Equipment

# Service Information.
# **Installation and Replacement of a Heidelberg Counter Box.**


HEIDELBERG

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# About This Documentation

Heidelberg has introduced an improved counter box to which up to 12 machines can be connected. Like the counter box to date, the new counter box is customized to the Prinect Postpress Manager. This documentation describes the installation of the new counter box and the replacement of the old counter box.

## What you should already know

Installation of the counter box requires basic knowledge of electrical engineering.

## Further Documentation

You can find more information in the following documentation:

- Prinect Cockpit Online Help:
  This is where you will find more details about device configuration and connection in Prinect.

## Important Information

Important information in the text is marked by symbols at the side which are used as follows:

**Note:** Contains important general or supplementary information about a specific topic.

**Prerequisite:** Lists requirements which must be fulfilled before the steps which follow can be performed.

# Installation of the New Counter Box

We will describe the installation of the new counter box below.

See "Replacement of the Counter Box", page 15 for details on how to replace a counter box.

You must run through the following steps to install a new counter box:

1. "Assign a Valid IP Address to the Counter Box", page 7
2. "Set up the Counter Box in Prinect", page 8
3. "Assign a Channel to the Devices", page 10
4. "Wire the Counter Box on the Machine", page 13

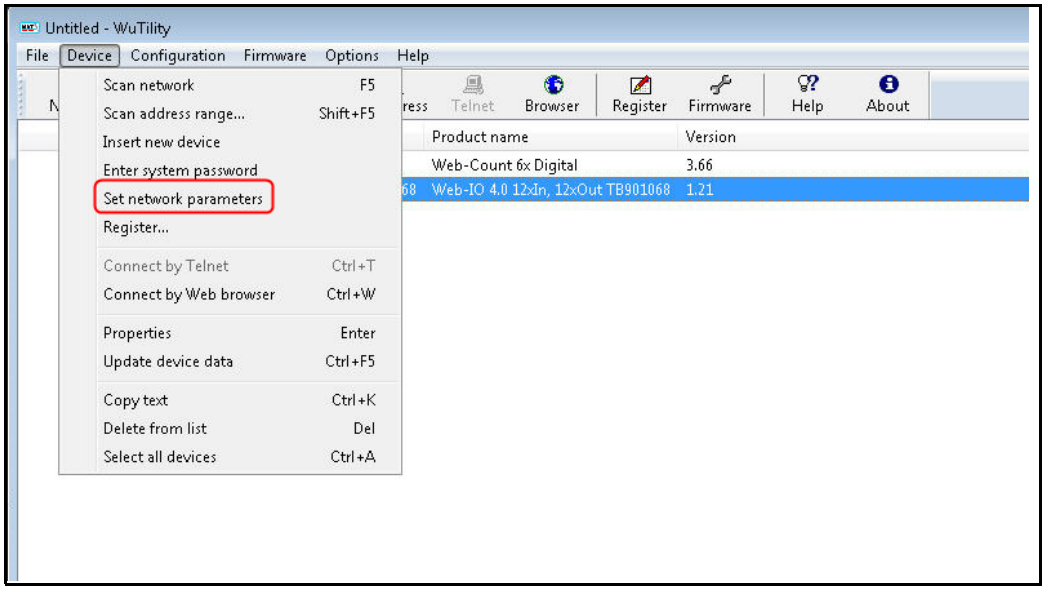
# Assign a Valid IP Address to the Counter Box

You must assign a valid IP address to the counter box. Your network administrator will provide you with the IP address.

**Prerequisite:** The counter box must be set up in the network in order to be assigned.

Proceed as follows to assign an IP address to the counter box:

1. Start the WuTility-tool (download: http://wut.de/wutility).
   All counter boxes in the network are listed. Your counter box must also be listed here.
2. Select your counter box.
3. Click "Device > Set network parameters".




4. Type in the IP address.

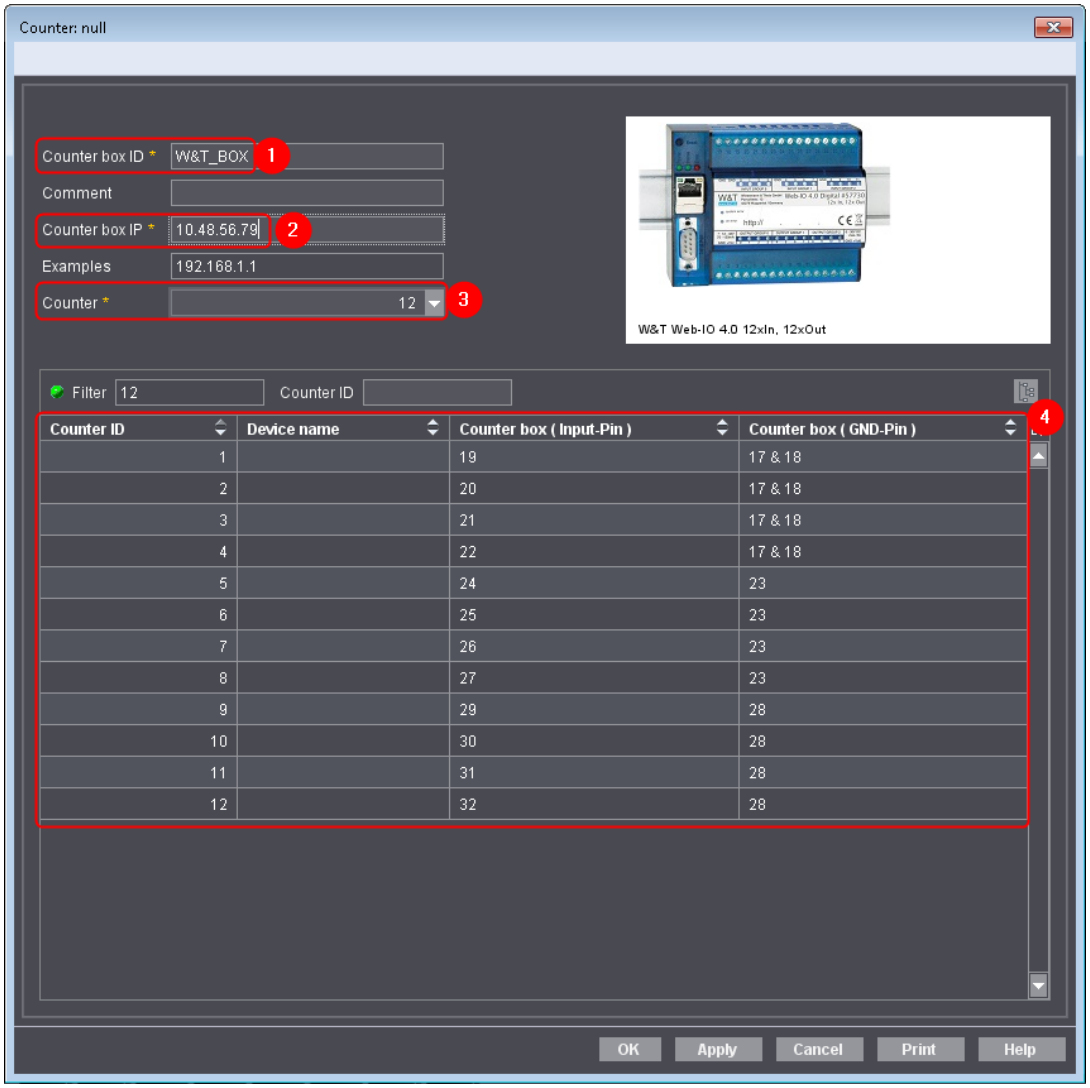
5. Save the settings.

You have now assigned the IP address. In the next step, you must set up the counter box in Prinect.

# Set up the Counter Box in Prinect

You must set up the new counter box in the Prinect Cockpit.

1. To do this, open the Prinect Cockpit.
2. Go to "Administration > Device configuration > Counter box".
3. Click "Create".
   The dialog for configuration of the counter box opens:




4. Give the counter box a name of your choice (1).

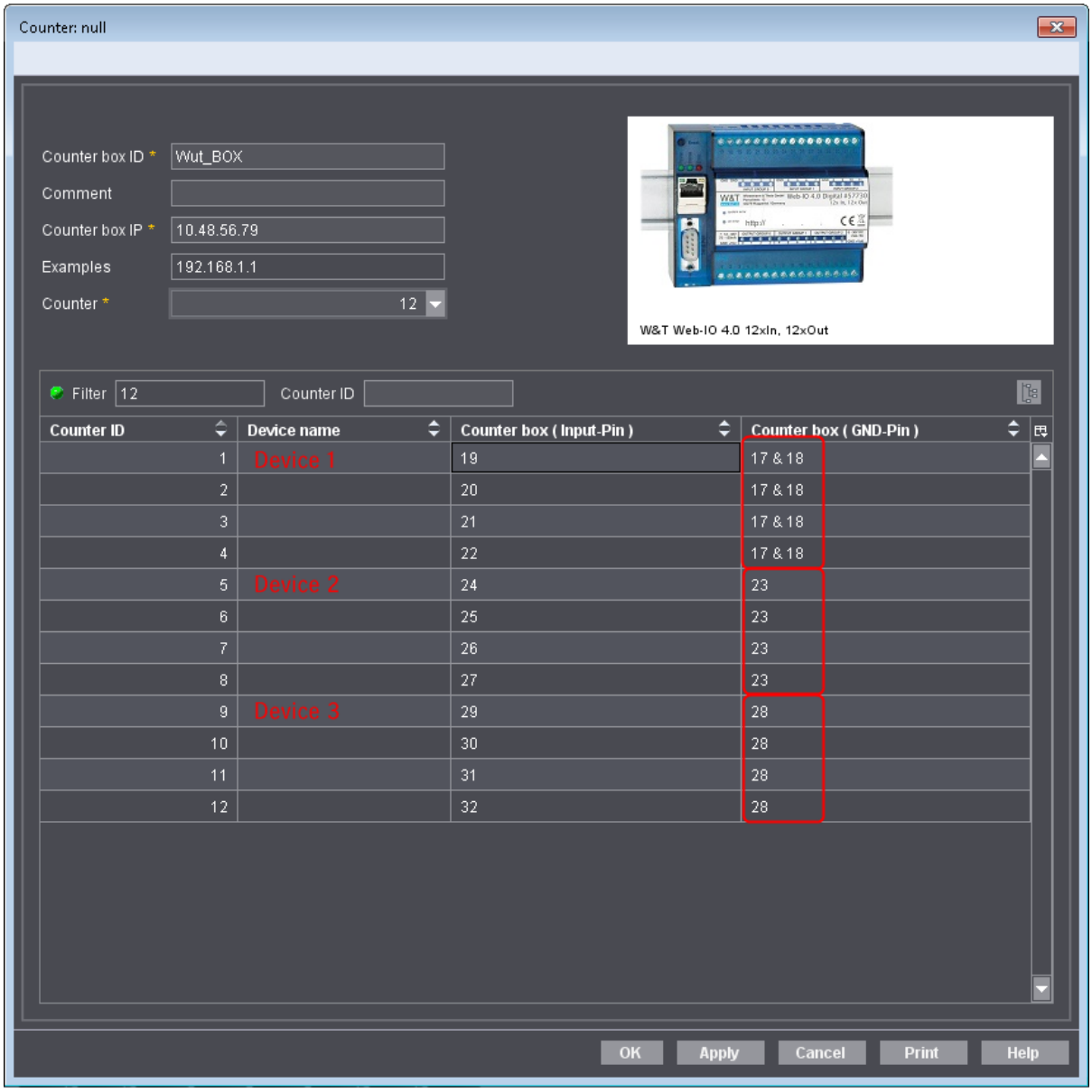
5. Enter the previously assigned IP address (2).
6. Select the number of channels (3):
   12 = New counter box
   6 = Old counter box

In the example below, you can see a connection variant as is used for voltage signals. Because each machine has its own ground connection in a connection and the counter box links four channels with one ground, the voltage signal in each ground block must be shifted. This means:

Device 1 to channel 1-4

Device 2 to channel 5-8 and

Device 3 to channel 9-12




7. Make a note of the channels for each device (you can print the dialog with "Print").

8. Click "OK" to save your settings.

In the next step, you assign a channel to the devices.

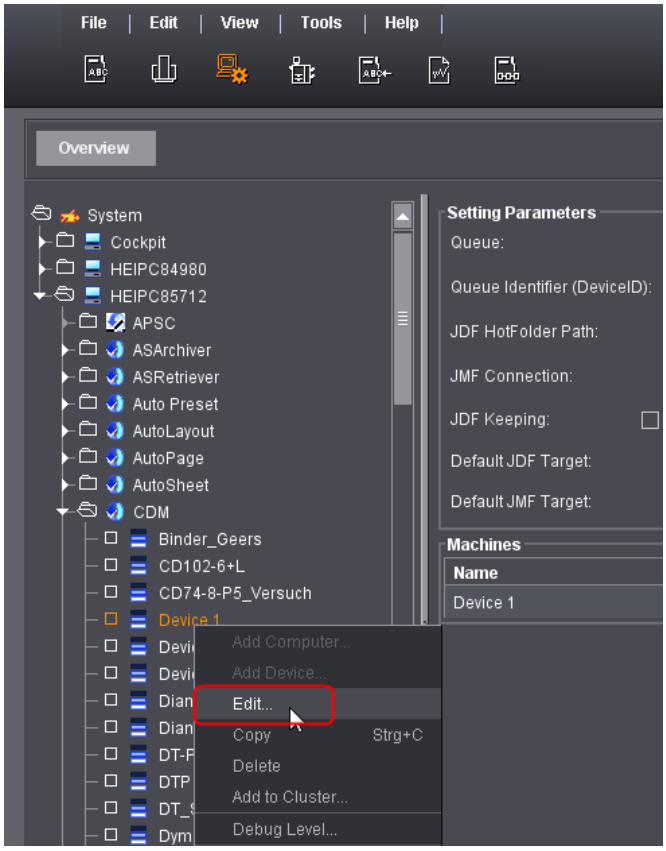
# Assign a Channel to the Devices

When the counter box is set up, you must assign the channel to the devices. You assign it on the Central Device Manager (CDM).

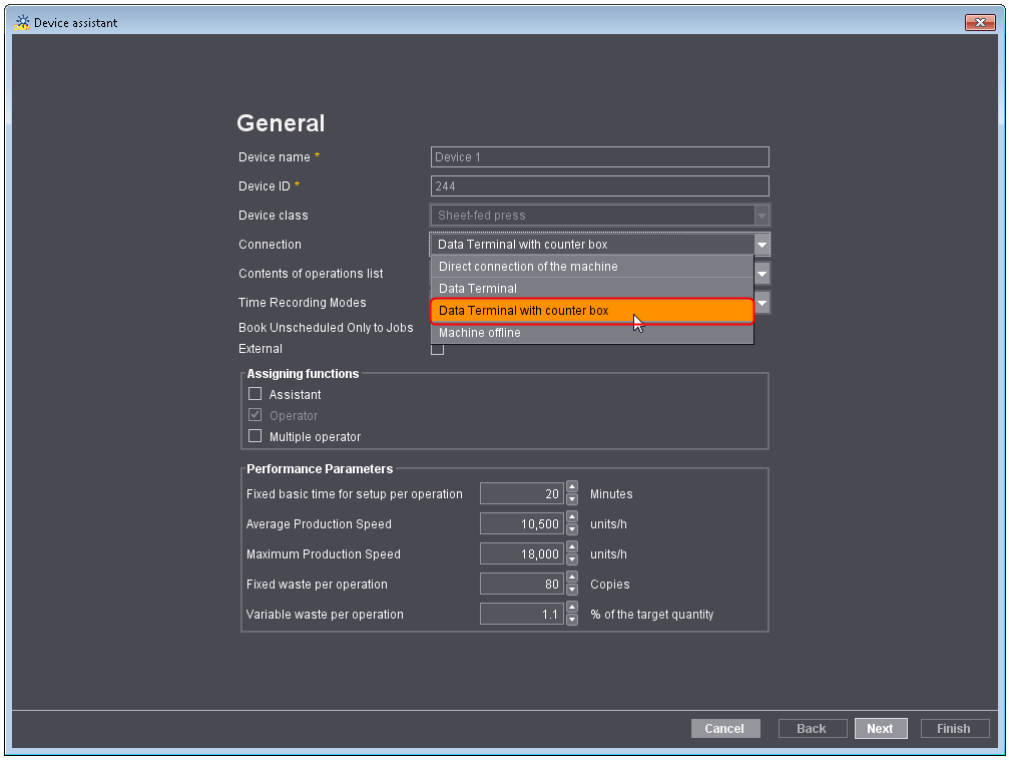
**Prerequisite:** We assume below that the devices are already set up on the CDM. You can find out how to set up a new device in the Online Help of the Prinect Cockpit.

Proceed as follows to assign a channel to the device:

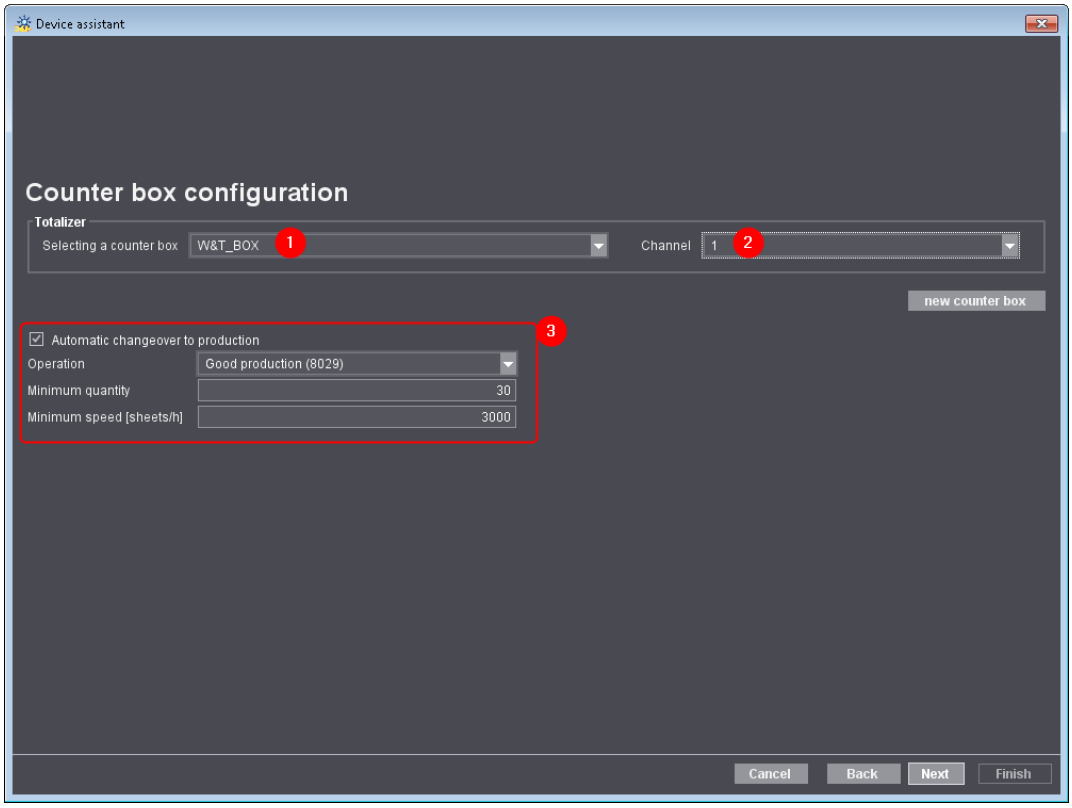
1. In Prinect Cockpit, go to "Administration > System > <name of the Prinect server>".
2. Open "CDM".
3. Select the device.
4. Click "Edit" in the context-sensitive menu.



The "Device assistant" opens:




5. Select "Data Terminal with counter box" in "Connection".
6. Click "Next" until you are at "Counter box configuration".



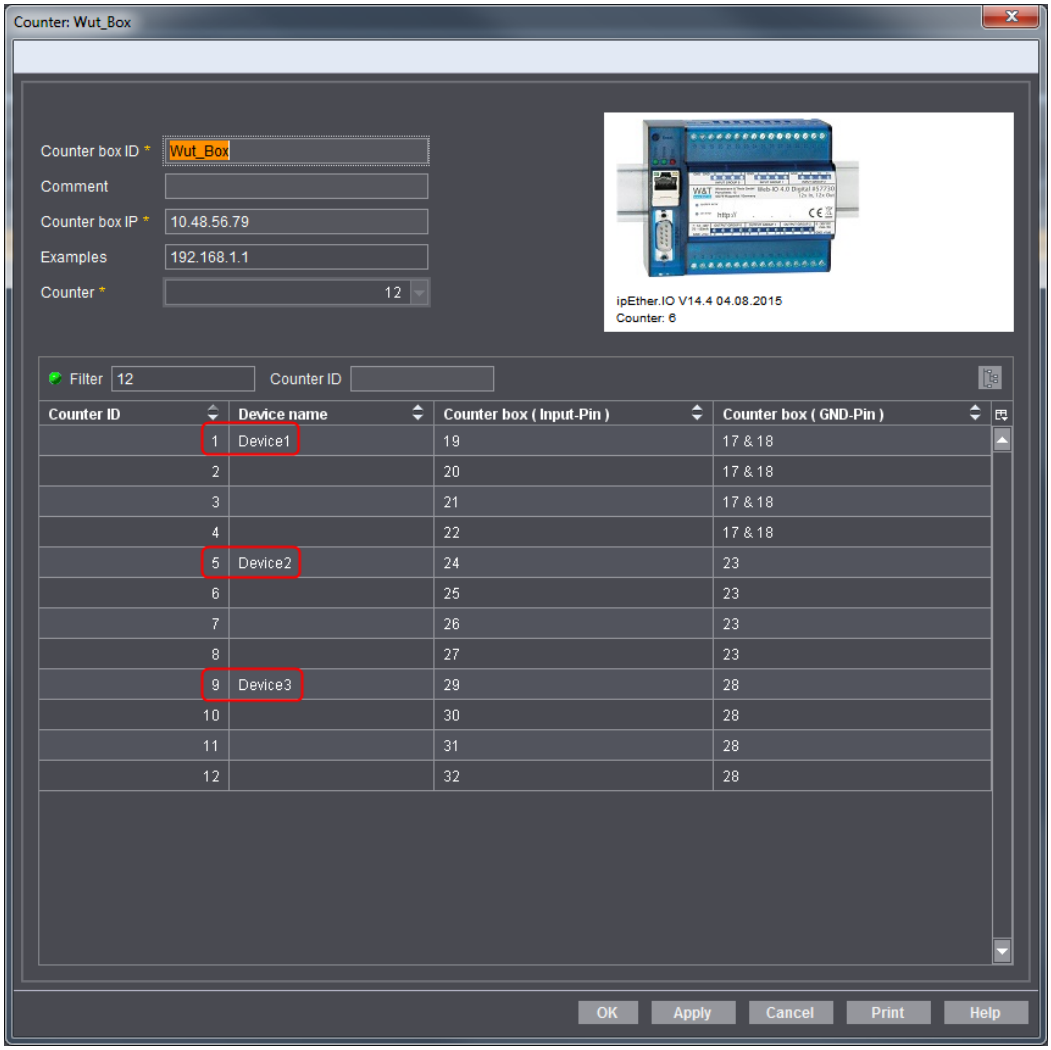
7. Select the counter box you set up beforehand (1).
8. Assign the channel to the device (2).
   In this example, we assign channel 1 to device 1.

(9). If wanted, enable "Automatic changeover to production" and enter the appropriate values. You will find more details about this in the Prinect Cockpit Online Help.

10. Click "Next".
11. Click "Finish".
12. Repeat the steps for the other devices.
13. **Restart the Prinect Cockpit. If you don't, the device names do not appear correctly in the device configuration.**

Afterwards, check whether you assigned the channels correctly. To do this, go again to "Administration > Device configuration > Counter box" and open the counter box.

The devices should now be assigned to the correct channels:




Print the graphic to then set up the wiring on the machine.

# Wire the Counter Box on the Machine

Wiring on the machine is done based on the graphic you printed in advance. In addition, take note of the wiring diagrams. See "Wiring Diagrams", page 21.

In this example, wiring would be as follows:

- Device 1 is on Counter ID (channel) 1
  The signal cable of the machine must be connected with pin 19 and the related ground (GND) with pin 17 or 18.
- Device 2 is on Counter ID (channel) 5
  The signal cable of the machine must be connected with pin 24 and the related ground (GND) with pin 23.
- Device 3 is on Counter ID (channel) 9
  The signal cable of the machine must be connected with pin 29 and the related ground (GND) with pin 28.

# Replacement of the Counter Box

In the section below we will describe how to replace the previous counter box with a new counter box.

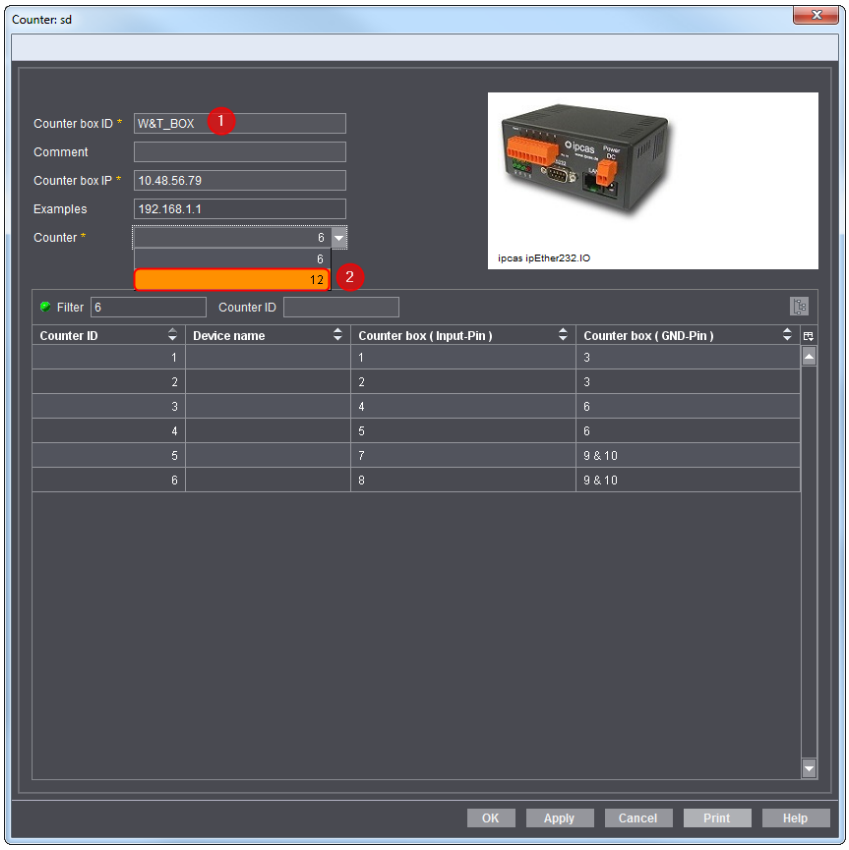
You must run through the following steps for this:

1. "Replace Previous Counter Box in Prinect", page 15
2. "Assign New Channels", page 17
3. "Wire the Counter Box on the Machine", page 20

# Replace Previous Counter Box in Prinect

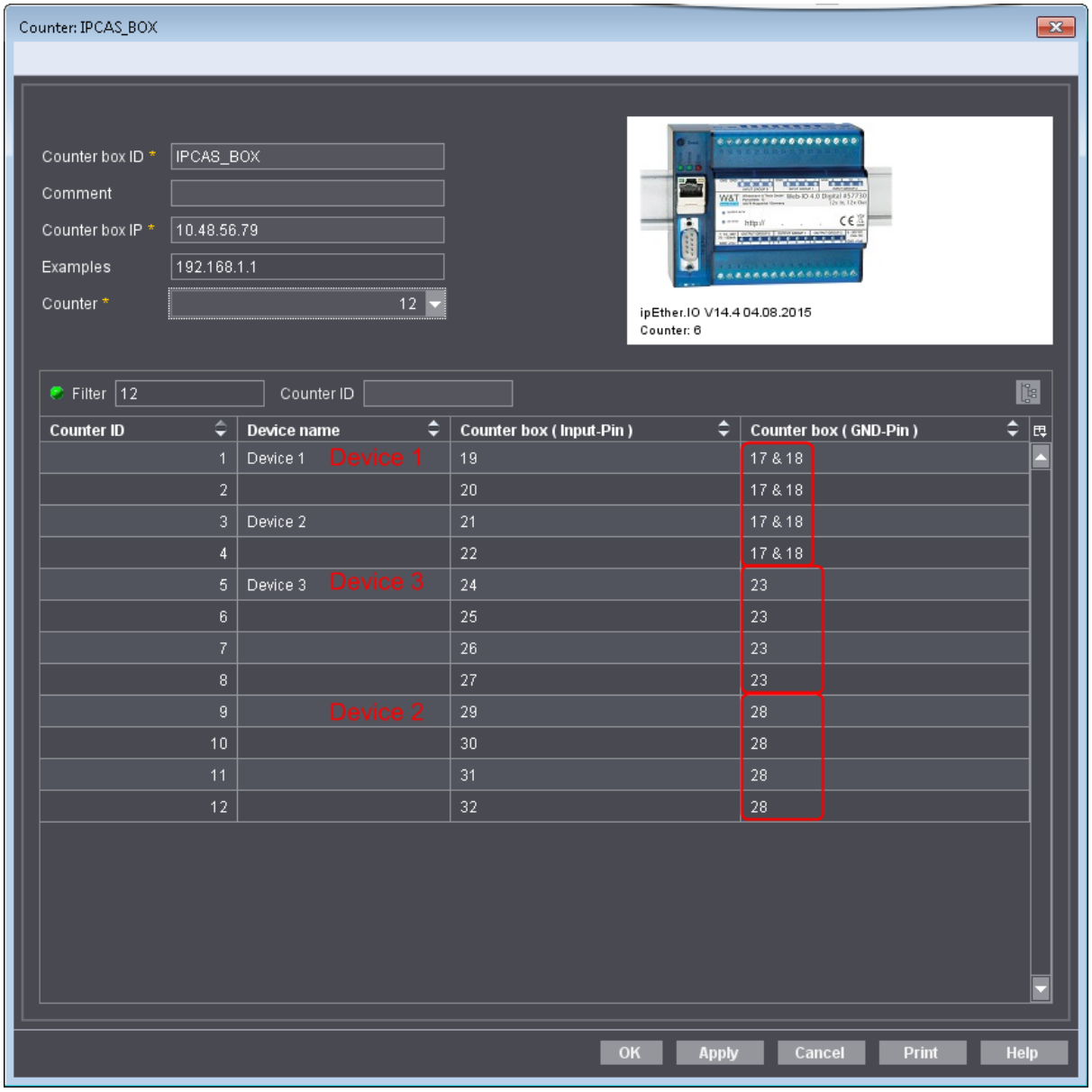
You must replace the previous counter box in the Prinect Cockpit.

1. To do this, open the Prinect Cockpit.
2. Go to "Administration > Device configuration > Counter box".
3. Select the previous counter box in the list.
4. Click "Open".
   The dialog for configuration of the counter box opens:



5. Rename the counter box (1).
   You can give it any name.
6. In "Counter", change the number from "6" to "12" (2).

Switchover to the new counter box is automatic:



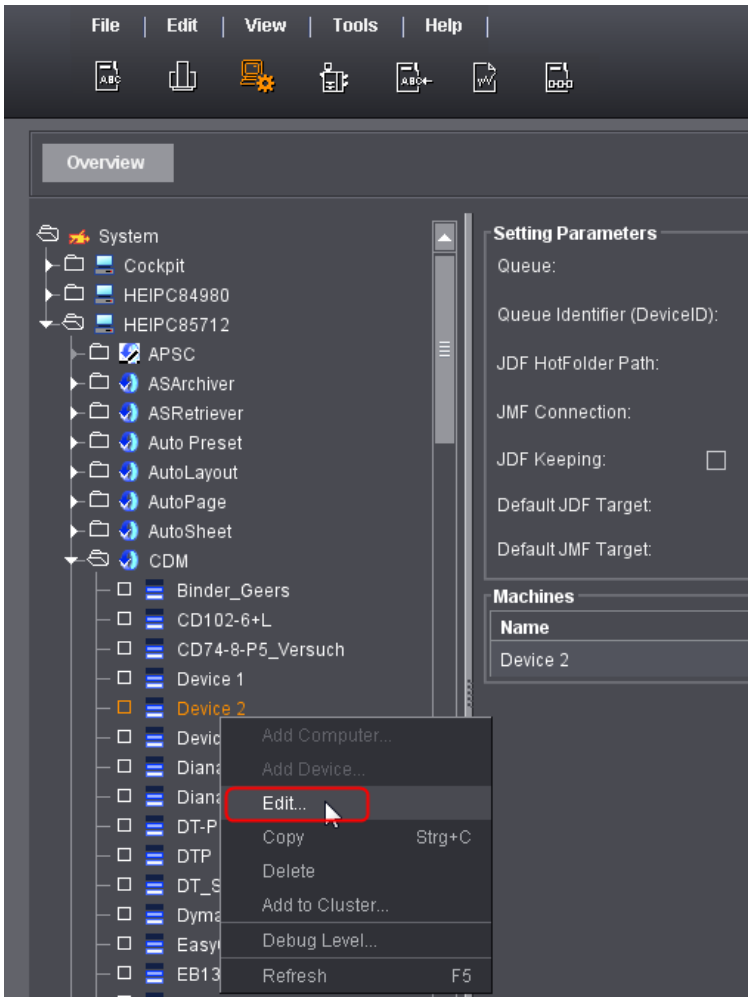

Because the three machines of the previous counter box were connected to separate grounds, they should also be connected to separate grounds with the new counter box. That is why the channel for device 2 must be reassigned.

7. Make a note of the channels for the next step.
8. Click "OK" to save your settings.

# Assign New Channels

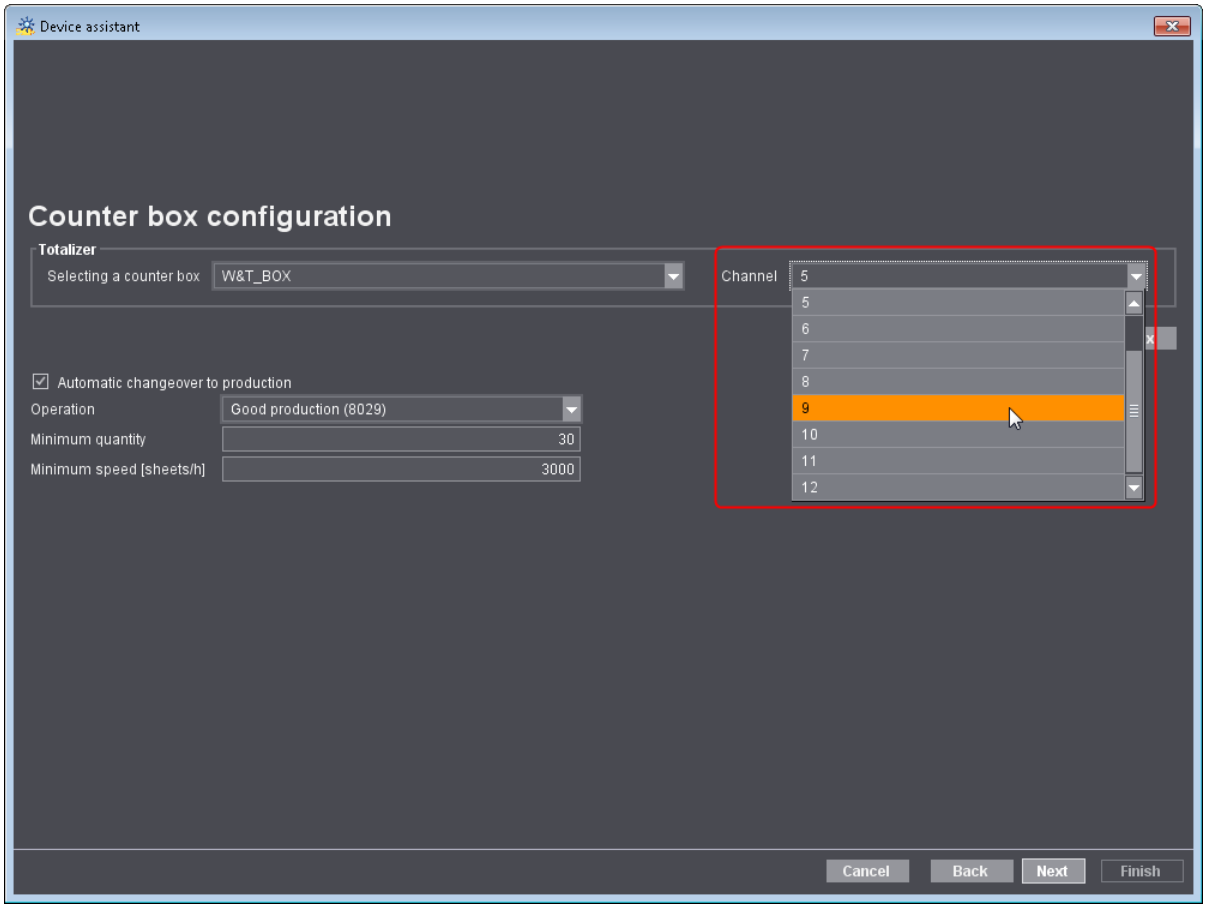
When the counter box is replaced, you must assign the new channel to the devices. This is done on the Central Device Manager (CDM). In this example, we only have to reassign "Device 2".

1. In Prinect Cockpit, go to "Administration > System > <name of the Prinect server>".
2. Open "CDM".
3. Select the device.
4. Click "Edit" in the context-sensitive menu.




The "Device assistant" opens.

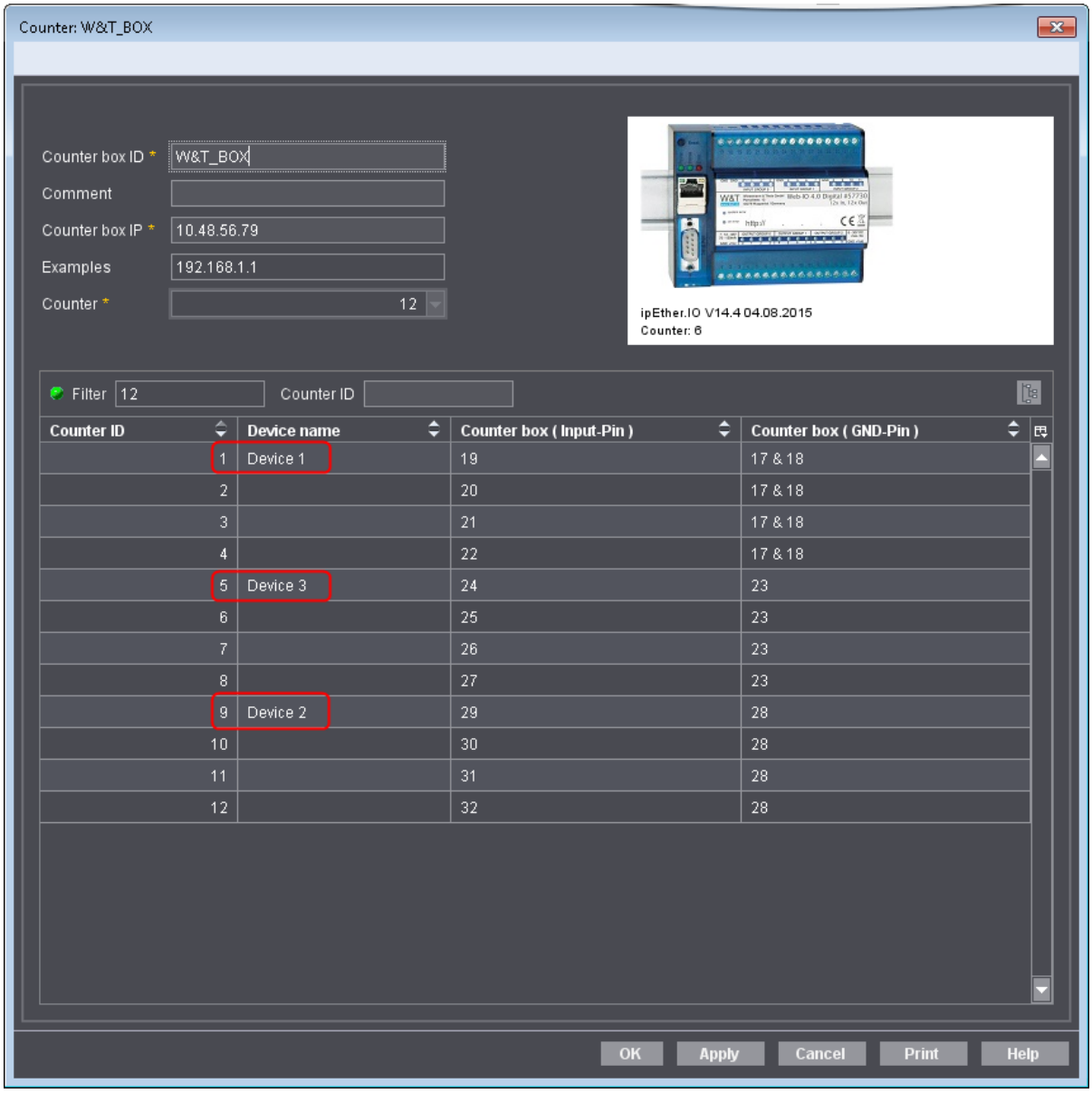
5. Click "Next" until you are at "Counter box configuration".




6. Assign the new channel to the device.
   In this example, channel 9.
7. Click "Next".
8. Click "Finish".
9. Repeat the steps for any other devices.
10. **Restart the Prinect Cockpit. If you don't, the device names do not appear correctly in the device configuration.**

Afterwards, check whether you assigned the channels correctly. To do this, go again to "Administration > Device configuration > Counter box" and open the counter box.

The devices should now be assigned to the correct channels:




Print the graphic to then set up the wiring on the machine.

# Wire the Counter Box on the Machine

Wiring on the machine is done based on the graphic you printed in advance. When doing so, take note of the wiring diagrams. See "Wiring Diagrams", page 21.

In this example, wiring would be as follows:

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- Device 2 is on Counter ID (channel) 9
  The signal cable of the machine must be connected with pin 29 and the related ground (GND) with pin 28.
- Device 3 is on Counter ID (channel) 5
  The signal cable of the machine must be connected with pin 24 and the related ground (GND) with pin 23.

# Wiring Diagrams

The procedure for carrying out the electrical wiring of the counter box on a Heidelberg machine depends on the machine. The wiring diagrams for two machine variants are shown below.

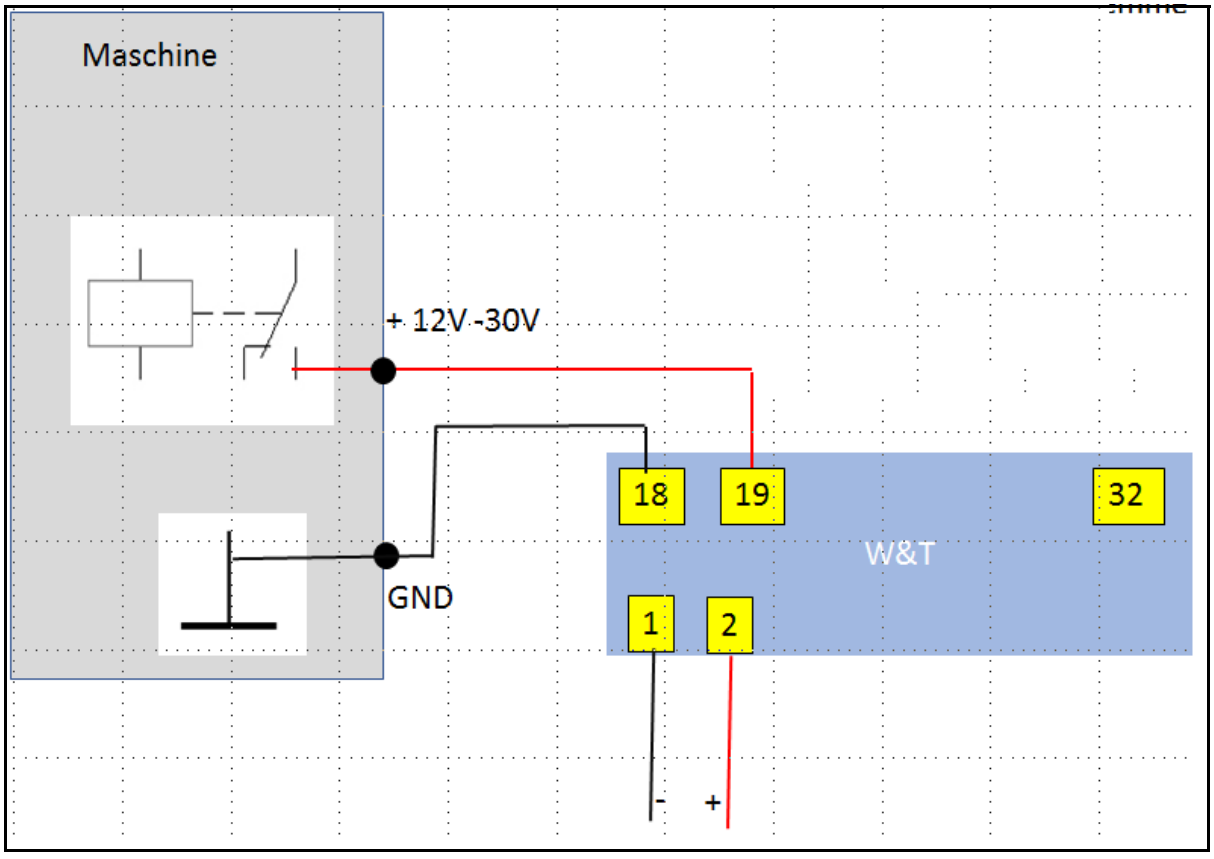
You can find a detailed description in the counter box manual.

# Counter Signals via Voltage Signals

In this variant, the machine has a 24 VDC sensor/light barrier output.

**Note:** Because each machine must be connected with its own ground signal, only three channels can be used in this case. The GND (ground) of four adjacent inputs is bridged in the box. That is why only one input of a group of four can always be used.

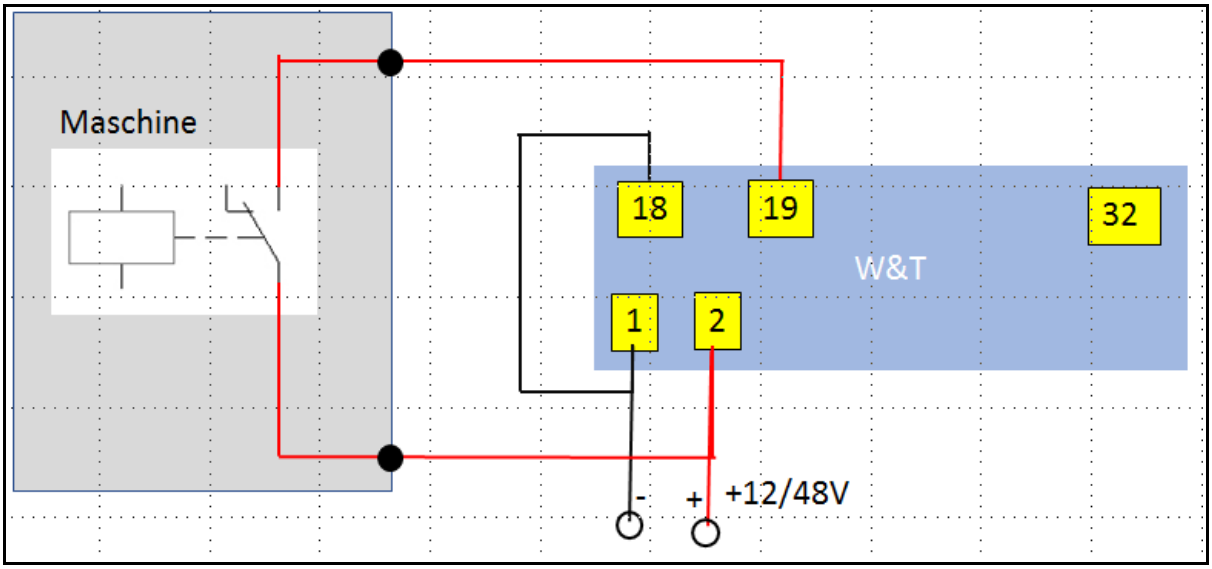
1. Connect the counter input (e.g. pin 19 for channel 1) with the output of the control system (+12 V to 30 V).
2. Connect the GND (ground) of the machine with the ground of the counter box (pin 18 for channel 1).



# Counter Signals via Potential-free Contacts

In this variant, the machine has a potential-free switching contact. As many as 12 machines can be connected.

1. Link the plus (+ pin 2) of the supply voltage to the counter input using the potential-free contact.
2. Bridge the minus (- pin 1) of the supply voltage with the GND (ground) of the channel.



**Heidelberger Druckmaschinen AG**
Kurfuersten-Anlage 52 - 60
69115 Heidelberg
Germany
Phone +49 6221 92-00
Fax +49 6221 92-6999
**heidelberg.com**



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