

## Quick Start Guide



## TC 75<sup>ex</sup>-NI / TC 75X<sup>ex</sup>-NI Touch Computer

## Quick Start Guide

## Quick Start Guide – Translation of the original

### Touch Computers

#### TC 75<sup>ex</sup>-NI/TC 75X<sup>ex</sup>-NI

ATEX / IECEx Zone 2 and Zone 22  
ETL Class I, II, III DIV 2

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## 1 Information about this Quick Start Guide



Read carefully before commissioning the device.

The Quick Start Guide is an integral part of the device.

The Quick Start Guide is directed at all persons who are entrusted with handling the device.

Knowledge of the safety instructions and warnings in this Quick Start Guide and strict compliance with them is essential for safe handling.

- ▶ Carefully read the Quick Start Guide and especially the safety instructions before using the device.
- ▶ Keep the Quick Start Guide throughout the service life of the device.
- ▶ Make the Quick Start Guide accessible to all people who are entrusted with handling the device.

### 1.1 Highlighting in the document

#### 1.1.1 Warnings

Warnings are used in this Quick Start Guide to warn of risks of damage to property and personal injuries.

- ▶ Always read and follow these warnings.



#### **DANGER**

**DANGER** designates a hazardous situation that can lead to death or serious, permanent injuries if safety measures are disregarded.



#### **WARNING**

**WARNING** designates a hazardous situation that can lead to serious but not permanent injuries if safety measures are disregarded.







#### **CAUTION**

**CAUTION** designates a hazardous situation that can lead to minor injuries if safety measures are disregarded.

#### **ATTENTION**

**ATTENTION** designates a hazardous situation that can lead to material damage if safety measures are disregarded.

## 1.1.2 Symbols and means of presentation

Symbol	Explanation
	Important advice and information for the effective, efficient and environmentally sound use of the product.
	Condition that must be met before the subsequent actions can be performed.
	Individual steps you must take.
1., 2., ...	Various steps to be performed in the order specified.
	Indication of the results of a step or of several steps for monitoring success.

## 1.2 Reference documents



All documents are available online from the following websites:

- BARTEC (global): [www.bartec.de](http://www.bartec.de)
- BARTEC (ACS): <http://automation.bartec.de>
- ZEBRA (ZEB): [www.zebra.com](http://www.zebra.com)



In the event of overlaps with Zebra user manuals, the instructions in the BARTEC Quick Start Guide apply. The BARTEC Quick Start Guide takes priority.

Document	Explanation	Version
BARTEC		
Quick Start Guide TC 75 <sup>ex</sup> -NI, TC 75X <sup>ex</sup> -NI	Guidelines on commissioning and the safe use of Touch Computers (including installation, safety information related to explosion protection and information regarding programming)	global
Data sheet TC 75 <sup>ex</sup> -NI, TC 75X <sup>ex</sup> -NI	Data on explosion protection and technical data for Touch Computers	global
ZEBRA		
For TC 75 and TC 75X: <ul style="list-style-type: none"><li>• User Manual</li><li>• Integrator Guide</li><li>• Quick Start Guide</li></ul>	Instructions for commissioning, operating, configuring, programming and maintaining Touch Computers (full information can be found on the ZEBRA support page).	ZEB



Further information on programming Touch Computers can be found in the original Zebra documentation.

The explosion protected TC 75<sup>ex</sup>-NI, TC 75X<sup>ex</sup>-NI Touch Computer are based on the Zebra TC 75 and TC 75X Touch Computer.

## 2 Safety

### 2.1 Intended use

The Touch Computer TC 75<sup>ex</sup>-NI, TC 75X<sup>ex</sup>-NI are used for the mobile capture, processing and transfer of data within potentially explosive atmospheres. The Touch Computer have been modified for use in the following potentially explosive atmospheres:

Configuration	Approved zone
TC 75 <sup>ex</sup> -NI Type: B7-A264-XXXX/XXXXXXXXXX	ATEX / IECEx Zone 2 and Zone 22 Class I, II, III DIV 2
TC 75X <sup>ex</sup> -NI Type: B7-A264-XXXX/XXXXXXXXXX	ATEX / IECEx Zone 2 and Zone 22 Class I, II, III DIV 2

The Touch Computer may only be used together with operating equipment that corresponds to Installation Category I.

You must comply with the permissible ambient conditions for the device used (see data sheet).

## **2.2 Personnel qualifications**

Target group	Skills
Qualified electricians	<ul style="list-style-type: none"><li>• Professional training</li><li>• Knowledge and experience to recognise and avoid risks that can emanate from electricity</li><li>• Understanding of the overall system</li><li>• Special instruction for potentially explosive atmospheres</li></ul>
IT specialists	<ul style="list-style-type: none"><li>• Understanding of the overall system</li><li>• Configuration/programming</li><li>• Understanding of programming manuals</li></ul>
Warehouse and transport employees	<ul style="list-style-type: none"><li>• Loading and transport activities</li><li>• Correct storage</li></ul>
Operators	<ul style="list-style-type: none"><li>• Instruction by the operating company on operation, changing and loading the battery</li><li>• Special instruction for potentially explosive atmospheres</li></ul>

## **2.3 Explosion protection**

Incorrect use of the Touch Computer and its accessories can trigger fires and explosions in potentially explosive atmospheres.

- ▶ Read the instructions in this Quick Start Guide thoroughly and follow them when using the device.

In the event of overlaps with user manuals from Zebra, the instructions in the BARTEC Quick Start Guide apply. The BARTEC Quick Start Guide takes priority.

### **2.3.1 Using Touch Computer and accessories**

- ▶ Always carry out an inspection prior to use (see Chapter 5.2, P. 29).
- ▶ Ensure that the application area corresponds to the explosion protection marking and permissible ambient conditions (see data sheet).
- ▶ Remove the device from the potentially explosive atmosphere immediately in the event of a malfunction or damaged enclosure.
- ▶ Only use accessories specified by BARTEC in the potentially explosive atmosphere.
- ▶ Have all maintenance work on and inspections of accessories conducted by authorised personnel.
- ▶ Have all repairs to the Touch Computer conducted by BARTEC.

## 2.4 Residual risks

### 2.4.1 Risk of an explosion caused by electrical ignition sources

Electrical ignition sources can trigger fires and explosions in a potentially explosive atmosphere.

#### Non-approved components

Specific Touch Computer and accessories (including 4 slot Battery Charger, Cradle) are suitable for each potentially explosive atmosphere. Touch Computer and components that have not been approved for the respective potentially explosive atmosphere may trigger explosions.

- ▶ Only use components that have been approved for the relevant zone.

#### Spark formation during battery change and cable connection

Sparks can arise when changing the battery or connecting cables. Sparks can trigger an explosion in a potentially explosive atmosphere.

- ▶ Only insert or remove the battery outside the potentially explosive atmosphere.
- ▶ Only connect or disconnect the cable outside the potentially explosive atmosphere.
- ▶ Always have cables connected by a qualified electrician.

#### Broken enclosure: loss of explosion protection

The Touch Computer has been tested for falls from a height of up to 2.4 m (Zone 2 / Div. 2). There is a risk of the enclosure or the scan window breaking during falls from a greater height, in which case the explosion protection is no longer guaranteed.

- ▶ Protect Touch Computer from falling from a greater height.
- ▶ If the Touch Computer has fallen from a greater height or you suspect a damaged enclosure:
  - Remove the Touch Computer from the potentially explosive atmosphere immediately.
  - Send the Touch Computer to BARTEC.

#### Corrosion: loss of explosion protection

The enclosure of the Touch Computer has protection class IP64, however constant exposure to moisture can lead to corrosion. This may lead to the loss of the explosion protection.

- ▶ Protect Touch Computer against constant exposure to moisture.
- ▶ Do not subject Touch Computer to any damp weather conditions.

#### **2.4.2 Damage to eyes caused by laser light**

The Touch Computer operates with a Class 3B laser. Laser beams can damage eyes.

- ▶ Do not look into the laser beam.
- ▶ Never aim at aircraft this is unsafe and illegal

#### **2.4.3 Risks of cuts if the scan window is broken**

The scan window may become damaged if the Touch Computer falls down. There is a risk of cuts if you reach into the broken or cracked area.

- ▶ When getting the Touch Computer out, secure it to prevent it falling down.
- ▶ Only get the Touch Computer out when it reaches its destination.
- ▶ If the scan window is broken:
  - Do not touch the broken area.
  - Do not use the Touch Computer.
  - Send the faulty Touch Computer to BARTEC.

#### **2.4.4 Health hazard in the case of incorrect disposal**

Lithium ion batteries on the Touch Computer contain pollutants that can be harmful to health.

- ▶ Dispose of batteries in an environmentally sound way in accordance with regional regulations.

## 2.5 Preventing damage to property

### 2.5.1 Short circuit caused by incorrect connection

Incorrect electrical connection can cause a short circuit, thereby damaging the Touch Computer.

- ▶ Always have the Touch Computer connected by a qualified electrician in accordance with the connection diagram.

### 2.5.2 Storage at too high a temperature

There is a risk of the Touch Computer getting too hot if the Touch Computer is stored and used outside of the permissible ambient temperatures.

- ▶ Only store and use the Touch Computer within the permissible ambient temperatures.

### 2.5.3 Aggressive cleaning agents

Aggressive cleaning agents can attack and fade the scan window, thereby impairing the scanning functionality. In extreme cases scanning is no longer possible.

- ▶ Only use a damp cloth to clean the Touch Computer.

### 2.5.4 Contact with chemicals

The enclosure of the Touch Computer consists of polycarbonate that has only limited chemical resistance. Contact with chemicals can break the enclosure.

- ▶ Do not bring the Touch Computer into contact with chemicals.

## 2.6 Disposal

The Touch Computer contain metallic and plastic parts and electronic components.



As professional electrical devices, our devices are intended exclusively for commercial use, so-called B2B devices, in accordance with the WEEE Directive.



The WEEE Directive provides the framework for the treatment of old electrical equipment throughout Europe. This means that you may not dispose of these devices in usual household waste but must dispose of them separately in an environmentally compatible manner and can also bring them to the collection points of public disposal companies.

All products purchased from us can be returned to us by our customers for disposal. We will ensure disposal in accordance with the applicable laws.

The sender shall bear the costs of postage and packaging.



### 3 Approval, standards

#### 3.1 TC 75<sup>ex</sup>-NI

Standard	Ex protection type	Certification
ATEX Zone 2/22	 II 3G Ex ic op is IIC T5 Gc  II 3D Ex ic op is IIIB T100 °C Dc	EPS 17 ATEX 1 028 X
IECEX Zone 2/22	Ex ic op is IIC T5 Gc Ex ic op is IIIB T100 °C Dc IP 64	IECEX EPS 17.0012X
ETL Div 2	Class I,II,III Div 2 Class I Div 2 Groups A,B,C,D Class II Div 2 Group F,G Class III Class I Div 2 Class I Div 2 Groups A,B,C and D T4 Conforms to ANSI/UL Std. 60950 Cert. to CAN/CSA Std. C22.2 No. 60950	5012876

Further approvals and certificates can be found at [www.bartec.de](http://www.bartec.de)

#### 3.2 TC 75X<sup>ex</sup>-NI

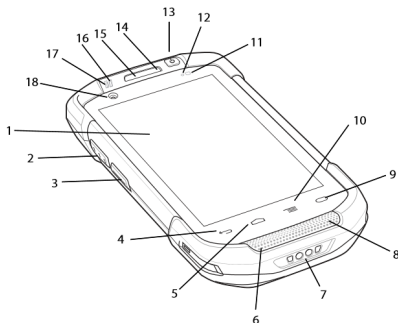
Standard	Ex protection type	Certification
ATEX Zone 2/22	 II 3G Ex ic op is IIC T5 Gc  II 3D Ex ic op is IIIB T100 °C Dc	Applied
IECEX Zone 2/22	Ex ic op is IIC T5 Gc Ex ic op is IIIB T100 °C Dc IP 64	Applied
ETL Div 2	Class I,II,III Div 2 Class I Div 2 Groups A,B,C,D Class II Div 2 Group F,G Class III Class I Div 2 Class I Div 2 Groups A,B,C and D T4 Conforms to ANSI/UL Std. 60950 Cert. to CAN/CSA Std. C22.2 No. 60950	5012876

Further approvals and certificates can be found at [www.bartec.de](http://www.bartec.de)

## 4 Product description

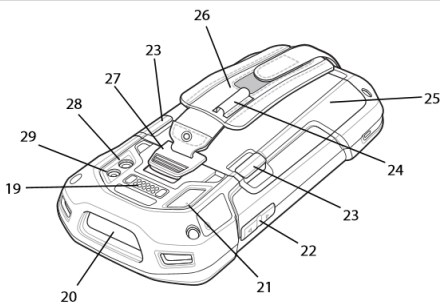
The TC 75<sup>ex</sup>-NI and TC 75X<sup>ex</sup>-NI is a Touch Computer for capturing 1D/2D barcodes. The barcodes are captured by a 1D/2D scan engine. The ergonomic design permits 1-handed operation.

### 4.1 Construction of the Touch Computer



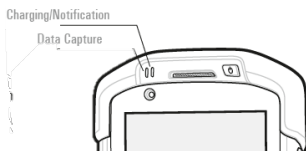
Pos.	Description	Function
1	Touch Screen	Displays all information needed to operate the TC 75.
2	Scan Button	Initiates data capture (programmable).
3	PTT Button	Initiates push-to-talk communications (programmable).
4	Back Button	Displays the previous screen.
5	Home Button	Displays the Home screen with a single press. Displays recently used applications when held for a short period of time. On TC 75 with GMS, opens the Google Now screen when held for a short period of time.

Pos.	Description	Function
6	Microphone	Use for communications in Handset mode.
7	Charging Contacts	Provides power to the device from cables and cradles.
8	Speaker	Provides audio output for video and music playback. Provides audio in speakerphone mode.
9	Search Button	Opens the search application (programmable). On TC 75 with GMS, opens the Recent App screen.
10	Menu Button	Opens a menu with items that affect the current screen or application.
11	Light Sensor	Determines ambient light for controlling display backlight intensity.
12	Proximity Sensor	Determines proximity for turning off display when in handset mode.
13	Power Button	Turns the display on and off. Press and hold to reset the device or power off.
14	Microphone	Use for communications in Speakerphone mode.
15	Receiver	Use for audio playback in Handset mode.
16	Charging/Notification LED	Indicates battery charging status while charging and application generated notifications.
17	Data Capture LED	Indicates data capture status.
18	Front Facing Camera	Use to take photos and videos.



Pos.	Description	Function
19	Interface Connector	Provides USB host and client communications, audio and device charging via cables and accessories.
20	Exit Window	Provides data capture using the imager.
21	Microphone	Use during video recording and for noise cancellation.
22	Volume Up/Down Button	Increase and decrease audio volume (programmable).
23	Battery Release Latches	Press to remove the battery.
24	Elastic Sleeve	Use to hold optional stylus.
25	Battery	Provides power to the device.
26	Hand strap	Use to securely hold the device in your hand.
27	Hand strap Mounting Point	Provides latching point for the hand strap.
28	Camera	Takes photos and videos.
29	Camera Flash	Provides illumination for the camera.

#### 4.1.1 Meaning of LED display



LED display	Colour	Meaning
Data Capture LED	Green	Good Decode
	Red	Data capture in progress
	Blue	Application notification
Charging/Notification LED	Slow blinking amber	Battery charging
	Solid green	Fully charged
	Fast blinking amber	Charging error
	Slow blinking red	Charging aged battery
	Solid red	Fully charged aged battery
	Fast blinking red	Charging error aged battery
	Slow blinking blue	Application notification



Other LED displays are described in the ZEBRA Product Reference Guide.

## 5 Operation

### 5.1 Touch Computer TC 75<sup>ex</sup>-NI/TC 75X<sup>ex</sup>-NI

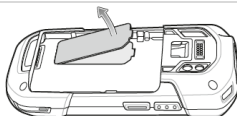
#### 5.1.1 SIM/SAM/SD Card Installation

#### DANGER

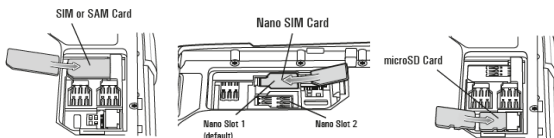
Inserting or replace the SIM/Micro SD card!

- ▶ Only insert or replace the SIM/Micro SD card outside of the potentially explosive atmosphere

1. Lift the access door



2. Insert the SIM/SAM/micro SD card into the card holder. Push the card all the way into the card holder.



Proper position of the SIM/SAM/micro SD card – the card connector (i.e., gold contacts) should be facing down. Nano slot 1 is default slot for SIM card. Go to Settings to configure the default SIM slot, if enabled by your system administrator.

3. Replace the access door. Ensure that it is properly seated.

### 5.1.2 Battery information



#### WARNING

Remove battery to decommission the device! The ambient temperature range of use for secure operation within the potentially explosive atmosphere is -20 °C to + 50 °C. Additional safety instruction for use in potentially explosive atmosphere.



### 5.1.3 Changing the battery



#### DANGER

##### Mixing up the batteries!

Loss of function and risk of explosion.

- Only use batteries that have been certified by BARTEC.

Only the following batteries are approved:

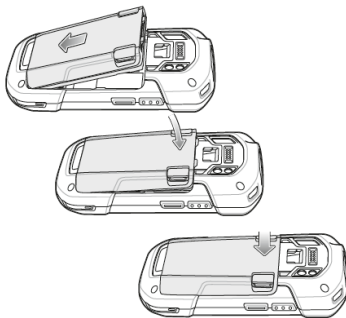
Zone / Div	Battery type
Zone 2 / Div 2	B7-A2Z0-0045

## 5.1.4 Battery installation

**DANGER****Spark formation when changing the battery!**

Explosion.

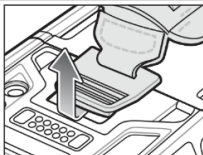
- ▶ Only insert or remove the battery outside the potentially explosive atmosphere.
- ▶ Make sure that step 3 of the battery installation is completely done.



1. Insert the bottom of the battery into the battery compartment
2. Rotate the battery down into the battery compartment
3. Press the battery down until it snaps into position

### **5.1.5 Battery replacement**

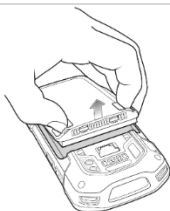
1. Remove any accessory attached to the device.
2. Press the Power button until the menu appears.
4. Touch Battery Swap.
5. Follow the on-screen instructions.
6. Wait for the LED to turn off.
7. If hand strap is attached, slide the hand strap clip up toward the top of the TC 75 and then lift.



8. Press the two battery latches in.



9. Lift the battery from the TC 75.





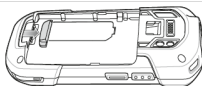
### VORSICHT

**VORSICHT** Replace the battery within two minutes. After two minutes the device reboots and data may be lost.

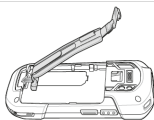
10. Insert the replacement battery, bottom first, into the battery compartment in the back of the TC 75.
11. Press the battery down until the battery release latch snaps into place.
12. Replace the hand strap, if required.
13. Press and hold the Power button to turn on the TC 75.

**5.1.6 Hand strap installation**

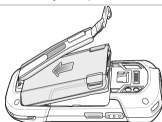
1. Remove hand strap filter plate



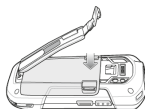
2. Insert the hand trap plate into the handstrap slot



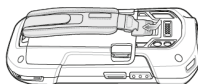
3. Insert the bottom of the battery into the battery compartment



4. Rotate the battery down into the battery compartment and press the battery down until it snaps into position



5. Place the hand strap into the hand strap attachment slot and pull down to lock into place



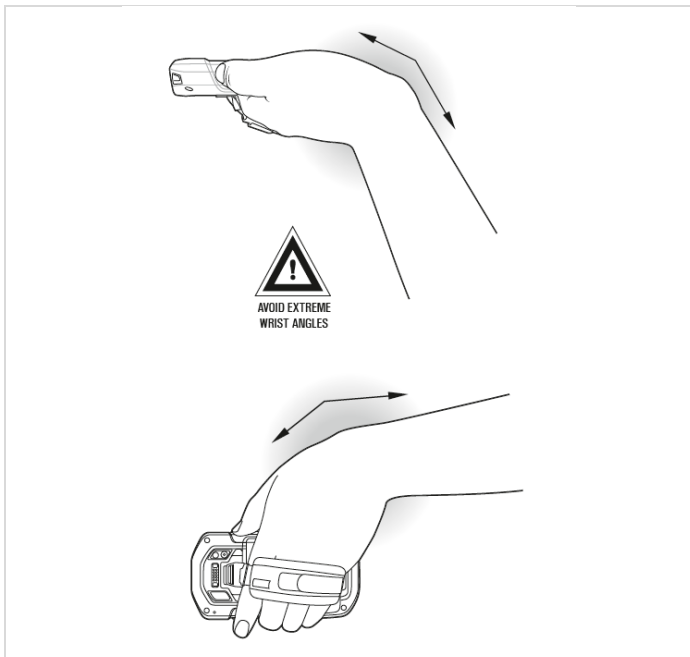
## 5.2 Inspection to be conducted prior to use

- Check the following points before operating the device:

### Final inspection of TC 75<sup>ex</sup>-NI/TC 75X<sup>ex</sup>-NI

Check points
Scan window free from damage, e.g. scratches
Enclosure free from damage, e.g. crack or break
Temperature in the area in which the Touch Computer is used corresponds to the specified temperature range
If cables are present: cables are not damaged. Make sure that the cables are removed before entering hazardous locations
If cables are present: cables have been certified
Battery has been certified

### 5.3 Avoid extreme wrist angles



## 5.4 Scanning

During scanning, the scanners in the TC 75<sup>ex</sup>-NI/TC 75X<sup>ex</sup>-NI emit a scanner beam.

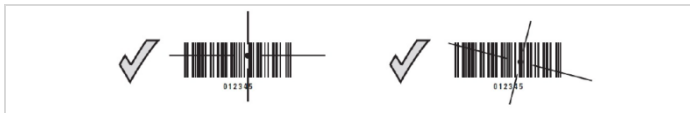


1. Ensure that an application is open and a text field is in focus (text cursor in text field).
2. Point the exit window at the bar code.
3. Press and hold the Scan button.
4. The red laser aiming pattern turn on the assit in aiming. When the TC 75 decodes the bar code the Data Capture LED light green and a beep sounds.
5. Release the Scan button.

## 5.5 Optimal scan position

### Right:

The Touch Computer can also read barcodes when the scanner beam is not directly centred on the barcode.



### Wrong:

The Touch Computer cannot decode/scan a barcode if the scanner beam does not capture the whole width of the barcode.



### 5.6 Camera Photo



1. Open the camera application.
2. Point the TC 75 camera at an object.
3. Touch the on screen shutter button.



## 6 Annex

### 6.1 Approved accessories

4-Slot Battery charging station G7-A0Z0-0020



Basestation

G7-A0Z0-0022



## 6.2 Notice

# BARTEC

## BARTEC

Your partner  
for safety  
technology.  
Challenge us!

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