top terminal you must follow the steps below. Ensure that your terminal is completely powered off before attempting to install your contactless reader

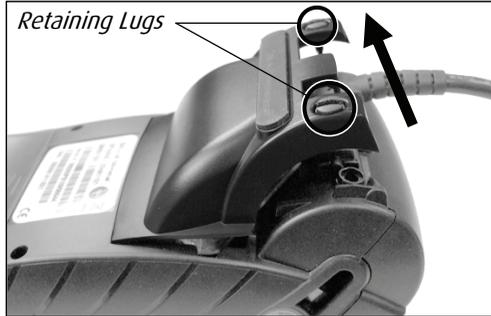


Fig. 1

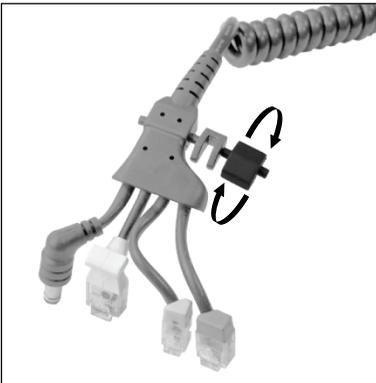


Fig. 2

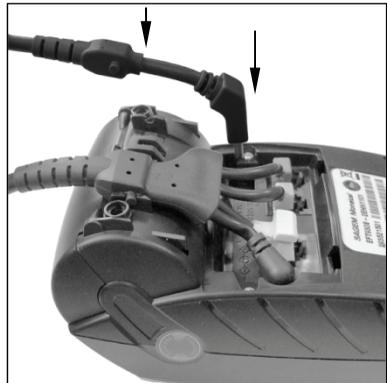


Fig. 3

1. Undo the two retaining lugs on the underside of your terminal using a coin or similar to turn the lugs 90 degrees. Lift the cover to reveal the cable bay.
2. Without removing the "magic cable", twist off the blanking spacer (as indicated) from the cable; take care not to damage the "magic cable" itself.
3. Plug in the contactless reader USB cable as indicated and ensure that it is secured properly in both the socket and the cable retaining clip. Replace and secure the cover by reversing the instructions in step 1.
4. Power on your terminal; your contactless reader should turn on during the terminal initialisation procedure.

Installation (iCT200 Series Counter Top Terminals)

In order to connect your contactless reader to an iCT200 series Counter Top terminal you must follow the steps below. Ensure that your terminal is completely powered off before attempting to install your contactless reader

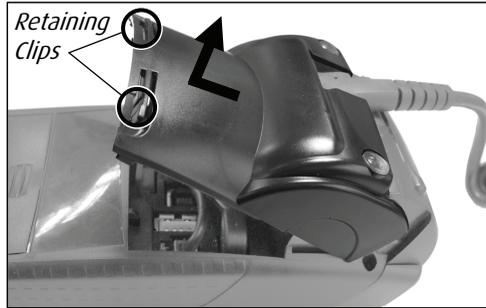


Fig. 1

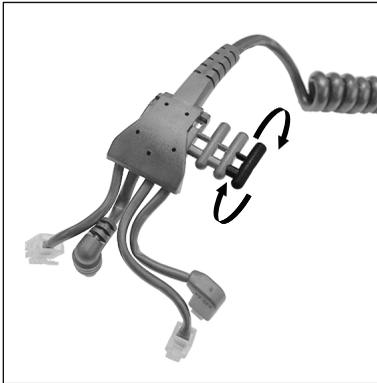


Fig. 2

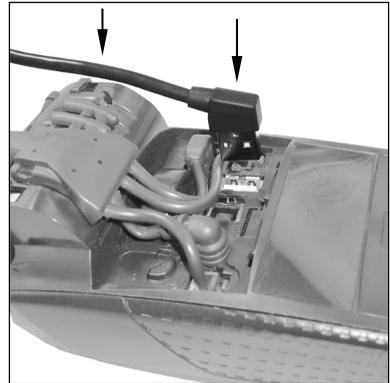


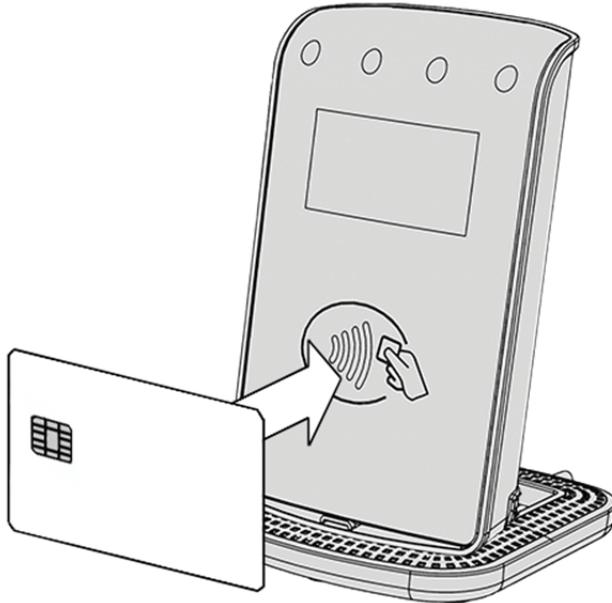
Fig. 3

1. Unclip the two retaining clips on the underside of your terminal using your fingernails and lift the cover upwards and away from the retaining lugs to reveal the cable bay.
2. Without removing the "magic cable", twist off the blanking spacer (as indicated) from the cable; take care not to damage the "magic cable" itself.
3. Plug in the contactless reader USB cable as indicated and ensure that it is secured properly in both the socket and the cable retaining clip. Replace and secure the cover by reversing the instructions in step 1.
4. Power on your terminal; your contactless reader should turn on during the terminal initialisation procedure.

Reading Cards

A contactless card should be presented by the cardholder only when prompted to do so on the screen and the first status light is lit steadily.

The card should be presented towards the contactless logo shown on the contactless reader - at the centre of the contactless card read zone.



When a contactless card is presented to your contactless reader during a contactless transaction the second, third and fourth status lights will be lit in turn. The card read is successful when all four status lights are lit and the confirmation tone is heard. If the card is removed prior to this the card read will be unsuccessful and the cardholder will be prompted to re-present the card. A card read should take between 1 and 2 seconds.

Contactless Reader Display

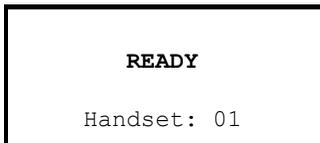
The contactless reader display is laid out as below:



When your contactless reader is connected to your terminal, and after a short initialisation process the `WELCOME` message will be displayed on the reader; this means that the reader has initialised and is ready to use. Your terminal will display the terminal status of `READY` at this time.

Throughout this guide the convention is to show screenshots of your contactless reader with a grey background, and to show screenshots of your terminal with a white background.

Further to this, in order to illustrate the different screens that are shown simultaneously on both your contactless reader and your terminal; the screenshot of your contactless reader will be shown immediately below that of your terminal - an example is shown below:



Terminal Display
(shown with white background)



Contactless Reader Display
(shown with grey background)

3. Transactions

Performing Transactions

In order to perform a transaction in a quick and efficient manner you may type in the transaction amount from the idle screen on your terminal. This method may be used to start any sale transaction, no matter what the card type is (ie. contactless cards or cards with, or without, a chip).

Enter the transaction amount while the idle screen is being displayed by typing in the amount in pence (ie. 1234 for £12.34) followed by the *enter* key. If you make a mistake when entering the amount you can correct this by using the correction keys. Press the *clear* key once to delete one character at a time. Press the *cancel* key to cancel the amount entry and return to the idle screen.

Contactless transactions are performed by this method and when the transaction value is under £15.00. Your contactless reader will only prompt for a card to be presented when a contactless transaction is allowed.



If you consistently sell an item at the same price you can “recall” the last transaction amount by pressing the *dot* key while the idle screen is being displayed. Your terminal will allow you to confirm if this is the correct amount, and you can continue with the transaction by pressing the *enter* key.

Printing the Customer Copy (Duplicate)

Only the merchant copy is printed during a contactless transaction. Because the transaction value is low for contactless transactions and fast transaction times are desired, the customer copy is not printed by default.

If the customer requires a receipt then a customer copy may be printed any time until another transaction is performed by pressing the *F1* key whilst the idle screen is displayed on your terminal. This prints a duplicate of the last transaction taken and is not restricted to contactless transactions.



For security reasons the full card number is not shown on the customer copy.

Sales - Contactless Cards

READY
Handset: 01

The idle screen will be displayed on both the terminal and the contactless reader. The first status light on the left will flash intermittently.

WELCOME

Amount: £1.23

Enter the sale amount in pence (eg. 123 for £1.23) and press the enter key.

£1.23
PRESENT CARD

Confirm that the amount is correct and invite the customer to present their card to the contactless reader. The first status light on the left will be lit.

£1.23
PRESENT CARD

CARD READ OK
PLEASE
REMOVE CARD

During the card read the second, third and fourth status lights will be lit in turn. A confirmation tone will sound and a message will be displayed. The card can be removed from the card read zone.

CONNECTING

If required, the terminal will dial out to the acquirer for authorisation.

AUTHORISING
PLEASE WAIT



APPROVED

The terminal will show the transaction result, and will print the merchant copy for you to retain.



PRINTING



APPROVED

The terminal and the contactless reader will return to their respective idle screens.



The customer MUST NOT remove the card from the card read zone until the terminal has prompted them to do so, sounded the confirmation tone, and all status lights are lit steadily.
You MUST retain the merchant copy for your records; this copy must be signed by the customer if a signature is requested.

Dealing with Card Read Failures

A contactless card read may fail, and the customer will be prompted to re-present their card.

If the card is removed too soon - before all four contactless status lights are lit; before the confirmation tone is heard; or before prompted to remove the card - the card read will fail.



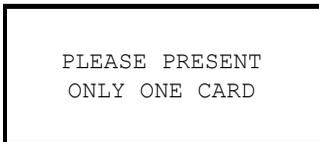
£1.23
PRESENT CARD

If the card is removed too soon the card read will fail. An alert tone will sound and the customer will be prompted to re-present the card.



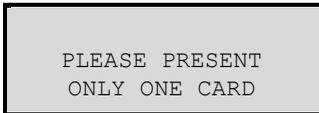
£1.23
TRY AGAIN

If more than one contactless card is presented to the contactless card read zone together then the card read will fail. This may occur if the card is presented in a wallet with other contactless payment cards, or other contactless cards such as public transport smart cards.



PLEASE PRESENT
ONLY ONE CARD

If more than one card is presented the card read will fail. An alert tone will sound and the customer will be prompted to re-present the card.



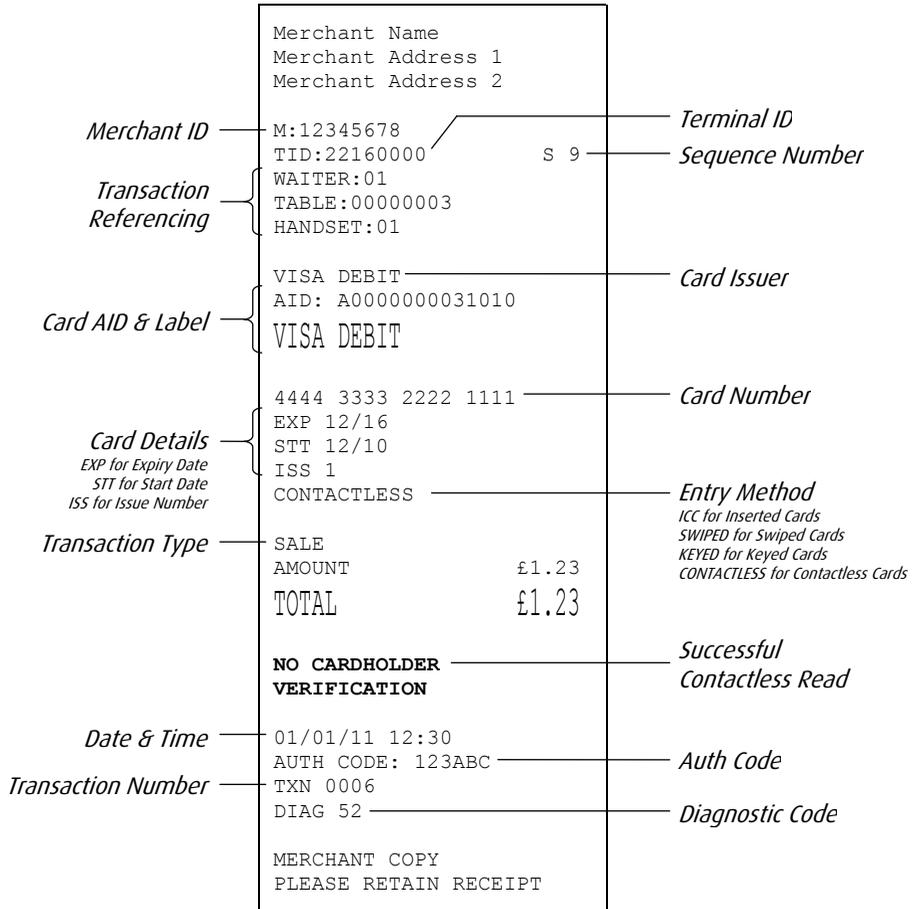
PLEASE PRESENT
ONLY ONE CARD

In both cases the terminal will continue as per a normal contactless sale, refer to the instructions for **Sales - Contactless Cards** to complete the transaction.

4. Transaction Receipts

Merchant Copy

Contactless Cards (Merchant Copy)



Customer Copy

Contactless Cards (Customer Copy)

	DUPLICATE	
	Merchant Name	
	Merchant Address 1	
	Merchant Address 2	
<i>Merchant ID</i>	M:12345678	<i>Terminal ID</i>
	TID:22160000	S 9 <i>Sequence Number</i>
<i>Transaction Referencing</i>	WAITER:01	
	TABLE:00000003	
	HANDSET:01	
	VISA DEBIT	<i>Card Issuer</i>
<i>Card AID & Label</i>	AID: A0000000031010	
	VISA DEBIT	
	*****1111	<i>Card Number</i>
<i>Card Details</i>	EXP 12/16	
<i>EXP for Expiry Date</i>	STT 12/10	
<i>STT for Start Date</i>	ISS 1	
<i>ISS for Issue Number</i>	CONTACTLESS	<i>Entry Method</i>
<i>Transaction Type</i>	SALE	<i>ICC for Inserted Cards</i>
	AMOUNT	£1.23 <i>SWIPED for Swiped Cards</i>
	TOTAL	£1.23 <i>KEYED for Keyed Cards</i>
		<i>CONTACTLESS for Contactless Cards</i>
	NO CARDHOLDER VERIFICATION	<i>Successful Contactless Read</i>
<i>Date & Time</i>	01/01/11 12:30	
<i>Transaction Number</i>	AUTH CODE: 123ABC	<i>Auth Code</i>
	TXN 0006	
	DIAG 52	<i>Diagnostic Code</i>
	CUSTOMER COPY	
	PLEASE RETAIN RECEIPT	



For security reasons the full card number is not shown on the customer copy.



Only the merchant copy is printed during a contactless transaction. If the customer requires a receipt then the customer copy can be printed by pressing the F1 key whilst the idle screen is displayed.

5. Troubleshooting

Frequently Asked Questions

Q I am unable to take contactless transactions, am I doing something incorrectly?

- The contactless option will only become active when the transaction amount is under £15.00.
- Not all cards are enabled for contactless transactions, please ensure that the card presented to PINPad is a contactless card, the customer should contact their card issuer if they are unsure.
- Ensure that the contactless card is presented to the contactless card read zone until prompted to remove the card. You can check the card read by observing the lighting of the contactless status lights - the card is read when the confirmation tone is heard and all four lights are lit steadily.

Q A number of contactless transactions prompt that the card should be inserted or swiped, is this normal?

- It is routine that a contactless card will require a further security check occasionally. If the card is used for a lot of contactless transactions then this should be expected.

Q What do I do if the customer has forgotten their PIN code?

- If your acquirer allows it, you can perform a PIN Bypass to bypass the entry of the PIN code, by pressing the *cancel* key followed promptly by the *menu* key **twice**. If the card allows the PIN Bypass you may find that the acquirer declines the transaction. Transactions taken by PIN Bypass are subject to chargebacks so you should make other careful checks on the card and cardholder as laid out by your acquirer. For more information on the use of PIN Bypass please contact your acquirer.

Q What does it mean when the terminal displays PIN TRIES EXCEEDED?

- The card has been locked after too many failed PIN entry attempts. It may be possible to perform a PIN Bypass. The customer should contact their card issuer to change their PIN, or if they do know it they can unlock it at any ATM.

Screen Messages

During normal operation you may come across a number of screen messages. Some indicate an error, whereas others offer information. Below is a list of the messages that you may see on the display of your terminal and/or contactless reader that specifically relate to contactless transactions.

APPROVED	The contactless transaction has been approved.
REFUSED	The contactless transaction has been refused, you should ask for another means of payment.
NOT AUTHORISED	The card, card issuer or acquirer has declined to authorise the transaction, you should ask for another means of payment.
TRY AGAIN	The card was removed too soon and the card read has failed. The cardholder should re-present the card. They should not remove the card until prompted to do so.
PLEASE PRESENT ONLY ONE CARD	The card was presented with another contactless card and the card read has failed. The cardholder should re-present the card ensuring that it is the only card presented.
INSERT OR SWIPE CARD	The card requires a further security check. The transaction must be completed with cardholder verification (PIN entry or Signature as appropriate).
LOADING TPASS PARAMETERS...	The contactless reader is being updated. This message is displayed during start up, and after your terminal has performed a maintenance call. Please wait a few seconds for the idle screen to be displayed before starting a transaction.

For a full list of screen messages that relate to other transaction types please refer to the User Guide for your terminal.

Diagnostic Codes

You may see diagnostic (`DIAG`) codes at the bottom of transaction receipts and reports. Some indicate an error while others offer information. More than one diagnostic code may be printed. For example `DIAG 828282` would indicate three communication failure attempts during a transaction.

52	Offline or Forced Transaction. This is not an error and is for information only.
53	Offline store is full. You should attempt an online transaction. If the problem persists check the mobile network (mobile terminals), telephone line or LAN (Bluetooth terminals), and contact the terminal Helpdesk quoting the full diagnostic code.
61	PIN Bypass attempted. This is not an error and is for information only.
62	PIN tries exceeded. This is not an error and is for information only.
70xxx	Error in transaction security. Normally indicates that the MAC code is invalid, contact the terminal Helpdesk quoting the full diagnostic code.
72	Merchant has indicated an invalid signature. This is not an error and is for information only.
93	Transaction cancelled by the operator. This is not an error and is for information only.

For a full list of diagnostic codes that relate to other transaction types please refer to the User Guide for your terminal.

6. Notes

Certification

The CE marking certifies that the iST150 complies with the following standards:

- European standard on the safety of information technology equipment (EN 60950-1);
- European standards on the characteristics of radio disturbances and the immunity characteristics of information technology equipment;

and complies with the following harmonised standards:

- EN 60950-1 2006/95/EC
- EN 301489 89/336/EEC
- EN 302291
- EN 61000-3/4

The manufacturer certifies that the products are manufactured in accordance with the above directives.



Operating Environment

Your contactless reader (Class III Equipment) has the following electrical supply characteristics:

- Power Consumption: 400mA at 5V; 300mA at 8-12V

Your contactless reader is designed to be operated and stored at the following temperatures:

- Operating Temperature: +5°C to +40°C
- Operating Relative Humidity (maximum): 85% at +40°C
- Storage Temperature: -20°C to +55°C
- Storage Relative Humidity (maximum): 85% at +40°C

