

MJU COMMANDS

The 440B provides commands for testing paths via Multi-Junction Units (MJUs). Since MJU control requires verifying responses to commands, it is important to LOCK the appropriate receiver to the transmitter chosen (RCVR 1 and XMTR 1 for example). Also verify that the correct DSO channels are selected in the RCVR and XMTR.

1. Press the DATA key to display the opening set-up screen below. (If the screen does not appear, press the DATA key a second time):

```

TYPE:DS0A RATE:9.6 MJU:IDLE [XMT#1]
PRI:2047 SEC:NONE      < > EDIT
  
```



The screen above shows that the DATA transmitter is currently generating a DS0A at 9.6Kb/s with a 2047 stress pattern selected. MJU controls are not in use (IDLE).

2. Underline MJU:IDLE and press EDIT to display the MJU Response screen. Use the <> softkeys to select the receiver.

```

XMT MJU RESPONSE ON: RCVR 1 RCVR 2
#1                    < > NXT
  
```



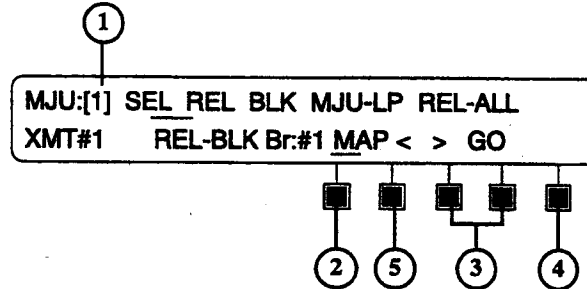
3. Press NXT in the above screen to display the command screen:

```

MJU:[1] SEL REL BLK MJU-LP REL-ALL
XMT#1      Br:#1 MAP < > GO
  
```



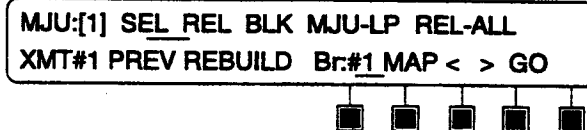
INTERPRETING THE MJU COMMAND SCREENS



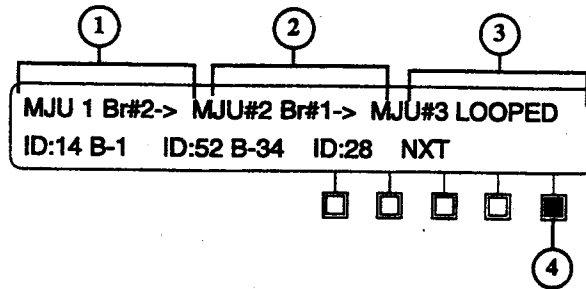
1. The number of the current MJU selected is shown in the flashing brackets: [1].
2. Br: #1 is the Branch selected (1 thru 4). Use F1 softkey to toggle 1-4.
3. Use the < > softkeys to underline the commands:

SEL = Branch Select
REL = Release all Branch Selects
BLK = Branch Block
MJU LP = MJU Loopback
REL-ALL = Release All Blocks and Selects
REL-BLK = Release Branch Block
PREV = Previous MJU, back-up one MJU
REBUILD = re-select full MJU path

4. The GO softkey will send the command underlined.
5. MAP provides a graphic display of the MJU path selected and which branches were blocked in each MJU. Selecting MAP will not interrupt the MJU path.



INTERPRETING A MAP

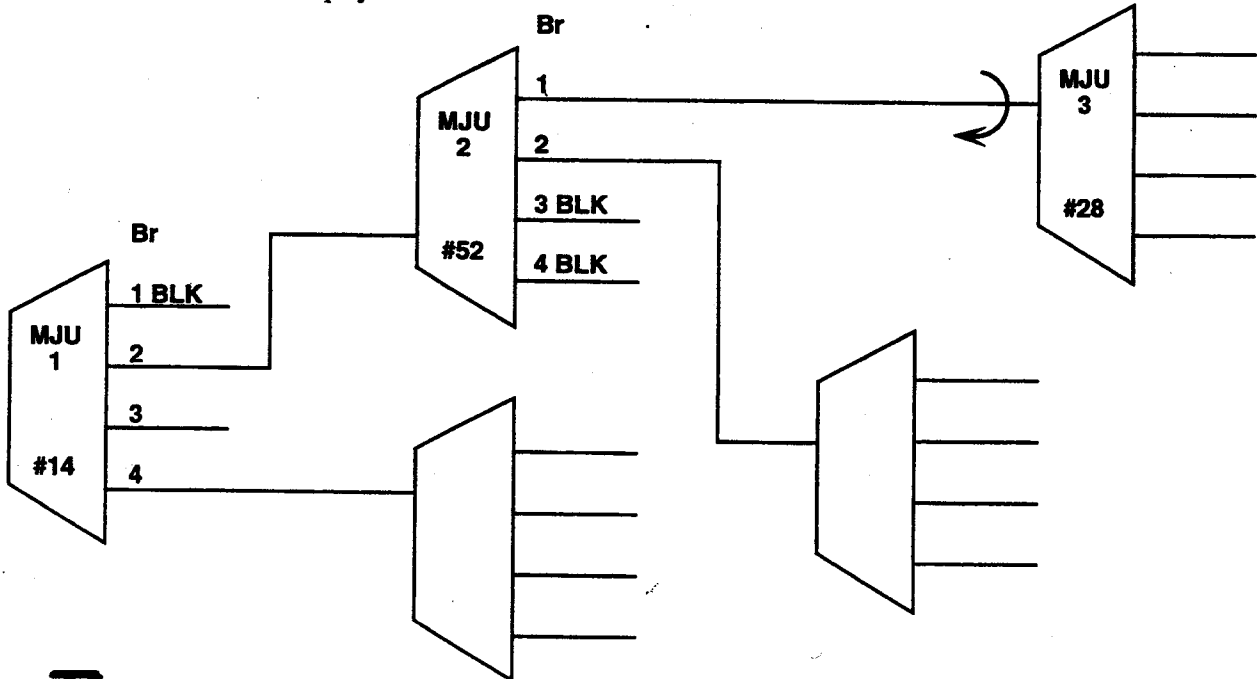


Pressing MAP on the previous MJU command screen displays a MAP as shown above.

1. MJU #1 has Branch #2 selected. The Arrow shows that the path is via Branch #2 to the next MJU (#2) ID: 14 represents the Hub ID for MJU #1. B-1 represents a permanent Block established on Branch #1 of MJU #1.
2. MJU #2 has Branch #1 selected. Branches #3 and #4 are permanently Blocked. (Hub ID is 52 for this MJU).
3. MJU #3 is Looped back.
4. NXT will either display the opening MJU command screen, or display more MJU mappings.

NOTE: The 440B keeps a memory of a single MJU path. Therefore, when a MAP shows an MJU status with no arrows (→) then all branch selects have been released.

Block diagram of the MAP displayed above:



MJU COMMANDS

Miscellaneous Notes

```

MJU:[1] SEL REL BLK MJU-LOOP REL-ALL
XMT#1      Br:#1 MAP <_> GO

```



Keep in mind that some commands will automatically release all previous branch selects. Therefore, sending certain commands (for example BLK and MJU LOOP DOWN) automatically end with a Release command. After a BLK command is sent, the command screen will show that you have returned to MJU #1.

Certain commands were developed to make MJU control easy. REBUILD is used to rebuild the full MJU path (assuming it was released due to a Block or Release-All command). PREV is used to step back one (1) MJU.

The MAP keeps a single path in memory for easy path rebuilding. But, reselecting a new path, will erase the previous path memory.

Once an MJU path is selected, and an MJU LOOP is established, you can select from the full complement of DS0A/B pattern selections described in the earlier sections. In other words, the MJU path will not be interrupted when selecting the transmitter DATA function key. Remember that the opening DATA menu screen has a variety of parameters, including MJU.

```

TYPE:DS0A RATE:9.6 MJU:IDLE [XMT#1]
PRI:2047 SEC:NONE < > EDIT

```



Likewise, all Loop Up and Down controls and Error Injection functions are also available.

However, it is important to always check the opening DATA screen to verify the status of MJUs before removing the test set from the circuit (or turning the set off). If opening the DATA screen shows MJU: Active or BLOCKS, then you have left certain branches Selected or Blocked. Return to MJU by underlining with the < > softkeys and EDIT accordingly.