

# RFXtrx

## USB RF transceiver

### Manuel Utilisateur



[www.rfxcom.com](http://www.rfxcom.com)

# 1. Sommaire

1.	Sommaire .....	2
2.	Informations générales sur le Transceiver RFXtrx.....	4
2.1.	RFXtrx315 liste des protocoles supportés .....	4
2.1.1.	RFXtrx315 configured for 310MHz.....	4
2.1.2.	RFXtrx315 configured for 315MHz.....	4
2.1.3.	RFXtrx868X and RFXtrx868XL liste des protocoles supportés .....	4
2.2.	RFXrec433, RFXtrx433, RFXtrx433E, RFXtrx433XL liste des protocoles supportés.....	5
2.2.1.	By function.....	5
2.2.2.	Alphabetic list.....	10
2.3.	Undec on .....	18
2.4.	Influence des protocoles activés sur la sensibilité .....	20
2.5.	RF range reduction .....	21
2.6.	Logiciels domotique compatibles .....	21
2.7.	Dimensions.....	21
2.8.	Electrical .....	21
2.9.	Condition d'utilisation .....	21
3.	Installation du driver USB.....	22
4.	Lancement du programme RFXflash sous Linux avec Mono.....	22
5.	Programme de test RFXmngr .....	23
5.1.	Récepteur .....	24
5.2.	Emetteur.....	25
6.	Mise à jour du RFXtrx .....	26
6.1.	Mise à jour du firmware RFXtrx.....	26
6.2.	Mise à jour du firmware RFXtrx pas à pas .....	27
7.	RFXtrx433 Code tables.....	29
7.1.	Remote commands.....	29
7.1.1.	X10 RF Remote .....	29
7.1.2.	ATI Remote Wonder .....	30
7.1.3.	ATI Remote Wonder Plus .....	31
7.1.4.	Medion Remote .....	32
7.2.	Harrison address conversion to switch settings.....	33
7.3.	Flamingo, AB400, IMPULS, Sartano,Brennenstuhl, SilverCrest 91089, Cranenbroek switch settings .....	34
7.4.	Energenie 5-gang 429.950.....	35
7.5.	Phenix, IDK YC-4000S switch settings.....	36
7.6.	HE105 switch settings.....	37
7.7.	HQ COCO-20 .....	38
7.8.	MDREMOTE V106, V107 .....	39
7.9.	MDREMOTE V108, EKAB-10KRF .....	39
7.10.	Aoke relay .....	39
7.11.	SEAV TXS4.....	40
7.12.	Comment obtenir l'ID du bandeau de led RGB dx.com.....	40
7.13.	How to find the dx.com RGB LED strip driver ID (rev. 2) .....	40
7.14.	How to find the Eurodomest ID.....	40
7.15.	How to find the Screenline ID .....	41
7.16.	How to find the Avantek remote ID .....	41
8.	commande Blyss.....	42
9.	Somfy RTS .....	43
9.1.	How to move RFY devices to another RFXtrx433E or RFXtrx433XL .....	44
10.	BlindsT6 .....	45
10.1.	Dooya DT52E, DT82TV, DT82TN .....	45
11.	ID switches Casafan and Lucci Air fans.....	45
12.	Transmit Funkbus (Insta, Gira, Jung, Berker) .....	46
13.	Transmit undecoded ARC commands.....	47
14.	Poêle et insert à granulés/pellets MCZ.....	48
15.	Lighting4 devices.....	49

15.1.	Proluxx projection screen .....	49
15.2.	Kingpin (KP100) projection screen .....	49
15.3.	Mercury remote control mains sockets .....	49
15.4.	Conrad 034911 sockets.....	49
15.5.	Sonoff.....	50
15.6.	PT2262 and EV1527 oscillator resistors accepted.....	50
16.	Receive and Transmit RAW data.....	51
17.	RFXtrx433XL - P1 smart meter connection .....	53
17.1.	DIY P1 connection for RFXtrx433XL batch 3618 and 4018 .....	54
17.2.	DIY P1 connection for RFXtrx433XL batch 4918 and later .....	54
17.3.	P1 option PCB Type 1 for RFXtrx433XL batch 3618 and 4018.....	55
17.4.	P1 option PCB Type 2 for RFXtrx433XL batch 4918 and later.....	56
18.	RFXtrx433XL - Teleinfo connection .....	57
18.1.	Teleinfo option PCB for RFXtrx433XL batch 4918 and later .....	57
19.	RFXtrx433XL - Connection points for a serial interface .....	58
20.	Recover from interrupted or wrong flash.....	59
21.	FAQ.....	61
21.1.	La réception s'est arrêtée brutalement mais la transmission fonctionne toujours. 61	
21.2.	Est-ce que je peux augmenter la distance de réception/émission du RFXtrx? ...	61
21.3.	Le module RFXtrx USB se déconnecte parfois.....	61
21.4.	J'ai un périphérique en 433.92 Mhz, mais celui-ci n'est pas reçu.....	61
21.5.	La prise murale est commandée par une télécommande. Celle-ci est bien reçue par le RFXtrx, mais il ne commande pas la prise.....	61
22.	EC Declaration of Conformity .....	62
23.	Précautions .....	63
24.	License.....	63
25.	Copyright notice .....	63
26.	Traduction française.....	63
27.	Historique des modifications.....	64

## 2. Informations générales sur le Transceiver RFXtrx

Le transceiver RFXtrx et le récepteur RFXrec communique avec l'application PC par l'intermédiaire d'un port USB. Le port USB sert aussi à alimenter les modules RFXtrx/rec. Au démarrage, le RFXtrx entre dans l'état Bootloader pendant 2 secondes (la led est rouge fixe), puis il passe automatiquement en mode émetteur/récepteur RF.

Si des paquets valides sont reçus, la led jaune clignote.

Le RFXtrx315 et le RFXrec433 sont principalement utilisés pour les US. RFXtrx315 permet la réception de signaux X10 US (standard et sécurisé) OU les signaux Visonic PowerCode en fréquence 315Mhz

Le RFXtrx433 permet la réception de signaux de différentes marques de station météo en 433.92Mhz. Le RFXtrx433 est un transceiver (émetteur et récepteur), il permet de contrôler une large gamme de capteurs et de périphériques radio en 433.92Mhz

Le RFXtrx433E est une version étendue du transceiver RFXtrx433 with additional memory and non-volatile memory for Somfy RTS codes and configuration settings.

The RFXtrx433XL is the next generation version with double size memory and a serial connection for the Dutch and French smart meters.

### 2.1. RFXtrx315 liste des protocoles supportés

#### 2.1.1. RFXtrx315 configured for 310MHz

Protocol	Enable	receive	transmit
US X10 lighting	X10	Y	Y
US X10 security	X10	Y	Y

#### 2.1.2. RFXtrx315 configured for 315MHz

Protocol	Enable	receive	transmit
Aoke relay	-	-	Y
PT2262, EV1527 and compatibles	Lighting4	Y	Y
Visonic CodeSecure	-	planned	-
Visonic PowerCode	Visonic	Y	Y

#### 2.1.3. RFXtrx868X and RFXtrx868XL liste des protocoles supportés

Protocol	Protocol	receive	transmit
Alecto ACH2010	Alecto ACH2010	Y	-
Alecto WS5500, FineOffset WH2900, Ventus W830	Alecto WS5500	Y	-
Davis Vantage Vue EU *	Davis EU	Y	-
Edisio	Edisio	Y	Y
FS20	FS20	Y	Y
Itho CVE RFT	Itho CVE RFT	-	Y
Keeloq (unencrypted part only)	Keeloq	Y	Y
Visonic CodeSecure (unencrypted part only)	Visonic	Y	-
Visonic PowerCode	Visonic	Y	-

\* based on information available at: wxforum.net – "Implementing a Si1000 based wireless receiver for Davis ISS data" and madscientistlabs.blogspot.com

**Important:** it is only possible to enable one protocol for receive in the RFXtrx868X and RFXtrx868XL because of the used transmission techniques at 868MHz.

## 2.2. RFXrec433, RFXtrx433, RFXtrx433E, RFXtrx433XL liste des protocoles supportés

### 2.2.1. By function

Curtains, shades, projection screen, awning, gate openers
A-OK blind motors (RF01,AC114,AC123,AC127,AC129 controlled) - <a href="http://www.motorisationplus.com/">http://www.motorisationplus.com/</a>
Aldomo - <a href="http://www.aldomo.de/">http://www.aldomo.de/</a>
ASA ETR blind motors - <a href="http://www.asa-mingardi.org/en/home.php">http://www.asa-mingardi.org/en/home.php</a>
ASP blind motors - <a href="http://www.asp-distribution.com/site%20volet/voletrenovation.aspx">http://www.asp-distribution.com/site%20volet/voletrenovation.aspx</a>
BOFU EYB25 EY1612 blind motors - <a href="http://www.bofumotor.com/">http://www.bofumotor.com/</a>
BTX blind motors, remote, part# 490.2076 – <a href="http://www.btxinc.com">http://www.btxinc.com</a>
Brel blind motors - <a href="http://www.brel-motors.nl/webshop/motoren/">http://www.brel-motors.nl/webshop/motoren/</a>
Bi-Directional is not supported!
Chamberlain CS4330CN <a href="http://www.chamberlain24.de/epages/es122868.sf/en_GB/?ObjectPath=/Shops/es122868/Products/RA4336">http://www.chamberlain24.de/epages/es122868.sf/en_GB/?ObjectPath=/Shops/es122868/Products/RA4336</a>
Cherubini
Confexx CNF24-2435
Dolat DLM-1 controlled motors - <a href="http://www.dolat.com.cn/product1.asp?id=538">http://www.dolat.com.cn/product1.asp?id=538</a>
Dooya blind motors, remotes tested: DC305,DC306,DC307,DC313,DC1602,DC1650,DC1651,DC2700 Bi-Directional is not supported!
Ematronic - <a href="http://www.ematronic.com/moteurs-volet-roulant/">http://www.ematronic.com/moteurs-volet-roulant/</a>
ESMO blind motors
Faher
Forest blind/curtain motors - <a href="http://www.forestgroup.nl/index_nl.html">http://www.forestgroup.nl/index_nl.html</a>
Gaposa ER motors 434.15MHz - <a href="http://www.gaposa.it/eng/products/residential-motors">http://www.gaposa.it/eng/products/residential-motors</a>
Harrison curtain – <a href="http://www.harrison.nl/home2.htm">http://www.harrison.nl/home2.htm</a>
Hasta blind motors - <a href="http://www.hasta.se/">http://www.hasta.se/</a>
inblindz – <a href="https://www.inblindz.nl/">https://www.inblindz.nl/</a>
JVS screens – <a href="http://www.screen-discount.nl/">http://www.screen-discount.nl/</a>
Kimex projection screen - <a href="https://www.kimexinternational.com/A-9162-ecran-de-projection-electrique-encastrable-3-00-x-1-69m-format-16-9.aspx">https://www.kimexinternational.com/A-9162-ecran-de-projection-electrique-encastrable-3-00-x-1-69m-format-16-9.aspx</a>
Kingpin KP100 projection screen
Louvolite one touch motorised blinds
Luxaflex (RFXtrx433E and RFXtrx433XL only) – <a href="http://www.luxaflex.se/produkter/luxaflex/rullgardiner/">http://www.luxaflex.se/produkter/luxaflex/rullgardiner/</a>
Media Mount Projector screen
Motiva blinds, remote BY-305
Motolux – <a href="http://www.motolux.com.au/">http://www.motolux.com.au/</a>
Motostar blinds
Nobily rolladenmotor <a href="http://www.nobily.de/rolladenmotor/funk-elektronisch/40mm-achtkantwelle/170/nobily-rolladenmotor-pre4?c=5">http://www.nobily.de/rolladenmotor/funk-elektronisch/40mm-achtkantwelle/170/nobily-rolladenmotor-pre4?c=5</a>
Omnia Go blinds <a href="https://omniablinds.com/">https://omniablinds.com/</a>
Outlook Motion Blinds – <a href="https://www.spotlightstores.com/curtains-blinds/indoor-blinds/roller-blinds/project-outlook-motion-motorised-roller-blind/p/BP80360543">https://www.spotlightstores.com/curtains-blinds/indoor-blinds/roller-blinds/project-outlook-motion-motorised-roller-blind/p/BP80360543</a>
Proluxx projection screen
Quotidom – <a href="http://www.quotidom.com/moteur-tubulaire-radio-quotidom-10-ou-20-nm-volet-roulant-ou-store-banne.html">http://www.quotidom.com/moteur-tubulaire-radio-quotidom-10-ou-20-nm-volet-roulant-ou-store-banne.html</a> (not the Solutio version)
RAEX blind motor (YR1326 or YRL2016 controlled)
RohrMotor24 RMF blind motors - <a href="http://www.rohrmotor24.eu/rohrmotor24">http://www.rohrmotor24.eu/rohrmotor24</a>
RollerTrol blind motors - <a href="http://rollertrol.com/">http://rollertrol.com/</a>
Screenline motors – <a href="http://www.screenline.cz/en/">http://www.screenline.cz/en/</a>
Silverline Premium – <a href="http://www.aluparts.nl">http://www.aluparts.nl</a>
Simu Hz (not BHz!) (RFXtrx433E and RFXtrx433XL only) – <a href="http://www.simu.com/">http://www.simu.com/</a>
Siro – <a href="https://shop.siro-antrieb.de/shop-kategorie/elektrische-antriebe-fuer-innensonnenschutz/">https://shop.siro-antrieb.de/shop-kategorie/elektrische-antriebe-fuer-innensonnenschutz/</a>
Somfy (RFXtrx433E and RFXtrx433XL only) – <a href="http://www.somfy.co.uk/">http://www.somfy.co.uk/</a>
Sunflower brand KT52E motorized Curtain track,Single track, DOOYA motor <a href="https://nl.aliexpress.com/item/motorized-Curtain-track-1m-3-3m-wide-Single-track-DOOYA-motor-the-top-motor-brand-in/1939622604.html">https://nl.aliexpress.com/item/motorized-Curtain-track-1m-3-3m-wide-Single-track-DOOYA-motor-the-top-motor-brand-in/1939622604.html</a>
Sunpery blind motors

<b>Temperature, humidity, weather sensors</b>
Alecto – WSD10,WS1200, WS1700, WS3500, WS4500
Auriol – H13726
Ambient Weather – F007TH
Banggood – SKU174397 <a href="http://www.banggood.com/433MHz-Wireless-Weather-Station-Digital-Thermometer-Humidity-Sensor-p-965559.html">http://www.banggood.com/433MHz-Wireless-Weather-Station-Digital-Thermometer-Humidity-Sensor-p-965559.html</a>
Blyss 630467
Bresser Temeo Hygro
Cresta
Digimax
Digoo DG-R8H DG-R8S
FineOffset – WH1285
Froggit – F007TH
Hama – EWS1500
Hideki weather sensors
Honeywell – TF-ATS34C
Inovalley SM80 with plant probes – <a href="http://www.inovalley.com/detail.php?item_id=289">http://www.inovalley.com/detail.php?item_id=289</a>
La Crosse
Lexibook – SM883
Marquant 943134
Maverick ET-732 BBQ/Smoke temperature
Meade – TS33F-M, TS34C-M <a href="http://www.meade.com/products/weatherstations/sensors.html">http://www.meade.com/products/weatherstations/sensors.html</a>
Meteoscan – W155, W160
Nexa NBA-001
NEXUS – I008T
mi.sol WH2 <a href="http://www.ebay.com/itm/Transmitter-for-Wireless-Weather-Station-wireless-temperature-sensor-/121664060899">http://www.ebay.com/itm/Transmitter-for-Wireless-Weather-Station-wireless-temperature-sensor-/121664060899</a>
Opus XT300 /Imagintronix Soil sensor <a href="http://www.plantcaretools.com/en/webshop/wireless-moisture-sensor-en-detail">http://www.plantcaretools.com/en/webshop/wireless-moisture-sensor-en-detail</a> <a href="http://www.ebay.co.uk/itm/Wireless-Soil-Moisture-Sensor-/251380900939?pt=UK_Home_Garden_Garden_Plants_Fertiliser_CV&amp;hash=item3a8778244b">http://www.ebay.co.uk/itm/Wireless-Soil-Moisture-Sensor-/251380900939?pt=UK_Home_Garden_Garden_Plants_Fertiliser_CV&amp;hash=item3a8778244b</a>
Oregon Scientific / Huger
Pearl NC-7159 <a href="http://www.pearl.de/a-NC7159-3041.shtml">http://www.pearl.de/a-NC7159-3041.shtml</a>
Prego P-8426 <a href="http://www.sunmarket.fi/tuote.asp?TID=11990">http://www.sunmarket.fi/tuote.asp?TID=11990</a>
Proove –TSS320 & TSS330 fridge/freezer thermometer & outdoor sensors 311346,311501
RFXSensor
RUBiCSON – stektermometer 48659, 48695 -pool sensor p48019
Sunvic TLX1206
Sunvic TLX7506
TechnoLine/Proficell <a href="http://www.elv.de/output/controller.aspx?cid=74&amp;detail=10&amp;detail2=27621">http://www.elv.de/output/controller.aspx?cid=74&amp;detail=10&amp;detail2=27621</a> - TX95-TH, WS9180-TX104
Telldus Thermo/Hygro sensors 313159 and 313160 <a href="https://www.lohelectronics.se/hemautomation/433mhz/sensorer-1110/smart-inne-och-utetermometer-med-hygrometer-10396">https://www.lohelectronics.se/hemautomation/433mhz/sensorer-1110/smart-inne-och-utetermometer-med-hygrometer-10396</a>
TFA
UPM/Esic (very short receiving range)
Ventus – WS155
Viking
WT0122 pool thermometer
Xiron –EN6

<b>Door/window, smoke and other security sensors</b>
Aidebao security
Alecto – SA30, SA33, SA41 smoke detector
AliExpress sensors with EV1572 or PT2262 (PT2262 is preferred)
Atlantic security
Chacon KD101 smoke detector
Chuango security
Digoo – <a href="https://www.aliexpress.com/item/DIGOO-433MHz-New-Door-Window-Alarm-Sensor-for-HOSA-HAMA-Smart-Home-Security-System-Suit-Kit/32957905665.html">https://www.aliexpress.com/item/DIGOO-433MHz-New-Door-Window-Alarm-Sensor-for-HOSA-HAMA-Smart-Home-Security-System-Suit-Kit/32957905665.html</a>
Eminent security
Flamingo KD101 smoke detector FA20RF, FA21RF, FA22RF
Focus
Housegard Origo smoke detector
Kerui security <a href="https://www.aliexpress.com/item/433-MHz-Wireless-Door-Windows-Sensors-for-KERUI-Alarm-System-Magnetic-Door-Sensor-Door-Open-reminder/32590916896.html">https://www.aliexpress.com/item/433-MHz-Wireless-Door-Windows-Sensors-for-KERUI-Alarm-System-Magnetic-Door-Sensor-Door-Open-reminder/32590916896.html</a>
Meiantech security
NEXA KD101/LM101LC smoke detector
Renkforce RF101 smoke detector
SAS SA-200 KD101 smoke detector
Smartwares RM174RF, RM175RF smoke detector
Oregon MSR939 <a href="https://www.redealer.de/multimedia/home-living/wetterstationen/bewegungssensor-msr939/a-200667/">https://www.redealer.de/multimedia/home-living/wetterstationen/bewegungssensor-msr939/a-200667/</a>
Visonic CodeSecure
Visonic PowerCode
X10 security

<b>Appliance modules, dimmers, relays, LED controllers</b>
ANSLUT (learning mode)
Aoke relay <a href="http://www.aliexpress.com/store/product/whose-sale-prices-DC12V10A-Learning-Code-Wireless-Remote-Control-Switch-System-1-Receiver-and-1-Transmitter/1211856_1774391429.html">http://www.aliexpress.com/store/product/whose-sale-prices-DC12V10A-Learning-Code-Wireless-Remote-Control-Switch-System-1-Receiver-and-1-Transmitter/1211856_1774391429.html</a>
Avantek
ByeByeStandBy
Blissy lighting – <a href="http://www.castorama.fr/store/Prise-telecommandee-et-telecommande-BLYSS---Interieur-prod4470026.html">http://www.castorama.fr/store/Prise-telecommandee-et-telecommande-BLYSS---Interieur-prod4470026.html</a>
Brennenstuhl RC2044, RCS2044N
Chacon – <a href="http://www.chacon.be/">http://www.chacon.be/</a>
CoCo – <a href="http://www.coco-technology.com/en/home/">http://www.coco-technology.com/en/home/</a>
Conrad RSL2 – <a href="http://www.conrad.com/ce/en/product/640466/FUNK-STECKDOSENSCHALTER-RSLR2">http://www.conrad.com/ce/en/product/640466/FUNK-STECKDOSENSCHALTER-RSLR2</a>
Cotech Smarhome
Cranenbroek
DI.O – <a href="http://www.di-o.be/">http://www.di-o.be/</a>
DomiaLite
Ebode
ELRO AB400/AB600 – <a href="http://www.elro.eu/en/products/cat/home-automation/home-control1">http://www.elro.eu/en/products/cat/home-automation/home-control1</a>
Energenie ENER010 – 429.935, 5-gang 429.950 - <a href="https://energenie4u.co.uk/">https://energenie4u.co.uk/</a>
Etekcitcity – <a href="http://etekcity.com/p-300-5-pack-wireless-remote-control-outlet-switch-set-with-2-remote-controls-zap-5lx.aspx">http://etekcity.com/p-300-5-pack-wireless-remote-control-outlet-switch-set-with-2-remote-controls-zap-5lx.aspx</a>
Eurodomest NL – Action
Everflourish EMW100
Flamingo
Flamingo FA500D FA500DSS
Flamingo Smartwares SF501
FunkBus (Gira, Jung, Insta, Berker)
Home Confort – <a href="http://www.home-confort.net/en">http://www.home-confort.net/en</a>
HomeEasy EU – <a href="http://www.elro.eu/en/products/cat/home-automation/">http://www.elro.eu/en/products/cat/home-automation/</a>
HomeEasy UK (including HE105 relay) – <a href="http://www.homeeasy.eu/">http://www.homeeasy.eu/</a>
HQ COCO-20
Ikea Koppla

Impuls – NL – Action
Intertechno – <a href="http://www.intertechno.at/">http://www.intertechno.at/</a>
Kambrook RF3672 – <a href="http://www.bunnings.com.au/kambrook-4-piece-indoor-powerpoint-kit-with-remote-control_p7030054">http://www.bunnings.com.au/kambrook-4-piece-indoor-powerpoint-kit-with-remote-control_p7030054</a>
KlikAanKlikUit – <a href="http://www.klikaanklikuit.nl/home/">http://www.klikaanklikuit.nl/home/</a>
Legrand CAD radio – <a href="http://docdif.fr.grleg.com/general/legrand-fr/NP-FT-GT/FA181DFR.pdf">http://docdif.fr.grleg.com/general/legrand-fr/NP-FT-GT/FA181DFR.pdf</a>
LightwaveRF – <a href="http://www.lightwaverf.co.uk/">http://www.lightwaverf.co.uk/</a>
Livolo - <a href="http://www.livolo-France.com/fr/">http://www.livolo-France.com/fr/</a> <a href="http://nl.aliexpress.com/w/wholesale-livolo-touch-switch.html">http://nl.aliexpress.com/w/wholesale-livolo-touch-switch.html</a>
Maplin <a href="http://www.maplin.co.uk/p/remote-controlled-mains-socket-set-single-n78ka">http://www.maplin.co.uk/p/remote-controlled-mains-socket-set-single-n78ka</a> (use Lighting1 – COCO GDR2)
Mdremote LED dimmer V106, V107, V108, EKAB-10KRF - <a href="http://www.ultraleds.co.uk">www.ultraleds.co.uk</a> - <a href="http://www.ledstripkoning.nl/accessoires/dimmers-wit/draadloze-dimmer-10-knops-rf/">http://www.ledstripkoning.nl/accessoires/dimmers-wit/draadloze-dimmer-10-knops-rf/</a>
Mercury appliance modules – <a href="http://mercury.avsl.com/product?range=ME5124">http://mercury.avsl.com/product?range=ME5124</a>
NEXA – <a href="http://www.nexa.se/">http://www.nexa.se/</a>
ORNO
OTIO
Phenix
Philips SBC SP370 series
Profile Qnect 423000040,423000042
PROmax
Proove - <a href="http://proove.se/">http://proove.se/</a>
Quigg
RGB LED strip driver dx.com - <a href="http://www.dx.com/">http://www.dx.com/</a> order nbr: 130913 (new TRC02 not supported) , 67412
RisingSun
Sartano
Siemens (UK)
SilverCrest 91089, 60494, 284705
Unitec 48110 EIM 826
Waveman
X10 RTS10 / RFS10
X10 lighting
Xdom

Remotes
ATI Remote Wonder
ATI Remote Wonder Plus
ATI Remote Wonder II
SEAV TXS4
X10 PC Remote

Chimes
1byOne Easy Chime
Alfawise – <a href="https://www.gearbest.com/ip-cameras/pp_1693842.html?wid=1214279">https://www.gearbest.com/ip-cameras/pp_1693842.html?wid=1214279</a>
Byron SX and BY chime - <a href="http://www.chbyron.eu/Byron/ByronSXRange/68/89/">http://www.chbyron.eu/Byron/ByronSXRange/68/89/</a>
Byron MP001
Chacon
dBell – <a href="https://www.webstore4ipcmeras.nl/dbell_DB-HD-LIVE-B-W">https://www.webstore4ipcmeras.nl/dbell_DB-HD-LIVE-B-W</a>
Envivo – ENV1348
HomeEasy
KlikAanKlikUit
Monaco – <a href="https://www.airam.fi/en/product/v8305-2988/7020500/monaco-wireless-doorbell-230v/140/1">https://www.airam.fi/en/product/v8305-2988/7020500/monaco-wireless-doorbell-230v/140/1</a>
Profiles PAC-326R Belcanto
SelectPlus200689101 & SelectPlus200689103 (Action NL)

Power, gas water metering
Cartelectronic TIC, Encoder, Linky – <a href="https://www.cartelectronic.fr/index.php?id_product=124&amp;controller=product">https://www.cartelectronic.fr/index.php?id_product=124&amp;controller=product</a>
cent-a-meter
Electrisave



OTIO EHS5050
OWL CM113, CM180, CM119, CM160, CM180, CM180i - <a href="http://www.theowl.com/">http://www.theowl.com/</a>
Revolt NC5461 - <a href="http://www.pearl.de/a-NC5462-5452.shtml">http://www.pearl.de/a-NC5462-5452.shtml</a>
RFXMeter

<b>Specials</b>
1byone Wireless Home Security Driveway Alarm <a href="http://www.1byone.co.uk/Home-Security/Alarms/O00QH-0511">http://www.1byone.co.uk/Home-Security/Alarms/O00QH-0511</a>
Casafan
DEA receivers <a href="http://www.deasystem.com/en/Accessory/7/receivers">http://www.deasystem.com/en/Accessory/7/receivers</a> (unencrypted only)
Hunter fan
Lucci Air Fan – <a href="https://www.beaconlighting-europe.com/product-category/lucci-air-deckventilatoren/">https://www.beaconlighting-europe.com/product-category/lucci-air-deckventilatoren/</a>
Mertik Maxitrol – Fire Place controllers
MCZ pellet stove
Novy extractor hood
Oregon Scientific Body weight scales – BWR101, BWR102, GR101
Prego P-8426 – sauna temperature sensor <a href="http://www.sunmarket.fi/tuote.asp?TID=11990">http://www.sunmarket.fi/tuote.asp?TID=11990</a>
Smartwares radiator valve <a href="http://www.homewizard.nl/smartwares-draadloze-radiatorkraan.html">http://www.homewizard.nl/smartwares-draadloze-radiatorkraan.html</a>
Siemens SF01 - LF959RA50/LF259RB50/LF959RB50 extractor hood
Wave Design extractor hood
X10 Ninja/Robocam – camera motor

## 2.2.2. Alphabetic list

Important notes:

- Ext, Ext2, Pro1 and Pro2 firmware can only be used in the RFXtrx433E!
- ProXL firmware can only be used in the RFXtrx433XL!
- RFXrec firmware is equal to RFXtrx433 – Type1 firmware without the transmit functions.
- Protocol enabling is only necessary for receive. Transmit protocols are always enabled.
- R = Receive only
- T = Transmit only
- RT = Receive & Transmit

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
1byone Driveway Alarm <a href="http://www.1byone.co.uk/Home-Security/Alarms/O00QH-0511">http://www.1byone.co.uk/Home-Security/Alarms/O00QH-0511</a>		RT	RT	RT	RT	RT	RT	ByronSX
1byone Easy Chime		RT	RT	RT	RT	RT	RT	ByronSX
A-OK blind motors RF01 <a href="http://www.motorisationplus.com/">http://www.motorisationplus.com/</a>	RT	RT		RT	RT	RT	RT	BlindsT2
A-OK blind motors AC114,AC123,AC127,AC129, ZC11 - <a href="http://www.motorisationplus.com/">http://www.motorisationplus.com/</a>	RT	RT		RT	RT	RT	RT	BlindsT3
Aidebao security	RT	RT	RT	RT	R	R	R	Meiantech
Aldomo – <a href="http://www.aldomo.de/">http://www.aldomo.de/</a>	T	T	T	T	RT	RT	RT	BlindsT6
Alecto – SA30, SA33, SA41 smoke detector	RT		RT				RT	Oregon
Alecto – WS1100 (needs correction -40°C)	R	R	R	R	R	R	R	FineOffset
Alecto – WS1200	R*	R*	R*	R*	R	R	R	*LaCrosse Pro = FineOffset
Alecto – WS1700 and compatibles, WS3500, WS4500			R	R	R	R	R	Rubicson
Alecto – WSD10				R	R	R	R	Rubicson
Alfawise – <a href="https://www.gearbest.com/ip-cameras/pp_1693842.html?wid=1214279">https://www.gearbest.com/ip-cameras/pp_1693842.html?wid=1214279</a>							RT	ByronSX
Ambient Weather F007TH, WS14 pool sensor				R	R	R	R	Oregon
ANSLUT (learning mode)	RT	RT	RT	RT	RT		RT	AC
Aoke relay <a href="http://www.aliexpress.com/store/product/whose-sale-prices-DC12V10A-Learning-Code-Wireless-Remote-Control-Switch-System-1-Receiver-and-1-Transmitter/1211856_1774391429.html">http://www.aliexpress.com/store/product/whose-sale-prices-DC12V10A-Learning-Code-Wireless-Remote-Control-Switch-System-1-Receiver-and-1-Transmitter/1211856_1774391429.html</a>	RT	RT	RT	RT	RT		RT	Lighting5 Aoke or Lighting1 ARC
ASA ETR blind motors - <a href="http://www.asa-mingardi.org/en/home.php">http://www.asa-mingardi.org/en/home.php</a>			T	T	T	T	T	RFY
ASP blind motors <a href="http://www.asp-distribution.com/site%20voilet/voiletrenovati on.aspx">http://www.asp-distribution.com/site%20voilet/voiletrenovati on.aspx</a>	RT	RT		RT	RT	RT	RT	BlindsT11
ATI Remote Wonder	R							ATI
ATI Remote Wonder Plus	R							ATI
ATI Remote Wonder II (only available in hardware version 1.0)	R							ATI
Atlantic security	RT	RT	RT	RT	RT	RT	RT	Meiantech
Auriol H13726			R	R	R	R	R	Rubicson
Auriol Z31055B-TX				R	R	R	R	Rubicson
Avantek * receive Lighting4			RT	RT	RT	RT	RT	Lighting5 *Lighting4
Banggood – SKU174397			R	R	R	R	R	Rubicson
Banggood DANIU			R					Rubicson

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
Blyss lighting <a href="http://www.castorama.fr/store/Prise-telecommandee-et-telecommande-BLYSS--Interieur-prod4470026.html">http://www.castorama.fr/store/Prise-telecommandee-et-telecommande-BLYSS--Interieur-prod4470026.html</a>	RT	RT	RT		RT		RT	AE
Blyss temperature/humidity 630467	R	R	R				R	AE
BOFU EYB25 EY1612 blind motors - <a href="http://www.bofumotor.com/">http://www.bofumotor.com/</a> * = receive in Type2 only used to get the remote ID.	T	RT	T	T	T		RT	BlindsT0
Brennenstuhl RCS2044N	RT	RT	RT	RT	RT	RT	RT	Lighting4
Brennenstuhl RC2044				RT	RT		RT	Lighting4 + AC Pro = AC
Brel blind motors <a href="http://www.brel-motors.nl/webshop/motoren/">http://www.brel-motors.nl/webshop/motoren/</a> Bi-Directional is not supported!	T	T	T	T	RT	RT	RT	BlindsT6
Bresser Temeo Hygro							R	Rubicson
BTX blind motors, remote, part# 490.2076 <a href="http://www.btxinc.com">http://www.btxinc.com</a>		T					T	BlindsT9
ByeByeStandBy	RT	RT	RT				RT	ARC
Byron BY chime					RT		RT	ByronSX
Byron SX chime <a href="http://www.chbyron.eu/Byron/ByronSXRang/e/68/89/">http://www.chbyron.eu/Byron/ByronSXRang/e/68/89/</a>	RT	RT	RT	RT	RT	RT	RT	ByronSX
Byron MP001 chime			T	T			T	Chime Byron MP001
Cartelectronic TIC, Encoder, Linky <a href="https://www.cartelectronic.fr/index.php?id_p roduct=124&amp;controller=product">https://www.cartelectronic.fr/index.php?id_p roduct=124&amp;controller=product</a>		R		R	R	R	R	ATI/cartelectronic
Casafan					T	T	T	Fan Casafan
CasaFan Eco Aviatos RH787T					T	T	T	Fan LucciAir DCII
cent-a-meter	R	R	R					Oregon
Chacon (learning mode) <a href="http://www.chacon.be/">http://www.chacon.be/</a>	RT	RT	RT	RT	RT	RT	RT	AC
Chacon (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
Chacon EMW200	T	T	T				T	Lighting1 EMW200
Chacon 54660 (equal COCO GDR2)	T	T	T	T			T	Lighting1 COCO GDR2
Chacon KD101 smoke detector	RT	RT	RT	RT	RT	RT	RT	always on
Chamberlain CS4330CN <a href="http://www.chamberlain24.de/epages/es122868.sf/en_GB/?ObjectPath=/Shops/es122868/Products/RA4336">http://www.chamberlain24.de/epages/es122868.sf/en_GB/?ObjectPath=/Shops/es122868/Products/RA4336</a>			T				T	BlindsT8
Cherubini							RT	BlindsT18 (receive =BlindsTx + Keelogg)
Chuango * decoded as X10	R	R	R	R*	R*	R*	R*	Lighting4
CoCo (learning mode) <a href="http://www.coco-technology.com/en/home/">http://www.coco-technology.com/en/home/</a>	RT	RT	RT	RT	RT	RT	RT	AC
CoCo (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
CoCo GDR2 (equal Chacon 54660)	T	T	T	T			T	Lighting1 COCO GDR2
Confexx CNF24-2435				T			T	BlindsT12
Conrad RSL2	RT	RT		RT	RT		RT	RSL

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
<a href="http://www.conrad.com/ce/en/product/640466/FUNK-STECKDOSENSCHALTER-RSLR2">http://www.conrad.com/ce/en/product/640466/FUNK-STECKDOSENSCHALTER-RSLR2</a>								
Conrad RSL sensors		R					R	RSL
Conrad RSL2 motion/door-window sensors		R					R	RSL
Cotech Smarthome				RT	RT		RT	Lighting4 + AC,
Cotech weather sensor <a href="https://www.clasohlson.com/no/Ekstra-temperaturgiver-hygrometer/36-6726">https://www.clasohlson.com/no/Ekstra-temperaturgiver-hygrometer/36-6726</a>				R	R		R	Rubicson
Cranenbroek	T	T	T	T			T	Lighting1 Impuls
Cresta - TX-320, TS34C, anemometer, UV sensor, rain sensor	R	R	R	R	R	R	R	Hideki
Cuveo <a href="https://shop-m-e.de/produkte/cuveo-funk-system/?p=1">https://shop-m-e.de/produkte/cuveo-funk-system/?p=1</a>						RT	RT	AE
dBell – <a href="https://www.webstore4ipcmeras.nl/dbell_D_B-HD-LIVE-B">https://www.webstore4ipcmeras.nl/dbell_D_B-HD-LIVE-B</a>							RT	ByronSX
DEA receivers (unencrypted) <a href="http://www.deasystem.com/en/accessory/7/receivers">http://www.deasystem.com/en/accessory/7/receivers</a>			RT		RT	RT	RT	KeeLoq
Digimax	R	R	R	R	R		R	X10
Digoo DG-R8H, DG-R8S <a href="https://www.banggood.com/Digoo-DG-R8H-433MHz-Wireless-Digital-Hygrometer-Thermometer-Weather-Station-Sensor-for-TH11300-8380-p-1178108.html">https://www.banggood.com/Digoo-DG-R8H-433MHz-Wireless-Digital-Hygrometer-Thermometer-Weather-Station-Sensor-for-TH11300-8380-p-1178108.html</a>				R	R	R	R	Rubicson
Digoo <a href="https://www.aliexpress.com/item/DIGOO-433MHz-New-Door-Window-Alarm-Sensor-for-HOSA-HAMA-Smart-Home-Security-System-Suit-Kit/32957905665.html">https://www.aliexpress.com/item/DIGOO-433MHz-New-Door-Window-Alarm-Sensor-for-HOSA-HAMA-Smart-Home-Security-System-Suit-Kit/32957905665.html</a>							R	Lighting4 + Meiantech
DI.O (learning mode) <a href="http://www.di-o.be/">http://www.di-o.be/</a>	RT	RT	RT	RT	RT	RT	RT	AC
DI.O (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
Dolat DLM-1 controlled motors <a href="http://www.dolat.com.cn/product1.asp?id=538">http://www.dolat.com.cn/product1.asp?id=538</a>		T					T	BlindsT10
DomiaLite (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
Dooya blind motors, emulate remotes: DC305, DC306, DC307, DC313, DC1602, DC1650, DC1651, DC2700 Bi-Directional is not supported!	T	T	T	T	RT	RT	RT	BlindsT6
Ebode	RT	RT	RT	RT	RT	RT	RT	X10
Electrisave	R	R	R		R	R	R	Oregon
ELRO AB400 <a href="http://www.elro.eu/en/products/cat/home-automation/home-control1">http://www.elro.eu/en/products/cat/home-automation/home-control1</a>	RT	RT	RT	RT	RT		RT	Lighting4
ELRO AB600	RT	RT	RT	RT	RT		RT	ARC
Ematronic RF01 <a href="http://www.ematronic.com/moteurs-volet-roulant/">http://www.ematronic.com/moteurs-volet-roulant/</a>	RT	RT		RT	RT	RT	RT	BlindsT2
Ematronic AC114, AC123 <a href="http://www.ematronic.com/moteurs-volet-roulant/">http://www.ematronic.com/moteurs-volet-roulant/</a>	RT	RT		RT	RT	RT	RT	BlindsT3
Eminent * decoded as X10 in ext firmware	RT	RT	RT	RT	RT	RT	RT	Lighting4
Energenie <a href="https://energenie4u.co.uk/">https://energenie4u.co.uk/</a>	T	T	T				T	Lighting1

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
- ENER010 – 429.935, 5-gang 429.950								Energenie Energenie5
Envivo – Chime ENV1348			T				RT	Chime + Lighting4
ESMO blind motors	T	T	T	T	RT	RT	RT	BlindsT6
Etekcicy – <a href="http://etekcity.com/p-300-5-pack-wireless-remote-control-outlet-switch-set-with-2-remote-controls-zap-5lx.aspx">http://etekcity.com/p-300-5-pack-wireless-remote-control-outlet-switch-set-with-2-remote-controls-zap-5lx.aspx</a>	T	T	T				T	Lighting1 Energenie5
Eurodomest (NL – Action) * ARC only	T*	T	T*	T*			T	Lighting1 – ARC Or Lighting5 Eurodomest
Everflourish EMW100	T	T	T				T	Lighting5 EMW100
Falmecc fan						T	T	Fan Falmecc
Faro Barcelona fan – <a href="http://www.faro.es/">http://www.faro.es/</a>			T		T	T	T	Fan LucciAir
Faro Barcelona DC fan For example : Airfusion Climate II 50 DC					T	T	T	Fan LucciAir DC
Faro Barcelona DCII fan For example : Airfusion Climate II 50 DC					T	T	T	Fan LucciAir DCII
Faher blinds motor	T	T	T	T	RT	RT	RT	BlindsT6
FineOffset – WH1285 (needs correction -40°C)	R	R	R	R	R	R	R	FineOffset
Flamingo	RT	RT	RT	RT	RT	RT	RT	Lighting4
Flamingo FA500D FA500DSS				T	T		T	IT
Flamingo KD101 smoke detector FA20RF, FA21RF, FA22RF	RT	RT	RT	RT	RT	RT	RT	always on
Flamingo Smartwares SF501	R	R	R	R	R	R	R	AC
Focus	RT	RT	RT	RT	RT	RT	RT	Meiantech
Forest blind/curtain motors <a href="http://www.forestgroup.nl/index_nl.html">http://www.forestgroup.nl/index_nl.html</a>	T	T	T	T			T	BlindsT7
Froggit – F007TH				R	R	R	R	Oregon
FT1211R fan controller					T	T	T	Fan FT1211R
FunkBus ID: 3F CC (Gira, Jung, Insta, Berker)						T	T	Funkbus
Gaposa ER motors 434.15MHz							RT	BlindsT17
HAMA EWS1500			R	R	R	R	R	Rubicson
Harrison curtain <a href="http://www.harrison.nl/home2.htm">http://www.harrison.nl/home2.htm</a>	T	T	T	T	T		T	Curtain Harrison
Hasta new blind motors <a href="http://www.hasta.se/">http://www.hasta.se/</a> * = receive in Type2 only used to get the remote ID.	T	RT	T	T	T		RT	BlindsT0
Hasta old blind motors	RT	RT					RT	BlindsT1
Hideki weather sensors	R	R	R	R	R	R	R	Hideki
Home Confort lighting <a href="http://www.home-confort.net/en">http://www.home-confort.net/en</a>			RT				RT	HomeConfort
HomeEasy EU (learning mode) <a href="http://www.elro.eu/en/products/cat/home-automation/">http://www.elro.eu/en/products/cat/home-automation/</a>	RT	RT	RT	RT	RT	RT	RT	HE EU
HomeEasy UK – HE105 - <a href="http://www.homeeasy.eu/">http://www.homeeasy.eu/</a>	T	T	T	T			T	Thermostat2 HE105
HomeEasy UK (learning mode)	RT	RT	RT	RT	RT	RT	RT	AC
HomeEasy UK (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
Honeywell - TF-ATS34C	R	R	R	R	R	R	R	Hideki
Housegard Origo smoke detector				RT	RT		RT	ARC
HQ COCO-20			T	T			T	Lighting1 HQ COCO20
Hualite blinds					T	T	T	BlindsT14
Hunter fan <a href="https://www.hunterfan.com/">https://www.hunterfan.com/</a>						RT	RT	Fan

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
Ikea Koppla	T							Lighting3
Impuls (NL – Action)	T	T	T	T			T	Lighting1 Impuls
inblindz – <a href="https://www.inblindz.nl/">https://www.inblindz.nl/</a>				T			T	BlindsT13
Inovalley SM80 with plant probes <a href="http://www.inovalley.com/detail.php?item_id=289">http://www.inovalley.com/detail.php?item_id=289</a>			R	R	R	R	R	Rubicson
Intertechno (learning mode) <a href="http://www.intertechno.at/">http://www.intertechno.at/</a>	RT	RT	RT	RT	RT	RT	RT	AC
Intertechno (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
JVS screens <a href="http://www.screen-discount.nl/">http://www.screen-discount.nl/</a>	T	T	T	T	RT	RT	RT	BlindsT6
Kambrook RF3672 – <a href="http://www.bunnings.com.au/kambrook-4-piece-indoor-powerpoint-kit-with-remote-control_p7030054">http://www.bunnings.com.au/kambrook-4-piece-indoor-powerpoint-kit-with-remote-control_p7030054</a>		T	T				T	Lighting2 Kambrook
Keeloq (unencrypted)			RT		RT	RT	RT	KeeLoq
Kerui security * decoded as X10 in Ext2 and Pro firmware <a href="https://www.aliexpress.com/item/433-MHz-Wireless-Door-Windows-Sensors-for-KERUI-Alarm-System-Magnetic-Door-Sensor-Door-Open-reminder/32590916896.html">https://www.aliexpress.com/item/433-MHz-Wireless-Door-Windows-Sensors-for-KERUI-Alarm-System-Magnetic-Door-Sensor-Door-Open-reminder/32590916896.html</a>	R	R	R	R*	R*	R*	R*	Lighting4 + X10*
Kerui siren xx xx x8 = on, xx xx x2 = off	T	T	T	T	T	T	T	Lighting4
Kimex projection screen <a href="https://www.kimexinternational.com/A-9162-ecran-de-projection-electrique-encastable-3-00-x-1-69m-format-16-9.aspx">https://www.kimexinternational.com/A-9162-ecran-de-projection-electrique-encastable-3-00-x-1-69m-format-16-9.aspx</a>	RT	RT		RT	RT	RT	RT	BlindsT3
Kingpin KP100 projection screen	T	T	T	T	T	T	T	Lighting4
KlikAanKlikUit (learning mode) <a href="http://www.klikaanklikuit.nl/home/">http://www.klikaanklikuit.nl/home/</a>	RT	RT	RT	RT	RT	RT	RT	AC
KlikAanKlikUit (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
La Crosse - TX2, TX3, TX3P, TX4, TX7, TX17, WS2300	R	R	R	R	R	R	R	LaCrosse
Legrand CAD radio			T				RT	Lighting5 LeGrand CAD
Lexibook - SM883	R	R	R	R	R	R	R	Hideki
LightwaveRF - <a href="http://www.lightwaverf.co.uk/">http://www.lightwaverf.co.uk/</a>	RT	RT	RT	RT	RT		RT	AD
Livolo - <a href="http://www.livolonederland.nl/">http://www.livolonederland.nl/</a> - <a href="http://www.livolo-France.com/fr/">http://www.livolo-France.com/fr/</a> - <a href="http://nl.aliexpress.com/w/wholesale-livolo-touch-switch.html">http://nl.aliexpress.com/w/wholesale-livolo-touch-switch.html</a>	T	T	T	T	T		RT	Lighting5 Livolo
Louvolite one touch motorised blinds * = receive in Type2 only used to get the remote ID.	T	RT	T	T	T		RT	BlindsT0
Lucci Air fan <a href="https://www.beaconlighting-europe.com/product-category/lucci-air-deckenventilatoren/">https://www.beaconlighting-europe.com/product-category/lucci-air-deckenventilatoren/</a>			T		T	T	T	Fan LucciAir
Lucci Air DC fan For example : Airfusion Climate II 50 DC					T	T	T	Fan LucciAir DC
Lucci Air DCII fan For example : Airfusion Climate II 50 DC					T	T	T	Fan LucciAir DCII

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
Luxaflex – <a href="http://www.luxaflex.se/produkter/luxaflex/ruilgardiner/">http://www.luxaflex.se/produkter/luxaflex/ruilgardiner/</a>			T	T	T	T	T	RFY
Maplin <a href="http://www.maplin.co.uk/p/remote-controlled-mains-socket-set-single-n78ka">http://www.maplin.co.uk/p/remote-controlled-mains-socket-set-single-n78ka</a>	T	T	T	T			T	Lighting1 COCO GDR2
Marquant 943134		R					R	X10
Maverick ET-732/733 BBQ/Smoke temperature	R	R	R	R	R		R	Hideki
MCZ pellet stove		RT	T				RT	Thermostat4
Mdremote LED dimmer v106 <a href="http://www.ultraleds.co.uk">www.ultraleds.co.uk</a>	T	T	T	T				Lighting5 MDRemote V106
Mdremote LED dimmer v107 <a href="http://www.ultraleds.co.uk">www.ultraleds.co.uk</a>	T	T	T	T				Lighting5 MDRemote V107
Mdremote LED dimmer v108, EKAB-10KRF <a href="http://www.ledstripkoning.nl/accessoires/dimmers-wit/draadloze-dimmer-10-knops-rt/">http://www.ledstripkoning.nl/accessoires/dimmers-wit/draadloze-dimmer-10-knops-rt/</a>	T	T	T	T				Lighting5 MDRemote V108
Meade – TS33F-M, TS34C-M <a href="http://www.meade.com/products/weatherstations/sensors.html">http://www.meade.com/products/weatherstations/sensors.html</a>	R	R	R	R	R	R	R	Hideki
Media Mount Projector screen		T						Lighting4
Meiantech security	RT	RT	RT	RT	RT	RT	RT	Meiantech
Mercury appliance modules <a href="http://mercury.avsl.com/product?range=ME5124">http://mercury.avsl.com/product?range=ME5124</a>	T	T	T	T			T	Lighting1 Energenie5
Mertik Maxitrol Fire Place controllers - G6R-H4T1, G6R-H4T5, G6R-H4TD, G6R-H4T16, G6R-H4TB, G6R-H4T21-Z22	RT	RT	RT	RT	RT		RT	Mertik
Mertik Maxitrol Fire Place controller – G6R-H3T1							RT	Mertik
Mertik Maxitrol Fire Place controller – G6R-H4S	T	T	T	T	T		T	Mertik
Meteoscan W155,W160			R	R	R	R	R	Rubicson
Monaco – <a href="https://www.airam.fi/en/product/v8305-2988/7020500/monaco-wireless-doorbell-230v/140/1">https://www.airam.fi/en/product/v8305-2988/7020500/monaco-wireless-doorbell-230v/140/1</a>			T				RT	Chime + Lighting4
Motiva blinds, remote BY-305 * = receive in Type2 only used to get the remote ID.	T	RT	T	T	T		RT	BlindsT0
Motorlux blinds motor	T	T		T	T	T	T	BlindsT3
Motostar blinds						T	T	BlindsT15
mi.sol WH2 <a href="http://www.ebay.com/itm/Transmitter-for-Wireless-Weather-Station-wireless-temperature-sensor-/121664060899">http://www.ebay.com/itm/Transmitter-for-Wireless-Weather-Station-wireless-temperature-sensor-/121664060899</a>	R	R	R	R	R	R	R	FineOffset
NEXA (learning mode) - <a href="http://www.nexa.se/">http://www.nexa.se/</a>	RT	RT	RT	RT	RT	RT	RT	AC
NEXA (with address code wheels)	RT	RT	RT	RT	RT		RT	ARC
NEXA KD101/LM101LC smoke detector	RT	RT	RT	RT	RT	RT	RT	always on
Nexa NBA-001 temperature sensor	R	R	R	R	R	R	R	Hideki
NEXUS - I008T	R	R	R	R	R	R	R	Hideki
Nobily rolladenmotor <a href="http://www.nobily.de/rolladenmotor/funk-elektronisch/40mm-achtkantwelle/170/nobily-rolladenmotor-pre4?c=5">http://www.nobily.de/rolladenmotor/funk-elektronisch/40mm-achtkantwelle/170/nobily-rolladenmotor-pre4?c=5</a>	T	T	T	T	RT	RT	RT	BlindsT6
Novy extractor hood						T	RT	Fan

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
<a href="https://www.novynederland.nl/">https://www.novynederland.nl/</a>								
Oase Inscenio FM Master						T	T	Lighting1 Oase
Omnia Go blinds <a href="https://omniablinds.com/">https://omniablinds.com/</a>	T	T	T	T	RT	RT	RT	BlindsT6
Opus XT300 /Imagintronix Soil sensor <a href="http://www.plantcaretools.com/en/webshop/wireless-moisture-sensor-en-detail">http://www.plantcaretools.com/en/webshop/wireless-moisture-sensor-en-detail</a> <a href="http://www.ebay.co.uk/itm/Wireless-Soil-Moisture-Sensor-/251380900939?pt=UK_Home_Garden_Plants_Fertiliser_CV&amp;hash=item3a8778244b">http://www.ebay.co.uk/itm/Wireless-Soil-Moisture-Sensor-/251380900939?pt=UK_Home_Garden_Plants_Fertiliser_CV&amp;hash=item3a8778244b</a>	R*	R*	R*	R*	R	R	R	Imagintronix* Pro = Fineoffset
ORNO	RT	RT	RT	RT	RT	RT	RT	AC
Oregon Scientific / Huger BBQ and weather sensors - AW129, AW131, BTHGN129, BTHR918, BTHR918N, BTHR968, EW109, PCR800, RGR126, RGR682, RGR918, RGR928, RTGN318, RTGR328N, RTGR328N, RTGR368N, RTGR383, RTHN318, STR918, STR928, THGN800, THGN801, THC138, THC238, THC268, THGN122NX, THGN123N, THGN132ES, THGN132N, THGN500, THGR122(N/NX), THGR228(N/NF), THGR238, THGR268, THGR328N, THGR810, THGR918, THGR928, THGRN228NX, THN122N, THN129, THN132N, THR128, THR138, THR288(N/NF), THRN122N, THWR288A, THWR800, UV138, UVN128, UVN800, UVR128, WGR800, WGR918, WTGR800, WTGR800	R	R	R	R	R	R	R	Oregon
Oregon Scientific weighting scales - BWR101, BWR102, GR101 US BWR101, BWR102 in RFXrec	R		R	R			R	Oregon
Oregon MSR939 <a href="https://www.redealer.de/multimedia/home-living/wetterstationen/bewegungssensor-msr939/a-200667/">https://www.redealer.de/multimedia/home-living/wetterstationen/bewegungssensor-msr939/a-200667/</a>			R				R	Oregon
OTIO EHS5050		R					R	RSL
OTIO Lighting	RT	RT		RT	RT		RT	RSL
Outlook Motion Blinds <a href="https://www.spotlightstores.com/curtains-blinds/indoor-blinds/roller-blinds/project-outlook-motion-motorised-roller-blind/p/BP80360543">https://www.spotlightstores.com/curtains-blinds/indoor-blinds/roller-blinds/project-outlook-motion-motorised-roller-blind/p/BP80360543</a>		RT			RT	RT	RT	BlindsT4
OWL – CM113	R	R	R				R	Oregon
OWL - CM119, CM160, CM180, CM180i <a href="http://www.theowl.com/">http://www.theowl.com/</a>	R	R	R	R	R	R	R	Oregon
Pearl NC-7159 <a href="http://www.pearl.de/a-NC7159-3041.shtml">http://www.pearl.de/a-NC7159-3041.shtml</a>			R	R	R	R	R	Rubicson
Phenix	RT	RT	RT	RT	RT	RT	RT	Lighting4
Philips SBC SP370 series		T					T	Lighting1 Philips SBC
Prego P-8426 <a href="http://www.sunmarket.fi/tuote.asp?TID=11990">http://www.sunmarket.fi/tuote.asp?TID=11990</a>	R	R	R		R		R	X10 Pro1/ProXL1 = Rubicson
Profile Qnect 423000040,423000042				RT	RT	RT	RT	Lighting4 + AC Pro = AC
Profiles PAC-326R Belcanto	RT	RT	RT	RT	RT	RT	RT	ByronSX
Profitec KD310T <a href="https://akkuplus.de/profitec-KD-310-T-Energiekosten-Messgeraet-Sender">https://akkuplus.de/profitec-KD-310-T-Energiekosten-Messgeraet-Sender</a>		R		R			R	RSL
Proluxx projection screen	T	T	T		T	T	T	Lighting4
PROMax				T	T	T	T	IT



Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
<b>Proove</b> –TSS320 & TSS330 fridge/freezer thermometer & outdoor sensors 311346,311501	R	R	R	R	R	R	R	FineOffset
<b>Quigg RC DS5 4001-A DE 3726</b>				RT	RT		RT	Lighting4 + AC Pro = AC
<b>Quotidom</b> – <a href="http://www.quotidom.com/moteur-tubulaire-radio-quotidom-10-ou-20-nm-volet-roulant-ou-store-banne.html">http://www.quotidom.com/moteur-tubulaire-radio-quotidom-10-ou-20-nm-volet-roulant-ou-store-banne.html</a> (not the Solutio version)	T	T	T	T	RT	RT	RT	BlindsT6
<b>RAEX blind motor</b> (YR1326 or YRL2016 controlled)		RT				RT	RT	BlindsT4
<b>RAW data</b>					RT	RT	RT	undec on
<b>Renkforce RF101 smoke detector</b>	RT	RT	RT	RT	RT	RT	RT	always on
<b>Revolt NC5461</b> <a href="http://www.pearl.de/a-NC5462-5452.shtml">http://www.pearl.de/a-NC5462-5452.shtml</a>		R		R			R	RSL
<b>RFXSensor</b>	R	R	R	R	R	R	R	X10
<b>RFXMeter</b>	R	R	R	R	R	R	R	X10
<b>RGB LED strip driver dx.com</b> - <a href="http://www.dx.com/">http://www.dx.com/</a> order nbr: 130913, (new TRC02 NOT supported) - <a href="http://www.dx.com/">http://www.dx.com/</a> order nbr: 67412 * = receive only in Type2 used to get the RGB remote ID.	T	RT	T					AD
<b>RGB432W LED controller</b>	T	T	T					Lighting5 RGB432W
<b>RisingSun</b>	RT	RT	RT	RT			RT	Lighting4
<b>RUBiCSON</b> - stekermometer 48659, 48695 -pool sensor p48019	R		R	R	R	R	R	Rubicson
<b>RohrMotor24 RMF blind motors</b> <a href="http://www.rohrmotor24.eu/rohrmotor24">http://www.rohrmotor24.eu/rohrmotor24</a>	T	T	T	T	RT	RT	RT	BlindsT6
<b>RollerTrol R-series blind motors</b> - <a href="http://rollertrol.com/">http://rollertrol.com/</a> * = receive in Type2 only used to get the remote ID.	T	RT	T	T	T		RT	BlindsT0
<b>Rollertrol G-series blind motors</b>	T	T	T	T	RT	RT	RT	BlindsT6
<b>Sartano</b>	RT	RT	RT	RT	RT		RT	Lighting4
<b>SAS SA-200 smoke detector</b>	RT	RT	RT	RT	RT	RT	RT	always on
<b>Screenline motors</b> - <a href="http://www.screenline.cz/en/">http://www.screenline.cz/en/</a>				T			T	BlindsT13
<b>SEAV TXS4</b>				T			T	FAN SEAV TXS4
<b>SelectPlus200689101 &amp; SelectPlus200689103</b> (Action NL)		RT	RT	RT	RT	RT	RT	ByronSX
<b>Siemens SF01</b> LF959RA50/LF259RB50/LF959RB50 extractor hood		T					RT	Homeconfort,Fan SF01
<b>Siemens (UK)</b>	RT	RT	RT	RT	RT		RT	AD
<b>SilverCrest 91089</b>	RT	RT	RT				RT	Lighting4
<b>SilverCrest 60494, 284705</b>				RT	RT		RT	Lighting4 + AC Pro = AC
<b>Silverline Premium</b> - <a href="http://www.aluparts.nl">http://www.aluparts.nl</a>	T	T	T	T	RT	RT	RT	BlindsT6
<b>Simu Hz / RTS</b> - <a href="http://www.simu.com/">http://www.simu.com/</a>			T	T	T	T	T	RFY
<b>Siro</b>	T	T	T	T	RT	RT	RT	BlindsT6
<b>Smartwares radiator valve</b> <a href="http://www.homewizard.nl/smartwares-draadloze-radiatorkraan.html">http://www.homewizard.nl/smartwares-draadloze-radiatorkraan.html</a>			T	T	T	T	T	Radiator1 Smartwares
<b>Smartwares RM174RF, RM175RF</b>				R	R	R	R	Ext2 = ARC Pro = Lighting4
<b>Somfy / RTS</b> <a href="http://www.somfy.co.uk/">http://www.somfy.co.uk/</a> To control Somfy Centralis use RFY2 commands.			T	T	T	T	T	RFY

Device	Type 1	Type 2	Ext	Ext 2	Pro 1	Pro 2	ProXL 1	Protocol
Sonoff RF	RT	RT	RT	RT	RT	RT	RT	Lighting4
Sunperly blind motors		T					T	BlindsT9
Sunvic TLX1206	RT	RT	RT		RT		RT	X10
Sunvic TLX7506	R	R	R		R		R	X10
TechnoLine/Proficell <a href="http://www.elv.de/output/controller.aspx?cid=74&amp;detail=10&amp;detail2=27621">http://www.elv.de/output/controller.aspx?cid=74&amp;detail=10&amp;detail2=27621</a> - TX95-TH, WS9180-TX104	R		R	R	R	R	R	Rubicson
Telldus 312716,313159,313160 <a href="https://www.lohelectronics.se/hemautomatikon/433mhz/sensorer-1110/smart-inne-och-utetermometer-med-hygrometer-10396">https://www.lohelectronics.se/hemautomatikon/433mhz/sensorer-1110/smart-inne-och-utetermometer-med-hygrometer-10396</a>	R	R	R	R	R	R	R	FineOffset
TFA - TS15C, TS34C, external temperature sensor 30.3133, anemometer 30.3149, UV sensor, rain sensor 30.3148, pool sensor 30.3160	R	R	R	R	R	R	R	Hideki
TFA - pool sensor 30.3056.10, 30.3216.20				R	R	R	R	Oregon
TFA external temperature sensor 30.3208.02				R	R	R	R	Hideki
TFA - rain sensor 30.3233						R	R	Hideki
UPM/Esic (very short receiving range) WT260, WT260H, WT440H, WT450, WT450H, WDS500, RG700	R				R		R	Hideki
Unitec 48110 EIM 826				RT	RT		RT	Lighting4 + AC Pro = AC
Ventus WS155			R	R	R	R	R	Rubicson
Viking - 02035, 02038, 02811	R	R	R	R	R	R	R	FineOffset
Visonic CodeSecure	R	R	R	R	R	R	R	Visonic
Visonic PowerCode	R	R	R	R	RT	RT	R	Visonic
Wave Design extractor hood	T	T	T	T			T	Fan SF01
Waveman	T	T	T	T			T	Lighting1 Waveman
Westinghouse fan 7226640				T			T	Fan
WT0122 pool sensor			R		R	R	R	FineOffset
YOODA blind motors <a href="http://www.sukcesgroup.pl">http://www.sukcesgroup.pl</a>	T	T	T	T	RT	RT	RT	BlindsT6
X10 Ninja/Robocam		RT						X10
X10 PC Remote	RT							X10
X10 RTS10 / RFS10	RT	RT	RT	RT	RT	RT	RT	X10
X10 lighting	RT	RT	RT	RT	RT	RT	RT	X10
X10 security	RT	RT	RT	RT	RT	RT	RT	X10
Xdom	RT	RT	RT	RT	RT	RT	RT	X10
Xiron – EN6	R		R	R	RT	R	R	Rubicson

### 2.3. Undec on

#### **Ce paramètre est pour une utilisation interne par RFXCOM!!!**

Si un nouveau type de capteur apparaît, il ne sera peut-être pas décodé par le firmware du RFXtrx. C'est pour cette raison qu'il y a un mode permettant d'afficher les messages reçus, mais non décodé.

Cela permet d'afficher les trames reçus par le RFXtrx pour permettre à RFXCOM de les ajouter ensuite dans les prochains firmware.

Si le mode Undec on est actif, l'application va recevoir un grand nombre de messages liés pour la plupart à des trames incorrectes ou des informations mal décodées.  
Il est donc important de désactiver l'option "undec on" pour une utilisation courante du produit.

## 2.4. Influence des protocoles activés sur la sensibilité.

La sensibilité du récepteur est très sensible au nombre de protocoles activés. Moins le nombre de protocoles activés est important, plus la sensibilité est grande.

Certains protocoles réduisent fortement, voire inhibent les autres protocoles qui sont proches. Par exemple le protocole AD (LightwaveRF, Siemens) peut perturber de manière significative la réception des protocoles Meiantech/Atlantic, Oregon 3.0, Visonic et Mertik.

Il est conseillé de désactiver les protocoles que vous ne souhaitez pas utiliser afin de maximiser les performances de réception.

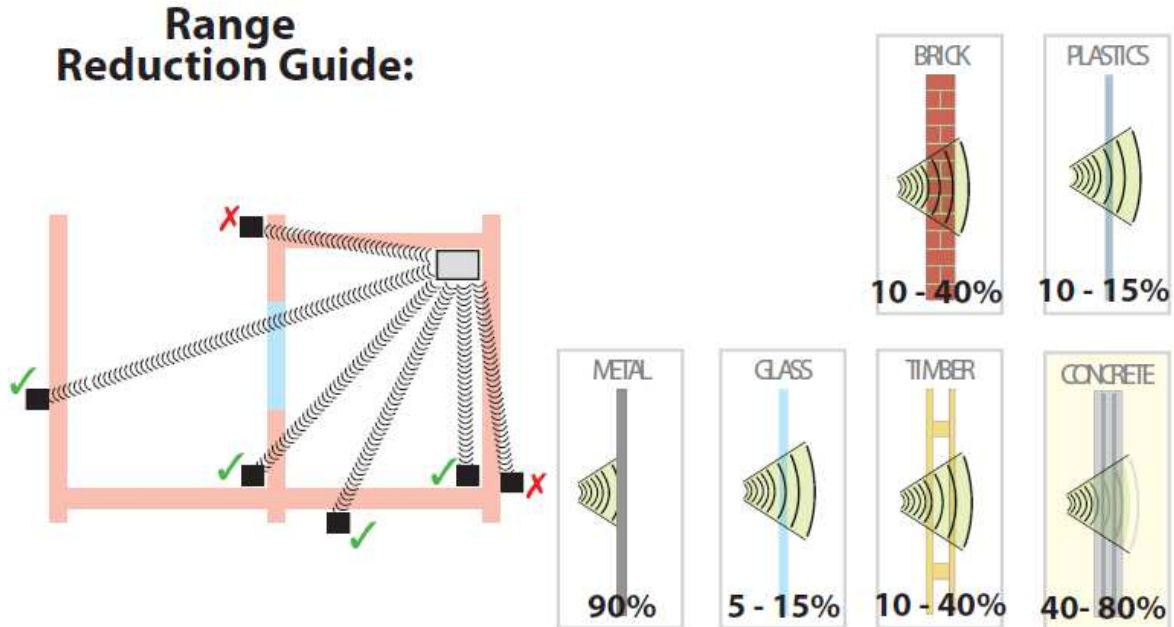
Voici un tableau décrivant les protocoles susceptibles de se perturber :

	X10	ARC	AC	HomeEasy EU	Meiantech/Atlantic	Oregon 1.0	Oregon 2.1	Oregon 3.0 / OWL	ATI	Visonic/Keeloq	Mertik	AD (LWRF)	Hideki/UPM	La Crosse	FS20	ProGuard	BlindsT0	BlindsT1/T2/T3/T4	AE (Blyss)	Rubicson/Alecto	FineOffset/Viking	Lighting4	RSL/Revolt	Byron SX	Imagintronic/Opus	HomeComfort
X10																										
ARC																										
AC																										
HomeEasy EU																										
Meiantech/Atlantic																										
Oregon																										
ATI																										
Visonic/Keeloq																										
Mertik																										
AD (LWRF)																										
Hideki/UPM																										
La Crosse																										
FS20																										
ProGuard																										
BlindsT0																										
BlindsT1/T2/T3																										
AE (Blyss)																										
Rubicson																										
FineOffset/Viking																										
Lighting4																										
RSL																										
Byron SX																										
Imagintronic																										
HomeComfort																										

Verde = enabled by default

## 2.5. RF range reduction

The RF signals operating distance is reduced when the signal has to pass through walls.



## 2.6. Logiciels domotique compatibles

La liste des logiciels compatibles avec le RFXtrx est disponible sur [www.rfxcom.com](http://www.rfxcom.com)

## 2.7. Dimensions

Les dimensions du RFXtrx : 83.5 x 42 x 15 mm

La hauteur totale en incluant l'antenne est : 122mm

Les dimensions du RFXtrx433E / RFXtrx433XL : 83 x 59 x 22 mm

La hauteur totale en incluant l'antenne est : 130mm

## 2.8. Electrical

Le RFXtrx est alimenté par les 5 Volt de l'interface USB.

Courant consommé :

Receive mode: 28 mA (0.14Watt)

Transmit mode: 45 mA

The RFXtrx Radiated RF power is 10dBm max.

## 2.9. Condition d'utilisation

Température normal :15°C à 35°C

Température extrême : -10°C à 55°C

### 3. Installation du driver USB

Le RFXtrx dispose de l'interface USB avec chipset FTDI FT232R.

Le RFXtrx433XL dispose de l'interface USB avec chipset FTDI FT230X

Le driver est disponible sur le site FTDI : <http://www.ftdichip.com/Drivers/VCP.htm>

### 4. Lancement du programme RFXflash sous Linux avec Mono

Lancer un terminal Linux (Ctrl-Alt-T)

Exécuter les commandes suivantes au moins une fois (si mono n'est pas installé) :

*Installer Mono:*

```
[sudo] apt-get install mono-runtime
```

*Installer la librairie VisualBasic :*

```
[sudo] apt-get install libmono-microsoft-visualbasic8.0-cil
```

Si le périphérique USB est détecté sous la forme /dev/ttyACMx, vous devez créer un lien symbolique vers un port série virtuel /dev/ttySx.

Cela n'est pas nécessaire si le périphérique est directement créé sous la forme /dev/ttyUSBx !!

```
[sudo] ln -sf /dev/ttyACM1 /dev/ttyS3
```

Note : Les crochets [] indique que sudo est facultatif. Vous devez utiliser sudo (sans crochet) uniquement si vous utilisez un compte qui n'est pas super utilisateur (root).

*Lancer le program RFXflash :*

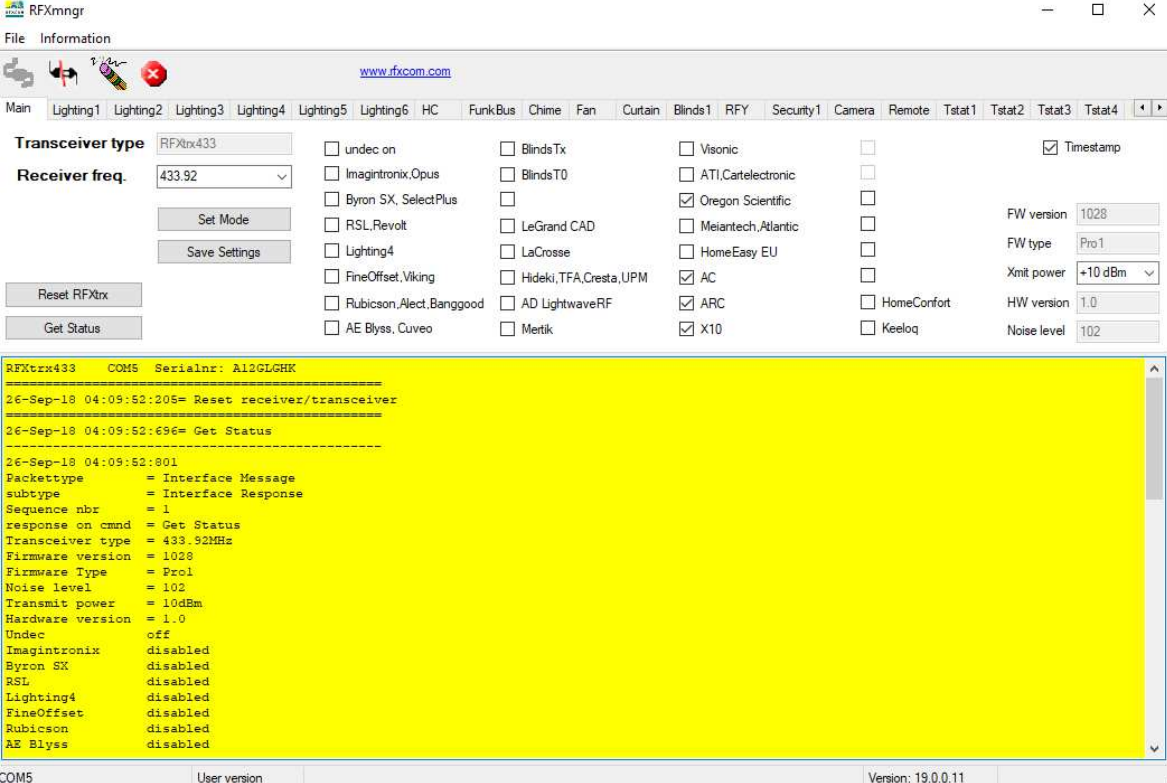
```
[sudo] mono RFXflash.exe
```

Remarque: RFXmngn ne fonctionne pas sous mono!

## 5. Programme de test RFXmngtr

L'application RFXmngtr permet le décodage des trames reçues et l'émission de commande dans les différents protocoles supportés par le RFXCOM.

Lors de la connexion du RFXtrx, l'application RFXmngtr émet automatiquement un Reset suivi d'une commande Get Status qui permet de lire les paramètres courants du module RFXtrx.



The screenshot shows the RFXmngtr application window. The top menu bar includes 'File' and 'Information'. Below the menu is a toolbar with icons for a mouse, keyboard, and a red 'X' icon. The main area is divided into several sections:

- Transceiver type:** RFXtrx433
- Receiver freq.:** 433.92
- Buttons:** Set Mode, Save Settings, Reset RFXtrx, Get Status
- Protocol checkboxes:** undec on, Imagintronix, Opus, Byron SX, SelectPlus, RSL, Revolt, Lighting4, FineOffset, Viking, Rubicson, Alect, Banggood, AE Blyss, Cuveo, BlindsTx, BlindsT0, LeGrand CAD, LaCrosse, Hideki, TFA, Cresta, UPM, AD LightwaveRF, Mertik, Visonic, ATI, Carfelectronic, Oregon Scientific, Meiantech, Atlantic, HomeEasy EU, AC, ARC, X10, Keeloq, Timestamp
- FW version:** 1028
- FW type:** Pro1
- Xmit power:** +10 dBm
- HW version:** 1.0
- Noise level:** 102

The terminal window at the bottom displays the following text:

```
RFXtrx433 COM5 Serialnr: A126LGHK
-----
26-Sep-18 04:09:52:205= Reset receiver/transceiver
-----
26-Sep-18 04:09:52:696= Get Status
-----
26-Sep-18 04:09:52:801
Packettype = Interface Message
subtype = Interface Response
Sequence nbr = 1
response on cmd = Get Status
Transceiver type = 433.92MHz
Firmware version = 1028
Firmware Type = Pro1
Noise level = 102
Transmit power = 10dBm
Hardware version = 1.0
Undec off
Imagintronix disabled
Byron SX disabled
RSL disabled
Lighting4 disabled
FineOffset disabled
Rubicson disabled
AE Blyss disabled
```

Tous les protocoles sont toujours actifs en transmission. En réception par contre, il est possible de désactiver certains protocoles.

Moins le nombre de protocole activé est important et plus la sensibilité est accrue.

Il est donc conseillé de n'activer que les protocoles que vous utilisez réellement.

A noter que ces paramètres sont remis à zéro lors d'une mise à jour de firmware Type1 ou Type2.

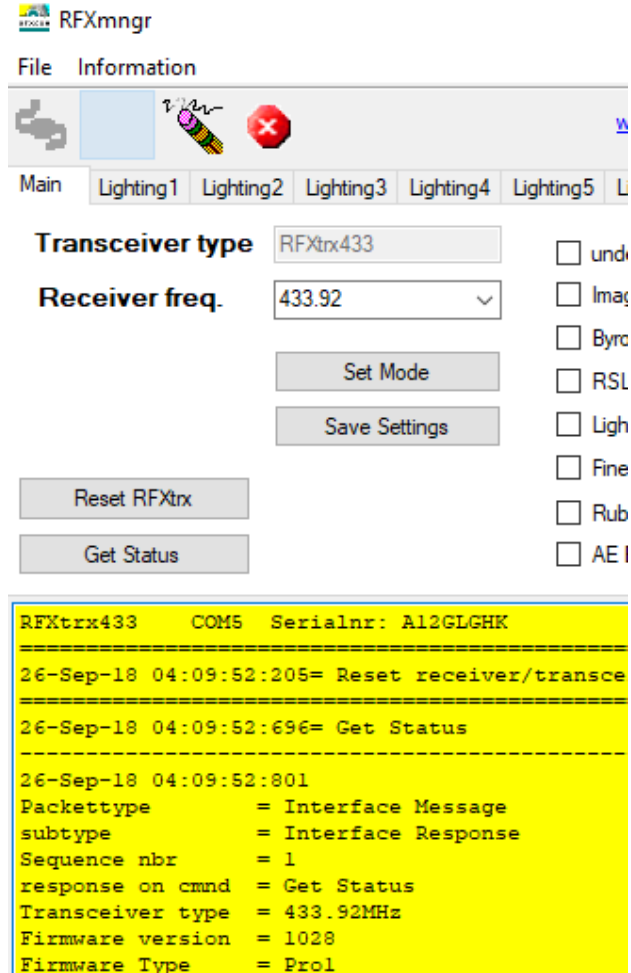
## 5.1. Récepteur

Les protocoles radio qui sont autorisés pour la réception doivent être configurés dans l'onglet « Main »

Cliquez sur le bouton « Save Settings » afin d'enregistrer la configuration courante dans la mémoire non volatile du RFXtrx, elle sera ainsi rechargée même après un redémarrage du module.

Ces paramètres sont automatiquement effacés lors de la mise à jour du firmware.

Les données reçues par le RFXtrx sont décodées et affichées dans la fenêtre jaune :



The screenshot shows the RFXmngnr application window. The title bar reads "RFXmngnr". Below the title bar is a menu bar with "File" and "Information". The main area has a toolbar with icons for a mouse, a lightbulb, a pencil, and a red 'X'. Below the toolbar is a tabbed interface with tabs for "Main", "Lighting1", "Lighting2", "Lighting3", "Lighting4", "Lighting5", and "L". The "Main" tab is active. In the "Main" tab, there are several configuration fields and buttons:

- Transceiver type:** A dropdown menu showing "RFXtrx433".
- Receiver freq.:** A dropdown menu showing "433.92".
- Buttons:** "Set Mode", "Save Settings", "Reset RFXtrx", and "Get Status".
- Checkboxes:** A vertical list of checkboxes on the right side, including "und", "Ima", "Byrc", "RSL", "Ligh", "Fine", "Rub", and "AE I".

At the bottom of the window is a yellow terminal window displaying the following text:

```
RFXtrx433 COM5 Serialnr: A12GLGHK
-----
26-Sep-18 04:09:52:205= Reset receiver/transce
-----
26-Sep-18 04:09:52:696= Get Status
-----
26-Sep-18 04:09:52:801
Packettype      = Interface Message
subtype         = Interface Response
Sequence nbr    = 1
response on cmd = Get Status
Transceiver type = 433.92MHz
Firmware version = 1028
Firmware Type   = Prol
```

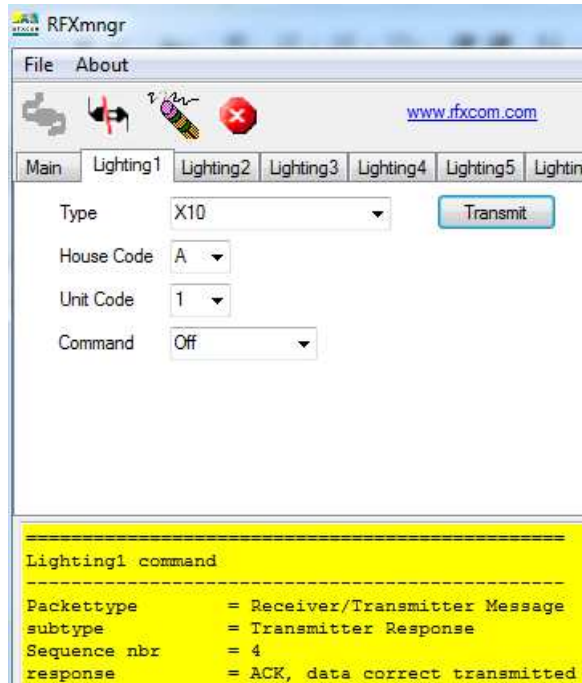


## 5.2. Emetteur

Les différents onglets à la suite de l'onglet « Main » permettent d'émettre des commandes dans les différents protocoles supportés par le RFXtrx.

Les protocoles sont regroupés suivant la configuration qui leur est nécessaire.  
Par exemple, Lighting1 est utilisée pour émettre en X10, ARC, etc...

Il faut se reporter à la documentation du SDK pour avoir une liste complète des protocoles pour chaque onglet.



Les commandes émises sont affichées dans la fenêtre jaune.  
L'acquittement renvoyé par le RFXtrx est aussi affiché.  
Dans l'exemple, L'acquittement ACK indique que les données ont été transmises correctement.

## 6. Mise à jour du RFXtrx

### 6.1. Mise à jour du firmware RFXtrx

Le Firmware du RFXtrx433 peut être mis jour en utilisant la procédure suivante :

1. Télécharger la dernière version du firmware: RFXtrx315\_yy.hex, RFXrec433\_yy.hex, RFXtrx433\_yy.hex ou RFXtrx433XL\_yy.hex.
2. Connecter le RFXtrx sur un PC Windows ou Linux (avec MONO)
3. Arrêter toute application utilisant le RFXtrx
4. Démarrer le programme de mise à jour avec Administrator rights (RFXflash version 9.0.0.0 minimum).
5. Sélectionner le port COM ou TCP/IP port correspondant à votre RFXtrx dans le logiciel RFXflash et cliquer sur le bouton « CONNECT »,  
(La LED rouge doit s'allumer)
6. Charger le fichier .hex correspondant au firmware,
7. Cliquer sur le bouton WRITE,
8. Cliquer sur le bouton « Normal Execution Mode ».

#### IMPORTANT:

1. Ne jamais interrompre la procédure de flash une fois qu'elle a démarrée.
2. Il est possible que vous ayez une boîte de dialogue indiquant qu'il y a eu une erreur. Dans ce cas, déconnecter et reconnecter le RFXtrx, puis reprendre à l'étape 5 ci-dessus jusqu'à ce que la procédure se déroule correctement.

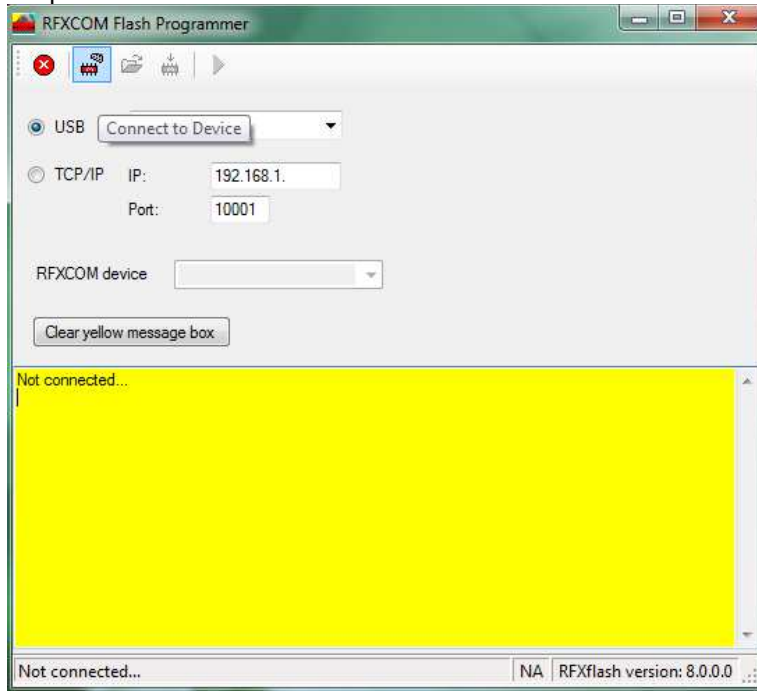
Si la LED rouge ne s'allume pas lorsque vous cliquez sur le bouton Connect :

1. Vérifiez que vous avez choisi le bon port COM USB.
2. Si vous avez flashé le RFXtrx et que la procédure c'est mal passée, il est possible que le module soit dans un état qui ne permet plus de le mettre à jour. Dans ce cas, contactez directement le support RFXCOM : [support@rfxcom.com](mailto:support@rfxcom.com).

**Note:** Les paramètres du RFXtrx seront automatiquement écrasés lors d'une mise à jour de firmware (Type1/Type2) et devront être reconfigurés.

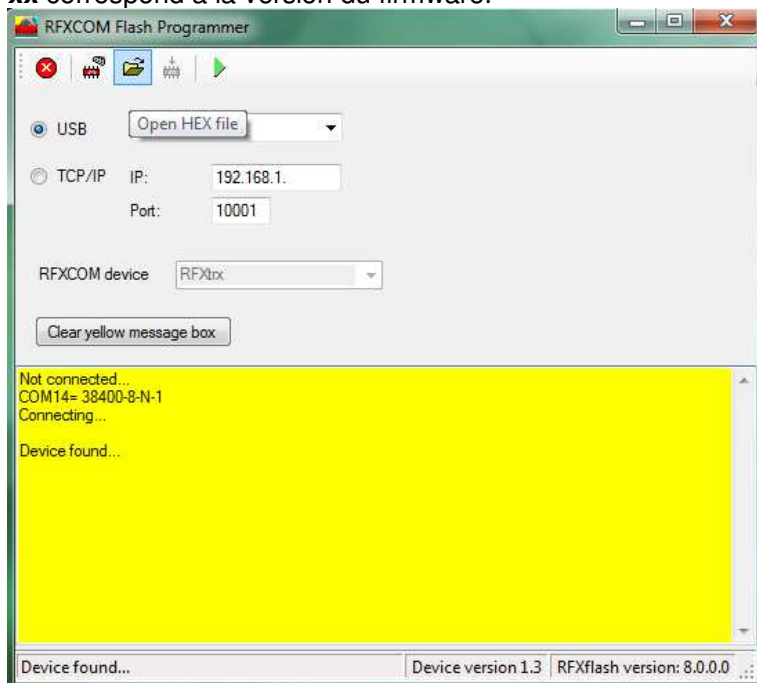
## 6.2. Mise à jour du firmware RFXtrx pas à pas

- Cliquer sur le bouton *Connect to Device* :

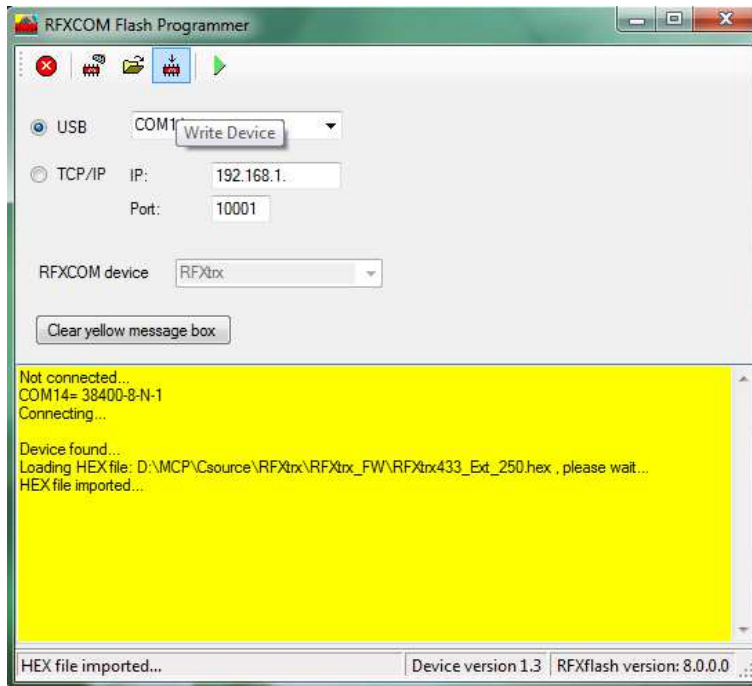


Le RFXtrx va automatiquement basculer en mode Mise à jour.  
Si le bootloader n'est pas chargé (mode mise à jour), consultez le paragraphe « forcer le bootloader ».

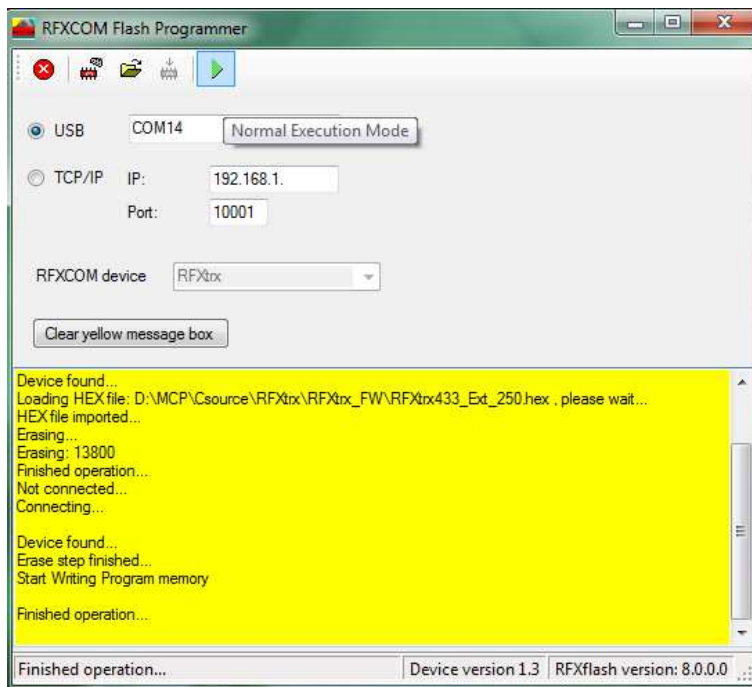
- Cliquer le bouton *Open HEX file* et charger le fichier RFXtrxyyy ??\_xx.hex  
Prenez bien attention à toujours charger le dernier firmware disponible.  
**yyy** correspond à la fréquence RFXtrx433 pour un module RFXtrx433!  
**?? XL** pour un module RFXtrx433XL  
**xx** correspond à la version du firmware.



- Cliquez sur le bouton « Write device button » pour flasher le RFXtrx.



- Cliquez sur le bouton « Normal Execution Mode » pour passer le RFXtrx en mode exécution.



**Note:** Les paramètres du RFXtrx seront automatiquement écrasés lors d'une mise à jour de firmware (Type1/Type2) et devront être reconfigurés.

## 7. RFXtrx433 Code tables

### 7.1. Remote commands

#### 7.1.1. X10 RF Remote

Dec	Hex	Button
2	02	0
18	12	8
34	22	4
56	38	Rewind
58	3A	Info
64	40	CHAN+
66	42	2
82	52	Ent
96	60	VOL+
98	62	6
99	63	Stop
100	64	Pause
112	70	Cursor-left
113	71	Cursor-right
114	72	Cursor-up
115	73	Cursor-down
116	74	Cursor-up-left
117	75	Cursor-up-right
118	76	Cursor-down-right
119	77	Cursor-down-left
120	78	left mouse
121	79	left mouse-End
123	7B	Drag
124	7C	right mouse
125	7D	right mouse-End
130	82	1
146	92	9
160	A0	MUTE
162	A2	5
176	B0	Play
182	B6	Menu
184	B8	Fast Forward
186	BA	A+B
192	C0	CHAN-
194	C2	3
201	C9	Exit
209	D1	MP3
210	D2	DVD
211	D3	CD
212	D4	PC / Shift-4
213	D5	Shift-5
214	D6	Shift-Ent
215	D7	Shift-Teletext
216	D8	Text
217	D9	Shift-Text
224	E0	VOL-
226	E2	7
242	F2	Teletext
255	FF	Record

## 7.1.2. ATI Remote Wonder

Dec	Hex	Button	57	39	Full screen
0	00	A	58	3A	DVD Audio
1	01	B	112	70	Cursor-left
2	02	power	113	71	Cursor-right
3	03	TV	114	72	Cursor-up
4	04	DVD	115	73	Cursor-down
5	05	?	116	74	Cursor-up-left
6	06	Guide	117	75	Cursor-up-right
7	07	Drag	118	76	Cursor-down-right
8	08	VOL+	119	77	Cursor-down-left
9	09	VOL-	120	78	V
10	0A	MUTE	121	79	V-End
11	0B	CHAN+	124	7C	X
12	0C	CHAN-	125	7D	X-End
13	0D	1			
14	0E	2			
15	0F	3			
16	10	4			
17	11	5			
18	12	6			
19	13	7			
20	14	8			
21	15	9			
22	16	txt			
23	17	0			
24	18	snapshot ESC			
25	19	C			
26	1A	^			
27	1B	D			
28	1C	TV/RADIO			
29	1D	<			
30	1E	OK			
31	1F	>			
32	20	<-			
33	21	E			
34	22	v			
35	23	F			
36	24	Rewind			
37	25	Play			
38	26	Fast forward			
39	27	Record			
40	28	Stop			
41	29	Pause			
44	2C	TV			
45	2D	VCR			
46	2E	RADIO			
47	2F	TV Preview			
48	30	Channel list			
49	31	Video Desktop			
50	32	red			
51	33	green			
52	34	yellow			
53	35	blue			
54	36	rename TAB			
55	37	Acquire image			
56	38	edit image			

### 7.1.3. ATI Remote Wonder Plus

Dec	Hex	Button
0	00	A
1	01	B
2	02	power
3	03	TV
4	04	DVD
5	05	?
6	06	Guide
7	07	Drag
8	08	VOL+
9	09	VOL-
10	0A	MUTE
11	0B	CHAN+
12	0C	CHAN-
13	0D	1
14	0E	2
15	0F	3
16	10	4
17	11	5
18	12	6
19	13	7
20	14	8
21	15	9
22	16	txt
23	17	0
24	18	Open Setup Menu
25	19	C
26	1A	^
27	1B	D
28	1C	FM
29	1D	<
30	1E	OK
31	1F	>
32	20	Max/Restore Window
33	21	E
34	22	v
35	23	F
36	24	Rewind
37	25	Play
38	26	Fast forward
39	27	Record
40	28	Stop
41	29	Pause
42	2A	TV2
43	2B	Clock
44	2C	TV
45	2D	VCR
46	2E	RADIO
47	2F	TV Preview
48	30	Channel list
49	31	Video Desktop
50	32	red
51	33	green
52	34	yellow
53	35	blue
54	36	rename TAB
55	37	Acquire image
56	38	edit image
57	39	Full screen
58	3A	DVD Audio
112	70	Cursor-left
113	71	Cursor-right
114	72	Cursor-up
115	73	Cursor-down
116	74	Cursor-up-left
117	75	Cursor-up-right
118	76	Cursor-down-right
119	77	Cursor-down-left
120	78	Left Mouse Button
121	79	V-End
124	7C	Right Mouse Button
125	7D	X-End

## 7.1.4. Medion Remote

Dec	Hex	Button	Dec	Hex	Button
0	00	Mute	55	37	Acquire image
1	01	B	56	38	edit image
2	02	power	57	39	Full screen
3	03	TV	58	3A	DVD Audio
4	04	DVD	112	70	Cursor-left
5	05	Photo	113	71	Cursor-right
6	06	Music	114	72	Cursor-up
7	07	Drag	115	73	Cursor-down
8	08	VOL-	116	74	Cursor-up-left
9	09	VOL+	117	75	Cursor-up-right
10	0A	MUTE	118	76	Cursor-down-right
11	0B	CHAN+	119	77	Cursor-down-left
12	0C	CHAN-	120	78	V
13	0D	1	121	79	V-End
14	0E	2	124	7C	X
15	0F	3	125	7D	X-End
16	10	4			
17	11	5			
18	12	6			
19	13	7			
20	14	8			
21	15	9			
22	16	txt			
23	17	0			
24	18	snapshot ESC			
25	19	DVD MENU			
26	1A	^			
27	1B	Setup			
28	1C	TV/RADIO			
29	1D	<			
30	1E	OK			
31	1F	>			
32	20	<-			
33	21	E			
34	22	v			
35	23	F			
36	24	Rewind			
37	25	Play			
38	26	Fast forward			
39	27	Record			
40	28	Stop			
41	29	Pause			
44	2C	TV			
45	2D	VCR			
46	2E	RADIO			
47	2F	TV Preview			
48	30	Channel list			
49	31	Video Desktop			
50	32	red			
51	33	green			
52	34	yellow			
53	35	blue			
54	36	rename TAB			



## 7.2. Harrison address conversion to switch settings

The address used is converted to the address selected in the Harrison curtain motor using the table below.

switch	1	2	3	4		5	6	7	8
	H	H	H	H		X	X	X	X
A	0	1	1	0	1	0	0	0	0
B	0	1	1	1	2	0	0	0	1
C	0	1	0	0	3	0	0	1	0
D	0	1	0	1	4	0	0	1	1
E	1	0	0	0	5	0	1	0	0
F	1	0	0	1	6	0	1	0	1
G	1	0	1	0	7	0	1	1	0
H	1	0	1	1	8	0	1	1	1
I	1	1	1	0	9	1	0	0	0
J	1	1	1	1	10	1	0	0	1
K	1	1	0	0	11	1	0	1	0
L	1	1	0	1	12	1	0	1	1
M	0	0	0	0	13	1	1	0	0
N	0	0	0	1	14	1	1	0	1
O	0	0	1	0	15	1	1	1	0
P	0	0	1	1	16	1	1	1	1

H H H H = House code

X X X X = device code

Switch position in the motor:

Up = 1

Middle = not used!!!!

Down = 0

Examples:

If you assign the address E7 (1000 0110) to the curtain motor then set the switches to: 1=up, 2=down, 3=down, 4=down, 5=down, 6=up, 7=up, 8=down

If you assign the address A2 (0110 0001) to the curtain motor then set the switches to: 1=down, 2=up, 3=up, 4=down, 5=down, 6=down, 7=down, 8=up

### 7.3. Flamingo, AB400, IMPULS, Sartano, Brennenstuhl, SilverCrest 91089, Cranenbroek switch settings

Utiliser ELRO AB400D

Remarque : Le code HC (House Code A-P) correspond au code maison utilisé dans l'application, et n'a aucune relation avec les codes A, B, C, D, E correspondant aux boutons des télécommandes.

```

      1 2 3 4  <== switches
HC=====
A   0 0 0 0
B   0 0 0 1
C   0 0 1 0
D   0 0 1 1
E   0 1 0 0
F   0 1 0 1
G   0 1 1 0
H   0 1 1 1
I   1 0 0 0
J   1 0 0 1
K   1 0 1 0
L   1 0 1 1
M   1 1 0 0
N   1 1 0 1
O   1 1 1 0
P   1 1 1 1

```

```

      5 A B C D E      5 A B C D E  <== switches
      5 6 7 8 9 10    5 6 7 8 9 10  <== OR switches
DC=====DC=====
1   0 0 0 0 0 0 0 33  0 0 0 0 0 1
2   0 0 0 1 0 0 0 34  0 0 0 1 0 1
3   0 0 1 0 0 0 0 35  0 0 1 0 0 1
4   0 0 1 1 0 0 0 36  0 0 1 1 0 1
5   0 1 0 0 0 0 0 37  0 1 0 0 0 1
6   0 1 0 1 0 0 0 38  0 1 0 1 0 1
7   0 1 1 0 0 0 0 39  0 1 1 0 0 1
8   0 1 1 1 0 0 0 40  0 1 1 1 0 1
9   1 0 0 0 0 0 0 41  1 0 0 0 0 1
10  1 0 0 1 0 0 0 42  1 0 0 1 0 1
11  1 0 1 0 0 0 0 43  1 0 1 0 0 1
12  1 0 1 1 0 0 0 44  1 0 1 1 0 1
13  1 1 0 0 0 0 0 45  1 1 0 0 0 1
14  1 1 0 1 0 0 0 46  1 1 0 1 0 1
15  1 1 1 0 0 0 0 47  1 1 1 0 0 1
16  1 1 1 1 0 0 0 48  1 1 1 1 0 1
17  0 0 0 0 0 1 0 49  0 0 0 0 1 1
18  0 0 0 1 1 0 0 50  0 0 0 1 1 1
19  0 0 1 0 1 0 0 51  0 0 1 0 1 1
20  0 0 1 1 1 0 0 52  0 0 1 1 1 1
21  0 1 0 0 1 0 0 53  0 1 0 0 1 1
22  0 1 0 1 1 0 0 54  0 1 0 1 1 1
23  0 1 1 0 1 0 0 55  0 1 1 0 1 1
24  0 1 1 1 1 0 0 56  0 1 1 1 1 1
25  1 0 0 0 1 0 0 57  1 0 0 0 1 1
26  1 0 0 1 1 0 0 58  1 0 0 1 1 1
27  1 0 1 0 1 0 0 59  1 0 1 0 1 1
28  1 0 1 1 1 0 0 60  1 0 1 1 1 1
29  1 1 0 0 1 0 0 61  1 1 0 0 1 1
30  1 1 0 1 1 0 0 62  1 1 0 1 1 1
31  1 1 1 0 1 0 0 63  1 1 1 0 1 1
32  1 1 1 1 1 0 0 64  1 1 1 1 1 1

```

Examples:

```

A1   0 0 0 0 0 0 0 0 0
A15  0 0 0 0 1 1 1 0 0
N2   1 1 0 1 0 0 0 1 0
N11  1 1 0 1 1 0 1 0 0

```

0 = switch off  
1 = switch on

## 7.4. Energenie 5-gang 429.950

To know the codes to use open the remote and check the 1 to 5 jumpers connected. If a jumper connection is open it is a 1. If connected it is a 0 (zero)

	1	2	3	4	jumper setting in the remote
HC=====					
A	0	0	0	0	
B	0	0	0	1	
C	0	0	1	0	
D	0	0	1	1	
E	0	1	0	0	
F	0	1	0	1	
G	0	1	1	0	
H	0	1	1	1	
I	1	0	0	0	
J	1	0	0	1	
K	1	0	1	0	
L	1	0	1	1	
M	1	1	0	0	
N	1	1	0	1	
O	1	1	1	0	
P	1	1	1	1	

If jumper 5 is open (1) than add 5 to the remote code.

Examples:

Jumper	1	2	3	4	5	Button Code
1 0 0 0 0	1					I1
1 0 0 0 1	1					I6

## 7.5. Phenix, IDK YC-4000S switch settings

Utiliser ELRO AB400D

Remarque : Le code HC (House Code A-P) correspond au code maison utilisé dans l'application, et n'a aucune relation avec les codes A, B, C, D, E correspondant aux boutons des télécommandes.

```
HC  switch
    1 2 3 4
```

```
=====
A   0 0 0 0
B   0 0 0 1
C   0 0 1 0
D   0 0 1 1
E   0 1 0 0
F   0 1 0 1
G   0 1 1 0
H   0 1 1 1
I   1 0 0 0
J   1 0 0 1
K   1 0 1 0
L   1 0 1 1
M   1 1 0 0
N   1 1 0 1
O   1 1 1 0
P   1 1 1 1
```

```
DC  switch
    5 A B C D
```

```
=====
1   0 0 0 0 0
2   0 0 0 1 0
3   0 0 1 0 0
4   0 0 1 1 0
5   0 1 0 0 0
6   0 1 0 1 0
7   0 1 1 0 0
8   0 1 1 1 0
9   1 0 0 0 0
10  1 0 0 1 0
11  1 0 1 0 0
12  1 0 1 1 0
13  1 1 0 0 0
14  1 1 0 1 0
15  1 1 1 0 0
16  1 1 1 1 0
17  0 0 0 0 1
18  0 0 0 1 1
19  0 0 1 0 1
20  0 0 1 1 1
21  0 1 0 0 1
22  0 1 0 1 1
23  0 1 1 0 1
24  0 1 1 1 1
25  1 0 0 0 1
26  1 0 0 1 1
27  1 0 1 0 1
28  1 0 1 1 1
29  1 1 0 0 1
30  1 1 0 1 1
31  1 1 1 0 1
32  1 1 1 1 1
```

## 7.6. HE105 switch settings

Unitnr	HE105 switches
	1 2 3 4 5
0	0 0 0 0 0
1	0 0 0 0 1
2	0 0 0 1 0
3	0 0 0 1 1
4	0 0 1 0 0
5	0 0 1 0 1
6	0 0 1 1 0
7	0 0 1 1 1
8	0 1 0 0 0
9	0 1 0 0 1
10	0 1 0 1 0
11	0 1 0 1 1
12	0 1 1 0 0
13	0 1 1 0 1
14	0 1 1 1 0
15	0 1 1 1 1
16	1 0 0 0 0
17	1 0 0 0 1
18	1 0 0 1 0
19	1 0 0 1 1
20	1 0 1 0 0
21	1 0 1 0 1
22	1 0 1 1 0
23	1 0 1 1 1
24	1 1 0 0 0
25	1 1 0 0 1
26	1 1 0 1 0
27	1 1 0 1 1
28	1 1 1 0 0
29	1 1 1 0 1
30	1 1 1 1 0
31	1 1 1 1 1

## 7.7. HQ COCO-20

Remarque : Le code HC (House Code A-P) correspond au code maison utilisé dans l'application, et n'a aucune relation avec les codes A, B, C, D, E correspondant aux boutons des télécommandes.

```

    6 7 8 9 <== switches in module
HC=====
A   0 0 0 0
B   0 0 0 1
C   0 0 1 0
D   0 0 1 1
E   0 1 0 0
F   0 1 0 1
G   0 1 1 0
H   0 1 1 1
I   1 0 0 0
J   1 0 0 1
K   1 0 1 0
L   1 0 1 1
M   1 1 0 0
N   1 1 0 1
O   1 1 1 0
P   1 1 1 1

    10 1 2 3 4 5          10 1 2 3 4 5 <== switches in module
DC=====DC=====
1   0 0 0 0 0 0    33  1 0 0 0 0 0
2   0 0 0 0 0 1    34  1 0 0 0 0 1
3   0 0 0 0 1 0    35  1 0 0 0 1 0
4   0 0 0 0 1 1    36  1 0 0 0 1 1
5   0 0 0 1 0 0    37  1 0 0 1 0 0
6   0 0 0 1 0 1    38  1 0 0 1 0 1
7   0 0 0 1 1 0    39  1 0 0 1 1 0
8   0 0 0 1 1 1    40  1 0 0 1 1 1
9   0 0 1 0 0 0    41  1 0 1 0 0 0
10  0 0 1 0 0 1    42  1 0 1 0 0 1
11  0 0 1 0 1 0    43  1 0 1 0 1 0
12  0 0 1 0 1 1    44  1 0 1 0 1 1
13  0 0 1 1 0 0    45  1 0 1 1 0 0
14  0 0 1 1 0 1    46  1 0 1 1 0 1
15  0 0 1 1 1 0    47  1 0 1 1 1 0
16  0 0 1 1 1 1    48  1 0 1 1 1 1
17  0 1 0 0 0 0    49  1 1 0 0 0 0
18  0 1 0 0 0 1    50  1 1 0 0 0 1
19  0 1 0 0 1 0    51  1 1 0 0 1 0
20  0 1 0 0 1 1    52  1 1 0 0 1 1
21  0 1 0 1 0 0    53  1 1 0 1 0 0
22  0 1 0 1 0 1    54  1 1 0 1 0 1
23  0 1 0 1 1 0    55  1 1 0 1 1 0
24  0 1 0 1 1 1    56  1 1 0 1 1 1
25  0 1 1 0 0 0    57  1 1 1 0 0 0
26  0 1 1 0 0 1    58  1 1 1 0 0 1
27  0 1 1 0 1 0    59  1 1 1 0 1 0
28  0 1 1 0 1 1    60  1 1 1 0 1 1
29  0 1 1 1 0 0    61  1 1 1 1 0 0
30  0 1 1 1 0 1    62  1 1 1 1 0 1
31  0 1 1 1 1 0    63  1 1 1 1 1 0
32  0 1 1 1 1 1    64  1 1 1 1 1 1

```

Examples:

Switch 6 7 8 9 0 1 2 3 4 5

```

=====
A1   0 0 0 0 0 0 0 0 0 0
A15  0 0 0 0 1 1 1 0 0 0
N2   1 1 0 1 0 0 0 1 0 0
N11  1 1 0 1 1 0 1 0 0 0

```

0 = switch off

1 = switch on

## 7.8. MDREMOTE V106, V107

This MDREMOTE has been tested.

<http://www.ultraleds.co.uk/mini-dimmer-with-rf-remote-control-12-or-24v-dc-12a-maximum.html>

The RFXtrx433 can only transmit MDREMOTE commands.

Procedure to find the ID of the MDREMOTE: In RFXmngn enable the X10 protocol and enable "Undec on". Press a button on the MDREMOTE remote.

The undecoded message contains the ID in the 2<sup>nd</sup> and 3<sup>rd</sup> byte, for example:

UNDECODED NEC:20AF6801D1

The 2 bytes after 20 is the MDREMOTE ID, in this example AF 68

## 7.9. MDREMOTE V108, EKAB-10KRF

This MDREMOTE has been tested.

- <http://www.ledstripkoning.nl/accessoires/dimmers-wit/draadloze-dimmer-10-knops-rf/>

Procedure to find the ID of the MDREMOTE: In RFXmngn enable the Lighting4 protocol and enable "Undec on". Press a button on the MDREMOTE remote.

The undecoded message contains the ID in the 2<sup>nd</sup> and 3<sup>rd</sup> byte, for example:

UNDECODED ARC:201A0703FCFC

The 2 bytes after 20 is the MDREMOTE ID, in this example 1A 07

## 7.10. Aoke relay

The Aoke 12V DC - 315MHz or 433.92MHz 1 channel relay is available at [www.aliexpress.com](http://www.aliexpress.com) store No.110758. Indicate clearly the required frequency when ordering!

The 1 channel learning relays can be used, see the picture below.

For example, for 1 relay:

[http://www.aliexpress.com/store/product/DC12V-1CH-wireless-switch-remote-control-system-remote-control-switch-for-guard-door-window-curtain/110758\\_936534863.html](http://www.aliexpress.com/store/product/DC12V-1CH-wireless-switch-remote-control-system-remote-control-switch-for-guard-door-window-curtain/110758_936534863.html)

or for 6 relays:

[http://www.aliexpress.com/store/product/ak-DC12V-1CH-RF-rocker-switch-livolo-switch-system-in-china-j-12a-108d-smart-house/110758\\_1007306574.html](http://www.aliexpress.com/store/product/ak-DC12V-1CH-RF-rocker-switch-livolo-switch-system-in-china-j-12a-108d-smart-house/110758_1007306574.html)



The jumper next to the learning button defines to operating mode:  
Open = momentary  
1-2 = toggle mode  
2-3 = on/off mode (to be used with the RFXtrx)

## 7.11. SEAV TXS4

The ID can be found using RFXmngnr and enable only ByronSX and undec on.

Or calculate the ID:

A SW1 switch on = 1

```
|-----SW1-----|
 1 2 3 4 5 6 7 8 9 10
0 x x x | x x x x | x x x 0 | 0 1 0 1
```

For example SW1 = **on off on off on off on off on off**

The ID will become:

```
|-----SW1-----|
 1 2 3 4 5 6 7 8 9 10
0 1 0 1 | 0 1 0 1 | 0 1 0 0 | 0 1 0 1 this is hex: 5 5 4 5
```

## 7.12. Comment obtenir l'ID du bandeau de led RGB dx.com

Flasher le RFXtrx433 avec le firmware Type2 pour permettre la réception de l'ID grâce au logiciel RFXmngnr.

Dans le logiciel RFXmngnr, activer uniquement le protocol LightwaveRF (AD).

```
-----
Packettype = Lighting5
subtype = RGB TRC02
Sequence nbr = 5
ID = FCC48B
Command = On
Signal level = 8
The ID is: FC C4 8B
```

Si le firmware Type2 ne supporte pas votre périphérique, essayez en utilisant le firmware Type1/ext (Voir chapitre 2.2)

## 7.13. How to find the dx.com RGB LED strip driver ID (rev. 2)

Valid for the old TRC02 remote with 3 batteries and ebay.com 191481664563.

In RFXmngnr enable only the Lighting4 protocol.

```
-----
Packettype = Lighting4
subtype = PT2262
Sequence nbr = 29
Code = 161C84
The ID is: 16 1C
```

## 7.14. How to find the Eurodomest ID

You can assign a random ID to the Eurodomest. If you want to use the same ID as the remote you can find the ID of the remote using RFXmngnr.

Start RFXmngnr and enable only the Lighting4 protocol.

Press a button on the remote and you will receive a message like:

```
-----
Packettype = Lighting4
subtype = PT2262
Sequence nbr = 12
Code = 6DFE0F
The ID is: 6 DF E0
```

Note: Eurodomest can also be controlled using ARC.



### **7.15. How to find the Screenline ID**

You can assign a random ID to the Screenline. If you want to use the same ID as the remote you can find the ID of the remote using RFXmng.

Start RFXmng and enable only the Lighting4 protocol and undec on.  
Press a button on the remote and you will receive a message like:

```
-----  
Packettype = UNDECODED RF Message  
UNDECODED ARC:40000F7BD1D2AF04B7
```

The ID starts at the 7<sup>th</sup> character, in this example the ID = **7B D1**

### **7.16. How to find the AvanteK remote ID**

You can find the ID of the remote using RFXmng.

Start RFXmng and enable only the Lighting4 protocol.

Press a button on the remote and you will receive a message like:

```
Packettype      = Lighting4  
subtype         = PT2262  
Sequence nbr   = 3  
Code            = 122336 decimal:1188662  
S1- S24        = 0001 0010 0010 0011 0011 0110  
Pulse           = 280 usec  
Signal level    = 7 -64dBm
```

The ID to be used is **1 22 33**

## 8. commande Blyss

Certains périphériques Blyss comme les moteurs nécessitent des commandes spéciales incluant un numéro de séquence. Pour simplifier 0,1,2,3,4,0,1,....

Ce numéro de séquence est créé par les télécommandes Blyss, mais aussi par le RFXtrx433.

Si vous utilisez une télécommande Blyss en parallèle, il est possible qu'ensuite l'application (Homeseer, Domoticz, DomotiGa...) utilisant le RFXtrx433 ne soit pas synchronisée avec votre périphérique Blyss. Il faudra alors envoyer plusieurs commandes afin de resynchroniser le module.

Le problème est le même si vous utilisez le RFXtrx433 pour piloter le module Blyss et que vous utilisez ensuite la télécommande. Celle-ci ne fonctionnera qu'après s'être resynchronisée, nécessitant parfois l'émission de plusieurs commandes avant que le périphérique ne fonctionne.

## 9. Somfy RTS

Les périphériques Somfy RTS\* peuvent être piloté uniquement par le RFXtrx433E / RFXtrx433XL.  
(Pas par le RFXtrx433 simple)

La version RFXtrx433E/RFXtrx433XL intègre une extension matérielle permettant la gestion du protocole RFY utilisé par les périphériques Somfy RTS.

**L'émetteur 433.42 Mhz se trouvant dans le transceiver est utilisé pour contrôler les équipements SOMFY RTS sur une grande distance et à travers les murs.**

L'émetteur 433.92 Mhz du transceiver est utilisé pour interagir avec tous les autres équipements contrôlables par le RFXtrx433E/RFXtrx433XL.

Pour associer un périphérique Somfy :

\* Sélectionner un identifiant unique (ID) et un code unité (unitcode) pour le périphérique RFXCOM RFY.

\* Déconnecter l'alimentation de tous les modules Somfy RTS sauf celui à associer.

\* Appuyer sur le bouton d'association pendant 2 secondes sur la télécommande Somfy d'origine jusqu'à ce que le périphérique Somfy réagisse.

\* Transmettre un code de programmation avec le RFXtrx433E/RFXtrx433XL. Le périphérique Somfy doit réagir pour confirmer la prise en compte de l'association.

La télécommande RFXCOM RFY est alors enregistrée dans le RFXtrx433E/RFXtrx433XL

Il est possible d'enregistrer jusqu'à 40 télécommande Somfy sur le RFXtrx433E/RFXtrx433XL.

Les télécommandes enregistrées peuvent être supprimées en utilisant le logiciel RFXmng.

Les périphériques Somfy peuvent être contrôlés par plusieurs applications différentes si l'identifiant ID et le code unité unitcode est utilisé.

Par exemple, si un périphérique RTS est associé avec le RFXtrx433E/RFXtrx433XL en utilisant le RFXMng avec l'ID 1 02 03 et le code Unité 1, le périphérique pourra être contrôlé dans Homeseer en utilisant les mêmes informations.

### **Usage :**

Pour contrôler les modules Somfy Centralis, utilisez les commandes > 2 secondes (RFY2).

Somfy Tilt motors can be configured in 2 modes, US or European.

To toggle between modes, press the Reset/ Prog button 2 s. Repeat until the LED, according to the desired configuration, lights up. Store by pressing 2 s.

To control Venetian Blinds in US mode:

- up/down (transmit < 0.5 seconds): open or close
- up/down (transmit > 2seconds): change angle

To control Venetian Blinds in Europe mode:

- up/down (transmit < 0.5 seconds): change angle
- up/down (transmit > 2seconds): open or close

Somfy RTS motors have a limited number of memory locations for the remotes. Some have a max of 10 remotes. If you try to pair the 11th remote (can be a RFXtrx433E/RFXtrx433XL ID-unit) the motor reacts as if the pairing was successful but there is no response on an up/down command. To solve this, reset the motor to remove all remotes.

\* Somfy RTS est une marque déposée de la société Somfy System, Inc.

## 9.1. How to move RFX devices to another RFXtrx433E or RFXtrx433XL

Important: If an RFX devices is moved to another RFXtrx433E/XL do not use the old RFXtrx433E/XL to control the RFX devices.

Because the rolling code will become out of sync with the Somfy device.

Step 1: List all RFX devices in the “old” RFXtrx433E or RFXtrx433XL.

RFXmngnr  
File Information

www.rfxcom.com

Main Lighting1 Lighting2 Lighting3 Lighting4 Lighting5 Lighting6 HC FunkBus Chime Fan Curtain Blinds1 RFX

Type: RFX Transmit

ID: 0 00 00

Unit Code: 1

Command: List remotes

rfu1: 00

rfu2: 00

rfu3: 00

Use \* commands with care as they can delete or set parameters in the m

Venetian Blind in US mode:  
- up/down (transmit < 0.5 seconds): open or close  
- up/down (transmit > 2seconds): change angle

Venetian Blind in Europe mode:  
- up/down (transmit < 0.5 seconds): change angle  
- up/down (transmit > 2seconds): open or close

```

=====
02-Dec-18 03:13:53:971= RFX command
=====
Packettype = RFX
subtype = RFX
Sequence nbr = 18
idl-3 = 000000 decimal:0
Unit = 1
Command = List remotes
rfu1 = 00
rfu2 = 00
rfu3 = 00
Signal level = +10 dBm
=====
02-Dec-18 03:13:54:284
Packettype = Interface Message
subtype = RFX remote:0 ID:00 00 01 unitnbr:1 rfu1:A4 rfu2:0 rfu3:14

```

Step 2: Connect the “new” RFXtrx433E or RFXtrx433XL.

Select the ID, Unit Code, rfu1, rfu2 and rfu3 values.

Transmit a Program command. The values are now programmed in the “new” RFXtrx and the Somfy device can be controlled with this RFXtrx.

Transmit an Up and Down command to be sure the motor is no longer in program mode!

RFXmngnr  
File Information

www.rfxcom.com

Main Lighting1 Lighting2 Lighting3 Lighting4 Lighting5 Lighting6 HC FunkBus Chime Fan Curtain Blinds1 RFX

Type: RFX Transmit

ID: 0 00 01

Unit Code: 1

Command: Program

rfu1: A4

rfu2: 00

rfu3: 14

Use \* commands with care as they can delete or set parameters in the m

Venetian Blind in US mode:  
- up/down (transmit < 0.5 seconds): open or close  
- up/down (transmit > 2seconds): change angle

Venetian Blind in Europe mode:  
- up/down (transmit < 0.5 seconds): change angle  
- up/down (transmit > 2seconds): open or close

## 10. BlindsT6

Pour ajouter un émetteur RFXtrx433/E/XL (protocole Blinds T6) au moteur du volet :

- appuyer sur la touche "program" (P2) de la télécommande d'origine 2 fois ==> 2 bips
- transmettre la commande "confirm" avec le RFXtrx433/E/XL ==> 5 bips de confirmation

### 10.1. Dooya DT52E, DT82TV, DT82TN

- Select a random ID different from all zeroes and a unit code 1 to 15
- Press the program button on the motor until the LED lights up
- Transmit a Confirm command
- The LED on the motor starts blinking
- Transmit again a Confirm command
- The LED on the motor blinks 5 times
- The motor can be controlled now by the RFXtrx433/E/XL

## 11. ID switches Casafan and Lucci Air fans

Select the ID for switch settings:

ID	Remote switches
	1 2 3 4
0	0 0 0 0
1	0 0 0 1
2	0 0 1 0
3	0 0 1 1
4	0 1 0 0
5	0 1 0 1
6	0 1 1 0
7	0 1 1 1
8	1 0 0 0
9	1 0 0 1
A	1 0 1 0
B	1 0 1 1
C	1 1 0 0
D	1 1 0 1
E	1 1 1 0
F	1 1 1 1

For LucciAir AC fan: 0 = ON

For Casafan and LucciAir DC fan: 1 = ON

## 12. Transmit Funkbus (Insta, Gira, Jung, Berker)

With Pro2 or ProXL1 firmware you can transmit Funkbus commands using ID : 3F CC.  
If the Home Automation application has Funkbus control not implemented, you can use an ANSLUT device instead.

The 1st digit of the ID indicates the Group.

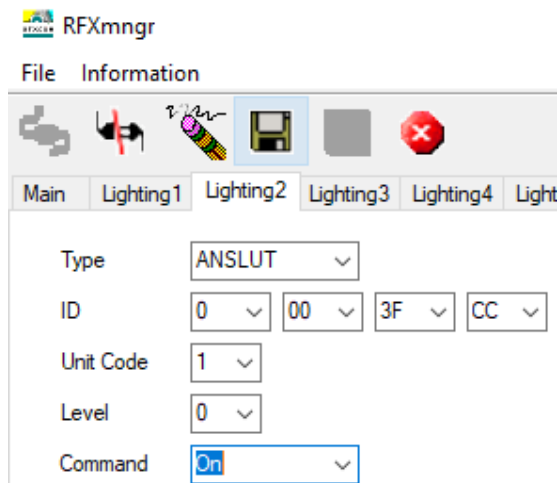
0 = A,  
1 = B,  
2 = C,  
3 = Scenes

The last 2 bytes are the remote ID: 3F CC.

For de groups A, B en C: Unit code 1-8 = channel 1-8

For group Scenes (3) : Unit code 1-5 = scene 1-5.

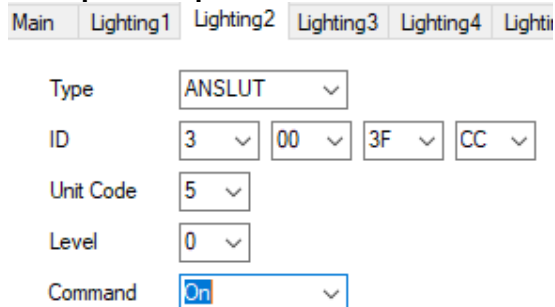
### Example Group A - Channel 1 - On



The screenshot shows the RFXmngnr software interface. At the top, there is a menu bar with 'File' and 'Information'. Below the menu bar is a toolbar with several icons. The main window has a tabbed interface with tabs for 'Main', 'Lighting1', 'Lighting2', 'Lighting3', 'Lighting4', and 'Lighting5'. The 'Lighting1' tab is selected. The configuration panel for 'Lighting1' is shown, with the following settings:

- Type: ANSLUT
- ID: 0, 00, 3F, CC
- Unit Code: 1
- Level: 0
- Command: On

### Example Group Scenes – Scene 5 - On



The screenshot shows the RFXmngnr software interface. At the top, there is a menu bar with 'File' and 'Information'. Below the menu bar is a toolbar with several icons. The main window has a tabbed interface with tabs for 'Main', 'Lighting1', 'Lighting2', 'Lighting3', 'Lighting4', and 'Lighting5'. The 'Lighting2' tab is selected. The configuration panel for 'Lighting2' is shown, with the following settings:

- Type: ANSLUT
- ID: 3, 00, 3F, CC
- Unit Code: 5
- Level: 0
- Command: On

### 13. Transmit undecoded ARC commands.

Plug-in modules or other equipment with a PT2262 can be controlled using Lighting4. There are a lot of brands using the PT2262 and some of them use the same timing (350) as used by the ARC devices but a different protocol definition.

Messages will be received as undecoded ARC messages if the protocol definition does not match the definition of the ARC protocol. Remote commands are received as ARC commands with a wrong house and device code and/or command code or as undecoded ARC messages if “undec on” is enabled. Decoding of these remotes is therefore not possible because they overlap the ARC protocol partly.

But transmitting these commands is possible using the Lighting4 command.

So, if we receive this command UNDECODED ARC:18014403:  
(18 is not used)

hex to binary table

```

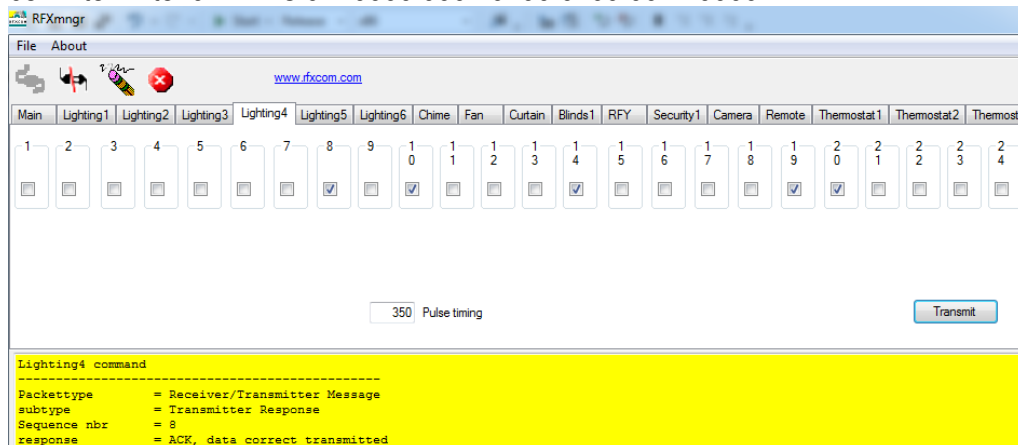
0=0 0 0 0
1=0 0 0 1
2=0 0 1 0
3=0 0 1 1
4=0 1 0 0
5=0 1 0 1
6=0 1 1 0
7=0 1 1 1
8=1 0 0 0
9=1 0 0 1
A=1 0 1 0
B=1 0 1 1
C=1 1 0 0
D=1 1 0 1
E=1 1 1 0
F=1 1 1 1
    
```

0 1 4 4 0 3 = selection box 0000 0001 0100 0100 0000 0011  
Not selected = 0, box selected = 1

And the Lighting4 command contains the same “undec code” 01 44 03:  
Lighting4 command:09 13 00 04 **01 44 03** 01 5E 00  
pulse timing is 350 = hex 015E

Another example:

For this command UNDECODED ARC:18014430 set on the Lighting4 tab in RFXmngnr selection box 1 to 24 to 0 1 4 4 3 0 = 0000 0001 0100 0100 0011 0000



## 14. Poêle et insert à granulés/pellets MCZ.

### RFXtrx433/RFXtrx433E:

Dans le fichier archive zip firmware Type2, qui est disponible dans la page de téléchargement du site, se trouve le firmware speciale RFXtrxMCZ.hex. Celui-ci permet le décodage de l'ID de la télécommande MCZ.

Flashez le fichier RFXtrxMCZ.hex sur le RFXtrx433/E/XL et démarrez l'application RFXmngr.

### RFXtrx433XL:

In RFXmngr select Receiver Freq 434.50 and enable MCZ

A chaque commande transmise par la télécommande MCZ, l'application RFXmngr doit recevoir les informations comme ci-dessous.

Cet exemple donne l'ID égal à 0x81 0x3F 0x22

```
Packettype = Thermostat4
subtype    = MCZ pellet stove 2 fans model
Sequence nbr = 0
ID         = 0x813F22 decimal:8470306
Beep       = Yes
Fan1 speed = 1
Fan2 speed = 7
Flame power = 1
Command    = Off
Signal level = 6 -72dBm
```

Reflashez ensuite le RFXtrx433/RFXtrx433E avec le firmware Type2 ou Ext et vous pouvez piloter le poêle/insert MCZ en utilisant l'ID de votre télécommande.

Important : Il est impératif d'enlever les piles de la télécommande MCZ afin de s'assurer que le RFXtrx433/E/XL et la télécommande ne fonctionnent pas en même temps!





## 15.5. Sonoff

All Sonoff 433MHz RF receiver devices can be controlled by the RFXtrx433/E/XL using Lighting4 with a pulse timing of 370usec.

The 4 button Sonoff Lighting4 remote code:

The last digit indicates the button:

A 0001 hex 1  
B 0010 hex 2  
C 0100 hex 4  
D 1000 hex 8

The first 5 digits are the ID. Here an example of ID=D216B button=A

Packettype = Lighting4

subtype = PT2262

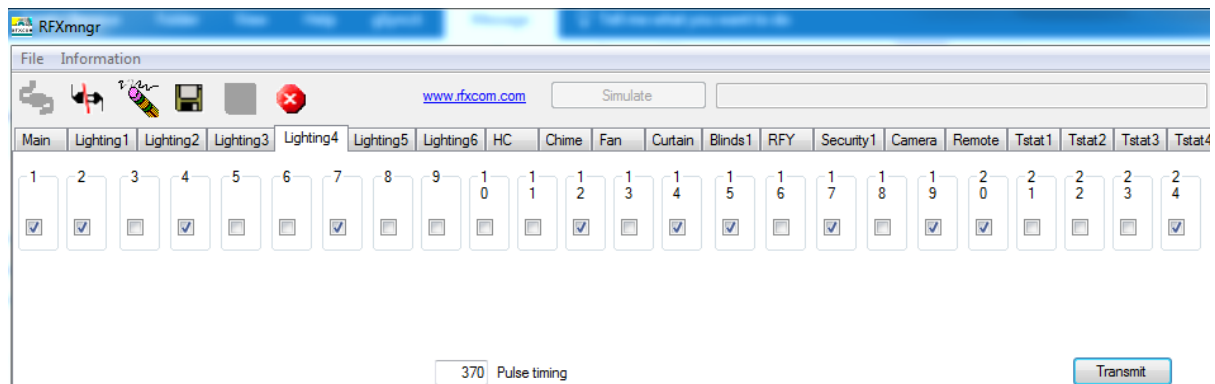
Sequence nbr = 1

Code = D216B1 decimal:13768369

S1- S24 = 1101 0010 0001 0110 1011 0001

Pulse = 370 usec

Signal level = 8 -56dBm



The Lighting4 commands can be used for example to control the 4 relays in a Sonoff 4CH Pro [https://www.banggood.com/SONOFF-4CH-Pro-10A-2200W-2\\_4Ghz-433MHz-RF-InchingSelf-LockingInterlock-Smart-Home-p-1153324.html](https://www.banggood.com/SONOFF-4CH-Pro-10A-2200W-2_4Ghz-433MHz-RF-InchingSelf-LockingInterlock-Smart-Home-p-1153324.html)

## 15.6. PT2262 and EV1527 oscillator resistors accepted

For the PT2262 use a 3M3 oscillator resistor

For the EV1527 a 220K, 270K or 390K oscillator resistor can be used.

## 16. Receive and Transmit RAW data

The Pro firmware can receive and transmit RAW data. This can be used to replay received data received from a remote. Note that this can only be used for a protocol with fixed code and rolling code cannot be used.

It is unknown if and how this is implemented in Home Automation applications!

Here an example of a packet received from an ARC remote in RFXmng:

```
RAW Packet:
687F000001010804720132046701340467041401BB01300474013104680131046E0131046D0131047001330470012D046B0
133046C013004720132046E013104690132046A0133046D0138046C0130046A041401B901310471041701B70133046A0133
046F012E0000
Packettype = RAW Packet
Packet Length = 104
subtype = RAW packet
Sequence nbr = 0
Repeat = 1
Nbr of pulses = 25
264 1138 306 1127 308 1127 1044 443 304 1140 305 1128 305 1134 305 1133 305 1136
307 1136 301 1131 307 1132 304 1138 306 1134 305 1129 306 1130 307 1133 312 1132
304 1130 1044 441 305 1137 1047 439 307 1130 307 1135 302 0
```

The last value of zero indicates a gap timeout and the real gap is greater than 8000. To replay this packet replace the last zero with a value greater than 8000.

To replay this in RFXmng, create a text file with the content below and send it on the RAW transmit tab.

The first value is 0 which indicates it is a single packet

The next value (7 in this example) is the repeat count.

Do not set the repeat count too high to lower the risk to disturb other RF transmissions.

```
0
7
264
1138
306
1127
308
1127
1044
443
304
1140
305
1128
305
1134
305
1133
305
1136
```

the next values .....

```
307
1135
302
10000
```

If you receive multiple RAW packet with more than 62 pulses, try to find the gap. This is normally a higher value and smaller than 8000. Here an example with a gap value of 6600 and the next 6596.

```

RAW Packet:
FC7F00000001190491012C0491012A0492012A0490012A049201270493012801B7040601BC03FF01B903FF048F012C04930
1270493012801B9040001BB03FF01BC040101BB03FF01BB040019C8013C049301280491012A049201290492012704940127
0494012701BE040201BA03FF01BD03FE0492012A049201290492012901BB03FF01BC03FF01BB040401BB03FF01BD040019C
401400490012B048F012D048F012A04950127049301270494012701BC040201BD03FF01BA03FF0493012804920128049501
2601BB040001BC040001B8040601B903FF01BC03FF19C801400492012A049301280492012A0495012704940128049501280
1BA040501BD
Packettype = RAW Packet
Packet Length = 252
subtype = RAW packet
Sequence nbr = 0
Repeat = 0
Nbr of pulses = 62
281 1169 300 1169 298 1170 298 1168 298 1170 295 1171 296 439 1030 444 1023 441
1023 1167 300 1171 295 1171 296 441 1024 443 1023 444 1025 443 1023 443 1024 6600
316 1171 296 1169 298 1170 297 1170 295 1172 295 1172 295 446 1026 442 1023 445
1022 1170 298 1170 297 1170 297 443 1023 444 1023 443 1028 443 1023 445 1024 6596
320 1168 299 1167 301 1167 298 1173 295 1171 295 1172 295 444 1026 445 1023 442
1023 1171 296 1170 296 1173 294 443 1024 444 1024 440 1030 441 1023 444 1023 6600
320 1170 298 1171 296 1170 298 1173 295 1172 296 1173 296 442 1029 445

```

Create a text file to control this device in RFXmng:

```

0
7
281
1169
300
1169
298
1170
298
1168
298
1170
295
1171
296
439
1030
444
1023
441
1023
1167
300
1171
295
1171
296
441
1024
443
1023
444
1025
443
1023
443
1024
6600

```

## 17. RFXtrx433XL - P1 smart meter connection

The RFXtrx433XL can be connected to the Dutch P1 smart meter with the DSMR P1 option board with RJ11 cable or DIY connection.

The connection can be tested in RFXmngn.

Select the correct parameters and click Set Async port.

Important: the P1 connection must be present!

Chime Fan Curtain Blinds1 RFY Security1 Camera Remote Tstat1 Tstat2 Tstat3 Tstat4 Radiator1 Security2 Async

Command:

Baudrate:

Bits:

Parity:

Stopbits:

Polarity:

Select the correct parameters for your smart meter:

Meter Brand	DSMR version	ID	Baudrate	Bits	Parity
Iskra ME382, MT382	2.2	/ISK5	9600	7	E
Iskra AM550	5.0	/ISK5	115200	8	N
Kaifa E0003,E0025,MA105,MA304	4.0	/KFM5	115200	8	N
Kamstrup 162,351,382	2.2	/KMP5	9600	7	E
Landis+Gyr E350 ZCF100,ZCF110,ZFF100,ZMF100	4.0	/XMX5LG	115200	8	N
Sagemcom XT210	4.0		115200	8	N

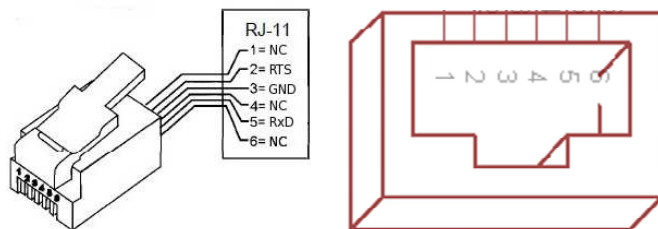
The smart meter connector type is RJ12. The Metering System holds a female connector, the customer can plug in a standard RJ12 or RJ11 plug.

RJ12 is a 6P6C (6 positions, 6 contacts)

RJ11 is a 6P4C (6 positions, 4 contacts) This one can be used to connect the RFXtrx433XL.

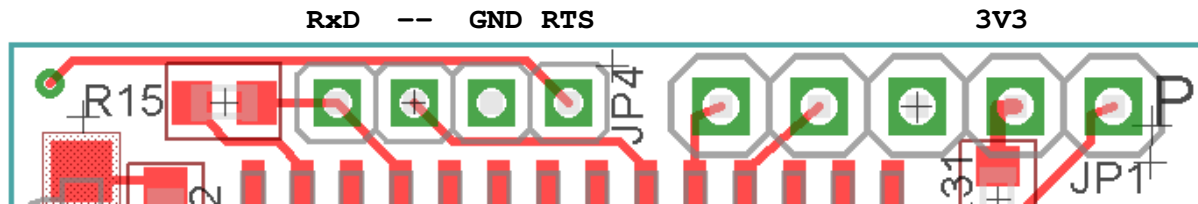
Pin #	Signal name	Description
1	+ 5V power	Power supply (not used by the RFXtrx433XL)
2	RTS	Request to Send
3	GND	Data GND
4	NC	Not connected
5	RxD	Data output to the RFXtrx433XL
6	GND power	Power GND (not used by the RFXtrx433XL)

RJ12 and RJ11 connections:



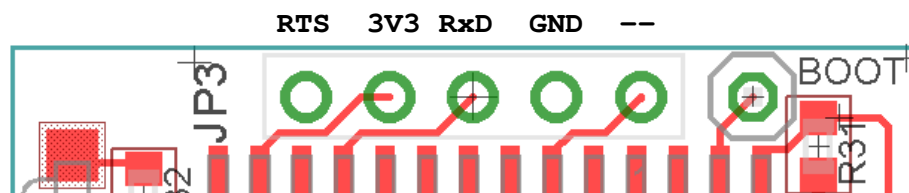
### 17.1. DIY P1 connection for RFXtrx433XL batch 3618 and 4018

1. Open the enclosure by removing the 4 screws.
2. Connect a 4k7 resistor between 3V3 and RxD.
3. Connect the RJ11 cable to the RFXtrx433XL PCB RFXtrx V5.0:  
RJ11-2 to RTS  
RJ11-3 to GND  
RJ11-4 not used  
RJ11-5 to RxD
4. Cut a few plastics from the upper side of the enclosure using a Stanley knife.
5. Cut also at the same position a few plastics from the bottom part.
6. Close the enclosure. First turn the screw left until you hear/feel a soft click, now turn the screw right and fix the screw (not too tight).



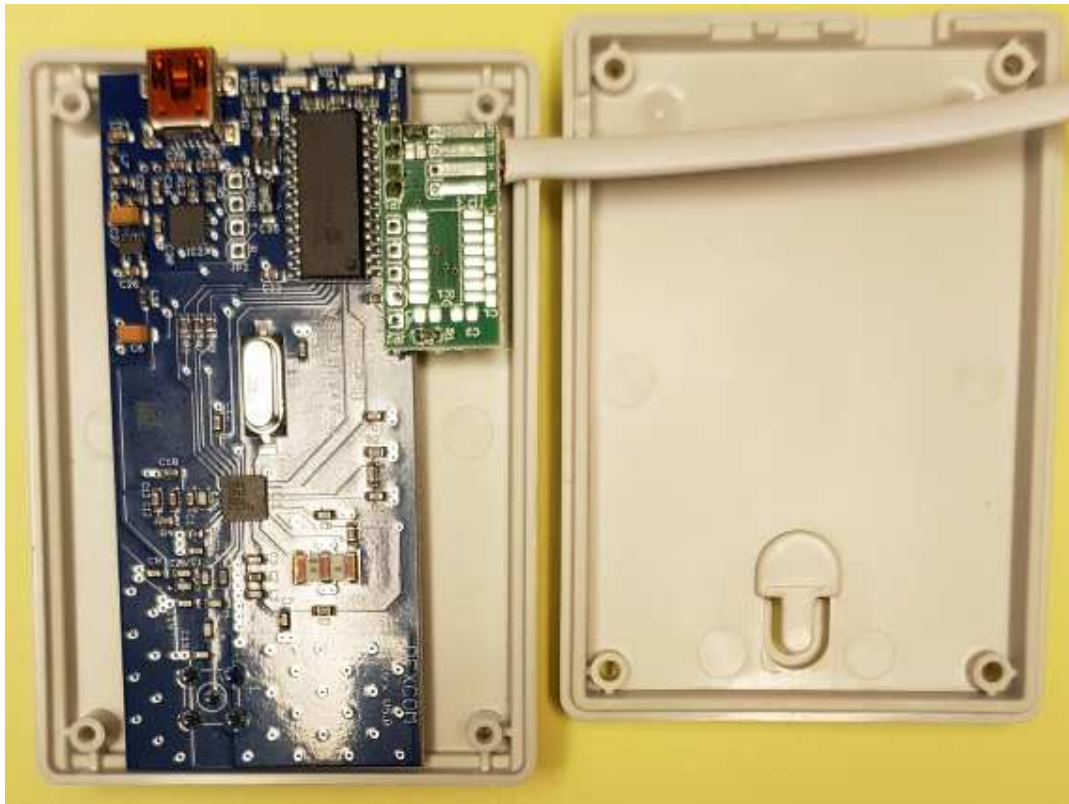
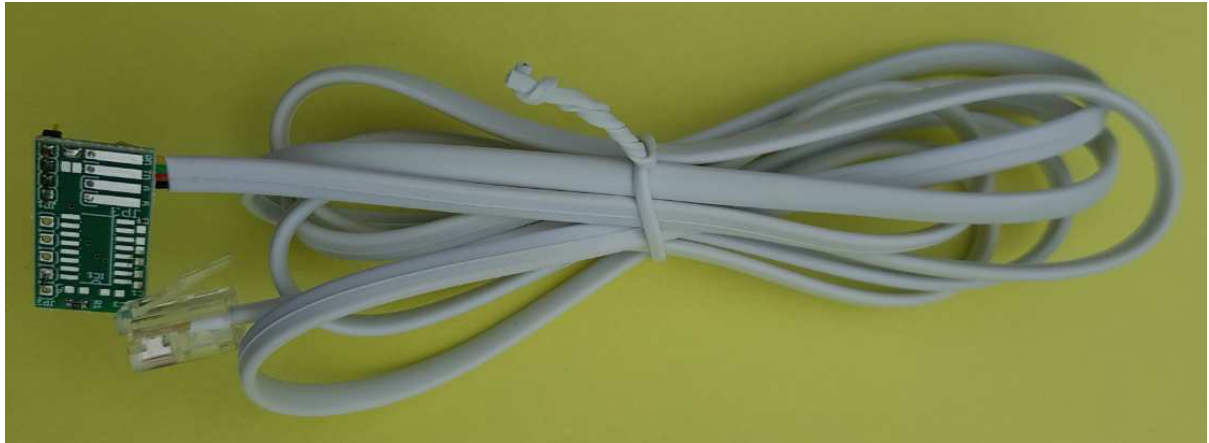
### 17.2. DIY P1 connection for RFXtrx433XL batch 4918 and later

1. Open the enclosure by removing the 4 screws.
2. Connect a 3k3 resistor between 3V3 and RxD
3. Connect the RJ11 cable to the RFXtrx433XL PCB RFXtrx V5.1:  
RJ11-2 to RTS  
RJ11-3 to GND  
RJ11-4 not used  
RJ11-5 to RxD
4. Cut a few plastics from the upper side of the enclosure using a Stanley knife.
5. Cut also at the same position a few plastics from the bottom part.
6. Close the enclosure. First turn the screw left until you hear/feel a soft click, now turn the screw right and fix the screw (not too tight)



### **17.3. P1 option PCB Type 1 for RFXtrx433XL batch 3618 and 4018**

1. Open the enclosure by removing the 4 screws.
2. Solder the 5 pins of the P1 PCB to the RFXtrx433XL PCB RFXtrx V5.0.  
First solder 1 pin and check if the connector is fully on the RFXtrx433XL PCB.  
Then solder the remaining 4 pins.
3. Cut a few plastics from the upper side of the enclosure for the cable using a Stanley knife.
4. Cut also at the same position a few plastics from the bottom part.
5. Close the enclosure. First turn the screw counter clockwise until you hear/feel a soft click, now turn the screw clockwise and fix the screw (not too tight).



## **17.4. P1 option PCB Type 2 for RFXtrx433XL batch 4918 and later**

1. Open the enclosure by removing the 4 screws.
2. Press the 5 pins of the P1 PCB into the RFXtrx433XL PCB RFXtrx V5.1.  
Use a wrench to push the connector into the PCB until the black parts of the Press-Fit connector is on the RFXtrx PCB.
3. Cut a few plastics from the upper side of the enclosure for the cable using a Stanley knife.
4. Cut also at the same position a few plastics from the bottom part.
5. Close the enclosure. First turn the screw counter clockwise until you hear/feel a soft click, now turn the screw clockwise and fix the screw (not too tight)





## 18. RFXtrx433XL - Teleinfo connection

The RFXtrx433XL can be connected to the French smart meter and needs a Teleinfo interface. At the moment we only supply the Teleinfo interface option only for the RFXtrx version 5.1 (this is on the PCB) which is delivered starting batch 4918 and the later batches xx19 (xx=01 to 52). The batch number is on the label on the backside of the enclosure.

This option cannot be added in the RFXtrx433XL batch 3618 or 4018!!

The connection can be tested in RFXmngn.

Select the correct parameters and click "Transmit Async Port command".

Important: the Teleinfo connection must be present!

The setting is 1200, 7, Even, 1 and Normal polarity for the "historique" meter

The setting is 9600, 7, Even, 1 and Normal polarity for the new Linky meter

Fan	Hunter	Blinds1	RFY	Security1	Tstat1	Tstat2	Tstat3	Tstat4	Radiator1	Security2	Async
Command	Receive Teleinfo		Transmit Async Port command								
Baudrate	9600										
Bits	7										
Parity	Even										
Stopbits	1										
Polarity	Normal										

### 18.1. Teleinfo option PCB for RFXtrx433XL batch 4918 and later



1. Open the enclosure by removing the 4 screws.
2. Press the 5 pins of the P1 PCB into the RFXtrx433XL PCB RFXtrx V5.1.  
Use a wrench to push the connector into the PCB until the black part of the Press-Fit connector is on the RFXtrx PCB.
3. Cut a few plastics from the upper side (only the raised edge) of the enclosure for the cable, using a Stanley knife.
4. Cut also at the same position a few plastics from the raised edge of the bottom part.
5. Close the enclosure. First turn the screw counterclockwise until you hear/feel a soft click, now turn the screw clockwise and fix the screw (not too tight)

## 19. RFXtrx433XL - Connection points for a serial interface

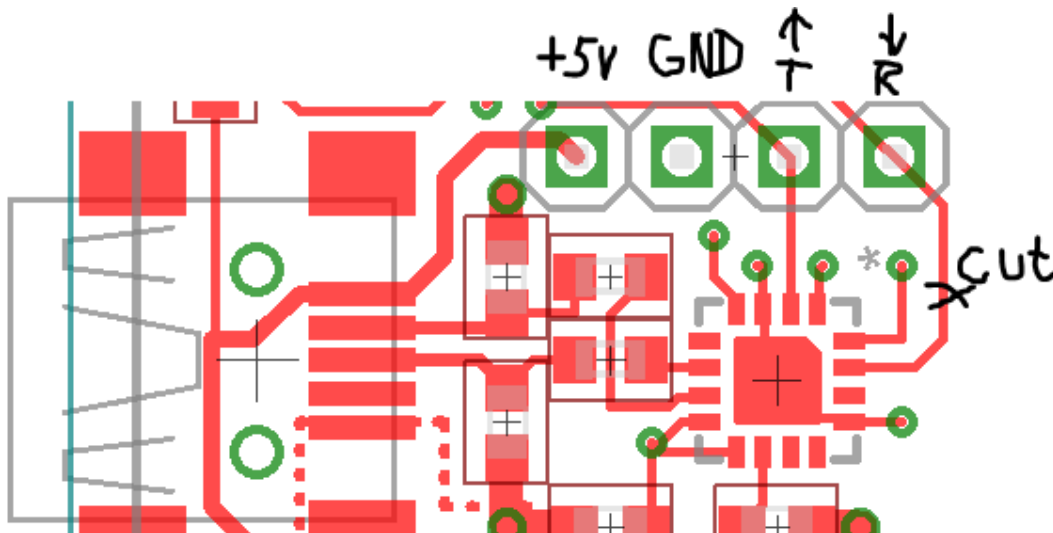
This connection can be used for a serial connection with the RFXtrx433XL instead of the USB interface.

The serial interface is using logic level of 5V maximum.

**WARNING:** Do NOT connect a RS232 interface that operates at +/-12Volts!!

**Important:** warranty is lost if this modification is used.

- Cut the PCB trace between the connection point R and the FT230X pin 15.
- Connect the serial interface to GND, T and R. Be sure to use a 3V3 or 5V logic level!
- The +5V can be used to power and external interface if required. In this case the RFXtrx433E must be powered by a 5V power supply connected to the USB interface. The +5V can also be an input for powering the RFXtrx433XL. Do not exceed +5V or the RFXtrx433XL will be destroyed.
- The serial interface is using 38400,N,8,1
- Be sure not to use a serial device that produces RF noise at 433MHz. A bad example of such a device is the USR-TCP232 LAN device.

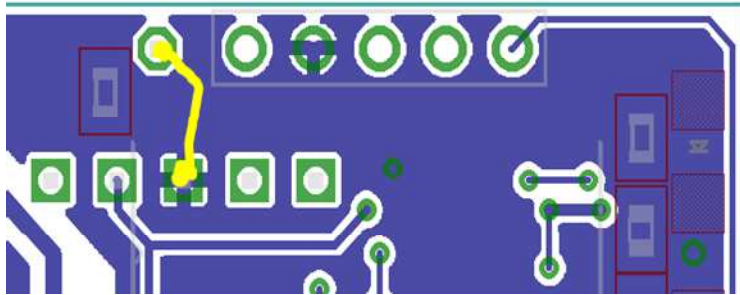


## 20. Recover from interrupted or wrong flash.

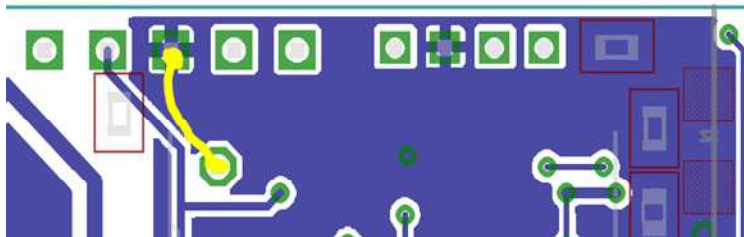
The RFXtrx can become in a loop after an interrupted flash or if you have flashed a wrong firmware. In this case the red LED stays on and no communication is possible.

1. Disconnect the USB,
2. Make a temporary connection (no soldering required) on the backside of the PCB as indicated below by the yellow connection,
3. Connect the USB,
4. Disconnect the temporary connection,
5. Start RFXflash and update the firmware.

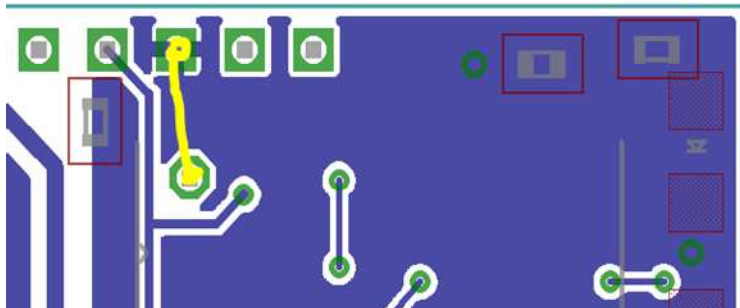
### RFXtrx433XL V5.1



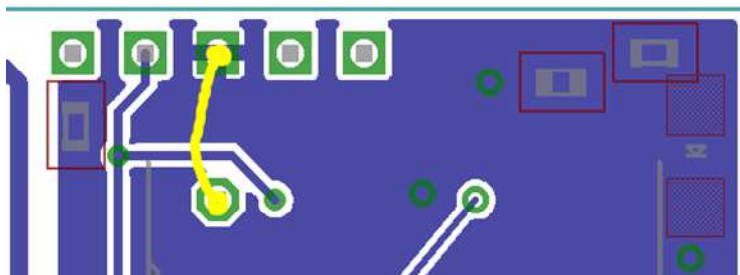
### RFXtrx433XL V5.0



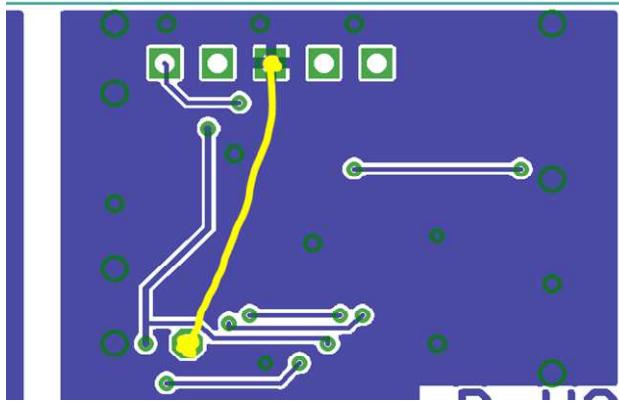
### RFXtrx433E



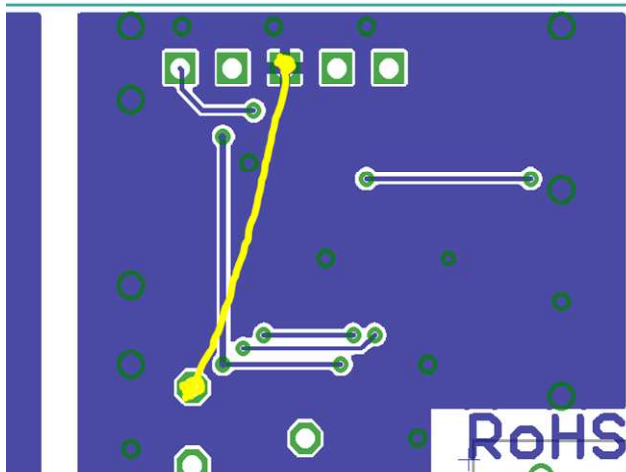
### RFXtrx433



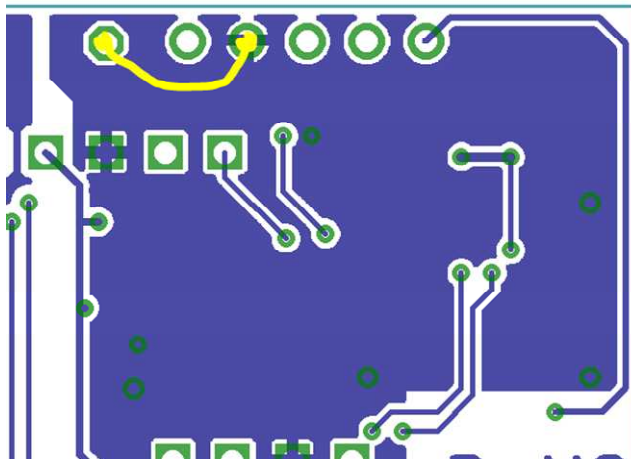
**RFXtrx868X RFXtrxX V1.0 USB FT232**



**RFXtrx868X RFXtrxX V1.0 USB MCP2200**



**RFXtrx868XL RFXtrx V6.1 USB FT230QX**



## 21. FAQ

### **21.1. La réception s'est arrêtée brutalement mais la transmission fonctionne toujours.**

Le plus probable est un capteur qui émet en continu:

- Par exemple le capteur de détection de mouvement X10 MS13 ou un capteur météo avec des batteries presque vides.
- un capteur de météo extérieur qui subit des infiltrations d'eau.
- une télécommande avec un bouton appuyé en continu (un livre posé dessus par exemple).

Testez le RFXtrx avec une télécommande ou un sensor sur un autre emplacement (> 1 km) en utilisant RFXmngn sur un système Windows ou un laptop.

### **21.2. Est-ce que je peux augmenter la distance de réception/émission du RFXtrx?**

Reportez-vous au chapitre 2.5 pour connaître le meilleur emplacement possible pour le RFXtrx. Le tableau électrique n'est pas le meilleur endroit parce que les objets métalliques se situant autour vont absorber ou réfléchir les signaux RF.

Il est de plus conseillé de placer le RFXtrx loin des ordinateurs, routeurs, Raspberry Pi, ... Ces équipements émettent des perturbations qui peuvent réduire fortement la sensibilité du RFXtrx. Il est possible de connecter une autre antenne de 50 ohms 70cm/433 avec plus de gain:

Par exemple : <http://www.ebay.com/itm/290979680030>

Placer cette antenne dans un plateau métallique d'environ 30cm pour un résultat optimum.

### **21.3. Le module RFXtrx USB se déconnecte parfois.**

Cela se passe principalement pour le raspberry PI avec une alimentation de faible qualité. La solution est d'utiliser un hub USB alimenté avec une alimentation de bonne qualité.

Cela peut arriver également si le câble USB longe un câble d'alimentation et qu'un équipement est mis en marche, provoquant un pic de courant. La solution est de séparer le câble USB de tous les autres câbles et/ou d'utiliser un hub USB alimenté par une alimentation de bonne qualité.

### **21.4. J'ai un périphérique en 433.92 Mhz, mais celui-ci n'est pas reçu.**

En plus de la fréquence, le protocole utilisé et le type de modulation sont importants.

Reportez-vous au chapitre 2 pour la liste des équipements supportés.

### **21.5. La prise murale est commandée par une télécommande. Celle-ci est bien reçue par le RFXtrx, mais il ne commande pas la prise.**

La télécommande émet plusieurs protocoles. Le protocole utilisé par la prise murale n'est pas reçu par le transceiver, mais les autres sont reçus.

Solution:

- Pour les équipements HomeEasy EU- HE8xx : réinitialiser le périphérique pour enlever la configuration (télécommandes appariées), et réaliser l'appairage de celui-ci avec le RFXtrx433E. L'appairage sera alors réalisé avec un des protocoles reçu par le transceiver.
- Pour les équipements FA500/PROmax: Configurer l'appairage entre le RFXtrx433E et le périphérique en utilisant un équipement IT et sélectionner un ID aléatoire. Le code reçu peut être utilisé pour connaître l'état du périphérique envoyé par la télécommande.

## 22. EC Declaration of Conformity

# EC Declaration of Conformity

RFXCOM declares that the product:

**RFXtrx**

**Brand: RFXCOM    Type: RFXtrx433, RFXtrx433E, RFXtrx433XL**

conforms with the essential requirements and other relevant provisions of the following directives and complies with the following standards applied:

R&TTE Directive 99/5/EC	EN 300 220-1 V2.4.1 (2012-05)
	EN 300 220-2 V2.4.1 (2012-05)
Low-voltage Directive 2006/95/EC	IEC 60950-1 (2005-12)
EMC Directive 2004/108/EC	EN 301 489-1 V1.9.2 (2011-09)
	EN 301 489-3 V1.4.1 (2002-08)

## 23. Précautions

- La gestion de signaux RF est soumise à perturbations. Il n'est pas conseillé d'utiliser cet équipement dans des systèmes qui peuvent entraîner la mise en danger de personnes.
- RFXCOM HARDWARE AND SOFTWARE IS NOT INTENDED FOR USE IN THE OPERATION OF NUCLEAR FACILITIES, AIRCRAFT NAVIGATION OR COMMUNICATION SYSTEMS, AIR TRAFFIC CONTROL SYSTEMS, LIFE SUPPORT MACHINES OR OTHER EQUIPMENT IN WHICH THE FAILURE OF THE SOFTWARE COULD LEAD TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE.

## 24. License

- You are allowed to use RFXCOM software, protocols and Written Materials with RFXCOM hardware only.
- All copyright and other proprietary notices associated with RFXCOM software, protocols and Written Materials shall be visible to all users.
- You may not sell, distribute, loan, rent, lease, license, sublicense or otherwise assign or transfer RFXCOM software or RFXtrx protocols or Written Materials unless expressly authorized in writing by RFXCOM.
- You may not use any RFXCOM device, software or protocol as part of an exclusive or patented product without the express prior written permission of RFXCOM.
- You may not alter, modify, adapt or create derivative works based on any part of RFXCOM software or protocols or Written Materials in any way, including translating, reverse engineering, disassembling or decompiling the software.

## 25. Copyright notice

- All RFXCOM hardware, software, protocols and Written Materials are protected by copyright laws, and may not be reproduced, republished, distributed, transmitted, displayed, broadcast or otherwise exploited in any manner without the express prior written permission of RFXCOM.
- Netherlands Copyright and international treaty provisions protect the SOFTWARE, HARDWARE, RFXtrx protocols and Written Materials and shall be subject to the exclusive jurisdiction of the Netherlands Courts
- RFXCOM reserves all rights not expressly granted herein.

## 26. Traduction française

La traduction du manuel utilisateur a été effectuée par Mickael VIALAT (<http://www.planete-domotique.com>).

Cette traduction est proposée à titre d'information, en cas d'information contradictoire, c'est systématiquement la version anglaise disponible sur le site <http://www.rfxcom.com/downloads.htm> qui sera considéré comme prioritaire.

## 27. Historique des modifications

- Version 0.0 – August 18, 2011  
Initial version.
- Version 1.0 – October 30, 2011  
RFXflash under Mono added.
- Version 2.0 – December 30, 2011  
Updated for the production version with FTDI USB chip
- Version 2.1 – January 18, 2012  
Link for ACM to serial port added in Linux instruction.  
EC Declaration of Conformity added
- Version 2.2 – February 8, 2012  
Protocols overview added  
Screen dumps updated
- Version 2.3 – February 16, 2012  
Novatys planned
- Version 2.4 – February 25, 2012  
General information updated
- Version 2.5 – March 1, 2012  
Chapter added how to run RFXmng or RFXflash on Linux.
- Version 2.6 – March 14, 2012  
Code tables added, Cresta, UPM added
- Version 2.7 – March 15, 2012  
Flash procedure updated
- Version 2.8 – March 31, 2012  
Phenix table added
- Version 2.9 – March 31, 2012  
AB400 and Phenix address extended
- Version 2.10 – April 16, 2012  
Linux USB - tty configuration updated
- Version 2.11 – May 14, 2012  
List of supported protocols updated.
- Version 2.12 – June 8, 2012  
Chapter added how to run RFXmng or RFXflash on Mac OS
- Version 2.13 – July 15, 2012  
List of supported protocols updated
- Version 2.14 – August 4, 2012  
List of enabled protocols influence added  
RFXtr315 added
- Version 2.15 – August 18, 2012  
Enabled protocols table changed
- Version 2.16 – August 26, 2012  
Rubicon stektermometer added  
ATI Remote Wonder II added
- Version 2.17 – August 28, 2012  
Table “sensitivity influenced” updated
- Version 2.18 – September 18, 2012  
Chapter 2.3 updated: BlindsT0 disables all other protocols
- Version 2.19 – September 25, 2012  
RFXFlash version required changed to 4.0.0.0
- Version 2.20 – September 28, 2012  
RF range reduction guide added
- Version 2.21 – October 18, 2012  
BlindsT2 and BlindsT3 added
- Version 2.22 – October 24, 2012  
Sartano added
- Version 2.23 – October 31, 2012  
Sensitivity table updated



Version 2.24 – November 7, 2012  
Protocol table extended with the protocols to enable for receive

Version 2.25 – November 14, 2012  
HE105 switch settings added

Version 2.26 – November 28, 2012  
undec on explained

Version 2.27 – December 4, 2012  
Use of Lighting4 commands for undec ARC  
Brennenstuhl added

Version 2.28 – December 18, 2012  
Receiver tab removed from RFXmngr

Version 2.29 – December 27, 2012  
Lighting4 receive added

Version 2.30 – January 1, 2013  
Raex motor added

Version 3.00 – January 4, 2013  
RFXtrx433 Type1 and Type2 firmware added

Version 3.01 – February 4, 2013  
Supported protocols list updated

Version 4.00 – February 21, 2013  
Chapter 8 - Lighting4 screen updated for RFXmngr 11.0.0.0  
Known Lighting4 chapter added

Version 4.01 – March 13, 2013  
Receive of LaCrosse sometimes influenced by enabled Hideki

Version 4.02 – June 8, 2013  
MDREMOTE LED dimmer added [www.ultraleds.co.uk](http://www.ultraleds.co.uk)  
Conrad RSL2 added  
Energenie added

Version 4.03 – September 27, 2013  
How to find the MDREMOTE ID (chapter 7.6)  
WS1200 added  
Byron SX Chime added

Version 4.04 – November 15, 2013  
Maverick ET-732 added  
Alecto SA30 added  
Oregon EW109 added  
Revolt added

Version 4.05 – December 5, 2013  
Blyss command explanation added.  
Lighting4 - Mercury added  
Lighting5 – RGB controller added <http://dx.com/p/rf-remote-touch-rgb-controller-130913>

Version 4.06 – December 27, 2013  
Chapter 2.2 updated

Version 4.07 – February 10, 2014  
Chapter 7.8 Comment obtenir l'ID du bandeau de led RGB dx.com

Version 4.08 – March 20, 2014  
ARC and Oregon3.0 updated in table 2.4.  
Energenie 5-gang 429.950 added

Version 4.09 – April 4, 2014  
BlindsT6 - DC106, YOODA, Röhrmotor24 RMF added

Version 4.10 – April 7, 2014  
BlindsT7 - Forest added

Version 4.11 – April 28, 2014  
RGB LED – clarified AD is LightwaveRF

Version 4.12 – May 21, 2014  
Kambrook RF3672 added  
RFY protocol added  
Somfy programming instructions added

Supported protocol list RFXtrx433 updated.  
 Protocol list by function added

Version 4.13 – May 31, 2014  
 Opus TX300/Imagintronix Soil sensor added

Version 4.14 – June 18, 2014  
 Prega sensor added  
 Conrad 34911 Lighting4 coding added

Version 4.15 – June 25, 2014  
 Kambrook, Rubicson, Viking supported in ext firmware  
 Number of RFY remotes increased from 16 to 30

Version 4.16 – June 29, 2014  
 RFXmngnr cannot be used on Linux

Version 4.17 – July 3, 2014  
 CoCo GDR2 added

Version 4.18 – July 14, 2014  
 Opus TX300 link added

Version 4.19 – July 25, 2014  
 Aoke relay added

Version 4.20 – August 25, 2014  
 Enabling protocols clarified.

Version 4.21 – September 5, 2014  
 Meade sensors added  
 Oregon BTHGN129 sensor added

Version 4.22 – September 18, 2014  
 Eurodomest added (NL - Action)  
 Byron MP001 added  
 WT0122 added  
 Procedures added to find the Eurodomest and TRC02 ver2 ID

Version 4.23 – September 24, 2014  
 Proove TSS330 fridge/freezer sensor added

Version 4.24 – October 9, 2014  
 BlindsT0 added in ext firmware  
 Alecto WS1700 and compatibles added

Version 4.25 – December 13, 2014  
 Smartwares radiator valve added  
 Proove TSS320 sensor added

Version 4.26 – January 2, 2015  
 SelectPlus200689101 White Chime (Action NL) added

Version 4.27 – January 6, 2015  
 SelectPlus200689103 Black Chime (Action NL) added

Version 4.28 – January 7, 2015  
 Proove outdoor sensors 311346 & 311501 added  
 Etekcitec Wireless Remote Control Outlet Switch (US)

Version 5.00 – January 10, 2015  
 RFXmngnr information updated  
 Copyright message updated  
 License chapter added

Version 5.01 – February 27, 2015  
 Chapter 2.5 Lighting4 receive is reduced with HomeEasy EU enabled.  
 Chamberlain tubular motor added  
 Sunperly blind motors added  
 DEA Systems receivers added  
 Envivo ENV-1348 chime added  
 Alecto WS4500 added

Version 5.02 – March 18, 2015  
 1byOne Easy Chime added  
 BTX blind motors added  
 Dolat DLM-1 blind motors added  
 OTIO added

Version 5.03 – March 19, 2015  
 TFA 30.3160 pool sensor added

Version 5.04 – April 14, 2015  
 Chapter 4 updated with restrictions on Lighting4  
 Siemens SF01 LF959RA50/LF259RB50/LF959RB50 extractor hood added  
 Maplin N78KA added

Version 5.05 – May 2, 2015  
 Dooya blind motors added  
 Louvolite one touch motorised blinds added  
 Alecto WS3500 added

Version 5.06 – May 4, 2015  
 Current dx.com TRC02 LED drivers have a different protocol and are not supported.

Version 5.07 – June 1, 2015  
 WH2 temperature humidity sensor added  
 RGB LED controller <http://www.ebay.com/itm/191481664563> (maybe dx.com 227892)

Version 5.08 – July 31, 2015  
 Oregon MSR939 added  
 ESMO blind motors added  
 Brel blind motors added  
 Blinds T6 type motors now also supported in Ext firmware  
 Supported devices table 2.2.2. updated

Version 5.09 – Aug 12, 2015  
 Luxaflex blind motors added

Version 5.10 – Aug 17, 2015  
 JVS screen motors added  
 Livolo NL link added

Version 5.11 – Aug 31, 2015  
 ASA motors added

Version 5.12– Sept 14, 2015  
 Home Confort added

Version 5.13– Oct 2, 2015  
 Oregon GR101 received in Type1 firmware  
 Conrad RSL sensors received in Type2 firmware

Version 5.14– Oct 7, 2015  
 Quotidom blinds motor added

Version 5.15– Nov 06, 2015  
 Banggood temp-hum sensor added  
 Legrand CAD radio added

Version 5.16– Nov 26, 2015  
 Proluxx codes corrected

Version 5.17– Dec 24, 2015  
 RFXflash procedure updated  
 Rubicson pool sensor 48.019 added  
 Inovalley SM80 plant sensor added  
 Lucci Air fan added

Version 5.18– Jan 1, 2016  
 1byone Drive Way alarm added

Version 5.19– Feb 6, 2016  
 Avantek added  
 ASP blinds motors BlindsT11 added  
 Maverick ET-733 added  
 Profiles PAC-326R Belcanto chime added  
 HQ COCO-20 added

Version 5.20– Feb 18, 2016  
BlindsT12 Confexx CNF24-2435 added  
IT FA500, PROmax... added  
Ext2 firmware overview added in chapter 2  
Auriol Z31055B-TX added  
Chuango, Eminent security sensors added

Version 5.21– May 6, 2016  
Cartelectronic TIC and Encoder added  
FAQ chapter added

Version 5.22– May 14, 2016  
Corrected: TX95 is using the Rubicson protocol  
MDRemote V108 added

Version 5.23– June 10, 2016  
Motolux blinds motor added  
Auriol H13726, Hama EWS1500, Meteoscan W155/W160, Ventus WS155 added  
FAQ updated

Version 5.24– June 21, 2016  
Seav TXS4 added

Version 5.25– Aug 6, 2016  
ORNO added

Version 5.26– Sept 6, 2016  
Added: How to find the SEAV TXS4 ID

Version 5.27– Oct 09, 2016  
Westinghouse fan 7226640 added  
THN129 added  
TFA 30.3056 pool sensor added

Version 5.28– Oct 19, 2016  
MCZ pellet stove added  
Alecto SA33 added  
Smartwares RM174RF smoke detector added

Version 5.29– Nov 27, 2016  
SilverCrest 91089 added  
Mertik G6R-H4S added  
Marquant 943134  
MCZ pellet stove instructions added

Version 5.30– Dec 6, 2016  
Kerui security sensors added  
Screenline added

Version 5.31– Dec 15, 2016  
Flamingo smartwares SF501 added

Version 5.32– Jan 02, 2017  
Kangtai, Cotech added

Version 5.33– Feb 01, 2017  
Cranenbroek added  
Unitec 48110 EIM 826 added  
SilverCrest 60494 added  
WSD10 added

Version 5.34– March 08, 2017  
Housegard Origo smoke detector added  
Pearl NC-7159 added  
Ambient Weather & Froggit F007TH added  
TFA 30.3208.02 sensor added

Version 5.35– March 20, 2017  
Silverline Premium motor added  
Dooya DT82 instructions added

Version 5.36– April 25, 2017  
Quigg added  
OTIO EHS5050 added  
Blyss temperature/humidity sensor 630467 added  
Outlook Motion Blinds added

Version 5.37– May 5, 2017  
Cartelectronic TIC in Type2 and Ext2

Version 5.38– May 22, 2017  
BBSB not in Ext2  
Profile Qnect added

Version 5.39– July 28, 2017  
Banggood DANIU sensor added  
Somfy usage remarks added  
Brennenstuhl RC2044 added

Version 5.40– Sept 18, 2017  
Blyss temp/hum added in Ext  
Cartelectronic Linky added

Version 5.41– Sept 24, 2017  
Sonoff RF added  
Rollertrol G series added

Version 5.42– Oct 26, 2017  
Dooya DC2770, DT52E added

Version 5.43– Nov 1, 2017  
A-OK AC127, AC129 added

Version 5.44– Nov 11, 2017  
Digoo DG-R8H added

Version 5.45– Nov 23, 2017  
SilverCrest 284705 added

Version 5.46– March 2, 2018  
Nexa NBA-001 added  
Kimex projection screen added

Version 5.47– March 13, 2018  
Lighting4 PT2262 EV1527 info added  
Tellus Thermo/Hygro sensors 313159 and 313160

Version 5.48– July 28, 2018  
Supported Protocols list updated  
FunkBus (Gira, Jung, Berker, Insta) added  
Nobily rolladenmotor added  
LucciAir DC added

Version 5.49– Aug 18, 2018  
Supported Protocols list updated

Version 5.50– Sep 26, 2018  
Cotech Ekstra temperaturgiver/hygrometer added  
Supported Protocols list updated for RFXtrx433XL

Version 5.51– Sep 28, 2018  
RFXtrx433XL Dutch P1 smart meter connection added

Version 5.52– Oct 3, 2018  
RFXtrx433XL serial connection added

Version 5.53– Oct 12, 2018  
P1 smart meter connection updated  
RFXtrx433XL French Teleinfo connection added  
Mertik G6R-H3T1 added

Version 5.54– Oct 16, 2018  
Teleinfo interface circuit added

Version 5.55– Oct 17, 2018  
Firmware recovery procedure added

Version 5.56– Nov 3, 2018  
P1 and Teleinfo resistor R15 change added

Version 5.57– Nov 30, 2018  
P1 and Teleinfo updated

Version 5.58– Dec 2, 2018  
How to move RFY devices to another RFXtrx433E or RFXtrx433XL

Version 5.59– Jan 5, 2019  
Funkbus transmit only  
Motiva blinds added  
Envivo chime added in XL  
Byron BY chime added

Version 5.60– April 03, 2019  
P1 DIY cable connection added  
P1 option boards added  
RFXtrx868 supported protocols updated  
Alfawise and dBell added  
inblindz added  
Homeconfort, Siemens SF01 receive added  
Bresser Temeo Hygro added  
Digoo door/window sensor added  
Monaco wireless doorbell added  
CasaFan Eco Aviatos RH787T added  
Motostar blinds added

Version 5.61– April 25, 2019  
Procedure how to move RFY devices updated.  
Teleinfo option PCB added.

Version 5.62– May 04, 2019  
RM174RF, RM175RF added in Pro firmware

Version 5.63– May 07, 2019  
Omnia Go blinds added  
Teleinfo setting – Inverted polarity

Version 5.64– July 23, 2019  
Faher blinds motor added  
Profitec KD310T added  
Kerui siren added  
RM174RF, RM175RF transmit added

Version 5.65– Aug 12, 2019  
Recover RFXtrx868 added  
Hunter fan added  
Novy extractor hood added

Version 5.65a– Aug 12, 2019  
MCZ receive updated in 2.2.2.

Version 5.66– Sept 30, 2019  
Smartwares RM174RF/RM175RF receive only  
Teleinfo interface updated

Version 5.67– Jan 11, 2020  
Simu Hz indicated (BHz is not supported)  
Dooya Bi-Directional is not supported!  
SAS SA-200 added  
RAIN9 - TFA 30.3233.01 rain sensor added  
Gaposa QCTR5

Version 5.68– Feb 26, 2020  
Cherubini added