Beginners LCR

1. **Assign an access code for LCR.**
   Assign an access code to get you into LCR (E.g. 9 for Nth America, 0 for Australia/Europe).

   CM 200>**9**>**A126** Where **9** = the access code dialed at the station to make an outside call and **A126** represents LCR Group 0 (There is also LCR groups 1~3 and these will be explained in the Advanced LCR Cheat Sheet).

2. **Designate a Development Pattern to your LCR access code.**
   Now you must assign a Development Pattern which is a collection area or location where you will record/assign the actual numbers dialed by the stations.

   CM 8AA000>**0**>**4005** Where **0** = LCR Group 0 (See step 1) and **4005** = Development Pattern or collection area for the digits dialed by the user.

3. **Assign dialed digits to a Development Pattern and a Route Pattern.**
   Record the digits dialed by the user in the Development Pattern. These are the **Blue** digits in the example below. Notice these are digits dialed ***AFTER*** the LCR access code "9" from step 1. The digits are assigned to a Route Pattern. You can assign up to 256 different route patterns (0000~0255). It is advised that you assign one route pattern for long distance calls, one for local calls, and one for Emergency 911calls.

CM 8A4005>**0**>0001
CM 8A4005>**12**>0000
CM 8A4005>**13**>0000
CM 8A4005>¦ > ¦
CM 8A4005>**17**>0000
CM 8A4005>**1800**>0001
CM 8A4005>**1801**>0000
CM 8A4005> ¦ > ¦
CM 8A4005>**1809**>0000
CM 8A4005>**182**>0000
CM 8A4005> ¦ >0000
CM 8A4005>**189**>0000
CM 8A4005>**19**>0000
CM 8A4005>**2**>0001
CM 8A4005>¦ > ¦
CM 8A4005>**8**>0001
CM 8A4005>**90**>0001
CM 8A4005>**910**>0001
CM 8A4005>**911**>0011
CM 8A4005>**912**>0001
CM 8A4005> ¦ > ¦
CM 8A4005>**919**>0001
CM 8A4005>**92**>0001
CM 8A4005>¦ > ¦
CM 8A4005>**99**>0001

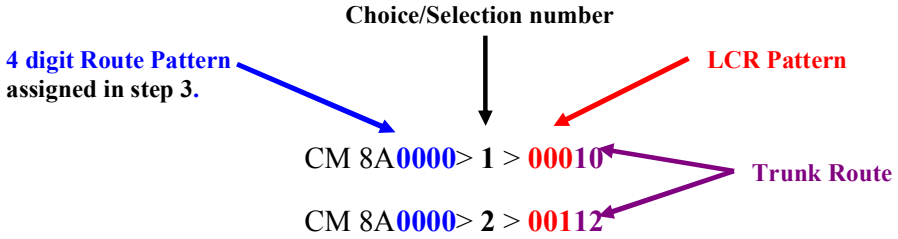
*As you can see only the **leading digits** of a number dialed are entered. In this example long distance calls (1+ calls) are assigned to Route Pattern 0000.*

Local calls are pointed to Route Pattern 0001. Because 1800 calls are considered local, in this example, they must be broken out to 4 digits in the development pattern to be pointed to the local route pattern. This way 1801~1809 (long distance numbers) are still pointed to the long distance route pattern.

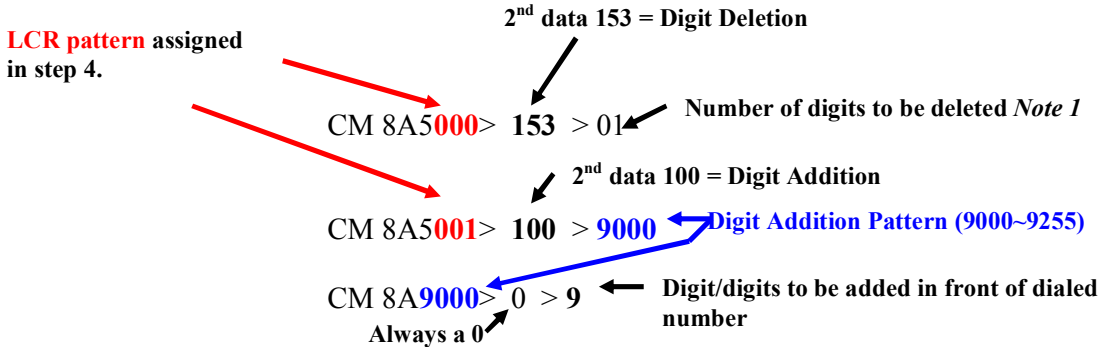
It is recommended that 911 emergency calls have a unique route pattern to limit possible dialing issues when assigning features such as toll restriction to an already assigned/common route pattern. In this example 911 is broken out to accommodate this.

4. Program the Route Pattern for Long Distance Calls

The route pattern is assigned an LCR pattern (for special dialing features if needed) and a trunk route pattern to place the call on. The route pattern also allows for alternative trunk route dialing choices if the initial choice, first selection, is busy. This Example has 2 trunk routes available for outbound calls. Trunk route 10 is an ISDN PRI for LD calls while trunk route 12 is an analog copper route for local calls.

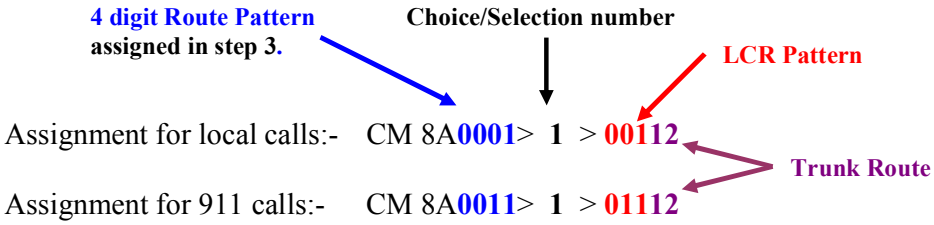


5. The above shows the first choice (**1**) on a long distance call to be routed over route 10 and the second choice (**2,** if route 10 is busy) to go out over route 12.
An **LCR Pattern** must be assigned (000~255) and has ***NO*** relation to the Route Pattern number. The LCR Pattern number is where features such as Toll restriction, Digit Addition, Digit Stripping, and various other features are assigned. ***If none of these features are required go to step 7.***
If, for example, the ISDN PRI (**route 10**) will only accept 10 digits the leading digit 1, dialed by the user, must be stripped. Also the local copper trunks (**route 12**) are Centrex and require a 9 inserted in front of the number dialed.



6. Program the route Pattern for local and 911 calls.

As per the explanation in step 4, the local calls and 911 route patterns must be assigned. A second choice for each of these route patterns could also be assigned. Choice 2 would route the local/911 calls over the ISDN PRI if desired when the local trunks were all busy.



Note 1. The number of digits deleted in CM 8A5XXX>153 cannot exceed the number of digits assigned in CM 8A4005. E.g. If you wish to delete the 3 leading digits from a number dialed you must have at least 3 digits assigned in CM 8A4005.

7. The Maximum Number of Digits must be assigned.
To improve the speed of LCR operation the maximum number of digits dialed should be assigned to CM 85. This is the number of digits dialed on the telephone keypad ***AFTER*** the LCR access code in step 1. The example shows that whenever the digit **0** is dialed the PBX will look for a possible 18 more digits. This allows for longer numbers encountered on international dialing (011). Digit **1** would be the lead digit for long distance which = 11 digits dialed.

CM 855> **0** > 18
CM 855> **1** > 11
CM 855> **2** > 10
CM 855> ¦ > ¦
CM 855> **8** > 10
CM 855> **90** >10
CM 855> **910** > 10
CM 855> **911** > 03
CM 855> **912** >10
CM 855> ¦ > ¦
CM 855> **919**> 10
CM 855> **92** >10
CM 855> ¦ > ¦
CM 855> **99**> 10

When digits **2~9** are dialed (beginning of a local call) a total of 10 digits will be dialed on the keypad. Some areas still support only 7 digit local dialing and as such the appropriate assignment would be made.

Just like in CM 8A4005 digits can be broken out when individual numbers required different dialed lengths. Here **911** is broken out so that the emergency call is placed as soon as 3 digits have been dialed on the key pad.