

# MJC8Q400, Special Features guide

This special features guide describes the functionality which is addon-specific and is not found in the system or flight tutorial.

## Switches and knobs

All the switches and knobs can be controlled by the mouse in the following manner: left click or mouse wheel down - rotate knob anti-clockwise, move switch left or down. Right click or mouse wheel up - rotate knob clockwise, move switch right or up. Guards are only activated by the right mouse clicks.

#### **Power and Condition levers**

Power and Condition levers can be moved separately by left click-and-drag. They can be set to the same value and moved together by right click-and-drag.

#### Aircraft Doors

There are 4 animated aircraft doors (3 passenger and 1 baggage) on the external model, which can be opened and closed using Shift E 1, Shift E 2, Shift E 3, Shift E 4. The aircraft door status will also be indicated on the DOORS system page and shown by the Doors warning light.

#### Seat animations

The pilot seats can be moved back and forth by clicking on the seat.

#### Sun visors animation

The sun visors can be moved along the rail by clicking on the visor. Left clicks move the visor forward, right clicks move it backward.

#### Yoke visibility control

The pilot yokes can be hidden and brought back by clicking on the bottom of each yoke.

#### Emergency exit hatch

The emergency exit hatch on the top of the overhead can be opened by two left clicks on the handle - one to unlock the hatch, and the second to open it.

Manual main gear extension (PRO version and higher)



Open the manual gear extension panel, located behind the pedestal. Click on the yellow-black striped lever located on the rear cockpit's wall - the lever will be inserted into the slot in the gear extension panel. Click one more time on the lever to start the gear extension. The Nose gear can be extended by opening the alternate nose gear extension door above the overhead, turning the inhibit switch, and clicking on the handle.

## Oxygen masks pressure indicators

An oxygen mask pressure indicator is installed on each oxygen mask supply pipe. A green color indication must be checked in accordance to the respective checklist item.

#### Gear pins

There are 3 gear pins, which can be located in situ (in a bag behind the F/O seat), or installed outside in the aircraft gear. In the PILOT version, the pins will be placed in situ automatically once the electrical system is powered. In the PRO version and above the pins removal must be ordered from the FMS DATA->SERVICES page. Failure to do so will result in the gear not retracting in flight.

#### Window mist and ice simulation

When the appropriate weather conditions are met, the window mist or ice can appear. The antiicing system and side window de-misting controls must be used to restore the external visibility. Note that there is no antiice device on the FO side window.

#### **Ground Power Unit**

The Ground Power Unit can be requested from the FMS->DATA->SERVICES page. It will take about 40 seconds for the GPU to become available after the request is placed.

#### Pushback

This addon comes with a voice-enabled pushback simulation. The pushback can be initiated via the FMS DATA->SERVICES page. Please note, than upon selecting the "End" prompt to stop the pushback, the pushback car will continue the procedure for the several seconds in order to straighten the front wheel and provide for a smooth stop of the aircraft.

#### The ARCDU volumes and QNH knobs

Use the mouse wheel or a left/mouse click on the sides of the knob to rotate. A single mouse click in the center of the knob will enable/disable the volume or set the standard QNH.



# The ARCDU volumes and QNH knobs

If desired, the tiller controls can be linked to the FSX spoiler axis (use the mjc84.ini file)

## The sound system

In the PRO edition and above, it is possible to force the sound system to direct particular sounds to the selected speakers of SB9.1 or below. Use the mjc84.ini file sound section.

# The scripting system

The scripting system can be used to make the custom passenger announcements for a selected livery, in which case the announcement script file must be placed within the folder called "announcement " inside the livery texture folder.

#### **Emergency Exit Hatch**

The hatch can be opened with two right clicks on its handle. The first click unlocks the hatch, the second opens it. To close the hatch, use left clicks in reverse order. Warning: the hatch can be opened only if the pressure difference between the cabin and the exterior is less than 0.8 psi.

#### Additional cockpit cameras

There are additional cockpit cameras included in order to enable the faster access to the panels in the VC mode, via the FSX Hot Keys assignments (configured using the FSX buttons setting dialog). The Cameras and their respective hot key numbers are as follows:

•	VC Overhead View	Hot Key 7
•	VC Central FWD Console View	Hot Key 8
•	VC Central AFT Console View	Hot Key 9

#### **Joystick Connector**

This connector allows access to the windows joysticks on the system level, and is used for the following:

1. To allow mapping of the joystick buttons to the Q400 specific system events

2. To enable flight controls to operate at the internal FDE rate of 125Hz, thus reducing the FDE response time and bypassing the excessive filtering of the FSX (**PRO ONLY**).



The Joystick Connector is configured using the mjc84.ini file. It is enabled by setting

JOYSTICK\_INTERFACE =1

under the [INTERFACE] section. It is then configured via its own section

[JOYSTICK\_INTERFACE\_ASSIGNMENTS]

each entry of which has the following format

J<N>\_<Axis>pos=<-><VarName>

for axis (PRO ONLY) and

J<N>\_b<B>=<-><VarName>

for the buttons.

Where

<N> is a 0 based sequential joystick number as it appears in the Joystick windows dialog.

<Axis> (PRO ONLY) is the joystick axis name, which should be one of :

X,Y,Z,Rx,Ry,Rz,Ax,Ay,Az,ARx,ARy,ARz,Fx,Fy,Fz,FRx,FRy,FRz,Vx,Vy,Vz,VRx, VRy,VRz,Slider1,Slider2,ASlider1,ASlider2,VSlider1,VSlider2,FSlider1,FSlider2

<-> is an optional minus sign, telling the connector that an axis or a button press must be inversed.

VarName is an internal Q400 variable, which must be linked to the Axis or a button. The variable names must be taken from

\scripts\varList.xls file, relative to the location of this file.

<B> is 0 based joystick button sequential number, from 0 to 127

Example:

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[JOYSTICK\_INTERFACE\_ASSIGNMENTS]

; See SpecialFeatures.pdf Joystyick Connector section for description

; Ailerons

J0\_X=FlightControls\_->sensors.Aileron0\_ADC

; Elevators

J0\_Y=-FlightControls\_->sensors.Elevator0\_ADC



; Rudder J0\_Z=FlightControls\_->sensors.Rudder0\_ADC ; AP DISC J0\_b2=AFCS\_->inputs.AP\_disengage

Links Ailerons, Elevator, Rudder and AP Disengage button to the joystick 0.

Note: When linking FlightControls\_->sensors.XXX\_ADC it is recommended to unlink the flight controls axis from the FSX, via the [FLIGHTCONTROLS] section:

; Flight Controls positions from FSX

ElevatorsByFSX=0

AileronsByFSX=0

RuddersByFSX=0

Important: Should both left and right flight columns be controlled via a single joystick (no split controls for the captain and first officer), the deflection values for the opposite side must be set to 0. Failure to do so will result in the flight controls range being reduced by 50%:

[FLIGHTCONTROLS]

/..../

ELEVATOR1\_DEFLECTION =0

AILERON1\_DEFLECTION =0

RUDDER1\_DEFLECTION =0