

# Wireless Installer User's Guide

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# Contents

Copyright Notice Trademarks	2 2 2
CONTENTS	3
ABOUT THIS GUIDE	4
Definitions, Acronyms and Abbreviations	4
INSTALL WIRELESS INSTALLER APP	5
Start Wireless Installer Application	6
WIRELESS INSTALLER CONTROLS	7
Import AP from WNMS         Import PTP from LinkCalc         Import Coordinates from Google Earth         1         Enter Coordinates Manually         1         Device Configuration	8 0 2 4 6
UNINSTALL WIRELESS INSTALLER APP1	8

# About This Guide

### Definitions, Acronyms and Abbreviations

The following typographic conventions and symbols are used throughout this document:

Additional information that may be helpful but which is not required.



Important information that should be observed.

- bold Menu commands, buttons, input fields, links, and configuration keys are displayed in bold
- *italic* References to sections inside the document are displayed in italic.
- code File names, directory names, form names, system-generated output, and user typed entries are displayed in constant-width type

# Install Wireless Installer App

Wireless Installer application is a handy application designed to simplify and speed up wireless link installation process for the engineers working in the field.

System requirements:

- Android tablet or smartphone with back/primary camera and GPS support
- Android version 4.0 or later
- Internet connectivity

Follow the steps for easy installation of the Wireless Installer application:

**Step 1.** Find the Wireless Installer App on Google Play Store and install it:



Step 2.

The Wireless Installer application has been successfully installed:



### Start Wireless Installer Application

To start Wireless Installer application, simply click the icon kight he umain window of the application will be displayed:



#### sign the user agreement and the



# Wireless Installer Controls

Using the Wireless Installer application it makes easy to align and test devices on link installation. First, the GPS coordinates of the remote device must be imported on the application. This can be done in four ways:

- Import AP from WNMS
- Import PTP from LinkCalc .
- Import coordinates from Google Earth
- Enter coordinates manually .

After the coordinates of the remote device are imported to the Wireless Installer App, the mobile device is ready for installation and aligning. The following actions can be performed on the remote device:

- Configure device (change main parameters) .
- Antenna alignment .
- LinkTest

0 🖸 🗟 🖬 ۶ 🎟 15:04 Installation
Import AP from WNMS
Import PTP from LinkCalc
Import coordinates from Google Earth
Enter coordinates manually
Device configuration
Device configuration
Antenna alignment
LinkTest
Other

# Import AP from WNMS



The correct coordinates (longitude, latitude and height AGL) of the remote device must be provided in the device configuration in order to achieve the best aligning results.

If the required device is configured on WNMS server, simply login into the specified WNMS server, select the proper device by touching it on the list and it will be ready for control:



After the location of the mobile device has been determinated, place the phone/tablet on the local device (in parallel to the antenna) and target the device using the mobile phone/tablet for aligning.



Radar is used to find the direction of the remote device along horizon. Camera radar is used to align and tilt the device.

After the device has been aligned, login into the one devices of the link and measure the signal level by using Antenna Alignment and/or perform the Link Test with chosen parameters (duration and packet size):

	0 Q +++ all 7 (99%) 10:2		<u>(30%)</u> 10.49
« Antenna aligi	nment	« Antenna alignment	=
		Received signal level	
Device IP		Status:	
User:		Good signal	
Password			
Lc	ogin		1
		-64 / -65 dBm	
		Sound meter	
		Off On	
		(-WV-)	
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« LinkTest	=	« LinkTest	K LinkTest
Duration	Packet size bytes	Duration Packat s	LinkTest Result
Duration	i uoket size, bytes		
		Chart	Packet per second
Short	128	Medium	44205
Medium	256		<u>Throughput, Mbps</u>
Long	512	Linktest in progress.	43.169 Mbps
		Please wait	New test
	เล่าเ	Otart	
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S rev. ≋ Installia	tion steps ≳ Finisl	h Prev. ≳Installiation steps ≳	Finish Prev.

# Import PTP from LinkCalc



The correct coordinates (longitude, latitude and height AGL) of the remote device must be provided in the device configuration in order to achieve the best aligning results.

The PTP link must be registered in LinkCalc.

If the required PTP link is successfully registered on LinkCalc, simply specify login credentials, login to the LinkCalk, select the required link by touching it on the list and it will be ready for control:



After the location of the mobile device has been determinated, place the phone on the local device and target the device using the mobile phone for aligning.



After the endpoint of the link has been aligned, login into the one devices of the link and measure the signal level by using Antenna Alignment and/or perform the Link Test with chosen parameters (duration and packet size):

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<b>&gt;&gt;&gt;</b>	Antenna align	ment	<b>&gt;&gt;&gt;</b>	Antenna ali	gnment	=					
			Rece	eived signal leve							
D	evice IP			_	Status:						
U	ser:			Goo	od signal						
Ρ	assword										
	LO	gin		37 /	37 dBm						
				-377	-37 abm						
				Sou	und meter On						
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<b>&gt;&gt;&gt;</b>	LinkTest	=	~~~	LinkTest		=	~~~	Device	configuratio	on	
	Duration	Packet size, bytes		Duration	Packet size	ovtes	าa alignn	nent	Linktest	-	
	Durution	i doket Size, bytes		Durution	i donet bize, i	Jy led		Lin	kTest Re	esult	
				Short			Pack	et per se	cond		
	Short	128		Medium	128		3	0574			
	Medium	256 512			**		Thro	ughput,	Mbps		
	Long	512		Linktest	in progress		2'	9.857 Mbr	os		
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# Import Coordinates from Google Earth

The Wireless Installer application contains possibility to import remote device coordinates from the Google Earth specific .kmz file. Select the .kmz file, upload it and specify the device Height above the ground in meters:



After the location of the mobile device has been determinated, place the phone on the local device and target the device using the mobile phone for aligning.



After the device has been aligned, login into the one of the devices of the link and measure the signal level by using Antenna Alignment and/or perform the Link Test with chosen parameters (duration and packet size):

8 🖸 🗟 🖬 🕫 16:20	) 🕴 😨 💼 🥯 13:30
« Antenna alignment	Antenna alignment
	Received signal level
Device IP	Status:
User:	Good signal
Password	
Login	-53 / -50 dBm
	Constantos
	Off On
	EM/A
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#### Wireless Installer Controls

#### User's Guide

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<b>&gt;&gt;&gt;</b>	LinkTest	=	« LinkTest	≡	« LinkTest	
	Duration	Packet size, bytes	Duration	Packet size, bytes	LinkTes	st Result
		100	Short		Packet per second 43246	
	Short Medium Long	128 256 512	Linktest in	128 progress	Throughput, Mbps 42.232 Mbps	
	Sta	rt	Please	a wait	Nev	v test
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### Enter Coordinates Manually

There is possibility to import remote device coordinates manually. Specify the accurate longitude, latitude and the height AGL of the remote device and target the device using the mobile phone:

8 💟 🗟 📶 🗲 🤒 16:05	💡 🕴 🗭 🗟 🗤 💵 🗲 🤒 16:05	
Enter coordinates manually	« Radar	« Radar
The best estimates of map accuracy are obtained by entering full length values in longitude and latitude fields.		Distance to the device: 4537 m
AP		(/ (1))
Latitude:		
54.8973411		Hold your phone in front of you
Longitude:		and wave it through the air in a
23.8969260	Finding current location	figure 8 pattern as shown until the calibration is complete.
Height(AGL), m :		Do not show calibration dialog in
30		└── map.
Import to Radar		Ok
		Google
		© Installiation steps ⊗ Next
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After the device has been aligned, login into the one of the devices of the link and measure the signal level by using Antenna Alignment and/or perform the Link Test with chosen parameters (duration and packet size):

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Antenna alignment	Antenna alignment
	Received signal level
Device IP	Status:
User:	Good signal
Password	
Login	
	-64 / -65 dBm
	Off On
Prev. 🔅 Installiation steps 🔅 Next	Prev. Rext

« LinkTest	8 🖸 ବି.∎≁% 16:27	이 여 네 100 16: 《 LinkTest	37
Duration	Packet size, bytes	LinkTest Result	
Short Medium Long	128 256 512	Packet per second 43824 Throughput, Mbps 42.797 Mbps	
St	art	New test	
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		5 ☆ □	

### **Device Configuration**



The **Device configuration** section will always display settings of the latest associated device (imported from WNMS, LinkCalc, or entered manually). In order to access other device, click Logout button in menu on the upper right corner first.

Acess the device's basic parameters by providing it's IP and login credentials. Use the **Device configuration** menu, to login to the device, where some of the main parameters are listed and ready for configuration, if necessary:

8 💟 🛜 💵 ¥ 🤒 16:06		
« Configuration	W Device configuration	
	Network settings	Antenna
Device IP	Wireless mode:	
Username	AP	~
Password	SSID:	
	ptmp	
Login	Security :	
	WPA2PSK	~
	Encryption :	
	AES	•
	Passphrase :	
	11223344556677889911223344	
	Frequency, MHz :	
	5765	•

The following settings are retrieved from the device configurations and are ready for change:

- Wireless mode
- SSID
- Security
- Frequency
- IP address
- Subnet mask
- Gateway
- Firmware revision (not changeable)

After some changes were done, click 🗎 button to save configuration on the device.

Additionally, the Antenna Alignment (with or without sound effects) and the Link Test (by choosing Duration and Packet sizes) can be performed on the device if the link with another endpoint is established.



# Uninstall Wireless Installer App

The Wireless Installer application can be easily uninstalled from your phone or tablet.

**Step 1.** Visit your device's **Settings** menu > **Apps** or **Application manager** (this may differ depending on your device).



Step 2.

Touch the Wireless Installer App for uninstalling and select **Uninstall button**:

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< 🏹 App info		< 🔏 Арр	info			
Wireless Installe	er App		Vireless version 1.0	Installer	Арр	
Force stop	Uninstall	For	ce stop		Uninstall	
Show notifications		Sho	w notifica	tions		
STORAGE		- 0	Wire	less In	staller	
Total	6.53MB				3	
App on device	6.43MB	Do y	ou want	to unins	tall this	
Data on device	104KB	app	:			
	Clear data		Cancel	<	ок	
CACHE		CACHE				
Cache	20.00KB	Cache			20.00KB	
	Clear cache				Clear cache	
LAUNCH BY DEFAULT		LAUNCH	BY DEFAUL	T		
No defaults set.		No defaul	ts set.			
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**Step 3.** The Wireless Installer application has been uninstalled from your device successfully.