



SECTION 10 - FUTURA GROUP SETUP

NOTE: All GROUP Operations can only be done from the "Master" (Dispatcher) Car.
Any car can be the Master with the "RMA" Request Master command.
To go to Group Mode, enter the "GRP" command. Use the "CAR" command to return.
A "WRT" write command in Group Mode will write all group parameters to all cars.

HPU Hall Call Activation

1. Verify that all HPU for the hall push buttons have been installed and properly addressed. [See Section 1 page 10 for details.]

2. In terminal mode, go to Group and verify the following CSW bits are reset:

CS4, Bits 5, 13, 14 (see sec.18)

3. In Group Mode, set CS4 Bit 3 to disable Emergency dispatching. This will be reset after HPU are communicating.

4. Verify hoistway wiring for HPUs are connected to terminals, VH+, VHC, HCRT+ & HCRT- .

5. Verify this wiring is at least 6" away from any high voltage wiring. (mainline and motor).

Note: If the HPU is not on, check the VH+ & VHC power connections to the card. If it is on solid, check the HCRT+ and HCRT- communication connections.

6. In terminal mode, go to "CAR", type **CMG** and press enter (this can only be done when connected to the group car). This will display the address of each hall HPU and the status of its communication. The primary HPU addresses are 11 through 42. (Physical binary jumpers are 10 less than corresponding address, i.e.; jumpers corresponding to #3 will be represented by #13 under CMG command)

Note: If there are any with 100% failures, check the connection address of that HPU. If problem still exists, replace HPU.

7. With all the HPUs showing good communications, place the car on Automatic and, using the hall push button stations, call

the car to each landing, using both the up and down push buttons.

Note: If aux. risers are used, set CS4 bit 13 and repeat step 6.

Note: If discrete wiring is used from push buttons to I/O boards, Set Bit5 in Word 4 (BITS4,5), write, and recycle processor power. (Circuit Breaker 2)

Setting Additional Group Parameters

Set the following parameters for the group under the Group Parameters Menu.

Note: These parameters that set floors must also be set to the same floor in each car.

LBY	Lobby Floor Designation
FIR	Main Fire Recall Landing
FAL	Fire Alternate Floor Landing
EPF	Emergency Power Floor
MEP	Maximum Cars on Emergency Power
LER	Elevator Lobby Request Set to 0

Group Dispatching

Note: This procedure can be set up when 2 or more of the cars have been put into service. It is ideal to set the group up when all cars are in service.

Note: Prior to setting up the group, it is a good idea to monitor and note existing traffic patterns. For example, if the main lobby has continuous traffic all day, then an elevator might want to be returned to the lobby when free.

The Futura is defaulted so that one elevator will stay at the lobby floor if there is no demand. If this is what is required, there is no further adjustment necessary.



Parking One or More Cars at the Lobby

1. Note which floor in the building is referred to as the main lobby.
2. Set Group parameter **LER** to the number of elevators wanted to be placed at the lobby. In most cases this will be 0 (no elevators required) or 1.
3. Place all the elevators on Automatic and observe, verifying that the number of cars returning to the lobby matches what was set for parameter **LER**.

Note: *If the lobby has floors below, an elevator going up from those lower floors will always stop at the lobby.*

4. Once the proper number of elevators have been assigned to stop at the lobby an extended door time can be programmed in for that floor. If this is desired set CSW 0 bit 1 and enter the time required to stay open at group parameter **NDH**.

Should the remainder of the elevators be required to space themselves out in the building once they are free for a period of time, then Zoning will be required.

Zoning Setup

1. Note the traffic in the building and determine the following:
 - A. Is one or more cars required in the lobby?
 - B. Are there certain floors where you would want to park an elevator?
 - C. What floor spacing would be required to accommodate one elevator per zone? (Having an elevator parked at the lobby will be a separate zone function).
2. Count the number of elevators you wish to zone, minus **LER** value and set Group Parameter **NZN** to that number.
3. Set **CSW 0 Bit 4** to activate Zoning.
4. Set **ZN1** (first zone) to the floor where an elevator should park.
5. Set **ZN2** (second zone) to the floor where an elevator should park.
6. Continue setting **ZN#** until there are no more elevators for zones. The **ZN#** should equal the **NZN** parameter.
7. Set the time the elevators have to set idle before zoning using **PFT** parameter.
8. Once these are set, use the **WRT** Car command to save to flash memory.

See sections 16-18 for full array of GROUP options



Up Peak and Down Peak

1. In order to trigger up peak automatically from the number of calls or load, set the following Group Parameter:

UCC – Number of trips from the lobby with more than 2 calls entered.

ULC – Number of trips from the lobby with load switch tripped.

2. In order for Down peak to be triggered by calls, ETA times and wait times, set the following parameters:

DCC – Number hall calls initiated at one time.

DTT – Average ETA time. The time that triggers down peak if the average ETA time exceeds this value.

DWT – Long down call waiting time. If a down call is not answered in this amount of time the system will swing to Down Peak.

Setting Elevator ETA Parameters in the Group (optional)

In order for the group to optimally dispatch the elevators to the call, it must know specific details of each elevator.

1. Using a stop watch, observe and note the following:

- **ACC** - Average acceleration time it takes the elevator to reach top speed.
- **ATT** - Average transfer time the doors are fully open when loading and unloading passengers.
- **BTT** - Blind travel time it takes the car to travel through a blind hoistway.
- **DCT** - Door closing time it takes the doors to close.
- **DEC** - Average deceleration time it take the elevator to slow from top speed to stopping at a floor.
- **DOT** - Door open time it takes to open the doors fully.
- **SPE** - Speed of elevator in timed units by using the formula:

Average floor height (h)/(Speed in FPM/60) X 16 = SPE value

or for metric

Average floor height in meters X 3.28/(Speed in meters per second/.3048) X 16. = SPE value

- **GPT** - If this is a generator application the time it takes for the generator to start completely.
2. Using the **Group Command REE**, enter the car number you are working on, then enter the previous values. [For example, REE = 1.]
 3. With the exception of **SPE**, all values recorded in the previous steps will be multiplied by 16 and entered into these related group parameters. **ACC, ATT, BTT, DCT, DEC, DOT, GPT, SPE.**