System Diagnostic Unit

Instruction Manual

V116 (September 2019)

ARC
ADVANCED RADIOTECH CORPORATION

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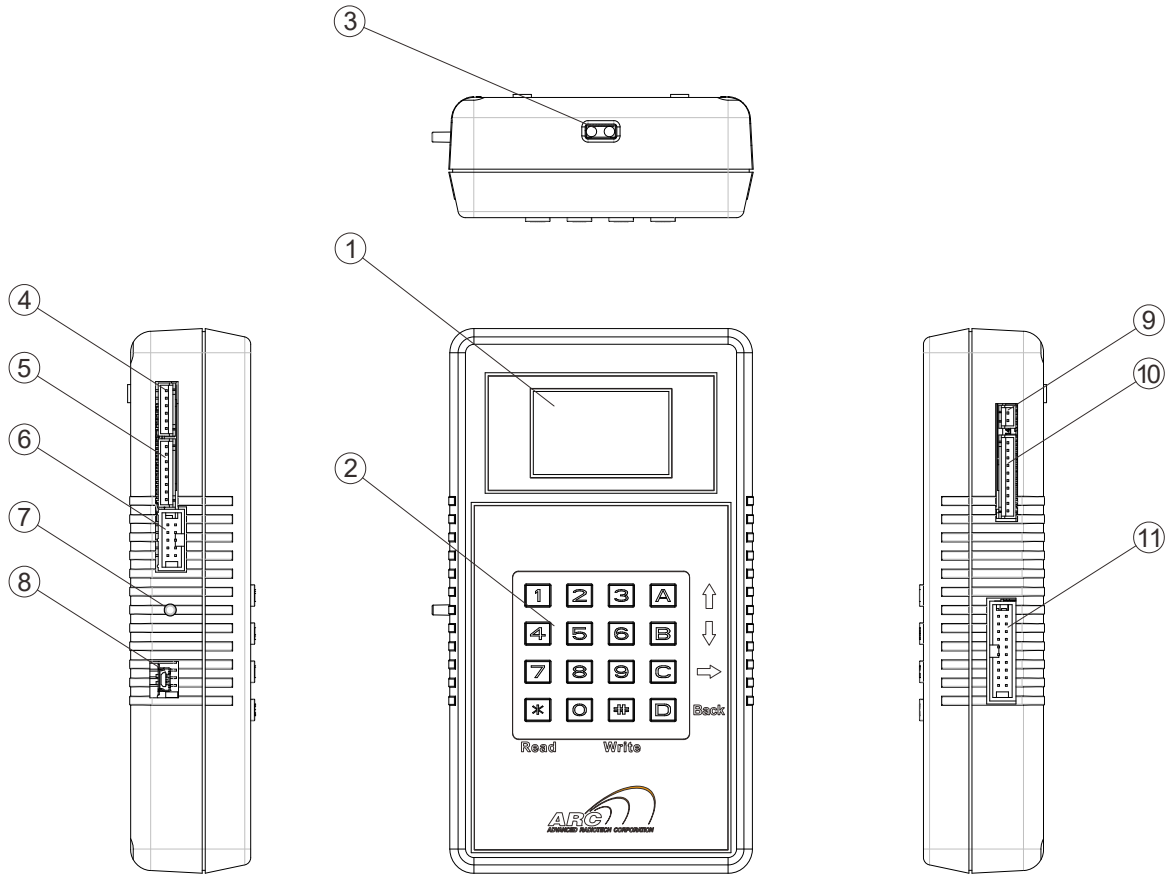

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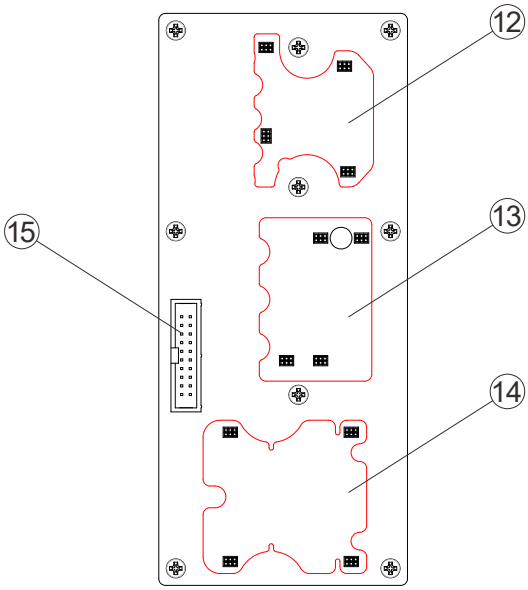


2. Power On/Off the Unit

1. Press the power button for up to 2 seconds to power on the unit.
2. Press the power button for up to 2 seconds to power off the unit.
3. LCD backlights will shut off after 2 minutes of inactivity, press the power button to turn it back on.
4. The unit will power off after 10 minutes of inactivity.
5. Change battery immediately when the LCD backlights flash repeatedly.

3. Model Selection

At type model main screen press “↑” (A) and “↓” (B) buttons to scroll between models. Press “→” (C) button to enter the selected type model (cursor shown next to the type model). To deselect the type model after entering press the “Back” (D) button until the type model main screen is shown again.

4. Flex EX Models

4.1 Decode TX Data **(Using internal-equipped receiving RF board)**

1. Press “→” button to enter “Decode TX Data”.
2. Press “→” button to enter Frequency Range column. Press “↑” and “↓” button to scroll and select the frequency range of the internal-equipped receiving RF board. Make sure the internal-equipped receiving RF board corresponds to the frequency range selected. Press “BACK” button to exit “FREQ” column.
3. Press “↓” and then “→” button to enter Channel column.
4. Press “↑” and “↓” button to scroll and select channel 01~62 or select auto-scanning (AUTOSCAN) if unsure of transmitter channel.

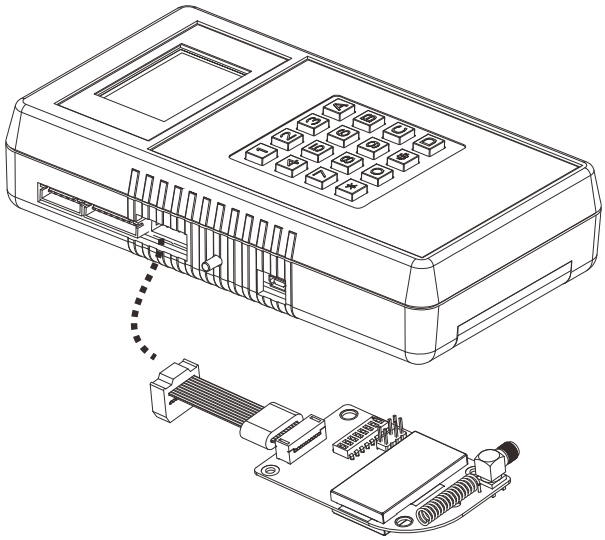
   Numeric column: Input channel number by using the keypad number 0~9, for example, press “0” and then “9” for channel “09”. Press “→” button to start transmitter function testing. Press “BACK” button to exit.

   AUTOSCAN column: Rotate and hold the transmitter power switch at the START position or press and hold any pushbutton to connect. Press “→” button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the power switch or pushbutton. Press “BACK” button two times with the curser shown next to the “CH” column. Press “↓” button one time with the curser shown next to the “01 S:XXXXXX T:XXX” and then press “→” button start transmitter function testing. Press “BACK” button to exit.

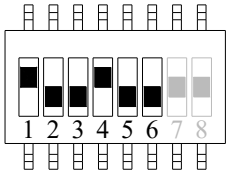
When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

4.2 Decode TX Data (Using external receiving RF board)

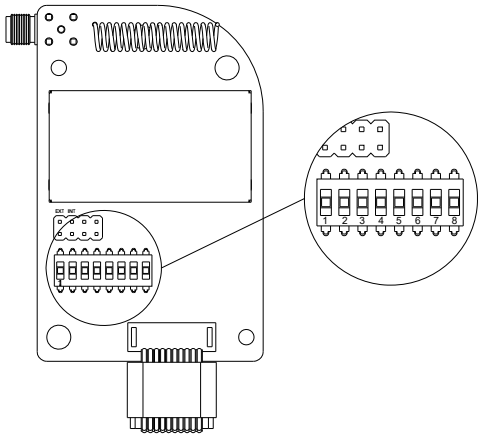
1. Make sure the receiving RF board is connected.



2. Make sure the channel set on the receiving RF board is identical to the channel set on the transmitter. If not, please readjust the channel dipswitch accordingly.



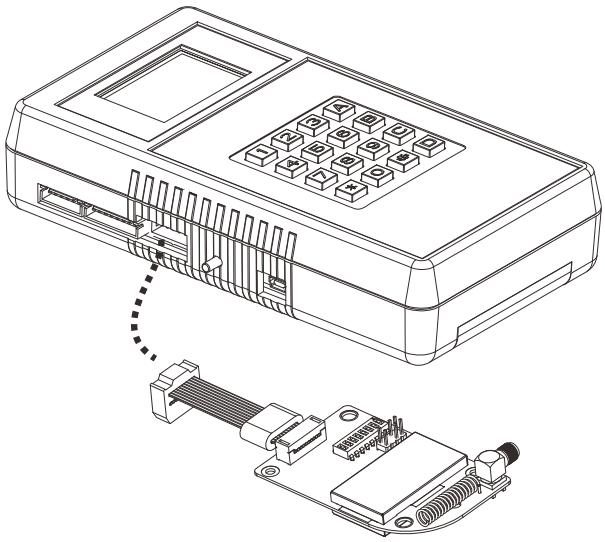
Top slot → "1"
Bottom slot → "0"



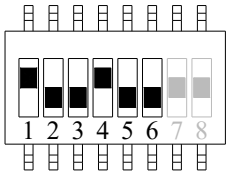
3. Press "→" button to start transmitter function testing. Press "BACK" button to exit.

4.3 Test Receiving RF board

1. Make sure the receiving RF board is connected.

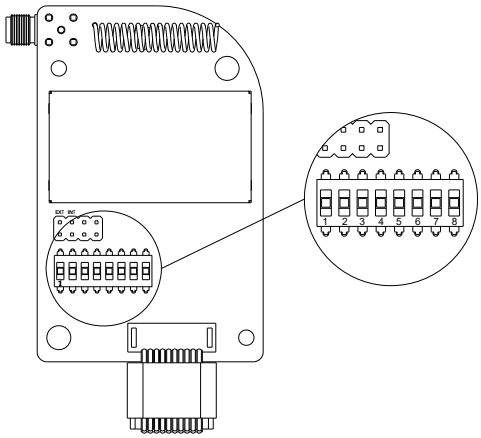


2. Make sure the channel set on the receiving RF board is identical to the channel set on the transmitter. If not, please readjust the channel dipswitch accordingly.



Top slot → “1”

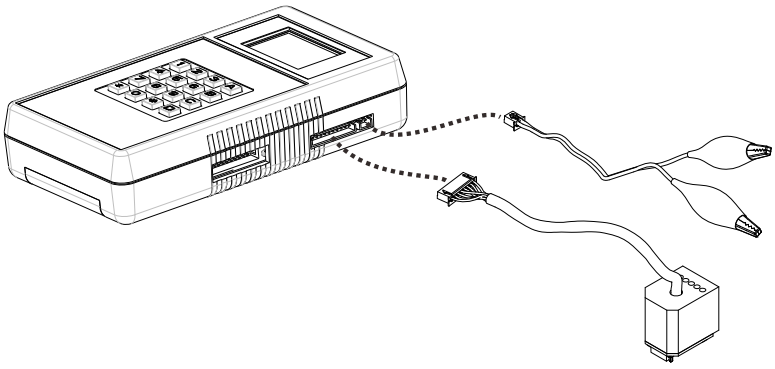
Bottom slot → “0”



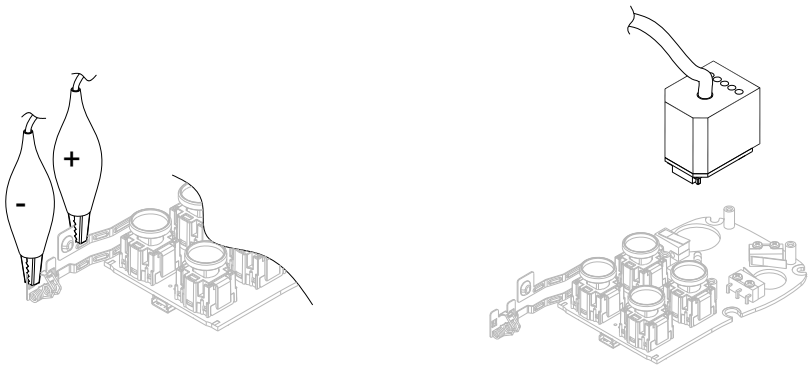
3. Press “→” button to enter start testing the receiving RF board. Press “BACK” button to exit.

4.4 Test Encoder Board

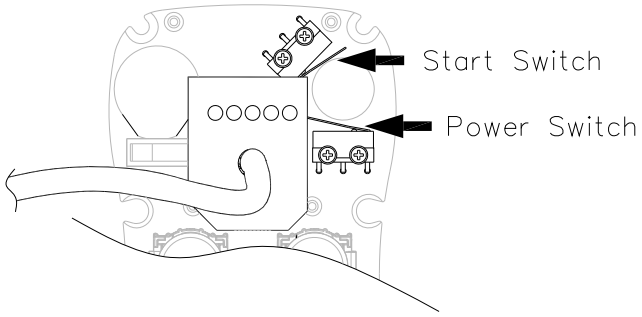
1. Connect the power and LED cables onto the unit.



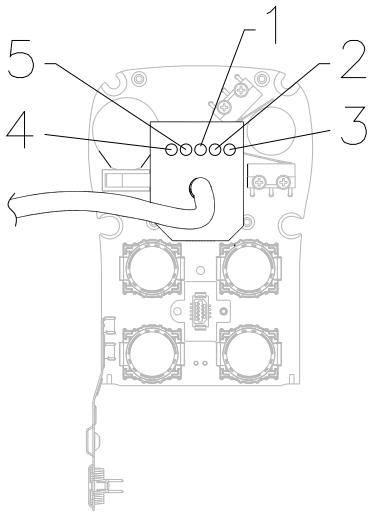
2. Connect the other end of the power and LED cables onto the encoder board.



3. Make sure the I-Chip is installed onto the encoder board.
4. Press and hold the Power Switch.



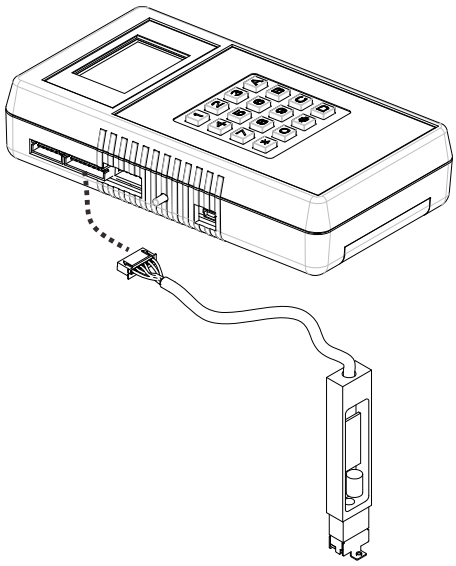
5. Press the START switch one time and let go. Status LED (LED-1) should blink green.



6. At this time the I-Chip information should be displayed on the LCD screen. If not, the encoder board is defective.
7. If the LCD screen displayed correct I-Chip information, such as the serial number, then proceed further by pressing all pushbuttons one at a time. If pushbutton command is shown on the LCD screen when pressed, the pushbutton is OK. If not shown on the LCD screen, the pushbutton is defective.

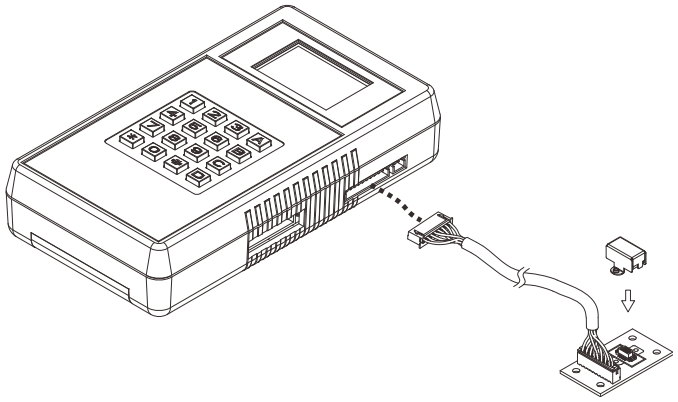
4.5 Decoder Board Programming

1. Connect the decoder programming cable onto the unit.
2. Connect the other end of the decoder programming cable onto the decoder board I-Chip programming port.
3. Press "→" button to enter decoder programming
4. Press "↑" and "↓" button to scroll settings
5. Press keypad number 0~9 or "↑" and "↓" button to change value
6. Press "Write" button to program new settings into the decoder board.
7. Press "BACK" button to exit.



4.6 I-Chip Programming

1) Connect the I-Chip programming cable onto the programmer.



2) Press "→" button to enter I-Chip Programming. When entered, the first selection shown on the screen is "Program". Use the "↑" and "↓" buttons to scroll through various Flex EX settings or press "→" button to enter "Program". Make sure the I-Chip is connected to the I-Chip programming cable.
3) Press "→" button to erase I-Chip information, press "→" button again to execute. "ERASE OK" is shown on the screen when completed.
4) Press "READ" button to store the I-Chip information into the programmer. If the screen shows "READ OK", the transfer is completed.
5) Press "WRITE" button to transfer the stored I-Chip information into a new I-Chip. If the screen shows "WRITE OK", the transfer is completed.
6) Exit Program I-Chip by pressing the "BACK" button until the cursor is shown next to "PROGRAM:".
7) Press "↑" and "↓" button to scroll through other Flex EX I-Chip settings or the "BACK" button to exit I-Chip Programming.

4.7 Program Serial Number (TX & RX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter Serial Number setting.
3) Press "↑" and "↓" button to change serial number as a whole or…
4) Input serial number directly by using the keypad number 0~9, for example, press "0" five times and then "1" one time is "S/N 000001".
5) Exit Program Serial Number by pressing the "BACK" button until the cursor is shown next to "S/N".
6) Press "↑" and "↓" button to scroll through other Flex EX settings.

When finished, take out the I-Chip and insert it onto the I-Chip programming port located on the decoder module to transfer the new serial number from the I-Chip to the receiver. Make sure JP6 jumper is inserted when transferring I-Chip information into the receiver.

4.8 Program System Type (TX & RX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter System Type setting.
3) Press "↑" and "↓" button to change system type as a whole or…
4) Input system type directly by using the keypad number 0~9, for example, press "0" three times and then "1" one time is "TYPE 0001".
5) Exit Program System Type by pressing the "BACK" button until the cursor is shown next to "TYPE".
6) Press "↑" and "↓" button to scroll through other Flex EX settings.

When finished, take out the I-Chip and insert it onto the I-Chip programming port located on the decoder module to transfer the new system type from the I-Chip to the receiver. Make sure JP6 jumper is inserted when transferring I-Chip information into the receiver.

4.9 Program System Frequency Range (TX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter System Frequency Range setting.
3) Press "↑" and "↓" button to change frequency range.
4) Exit Program System Frequency Range by pressing the "BACK" button until the cursor is shown next to "FREQ".
5) Press "↑" and "↓" button to scroll through other Flex EX settings.

When changing the frequency range table in I-Chip, make sure the transmitting and receiving RF boards are also changed accordingly.

4.10 Program System Channel (TX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter System Channel setting.
3) Press "↑" and "↓" button to change system channel as a whole or…
4) Input system channel directly by using the keypad number 0~9, for example, press "0" one time and then "1" one time is "CH 01".
5) Exit Program System Channel by pressing the "BACK" button until the cursor is shown next to "CHANNEL".
6) Press "↑" and "↓" button to scroll through other Flex EX settings.

4.11 Program RF Power (TX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter RF Power setting.
3) Press "↑" and "↓" button to change RF power (0.01 ~ 10mW).
4) Exit Program RF Power by pressing the "BACK" button until the cursor is shown next to "RFpower".
5) Press "↑" and "↓" button to scroll through other Flex EX settings.

4.12 Program Transmitter Inactivity Timer (TX)

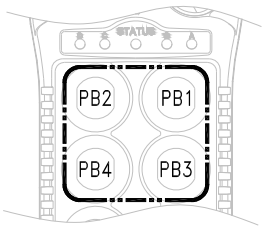
1) Make sure the I-Chip is connected.
2) Press "→" button to enter Transmitting Timer setting.
3) Press "↑" and "↓" button to select __M (or __S) and ON (constant on).
4) When **M**inutes or **S**econds is selected, input value directly by using the keypad number 0~9, for example, press "0" one time and then "1" one time is "01".
5) Press "→" button to go to the next column to select "M" for minutes and "S" for seconds. Press "↑" and "↓" button to select.
6) Exit Program Transmitter Timer by pressing the "BACK" button until the cursor is shown next to "TX TIME".
7) Press "↑" and "↓" button to scroll through other Flex EX settings.

4.13 Program Password (TX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter Password setting.
3) Input password directly by using the keypad number 0~9, for example, press "1" one time, "2" one time, "3" one time and "4" one time is "1234".
4) Exit Program Password by pressing the "BACK" button until the cursor is shown next to "PASSWORD".
5) Press "↑" and "↓" button to scroll through other Flex EX settings.

Only PB1 through PB4 are used when using the password function. Numeric value "1" represents PB1, "2" represents PB2, "3" represents PB3 and "4" represents PB4.

Setting "1111" → Password function disabled (manufacture preset)



4.14 Program Pushbutton Functions (TX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter Pushbutton Function setting.
3) Press "↑" and "↓" button to change pushbutton function as a whole or…
4) Input value directly by using the keypad number 0~9, for example, press "0" two times and "2" one time is PB function "002".
5) Exit Program Pushbutton Functions by pressing the "BACK" button until the cursor is shown next to "PB FUNC".
6) Press "↑" and "↓" button to scroll through other Flex EX settings.

The transmitter pushbutton function table on Section 11 Part-A illustrates which numeric value corresponds to which pushbutton function.

4.15 Program Function Relay / K26 Relay (RX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter Function Relay setting.
3) Press "↑" and "↓" button to scroll and select.
4) Exit Program Function Relay by pressing the "BACK" button until the cursor is shown next to "FUNC RLY".
5) Press "↑" and "↓" button to scroll through other Flex EX settings.

---	:	START function only.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
TDM A+B	:	FUNCTION relay closes when selector switch is rotated to the A+B position and opens when rotate to A or B positions (tandem monitoring output).
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
HORN	:	FUNCTION relay closes for up to 3 seconds when START command is executed at transmitter power on and then becomes normal momentary outputs thereafter.

When finished, take out the I-Chip and insert it onto the I-Chip programming port located on the decoder module to transfer the new setting from the I-Chip to the receiver. Make sure JP6 jumper is inserted when transferring I-Chip information into the receiver.

4.16 Program Brake Functions (RX)

1) Make sure the I-Chip is connected.
2) Press "→" button to enter Brake Function setting.
3) Press "↑" and "↓" button to scroll and select.
4) Exit Program Brake Functions by pressing the "BACK" button until the cursor is shown next to "BRAKE".
5) Press "↑" and "↓" button to scroll through other Flex EX settings.

DEMAG 1 : When releasing pushbutton from 2nd speed up to 1st speed, the 1st speed output relay will open for up to 1.0 second and then closes again.

DEMAG 2 : When pushbutton is pressed down to 2nd speed directly from 0 speed, the 1st speed output relay will maintain closure for up to 0.4 second before 2nd speed output relay closes. When pushbutton is released from 2nd speed up to 0 speed, the 1st speed output relay will maintain closure for up to 0.5 second before going to 0 speed.

DEMAG 3 : When releasing pushbutton from 2nd speed up to 1st speed, both 1st and 2nd speed output relays are opened. Release pushbutton to 0 speed and then press down to 1st speed to reengage the 1st speed output relay.

P&H : When releasing pushbutton from 2nd speed up to 0 speed, the 1st speed output relay will maintain closure for up to 0.1 second before going to 0 speed.

When finished, take out the I-Chip and insert it onto the I-Chip programming port located on the decoder module to transfer the new Brake setting from the I-Chip to the receiver. Make sure JP6 jumper is inserted when transferring I-Chip information into the receiver.

5. Flex EX2 Models

5.1 Decode TX Data (Using internal-equipped receiving RF board)

1. Press "→" button to enter "Decode TX Data".
2. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the internal-equipped receiving RF board. Make sure the internal-equipped receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
3. Press "↓" and then "→" button to enter Channel column.
4. Press "↑" and "↓" button to scroll and select ASSIGN 01~62, UNASSIGN, or AUTOSCAN. Press "→" button to enter.

ASSIGN column: Press "→" button to enter channel input column. Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09", or press "↑" and "↓" button to scroll and select from 1~62. Press "→" button to start transmitter function testing. Press "BACK" button to exit.

Transmitter must also set to assigned channel scheme in order to work.

UNASSIGN column: Press "→" button to begin channel pairing process. Turn on the transmitter power and rotate the power switch to the START position for up to 2 seconds. When paired, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

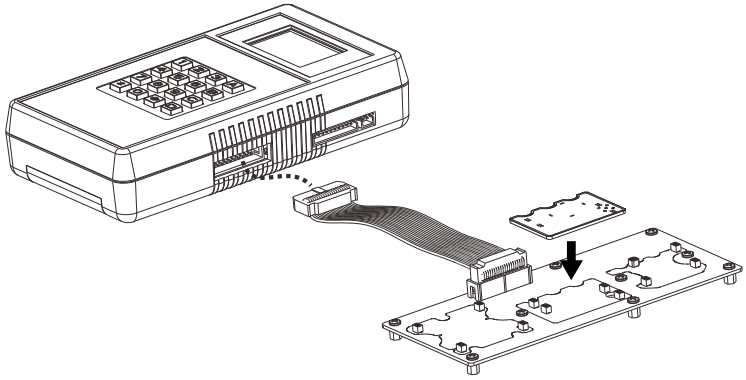
Transmitter must also set to unassigned channel scheme in order to work.

AUTOSCAN column: Rotate and hold the transmitter power switch at the START position or press and hold any pushbutton to connect. Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the power switch or pushbutton. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

Transmitter must also set to assigned channel scheme in order to work. When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

5.2 Decode TX Data (Using external receiving RF board)

1. Make sure the receiving RF board is connected.



Make sure transmitting RF board is not connected to this unit at the same time during testing. "NO BOARD" is shown on the screen when receiving RF board is not connected.

2. Press "→" button to enter "Decode TX Data".
3. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the external-equipped receiving RF board. Make sure the external-equipped receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
4. Press "↓" and then "→" button to enter Channel column.
5. Press "↑" and "↓" button to scroll and select ASSIGN 01~62, UNASSIGN, or AUTOSCAN. Press "→" button to enter.

ASSIGN column: Press "→" button to enter channel input column. Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09", or press "↑" and "↓" button to scroll and select from 01~62. Press "→" button to start transmitter function testing. Press "BACK" button to exit.

Transmitter must also set to assigned channel scheme in order to work.

UNASSIGN column: Press "→" button to begin channel pairing process. Turn on the transmitter power and rotate the power switch to the START position for up to 2 seconds. When paired, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

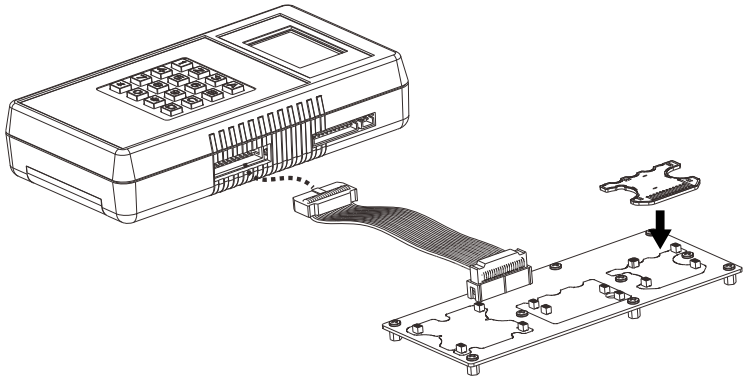
Transmitter must also set to unassigned channel scheme in order to work.

AUTOSCAN column: Rotate and hold the transmitter power switch at the START position or press and hold any pushbutton to connect. Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the power switch or pushbutton. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

Transmitter must also set to assigned channel scheme in order to work. When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

5.3 Test Transmitting RF Board

1. Make sure the transmitting RF board is connected.

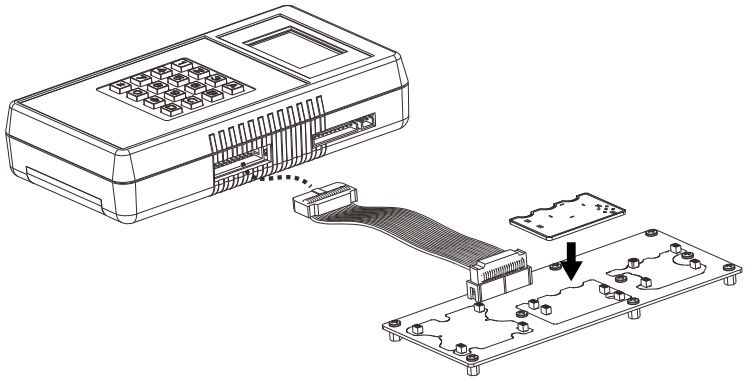


2. Press "↑" and "↓" button to select TX board, RX board or RFID board.
3. Press "→" button to enter TX board. Press "→" button again to test.
4. "OK" shown on the screen means TX board is ok.
5. "NO BOARD" shown on the screen means either the TX board is not connected, TX board defective, or both TX and RX boards are connected.
6. Press "BACK" button to exit.

Make sure receiving RF board is not connected to this unit at the same time during testing.

5.4 Test Receiving RF Board

1. Make sure the receiving RF board is connected.

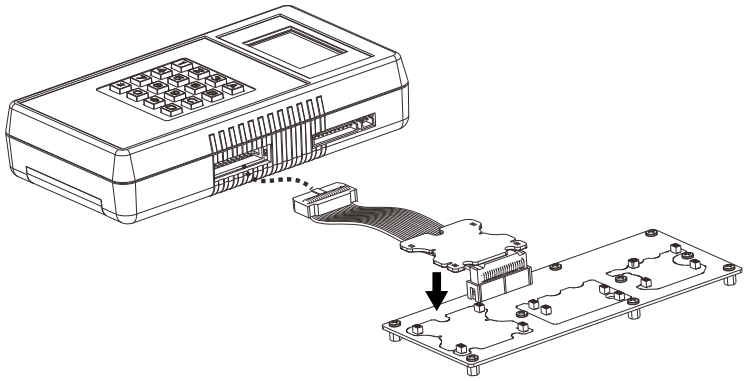


2. Press “↑” and “↓” button to select TX board, RX board or RFID board.
3. Press “→” button to enter RX board. Press “→” button again to test.
4. “OK” shown on the screen means RX board is ok.
5. “NO BOARD” shown on the screen means either the RX board is not connected, RX board defective, or both TX and RX boards are connected.
6. Press “BACK” button to exit.

Make sure transmitting RF board is not connected to this unit at the same time during testing.

5.5 Test RFID/TAC Board

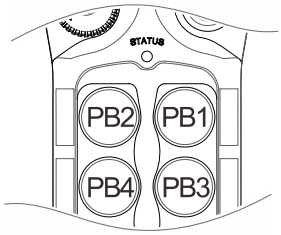
1. Make sure the TAC board is connected.



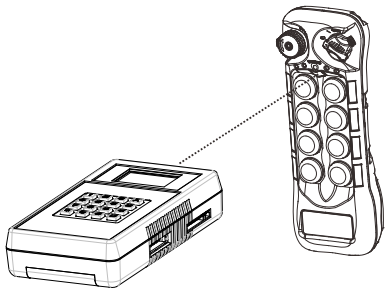
2. Press “↑” and “↓” button to select TX board, RX board or RFID board.
3. Press “→” button to enter RFID board. Press “→” button again to test.
4. ID:XXXXXXXXX shown on the screen means TAC board is ok with TAC access card or cards stored within the board.
5. ID: EMPTY shown on the screen means TAC board is ok and with no TAC access card stored within the board.
6. ID: NO BOARD shown on the screen means TAC board not connected or defective.
7. Press “BACK” button to exit.

5.6 Program IR

5.6.1 Transmitter



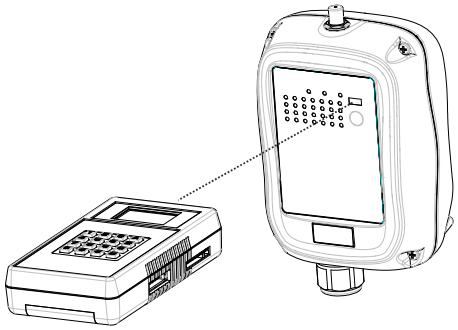
1) Rotate the power switch key to OFF (0) position.
2) With the STOP button elevated, press and hold PB1 and PB3 at the same time.
3) Rotate the power switch key to ON (I) position.
4) Release PB1 and PB3 at the same time. The transmitter Status LED displays firmware version with red, green and orange blinks.
5) Press and hold the READ button to transfer transmitter info into the programmer. If the screen shows “READ OK”, the transfer is completed.
6) Browse through list of settings by pressing “↑” and “↓” buttons.
7) Press and hold the WRITE button to transfer the new settings into the transmitter (transmitter Status LED constant orange). If the screen shows “WRITE OK”, the transfer is completed (transmitter Status LED constant green for up to 2 seconds).



8) Exit Program IR by pressing the “BACK” button until the cursor is shown next to “PROGRAM”.
9) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.6.2 Receiver

1) Power on the receiver with MAIN relays deactivated (standby mode).
2) Press and hold the READ button to transfer receiver info into the programmer. If the screen shows “READ OK”, the transfer is completed.
3) Browse through list of settings by pressing “↑” and “↓” buttons.
4) Press and hold the WRITE button to transfer the new settings into the receiver (receiver Status LED constant orange). If the screen shows “WRITE OK”, the transfer is completed (receiver Status LED blinks green – standby mode).



5) Exit Program IR by pressing the “BACK” button until the cursor is shown next to “PROGRAM”.
6) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

When performing infrared programming, make sure the distance between the programmer and the transmitter or receiver are within 10cm.

5.7 Program Serial Number (TX & RX)

1) Press “→” button to enter Serial Number setting.
2) Press “↑” and “↓” button to change serial number as a whole or…
3) Input serial number directly by using the keypad number 0~9, for example, press “0” five times and then “1” one time is “S/N 000001”.
4) Exit Program Serial Number by pressing the “BACK” button until the cursor is shown next to “S/N”.
5) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.8 Program System Type (TX & RX)

1) Press “→” button to enter System Type setting.
2) Press “↑” and “↓” button to change system type as a whole or…
3) Input system type directly by using the keypad number 0~9, for example, press “0” two times and then “1” one time is “TYPE 001”.
4) Exit Program System Type by pressing the “BACK” button until the cursor is shown next to “TYPE”.
5) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.9 Program T-Type Functions (TX & RX)

1) Press “→” button to enter T-Type Functions setting.
2) Press “↑” and “↓” button to change type number.
3) Press “→” button and then “↑” and “↓” button to select “LOCK” for all Select buttons interlocked and “UNLOCK” for all Select buttons non-interlocked.
4) Exit Program T-Type Functions by pressing the “BACK” button until the cursor is shown next to “T-TYPE”.
5) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.10 Program System Frequency Range (TX & RX)

1) Press “→” button to enter Frequency Range setting.
2) Press “↑” and “↓” button to change frequency range.
3) Exit Program System Frequency Range by pressing the “BACK” button until the cursor is shown next to “FREQ”.
4) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.11 Program System Channel (TX & RX)

1) Press “→” button to enter System Channel setting.
2) Press “↑” and “↓” button to change system channel as a whole or…
3) Input system channel directly by using the keypad number 0~9, for example, press “0” one time and then “1” one time is “CH 01”.
4) Exit Program System Channel by pressing the “BACK” button until the cursor is shown next to “CHANNEL”.
5) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.12 Program RF Power (TX)

1) Press “→” button to enter RF Power setting.
2) Press “↑” and “↓” button to change RF power (0.01mW ~ 10mW).
3) Press “→” button and then “↑” and “↓” button to **Enable** or **Disable** RF power adjustment via transmitter dipswitch.
4) Exit Program RF Power by pressing the “BACK” button until the cursor is shown next to “RFpower”.
5) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.13 Program Pushbutton Functions (TX)

1) Press “→” button to enter Pushbutton Functions setting.
2) Press “↑” and “↓” button to change pushbutton function as a whole or…
3) Input value directly by using the keypad number 0~9, for example, press “0” two times and “2” one time is PB function “002”.
4) Exit Program Pushbutton Functions by pressing the “BACK” button until the cursor is shown next to “PB FUNC”.
5) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

The transmitter pushbutton function table on Section 11 Part-B illustrates which numeric value corresponds to which pushbutton function.

5.14 Program Rotary Switch Functions (TX)

1) Press “→” button to enter Rotary Switch Functions setting.
2) Press “↑” and “↓” button to select A/Off/B, A/B/A+B, A/A+B/B or A/B/C rotary switch sequence.
3) Exit Program Rotary Switch Functions by pressing the “BACK” button until the cursor is shown next to “SW FUNC”.
4) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.15 Program Transmitter Inactivity Timer (TX)

1) Press “→” button to enter Transmitting Timer setting.
2) Press “↑” and “↓” button to select __M (or __S) and ON (constant on).
3) When “ON” is selected, press “→” button and then “↑” and “↓” button to select “+START” or “+ANY”.
4) When **M**inutes or **S**econds is selected, input value directly by using the keypad number 0~9, for example, press “0” one time and then “1” one time is “01”.
5) Press “→” button and then “↑” and “↓” button to select “M” for minutes or “S” for seconds.
6) Press “→” button again and then “↑” and “↓” button to select “+START” or “+ANY”.
7) Exit Program Transmitter Timer by pressing the “BACK” button until the cursor is shown next to “TX TIMER”.
8) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

Transmitter inactivity timer is for setting receiver main relays cutoff time when the transmitter is not in operation for a certain period of time. When set to 5 minutes (05M), the receiver main relays are deactivated at 5.0 minutes after last transmitter operation.

Select "ON" means the receiver main relays are activated at all time unless the STOP button is pressed down, transmitter power off, or receiver power turned off (inactivity timer disabled).

Select "+START" means after 5 minutes of transmitter inactivity you must execute the START command to continue operation. Select "+ANY" means after 5 minutes of transmitter inactivity, press any pushbutton to continue operation.

5.16 Program LED1 Feedback Function (TX)

1) Press "→" button to enter LED1 Feedback Function setting.
2) Press "↑" and "↓" button to select Off, Input number or Output number.
3) When "Input" is selected, press "→" button and then "↑" and "↓" button to select input number that the external source is connected to (IN1 ~ IN4).
4) When "Output" is selected, press "→" button and then "↑" and "↓" button to select which output relay to feedback to LED1 (K1 ~ K24).
5) Select "Off" if no feedback is required.
6) Exit Program LED1 Feedback Function by pressing the "BACK" button until the cursor is shown next to "LED1".
7) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

5.17 Program LED2 Feedback Function (TX)

1) Press "→" button to enter LED2 Feedback Function setting.
2) Press "↑" and "↓" button to select Off, Input number or Output number.
3) When "Input" is selected, press "→" button and then "↑" and "↓" button to select input number that the external source is connected to (IN1 ~ IN4).
4) When "Output" is selected, press "→" button and then "↑" and "↓" button to select which output relay to feedback to LED2 (K1 ~ K24).
5) Select "Off" if no feedback is required.
6) Exit Program LED2 Feedback Function by pressing the "BACK" button until the cursor is shown next to "LED2".
7) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

5.18 Program LED3 Feedback Function (TX)

1) Press "→" button to enter LED3 Feedback Function setting.
2) Press "↑" and "↓" button to select Off, Input number or Output number.
3) When "Input" is selected, press "→" button and then "↑" and "↓" button to select input number that the external source is connected to (IN1 ~ IN4).

4) When “Output” is selected, press “→” button and then “↑” and “↓” button to select which output relay to feedback to LED3 (K1 ~ K24).
5) Select “Off” if no feedback is required.
6) Exit Program LED3 Feedback Function by pressing the “BACK” button until the cursor is shown next to “LED3”.
7) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.19 Program LED4 Feedback Function (TX)

1) Press “→” button to enter LED4 Feedback Function setting.
2) Press “↑” and “↓” button to select Off, Input number or Output number.
3) When “Input” is selected, press “→” button and then “↑” and “↓” button to select input number that the external source is connected to (IN1 ~ IN4).
4) When “Output” is selected, press “→” button and then “↑” and “↓” button to select which output relay to feedback to LED4 (K1 ~ K24).
5) Select “Off” if no feedback is required.
6) Exit Program LED4 Feedback Function by pressing the “BACK” button until the cursor is shown next to “LED4”.
7) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.20 Program Infrared START Function (TX)

1) Press “→” button to enter Infrared Start Function setting.
2) Press “↑” and “↓” button to select Off or IRS.

   Select “OFF” to disable infrared START function.

   Select “IRS” to enable infrared START function.

3) Exit Program Infrared START Function by pressing the “BACK” button until the cursor is shown next to “IR Mode”.
4) Press “↓” button to go to the next Infrared START setting.

5.21 Program Infrared START ID Code (TX)

1) Press “→” button to enter Infrared START ID code setting.
2) Press “↑” and “↓” button to set the 3-digit ID code as a whole or…
3) Input value directly by using the keypad number 0~9, for example, press “0” two times and “2” one time is infrared ID “002”.
4) Exit Program Infrared START ID Code by pressing the “BACK” button until the cursor is shown next to “IR ID”.
5) Press “↓” button to go to the next Infrared START setting.

Make sure the infrared module on crane is set to same ID code as the transmitter.

Select “000” disables the ID code function hence any types of infrared modules can be used.

5.22 Program IRS Time Out (TX)

1) Press "→" button to enter IRS Time Out setting.
2) Press "↑" and "↓" button to select IRS Off or IRS On.

   Select "IRS On" if infrared START is required after every transmitter timeout.

   Select "IRS Off" if infrared START is not required after every transmitter timeout.

3) Exit Program IRS Time Out by pressing the "BACK" button until the cursor is shown next to "IRS FUNC".
4) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

5.23 Program DEADMAN PB Function (TX)

1) Press "→" button to enter DEADMAN PB Function setting.
2) Press "→" and then "↑" and "↓" button to select which button or switch to be used as DEADMAN function (OFF, START, PB1… PB12).
3) Press "BACK" and then "↓" button to select which button or buttons require pressing the DEADMAN button in order to work.
4) Press "→" to enter for PB1~PB7 setting. Press "→" button again to select which button to program. Press "↑" or "↓" button to assign. Shaded background means the assigned button works only when the DEADMAN button is pressed down.
5) Press "BACK" button and then "↓" buttons to program PB8~PB12. Press "→" button to enter. Repeat step 4 above to assign.
6) Exit DEADMAN PB Function by pressing the "BACK" button until the cursor is shown next to "DEADMAN".
7) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

5.24 Program PB Reset Function (TX)

1) Press "→" button to enter PB Reset Function setting.
2) Press "↑" and "↓" button to scroll and select OFF, 1S… 60S (seconds).
3) Exit PB Reset Function by pressing the "BACK" button until the cursor is shown next to "PB RESET".
4) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

Require pressing the motion pushbutton twice in order to activate the designated output.

Example: When set to 60S (60 seconds), pressing the motion pushbutton twice is required after transmitter is inactive for 60 seconds. Pressing it once will not activate the designated output.

5.25 Program All PB Interlocked (TX)

1) Press "→" button to enter All PB Interlocked setting.
2) Press "↑" and "↓" button to scroll and select YES or NO.
3) Exit All PB Interlocked by pressing the "BACK" button until the cursor is shown next to "ALL PB INTERLOCKED".
4) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

5.26 Program Channel Scanning (RX)

1) Press "→" button to enter Channel Scanning setting.
2) Press "↑" and "↓" button to select number of channels to scan (01~12).
3) Exit Program Channel Scanning by pressing the "BACK" button until the cursor is shown next to "CH SCAN".
4) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

Make sure the Channel dipswitch in receiver position 7 and 8 is set to "11" in order for this to work.

5.27 Program Function Relay 1 / K25 Relay (RX)

1) Press "→" button to enter Function Relay 1 setting.
2) Press "↑" and "↓" button to scroll and select.
3) Exit Program Function Relay 1 by pressing the "BACK" button until the cursor is shown next to "FUNC RLY1".
4) Press "↑" and "↓" button to scroll through other Flex EX2 settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
TDM A+B	:	FUNCTION relay closes when selector switch is rotated to the A+B position and opens when rotate to A or B positions (tandem monitoring output).
HORN	:	FUNCTION relay closes for up to 3 seconds when START command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
G SENSOR	:	FUNCTION relay closes when Zero-G sensor is triggered (receiver MAIN relays deactivated) and opens when receiver MAIN relays are reactivated.
TANDEM C	:	FUNCTION relay closes when tandem receiver C is selected or activated.
RESET	:	FUNCTION relay closes when rotate to START position and opens when let go. Works during initial transmitter startup and inactivity timer START reset.
SW8 ABC	:	FUNCTION relay closes at C position (for pushbutton and rotary select ABC function).
SW12 ABC	:	FUNCTION relay closes at C position (for pushbutton and rotary select ABC function).

5.28 Program Function Relay 2 / K26 Relay (RX)

1) Press “→” button to enter Function Relay 2 setting.
2) Press “↑” and “↓” button to scroll and select.
3) Exit Program Function Relay 2 by pressing the “BACK” button until the cursor is shown next to “FUNC RLY2”.
4) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
TDM A+B	:	FUNCTION relay closes when selector switch is rotated to the A+B position and opens when rotate to A or B positions (tandem monitoring output).
HORN	:	FUNCTION relay closes for up to 3 seconds when START command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
G SENSOR	:	FUNCTION relay closes when Zero-G sensor is triggered (receiver MAIN relays deactivated) and opens when receiver MAIN relays are reactivated.
TANDEM C	:	FUNCTION relay closes when tandem receiver C is selected or activated.
RESET	:	FUNCTION relay closes when rotate to START position and opens when let go. Works during initial transmitter startup and inactivity timer START reset.
SW8 ABC	:	FUNCTION relay closes at C position (for pushbutton and rotary select ABC function).
SW12 ABC	:	FUNCTION relay closes at C position (for pushbutton and rotary select ABC function).

5.29 Program Function Relay 3 / K30 Relay (RX)

1) Press “→” button to enter Function Relay 3 setting.
2) Press “↑” and “↓” button to scroll and select.
3) Exit Program Function Relay 3 by pressing the “BACK” button until the cursor is shown next to “FUNC RLY3”.
4) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
TDM A+B	:	FUNCTION relay closes when selector switch is rotated to the A+B position and opens when rotate to A or B positions (tandem monitoring output).
HORN	:	FUNCTION relay closes for up to 3 seconds when START command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
G SENSOR	:	FUNCTION relay closes when Zero-G sensor is triggered (receiver MAIN relays deactivated) and opens when receiver MAIN relays are reactivated.
TANDEM C	:	FUNCTION relay closes when tandem receiver C is selected or activated.
RESET	:	FUNCTION relay closes when rotate to START position and opens when let go. Works during initial transmitter startup and inactivity timer START reset.
SW8 ABC	:	FUNCTION relay closes at C position (for pushbutton and rotary select ABC function).
SW12 ABC	:	FUNCTION relay closes at C position (for pushbutton and rotary select ABC function).

5.30 Program Brake Functions (RX)

1) Press “→” button to enter Brake functions setting.
2) Press “↑” and “↓” button to scroll and select.
3) Exit Program Brake Functions by pressing the “BACK” button until the cursor is shown next to “BRAKE”.
4) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

DEMAG 1 : When releasing pushbutton from 2nd speed up to 1st speed, the 1st speed output relay will open for up to 1.0 second and then closes again.

DEMAG 2 : When pushbutton is pressed down to 2nd speed directly from 0 speed, the 1st speed output relay will maintain closure for up to 0.4 second before 2nd speed output relay closes. When pushbutton is released from 2nd speed up to 0 speed, the 1st speed output relay will maintain closure for up to 0.5 second before going to 0 speed.

DEMAG 3 : When releasing pushbutton from 2nd speed up to 1st speed, both 1st and 2nd speed output relays are opened. Release pushbutton to 0 speed and then press down to 1st speed to reengage the 1st speed output relay.

P&H : When releasing pushbutton from 2nd speed up to 0 speed, the 1st speed output relay will maintain closure for up to 0.1 second before going to 0 speed.

5.31 Program MRX Micro Receiver PB type (MRX)

1) Press “→” button 2 times to enter MRX Receiver PB Type setting.
2) Press “↑” and “↓” button to scroll and select. PB1~4 setting means the receiver corresponds to PB1~PB4 on the transmitter. PB5~8 means the receiver corresponds to PB5~PB8 on the transmitter. PB9~12 means the receiver corresponds to PB9~PB12 on the transmitter. Inline means the PB number is counted from top to bottom instead of right to left.
3) Exit Program MRX Receiver PB Type by pressing the “BACK” button until the cursor is shown next to “MICRO RX”.
4) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

5.32 Program Function Relay 1 (K10 and CN5) (MRX)

1) Press “→” button to enter Function Relay 1 setting.
2) Press “↑” and “↓” button to scroll and select.
3) Exit Program Function Relay 1 by pressing the “BACK” button until the cursor is shown next to “FUNC RLY1”.
4) Press “↑” and “↓” button to scroll through other Flex EX2 settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
HORN	:	FUNCTION relay closes for up to 3 seconds when START command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
G SENSOR	:	FUNCTION relay closes when Zero-G sensor is triggered (receiver MAIN relays deactivated) and opens when receiver MAIN relays are reactivated.
RESET	:	FUNCTION relay closes when rotate to START position and opens when let go. Works during initial transmitter startup and inactivity timer START reset.

6. Flex ECO/Handy Models

6.1 Decode TX Data (Using internal-equipped receiving RF board)

1. Press "→" button to enter "Decode TX Data".
2. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the internal-equipped receiving RF board. Make sure the internal-equipped receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
3. Press "↓" and then "→" button to enter Channel column.
4. Press "↑" and "↓" button to scroll and select CHANNEL or AUTOSCAN.

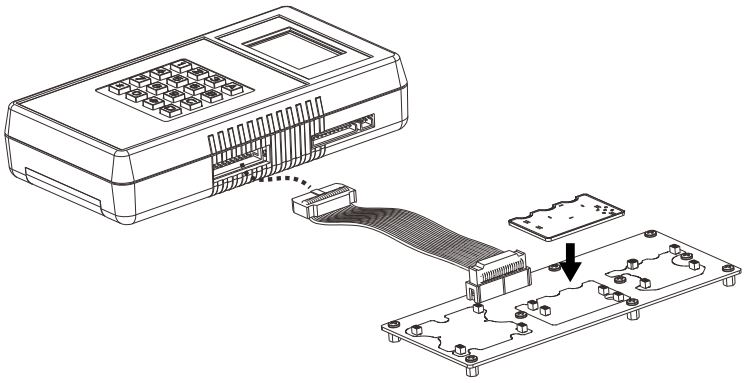
Channel column: Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09". Press "→" button to start transmitter function testing. Press "BACK" button to exit.

AUTOSCAN column: Press and hold the green START button on the transmitter to connect. Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the green START button. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

6.2 Decode TX Data (Using external receiving RF board)

1. Make sure the EX2 receiving RF board (compatible) is connected.



Make sure transmitting RF board is not connected to this unit at the same time during testing. "NO BOARD" is shown on the screen when receiving RF board is not connected.

2. Press "→" button to enter "Decode TX Data".
3. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the external-equipped EX2 receiving RF board. Make sure the external-equipped EX2 receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
4. Press "↓" and then "→" button to enter Channel column.
5. Press "↑" and "↓" button to scroll and select CHANNEL or AUTOSCAN.

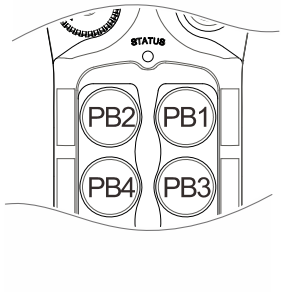
Channel column: Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09". Press "→" button to start transmitter function testing. Press "BACK" button to exit.

AUTOSCAN column: Press and hold the green START button on the transmitter to connect. Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the green START button. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

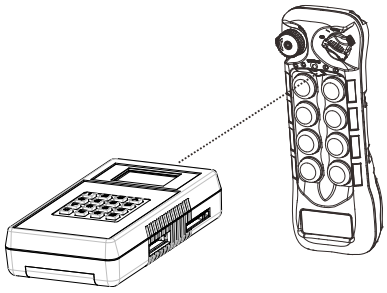
When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

6.3 Program IR

6.3.1 Transmitter

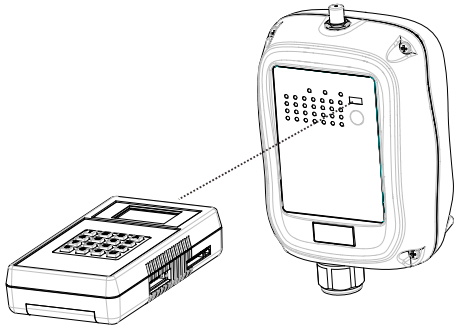


1) Pressed down the STOP button (transmitter power off).
2) Press and hold PB1 and PB3 at the same time.
3) Reset the STOP button by rotating it clockwise or counter-clockwise, it will pop up.
4) Release PB1 and PB3 at the same time. The transmitter Status LED displays firmware version with red, green and orange blinks.
5) Press and hold the READ button to transfer transmitter info into the programmer. If the screen shows “READ OK”, the transfer is completed.
6) Browse through list of settings by pressing “↑” and “↓” buttons.
7) Press and hold the WRITE button to transfer the new settings into the transmitter (transmitter Status LED constant orange). If the screen shows “WRITE OK”, the transfer is completed (transmitter Status LED constant green for up to 2 seconds).
8) Exit Program IR by pressing the “BACK” button until the cursor is shown next to “Program”.
9) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.



6.3.2 Receiver

1) Power on the receiver with MAIN relays deactivated (standby mode).
2) Press and hold the READ button to transfer receiver info into the programmer. If the screen shows “READ OK”, the transfer is completed.
3) Browse through list of settings by pressing “↑” and “↓” buttons.
4) Press and hold the WRITE button to transfer the new settings into the receiver (receiver Status LED constant orange). If the screen shows “WRITE OK”, the transfer is completed (receiver Status LED blinks green – standby mode).
5) Exit Program IR by pressing the “BACK” button until the cursor is shown next to “Program”.
6) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.



When performing infrared programming, make sure the distance between the programmer and the transmitter or receiver are within 10cm.

6.4 Program Serial Number (TX & RX)

1) Press “→” button to enter Serial Number setting.
2) Press “↑” and “↓” button to change serial number as a whole or…
3) Input serial number directly by using the keypad number 0~9, for example, press “0” five times and then “1” one time is “S/N 000001”.
4) Exit Program Serial Number by pressing the “BACK” button until the cursor is shown next to “S/N”.
5) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

6.5 Program System Type (TX & RX)

1) Press “→” button to enter System Type setting.
2) Press “↑” and “↓” button to change system type as a whole or…
3) Input system type directly by using the keypad number 0~9, for example, press “0” two times and then “1” one time is “TYPE 001”.
4) Exit Program System Type by pressing the “BACK” button until the cursor is shown next to “TYPE”.
5) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

6.6 Program T-Type Function (TX & RX)

1) Press “→” button to enter T-Type Functions setting.
2) Press “↑” and “↓” button to change type number.
3) Press “→” button and then “↑” and “↓” button to select “LOCK” for all Select buttons interlocked and “UNLOCK” for all Select buttons non-interlocked.
4) Exit Program T-Type Functions by pressing the “BACK” button until the cursor is shown next to “T-TYPE”.
5) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

6.7 Program System Frequency Range (TX & RX)

1) Press “→” button to enter Frequency Range setting.
2) Press “↑” and “↓” button to change frequency range.
3) Exit Program System Frequency Range by pressing the “BACK” button until the cursor is shown next to “FREQ”.
4) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

6.8 Program System Channel (TX & RX)

1) Press “→” button to enter System Channel setting.
2) Press “↑” and “↓” button to change system channel as a whole or…
3) Input system channel directly by using the keypad number 0~9, for example, press “0” one time and then “1” one time is “CH 01”.
4) Exit Program System Channel by pressing the “BACK” button until the cursor is shown next to “CHANNEL”.
5) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

6.9 Program RF Power (TX)

1) Press “→” button to enter RF Power setting.
2) Press “↑” and “↓” button to change RF power (0.01mW ~ 10mW).
3) Press “→” button and then “↑” and “↓” button to **Enable** or **Disable** RF power adjustment via transmitter dipswitch.
4) Exit Program RF Power by pressing the “BACK” button until the cursor is shown next to “RFpower”.
5) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

6.10 Program Pushbutton Functions (TX)

1) Press “→” button to enter Pushbutton Functions setting.
2) Press “↑” and “↓” button to change pushbutton function as a whole or…
3) Input value directly by using the keypad number 0~9, for example, press “0” two times and “2” one time is PB function “002”.
4) Exit Program Pushbutton Functions by pressing the “BACK” button until the cursor is shown next to “PB FUNC”.
5) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

The transmitter pushbutton function table on Section 11 Part-C illustrates which numeric value corresponds to which pushbutton function.

6.11 Program Transmitter Inactivity Timer (TX)

1) Press “→” button to enter Transmitting Timer setting.
2) Press “↑” and “↓” button to select __M (or __S) and ON (constant on).
3) When “ON” is selected, press “→” button and then “↑” and “↓” button to select “+START” or “+ANY”.
4) When **M**inutes or **S**econds is selected, input value directly by using the keypad number 0~9, for example, press “0” one time and then “1” one time is “01”.
5) Press “→” button and then “↑” and “↓” button to select “M” for minutes or “S” for seconds.
6) Press “→” button again and then “↑” and “↓” button to select “+START” or “+ANY”.
7) Exit Program Transmitter Timer by pressing the “BACK” button until the cursor is shown next to “TX TIMER”.
8) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

Transmitter inactivity timer is for setting receiver main relays cutoff time when the transmitter is not in operation for a certain period of time. When set to 5 minutes (05M), the receiver main relays are deactivated at 5.0 minutes after last transmitter operation.

Select “ON” means the receiver main relays are activated at all time unless the STOP button is pressed down or receiver power turned off (inactivity timer disabled).

Select “+START” means after 5 minutes of transmitter inactivity you must execute the START command to continue operation. Select “+ANY” means after 5 minutes of transmitter inactivity, press any pushbutton to continue operation.

6.12 Program Channel Scanning (RX)

1) Press “→” button to enter Channel Scanning setting.
2) Press “↑” and “↓” button to select number of channels to scan (01~12).
3) Exit Program Channel Scanning by pressing the “BACK” button until the cursor is shown next to “CH SCAN”.
4) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

Make sure the Channel dipswitch in receiver position 7 and 8 is set to “11” in order for this to work.

6.13 Program Function Relay 1 / K25 Relay (RX)

1) Press “→” button to enter Function Relay 1 setting.
2) Press “↑” and “↓” button to scroll and select.
3) Exit Program Function Relay 1 by pressing the “BACK” button until the cursor is shown next to “FUNC RLY1”.
4) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
TDM A+B	:	FUNCTION relay closes when selector switch is rotated to the A+B position and opens when rotate to A or B positions (tandem monitoring output).
HORN	:	FUNCTION relay closes for up to 3 seconds when Start command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
TANDEM C	:	FUNCTION relay closes when tandem receiver C is selected or activated.
RESET	:	FUNCTION relay closes when Start command is initiated and opens when let go. Works during initial transmitter startup and inactivity timer START reset.

6.14 Program Function Relay 2 / K26 Relay (RX)

1) Press “→” button to enter Function Relay 2 setting.
2) Press “↑” and “↓” button to scroll and select.
3) Exit Program Function Relay 2 by pressing the “BACK” button until the cursor is shown next to “FUNC RLY2”.
4) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
TDM A+B	:	FUNCTION relay closes when selector switch is rotated to the A+B position and opens when rotate to A or B positions (tandem monitoring output).
HORN	:	FUNCTION relay closes for up to 3 seconds when Start command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
TANDEM C	:	FUNCTION relay closes when tandem receiver C is selected or activated.
RESET	:	FUNCTION relay closes when Start command is initiated and opens when let go. Works during initial transmitter startup and inactivity timer START reset.

6.15 Program Function Relay 3 / K30 Relay (RX)

1) Press "→" button to enter Function Relay 3 setting.
2) Press "↑" and "↓" button to scroll and select.
3) Exit Program Function Relay 3 by pressing the "BACK" button until the cursor is shown next to "FUNC RLY3".
4) Press "↑" and "↓" button to scroll through other Flex ECO/Handy settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
TDM A+B	:	FUNCTION relay closes when selector switch is rotated to the A+B position and opens when rotate to A or B positions (tandem monitoring output).
HORN	:	FUNCTION relay closes for up to 3 seconds when Start command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
TANDEM C	:	FUNCTION relay closes when tandem receiver C is selected or activated.
RESET	:	FUNCTION relay closes when Start command is initiated and opens when let go. Works during initial transmitter startup and inactivity timer START reset.

6.16 Program Brake Functions (RX)

1) Press "→" button to enter Brake functions setting.
2) Press "↑" and "↓" button to scroll and select.
3) Exit Program Brake Functions by pressing the "BACK" button until the cursor is shown next to "BRAKE".
4) Press "↑" and "↓" button to scroll through other Flex ECO/Handy settings.

DEMAG 1	:	When releasing pushbutton from 2nd speed up to 1st speed, the 1st speed output relay will open for up to 1.0 second and then closes again.
DEMAG 2	:	When pushbutton is pressed down to 2nd speed directly from 0 speed, the 1st speed output relay will maintain closure for up to 0.4 second before 2nd speed output relay closes. When pushbutton is released from 2nd speed up to 0 speed, the 1st speed output relay will maintain closure for up to 0.5 second before going to 0 speed.
DEMAG 3	:	When releasing pushbutton from 2nd speed up to 1st speed, both 1st and 2nd speed output relays are opened. Release pushbutton to 0 speed and then press down to 1st speed to reengage the 1st speed output relay.
P&H	:	When releasing pushbutton from 2nd speed up to 0 speed, the 1st speed output relay will maintain closure for up to 0.1 second before going to 0 speed.

6.17 Program MRX Micro Receiver PB type (MRX)

1) Press “→” button 2 times to enter MRX Receiver PB Type setting.
2) Press “↑” and “↓” button to scroll and select. PB1~4 setting means the receiver corresponds to PB1~PB4 on the transmitter. PB5~8 means the receiver corresponds to PB5~PB8 on the transmitter. PB9~12 means the receiver corresponds to PB9~PB12 on the transmitter. Inline means the PB number is counted from top to bottom instead of right to left.
3) Exit Program MRX Receiver PB Type by pressing the “BACK” button until the cursor is shown next to “MICRO RX”.
4) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

6.18 Program Function Relay 1 (K10 and CN5) (MRX)

1) Press “→” button to enter Function Relay 1 setting.
2) Press “↑” and “↓” button to scroll and select.
3) Exit Program Function Relay 1 by pressing the “BACK” button until the cursor is shown next to “FUNC RLY1”.
4) Press “↑” and “↓” button to scroll through other Flex ECO/Handy settings.

---	:	START function only.
LV	:	Function relay closes when receiver voltage is low.
ID	:	Function relay works simultaneously with all motion commands.
NORMAL	:	START function + AUX with normal momentary output.
TOGGLE	:	START function + AUX with toggled/latching output.
TOG&E	:	START function + AUX with toggled/latching output. The relay opens when STOP button is pressed down and transmitter power off.
S/P	:	FUNCTION relay closes when START command is executed and opens only when transmitter power is turned off.
EXT	:	FUNCTION relay works simultaneously with the receiver MAIN relays.
HORN	:	FUNCTION relay closes for up to 3 seconds when Start command is initiated at transmitter power on and then becomes normal momentary outputs thereafter.
RESET	:	FUNCTION relay closes when Start command is initiated and opens when let go. Works during initial transmitter startup and inactivity timer START reset.

7. Flex 2JX Models

7.1 Decode TX Data (Using internal-equipped receiving RF board)

1. Press "→" button to enter "Decode TX Data".
2. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the internal-equipped receiving RF board. Make sure the internal-equipped receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
3. Press "↓" and then "→" button to enter Channel column.
4. Press "↑" and "↓" button to scroll and select CHANNEL or AUTOSCAN.

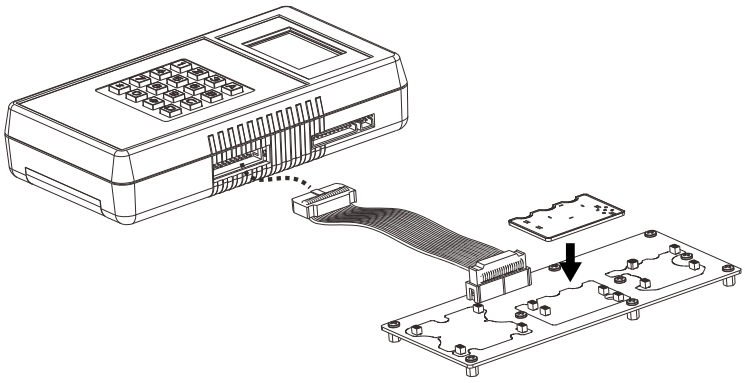
Channel column: Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09". Press "→" button to start transmitter function testing. Press "BACK" button to exit.

AUTOSCAN column: Press and hold the green START button on the transmitter to connect. Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the green START button. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

7.2 Decode TX Data (Using external receiving RF board)

1. Make sure the EX2 receiving RF board (compatible) is connected.



Make sure transmitting RF board is not connected to this unit at the same time during testing. "NO BOARD" is shown on the screen when receiving RF board is not connected.

2. Press "→" button to enter "Decode TX Data".
3. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the external-equipped EX2 receiving RF board. Make sure the external-equipped EX2 receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
4. Press "↓" and then "→" button to enter Channel column.
5. Press "↑" and "↓" button to scroll and select CHANNEL or AUTOSCAN.

Channel column: Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09". Press "→" button to start transmitter function testing. Press "BACK" button to exit.

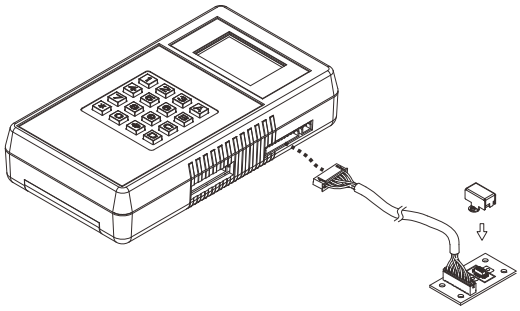
AUTOSCAN column: Press and hold the green START button on the transmitter to connect. Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the green START button. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

7.3 Program I-Chip

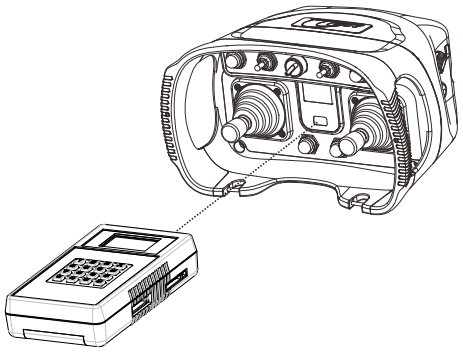
When entering the 2JX model the first selection shown on the screen is “Program I-Chip” or “Program IR”. Use the “↑” and “↓” buttons to scroll through various Flex 2JX settings or press “→” button to enter “Program I-Chip” or “Program IR”. Then press “↑” and “↓” button to select.

Program I-Chip:



1) Make sure the I-Chip is connected to the programmer.
2) Press “READ” button to store the I-Chip information into the programmer. If the screen shows “READ OK”, the transfer is completed.
3) Press “WRITE” button to transfer the stored I-Chip information into the I-Chip. If the screen shows “WRITE OK”, the transfer is completed.
4) Press “→” button to format the I-Chip, press “→” button again to execute. If the screen shows “FORMAT OK”, the format is completed.
5) Exit I-Chip programming by pressing the “BACK” button until the cursor is shown next to “Program”.
6) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

Program IR (infrared):



1) Make sure the transmitter is turned on.
2) Press and hold the “READ” button to store the transmitter info into the programmer. If the screen shows “READ OK”, the transfer is completed.
3) Press and hold the “WRITE” button to transfer the stored info into the transmitter. If the screen shows “WRITE OK”, the transfer is completed. The transmitter will restart automatically after 2 seconds.
4) Exit Program IR by pressing the “BACK” button until the cursor is shown next to “Program”.
5) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

When performing infrared programming, make sure the distance between the programmer and the transmitter is within 10cm.

7.4 Program Serial Number (TX & RX)

1) Press "→" button to enter Serial Number setting.
2) Press "↑" and "↓" button to change serial number as a whole or…
3) Input serial number directly by using the keypad number 0~9, for example, press "0" five times and then "1" one time is "S/N 000001".
4) Exit Program Serial Number by pressing the "BACK" button until the cursor is shown next to "S/N".
5) Press "↑" and "↓" button to scroll through other Flex 2JX Settings.

When finished, make sure to transfer the newly selected serial number to the receiver.

7.5 Program System Type (TX & RX)

1) Press "→" button to enter System Type setting (for tandem systems).
2) Press "↑" and "↓" button to scroll and then "→" button to select first column (tandem receiver type) or second column (tandem transmitter type).

Tandem receiver type setting:

1) Press "↑" and "↓" button to select (shaded background) or deselect.
2) Press "→" button to go to the next column.
3) Press "BACK" button to return.

A: for tandem receiver-A
B: for tandem receiver-B
C: for tandem receiver-C
D: for tandem receiver-D
E: for tandem receiver-E
F: for tandem receiver-F
G: for tandem receiver-G
H: for tandem receiver-H

Example: Tandem receiver-A set to "A" and Tandem receiver-B set to "B".

Tandem transmitter rotary switch type setting:

1) Press "↑" and "↓" button to scroll and select.
2) Press "BACK" button to return.

---: standard system.

A+B: A/A+B/B rotary switch (for tandem master-A transmitter)

B+A: B/B+A/A rotary switch (for tandem master-B transmitter)

B: without rotary switch (for tandem slave transmitter).

3) Exit Program System Type by pressing the "BACK" button until the cursor is shown next to "TYPE".

7.6 Program System Frequency Range (TX & RX)

1) Press "→" button to enter Frequency Range setting.
2) Press "↑" and "↓" button to change frequency range.
3) Exit Program System Frequency Range by pressing the "BACK" button until the cursor is shown next to "FREQ".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings

When changing the frequency range table in I-Chip make sure the transmitting and receiving RF boards are also changed accordingly.

7.7 Program System Channel (TX & RX)

1) Press "→" button to enter System Channel setting.
2) Press "↑" and "↓" button to change system channel as a whole or…
3) Input system channel directly by using the keypad number 0~9, for example, press "0" one time and then "1" one time is "CH 01".
4) Exit Program System Channel by pressing the "BACK" button until the cursor is shown next to "CHANNEL".
5) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

When transmitter channel is changed make sure the receiver channel is also set to the newly selected channel.

7.8 Program Transmitter Inactivity Timer (TX)

1) Press "→" button to enter Transmitting Timer setting.
2) Press "↑" and "↓" button to select __M__S (minute or second) and ON (constant on).
3) When "ON" is selected, press "→" button and then "↑" and "↓" button to Scroll and select "+START" or "+ANY".
4) When __M__S (minute or second) is selected:

   For Minutes: Press "→" button to go the Minutes column and then press "↑" and "↓" button to scroll and select the minute value, or input minute value directly by using the keypad number 0~9, for example, press "0" one time and then "5" one time is "05M" (5 minutes). When done, press "→" button twice to go to the "+START" or "+ANY" column. Press ↑" and "↓" button to scroll and select.

   For Seconds: Press "→" button twice to go the Seconds column and then press "↑" and "↓" button to scroll and select the second value, or input second value directly by using the keypad number 0~9, for example, press "3" one time and then "0" one time is "30S" (30 seconds). When done, press "→" button one time to go to the "+START" or "+ANY" column. Press ↑" and "↓" button to scroll and select.
5) Exit Program Transmitter Timer by pressing the "BACK" button until the cursor is shown next to "TX TIMER".
6) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Transmitter inactivity timer is for setting receiver main relays cutoff time when the transmitter is not in operation for a certain period of time. When set to 5 minutes (05M), the receiver mains are deactivated at 5.0 minutes after last transmitter operation.

Select "ON" means the receiver mains are activated at all time unless the STOP button is pressed down or transmitter power turned off.

Select "+START" means after 5 minutes of transmitter inactivity you must execute the START command to continue operation. Select "+ANY" means after 5 minutes of transmitter inactivity, operate the joystick or press any button (not switches) to continue operation.

7.9 Program Transmitter RF Power (TX)

1) Press "→" button to enter RF Power setting.
2) Press "↑" and "↓" button to change RF power (0.01mW ~ 10mW).
3) Exit Program RF Power by pressing the "BACK" button until the cursor is shown next to "RFpower".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

7.10 Program Infrared (IR) Modes (TX)

1) Press "→" button to enter Infrared Mode setting.
2) Press "↑" and "↓" button to scroll and select.

   OFF: disable infrared function.

   IRS: enable infrared START function.

   IRL: enable infrared range limiting function.

3) Exit Program IR Mode by pressing the "BACK" button until the cursor is shown next to "IR Mode".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

7.11 Program Infrared (IR) Identification Number (TX)

1) Press "→" button to enter Infrared ID setting.
2) Press "↑" and "↓" button to change the 3-digit infrared ID as a whole or…
3) Input value directly by using the keypad number 0~9, for example, press "0" two times and "2" one time is infrared ID "002".
4) Exit Program Infrared ID by pressing the "BACK" button until the cursor is shown next to "IR_ID".
5) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Make sure the IRM-01 infrared module is set to same ID as the transmitter.

Select "000" disables the ID function hence any types of infrared modules can be used.

7.12 Program IRS Time Out Function (TX)

1) Press "→" button to enter IRS Time Out setting.
2) Press "↑" and "↓" button to scroll and select between IRS On and IRS Off.
3) Exit Program IRS Time Out Function by pressing the "BACK" button until the cursor is shown next to "IRS FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

IRS ON: infrared START required after every transmitter timeout.

IRS OFF: infrared START not required after every transmitter timeout.

7.13 Program Tilt Function (TX)

1) Press "→" button to enter Tilt setting.
2) Press "↑" and "↓" button to scroll and select between Off, 1.0S and 0.5S.
3) Exit Program Tilt Function by pressing the "BACK" button until the cursor is shown next to "TILT".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

When TILT function is set to 0.5S (more sensitive) or 1.0S (less sensitive), the receiver main relays are disconnected (opened) when the transmitter is tilted beyond 35~40 degrees. Select OFF disables the TILT function.

7.14 Program LX Joystick Function (TX)

1) Press "→" button to enter LX Joystick setting.
2) Press "↑" and "↓" button to scroll and select between None, Analog, 1-step, 2-step, 3-step, 4-step and 5-step.
3) Exit Program LX Function by pressing the "BACK" button until the cursor is shown next to "LX FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Set each joystick's number of steps and output type (analog-stepless or digital-stepped) according to the hardware installed.

7.15 Program LY Joystick Function (TX)

1) Press "→" button to enter LY Joystick setting.
2) Press "↑" and "↓" button to scroll and select between None, Analog, 1-step, 2-step, 3-step, 4-step and 5-step.
3) Exit Program LY Function by pressing the "BACK" button until the cursor is shown next to "LY FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Set each joystick's number of steps and output type (analog-stepless or digital-stepped) according to the hardware installed.

7.16 Program RX Joystick Function (TX)

1) Press "→" button to enter RX Joystick setting.
2) Press "↑" and "↓" button to scroll and select between None, Analog, 1-step, 2-step, 3-step, 4-step and 5-step.
3) Exit Program RX Function by pressing the "BACK" button until the cursor is shown next to "RX FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Set each joystick's number of steps and output type (analog-stepless or digital-stepped) according to the hardware installed.

7.17 Program RY Joystick Function (TX)

1) Press "→" button to enter RY Joystick setting.
2) Press "↑" and "↓" button to scroll and select between None, Analog, 1-step, 2-step, 3-step, 4-step and 5-step.
3) Exit Program RY Function by pressing the "BACK" button until the cursor is shown next to "RY FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Set each joystick's number of steps and output type (analog-stepless or digital-stepped) according to the hardware installed.

7.18 Program SW1 Function (TX)

1) Press "→" button to enter SW1 setting.
2) Press "↑" and "↓" button to scroll and select between settings.
3) Exit Program SW1 Function by pressing the "BACK" button until the cursor is shown next to "SW1FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Button: Select "NORMAL" for momentary output relay contact and "TOGGLE" for transmitter toggled output relay contact. Select "A→B" or "0→A→B" or "A→B→AB" or "0→A→B→AB" for Select A/B, off/A/B, A/B/AB or off/A/B/AB output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

Rocker Switch: Select "NORMAL" for 2-stage On-On or 3-stage On-Off-On output relay contacts. Select "SW A→AB→B" for Select A/A+B/B output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

*If SW1 is set to one of the above settings then the SW1 output relay function in receiver must set to "**NORMAL**" or "**ABUS**" (Reversed Logic A/A+B/B).*

7.19 Program SW2 Function (TX)

1) Press "→" button to enter SW2 setting.
2) Press "↑" and "↓" button to scroll and select between settings.
3) Exit Program SW2 Function by pressing the "BACK" button until the cursor is shown next to "SW2FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Button: Select "NORMAL" for momentary output relay contact and "TOGGLE" for transmitter toggled output relay contact. Select "A→B" or "0→A→B" or "A→B→AB" or "0→A→B→AB" for Select A/B, off/A/B, A/B/AB or off/A/B/AB output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

Rocker Switch: Select "NORMAL" for 2-stage On-On or 3-stage On-Off-On output relay contacts. Select "SW A→AB→B" for Select A/A+B/B output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

*If SW2 is set to one of the above settings then the SW1 output relay function in receiver must set to "**NORMAL**" or "**ABUS**" (Reversed Logic A/A+B/B).*

7.20 Program SW3 Function (TX)

1) Press "→" button to enter SW3 setting.
2) Press "↑" and "↓" button to scroll and select between settings.
3) Exit Program SW3 Function by pressing the "BACK" button until the cursor is shown next to "SW3FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Rotary Switch: Select "NORMAL" for 2-stage On-On or 3-stage On-Off-On output relay contacts. Select "SW A→AB→B" for Select A/A+B/B output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

*If SW3 is set to one of the above settings then the SW3 output relay function in receiver must set to "**NORMAL**" or "**ABUS**" (Reversed Logic A/A+B/B).*

7.21 Program SW4 Function (TX)

1) Press "→" button to enter SW4 setting.
2) Press "↑" and "↓" button to scroll and select between settings.
3) Exit Program SW4 Function by pressing the "BACK" button until the cursor is shown next to "SW4FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Button: Select "NORMAL" for momentary output relay contact and "TOGGLE" for transmitter toggled output relay contact. Select "A→B" or "0→A→B" or "A→B→AB" or "0→A→B→AB" for Select A/B, off/A/B, A/B/AB or off/A/B/AB output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

Rocker Switch: Select "NORMAL" for 2-stage On-On or 3-stage On-Off-On output relay contacts. Select "SW A→AB→B" for Select A/A+B/B output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

*If SW4 is set to one of the above settings then the SW1 output relay function in receiver must set to "**NORMAL**" or "**ABUS**" (Reversed Logic A/A+B/B).*

7.22 Program SW5 Function (TX)

1) Press "→" button to enter SW5 setting.
2) Press "↑" and "↓" button to scroll and select between settings.
3) Exit Program SW5 Function by pressing the "BACK" button until the cursor is shown next to "SW5FUNC".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

Button: Select "NORMAL" for momentary output relay contact and "TOGGLE" for transmitter toggled output relay contact. Select "A→B" or "0→A→B" or "A→B→AB" or "0→A→B→AB" for Select A/B, off/A/B, A/B/AB or off/A/B/AB output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

Rocker Switch: Select "NORMAL" for 2-stage On-On or 3-stage On-Off-On output relay contacts. Select "SW A→AB→B" for Select A/A+B/B output relay contacts. Select "A→B→C" or "0→A→B→C" adds the 3rd output for Select A/B/C output relay contacts (see section 7.27~7.28).

*If SW5 is set to one of the above settings then the SW1 output relay function in receiver must set to "**NORMAL**" or "**ABUS**" (Reversed Logic A/A+B/B).*

7.23 Program SW6 Function (TX)

1) Press “→” button to enter SW6 setting.
2) Press “↑” and “↓” button to scroll and select between settings.
3) Exit Program SW6 Function by pressing the “BACK” button until the cursor is shown next to “SW6FUNC”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

Button: Select “NORMAL” for normal momentary relay output and “TOGGLE” for transmitter toggled relay output.

7.24 Program SW7 Function (TX)

1) Press “→” button to enter SW7 setting.
2) Press “↑” and “↓” button to scroll and select between settings.
3) Exit Program SW7 Function by pressing the “BACK” button until the cursor is shown next to “SW7FUNC”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

Button: Select “NORMAL” for normal momentary relay output and “TOGGLE” for transmitter toggled relay output.

7.25 Program Channel Scanning Function (RX)

1) Press “→” button to enter Channel Scanning setting.
2) Press “↑” and “↓” button to scroll and select between settings.
3) Exit Program Channel Scanning Function by pressing the “BACK” button until the cursor is shown next to “CH SCAN”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

SCANS 01: Receiver scans the channel set on the receiver.

SCANS 02: Receiver scans the channel set on the receiver plus the next channel up (scans channel N and channel N+1).

SCANS 03: Receiver scans the channel set on the receiver plus the next two channels up (scans channel N, channel N+1 and channel N+2).

SCANS ALL: Receiver scans all 62 channels.

7.26 Program MAIN Relay Function (RX)

1) Press “→” button to enter MAIN Relay setting.
2) Press “↑” and “↓” button to scroll and select between Test and Normal.
3) Exit Program MAIN Relay Function by pressing the “BACK” button until the cursor is shown next to “MAIN RLY”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

NORMAL: For normal operation (receiver mains and all other outputs enabled).

TEST: For system testing (receiver mains disabled and all other outputs enabled).

7.27 Program Function Relay 1 (RX)

1) Press "→" button to enter Function Relay 1 setting.
2) Press "↑" and "↓" button to scroll and select between settings.
3) Exit Program Function Relay 1 by pressing the "BACK" button until the cursor is shown next to "FUNC RLY1".
4) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

LV: For receiver low voltage external warning output.

ID: For receiver ID output (works simultaneously with all joystick motions and interlocking momentary contacts).

NORMAL: The output relay becomes momentary contact when START button is pressed.

TOGGLE: The output relay becomes toggled contact when START button is pressed.

TOGGLE&E: The output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

EXT: The output relay works simultaneously with the receiver mains.

S/P: The output relay closes when the green START button is pressed and opens only when transmitter power is switched off, not e-stop pressed.

TDM A+B: The output relay closes when the 3-stage tandem rotary key switch on the SW3 slot is rotated to A+B position for dual crane A+B tandem operation.

SW1 1+2… SW5 1+2: The output relay closes when a 3-stage rocker switch, a 3-stage rotary switch or a 3-stage A/B/A+B button on SW1 ~ SW5 slot is rotated to A+B position for dual hoist/trolley A+B tandem operation. Only 1 switch or button can be assigned to each Function relay.

HORN: The output relay closes for up to 3 seconds when the green START button is pressed after every transmitter power on and then becomes a momentary contact thereafter.

SW1~5 ABC: Adds the 3rd outputs relay for button or switch A→B→C selection (see section 7.18~7.22).

7.28 Program Function Relay 2 (RX)

1) Press “→” button to enter Function Relay 2 setting.
2) Press “↑” and “↓” button to scroll and select between settings.
3) Exit Program Function Relay 2 by pressing the “BACK” button until the cursor is shown next to “FUNC RLY2”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

LV: For receiver low voltage external warning output.

ID: For receiver ID output (works simultaneously with all joystick motions and interlocking momentary contacts).

NORMAL: The output relay becomes momentary contact when START button is pressed.

TOGGLE: The output relay becomes toggled contact when START button is pressed.

TOGGLE&E: The output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

EXT: The output relay works simultaneously with the receiver mains.

S/P: The output relay closes when the green START button is pressed and opens only when transmitter power is switched off, not e-stop pressed.

TDM A+B: The output relay closes when the 3-stage tandem rotary key switch on the SW3 slot is rotated to A+B position for dual crane A+B tandem operation.

SW1 1+2… SW5 1+2: The output relay closes when a 3-stage rocker switch, a 3-stage rotary switch or a 3-stage A/B/A+B button on SW1 ~ SW5 slot is rotated to A+B position for dual hoist/trolley A+B tandem operation. Only 1 switch or button can be assigned to each Function relay.

HORN: The output relay closes for up to 3 seconds when the green START button is pressed after every transmitter power on and then becomes a momentary contact thereafter.

SW1~5 ABC: Adds the 3rd outputs relay for button or switch A→B→C selection (see section 7.18~7.22).

7.29 Program LX Output Relay (RX)

Below chart and settings are various types of shared (F/R) and separate (F or R) acceleration relay closure at 1st, 2nd, 3rd, 4th and 5th steps.

Output Relay / Type	LY LX RY RX	K2 K9 K16 K23	K3 K10 K17 K24	K4 K11 K18 K25	K5 K12 K19 K26	K6 K13 K20 K27	K7 K14 K21 K28
01	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1	F/R2	F/R3		
	at 4th Step	F1	or R1	F/R2	F/R3	F/R4	
	at 5th Step	F1	or R1	F/R2	F/R3	F/R4	F/R5
02	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1		F/R3		
	at 4th Step	F1	or R1			F/R4	
	at 5th Step	F1	or R1				F/R5
03	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R	F/R1	F/R2		
	at 3rd Step	F	or R	F/R1	F/R2	F/R3	
	at 4th Step	F	or R	F/R1	F/R2	F/R3	F/R4
04	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R		F/R2		
	at 3rd Step	F	or R			F/R3	
	at 4th Step	F	or R				F/R4
05	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F2	or R2		
	at 3rd Step	F1	or R1	F2	or R2	F3	or R3
06	at 1st Step	F1	or R1				
	at 2nd Step			F2	or R2		
	at 3rd Step					F3	or R3

LY → Left Joystick Y axis **LX** → Left Joystick X axis **RY** → Right Joystick Y axis **RY** → Right Joystick X axis

F → Forward **F1** → Forward 1st step **F2** → Forward 2nd step **F3** → Forward 3rd step **F4** → Forward 4th step

F5 → Forward 5th step **R** → Reverse **R1** → Reverse 1st step **R2** → Reverse 2nd step **R3** → Reverse 3rd step

R4 → Reverse 4th step **R5** → Reverse 5th step **F/R1** → Forward/Reverse shared 1st step

F/R2 → Forward/Reverse shared 2nd step **F/R3** → Forward/Reverse shared 3rd step

F/R4 → Forward/Reverse shared 4th step **F/R5** → Forward/Reverse shared 5th step

K8 → 0-step relays can be set to NO (normal open) or NC (normal close) contact.

1) Press "→" button to enter LX Output Relay setting.
2) Press "↑" and "↓" button to select output relay type (see above chart type 01~06) and K8 relay type (NC-Normal Open or NO-Normal Close).
3) Press "→" button to enter and press "↑" and "↓" button to scroll and select
4) Press "BACK" button to go back to step 2.
5) Exit Program LX Output Relay by pressing the "BACK" button until the cursor is shown next to "LX RLY".
6) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

7.30 Program LY Output Relay (RX)

Below chart and settings are various types of shared (F/R) and separate (F or R) acceleration relay closure at 1st, 2nd, 3rd, 4th and 5th steps.

Output Relay / Type	LY LX RY RX	K2 K9 K16 K23	K3 K10 K17 K24	K4 K11 K18 K25	K5 K12 K19 K26	K6 K13 K20 K27	K7 K14 K21 K28
01	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1	F/R2	F/R3		
	at 4th Step	F1	or R1	F/R2	F/R3	F/R4	
	at 5th Step	F1	or R1	F/R2	F/R3	F/R4	F/R5
02	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1		F/R3		
	at 4th Step	F1	or R1			F/R4	
	at 5th Step	F1	or R1				F/R5
03	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R	F/R1	F/R2		
	at 3rd Step	F	or R	F/R1	F/R2	F/R3	
	at 4th Step	F	or R	F/R1	F/R2	F/R3	F/R4
04	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R		F/R2		
	at 3rd Step	F	or R			F/R3	
	at 4th Step	F	or R				F/R4
05	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F2	or R2		
	at 3rd Step	F1	or R1	F2	or R2	F3	or R3
06	at 1st Step	F1	or R1				
	at 2nd Step			F2	or R2		
	at 3rd Step					F3	or R3

LY → Left Joystick Y axis **LX** → Left Joystick X axis **RY** → Right Joystick Y axis **RY** → Right Joystick X axis

F → Forward **F1** → Forward 1st step **F2** → Forward 2nd step **F3** → Forward 3rd step **F4** → Forward 4th step

F5 → Forward 5th step **R** → Reverse **R1** → Reverse 1st step **R2** → Reverse 2nd step **R3** → Reverse 3rd step

R4 → Reverse 4th step **R5** → Reverse 5th step **F/R1** → Forward/Reverse shared 1st step

F/R2 → Forward/Reverse shared 2nd step **F/R3** → Forward/Reverse shared 3rd step

F/R4 → Forward/Reverse shared 4th step **F/R5** → Forward/Reverse shared 5th step

K1 → 0-step relays can be set to NO (normal open) or NC (normal close) contact.

1) Press "→" button to enter LY Output Relay setting.
2) Press "↑" and "↓" button to select output relay type (see above chart type 01~06) and K1 relay type (NC-Normal Open or NO-Normal Close).
3) Press "→" button to enter and press "↑" and "↓" button to scroll and select.
4) Press "BACK" button to go back to step 2.
5) Exit Program LY Output Relay by pressing the "BACK" button until the cursor is shown next to "LY RLY".
6) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

7.31 Program RX Output Relay (RX)

Below chart and settings are various types of shared (F/R) and separate (F or R) acceleration relay closure at 1st, 2nd, 3rd, 4th and 5th steps.

Output Relay / Type	LY LX RY RX	K2 K9 K16 K23	K3 K10 K17 K24	K4 K11 K18 K25	K5 K12 K19 K26	K6 K13 K20 K27	K7 K14 K21 K28
01	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1	F/R2	F/R3		
	at 4th Step	F1	or R1	F/R2	F/R3	F/R4	
	at 5th Step	F1	or R1	F/R2	F/R3	F/R4	F/R5
02	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1		F/R3		
	at 4th Step	F1	or R1			F/R4	
	at 5th Step	F1	or R1				F/R5
03	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R	F/R1	F/R2		
	at 3rd Step	F	or R	F/R1	F/R2	F/R3	
	at 4th Step	F	or R	F/R1	F/R2	F/R3	F/R4
04	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R		F/R2		
	at 3rd Step	F	or R			F/R3	
	at 4th Step	F	or R				F/R4
05	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F2	or R2		
	at 3rd Step	F1	or R1	F2	or R2	F3	or R3
06	at 1st Step	F1	or R1				
	at 2nd Step			F2	or R2		
	at 3rd Step					F3	or R3

LY → Left Joystick Y axis **LX** → Left Joystick X axis **RY** → Right Joystick Y axis **RY** → Right Joystick X axis

F → Forward **F1** → Forward 1st step **F2** → Forward 2nd step **F3** → Forward 3rd step **F4** → Forward 4th step

F5 → Forward 5th step **R** → Reverse **R1** → Reverse 1st step **R2** → Reverse 2nd step **R3** → Reverse 3rd step

R4 → Reverse 4th step **R5** → Reverse 5th step **F/R1** → Forward/Reverse shared 1st step

F/R2 → Forward/Reverse shared 2nd step **F/R3** → Forward/Reverse shared 3rd step

F/R4 → Forward/Reverse shared 4th step **F/R5** → Forward/Reverse shared 5th step

K22 → 0-step relays can be set to NO (normal open) or NC (normal close) contact.

1) Press "→" button to enter RX Output Relay setting.
2) Press "↑" and "↓" button to select output relay type (see above chart type 01~06) and K22 relay type (NC-Normal Open or NO-Normal Close).
3) Press "→" button to enter and press "↑" and "↓" button to scroll and select.
4) Press "BACK" button to go back to step 2.
5) Exit Program RX Output Relay by pressing the "BACK" button until the cursor is shown next to "RX RLY".
6) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

7.32 Program RY Output Relay (RX)

Below chart and settings are various types of shared (F/R) and separate (F or R) acceleration relay closure at 1st, 2nd, 3rd, 4th and 5th steps.

Output Relay / Type	LY LX RY RX	K2 K9 K16 K23	K3 K10 K17 K24	K4 K11 K18 K25	K5 K12 K19 K26	K6 K13 K20 K27	K7 K14 K21 K28
01	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1	F/R2	F/R3		
	at 4th Step	F1	or R1	F/R2	F/R3	F/R4	
	at 5th Step	F1	or R1	F/R2	F/R3	F/R4	F/R5
02	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F/R2			
	at 3rd Step	F1	or R1		F/R3		
	at 4th Step	F1	or R1			F/R4	
	at 5th Step	F1	or R1				F/R5
03	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R	F/R1	F/R2		
	at 3rd Step	F	or R	F/R1	F/R2	F/R3	
	at 4th Step	F	or R	F/R1	F/R2	F/R3	F/R4
04	at 1st Step	F	or R	F/R1			
	at 2nd Step	F	or R		F/R2		
	at 3rd Step	F	or R			F/R3	
	at 4th Step	F	or R				F/R4
05	at 1st Step	F1	or R1				
	at 2nd Step	F1	or R1	F2	or R2		
	at 3rd Step	F1	or R1	F2	or R2	F3	or R3
06	at 1st Step	F1	or R1				
	at 2nd Step			F2	or R2		
	at 3rd Step					F3	or R3

LY → Left Joystick Y axis **LX** → Left Joystick X axis **RY** → Right Joystick Y axis **RY** → Right Joystick X axis

F → Forward **F1** → Forward 1st step **F2** → Forward 2nd step **F3** → Forward 3rd step **F4** → Forward 4th step

F5 → Forward 5th step **R** → Reverse **R1** → Reverse 1st step **R2** → Reverse 2nd step **R3** → Reverse 3rd step

R4 → Reverse 4th step **R5** → Reverse 5th step **F/R1** → Forward/Reverse shared 1st step

F/R2 → Forward/Reverse shared 2nd step **F/R3** → Forward/Reverse shared 3rd step

F/R4 → Forward/Reverse shared 4th step **F/R5** → Forward/Reverse shared 5th step

K15 → 0-step relays can be set to NO (normal open) or NC (normal close) contact.

1) Press "→" button to enter RY Output Relay setting.
2) Press "↑" and "↓" button to select output relay type (see above chart type 01~06) and K8 relay type (NC-Normal Open or NO-Normal Close).
3) Press "→" button to enter and press "↑" and "↓" button to scroll and select.
4) Press "BACK" button to go back to step 2.
5) Exit Program RY Output Relay by pressing the "BACK" button until the cursor is shown next to "RY RLY".
6) Press "↑" and "↓" button to scroll through other Flex 2JX settings.

7.33 Program LX Delay (RX)

1) Press “→” button to enter LX Delay setting.
2) Press “↑” and “↓” button to select delay for ACC (forward motion) and DEC (reverse motion).
3) Press “→” button to enter and press “↑” and “↓” button to scroll and select.
4) Press “BACK” button to go back to step 2.
5) Exit Program LX Delay by pressing the “BACK” button until the cursor is shown next to “LX DELAY”.
6) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.34 Program LY Delay (RX)

1) Press “→” button to enter LY Delay setting.
2) Press “↑” and “↓” button to select delay for ACC (forward motion) and DEC (reverse motion).
3) Press “→” button to enter and press “↑” and “↓” button to scroll and select.
4) Press “BACK” button to go back to step 2.
5) Exit Program LY Delay by pressing the “BACK” button until the cursor is shown next to “LY DELAY”.
6) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.35 Program RX Delay (RX)

1) Press “→” button to enter RX Delay setting.
2) Press “↑” and “↓” button to select delay for ACC (forward motion) and DEC (reverse motion).
3) Press “→” button to enter and press “↑” and “↓” button to scroll and select.
4) Press “BACK” button to go back to step 2.
5) Exit Program RX Delay by pressing the “BACK” button until the cursor is shown next to “RX DELAY”.
6) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.36 Program RY Delay (RX)

1) Press “→” button to enter RY Delay setting.
2) Press “↑” and “↓” button to select delay for ACC (forward motion) and DEC (reverse motion).
3) Press “→” button to enter and press “↑” and “↓” button to scroll and select.
4) Press “BACK” button to go back to step 2.
5) Exit Program RY Delay by pressing the “BACK” button until the cursor is shown next to “RY DELAY”.
6) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.37 Program LX Output (RX)

1) Press “→” button to enter LX Output setting.
2) Press “↑” and “↓” button to scroll between OFF, Voltage, Current and PFM output setting. Press “→” button to enter.

   When Voltage is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change voltage value or input numeric number 0~9 directly. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When Current is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change value. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When PFM is selected on step 2 above: press “↑” and “↓” button to select between 02K, 08K and 32K value. Press “→” button to enter and then “↑” and “↓” button scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to set % range. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

3) Exit Program LX Output by pressing the “BACK” button until the cursor is shown next to “LX OUT”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.38 Program LY Output (RX)

1) Press “→” button to enter LY Output setting.
2) Press “↑” and “↓” button to scroll between OFF, Voltage, Current and PFM output setting. Press “→” button to enter.

   When Voltage is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change voltage value or input numeric number 0~9 directly. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When Current is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change value. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When PFM is selected on step 2 above: press “↑” and “↓” button to select between 02K, 08K and 32K value. Press “→” button to enter and then “↑” and “↓” button scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to set % range. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

3) Exit Program LY Output by pressing the “BACK” button until the cursor is shown next to “LY OUT”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.39 Program RX Output (RX)

1) Press “→” button to enter RX Output setting.
2) Press “↑” and “↓” button to scroll between OFF, Voltage, Current and PFM output setting. Press “→” button to enter.

   When Voltage is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change voltage value or input numeric number 0~9 directly. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When Current is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change value. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When PFM is selected on step 2 above: press “↑” and “↓” button to select between 02K, 08K and 32K value. Press “→” button to enter and then “↑” and “↓” button scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to set % range. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

3) Exit Program RX Output by pressing the “BACK” button until the cursor is shown next to “RX OUT”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.40 Program RY Output (RX)

1) Press “→” button to enter RY Output setting.
2) Press “↑” and “↓” button to scroll between OFF, Voltage, Current and PFM output setting. Press “→” button to enter.

   When Voltage is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change voltage value or input numeric number 0~9 directly. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When Current is selected on step 2 above: press “↑” and “↓” button to scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to change value. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

   When PFM is selected on step 2 above: press “↑” and “↓” button to select between 02K, 08K and 32K value. Press “→” button to enter and then “↑” and “↓” button scroll between Maximum, Neutral and Minimum value. Press “→” button to enter and then “↑” and “↓” button to set % range. Press the “BACK” button to go back to the Maximum, Neutral and Minimum selection.

3) Exit Program RY Output by pressing the “BACK” button until the cursor is shown next to “RY OUT”.
4) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

7.41 Program SW1 Output Relay (RX)

1) Press “→” button to enter SW1 Output Relay setting.
2) Press “→” button and then “↑” and “↓” button to select “LOCK” or “UNLOCK”.
3) Press “BACK” button to go back to step 2.
4) Press “↓” button and then “→” button select SW1 Output Relay function.
5) Press “↑” and “↓” button to scroll and select.
6) Exit Program SW1 Output Relay by pressing the “BACK” button until the cursor is shown next to “SW1 RLY”.
7) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

UNLOCK Settings (SW1 and SW2 output relays not interlocked):

NORMAL: Output relay becomes momentary contact.

NORMAL+S: Output relay becomes momentary contact. Must press the green START button together to work.

TOGGLE: Output relay becomes toggled contact.

TOGGLE&E: Output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

PITCH: SW1 button becomes the “Pitch” function in Pitch & Catch Operation.

PITCH&E: SW1 button becomes the “Pitch” function in Pitch & Catch Operation. When Pitch command is initiated, the receiver mains are disconnected.

STOP: SW1 button becomes an auxiliary e-stop function. Press to disconnect the receiver mains and press START button to reconnect the receiver mains.

ABUS (reversed logic A/B switching): All contacts are reversed when all pushbuttons, rocker switches and rotary switches are set to A/A+B/B function.

When one of the above is selected make sure the same SW1 button function on transmitter is set to “NORMAL”.

When select Pitch & Catch function make sure you set the spare transmitter to the next channel up and the receiver channel scanning to “02”.

LOCK Settings (SW1 and SW2 output relays interlocked):

NORMAL: Both output relays become interlocking momentary contacts.

TOG/TOG: Both output relays become interlocking toggled contacts.

TOG/TOG&E: Both output relays become interlocking toggled contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

ON/OFF: Both output relays become interlocking On and Off contacts.

ON/OFF+S: Both output relays become interlocking On and Off contacts. Must press the green START button along with the On or Off button to work.

ON/OFF&E: Both output relays become interlocking On and Off contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

MAGNET: Two output relays become interlocking Magnet ON and OFF contacts.

When one of the above is selected make sure the same SW1 and SW2 button function on transmitter are both set to "NORMAL".

7.42 Program SW2 Output Relay (RX)

1) Press “→” button to enter SW2 Output Relay setting.
2) Press “→” button and then “↑” and “↓” button to select “LOCK” or “UNLOCK”.
3) Press “BACK” button to go back to step 2.
4) Press “↓” button and then “→” button select SW2 Output Relay function.
5) Press “↑” and “↓” button to scroll and select.
6) Exit Program SW2 Output Relay by pressing the “BACK” button until the cursor is shown next to “SW2 RLY”.
7) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

NORMAL: Output relay becomes momentary contact.

NORMAL+S: Output relay becomes momentary contact. Must press the green START button together to work.

TOGGLE: Output relay becomes toggled contact.

TOGGLE&E: Output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

PITCH: SW2 button becomes the “Pitch” function in Pitch & Catch Operation.

PITCH&E: SW2 button becomes the “Pitch” function in Pitch & Catch Operation. When Pitch command is initiated, the receiver mains are disconnected.

STOP: SW2 button becomes an auxiliary e-stop function. Press to disconnect the receiver mains and press START button to reconnect the receiver mains.

ABUS (reversed logic A/B switching): All contacts are reversed when all pushbuttons, rocker switches and rotary switches are set to A/A+B/B function.

When one of the above is selected make sure the same SW2 button function on transmitter is set to “NORMAL”.

When select Pitch & Catch function make sure you set the spare transmitter to the next channel up and the receiver channel scanning to “02”.

LOCK Settings (SW2 and SW1 output relays interlocked):

NORMAL: Both output relays become interlocking momentary contacts.

TOG/TOG: Both output relays become interlocking toggled contacts.

TOG/TOG&E: Both output relays become interlocking toggled contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

ON/OFF: Both output relays become interlocking On and Off contacts.

ON/OFF+S: Both output relays become interlocking On and Off contacts. Must press the green START button along with the On or Off button to work.

ON/OFF&E: Both output relays become interlocking On and Off contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

MAGNET: Two output relays become interlocking Magnet ON and OFF contacts.

When one of the above is selected make sure the same SW2 and SW1 button function on transmitter are both set to “NORMAL”.

7.43 Program SW3 Output Relay (RX)

1) Press “→” button to enter SW3 Output Relay setting.
2) Press “→” button again to enter settings.
3) Press “↑” and “↓” button to scroll and select.
4) Exit Program SW3 Output Relay by pressing the “BACK” button until the cursor is shown next to “SW3 RLY”.
5) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

NORMAL: Output relay becomes momentary contact.

NORMAL+S: Output relay becomes momentary contact. Must press the green START button together to work.

TOGGLE: Output relay becomes toggled contact.

TOGGLE&E: Output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

PITCH: SW3 button becomes the “Pitch” function in Pitch & Catch Operation.

PITCH&E: SW3 button becomes the “Pitch” function in Pitch & Catch Operation. When Pitch command is initiated, the receiver mains are disconnected.

STOP: SW3 button becomes an auxiliary e-stop function. Press to disconnect the receiver mains and press START button to reconnect the receiver mains.

ABUS (reversed logic A/B switching): All contacts are reversed when all pushbuttons, rocker switches and rotary switches are set to A/A+B/B function.

When one of the above is selected make sure the same SW3 button function on transmitter is set to “NORMAL”.

When select Pitch & Catch function make sure you set the spare transmitter to the next channel up and the receiver channel scanning to “02”.

7.44 Program SW4 Output Relay (RX)

1) Press “→” button to enter SW4 Output Relay setting.
2) Press “→” button and then “↑” and “↓” button to select “LOCK” or “UNLOCK”.
3) Press “BACK” button to go back to step 2.
4) Press “↓” button and then “→” button select SW4 Output Relay function.
5) Press “↑” and “↓” button to scroll and select.
6) Exit Program SW4 Output Relay by pressing the “BACK” button until the cursor is shown next to “SW4 RLY”.
7) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

UNLOCK Settings (SW4 and SW5 output relays not interlocked):

NORMAL: Output relay becomes momentary contact.

NORMAL+S: Output relay becomes momentary contact. Must press the green START button together to work.

TOGGLE: Output relay becomes toggled contact.

TOGGLE&E: Output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

PITCH: SW4 button becomes the “Pitch” function in Pitch & Catch Operation.

PITCH&E: SW4 button becomes the “Pitch” function in Pitch & Catch Operation. When Pitch command is initiated, the receiver mains are disconnected.

STOP: SW4 button becomes an auxiliary e-stop function. Press to disconnect the receiver mains and press START button to reconnect the receiver mains.

ABUS (reversed logic A/B switching): All contacts are reversed when all pushbuttons, rocker switches and rotary switches are set to A/A+B/B function.

When one of the above is selected make sure the same SW4 button function on transmitter is set to “NORMAL”.

When select Pitch & Catch function make sure you set the spare transmitter to the next channel up and the receiver channel scanning to “02”.

LOCK Settings (SW4 and SW5 output relays interlocked):

NORMAL: Both output relays become interlocking momentary contacts.

TOG/TOG: Both output relays become interlocking toggled contacts.

TOG/TOG&E: Both output relays become interlocking toggled contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

ON/OFF: Both output relays become interlocking On and Off contacts.

ON/OFF+S: Both output relays become interlocking On and Off contacts. Must press the green START button along with the On or Off button to work.

ON/OFF&E: Both output relays become interlocking On and Off contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

MAGNET: Two output relays become interlocking Magnet ON and OFF contacts.

When one of the above is selected make sure the same SW4 and SW5 button function on transmitter are both set to “NORMAL”.

7.45 Program SW5 Output Relay (RX)

1) Press “→” button to enter SW5 Output Relay setting.
2) Press “→” button and then “↑” and “↓” button to select “LOCK” or “UNLOCK”.
3) Press “BACK” button to go back to step 2.
4) Press “↓” button and then “→” button select SW5 Output Relay function.
5) Press “↑” and “↓” button to scroll and select.
6) Exit Program SW5 Output Relay by pressing the “BACK” button until the cursor is shown next to “SW5 RLY”.
7) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

UNLOCK Settings (SW5 and SW4 output relays not interlocked):

NORMAL: Output relay becomes momentary contact.

NORMAL+S: Output relay becomes momentary contact. Must press the green START button together to work.

TOGGLE: Output relay becomes toggled contact.

TOGGLE&E: Output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

PITCH: SW5 button becomes the “Pitch” function in Pitch & Catch Operation.

PITCH&E: SW5 button becomes the “Pitch” function in Pitch & Catch Operation. When Pitch command is initiated, the receiver mains are disconnected.

STOP: SW5 button becomes an auxiliary e-stop function. Press to disconnect the receiver mains and press START button to reconnect the receiver mains.

ABUS (reversed logic A/B switching): All contacts are reversed when all pushbuttons, rocker switches and rotary switches are set to A/A+B/B function.

When one of the above is selected make sure the same SW5 button function on transmitter is set to “NORMAL”.

When select Pitch & Catch function make sure you set the spare transmitter to the next channel up and the receiver channel scanning to “02”.

LOCK Settings (SW5 and SW4 output relays interlocked):

NORMAL: Both output relays become interlocking momentary contacts.

TOG/TOG: Both output relays become interlocking toggled contacts.

TOG/TOG&E: Both output relays become interlocking toggled contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

ON/OFF: Both output relays become interlocking On and Off contacts.

ON/OFF+S: Both output relays become interlocking On and Off contacts. Must press the green START button along with the On or Off button to work.

ON/OFF&E: Both output relays become interlocking On and Off contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

MAGNET: Two output relays become interlocking Magnet ON and OFF contacts.

When one of the above is selected make sure the same SW5 and SW4 button function on transmitter are both set to “NORMAL”.

7.46 Program SW6 Output Relay (RX)

1) Press “→” button to enter SW6 Output Relay setting.
2) Press “→” button and then “↑” and “↓” button to select “LOCK” or “UNLOCK”.
3) Press “BACK” button to go back to step 2.
4) Press “↓” button and then “→” button select SW6 Output Relay function.
5) Press “↑” and “↓” button to scroll and select.
6) Exit Program SW6 Output Relay by pressing the “BACK” button until the cursor is shown next to “SW6 RLY”.
7) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

UNLOCK Settings (SW6 and SW7 output relays not interlocked):

NORMAL: Output relay becomes momentary contact.

NORMAL+S: Output relay becomes momentary contact. Must press the green START button together to work.

TOGGLE: Output relay becomes toggled contact.

TOGGLE&E: Output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

PITCH: SW6 button becomes the “Pitch” function in Pitch & Catch Operation.

PITCH&E: SW6 button becomes the “Pitch” function in Pitch & Catch Operation. When Pitch command is initiated, the receiver mains are disconnected.

STOP: SW6 button becomes an auxiliary e-stop function. Press to disconnect the receiver mains and press START button to reconnect the receiver mains.

When one of the above is selected make sure the same SW6 button function on transmitter is set to “NORMAL”.

When select Pitch & Catch function make sure you set the spare transmitter to the next channel up and the receiver channel scanning to “02”.

LOCK Settings (SW6 and SW7 output relays interlocked):

NORMAL: Both output relays become interlocking momentary contacts.

TOG/TOG: Both output relays become interlocking toggled contacts.

TOG/TOG&E: Both output relays become interlocking toggled contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

ON/OFF: Both output relays become interlocking On and Off contacts.

ON/OFF+S: Both output relays become interlocking On and Off contacts. Must press the green START button along with the On or Off button to work.

ON/OFF&E: Both output relays become interlocking On and Off contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

MAGNET: Two output relays become interlocking Magnet ON and OFF contacts.

When one of the above is selected make sure the same SW6 and SW7 button function on transmitter are both set to "NORMAL".

7.47 Program SW7 Output Relay (RX)

1) Press “→” button to enter SW7 Output Relay setting.
2) Press “→” button and then “↑” and “↓” button to select “LOCK” or “UNLOCK”.
3) Press “BACK” button to go back to step 2.
4) Press “↓” button and then “→” button select SW7 Output Relay function.
5) Press “↑” and “↓” button to scroll and select.
6) Exit Program SW7 Output Relay by pressing the “BACK” button until the cursor is shown next to “SW7 RLY”.
7) Press “↑” and “↓” button to scroll through other Flex 2JX settings.

UNLOCK Settings (SW7 and SW6 output relays not interlocked):

NORMAL: Output relay becomes momentary contact.

NORMAL+S: Output relay becomes momentary contact. Must press the green START button together to work.

TOGGLE: Output relay becomes toggled contact.

TOGGLE&E: Output relay becomes toggled contact affected by the e-stop command (output relay opens when e-stop button is pressed).

PITCH: SW7 button becomes the “Pitch” function in Pitch & Catch Operation.

PITCH&E: SW7 button becomes the “Pitch” function in Pitch & Catch Operation. When Pitch command is initiated, the receiver mains are disconnected.

STOP: SW7 button becomes an auxiliary e-stop function. Press to disconnect the receiver mains and press START button to reconnect the receiver mains.

When one of the above is selected make sure the same SW7 button function on transmitter is set to “NORMAL”.

When select Pitch & Catch function make sure you set the spare transmitter to the next channel up and the receiver channel scanning to “02”.

LOCK Settings (SW7 and SW6 output relays interlocked):

NORMAL: Both output relays become interlocking momentary contacts.

TOG/TOG: Both output relays become interlocking toggled contacts.

TOG/TOG&E: Both output relays become interlocking toggled contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

ON/OFF: Both output relays become interlocking On and Off contacts.

ON/OFF+S: Both output relays become interlocking On and Off contacts. Must press the green START button along with the On or Off button to work.

ON/OFF&E: Both output relays become interlocking On and Off contacts affected by the e-stop command (output relay opens when e-stop button is pressed).

MAGNET: Two output relays become interlocking Magnet ON and OFF contacts.

When one of the above is selected make sure the same SW7 and SW6 button function on transmitter are both set to "NORMAL".

8. Flex Mini Models

8.1 Decode TX Data (Using internal-equipped receiving RF board)

1. Press "→" button to enter "Decode TX Data".
2. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the internal-equipped receiving RF board. Make sure the internal-equipped receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
3. Press "↓" and then "→" button to enter Channel column.
4. Press "↑" and "↓" button to scroll and select CHANNEL or AUTOSCAN.

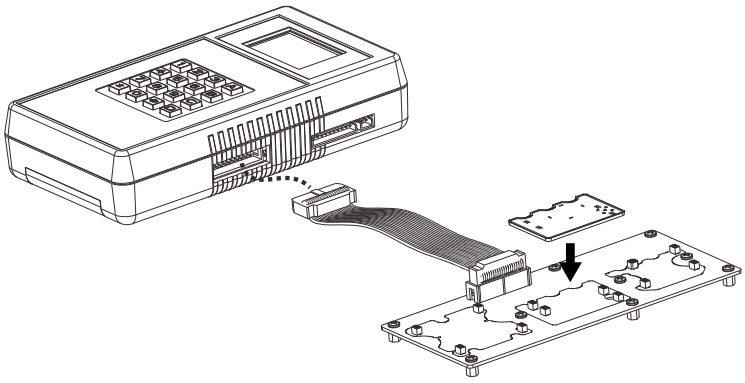
   Channel column: Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09". Press "→" button to start transmitter function testing. Press "BACK" button to exit.

   AUTOSCAN column: Press and hold any pushbutton on the transmitter to connect (excluded STOP, START and STOP/START buttons). Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the green START button. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

   When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

8.2 Decode TX Data (Using external receiving RF board)

1. Make sure the EX2 receiving RF board (compatible) is connected.



Make sure transmitting RF board is not connected to this unit at the same time during testing. "NO BOARD" is shown on the screen when receiving RF board is not connected.

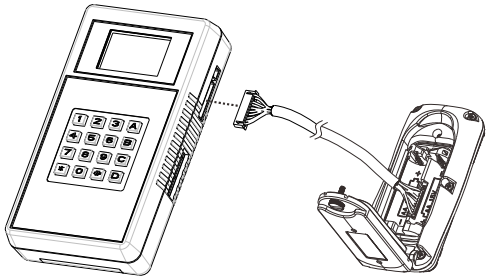
2. Press "→" button to enter "Decode TX Data".
3. Press "→" button to enter Frequency Range column. Press "↑" and "↓" button to scroll and select the frequency range of the external-equipped EX2 receiving RF board. Make sure the external-equipped EX2 receiving RF board corresponds to the frequency range selected. Press "BACK" button to exit "FREQ" column.
4. Press "↓" and then "→" button to enter Channel column.
5. Press "↑" and "↓" button to scroll and select CHANNEL or AUTOSCAN.

Channel column: Input channel number directly by using the keypad number 0~9, for example, press "0" and then "9" for channel "09". Press "→" button to start transmitter function testing. Press "BACK" button to exit.

AUTOSCAN column: Press and hold any pushbutton on the transmitter to connect (excluded STOP, START and STOP/START buttons). Press "→" button to start scanning. When connected, transmitter serial number is shown on the screen, for example: 01 S:123456 T:000. Release the green START button. Press "BACK" button two times with the curser shown next to the "CH" column. Press "↓" button one time with the curser shown next to the "01 S:XXXXXX T:XXX" and then press "→" button start transmitter function testing. Press "BACK" button to exit.

When performing AUTOSCAN, make sure other transmitters nearby are turned off to avoid multiple transmitters connected to this unit.

8.3 Program Direct



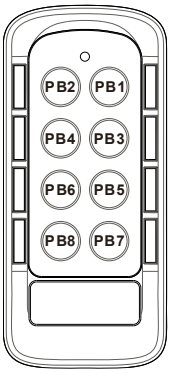
1) Make sure the programming cable is connected to the programmer.
2) Press "→" button to enter Direct setting.
3) Press READ button to store transmitter or receiver information into the programmer. If the screen shows "READ OK", the transfer is completed.
4) Press WRITE button to transfer the stored transmitter or receiver information into a new transmitter or receiver. If the screen shows "WRITE OK", the transfer is completed.
5) Exit Program Direct by pressing the "BACK" button until the cursor is shown next to "Program".
6) Press "↑" and "↓" button to scroll through other Flex Mini settings.

8.4 Program Serial Number (TX & RX)

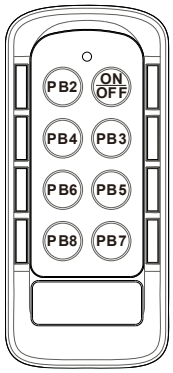
1) Press "→" button to enter Serial Number setting.
2) Press "↑" and "↓" button to change serial number as a whole or…
3) Input serial number directly by using the keypad number 0~9, for example, press "0" five times and then "1" one time is "S/N 000001".
4) Exit Program Serial Number by pressing the "BACK" button until the cursor is shown next to "S/N".
5) Press "↑" and "↓" button to scroll through other Flex Mini settings.

8.5 Program Keypad Type (TX & RX)

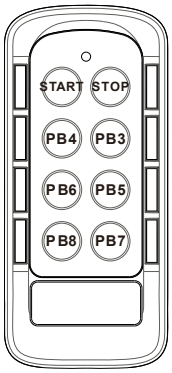
1) Press "→" button to enter Keypad Type setting.
2) Press "↑" and "↓" button to change keypad type as a whole or…
3) Input keypad type number directly by using the keypad number 0~9, for example, press "0" one time and then "1" one time is keypad type "01".
4) Exit Program Keypad Type by pressing the "BACK" button until the cursor is shown next to "KEYPAD:".
5) Press "↑" and "↓" button to scroll through other Flex Mini settings.



Type 1



Type 2



Type 3

8.6 Program System Frequency Range (TX & RX)

1) Press “→” button to enter System Frequency Range setting.
2) Press “↑” and “↓” button to change frequency range.
3) Exit Program System Frequency Range by pressing the “BACK” button until the cursor is shown next to “FREQ:”.
4) Press “↑” and “↓” button to scroll through other Flex Mini settings.

8.7 Program System Channel (TX & RX)

1) Press “→” button to enter System Channel setting.
2) Press “↑” and “↓” button to change system channel as a whole or…
3) Input system channel directly by using the keypad number 0~9, for example, press “0” one time and then “1” one time is “CH 01”.
4) Exit Program System Channel by pressing the “BACK” button until the cursor is shown next to “CHANNEL”.
5) Press “↑” and “↓” button to scroll through other Flex Mini settings.

8.8 Program RF Power (TX)

1) Press “→” button to enter RF Power setting.
2) Press “↑” and “↓” button to change RF power (0.01mW ~ 10mW).
3) Exit Program RF Power by pressing the “BACK” button until the cursor is shown next to “RFpower”.
4) Press “↑” and “↓” button to scroll through other Flex Mini settings.

8.9 Program Transmitter Inactivity/Sleep Timer (TX)

1) Press “→” button to enter TX Timer setting.
2) Press “↑” and “↓” button to select ON (constant on) or 01~99M (minutes).
3) When 01~99M is selected, input minute value directly by using the keypad Number 0~9. For example, press “0” one time and then “1” one time is 01M, which is 1 minute.
4) Exit Program Transmitter Inactivity/Sleep Timer by pressing the “BACK” button until the cursor is shown next to “TX TIMER”.
5) Press “↑” and “↓” button to scroll through other Flex Mini settings.

8.10 Program Output Relay 1 & 2 (PB1 & PB2) (RX)

1) Press “→” button to enter Program Output Relay 1 & 2.
2) Press “↑” and “↓” button to change system channel as a whole or…
3) Input numeric value directly by using the keypad number 0~9, for example, press “0” two times and then “1” one time is “001”.
4) Exit Program Output Relay 1 & 2 by pressing the “BACK” button until the cursor is shown next to “RELAY 1 & 2”.
5) Press “↑” and “↓” button to scroll through other Flex Mini settings.

001: On & Off pushbutton pair (for keypad type 01, 02 and 03).

002: Magnet On & Off pushbutton pair (for keypad type 01, 02 and 03).

003: On + Start & Off + Start pushbutton pair (for keypad type 03 only).

8.11 Program Output Relay 3 & 4 (PB3 & PB4) (RX)

1) Press “→” button to enter Program Output Relay 3 & 4.
2) Press “↑” and “↓” button to change system channel as a whole or…
3) Input numeric value directly by using the keypad number 0~9, for example, press “0” two times and then “1” one time is “001”.
4) Exit Program Output Relay 3 & 4 by pressing the “BACK” button until the cursor is shown next to “RELAY 3 & 4”.
5) Press “↑” and “↓” button to scroll through other Flex Mini settings.

001: On & Off pushbutton pair (for keypad type 01, 02 and 03).

002: Magnet On & Off pushbutton pair (for keypad type 01, 02 and 03).

003: On + Start & Off + Start pushbutton pair (for keypad type 03 only).

8.12 Program Output Relay 5 & 6 (PB5 & PB6) (RX)

1) Press “→” button to enter Program Output Relay 5 & 6.
2) Press “↑” and “↓” button to change system channel as a whole or…
3) Input numeric value directly by using the keypad number 0~9, for example, press “0” two times and then “1” one time is “001”.
4) Exit Program Output Relay 5 & 6 by pressing the “BACK” button until the cursor is shown next to “RELAY 5 & 6”.
5) Press “↑” and “↓” button to scroll through other Flex Mini settings.

001: On & Off pushbutton pair (for keypad type 01, 02 and 03).

002: Magnet On & Off pushbutton pair (for keypad type 01, 02 and 03).

003: On + Start & Off + Start pushbutton pair (for keypad type 03 only).

8.13 Program Output Relay 7 & 8 (PB7 & PB8) (RX)

1) Press “→” button to enter Program Output Relay 7 & 8.
2) Press “↑” and “↓” button to change system channel as a whole or…
3) Input numeric value directly by using the keypad number 0~9, for example, press “0” two times and then “1” one time is “001”.
4) Exit Program Output Relay 7& 8 by pressing the “BACK” button until the cursor is shown next to “RELAY 7 & 8”.
5) Press “↑” and “↓” button to scroll through other Flex Mini settings.

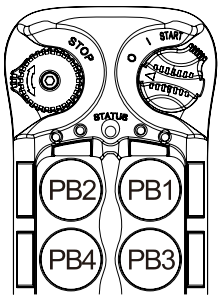
001: On & Off pushbutton pair (for keypad type 01, 02 and 03).

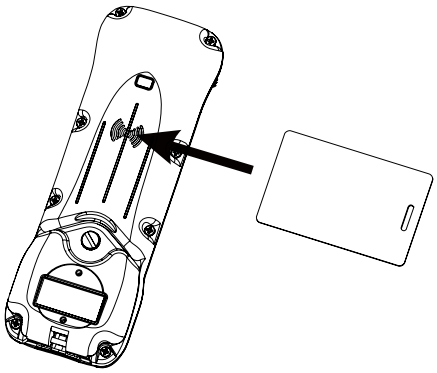
002: Magnet On & Off pushbutton pair (for keypad type 01, 02 and 03).

003: On + Start & Off + Start pushbutton pair (for keypad type 03 only).

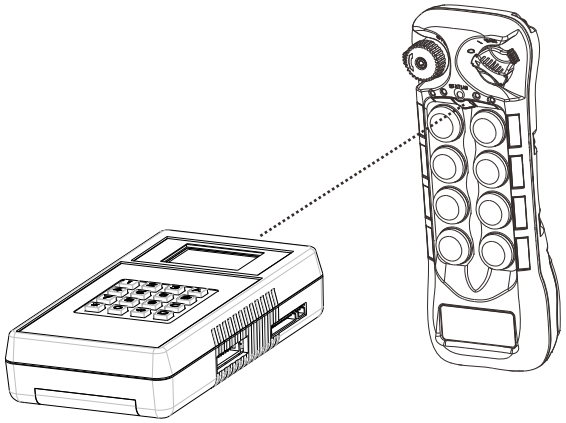
9. Transmitter Access Card (TAC)

1) Rotate the power switch key to OFF (0) position.
2) With the STOP button elevated, press and hold PB1, PB2, PB3 and PB4 at the same time.
3) Rotate the power switch key to ON (I) position.
4) Let go PB1, PB2, PB3 and PB4 at the same time, the Status LED displays orange fast blinks (entered TAC mode).
5) Placed the access card over the RFID marking located on the backside of the transmitter.
6) Status LED with 1 second green means the access card is being programmed into the transmitter.
7) Status LED with 1 second orange means the access card is already programmed into the transmitter.
8) Status LED with 1 second red means unable to store any more access cards. Each transmitter can only store up to 16 access cards.





9) When all access cards are stored into the transmitter then use the programmer to extract all access cards info by pointing the infrared sensor towards the transmitter Status LED location within a distance of no more than 10cm.

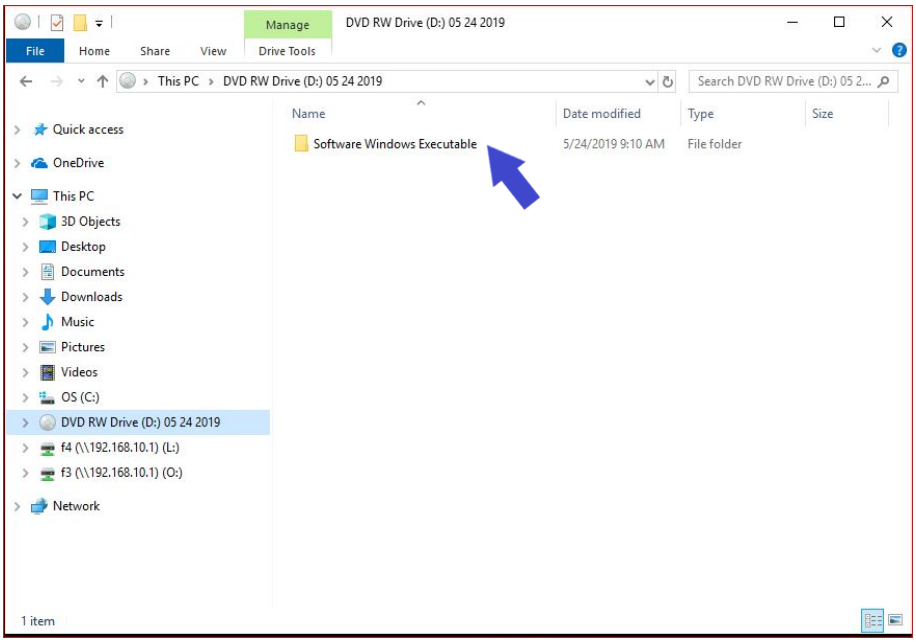


10) Press “→” button to enter TAC setting
11) Press and hold the READ button to transfer all access cards info into the programmer for further programming. If the screen shows “READ OK”, the transfer is completed.
12) After entering the TAC setting the first screen you see is either “EMPTY” (no access cards) or “_ CARDS” (number of access cards stored), “DEL_ALL” (delete all) and LAST USED (last TAC card in operation).
13) Select “DEL_ALL” by pressing “→” button one time if you want to delete all access cards from the system. Press “→” button again to delete.
14) Press “↑” and “↓” button if you want to program the access cards.
15) “CARD 1” shown on the screen is always the last access card scanned into the transmitter.
16) Press “↑” and “↓” button to select which access card to program and then press “→” button to enter.
17) A mix of alphabets and numbers shown on the second line below the access card number is the access card ID number.
18) The next line (S123456789101112) is the transmitter function. “S” is for START (access card required after transmitter power on), “1” for PB1, “2” for PB2, “3” for PB3… “12” for PB12.
19) Press “→” button to go to the first digit from the left and press “↑” and “↓” button to assign or un-assign. Assigned is represented by shaded or black color background.
20) When “S” (START) is assigned on one of the access cards, the same “S” START function on all other access cards is also assigned automatically. The pushbutton functions can be individually assigned.
21) Press “→” button to go to the next column to the right and redo step 19.
22) Program other access cards by pressing the “BACK” button until the cursor is shown next to “CARD # and redo step 16.
23) When all access cards are programmed, use the programmer to transfer all access card info back to the transmitter by pointing the infrared sensor towards the transmitter Status LED location within a distance of no more than 10cm and press and hold the “WRITE” button. In order for the transmitter to receive TAC info back from the programmer it must be in the TAC mode as well (refer to step 1 through 4). If the screen shows “WRITE OK”, the transfer is completed.
24) Exit Program TAC by pressing the “BACK” button until the cursor is shown next to “TAC”.

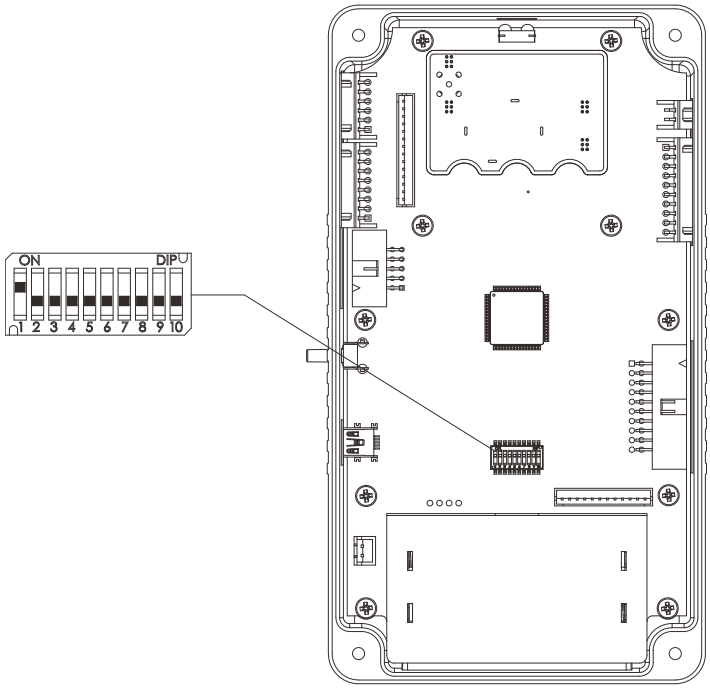
10. Firmware Update

10.1 Install Software

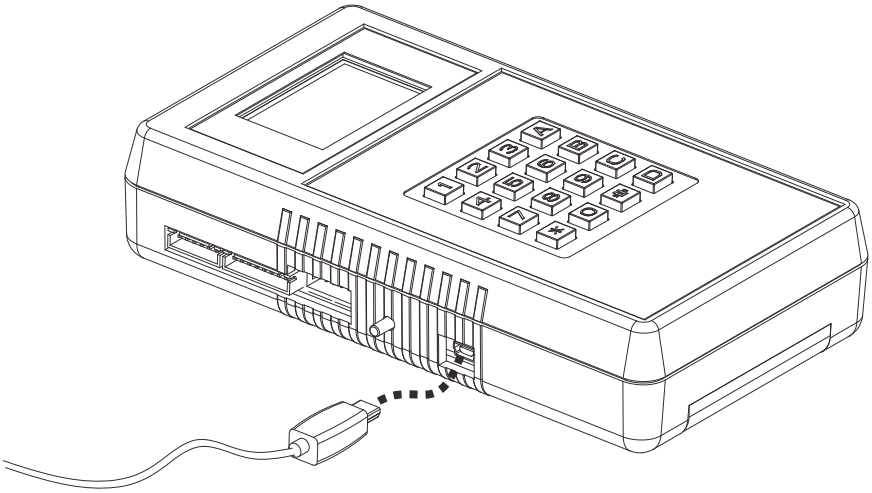
10.1.1 Copy and paste the provided folder onto your computer.



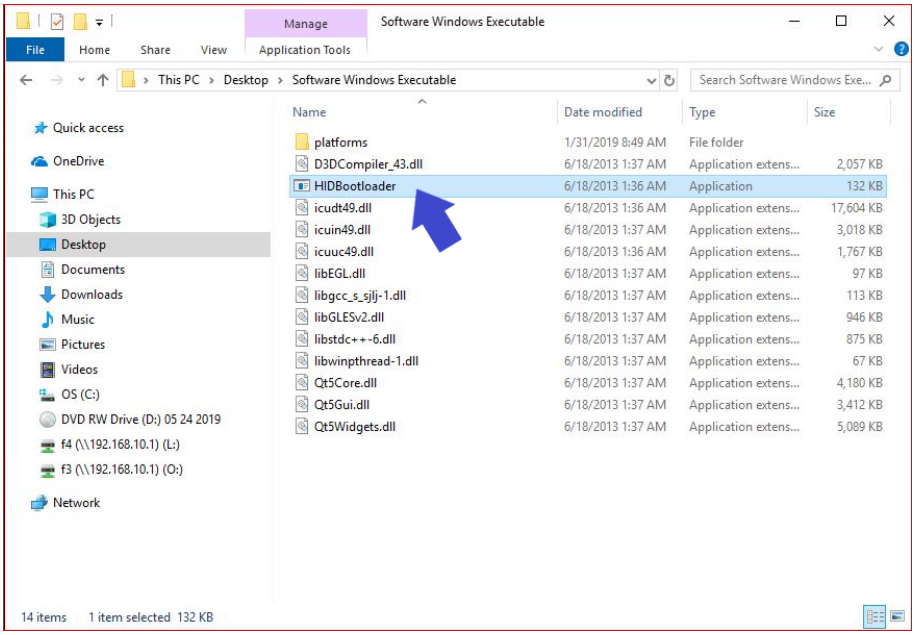
10.1.2 Set dipswitch position #1 to “1” or up position.



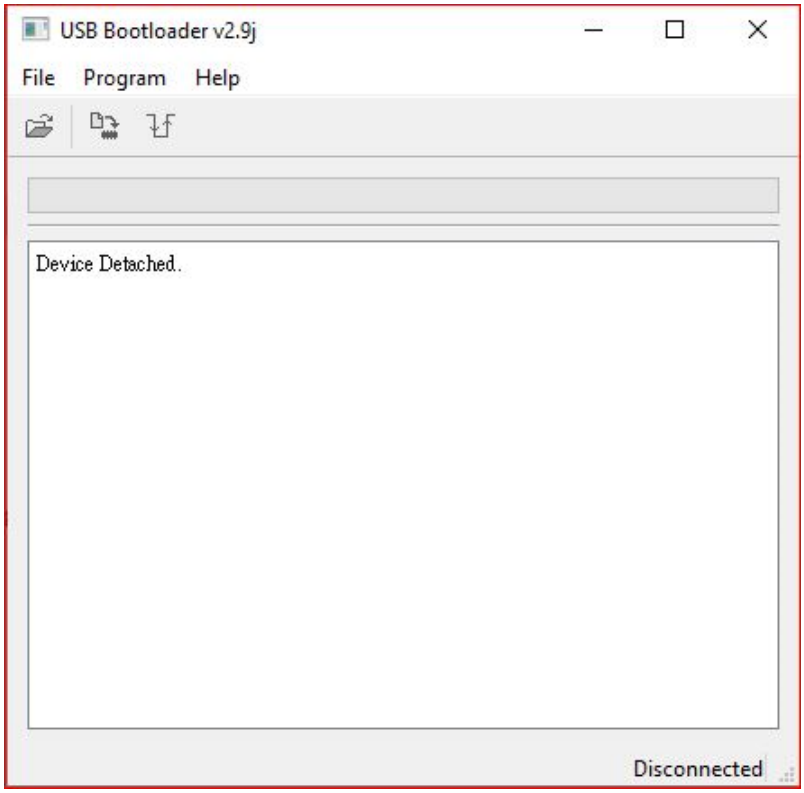
10.1.3 Plug in the USB cable (not provided).



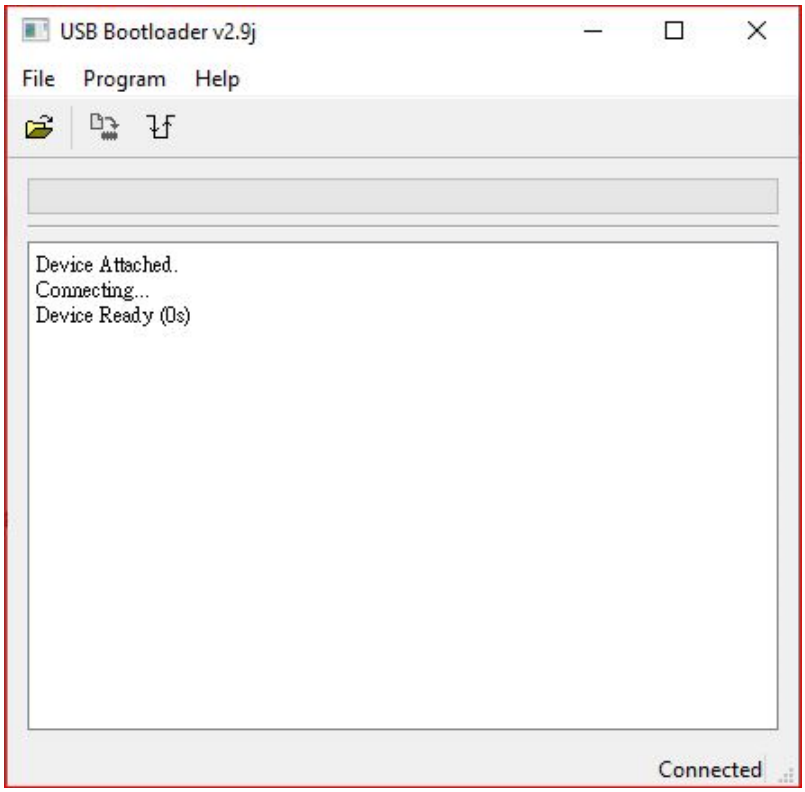
10.1.4 Open HIDBootloader.



Disconnected!

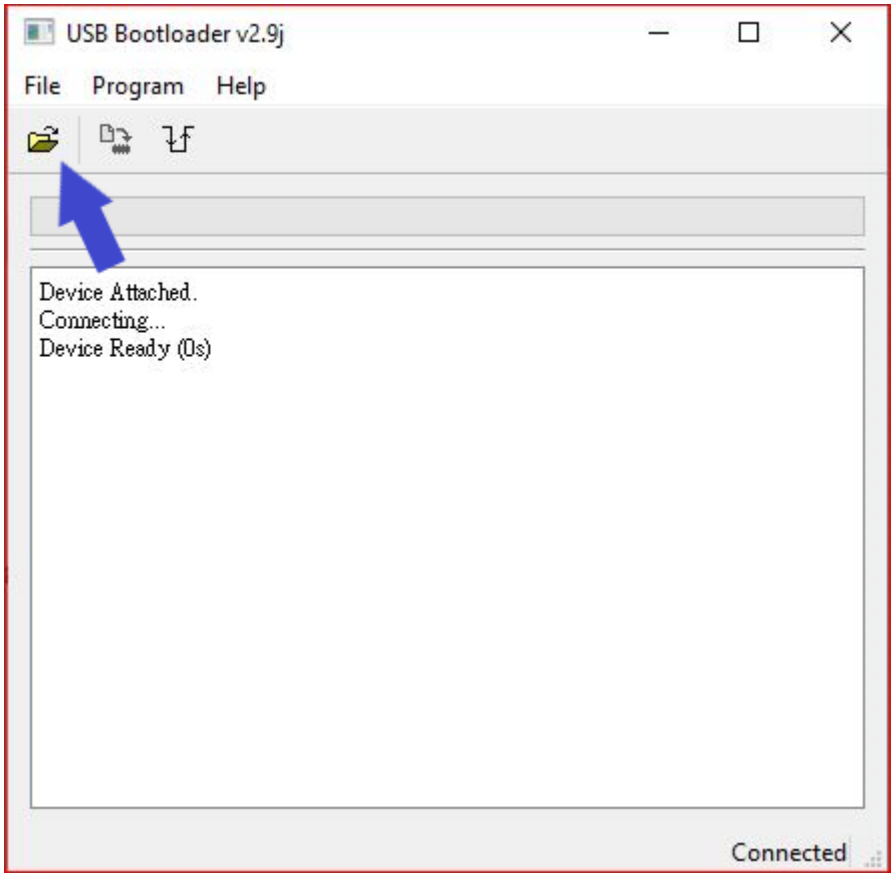


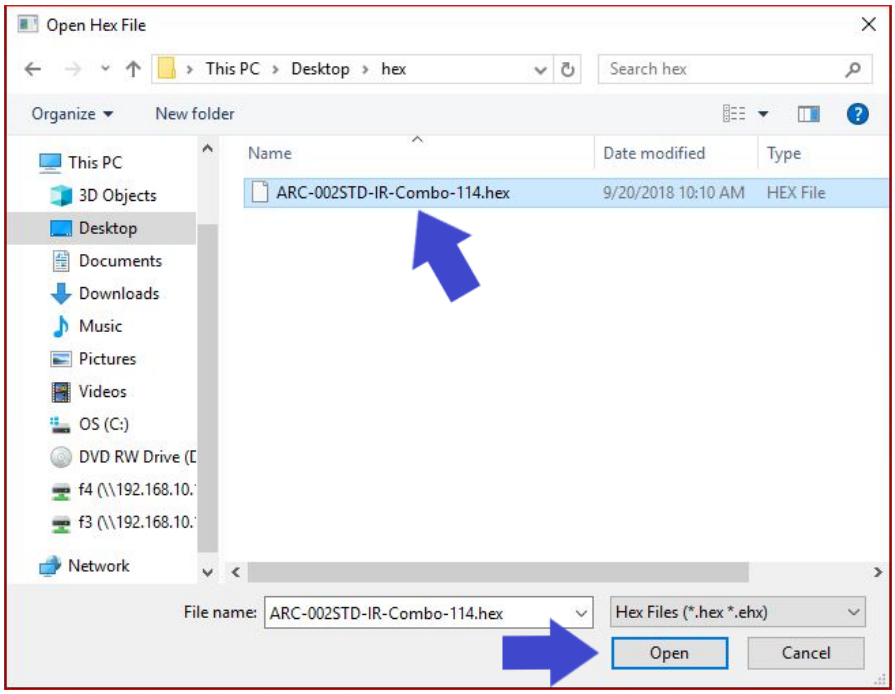
Connected!



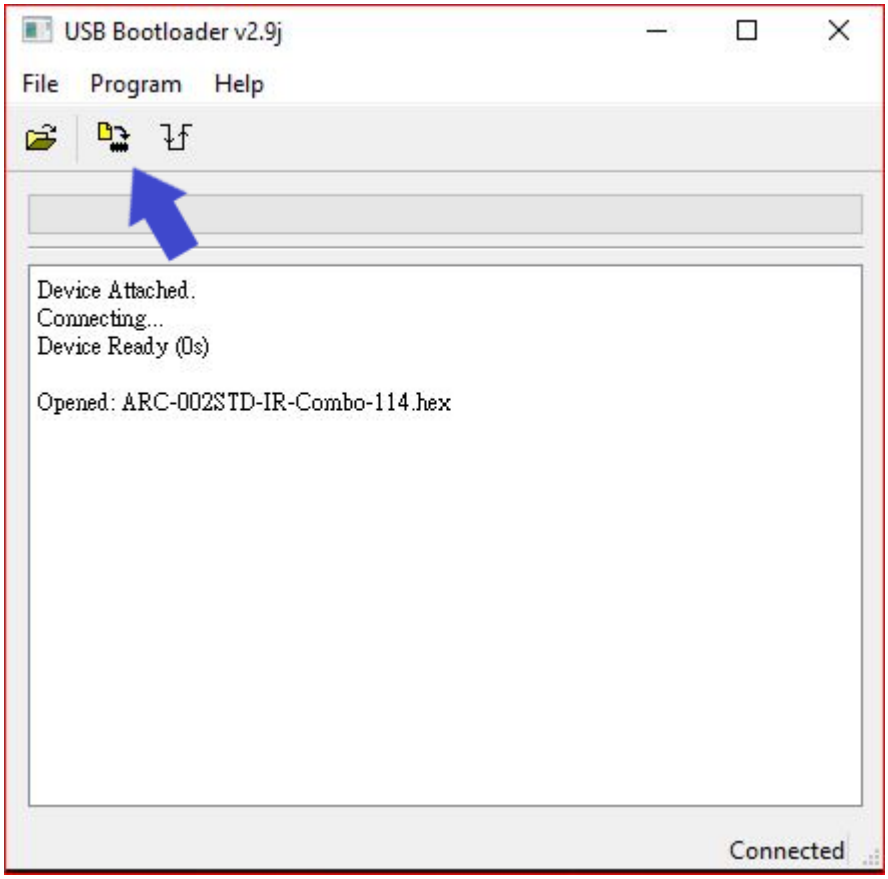
10.2 Firmware Update

10.2.1 Select HEX file (downloaded from ARC website)

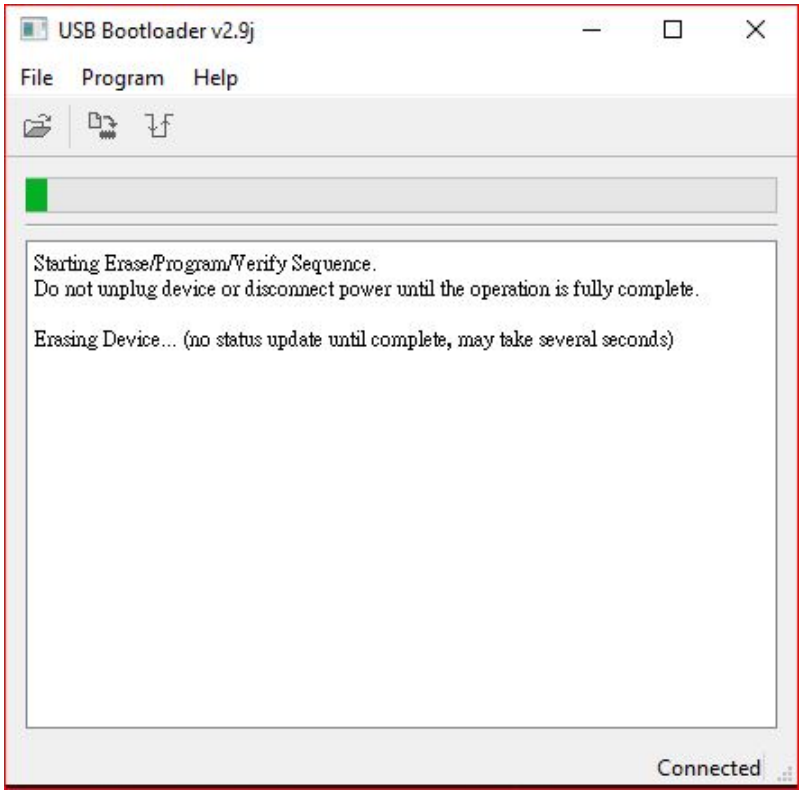


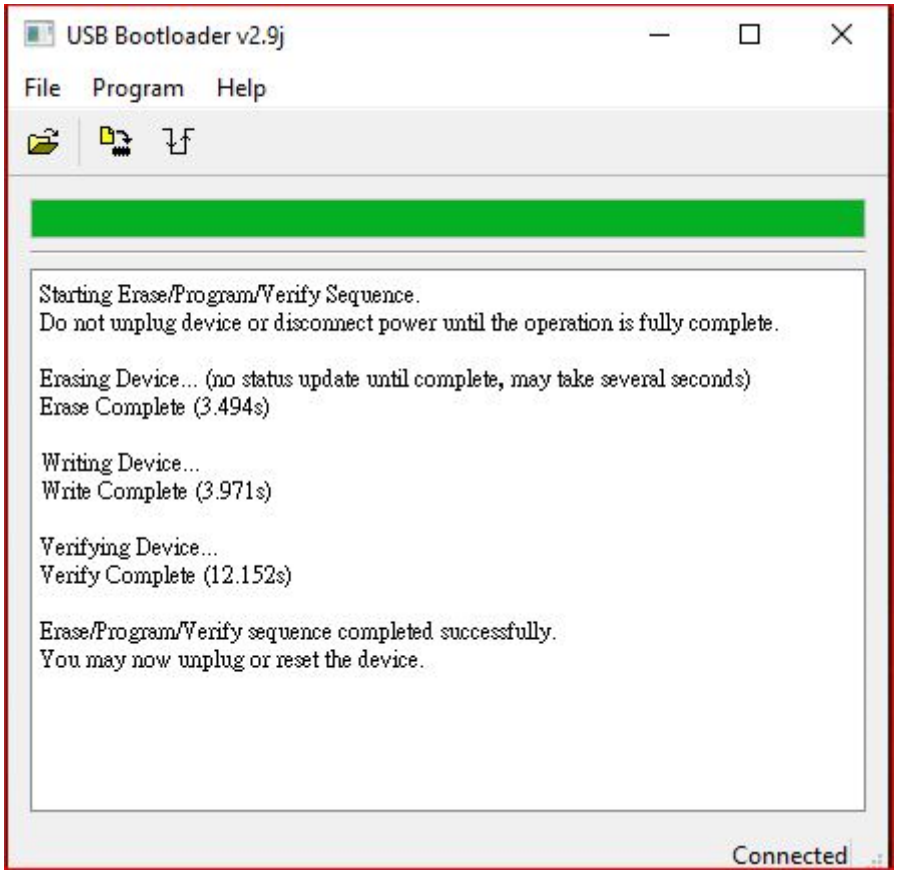


10.2.2 Program target device memory



10.2.3 Download and Complete





10.2.4 Unplug the USB cable and set dipswitch position #1 back to "0"or down position.

10.2.5 Exit firmware update by turning off the programmer.

11. Pushbutton Function Table

A. Flex EX Models

A. Transmitter Toggle Functions (Standard)

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
001	00000001				**4**								
002	00000010			**3**	**4**								
003	00000011		**2**	**3**	**4**								
004	00000100	**1**	**2**	**3**	**4**								
005	00000101								**4**				
006	00000110							**3**	**4**				
007	00000111						**2**	**3**	**4**				
008	00001000					**1**	**2**	**3**	**4**				
009	00001001										**4**		
010	00001010									**3**	**4**		
011	00001011								**2**	**3**	**4**		
012	00001100							**1**	**2**	**3**	**4**		
013	00001101												**4**
014	00001110											**3**	**4**
015	00001111										**2**	**3**	**4**
016	00010000									**1**	**2**	**3**	**4**

B. Transmitter Toggle Functions (Inline)

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
01	00000001				4								
017	00010001			3	4								
018	00010010		2	3	4								
019	00010011	1	2	3	4								
005	00000101								4				
020	00010100							3	4				
021	00010101						2	3	4				
022	00010110					1	2	3	4				
005	00000101										4		
020	00010100									3	4		
021	00010101								2	3	4		
022	00010110							1	2	3	4		
009	00001001											4	
023	00010111										3	4	
024	00011000									2	3	4	
025	00011001								1	2	3	4	
013	00001101												4
026	00011010											3	4
027	00011011										2	3	4
028	00011100									1	2	3	4

C. A/B Pushbutton Select Functions (Standard)

Type-A selector sequence : A → B → A → B …

Type-B selector sequence : Off → A → B → Off → A → B …

Type-C selector sequence : A → B → A+B → A → B → A+B …

Type-D selector sequence : Off → A → B → A+B → Off → A → B → A+B …

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
029	00011101			**A/1.2**									
030	00011110			**B/1.2**									
031	00011111			**C/1.2**									
032	00100000			**D/1.2**									
033	00100001				**A/3.4**								
034	00100010				**B/3.4**								
035	00100011				**C/3.4**								
036	00100100				**D/3.4**								
037	00100101			**A/1.2**	**A/3.4**								
038	00100110			**A/1.2**	**B/3.4**								
039	00100111			**A/1.2**	**C/3.4**								
040	00101000			**A/1.2**	**D/3.4**								
041	00101001			**B/1.2**	**B/3.4**								
042	00101010			**B/1.2**	**C/3.4**								
043	00101011			**B/1.2**	**D/3.4**								
044	00101100			**C/1.2**	**C/3.4**								
045	00101101			**C/1.2**	**D/3.4**								
046	00101110			**D/1.2**	**D/3.4**								
047	00101111							**A/1.2**					
048	00110000							**B/1.2**					
049	00110001							**C/1.2**					
050	00110010							**D/1.2**					

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
051	00110011								**A/3.4**				
052	00110100								**B/3.4**				
053	00110101								**C/3.4**				
054	00110110								**D/3.4**				
055	00110111							**A/1.2**	**A/3.4**				
056	00111000							**A/1.2**	**B/3.4**				
057	00111001							**A/1.2**	**C/3.4**				
058	00111010							**A/1.2**	**D/3.4**				
059	00111011							**B/1.2**	**B/3.4**				
060	00111100							**B/1.2**	**C/3.4**				
061	00111101							**B/1.2**	**D/3.4**				
062	00111110							**C/1.2**	**C/3.4**				
063	00111111							**C/1.2**	**D/3.4**				
064	01000000							**D/1.2**	**D/3.4**				
065	01000001									**A/1.2**			
066	01000010									**B/1.2**			
067	01000011									**C/1.2**			
068	01000100									**D/1.2**			
069	01000101										**A/3.4**		
070	01000110										**B/3.4**		
071	01000111										**C/3.4**		
072	01001000										**D/3.4**		
073	01001001									**A/1.2**	**A/3.4**		
074	01001010									**A/1.2**	**B/3.4**		
075	01001011									**A/1.2**	**C/3.4**		

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
076	01001100									**A/1.2**	**D/3.4**		
077	01001101									**B/1.2**	**B/3.4**		
078	01001110									**B/1.2**	**C/3.4**		
079	01001111									**B/1.2**	**D/3.4**		
080	01010000									**C/1.2**	**C/3.4**		
081	01010001									**C/1.2**	**D/3.4**		
082	01010010									**D/1.2**	**D/3.4**		
083	01010011											**A/1.2**	
084	01010100											**B/1.2**	
085	01010101											**C/1.2**	
086	01010110											**D/1.2**	
087	01010111												**A/3.4**
088	01011000												**B/3.4**
089	01011001												**C/3.4**
090	01011010												**D/3.4**
091	01011011											**A/1.2**	**A/3.4**
092	01011100											**A/1.2**	**B/3.4**
093	01011101											**A/1.2**	**C/3.4**
094	01011110											**A/1.2**	**D/3.4**
095	01011111											**B/1.2**	**B/3.4**
096	01100000											**B/1.2**	**C/3.4**
097	01100001											**B/1.2**	**D/3.4**
098	01100010											**C/1.2**	**C/3.4**
099	01100011											**C/1.2**	**D/3.4**
100	01100100											**D/1.2**	**D/3.4**

D. A/B Pushbutton Select Functions (Inline)

Type-A selector sequence : A → B → A → B …

Type-B selector sequence : Off → A → B → Off → A → B …

Type-C selector sequence : A → B → A+B → A → B → A+B …

Type-D selector sequence : Off → A → B → A+B → Off → A → B → A+B …

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
101	01100101			**A/1.2**									
102	01100110			**B/1.2**									
103	01100111			**C/1.2**									
104	01101000			**D/1.2**									
033	00100001				**A/3.4**								
034	00100010				**B/3.4**								
035	00100011				**C/3.4**								
036	00100100				**D/3.4**								
105	01101001			**A/1.2**	**A/3.4**								
106	01101010			**A/1.2**	**B/3.4**								
107	01101011			**A/1.2**	**C/3.4**								
108	01101100			**A/1.2**	**D/3.4**								
109	01101101			**B/1.2**	**B/3.4**								
110	01101110			**B/1.2**	**C/3.4**								
111	01101111			**B/1.2**	**D/3.4**								
112	01110000			**C/1.2**	**C/3.4**								
113	01110001			**C/1.2**	**D/3.4**								
114	01110010			**D/1.2**	**D/3.4**								
115	01110011							**A/1.2**					
116	01110100							**B/1.2**					
117	01110101							**C/1.2**					
118	01110110							**D/1.2**					

.

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
051	00110011								**A/3.4**				
052	00110100								**B/3.4**				
053	00110101								**C/3.4**				
054	00110110								**D/3.4**				
119	01110111							**A/1.2**	**A/3.4**				
120	01111000							**A/1.2**	**B/3.4**				
121	01111001							**A/1.2**	**C/3.4**				
122	01111010							**A/1.2**	**D/3.4**				
123	01111011							**B/1.2**	**B/3.4**				
124	01111100							**B/1.2**	**C/3.4**				
125	01111101							**B/1.2**	**D/3.4**				
126	01111110							**C/1.2**	**C/3.4**				
127	01111111							**C/1.2**	**D/3.4**				
128	10000000							**D/1.2**	**D/3.4**				
115	01110011									**A/1.2**			
116	01110100									**B/1.2**			
117	01110101									**C/1.2**			
118	01110110									**D/1.2**			
051	00110011										**A/3.4**		
052	00110100										**B/3.4**		
053	00110101										**C/3.4**		
054	00110110										**D/3.4**		
119	01110111									**A/1.2**	**A/3.4**		
120	01111000									**A/1.2**	**B/3.4**		
121	01111001									**A/1.2**	**C/3.4**		

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
122	01111010									**A/1.2**	**D/3.4**		
123	01111011									**B/1.2**	**B/3.4**		
124	01111100									**B/1.2**	**C/3.4**		
125	01111101									**B/1.2**	**D/3.4**		
126	01111110									**C/1.2**	**C/3.4**		
127	01111111									**C/1.2**	**D/3.4**		
128	10000000									**D/1.2**	**D/3.4**		
129	10000001										**A/1.2**		
130	10000010										**B/1.2**		
131	10000011										**C/1.2**		
132	10000100										**D/1.2**		
069	01000101											**A/3.4**	
070	01000110											**B/3.4**	
071	01000111											**C/3.4**	
072	01001000											**D/3.4**	
133	10000101										**A/1.2**	**A/3.4**	
134	10000110										**A/1.2**	**B/3.4**	
135	10000111										**A/1.2**	**C/3.4**	
136	10001000										**A/1.2**	**D/3.4**	
137	10001001										**B/1.2**	**B/3.4**	
138	10001010										**B/1.2**	**C/3.4**	
139	10001011										**B/1.2**	**D/3.4**	
140	10001100										**C/1.2**	**C/3.4**	
141	10001101										**C/1.2**	**D/3.4**	
142	10001110										**D/1.2**	**D/3.4**	

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
143	10001111											**A/1.2**	
144	10010000											**B/1.2**	
145	10010001											**C/1.2**	
146	10010010											**D/1.2**	
087	01010111												**A/3.4**
088	01011000												**B/3.4**
089	01011001												**C/3.4**
090	01011010												**D/3.4**
147	10010011											**A/1.2**	**A/3.4**
148	10010100											**A/1.2**	**B/3.4**
149	10010101											**A/1.2**	**C/3.4**
150	10010110											**A/1.2**	**D/3.4**
151	10010111											**B/1.2**	**B/3.4**
152	10011000											**B/1.2**	**C/3.4**
153	10011001											**B/1.2**	**D/3.4**
154	10011010											**C/1.2**	**C/3.4**
155	10011011											**C/1.2**	**D/3.4**
156	10011100											**D/1.2**	**D/3.4**

E. Transmitter Toggle + A/B Pushbutton Select Functions (Standard)

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
157	10011101			**1**	**A/3.4**								
158	10011110			**1**	**B/3.4**								
159	10011111			**1**	**C/3.4**								
160	10100000			**1**	**D/3.4**								
161	10100001		**1**	**2**	**A/3.4**								
162	10100010		**1**	**2**	**B/3.4**								
163	10100011		**1**	**2**	**C/3.4**								
164	10100100		**1**	**2**	**D/3.4**								
165	10100101			**A/1.2**	**4**								
166	10100110			**B/1.2**	**4**								
167	10100111			**C/1.2**	**4**								
168	10101000			**D/1.2**	**4**								
169	10101001		**3**	**A/1.2**	**4**								
170	10101010		**3**	**B/1.2**	**4**								
171	10101011		**3**	**C/1.2**	**4**								
172	10101100		**3**	**D/1.2**	**4**								
173	10101101							**1**	**A/3.4**				
174	10101110							**1**	**B/3.4**				
175	10101111							**1**	**C/3.4**				
176	10110000							**1**	**D/3.4**				
177	10110001						**1**	**2**	**A/3.4**				
178	10110010						**1**	**2**	**B/3.4**				
179	10110011						**1**	**2**	**C/3.4**				
180	10110100						**1**	**2**	**D/3.4**				
181	10110101							**A/1.2**	**4**				

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
182	10110110							**B/1.2**	**4**				
183	10110111							**C/1.2**	**4**				
184	10111000							**D/1.2**	**4**				
185	10111001						**3**	**A/1.2**	**4**				
186	10111010						**3**	**B/1.2**	**4**				
187	10111011						**3**	**C/1.2**	**4**				
188	10111100						**3**	**D/1.2**	**4**				
189	10111101									**1**	**A/3.4**		
190	10111110									**1**	**B/3.4**		
191	10111111									**1**	**C/3.4**		
192	11000000									**1**	**D/3.4**		
193	11000001								**1**	**2**	**A/3.4**		
194	11000010								**1**	**2**	**B/3.4**		
195	11000011								**1**	**2**	**C/3.4**		
196	11000100								**1**	**2**	**D/3.4**		
197	11000101									**A/1.2**	**4**		
198	11000110									**B/1.2**	**4**		
199	11000111									**C/1.2**	**4**		
200	11001000									**D/1.2**	**4**		
201	11001001								**3**	**A/1.2**	**4**		
202	11001010								**3**	**B/1.2**	**4**		
203	11001011								**3**	**C/1.2**	**4**		
204	11001100								**3**	**D/1.2**	**4**		
205	11001101											**1**	**A/3.4**
206	11001110											**1**	**B/3.4**

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
207	11001111											**1**	**C/3.4**
208	11010000											**1**	**D/3.4**
209	11010001										**1**	**2**	**A/3.4**
210	11010010										**1**	**2**	**B/3.4**
211	11010011										**1**	**2**	**C/3.4**
212	11010100										**1**	**2**	**D/3.4**
213	11010101											**A/1.2**	**4**
214	11010110											**B/1.2**	**4**
215	11010111											**C/1.2**	**4**
216	11011000											**D/1.2**	**4**
217	11011001										**3**	**A/1.2**	**4**
218	11011010										**3**	**B/1.2**	**4**
219	11011011										**3**	**C/1.2**	**4**
220	11011100										**3**	**D/1.2**	**4**

F. Transmitter Toggle + A/B Pushbutton Select Functions (Inline)

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
221	11011101			**1**	**A/3.4**								
222	11011110			**1**	**B/3.4**								
223	11011111			**1**	**C/3.4**								
224	11100000			**1**	**D/3.4**								
225	11100001		**1**	**2**	**A/3.4**								
226	11100010		**1**	**2**	**B/3.4**								
227	11100011		**1**	**2**	**C/3.4**								
228	11100100		**1**	**2**	**D/3.4**								
229	11100101							**1**	**A/3.4**				
230	11100110							**1**	**B/3.4**				
231	11100111							**1**	**C/3.4**				
232	11101000							**1**	**D/3.4**				
233	11101001						**1**	**2**	**A/3.4**				
234	11101010						**1**	**2**	**B/3.4**				
235	11101011						**1**	**2**	**C/3.4**				
236	11101100						**1**	**2**	**D/3.4**				
229	11101101									**1**	**A/3.4**		
230	11101110									**1**	**B/3.4**		
231	11101111									**1**	**C/3.4**		
232	11110000									**1**	**D/3.4**		
233	11110001								**1**	**2**	**A/3.4**		
234	11110010								**1**	**2**	**B/3.4**		
235	11110011								**1**	**2**	**C/3.4**		
236	11110100								**1**	**2**	**D/3.4**		
237	11110101										**1**	**A/3.4**	

NO	Dip Set	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
238	11110110										**1**	**B/3.4**	
239	11110111										**1**	**C/3.4**	
240	11111000										**1**	**D/3.4**	
241	11111001									**1**	**2**	**A/3.4**	
242	11111010									**1**	**2**	**B/3.4**	
243	11111011									**1**	**2**	**C/3.4**	
244	11111100									**1**	**2**	**D/3.4**	
245	11110101											**1**	**A/3.4**
246	11110110											**1**	**B/3.4**
247	11110111											**1**	**C/3.4**
248	11111000											**1**	**D/3.4**
249	11111001										**1**	**2**	**A/3.4**
250	11111010										**1**	**2**	**B/3.4**
251	11111011										**1**	**2**	**C/3.4**
252	11111100										**1**	**2**	**D/3.4**

B. Flex EX2 Models

A. Transmitter Toggle Functions (Standard)

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
001				4								
002			3	4								
003		2	3	4								
004	1	2	3	4								
005								4				
006							3	4				
007						2	3	4				
008					1	2	3	4				
009										4		
010									3	4		
011								2	3	4		
012							1	2	3	4		
013												4
014											3	4
015										2	3	4
016									1	2	3	4

B. Transmitter Toggle Functions (Inline)

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
001				4								
017			3	4								
018		2	3	4								
019	1	2	3	4								
005								4				
020							3	4				
021						2	3	4				
022					1	2	3	4				
005										4		
020									3	4		
021								2	3	4		
022							1	2	3	4		
009											4	
023										3	4	
024									2	3	4	
025								1	2	3	4	
013												4
026											3	4
027										2	3	4
028									1	2	3	4

C. A/B Pushbutton Select Functions (Standard)

Type-A selector sequence : A → B → A → B …

Type-B selector sequence : Off → A → B → Off → A → B …

Type-C selector sequence : A → B → A+B → A → B → A+B …

Type-D selector sequence : Off → A → B → A+B → Off → A → B → A+B …

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
029			A/1.2									
030			B/1.2									
031			C/1.2									
032			D/1.2									
033				A/3.4								
034				B/3.4								
035				C/3.4								
036				D/3.4								
037			A/1.2	A/3.4								
038			A/1.2	B/3.4								
039			A/1.2	C/3.4								
040			A/1.2	D/3.4								
041			B/1.2	B/3.4								
042			B/1.2	C/3.4								
043			B/1.2	D/3.4								
044			C/1.2	C/3.4								
045			C/1.2	D/3.4								
046			D/1.2	D/3.4								
047							A/1.2					
048							B/1.2					
049							C/1.2					
050							D/1.2					

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
051								A/3.4				
052								B/3.4				
053								C/3.4				
054								D/3.4				
055							A/1.2	A/3.4				
056							A/1.2	B/3.4				
057							A/1.2	C/3.4				
058							A/1.2	D/3.4				
059							B/1.2	B/3.4				
060							B/1.2	C/3.4				
061							B/1.2	D/3.4				
062							C/1.2	C/3.4				
063							C/1.2	D/3.4				
064							D/1.2	D/3.4				
065									A/1.2			
066									B/1.2			
067									C/1.2			
068									D/1.2			
069										A/3.4		
070										B/3.4		
071										C/3.4		
072										D/3.4		
073									A/1.2	A/3.4		
074									A/1.2	B/3.4		
075									A/1.2	C/3.4		

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
076									A/1.2	D/3.4		
077									B/1.2	B/3.4		
078									B/1.2	C/3.4		
079									B/1.2	D/3.4		
080									C/1.2	C/3.4		
081									C/1.2	D/3.4		
082									D/1.2	D/3.4		
083											A/1.2	
084											B/1.2	
085											C/1.2	
086											D/1.2	
087												A/3.4
088												B/3.4
089												C/3.4
090												D/3.4
091											A/1.2	A/3.4
092											A/1.2	B/3.4
093											A/1.2	C/3.4
094											A/1.2	D/3.4
095											B/1.2	B/3.4
096											B/1.2	C/3.4
097											B/1.2	D/3.4
098											C/1.2	C/3.4
099											C/1.2	D/3.4
100											D/1.2	D/3.4

D. A/B Pushbutton Select Functions (Inline)

Type-A selector sequence : A → B → A → B …

Type-B selector sequence : Off → A → B → Off → A → B …

Type-C selector sequence : A → B → A+B → A → B → A+B …

Type-D selector sequence : Off → A → B → A+B → Off → A → B → A+B …

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
101			**A/1.2**									
102			**B/1.2**									
103			**C/1.2**									
104			**D/1.2**									
033				**A/3.4**								
034				**B/3.4**								
035				**C/3.4**								
036				**D/3.4**								
105			**A/1.2**	**A/3.4**								
106			**A/1.2**	**B/3.4**								
107			**A/1.2**	**C/3.4**								
108			**A/1.2**	**D/3.4**								
109			**B/1.2**	**B/3.4**								
110			**B/1.2**	**C/3.4**								
111			**B/1.2**	**D/3.4**								
112			**C/1.2**	**C/3.4**								
113			**C/1.2**	**D/3.4**								
114			**D/1.2**	**D/3.4**								
115							**A/1.2**					
116							**B/1.2**					
117							**C/1.2**					
118							**D/1.2**					

.

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
051								A/3.4				
052								B/3.4				
053								C/3.4				
054								D/3.4				
119							A/1.2	A/3.4				
120							A/1.2	B/3.4				
121							A/1.2	C/3.4				
122							A/1.2	D/3.4				
123							B/1.2	B/3.4				
124							B/1.2	C/3.4				
125							B/1.2	D/3.4				
126							C/1.2	C/3.4				
127							C/1.2	D/3.4				
128							D/1.2	D/3.4				
115									A/1.2			
116									B/1.2			
117									C/1.2			
118									D/1.2			
051										A/3.4		
052										B/3.4		
053										C/3.4		
054										D/3.4		
119									A/1.2	A/3.4		
120									A/1.2	B/3.4		
121									A/1.2	C/3.4		

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
122									A/1.2	D/3.4		
123									B/1.2	B/3.4		
124									B/1.2	C/3.4		
125									B/1.2	D/3.4		
126									C/1.2	C/3.4		
127									C/1.2	D/3.4		
128									D/1.2	D/3.4		
129										A/1.2		
130										B/1.2		
131										C/1.2		
132										D/1.2		
069											A/3.4	
070											B/3.4	
071											C/3.4	
072											D/3.4	
133										A/1.2	A/3.4	
134										A/1.2	B/3.4	
135										A/1.2	C/3.4	
136										A/1.2	D/3.4	
137										B/1.2	B/3.4	
138										B/1.2	C/3.4	
139										B/1.2	D/3.4	
140										C/1.2	C/3.4	
141										C/1.2	D/3.4	
142										D/1.2	D/3.4	

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
143											A/1.2	
144											B/1.2	
145											C/1.2	
146											D/1.2	
087												A/3.4
088												B/3.4
089												C/3.4
090												D/3.4
147											A/1.2	A/3.4
148											A/1.2	B/3.4
149											A/1.2	C/3.4
150											A/1.2	D/3.4
151											B/1.2	B/3.4
152											B/1.2	C/3.4
153											B/1.2	D/3.4
154											C/1.2	C/3.4
155											C/1.2	D/3.4
156											D/1.2	D/3.4

E. Transmitter Toggle + A/B Pushbutton Select Functions (Standard)

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
157			1	A/3.4								
158			1	B/3.4								
159			1	C/3.4								
160			1	D/3.4								
161		1	2	A/3.4								
162		1	2	B/3.4								
163		1	2	C/3.4								
164		1	2	D/3.4								
165			A/1.2	4								
166			B/1.2	4								
167			C/1.2	4								
168			D/1.2	4								
169		3	A/1.2	4								
170		3	B/1.2	4								
171		3	C/1.2	4								
172		3	D/1.2	4								
173							1	A/3.4				
174							1	B/3.4				
175							1	C/3.4				
176							1	D/3.4				
177						1	2	A/3.4				
178						1	2	B/3.4				
179						1	2	C/3.4				
180						1	2	D/3.4				
181							A/1.2	4				

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
182							B/1.2	4				
183							C/1.2	4				
184							D/1.2	4				
185						3	A/1.2	4				
186						3	B/1.2	4				
187						3	C/1.2	4				
188						3	D/1.2	4				
189									1	A/3.4		
190									1	B/3.4		
191									1	C/3.4		
192									1	D/3.4		
193								1	2	A/3.4		
194								1	2	B/3.4		
195								1	2	C/3.4		
196								1	2	D/3.4		
197									A/1.2	4		
198									B/1.2	4		
199									C/1.2	4		
200									D/1.2	4		
201								3	A/1.2	4		
202								3	B/1.2	4		
203								3	C/1.2	4		
204								3	D/1.2	4		
205											1	A/3.4
206											1	B/3.4

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
207											1	C/3.4
208											1	D/3.4
209										1	2	A/3.4
210										1	2	B/3.4
211										1	2	C/3.4
212										1	2	D/3.4
213											A/1.2	4
214											B/1.2	4
215											C/1.2	4
216											D/1.2	4
217										3	A/1.2	4
218										3	B/1.2	4
219										3	C/1.2	4
220										3	D/1.2	4

F. Transmitter Toggle + A/B Pushbutton Select Functions (Inline)

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
221			1	A/3.4								
222			1	B/3.4								
223			1	C/3.4								
224			1	D/3.4								
225		1	2	A/3.4								
226		1	2	B/3.4								
227		1	2	C/3.4								
228		1	2	D/3.4								
229							1	A/3.4				
230							1	B/3.4				
231							1	C/3.4				
232							1	D/3.4				
233						1	2	A/3.4				
234						1	2	B/3.4				
235						1	2	C/3.4				
236						1	2	D/3.4				
229									1	A/3.4		
230									1	B/3.4		
231									1	C/3.4		
232									1	D/3.4		
233								1	2	A/3.4		
234								1	2	B/3.4		
235								1	2	C/3.4		
236								1	2	D/3.4		
237										1	A/3.4	

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
238										1	B/3.4	
239										1	C/3.4	
240										1	D/3.4	
241									1	2	A/3.4	
242									1	2	B/3.4	
243									1	2	C/3.4	
244									1	2	D/3.4	
245											1	A/3.4
246											1	B/3.4
247											1	C/3.4
248											1	D/3.4
249										1	2	A/3.4
250										1	2	B/3.4
251										1	2	C/3.4
252										1	2	D/3.4

C. Flex ECO/Handy Models

A. Transmitter Toggle Functions (Standard)

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
001	1											
002		2										
003			1									
004				2								
005					1							
006						2						
007							1					
008								2				
009									1			
010										2		
011											1	
012												2
013	1	2										
014			1	2								
015					1	2						
016							1	2				
017									1	2		
018											1	2

B. Transmitter Toggle Functions (Inline)

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
019	1		2									
020					1		2					
021									1		2	
022		1		2								
023						1		2				
024										1		2

C. A/B Pushbutton Select Functions (Standard)

Type-A selector sequence : A → B → A → B …

Type-B selector sequence : Off → A → B → Off → A → B …

Type-C selector sequence : A → B → A+B → A → B → A+B …

Type-D selector sequence : Off → A → B → A+B → Off → A → B → A+B …

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
025			**A/1.2**									
026			**B/1.2**									
027			**C/1.2**									
028			**D/1.2**									
029				**A/1.2**								
030				**B/1.2**								
031				**C/1.2**								
032				**D/1.2**								
033							**A/1.2**					
034							**B/1.2**					
035							**C/1.2**					
036							**D/1.2**					
037								**A/1.2**				
038								**B/1.2**				
039								**C/1.2**				
040								**D/1.2**				
041											**A/1.2**	
042											**B/1.2**	
043											**C/1.2**	
044											**D/1.2**	
045												**A/1.2**
046												**B/1.2**

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
051												C/1.2
052												D/1.2

D. A/B Pushbutton Select Functions (Inline)

Type-A selector sequence : A → B → A → B …

Type-B selector sequence : Off → A → B → Off → A → B …

Type-C selector sequence : A → B → A+B → A → B → A+B …

Type-D selector sequence : Off → A → B → A+B → Off → A → B → A+B …

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
049			A/1.2									
050			B/1.2									
051			C/1.2									
052			D/1.2									
029				A/1.2								
030				B/1.2								
031				C/1.2								
032				D/1.2								
053							A/1.2					
054							B/1.2					
055							C/1.2					
056							D/1.2					
037								A/1.2				
038								B/1.2				
039								C/1.2				
040								D/1.2				
057											A/1.2	
058											B/1.2	

.

NO	PB1	PB2	PB3	PB4	PB5	PB6	PB7	PB8	PB9	PB10	PB11	PB12
059											C/1.2	
060											D/1.2	
045												A/1.2
046												B/1.2
047												C/1.2
048												D12