MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

MiTek Machinery SERVICE BULLETIN

Service Bulletin	SB121
Date	1/30/01
Revision Level	

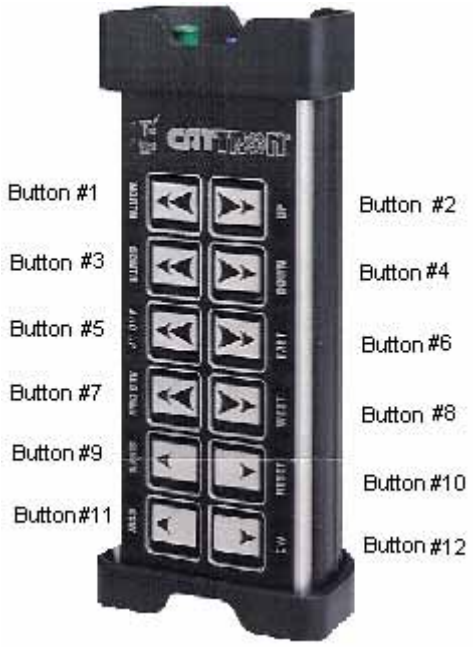
Product	Horizontal Stacker
Description	Cattron MKEZ Hand Held Controller

Created	Reviewed	Approved
MS	VDC/EMT	TBH

When your **MKEZ** Controller is supplied as a stand alone spare item to complement your existing CATTRON EZ System, or has been returned after repairs, address and operating frequency have not been pre-programmed into the controller. You will be required to verify/program the system address and operating frequency before using your **MKEZ** controller for the first time.

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

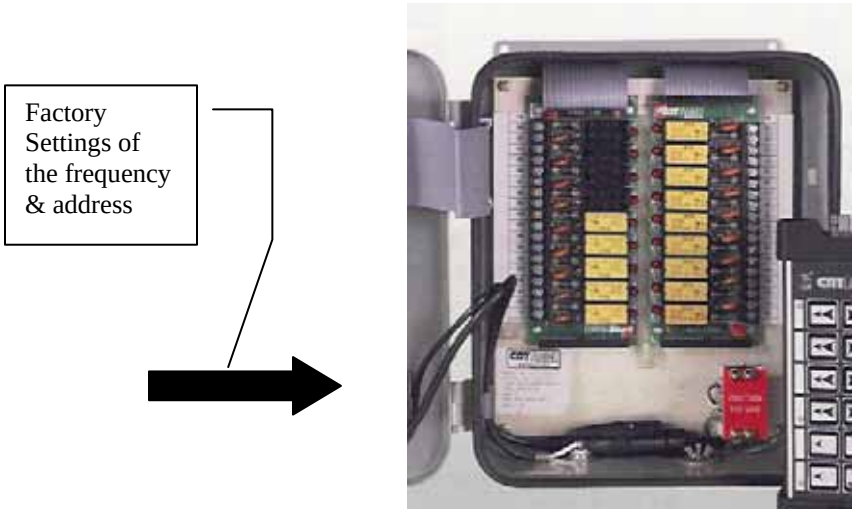
Step 1: Frequency and Address Settings



The **MKEZ** controller has two programmable address code digits which are selected using buttons #3, and #4 on the keypad. The original factory settings can be found on the label affixed to the side of the receiver/decoder housing.

Step 2 Part A: Enter the 'High' Address

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380



Example: Sample EZ System Label-

Factory Settings:
Frequency 448.90000MHz
Address: F E

Digit #3 ('High' digit)
Digit #4 ('Low' digit)

The original factory settings can be found on the label affixed to the side of the receiver/decoder housing.

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

Address digit #3 entry and report* (MKEZ *controller)

Note (1) On the **MKEZ** controller, address codes 00 and FF are not valid.
(2) On the **MKEZ** controller, digit #3 is the *high digit* and digit #4 is the *low digit*.

1) Set (*push down*) the green ON/OFF switch on the **MKEZ** controller to OFF. Press and hold down button #1 and push down the red STOP switch. Set (*pull up*) green ON/OFF switch on controller to ON, pause momentarily, then release button #1. The controller will emit one long beep followed by one short beep. The controller is now in **Address Data Entry Mode.**

2) To select digit #3 data entry mode, press and release button #3. To find the present address digit #3 value, press and release button #4. The unit will emit one long beep to alert you, then will beep out the address digit #3 setting count with short beeps (*i.e., five short beeps if the digit is '5'*). The yellow led will also flash with each short beep/count. (*'0' is represented by a long beep with no led flash*). *Look, listen, and count to determine the existing value.* Repeat as necessary by pressing button #4. **See Table 1 to convert number of beeps to address digit setting.**

3) To increment the address digit #3 press and release button #1. Each depression will increment the address digit #3 by one; continuing from its present value until it reaches 15, then it will roll over to zero and start again. (*The unit will beep each time button #1 is depressed*).

4) Press button #4 to confirm your desired setting.

5) Once you have entered the desired address digit #3, set (*push down*) the green ON/OFF switch on the **MKEZ** controller to 'OFF' to permanently store the address digit #3.

Step 2 Part B: Enter the 'Low' Address

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

Address digit #4 entry and report* (MKEZ *controller)

1) Set (*push down*) the green ON/OFF switch on the **MKEZ** controller to OFF. Press and hold down button #1 and push down the red STOP switch. Set (*pull up*) green ON/OFF switch on controller to ON, pause momentarily, then release button #1. The controller will emit one long beep followed by one short beep. The controller is now in **Address Data Entry Mode.**

2) To select digit #4 data entry mode, press and release button #4. To find the present address digit #4 value, press and release button #4. The unit will emit one long beep to alert you, then will beep out the address digit #4 setting count with short beeps (*i.e., fourteen short beeps if the digit is 'E'*). The yellow led will also flash with each short beep/count. (*'0' is represented by a long beep with no led flash*). *Look, listen, and count to determine the existing value.* Repeat as necessary by pressing button #4. **See Table 1 to convert number of beeps to address digit setting.**

3) To increment the address digit #4 press and release button #1. Each depression will increment the address digit #4 by one; continuing from its present value until it reaches 15, then it will roll over to zero and start again. (*The unit will beep each time button #1 is depressed*).

4) Press button #4 to confirm your desired setting.

5) Once you have entered the desired address digit #4, set (push down) the green ON/OFF switch on the **MKEZ** controller to 'OFF' to permanently store the address digit #4.

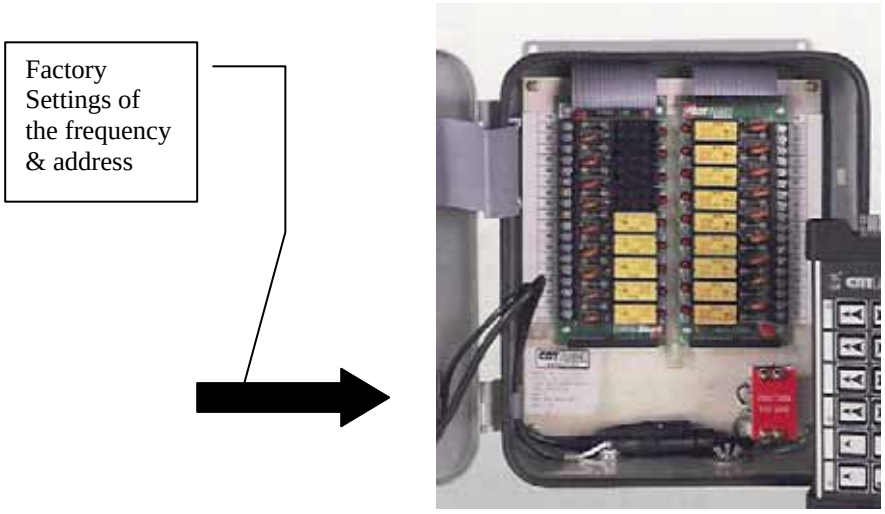
MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

Table 1: Address for MKEZ *Controller*

Number of Counts of Beeps and Yellow LED Flashes		Address Digit
0	=	0
1	=	1
2	=	2
3	=	3
4	=	4
5	=	5
6	=	6
7	=	7
8	=	8
9	=	9
10	=	A
11	=	B
12	=	C
13	=	D
14	=	E
15	=	F

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

Step 3 Part A: Enter the Frequency Bank



Example: Sample EZ System Label-

Factory Settings:
Frequency 448.90000MHz ——— Frequency for
Address: F E Frequency Bank Entry

The original factory settings can be found on the label affixed to the side of the receiver/decoder housing.

Frequency Bank entry and report* (MKEZ *controller)

1) Locate the controller frequency in Table 2 and note the bank that the frequency is listed under.

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

2) Set (*push down*) the green ON/OFF switch on the **MKEZ** controller to OFF. Press and hold down button #2 and push down the red STOP switch. Set (*pull up*) green ON/OFF switch on controller to ON, pause momentarily, then release button #2. The controller will emit one long beep followed by one short beep. The controller is now in **Frequency Data Entry Mode.**

3) To find the present Frequency Bank value, press and release button #4. The unit will emit one long beep to alert you, then will beep out the Frequency Bank setting count with short beeps (*i.e., zero beeps for frequency table USA 1, two beeps for frequency table USA 3*). The yellow led will also flash with each short beep/count. (*'0' is represented by a long beep with no led flash*). *Look, listen, and count to determine the existing value.* Repeat as necessary by pressing button #4.

4) To increment the Frequency Bank**,** press and release button #2. Each depression will increment the Frequency Bank by one, continuing from its present value until it reaches 4, then it will roll over to zero and start again. (*The unit will beep each time button #2 is depressed*). **See Table 2 for Bank Assignments.**

5) Press button #4 to confirm your desired setting.

6) Once you have entered the desired Frequency Bank, set (*push down*) the green ON/OFF switch on the **MKEZ** controller to 'OFF' to permanently store the Frequency Bank.

Table 2: Frequency Bank and Settings

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

Controller Beeps	USA 1 (Bank 0)	USA 2 (Bank 1)	USA 3 (Bank 2)	CAN 1 (Bank 3)	USA 4 (Bank 4)
0	Not Programmed	449.3000	457.5375	455.0000	460.4875
1	448.1000	449.3000	467.7875	457.5250	460.5125
2	448.2000	449.4000	460.6875	457.5500	460.5375
3	448.3000	449.6000	460.7375	457.5625	460.5625
4	448.4000	449.7000	460.7875	457.5750	460.9375
5	448.6000	449.8000	460.8375	467.7500	460.9625
6	448.7000	449.9000	460.8875	467.7750	460.9875
7	448.8000	460.6625	465.6875	467.7875	465.0125
8	448.9000	460.7625	465.7375	467.8000	465.4875
9	449.1000	460.8625	465.7875	467.8500	465.5125
10	449.2000	460.9125	465.8375	467.8750	465.5375
11	465.7125	465.6625	467.8875	467.9000	465.5625
12	465.8125	465.7625	467.3375	467.9250	465.9375
13	460.7125	465.8625	467.7625	455.0000	465.9625
14	460.8125	465.9125	467.8625	461.4625	465.9875
15	457.0000	457.0000	457.0000	467.9250	457.0000

Step 3 Part B: Enter the Frequency Value

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

1) Set (*push down*) the green ON/Off switch on the controller to 'OFF'. Press and hold down button #3 and push down the red stop switch. Set (*pull up*) green ON/OFF switch on the controller to 'ON', pause momentarily, then release button #3. The controller will emit one long beep followed by three short beeps. The controller is now in **Frequency Data Entry Mode.**

2) To find the present Frequency value, press and release button #4. The unit will emit one long beep to alert you, then will beep out the Frequency setting count with short beeps. (*I.e., for frequency table USA 1, eight beeps will be emitted for 448.9000 MHz- see table 2*) the yellow LED will also flash with each short beep/count. (*'0' is represented by a long beep with no LED flash*). *Look, listen, and count to determine the existing value*. Repeat as necessary by pressing button #4.

3) To increment the Frequency, press and release button #3. Each depression will increment the Frequency by one, continuing from its present value until it reaches 15, then it will roll over to zero and start again. (*The unit will beep each time button #3 is depressed*).

4) Press button #4 to confirm your desired setting.

5) Once you have entered the desired Frequency, set (*push down*) the green ON/OFF switch on the controller to 'OFF' to permanently store the Frequency.

Step 4: Confirmation of Address and Frequency

This mode allows confirmation of Address, Frequency Bank, and Frequency settings. Changes cannot be programmed while in this report-only mode.

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

1) Set (*push down*) the green ON/Off switch on the controller to 'OFF'. Press and hold down button #4 and push down the red stop switch. Set (*pull up*) green ON/OFF switch on the controller to 'ON', pause momentarily, then release button #4. The controller will emit one long beep followed by three short beeps. The controller is now in **Report Status Mode.**

2) To find the two Address Digits values, press and release button #1. Then press buttons #3 or #4 corresponding to the desired Address Digit. The controller will emit one long beep to alert you, then will beep out the Address Digit setting count with short beeps. The yellow LED will also flash with each short beep/count. (*'0' is represented by a long beep with no LED flash*). *Look, listen, and count to determine the existing value.* Repeat as necessary by pressing button #3 or #4. See Table 1 to convert number of beeps to address digit setting. Set (*push down*) the green ON/OFF switch on the controller to OFF.

3) Repeat step 1 above to check **Frequency Bank and Frequency settings.**

4) To find the present Frequency Bank value, press and release button #2. The controller will emit one long beep to alert you, then will beep out the Frequency Bank setting count with short beeps. The yellow LED will also flash with each short beep/count. (*'0' is represented by a long beep with no LED flash*). *Look, listen, and count to determine the existing value.* Repeat as necessary by pressing button #2.

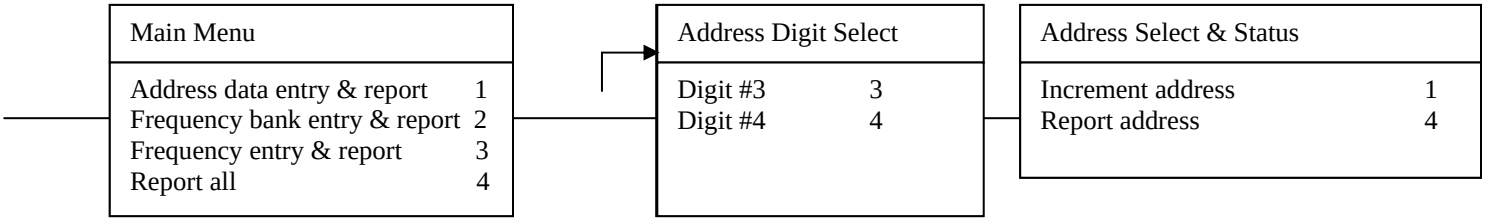
5) To find the present Frequency setting, press and release button #3. The controller will emit one long beep to alert you, then will beep out the Frequency setting count with short beeps. The yellow LED will also flash with each short beep/count. (*'0' is represented by a long beep with no LED flash*). *Look, listen, and count to determine the existing value.* Repeat as necessary by pressing button #3.

MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380

6) Set (*push down*) the green ON/Off switch on the controller to 'OFF', then pull up to 'ON' again for normal operation. While in normal operating mode all buttons perform as labeled-frequency and address will not change.

MKEZ Keypad programming menu

To enter Main Menu: (i) set (push down) green On/Off switch on MK controller to 'Off'
(ii) set (push down) red stop switch on MK controller
(iii) press and hold the corresponding keypad button for the main menu option desired (button #3, #4) and set (pull-up) on/off switch on controller to 'On'



MiTek
301 Fountain Lakes Industrial Dr.
St. Charles, MO 63301
USA
Fax (636) 328-9222
Phone (800) 523-3380