

Reference Manual

URCap Fieldbus Monitor – Version 1.1.3



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1 Introduction

The URCap Fieldbus Monitor is a software extension for the UR robot (Universal Robots). It was developed as a diagnostic tool for commissioning the UR fieldbus interface (Profinet, EtherNet/IP) and is therefore the ideal tool for testing communication with an external controller and for detecting configuration problems at an early stage.

With the Fieldbus Monitor the entire fieldbus interface is displayed directly on the UR panel and the fieldbus outputs can be flexibly assigned test values.

1.1 About this document

The reference manual contains an overview of all functions of the URCap. It was created for robot programmers, software developers and maintenance technicians.

1.2 Requirements and supported versions

E-Series robots (UR3, UR5, UR10 or UR16) from PolyScope 5.8.

1.3 Update URCap

Attention: Robot programs that were created with a previous version may no longer be used. The robot programs and the robot installation may have to be recreated or adapted. To install the URCap version 1.1.3 on a system where an earlier version is already installed.

- Uninstall the previous version
- Check the PolyScope version, if necessary update to a newer version (version 5.8)
- To avoid configuration conflicts, create a new robot installation
- Install URCap



2 Installation

2.1 Installing the URCap

	PROGRAM <unnamed></unnamed> INSTALLATION default	New Open.	Save	c c
				3
	Getting Started			
What	would you like to d	o firsta	,	
RUN A PROGRAM	PROGRAM THE ROBOT			DT I
Don't show this message again				
Power off Speed	100%	00	0	Simulation

Figure 1: Home screen

- 1. Start the robot
- 2. Insert the USB stick with the URCap
- 3. Click the hamburger menu in the top right corner



Figure 2: Select Settings

4. Click Settings



Installation

		Settings	
> Preferences	Active URCaps	Inactive URCaps	
> Password		😑 Remote TCP & Toolpath	
V System			
System Backup			
Robot Registration	5		
URCaps	UBCap Information		
Remote Control			
Constrained Freedrive			
Network			
Update			
> Security			
	6		
Exit	+ -		Restart

Figure 3: Add URCap

- 5. Click on URCaps
- 6. Click +

N EES ALL NOVE VO Log	PROGRAM <unnamed> INSTALLATION default</unnamed>	New Open	Save	с с с с
	Select URCap to install			
New Cut Copy Paste Delete Rename				B ackup
H URCaps_Copy_Fol				
Filename: //de.kpi_software.urcap.palletizing-1.0.4.urcap	Filter: URCap Files			8

Figure 4: Select URCap on USB stick

- 7. Select the URCap on the USB stick
- 8. Click Open to install the URCap



	Settings		
N =	Active LIPCane	Inactive LIPCane	
> Preferences	Relatizing		
> Password		S Remote ICF & Toopath	
✔ System			
System Backup			
Robot Registrati	n		
URCaps	LIBCap Information	1	
Remote Control	URCap name: Palletizing Version: 1.0.4		•
Constrain Freedrive	d Developer: XPI Software GmbH Contact Info: Im Winkel 1, 78588 Denkingen Description: Advanced palletizing for UR		
Network	Copyright: (C) KPI Software GmbH 2021 License Type: See End-user license agreement		
Update	License: End User License Agreement		
> Security	Please read the terms and conditions of this End User License Agreet ('Agreement') carefully before you use the Software (as defined below a legally binding contract. By assenting electronically, installing or us	ment w). This is The changes require a restart to take effe	ect.
Exit	+ -	Re	estart

Figure 5: Restart the robot

9. Click Restart to restart the robot

	Settings	1	
> Preferences	Active URCaps	Inactive URCaps	
Password		⊖ Remote TCP & Toolpath	
V System			
System Backup			
Robot Registration			
URCaps	URCap Information	1	
Remote Control	URCap name: Palletizing Version: 1.0.4		
Constrained Freedrive	Developer: KPI Software GmbH Contact Info: Im Winkel 1, 78588 Denkingen Description: Advanced balletizing for UR		
Network	Copyright: (C) KPI Software GmbH 2021 License Type: See End-user license agreement		
Update	License: End User License Agreement		
> Security	Please read the terms and conditions of this End User Licens ("Agreement") carefully before you use the Software (as defin a legally binding contract. By assenting electronically install	e Agreement ied below). This is ng or using the	
Exit	+ -		Restart

Figure 6: URCap is installed

10. A green tick will appear next to the URCap if it has been installed correctly



2.2 Uninstall the URCap

		Settings	
> Preferences	Active URCaps	Inactive URCaps	
> Password	Palletizing	Remote TCP & Tool	path
V System			
System Backup			
Robot Registration			
URCaps	UBCap Information		
Remote Control	URCap name: Palletizing Version: 1.0.4		
Constrained Freedrive	Developer: KPI Software GmbH Contact Info: Im Winkel 1, 78588 Denkingen Description: Advanced palletizing for UB		
Network	Copyright: (C) KPI Software GmbH 2021		
Update	License: End User License Agreement		
> Security	Please read the terms and conditions of this End U ("Agreement") carefully before you use the Softwar a legally binding of 2 ct. By assenting electronica	ser License Agreement re (as defined below). This is ally installing or using the	
Exit	+ -		Restart

Figure 7: Select URCap

- 1. Select the URCap to be uninstalled
- 2. Click on -
- 3. Restart the robot



3 Installation Node

3.1 Licensing

In order for Advanced Palletizing to be used, a valid license key must be entered in advance. This is generated by the manufacturer with the help of the generator string.

			PROGRAM <unna INSTALLATION defaul</unna 	amed> t*	New Open.	. Save	د د د د
🔪 General	Fieldbus Mo	nitor					
> Safety	Pite	Inte Eloste					
> Features	Dits	Ints Ploats		_			
X Eieldhue	Inuts			Ou	tputs		
	ix_1	OFF	^	qx_1		OFF	^
VURCaps 🕗	ix_2	OFF		qx_2	2	OFF	
Fieldbus	GPbi[2]	OFF		GPbo	[2]	OFF	
Monitor 🔒	GPbi[3]	OFF		GPbo	(3)	OFF	
-	GPbi[4]	OFF		GPbo	[4]	OFF	
	GPbi[5]	OFF		GPbo		OFF	
	GPbi[6]	OFF		GPbo	[6]	OFF	
	GPbi[7]	OFF		GPbo		OFF	
	GPbi[8]	OFF		GPbo	[8]	OFF	
	GPbi[9]	OFF		GPbo	[9]	OFF	
	GPbi[10]	OFF		GPbo		OFF	
	GPbi[11]	OFF		GPbo		OFF	
	GPbi[12]	OFF		GPbo		OFF	
	GPbi[13]	OFF		GPbo	[13]	OFF	
	GPbi[14]	OFF		GPbo	[14]	OFF	
	GPbi[15]	OFF		GPbo		OFF	
	GPbi[16]	OFF		GPbo	[16]	OFF	
	GPbi[17]	OFF	~	GPbo		OFF	~
	Enable	Disable	alue		×	4 Update License	
Normal		Speed 🥌	100%			0	Simulation

Figure 8: Installation Node

- 1. Open the installation page
- 2. Go to URCaps
- 3. Click on Advanced Palletizing
- 4. Click Update License

ххх	x xxxx <ppfd< th=""><th>BCFB></th><th></th><th></th><th></th><th></th></ppfd<>	BCFB>				
Image: Second	3 <	PPFD BC	FB>	? < 9 0	>=	← Backspace
q	w e	r t	y u	i o p	_	V Submit
a	s d	f g	h j	k I	+ - []	
↑ Shift	z x	c v	b n	m ;	: { . (} .
					•	•

Figure 9: Generator-String

5. Make a note of the 8-digit generator string and send it together with your contact details to <u>redeemlicense@kpi-software.de</u>



ABCD	EFGH			
	ABCD EFGH	% \$! 6 7 8	3 ? < > 9 0 =	← Backspace
q	w e r	t y u	i o p	Submit
a	s d f	g h j	k I +	ī
↑ Shift	z x c	v b n	m ; :	{ } ^ () '
				• •

Figure 10: Enter license key

6. You will then receive your 8-digit license key, which must be entered instead of the generator string



Figure 11: Successful licensing

7. You can recognize successful activation by the green tick





3.2 Overview

The URCap is divided into 4 sections. The individual sections are explained in more detail below.



Figure 12: Overview

- 1. Tab to switch between the different data types of the fieldbus register
 - Bits: Bit signals
 - Ints: Integers
 - Floats: Floating point numbers
- 2. The inputs are displayed in this area
- 3. The outputs are displayed in this area
- 4. Action buttons to activate/deactivate the URCap, control fieldbus outputs and licensing



3.3 Bits, Bit signals

Here you will find an overview of the current status of the bit signals on the fieldbus interface. A high signal (1) is displayed with the text ON and a green background, a low signal has the text OFF without a background color (2). If a variable name has not yet been assigned for this signal, the signal is grayed out (3).

Ausführen Programm		C Protokoli		PROGRAMM INSTALLATION	<unbenannt> default*</unbenannt>	Neu	öffnen	Speichern		R+	رجی Lokal	1 9 C E	≡
> Allgemein	Fieldbus Mo	nitor											
> Sicherheit	Dise	la ha	F 1 h -										
> Koordinatensys	BILS	incs	FIDALS			_							_
> Feldbus	Inputs					Out	tputs	OFF					
V URCaps	GPbi[25]	OFF				GPbo	[25]	OFF					^
Fieldbus	GPb1[26]	OFF				GPbo	[26]	OFF	3				
Monitor	GPbi[28]	OFF				GPbo		OFF					
Palletizing	GPbi[29]	OFF				GPb o	[29]	OFF					
VNC Server	GPbi[30]	OFF				GPbo	[30]	OFF					
	ixME DedustO	K ON				GPb o	[31] DedustStrt	OFF					_
	ixME_ScrewOK	OFF				qxME	SandblStrt	OFF					
	ixME_BunkerO	k ON				q×ME.	03	OFF	2				
	ixME_DoorClo	sed ON				qxME.	_04	OFF	_				
	ixME_Dedustin	sti ON				qxME	_05	OFF					
	ixME Perfust	ion OFF				qxME	_06	OFF					
	ixME Filter	OFF				qxME		OFF					
	ixME 09	OFF				qxME	_00	OFF					
	i×ME_10	OFF				axME	10	OFF					
	ixPRM_GripEx	ter ON			•	 GPbo 	[42]	OFF					~
	Enable	Disa	ble V	alue				🗖 🗌	lpdate Lice	nse		KF	
Reduziert		Ges	chwindigkeit		10	0%			0		Simula	ation 🤇	

Figure 13: Overview Bits



3.3.1 Set bit outputs

eneral	Fieldbus Mon	itor				
afety	Pite 4	Inte Electe				
eatures	Bits	Ints Floats	_			
aldhue	Inuts			Outputs		
lubus	ix_1	OFF	^	qx_1	OFF	
Caps 🛃	ix_2	OFF		qx_2	OFF 5	
Fieldbus	GPbi[2]	OFF		GPb o [2]	OFF	
Monitor	GPbi[3]	OFF		GPbo[3]	OFF	
-	GPbi[4]	OFF		GPbo[4]	OFF	
	GPbi[5]	OFF		GPbo [5]	OFF	
	GPbi[6]	OFF		GPbo[6]	OFF	
	GPbi[7]	OFF		GPbo[7]	OFF	
	GPbi[8]	OFF		GPbo[8]	OFF	
	GPbi[9]	OFF		GPbo[9]	OFF	
	GPbi[10]	OFF		GPbo[10]	OFF	
	GPbi[11]	OFF		GPbo[11]	OFF	
	GPbi[12]	OFF		GPbo[12]	OFF	
	GPbi[13]	OFF		GPbo[13]	OFF	
	GPbi[14]	OFF		GPbo[14]	OFF	
	GPbi[15]	OFF		GPbo(15)	OFF	
	GPbi[16]	OFF		GPbo[16]	OFF	
		OFF	\mathbf{v}	GPbo[17]	OFF	

Figure 14: Set bit outputs

- 1. Open the installation page under Installation
- 2. -> URCaps
- 3. -> Fieldbus Monitor
- 4. Switch to the Bits tab
- 5. Mark the desired output in the output area
- 6. Press the "Value" button, the output then changes its state

eneral	Fieldbus Mon	itor								
afety	Bite	inte E	oate							
eatures	Dita	11103 1	0415		_					
eldbus	Inuts					Outputs				
	ix_1	OFF			~	qx 1	OFF			^
RCaps	ix_2	OFF				qx_2	ON			
Fieldbus	GPbi[2]	OFF				GPbo [2]	OFF			
Monitor	GPbi[3]	OFF				GPbo[3]	OFF			
	GPbi[4]	OFF				GPbo[4]	OFF			
	GPbi[5]	OFF				GPbo[5]	OFF			
	GPbi[6]	OFF				GPbo[6]	OFF			
	GPbi[7]	OFF				GPbo[7]	OFF			
	GPbi[8]	OFF				GPbo[8]	OFF			
	GPbi[9]	OFF				GPbo [9]	OFF			
	GPbi[10]	OFF				GPbo[10]	OFF			
	GPbi[11]	OFF				GPbo[11]	OFF			
	GPbi[12]	OFF				GPbo[12]	OFF			
	GPbi[13]	OFF				GPbo[13]	OFF			
	GPbi[14]	OFF				GPbo[14]	OFF			
	GPbi[15]	OFF				GPbo(15)	OFF			
	GPbi[16]	OFF				GPbo[16]	OFF			
	GPbi[17]	OFF			\sim	GPbo[17]	OFF			\sim
	Enable	Disable	Value				Update	icense	🕅 KF	וכ
				_					SOFTW	ARE

Figure 15: Bit output set



3.4 Ints, Integers

Here you will find an overview of the current status of the integer signals on the fieldbus interface. The current numerical value for the inputs/outputs is displayed accordingly (1/2). If no variable name has yet been assigned for this signal, the signal is grayed out (3).

Ausführen Programm		Protokoll		PROGRA INSTALLAT	AMM <unber< b=""> NON default*</unber<>	nannt>	Neu öffner	Speichern		R+	Lokal	19 CE	≡
🔪 Allgemein	Fieldbus Mor	nitor											
> Sicherheit			-										
> Koordinatensys	Bits	Ints	Floats										_
> Feldbus	Inputs						Outputs						
V LIR Cape	1dBlankCount1	123456				^	qdCurrStepNo	0					^
	idBlankCount2	911					qdErrCode						
Fieldbus	idBlankCount4	0					ddB]ankCount	2 0					
monitor	GPii[4]	0					qdBlankCount:	3 0					
Palletizing	GPii[5]	0					qdBlankCount	1 O					
VNC Server	GPii[6]	0					qdFinCount1	0					
	GPii[7]	0					qdFinCount2	0					
	GPii[8]	0					qdFinCount3	0					
	GPii[9]	0					qdFinCount4	0					
	GPii[10]	0					GPio[10]	0					
	GPii[11]	0					GPio[11]	0					
	GPii[12]	0	3				GPio[12]	0					
	GPii[13]	0					GPio[13]	0					
	GPii[14]	0					GPio[14]	0					
	GPii[15]	0					GPio[15]	0					
	GPii[16]	0					GPio[16]	0					
	GPii[17]	0				~	GPio[17]	0					\sim
	Enable	Disa	ble \	/alue				¤ [Update Lic	ense			
Reduziert		Ges	chwindigkeit			=0 100%	6	00			Simu	lation	

Figure 16: Overview Ints



3.4.1 Set integer outputs

Jeneral	Fieldbus Mon	itor						
Safety		4						
eatures	Bits	Ints Floats	1					
Teleller en	Inuts				Outputs			
leiabus	id_1	0		^	qd_1	0	5	
RCaps 🛛 🔁	GPii[1]	0			GPio[1]	0		-
Fieldbus	GPii[2]	0			GPio[2]	0		
Monitor 3	GPii[3]	0			GPio[3]	0		
_	GPii[4]	0			GPio[4]	0		
	GPii[5]	0			GPio[5]	0		
	GPii[6]	0			GPio[6]	0		
	GPii[7]	0			GPio[7]	0		
	GPii[8]	0			GPio[8]	0		
	GPii[9]	0			GPio[9]	0		
	GPii[10]	0			GPio[10]	0		
	GPii[11]	0			GPio[11]	0		
	GPii[12]	0			GPio[12]	0		
	GPii[13]	0			GPio[13]	0		
	GPii[14]	0			GPio[14]	0		
	GPii[15]	0			GPio(15)	0		
	GPii[16]	0			GPio[16]	0		
				~	GPio[17]	0		

Figure 17: Set integer outputs

- 1. Open the installation page under Installation
- 2. -> URCaps
- 3. -> Fieldbus Monitor
- 4. Switch to the Ints tab
- 5. Mark the desired output in the output area
- 6. Press the "Value" button



Figure 18: Enter the integer value

- 7. Enter the desired value
- 8. Confirm your entry



Installation Node

General	Fieldbus Mo	nitor							
Safety	Bits	Ints	Floats						
Features	Inches					0			
Fieldbus	Inuts				1	Outputs	1007	-	
URCaps	10_1 (Rii[1]	0			^	qa_1	1337		
	GPii[2]	0				GPin[2]	0		
Fieldbus Monitor		0					0		
	GPii[4]					GPio[4]			
	GPii[5]	0				GPio[5]	0		
	GPii[6]	0				GPio[6]	0		
	GPii[7]	0				GPio[7]	0		
	GPii[8]	0				GPio[8]	0		
	GPii[9]	0				GPio[9]	0		
	GPii[10]	0				GPio[10]	0		
	GPii[11]	0				GPio[11]	0		
	GPii[12]	0				GPio[12]	0		
	GPii[13]	0				GPio[13]	0		1
	GPii[14]	0				GPio[14]	0		
	GPii[15]	0				GPio[15]	0		
	GPii[16]	0				GPio[16]	0		
	GPii[17]	0			~	GPio[17]	0		
	Constation.	Dia	alala Malius	_				data Lizanza	_
	Enable	Dis	able Value					date License	-

Figure 19: Integer output set



3.5 Floats, Floating point numbers

Here you will find an overview of the current status of the float signals on the fieldbus interface. The current numerical value for the input /outputs is displayed accordingly (1). If a variable name has not yet been assigned for this signal, the signal is grayed out (2).

Ausführen Programm		Protokoll		PROGR INSTALLA	AMM <unbe< b="">r TION default^a</unbe<>	nannt>	Neu öffn	en Speichern		R+	Lokal	19 CE	≡
> Allgemein	Fieldbus Mor	nitor											
> Sicherheit			-										
> Koordinatensys	Bits	Ints	Floats										_
> Feldbus	Inputs						Outputs						
V LIBCans	pre Dist 1	40.0				^	GPT0[0]						^
• oncaps	pril_begree_1	35.0					GP10[1]						
Fieldbus	nrm Dist 2	1.0					(Pfa[3]	0.0					
Monitor	prm Degree 2	0.0					GPfo[4]	0.0					
Palletizing	prm Cycles 2	1.0					GPfo[5]						
VNC Server	prm Dist 3	0.0					GPfo[6]						
	prm_Degree_3	0.0					GPfo[7]						
	prm_Cycles_3	1.0					GPfo[8]	0.0					
	prm_Speed_1	0.0					GPfo[9]	0.0					
	prm_Speed_2	0.0					GPfo[10]	0.0					
	prm_Speed_3	0.0					GPfo[11]	0.0					
	GPfi[12]						GPfo[12]	0.0					
	GPfi[13]						GPfo[13]	0.0					
	GPfi[14]						GPfo[14]	0.0					
	GPfi[15]						GPfo[15]	0.0					
	GPfi[16]						GPfo[16]	0.0					
	GPfi[17]					\sim	GPfo[17]	0.0					\sim
	Enable	Disa	ible V	/alue]				Update Lice	nse		KF	
Reduziert		Ge	schwindigkeit			=0 100%	6	00	0		Simula	ition 🔵	

Figure 20: Overview Floats



3.5.1 Set float outputs

eneral	Fieldbus Mor	nitor						
afety	Dite	Inte - Flaste	4					
atures	BILS	ints Floats						
Idbus	Inuts				Outputs			
	ir_1	0.0		^	qr_l	0.0	5	
Caps 🧲	GPfi[1]				GPfo[1]	0.0	-	
Fieldbus 👩	GPfi[2]				GPfo[2]	0.0		
Monitor 🥑	GPfi[3]				GPfo(3)	0.0		
	GPfi[4]				GPfo[4]	0.0		
	GPfi[5]				GPfo[5]	0.0		
	GPfi[6]				GPfo[6]	0.0		
	GPfi[7]				GPfo[7]	0.0		
	GPfi[8]				GPfo[8]	0.0		
	GPfi[9]				GPfo[9]	0.0		
	GPfi[10]				GPfo[10]	0.0		
	GPfi[11]				GPfo[11]	0.0		
	GPfi[12]				GPfo[12]	0.0		
	GPfi[13]				GPfo[13]	0.0		
	GPfi[14]				GPfo[14]	0.0		
	GPfi[15]				GPfo(15)	0.0		
	GPfi[16]				GPfo[16]	0.0		
	GPfi[17]			~	GPfo[17]			

Figure 21: Set float outputs

- 1. Open the installation page under Installation
- 2. -> URCaps
- 3. -> Fieldbus Monitor
- 4. Switch to the Floats tab
- 5. Mark the desired output in the output area
- 6. Press the "Value" button



Figure 22: Enter the integer value

- 7. Enter the desired value
- 8. Confirm your entry



eneral	Fieldbus Mo	onitor						
afety	Bite	Inte	Floats					
atures	Ditts	intes	TIOULS					
ldbus	Inuts				Outputs			
	ir_1	0.0		^	qr_l	123.5		
Caps	GPfi[1]				GPfo[1]	0.0		
Fieldbus								
Monitor	GPT1[3]	0.0			GPT0[3]	0.0		
	GPT1[4]	0.0			GP10141	0.0		
	unit[5]				02/10[5]			
	OP11[0]				CD(e [7]			
	GPfi[2]				CPfo[9]			
	GPfi[9]				GPfo [9]			
					GPfn[10]			
	GPfi[12]				GPfo[12]			
	GPfi[13]				GPfo[13]			
	GPfi[14]				GPfo[14]			
	GPfi[15]				GPfo(15)			
	GPfi[16]				GPfo[16]	0.0		
	GPfi[17]			~	GPfo[17]	0.0		
								45
	Enable	Dis	able Value			Update	License	KE KE
								SOFTW.

Figure 23: Float output set



3.6 Activate / deactivate URCap

The field bus signals are determined with the RTDE interface of the UR robot. In order to rule out complications with other URCaps, the URCap can be completely deactivated.

10 m 2	<u>+</u> qe		<u>H</u> (■ 🖓 📲 🗏
D	Residence Marchine			
)	80 10 Tats			
	reputs	Angent (
200				
The local				
			-	
	- Martine Control of C	100.0	=	
	Contract of the		Ξ	
	100.000 BB		=	
	1 2	-	-	
	Enable Disable Value		Update Licen	se KPI
<u> </u>	Sector April	(00	

Figure 24: URCap is activated

3.6.1 Activate

- 1. Open the installation page under Installation-> URCaps-> Fieldbus Monitor
- Check whether the URCap is already activated (Enable button = deactivated, Disable button = activated)
- 3. Press the Enable button (1)

3.6.2 Deactivate

- 4. Open the installation page under Installation-> URCaps-> Fieldbus Monitor
- Check whether the URCap is already activated (Enable button = deactivated, Disable button = activated)
- 2. Press the Disable button (2)



4 Rename fieldbus signals

The following describes how the fieldbus signals can be renamed. The Boolean registers (bits) are used below as an example. The procedure described can, however, be used analogously for the integer registers (Ints) and float registers (Floats).

		RAMM <unbenannt></unbenannt> ATION default*	Neu öffnen.	Speichern	IR+	Lokal 19	Ξ
✓ General							
TCP	View	1					
Mounting							
I/O Setup 🕗	Digital		Output				
Variables	Analog	^	D0[0]	mkfBtStart			^
Startup	Tool		D0[1]	digital_out[1]			
Smooth	Configurable		D0[3]	digital_out[3]			
Transition	Boolean Register		D0[4]	digital_out[4]			
Conveyor	Integer Register		D0[5]	digital_out[5]			
Tracking	Float Begister		D0[7]	digital_out[7]			
Screwdriving	MODBUS		TOIOI	tool out[0]			-
Home	TI[1] tool_in[1]	· ·	то[1]	tool_out[1]			\sim
Tool I/O							
> Safety	Select an I/O to configure						
> Features							
> Fieldbus							
> URCaps							
A Reduziert	Geschwindigkeit		%			Simulation	
V Readzient		100				Sinnalation	

Figure 25: Rename fieldbus signals

- 1. Open the installation page for the I/O Setup under Installation-> General
- 2. -> I/O Setup
- 3. Click the drop-down menu
- 4. Select the required input / output source from the list (Boolean register = bits on the fieldbus interface)



Ausführen Programm	Hervegen EA Protokoll	PROGRAMM <unbenannt></unbenannt> INSTALLATION default*	Neu öffnen.	Speichern	R +	Lokal 1	
✓ General	View						
TCP	De els es De els ter	_					
Mounting	Boolean Register	•					
1/O Setur	Input		Output				
i/O Setup	GPbi(0) iv 1		GPhoI01	av 1			
Variables	GPbi[1] ix 2	^	GPbo[1]	qx_1 qx 2			^
Startup	GPbi/21 GP bool in/21		GPbo[2]	GP bool out(2)			
	GPbi(3) GP_bool_in(3)		GPbo[3]	GP_bool_out(3)			
Smooth	GPbi[4] GP_bool_in[4]		GPbo[4]	GP_bool_out[4]			
-	GPbi[5] GP_bool_in[5]		GPbo[5]	GP_bool_out(5)			
Conveyor	GPbi[6] GP_bool_in[6]		GPbo[6]	GP_bool_out[6]			
	GPbi[7] GP_bool_in[7]		GPbo[7]	GP_bool_out[7]			
Screwdriving	GPbi[8] GP_bool_in[8]		GPbo[8]	GP_bool_out[8]			
Home	GPbi[9] GP_bool_in[9]	~	GPbo[9]	GP_bool_out[9]			~
Tool I/O	Selected I/O: GP_bool_in[2]						
Safety							
> Features	Rename (Lo use in programs)	Clear					
> Fieldbus							
> URCaps	Action						
	Action						
	None	•					
A Doduziort	Geschwindid		24			Simulation	
- Weduzient	Geschwindigh	100	, <u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Jimulation	

Figure 26: Activate the Rename field

- 5. Select the input/output to be named from the list
- 6. Click in the Rename field



Figure 27: Enter name

- 7. Assign a unique name
- 8. Confirm your entry



Serierai	View					
TCP	Boolean Register	•				
Mounting						
I/O Setup	Input			Output		
Variables	GPbi[0] ix_1	A	^	GPbo[0]	qx_1	
variables	GPbi[1] ix_2	9		GPbo[1]	qx_2	
Startup	GPbi[2] ix_3	-		GPbo[2]	GP_bool_out[2]	
Smooth	GPbi[3] GP_bool_in[3]			GPbo[3]	GP_bool_out[3]	
Transition	GPbi[4] GP_bool_in[4]			GPbo[4]	GP_bool_out[4]	
Conveyor	GPbi[5] GP_bool_in[5]			GPbo[5]	GP_bool_out[5]	
Tracking	GPbi[6] GP_bool_in[6]			GPbo[6]	GP_bool_out[6]	
Screwdriving	GPbi[7] GP_bool_in[7]			GPbo[7]	GP_bool_out[7]	
Sciewanning	GPbi[8] GP_bool_in[8]			GPbo[8]	GP_bool_out[8]	
Home	GPBI(9) GP_BOOLIN(9)		~	GPD0[9]	GP_bool_out(9)	
Tool I/O	Selected I/O: GP bool in[2]					
Safety						
a a turan	Rename (to use in programs)					
eatures	ix_3		Clear			
ieldbus						
JRCaps	Action					
	Actor	_				
	None	•				

Figure 28: Renamed fieldbus signal

9. Check that the input/output has been correctly named.



5 Directories

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6 Notes