

Rhein Tech Laboratories, Inc.  
360 Herndon Parkway  
Suite 1400  
Herndon, VA 20170  
<http://www.rheintech.com>

Client: Hunter Engineering Company  
Model: 146-59-1  
Standards: FCC 15.247/IC RSS-210  
ID's: LS3-146591/2938A-146591  
Report #: 2015070

## **Appendix I: Manual**

Please refer to the following pages.

## SETUP INSTRUCTIONS FOR REMOTE CONTROL 146-57-1 & 146-59-1



This procedure should be performed only by an authorized factory representative.

This document provides information for installation and setup of the XF remote controller. Second generation remotes require a different procedure to set the wireless channel.



Figure 1.

### CONSOLE CHANNEL SELECTION



In most cases, the wireless channels should be correctly set from the factory. Use this procedure if there is a wireless channel conflict.

- From the setup menu, under "Sensors", select "Cordless Channel Selection".

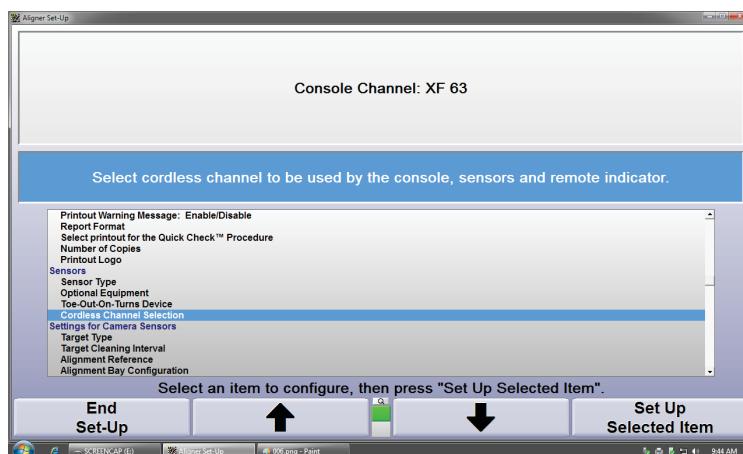
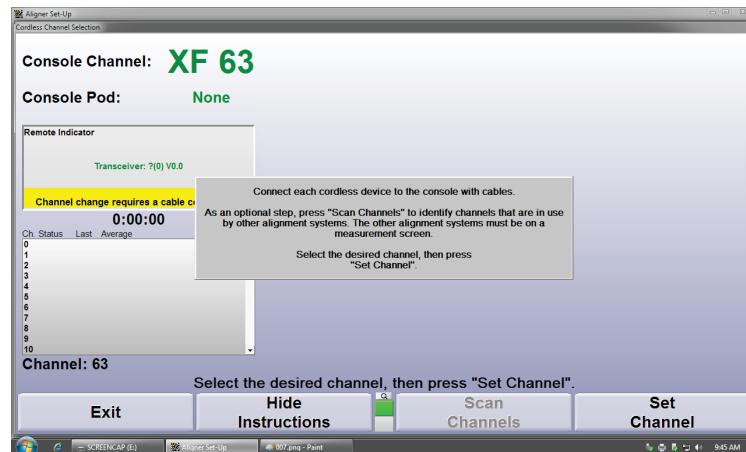


Figure 2.

- Wireless channels in use will be displayed. Press “Scan Channels” to identify channels that are in use. Select the desired channel, then select “Set Channel”.



**Figure 3.**

Set the channel of the remote if necessary as follows.

## SECOND DESIGN (146-59-1)

### SETTING THE REMOTE CHANNEL

The wireless channel is selected using a set of dip switches on the main board. To set the wireless channel, remove the four screws securing the back cover of the device, then remove the back cover.



Be careful not to lose the black rubber plug over the data port.



**Figure 4.**

Remove the batteries from the device, then remove the three screws securing the main board.



Leave the ribbon cable and power wires connected, the dip switches can be accessed without disconnecting them.



Figure 5.

Set the dip switches in sequence for the desired channel using the table below.

Switch Setting	Channel	Freq (MHz)									
ON 1 2 3 4	0	2405	ON 1 2 3 4	16	2425	ON 1 2 3 4	32	2445	ON 1 2 3 4	48	2465
ON 1 2 3 4	4	2410	ON 1 2 3 4	20	2430	ON 1 2 3 4	36	2450	ON 1 2 3 4	52	2470
ON 1 2 3 4	8	2415	ON 1 2 3 4	24	2435	ON 1 2 3 4	40	2455	ON 1 2 3 4	56	2475
ON 1 2 3 4	12	2420	ON 1 2 3 4	28	2440	ON 1 2 3 4	44	2460	ON 1 2 3 4	63	2480

Figure 6.

Re-install the board, install the batteries, then install the back cover. Make sure the data port plug is in place while assembling the case halves.



Figure 7.

Check the remote for proper operation.

### BATTERY REPLACEMENT



The port on the bottom is not a charging port, it is a data connection for future devices.  
Do not connect any charging adaptors to this port.

To replace the batteries, remove the two screws securing the battery cover then gently pry off the cover.



Figure 8.

Replace the batteries with two new "AA" size batteries, making sure to observe the correct polarity.

Replace the the battery cover and reinstall the two cover screws.

## FIRST DESIGN (146-57-1)

### CHANNEL SELECTION

To connect the wireless remote with the XF Pod or receiver board hold the “K1” + “Zoom” + “Menu” buttons on the remote for 5 seconds. This will cycle the remote until an available channel is found. This can take up to 10 seconds. If successful, the remote will now operate with the WinAlign program.



If multiple WinAlign consoles are running, it may take several retries to find the correct channel.

### BATTERY REPLACEMENT

Remove the four screws securing the back cover, then remove the back cover to expose the battery.

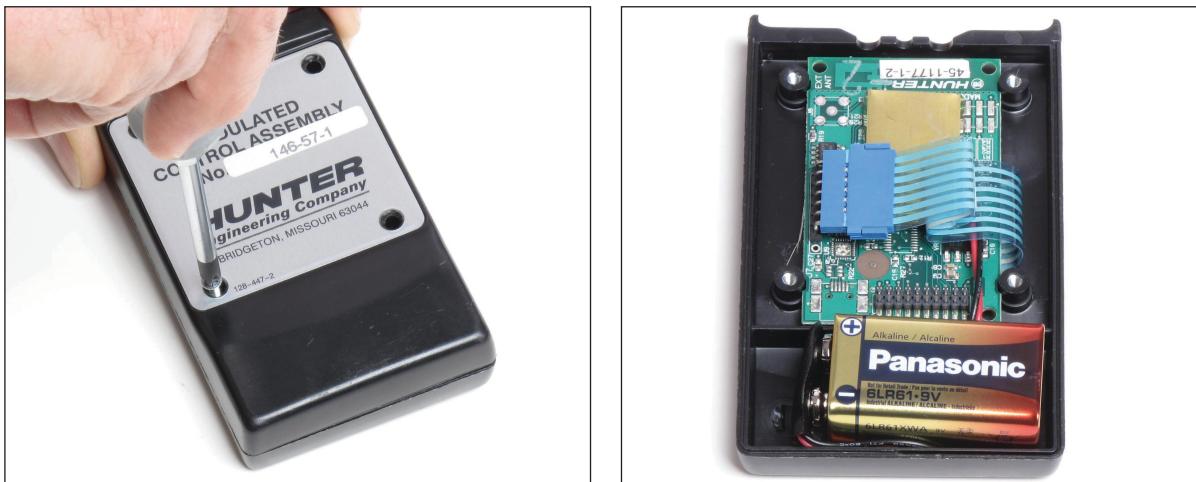


Figure 9.

Replace the battery with a new 9-volt, making sure to observe the correct polarity.

Reinstall the cover and the four retaining screws.

If necessary, connect the remote to the console as outlined earlier. *Refer to “Channel Selection,” on page 5 for detailed instructions.*

### TROUBLESHOOTING

If the remote is still not connecting to the WinAlign console after several retries, refer to the steps below to possibly identify a problem.

1. Verify XF pod or receiver board is connected to the PC. There should be a indicator light on the pod showing that they are receiving power from the console.
2. Check to make sure that the remote control channel setting is set to “A,0” in “Remote Control Channel Identification” under the “Aligner Equipment” heading in setup.
3. If the remote is still not connecting, it may be necessary to power down and unplug nearby WinAlign consoles to remove interfering channels.
4. The batteries on the remote indicator may be dead and need to be replaced.

## COMPLIANCE STATEMENTS

FCC ID: LS3-146591  
IC: 2938A-146591  
Model 146-59-1

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

*Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

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## Declaration of Conformity

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We, the undersigned,

Company	Hunter Engineering Company
Address, City	11250 Hunter Drive
Country	USA
Phone number	314 731 0000
Fax number	314 716 1260

certify and declare under our sole responsibility that the following equipment:

Product description / Intended use	RF Remote Control for use on Hunter Wheel Alignment Consoles
EU / EFTA member states intended for use	EU: Austria, Belgium, Belarus, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, United Kingdom EFTA: Switzerland, Iceland, Lichtenstein, Norway
Member states with restrictive use	N/A
Manufacturer	Hunter Engineering Company
Brand	Hunter Engineering Company
Type (Model)	146-59-1

is tested to and conforms with the essential requirements for protection of health and the safety of the user and any other person and Electromagnetic Compatibility, as included in following standards:

Standard	Issue date
EN 60950-1	2006 + A11:2009 + A12:2011 + A1:2010 + A2:2013
EN 301 489-1	2011-09
EN 301 489-3	2013-06

and is tested to and conforms with the essential radio test suites so that it effectively uses the frequency spectrum allocated to terrestrial/space radio communication and orbital resources so to as to avoid harmful interference, as included in following standards:

Standard	Issue date
EN 300 440-2	2010-08

and therefore complies with the essential requirements and provisions of the Directive 1999/5/EC of the European Parliament and of the council of March 9, 1999 on Radio equipment and Telecommunications Terminal Equipment and the mutual recognition of their conformity and with the provisions of Annex IV (Conformity Assessment procedure referred to in article 10).

The technical documentation as required by the Conformity Assessment procedure is kept at the following address:

Company	Hunter Engineering Company
Address, City	11250 Hunter Drive Bridgeton, Missouri 63044
Country	USA
Phone number	314 731 0000
Fax number	314 716 1260



TCF/TF reference nr.	2015071TCF
Drawn up in	Herndon, VA
Date	7/1/2015
Name and position	James McClenahan R&D Manager Electronics

Česky [Czech]	[Hunter Engineering Company] tímto prohlašuje, že tento [remote control] je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
Dansk [Danish]	Undertegnede [Hunter Engineering Company] erklærer herved, at følgende udstyr [remote control] overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EU.
Deutsch [German]	Hiermit erklärt [Hunter Engineering Company], dass sich das Gerät [remote control] in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
Eesti [Estonian]	Käesolevaga kinnitab [Hunter Engineering Company] seadme [remote control] vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
English	Hereby, [Hunter Engineering Company], declares that this [remote control] is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente [Hunter Engineering Company] declara que el [remote control] cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ [Hunter Engineering Company] ΔΗΛΩΝΕΙ ΟΤΙ [remote control] ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/EK.
Français [French]	Par la présente [Hunter Engineering Company] déclare que l'appareil [remote control] est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
Italiano [Italian]	Con la presente [Hunter Engineering Company] dichiara che questo [remote control] è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo [Hunter Engineering Company] deklarē, ka [remote control] atbilst Direktīvas 1999/5/EK būtiskajām prasībām un cītiem ar to saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo [Hunter Engineering Company] deklaruoja, kad šis [remote control] atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
Nederlands [Dutch]	Hierbij verklaart [Hunter Engineering Company] dat het toestel [remote control] in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
Malti [Maltese]	Hawnhekk, [Hunter Engineering Company], jiddikjara li dan [remote control] jikkonforma mal-ħtiġijiet essenziali u ma provvedimenti oħrajn relevanti li hemm fid-Direttiva 1999/5/EC.
Magyar [Hungarian]	Alulírott, [Hunter Engineering Company] nyilatkozom, hogy a [remote control] megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym [Hunter Engineering Company] oświadcza, że [remote control] jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	[Hunter Engineering Company] declara que este [remote control] está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	[Hunter Engineering Company] izjavlja, da je ta [remote control] v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	[Hunter Engineering Company] týmto vyhlasuje, že [remote control] spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
Suomi [Finnish]	[Hunter Engineering Company] vakuuttaa täten että [remote control] tyypin laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
Svenska [Swedish]	Härmed intygar [Hunter Engineering Company] att denna [remote control] står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.
Íslenska [Icelandic]	Hér með lýsir [Hunter Engineering Company] yfir því að [remote control] er í samræmi við grunnkröfur og aðrar kröfur, sem gerðar eru í tilskipun 1999/5/EC.
Norsk [Norwegian]	[Hunter Engineering Company] erklærer herved at utstyret [remote control] er i samsvar med de grunnleggende krav og øvrige relevante krav i direktiv 1999/5/EF.