# Installation

## Introduction

With installation of the standard BNWAS setup the parts that are point of interest are the following:

* Beijer Exter T70-bl
* Wago I/O system 750

And additionally

* Phoenix Contact FL switch SFNT series
* Watch Alarm Panel 1st, 2nd and 3rd stage
* Reset Buttons

## Beijer Exter T70-bl

### Specifications

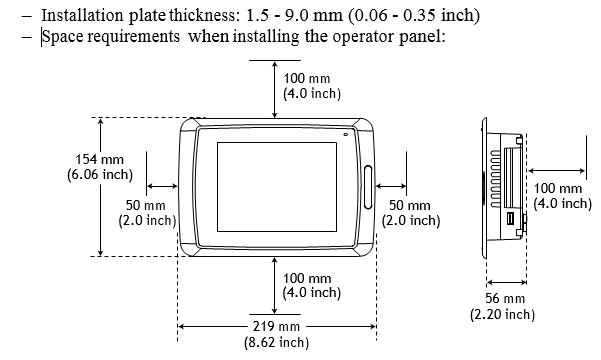


Figure 2‑1: Dimensions

1. Unpack and check the delivery (see Figure 2‑2). If damage is found, notify the supplier.

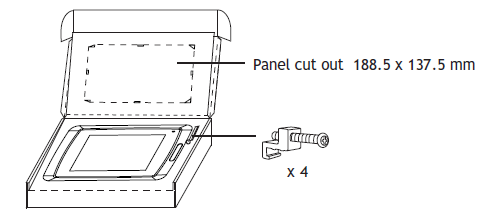


Figure 2‑2: Delivery and contents

NOTE

Place the operator panel on a stable surface during installation. Dropping it or letting it fall may cause damage.

1. Place the panel cut-out where the operator panel is to be situated, draw along the outer sides of the holes and cut according to the markings (see Figure 2‑3).

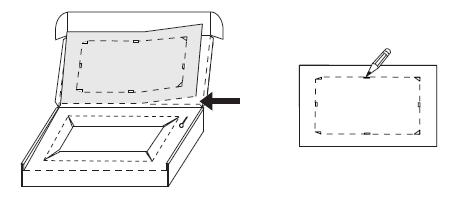


Figure 2‑3: Panel cut-out

1. Secure the operator panel in position, using all the fastening holes and the provided brackets and screws (see Figure 2‑4).

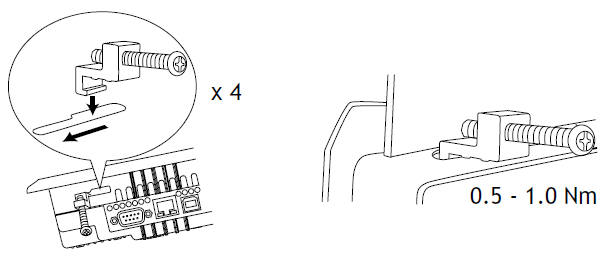


Figure 2‑4: Fastening holes and brackets

1. Connect the cables in the specified order.

**CAUTION**

**Ensure that the operator panel (ref. A, Figure 2‑5) and the controller system have the same electrical grounding (reference voltage level), otherwise errors in communication may occur.**

1. Use an M5 screw and a grounding conductor (as short as possible) with a cross-section of minimum 2.5 mm2 (ref. B).

**CAUTION**

* **Use only shielded communication cables**
* **Separate high voltage cables from signal and supply cables (ref. C)**
* **The operator panel must be brought to ambient temperature before it is started up. If condensation forms, ensure that the operator panel is dry before connecting it to the power outlet (ref. D).**
* **Ensure that the voltage and polarity of the power source is correct.**

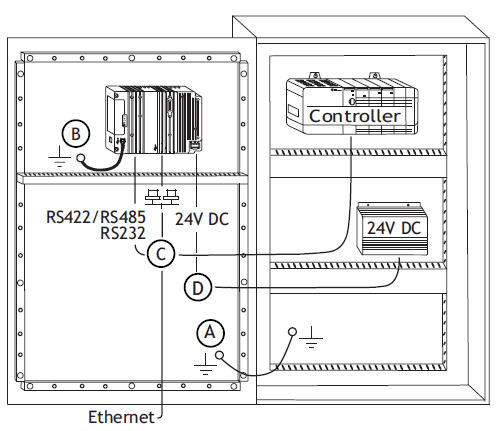


Figure 2‑5: Cable connections

1. Carefully remove the laminated film over the operator panel display, to avoid static electricity that could damage the panel.

### Mode switches

**CAUTION**

* **All mode switches (see Figure 2‑6) must be in OFF position during operator panel use.**
* **The mode switches should not be touched unless by qualified personnel.**

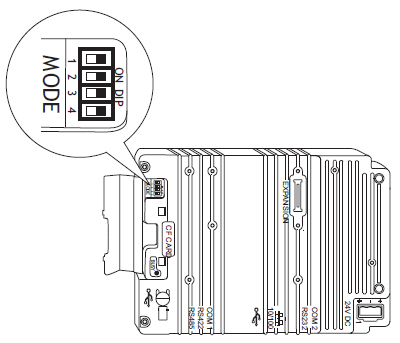


Figure 2‑6: Mode switches

### Connections to the controller

For information about the cables to be used when connecting the operator panel to the controller, please refer to the help file for the driver in question.

### Other connections and peripherals

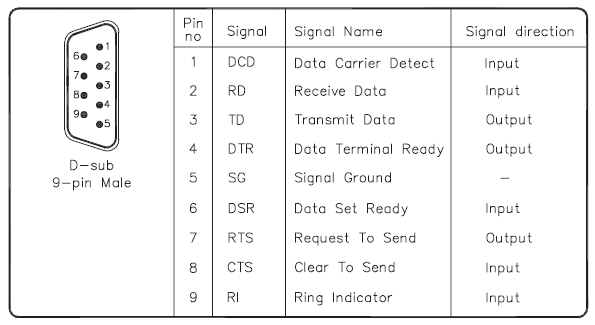
**CAUTION**

**When using a compact flash card, do not remove the card when the busy indicator is illuminated.**

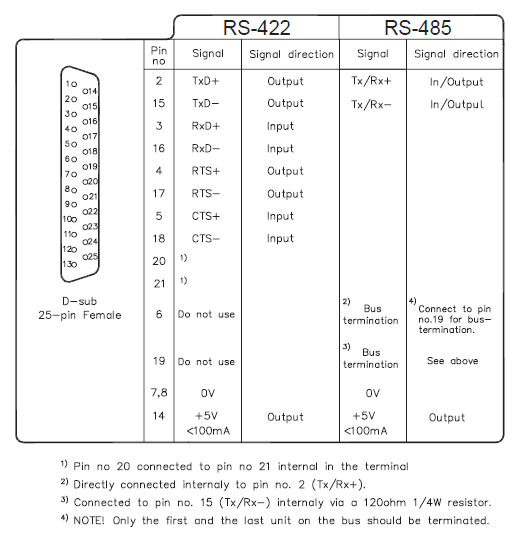
Cables, peripheral equipment and accessories must be suitable for the application and its environment. For further details or recommendations, please refer to the supplier (see references).

### Communication ports

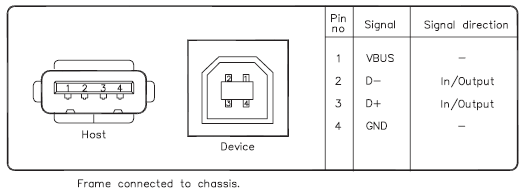
**RS-232:**



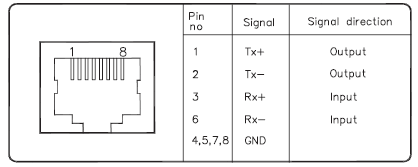
**RS-422/485:**

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**USB:**

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**Ethernet:**

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The panel should be installed in an environment that does not exceed 0-50 degrees Celsius when installed horizontally and 0-40 degrees Celsius when installed vertically. The relative humidity should be between 0-85 % (non-condensed). Only indoor use.

The power supply is class 2, +24V DC (20-30 V DC).

Mandatory to use at least Cat5E cable for Lan-connection.

### Installation

The Beijer Exter T70-bl comes with a standard software version that needs to be changed to a proprietary version.

To install the software, the following steps have to be made

#### Boot the Exter T70 system

The system automatically boots when the power is connected.

#### Connect the Exter T70 to the maintenance PC

Using a cross-over cable between the PC and Exter T70 panel or a straight-cable

between a network switch and the PC and the network switch and the panel.

*: be sure that only one uninitialized Exter T70 panel is connected to your network to prevent IP conflicts.*

#### Check the IP address of the maintenance PC

The IP address of the maintenance PC should be in the same subnet as the Exter T70.

Default settings of the Exter T70: IP: 192.168.1.1, Subnet-Mask: 255.255.0.0.

#### Copy the new software

To do this, open Windows Explorer and go to the local copy of the Alarm Panel

Software (to be found at Sharepoint). Select the folder “NavVisionUpdate” and click right mouse button and select

“Copy”

*:Make sure you use the right version for the BNWAS setup. At least the version of DisplayServer.exe needs to be 2.0*

*:The NavVision software version needs to be 9.18.4.100 or higher.*

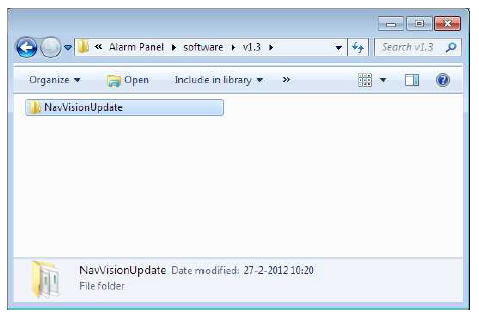


Figure 2‑7: Copy local files

#### Open an FTP connection to the Exter T70 panel.

You can do this by opening Windows Explorer and entering the ftp address in the address

bar. By default it is: ftp://free:technics@192.168.1.1

Change the IP address by the assigned IP address in FT NavVision, when the Exter T70

was already initialized.

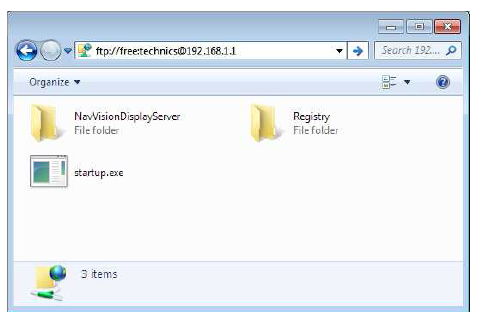


Figure 2‑8: Enter FTP address

#### Paste the files you have just copied

To do this, press right mouse button and select “Paste”

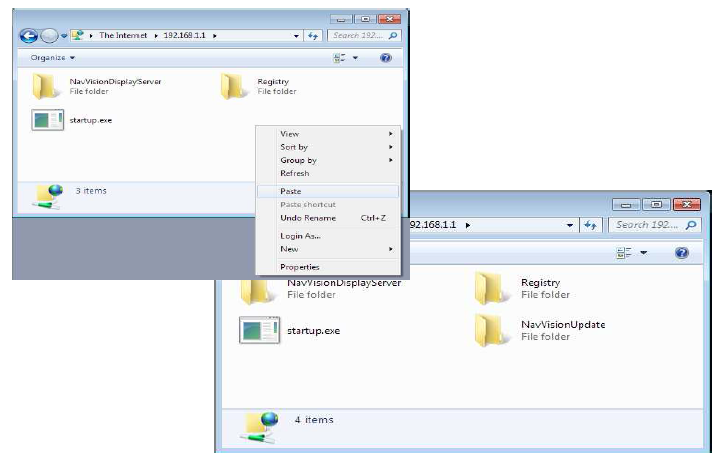


Figure 2‑9: Paste new files

#### Activating update

The panel will automatically update, when it is the first time the software is installed on the

Exter T70. When it’s an update of the Exter T70, the power to the unit should be turned off

and on again.

#### BNWAS.ini

Make a textfile by right-clicking on the desktop and choose “New/TextDocument” (see Figure 2‑10).Rename this textfile to “BNWAS.ini”. Put the file in the root of the DAP (can be just the empty file)

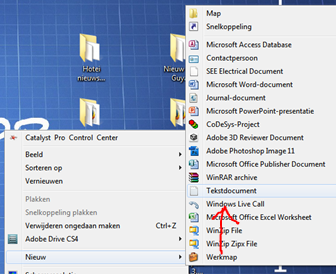


Figure 2‑10: Make the BNWAS.ini

The system is now completely functional and is ready to be used. When it starts up again it will show the standard DAP display as long as there is connection to the NavVision AMCS. As soon as this connection is lost, the DAP will fall back to the BNWAS HMI (see Figure 3‑1).