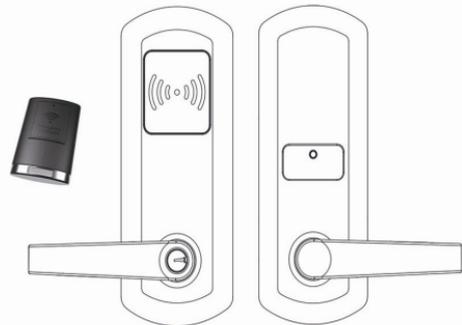


FME/FCE

Program Guide



FME 4010/4020/4030/4040

FCE 4010/4020/4030/4040

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The Security Door Lock FCE/FME is a standalone, battery operated, motorized lock with an encrypted reader, remote control unit (RCU) and applicable encrypted cards. The programming of the lock and Keycards is done using the reader of the lock.

FCE model- RFID with a Grade 1 cylindrical lock body

FME model- RFID with a Grade 1 mortise lock body

Keycards:

- Keycards come with an imbedded RFID chip and antenna, there is no battery in the keycards. The keycards are encrypted and only these cards can be used and programmed to work with the security door lock. Encryption is on sector 1 of the cards, other sectors can be used for other purposes independent of the lock. Keycards are labeled with their “type” and function- a Keycard can only be programmed for their labeled function.
- Keycards exchange data with the lock by “swiping” the Keycard within the effective reading distance (0 to ½”) of the lock reader surface that is located on the front face of the lock. The Keycard needs to be authorized (programmed) before use with the lock. For identification and Keycard control all Keycards have a unique serial number that is printed on the Keycard surface.
- Remote Control Unit (RCU)- should add a brief intro to the RCU
- 250 keycards (combined total of User, Office and Lockdown Cancel Keycards) can be programmed into each lock. 120 RCUs can be programmed into each lock.

The following is a description of the type of Keycards and function:

- **Construction Keycard**- Used for opening the lock in the Factory Mode, the door will relock within 5 seconds after opening. The lock is shipped from the factory in Factory Mode, it is not programmed and any Factory Mode lock will work with any Construction Keycard. It is recommended that the locks be programmed as soon as possible. The Construction Keycard will not work in a programmed lock.
- **User Keycard**- Used to open the lock once it is programmed. Under normal conditions the lock will relock within 5 seconds after opening. During lockdown mode the User Keycard will open the lock and will relock within 2 seconds.
- **Office Keycard**- Used to open and lock the lock once it is programmed. Under normal conditions the Office Keycard will open the lock and it will remain open until the Office Keycard is used again and it will lock the lock. During lockdown mode the User Keycard will open the lock and will relock within 2 seconds.
- **Remote Control Unit (RCU)**- used to put lock in the Lockdown Mode. Hold the lockdown button for 2 seconds in the RCU manual will enter the lock in the Lockdown Mode. If the lock is open it will lock. In the Lockdown Mode the User and Office Keycards will only open the locks for 2 seconds before it relocks. Only the Lockdown Cancel Keycard can cancel the Lockdown Mode. The RCU also has an Office Keycard imbedded in the unit. This can be used and programmed exactly like the Office Keycard by swiping the RCU on the lock reader.
- **Lockdown Cancel Keycard**- Used to cancel the lockdown mode. The Lockdown Cancel Keycard does not open the lock after the lockdown mode is canceled.

- **Programming Keycard**- Used for programming User Keycards, Office Keycards, RCUs and importing information into the lock. Can only program 1 Programming Keycard per lock.
- **Clear Keycard**- Used for deleting User Keycards, Office Keycards, RCUs and exporting information from the lock. Can only program 1 Clear Keycard per lock.
- **Register Keycard**- Used as a backup in the event that the Programming and/or Clear Keycard(s) are lost. The Register Keycard can program a new Programming or Clear Keycard and makes the previous Programming or Clear Keycards inactive. Can only program 1 Register Keycard per lock.
- **Database Keycard**- Used to download and upload data to and from the lock. Database Keycard can be used to export information from 1 programmed lock and import that information into another programmed lock. Database Keycard has more memory than the other cards used.

The Programming, Clear and Register Keycards are critical to the overall control of the lock system and it is recommended that these cards be kept in a secure location and controlled. If possible the Register Keycard should be kept in a separate location.

Programming and Initialization of the RFID Lock:

Initialization: The lock needs to be initialized using the Programming, Clear and Register Keycards. Once initialized the lock will not respond to the Construction Keycard or other Programming/Clear/Register Keycards. Once initialized the lock is ready for programming.

Initialization can only be done on locks in Factory Mode.

Procedure for Initialization:

Swipe the keys in the listed order. Valid entry- Blue LED followed by a short and long “beep”. Invalid entry- Red LED followed by 3 short “beeps”.

1. **Programming Keycard** (swipe)- Blue LED followed by a short and long “beep”
2. **Clear Keycard** (swipe)- Blue LED followed by a short and long “beep”
3. **Register Keycard** (swipe)- Blue LED followed by a short and long “beep”

IMPORTANT:

- All 3 Keycards must be used and accepted as valid to complete the Initialization. In all cases the Register Keycard must be used last.
- Once the unit is initialized it is ready for further programming.

Programming- Adding Keycards and RCUs to the lock:

This is to add /program Keycards (up to 250 per lock) and RCUs (up to 120 per lock) to the lock. Swiping the Programming Keycard will

put the lock in Programming Mode. Programming Mode will continue for 8 seconds after the last valid card was swiped. When the Programming Keycard is swiped the Programming Mode is indicated by a long “beep” and a flashing blue LED (the LED will continue flashing until the lock is out of Programming Mode). During Programming Mode the Keycards and RCUs can be added (programmed into the lock).

Swipe the keys in the listed order (steps 2 to 5 can be done in any sequence):

1. **Programming Keycard** (swipe)- Long “beep” and a continuous flashing blue LED
2. **User Keycards** (swipe)- Blue LED followed by a short and long “beep”- LED will continue flashing- can add as many User Keycards during this time as needed (remember- combined total of all the User, Office and Lockdown Cancel Keycards that can be added is 250).
3. **Office Keycards** (swipe)- Blue LED followed by a short and long “beep”- LED will continue flashing- can add as many Office Keycards during this time as needed (remember- combined total of all the User, Office and Lockdown Cancel Keycards that can be added is 250).
4. **Lockdown Cancel Keycards** (swipe)- Blue LED followed by a short and long “beep”- LED will continue flashing- can add as many Lockdown Cancel Keycards during this time as needed (remember- combined total of all the User, Office and Lockdown Cancel Keycards that can be added is 250).
5. **RCUs** (press emergency button)- Blue LED followed by a short and long “beep”- LED will continue flashing- can add as many RCUs during this time as needed (remember- total of all RCUs that can be added is 120).

Lock will stop flashing 8 seconds after the last valid card is swiped. When the LED stops flashing it is out of programming mode. In order to put it back into programming mode again- swipe the Programming Keycard. The Keycards and RCUs can be added in any sequence when the lock is in programming mode. You cannot stack Keycards- the lock will not recognize stacked Keycards- you must swipe Keycards 1 at a time.

Programming- Deleting Keycards and RCUs from the lock:

This is to delete Keycards and RCUs (that are in your possession) from the lock. Swiping the Clear Keycard will put the lock in Delete Mode. Delete Mode will continue for 8 seconds after the last valid card was swiped. When the Clear Keycard is swiped the Delete Mode is indicated by a long “beep” and a flashing red LED (the LED will continue flashing until the lock is out of Delete Mode). During Delete Mode the Keycards and RCUs can be deleted (no longer valid).

Swipe the keys in the listed order (steps 2 to 5 can be done in any sequence):

1. **Clear Keycard** (swipe)- Long “beep” and a continuous flashing red LED
2. **User Keycards** (swipe)- Blue LED followed by a short and long “beep”- red LED will continue flashing- can delete as many User Keycards during this time as needed.
3. **Office Keycards** (swipe)- Blue LED followed by a short and long “beep”- red LED will continue flashing- can delete as many Office Keycards during this time as needed.

4. **Lockdown Cancel Keycards** (swipe)- Blue LED followed by a short and long “beep”- red LED will continue flashing- can delete as many Lockdown Cancel Keycards during this time as needed.
5. **RCUs** (press emergency button)- Blue LED followed by a short and long “beep”- red LED will continue flashing- can delete as many RCUs during this time as needed.

Lock will stop flashing 8 seconds after the last valid card is swiped. When the LED stops flashing it is out of Delete Mode. In order to put it back into Delete Mode again- swipe the Clear Keycard. The Keycards and RCUs can be deleted in any sequence when the lock is in Delete Mode. You cannot stack Keycards- the lock will not recognize stacked Keycards- you must swipe Keycards 1 at a time.

Programming- Deleting Keycards and RCUs from the lock that are lost:

This is to delete Keycards and RCUs, which are not in your possession, from the lock. When you do not have the Keycard or RCU that you want to delete you have the ability to delete all Keycards of a certain type or RCUs from that specific lock. Swiping the Clear Keycard 2X will put the lock in this type of Delete Mode. Deleting a RCU in this manner will delete all RCUs programmed for this specific lock. Deleting a Lockdown Cancel Keycard will delete all Lockdown Cancel Keycards programmed for this specific lock. Deleting a User or Office Keycard will delete all User and Office Keycards programmed for this specific lock, User and Office Keycards are considered the same type of Keycard and will be deleted regardless if an Office or if a User Keycard is used for this deleting operation. When the Clear Keycard is swiped there is a long “beep” and a flashing red LED- swipe the Clear Keycard again and there is a short “beep” and the red

LED will flash faster. Swipe (or push the lockdown button on the RCU) the Keycard type you are deleting and follow this with swiping the Clear Keycard. The red LED will stop flashing after the last Clear Keycard is swiped.

Swipe the keys in the listed order (Clearing/Deleting all Office and User Keycards):

1. **Clear Keycard** (swipe)- short “beep” and a continuous flashing red LED
2. **Clear Keycard** (swipe)- longer “beep” and the red LED will flash faster.
3. **Office or User Keycard** (swipe)- Blue LED followed by a long “beep”- red LED will continue flashing.
4. **Clear Keycard** (swipe)- Blue and red LED followed by a short and long “beep”- red LED will stop flashing.

Swipe the keys in the listed order (Clearing/Deleting all Lockdown Cancel Keycards)

1. **Clear Keycard** (swipe)- short “beep” and a continuous flashing red LED
2. **Clear Keycard** (swipe)- longer “beep” and the red LED will flash faster.
3. **Lockdown Cancel Keycard** (swipe)- Blue LED followed by a long “beep”- red LED will continue flashing.
4. **Clear Keycard** (swipe)- Blue and red LED followed by a short and long “beep”- red LED will stop flashing.

Swipe the keys in the listed order (Clearing/Deleting all RCUs)

1. **Clear Keycard** (swipe)- short “beep” and a continuous flashing red LED
2. **Clear Keycard** (swipe)- longer “beep” and the red LED will flash faster.
3. **RCU** (press lockdown button extra) - Blue LED followed by a long “beep”- red LED will continue flashing.

4. **Clear Keycard** (swipe)- Blue and red LED followed by a short and long “beep”-red LED will stop flashing.

After deleting the type of Keycard or RCU- the lost or misplaced keycard or RCU will no longer work on this lock. In order to re-program the lock to add the Keycards and/or RCUs that were deleted follow the instruction **Programming- Adding Keycards and RCUs to the lock**. The programming may, also, be done using the Database Card-follow the instruction **Database Keycard Programming**.

Programming- Deleting all Keycards and RCUs from the lock except the Programming, Clear and Register Keycards:

This is to delete all Keycards and RCUs from the lock. The lock does not delete the Programming, Clear or Register Keycards and the lock remains initialized.

Swipe the keys in the listed order (Clearing/Deleting all Keycards and RCUs from the lock)

1. **Clear Keycard** (swipe)- short “beep” and a continuous flashing red LED
2. **Programming Keycard** (swipe)- short “beep” and the red LED will continue to flash.
3. **Programming Keycard** (swipe)- Blue LED followed by a short and long “beep”- red and blue LED will flash for 2 seconds.

After deleting the Keycards (User, Office and Lockdown Cancel) the lock is still initialized and the Programming, Clear and Register Keycards still function. In order to re-program the lock to add the Keycards and/or RCUs that were deleted follow the instruction

Programming- Adding Keycards and RCUs to the lock. The programming may, also, be done using the Database Card- follow the instruction **Database Keycard Programming**.

Factory Reset:

This is will delete all Keycards, RCUs and the lock is no longer initialized. The lock will be in Factory Mode and the Construction Keycard will open the lock.

Swipe the keys in the listed order (puts lock into the Factory Mode)

1. **Clear Keycard** (swipe)- short “beep” and a continuous flashing red LED
2. **Clear Keycard** (swipe)- short “beep” and a continuous flashing red LED
3. **Programming Keycard** (swipe)- short “beep” and the red LED will continue to flash.
4. **Programming Keycard** (swipe)- Blue LED followed by a short and long “beep”- red and blue LED will flash for 2 seconds.

In order to re-program the lock to add the Keycards and/or RCUs that were deleted follow the instruction **Programming and Initialization of the RFID Lock and Programming- Adding Keycards and RCUs to the lock**. The programming may, also, be done using the Database Card- follow the instruction **Database Keycard Programming**.

Database Keycard Programming:

The Database Keycard is used to import and export information. The Database Keycard can export or retrieve information from a programmed lock and this information can be imported or passed on to another lock to clone that lock. Each lock will have the same authorizations and the same Keycards/RCUs will work on both locks.

Database Keycard- Exporting (retrieving information from a lock):

Once a lock is programmed- you can use the Database Keycard to retrieve the information from the lock and store it on the Database Keycard. The information will stay on the Database Keycard until it is overwritten by using it again to export additional information from a lock to the card- the original data is overwritten and only the newest data is available. The Database Keycard is rated for 100,000 cycles minimum.

Swipe the keys in the listed order (exports information from the lock to the Database Keycard)

1. **Clear Keycard** (swipe)- short “beep” and a continuous flashing red LED
2. **Database Keycard** (swipe and hold)- short “beep” and a continuous flashing blue LED- after approximately 5 seconds you will get 2 short “beeps” and a final blue LED.

The Database Keycard needs to be held against the reader until all the information is exported to the card. The Database Keycard can

now be used to import information into a lock or it can be used as an archive of the information in the lock.

Database Keycard- Importing (transferring information to a lock):

This will program the lock using the information on the Database Keycard. The lock can import information from the Database Keycard and the lock will be a “clone” of the lock that the Database Keycard retrieved its information from- it will be programmed as a clone in regard to Keycard and RCU authorizations (same initialization and programming). The information can be transferred to the lock if the lock is in Factory Mode or if it is already programmed.

Lock is already programmed- Swipe the keys in the listed order (the lock imports information from the Database Keycard)

1. **Program Keycard** (swipe)- short “beep” and a continuous flashing blue LED
2. **Database Keycard** (swipe and hold)- short “beep” and a continuous flashing blue LED- after approximately 5 seconds you will get 2 short “beeps” and a final blue LED.

Lock is in Factory Mode- Swipe the keys in the listed order (the lock imports information from the Database Keycard)

1. **Database Keycard** (swipe and hold)- short “beep” and a continuous flashing blue LED- after approximately 5 seconds you will get 2 short “beeps” and a final blue LED.

The Database Keycard needs to be held against the reader until all the information is transferred to the lock. The Database Keycard can now be used to program additional locks as needed.

Lost Programming and/or Clear Keycard:

If a Programming or Clear Keycard is lost this will instruct you on how to make a new card and the lost cards will no longer be authorized. You must contact technical support (phone number and website is listed on all the Keycards) and obtain a new Programming or Clear Keycard to replace the lost Keycard. Once the new Keycard is received do the following:

Swipe the keys in the listed order:

1. **Register Keycard** (swipe)- Long “beep” and a continuous flashing blue LED
2. **New Programming or Clear Keycard** (swipe)- Blue LED and a long “beep”- blue LED will continue flashing.
3. **Register Keycard** (swipe)- Short and long “beep”- blue LED will stop flashing.

This will authorize the new Programming or Clear Keycard. No other Programming or Clear Keycard will now work with that lock. These are standalone locks and this must be done to each lock to authorize the new Keycard on each of those locks.

Lost Register Keycard:

If a Register Keycard is lost this will instruct you on how to obtain a new card and the lost card will no longer be authorized. You must contact technical support (phone number and website is listed on all the Keycards) and obtain a new Register Keycard to replace the lost Keycard. Once the new Keycard is received do the following:

Swipe the keys in the listed order (1st lock):

1. **New Register Keycard** (swipe)- Long “beep” and a continuous flashing blue LED
2. **Programming or Clear Keycard** (swipe)- Blue LED and a long “beep”- blue LED will continue flashing.
3. **Register Keycard** (swipe)- Short and long “beep”- blue LED will stop flashing.

Swipe the keys in the listed order (subsequent locks):

1. **New Register Keycard** (swipe)- short and long “beep” and a continuous flashing blue LED
2. **Programming or Clear Keycard** (swipe)- Blue LED and a long “beep”- blue LED will continue flashing for 8 seconds.

This will authorize the new register Keycard. No other register Keycard will now work with that lock. These are standalone locks and this must be done to each lock to authorize the new Keycard on each of those locks (1st lock programming is different from the subsequent locks).

Lost Programming, Clear and Register Keycards:

If all 3 Keycards are lost this will instruct you on how to obtain a new set of cards and the lost cards will no longer be authorized. If you have already used the Database Keycard and it has the information from 1 of the programmed locks you send the Database Keycard to the service center (technical support phone number and website is listed on all the Keycards).

If you do not have a Database Keycard with the lock information:

1. Open the back cover
2. Press the Clear Button need an illustration or delete it - wait for 1 short “beep” and a continuous flashing blue LED
3. Swipe and hold the Database Keycard- short “beep” and a continuous flashing blue LED- after approximately 5 seconds you will get 1 short and 1 long “beep” and a final blue LED.

This will program a Database Keycard with the information from the lock that was used. Send the Database Keycard to the service center.

The service center will issue new Keycards. Once the Keycards are received do the following:

Swipe the keys in the listed order (1st lock):

1. **New Register Keycard** (swipe)- Short “beep” and a continuous flashing blue LED
2. **New Programming Keycard** (swipe)- Wait for short and long “beep”- blue LED will continue flashing.
3. **Repeat steps 1 and 2 on all locks.**

Low Battery warning:

The lock operates on 4 AA alkaline batteries only. Low battery warning will come on at approximately 4.8 volts. The only way to reset the lock and get out of low battery warning is to replace the batteries with new AA alkaline batteries. Important: Always replace all 4 batteries with new batteries.

The following warnings will occur at different intervals:

1. **The 1st 50 times** you open the door after the low battery threshold (~4.8 volts) is reached- Swipe an authorized Keycard- 3 “beeps” followed by 3 “beeps” (6 “beeps” total) and the lock unlocks
2. **Using the lock 51-100 times** after the low battery warning threshold is reached- Swipe an authorized Keycard- 3“beeps” followed by 3 “beeps” followed by 3“beeps” (9 “beeps” total) and the lock unlocks
3. **After 100 times or under very low voltage conditions**- “3 beeps” 4 times (12“beeps” total) and then only the Programming Keycard will unlock the lock.

Do not wait for the low battery warning- it is recommended under normal use that the batteries be changed every 12 months. If the low battery warning has started it is important to replace the batteries immediately to avoid any issues.

Note: replacing or removing the batteries does not affect the lock memory.

Keycard Control:

Keycard control is important to maintain the integrity and security of the system. Each Keycard has a unique serial number printed on the face. Each Keycard is labeled with the type of Keycard (User, Office, Clear... etc.). Keycards and the serial numbers should be logged. Each lock should have a database showing what Keycards/RCUs are authorized and the serial numbers of each Keycard. System and management Keycards- Programming, Clear, Register, Lockdown Cancel and Database Keycards-should be controlled by the department or person in charge of security. It is recommended that these Keycards be placed in a secure location to prevent any unauthorized use. It is important to report any lost or stolen Keycards and RCUs immediately and take the action necessary to reinstate new Keycards and RCUs.

Swiping and holding the Keycards:

Swiping a RFID Keycard in this context means placing the Keycard flat on the reader in front of the lock. It is recommended that the Keycard is placed so that the Keycard essentially covers the reader. This will ensure proper transfer of data and reduce programming errors. The Keycard should be left on for about 1 second or until the confirmation (“beeps”) is heard. In some cases the Keycard needs to be held- usually the Database Keycard- in order to ensure all the data is transferred. After the data transfer is complete there is a second confirmation (“beeps”) and the Keycard can be removed.

Troubleshooting:

- If you have any issues please contact technical support (phone number and website is listed on all the Keycards).
- Some information and quick fixes:
- Look on on line for videos in regard to programming and troubleshooting (keywords- Townsteel and FCE 4000).
- In general- if you receive 3 “beeps” after swiping the Keycard it is not valid or the programming was incorrect.
- When having issues- stop and read the Programming Manual.
- When Initializing the lock- use the Programming, Clear and Register Keycards (in that order) and do not stop in the middle- complete this sequence.
- The Programming and Clear modes last for 8 seconds (signified by the flashing LED) after the last valid card was swiped- let it timeout before attempting something different.
- Read the manual before programming, have all the Keycards and RCUs organized and ready.

FCC STATEMENT:

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

conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Electronic Door Locking System - The Remote Control Unit

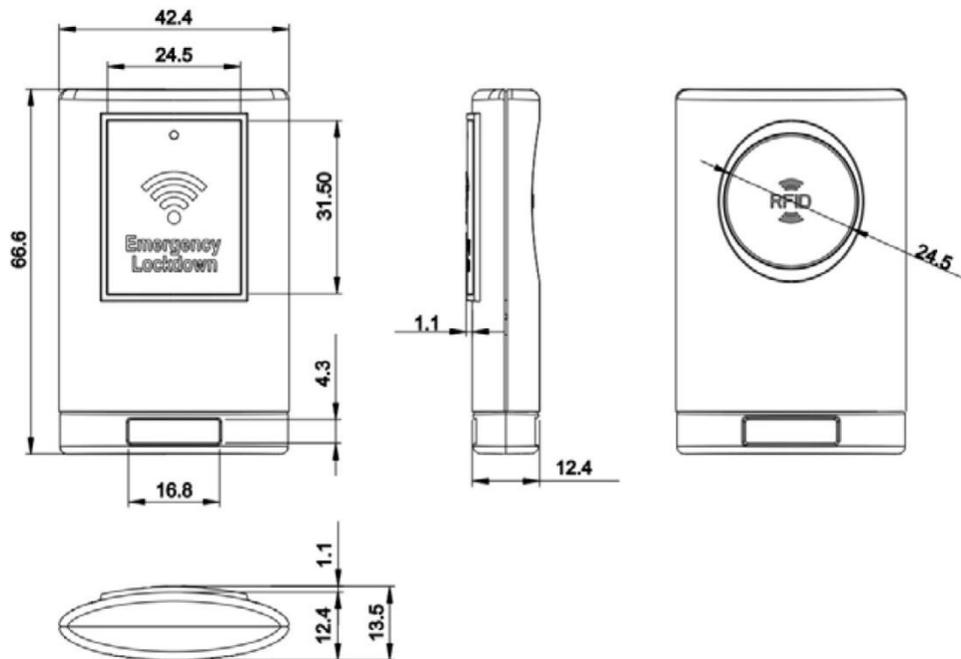
The Remote Control Unit (RCU) is used to set an electronic door lock in alarm mode (RCU 315-1) or to open an electronic door lock from remote (RCU 315-2).

The remote control unit is powered by an alkaline battery 27A 12VDC and uses 315MHz frequency. When the push button is pressed, the remote control unit sends a coded signal via the 315MHz RF circuits.

Specification

Item	Range	Reference Value	Unit	Description
Working Voltage	5-12	12	V	
Static Current	<10	0	uA	
RF Sending Current	<30	16	mA	
Working Temperature	-30~85		°C	

Dimensions:



Operation

Push the lockdown button and hold it for 2 seconds.



Battery Low Alarm and Battery Change

You should change the battery when the red LED flashes as alarm for battery low during pressing button. You can open the remote control unit easier with a slot type screwdriver.



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