

# ORDERING INFORMATION

# Model : JRQ2

## PLEASE FILL IN THIS SECTION



Model
Company
Name
P/O No.

## M-SYSTEM USE ONLY



Job No.	Approved by: (Sales office)
Ser No.                    -	
Sales	Issued by: (Sales office)

**SOFTWARE SETTING**      Fill in blank sections or mark  with . Standard settings will be used if not otherwise specified.

ITEM	SET VALUE	STANDARD	COMMENTS
INPUT TYPE	<input type="checkbox"/> Open collector <input type="checkbox"/> Voltage pulse <input type="checkbox"/> RS-422 line driver	Open collector	Choose from the list to the left.
PULSE AMPLITUDE (voltage pulse only)	V p-p	N/A	They are required to accurately understand the input waveform. The maximum voltage applicable across the input terminals is 50V.
DC OFFSET (voltage pulse only)	V	N/A	
DETECTING LEVEL (voltage pulse only)	V	N/A	
NOISE FILTER (voltage pulse only)	<input type="checkbox"/> High <input type="checkbox"/> Low <input type="checkbox"/> No filter	No filter	High noise filter must be specified for ±10 Hz or lower ranges. Low noise filter must be specified for ±500 Hz or higher ranges.
COUNT MODE	<input type="checkbox"/> Counts Phase B, one edge only (1 count / 1 input pulse) <input type="checkbox"/> Counts Phase B, both edges (2 counts / 1 input pulse) <input type="checkbox"/> Counts Phase A and B, both edges (4 counts / 1 input pulse)	Phase B, one edge only	Refer to Page 3 for more information. Input counts do not match the number of input pulses when 'Counts Phase B, both edges' or 'Counts Phase A and B, both edges' is selected.
INPUT ZERO COUNT Cz	Counts	0	Specify the count value for 0% input. -99999999 (99999999 in the reverse direction) ≤ Cz < Cs
INPUT SPAN COUNT Cs	Counts	1000 counts	Specify the count value for 100% input. fz < fs ≤ 99999999 (99999999 in the forward direction)
ALARM MODE	<input type="checkbox"/> High alarm <input type="checkbox"/> Low alarm <input type="checkbox"/> No alarm	High alarm	Choose from the list to the left.
ALARM SETPOINT	%	100.00%	Specify within -15.00 to +115.00% if High/Low alarm is selected.
ALARM DEADBAND	%	1.00%	Specify within 0.00 to 20.00% if High/Low alarm is selected.
ALARM ON DELAY TIME AT START UP	sec.	3 sec.	Specify the delay time for the alarm trip after the power is turned on, within 2.0 to 1000.0 sec. if High/Low alarm is selected.
INPUT COUNT AT POWER OFF	<input type="checkbox"/> Not held (Cold Start) <input type="checkbox"/> Held (Hot Start)	Not held	Specify either the last count before the power has been removed should be held or not (reset to zero).

**LINEARIZATION** Fill in the table only when the linearization is required. Refer to the example below.

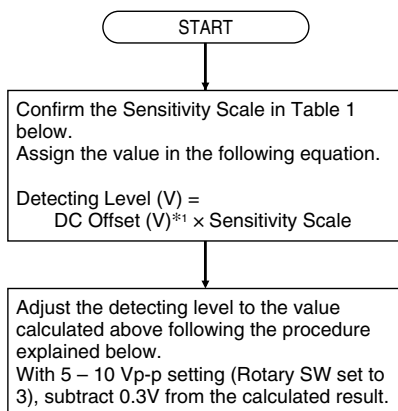
INPUT (count)		OUTPUT (unit : )		INPUT (count)		OUTPUT (unit : )	
X (01)		Y (01)		X (09)		Y (09)	
X (02)		Y (02)		X (10)		Y (10)	
X (03)		Y (03)		X (11)		Y (11)	
X (04)		Y (04)		X (12)		Y (12)	
X (05)		Y (05)		X (13)		Y (13)	
X (06)		Y (06)		X (14)		Y (14)	
X (07)		Y (07)		X (15)		Y (15)	
X (08)		Y (08)		X (16)		Y (16)	

[ EXAMPLE ]

X (01)	0 (count)	Y (01)	4.00(mA)	X (09)	80 (count)	Y (09)	17.58(mA)
X (02)	10	Y (02)	6.37	X (10)	90	Y (10)	18.81
X (03)	20	Y (03)	8.42	X (11)	100	Y (11)	20.00
X (04)	30	Y (04)	10.25	X (12)		Y (12)	
X (05)	40	Y (05)	11.92	X (13)		Y (13)	
X (06)	50	Y (06)	13.47	X (14)		Y (14)	
X (07)	60	Y (07)	14.92	X (15)		Y (15)	
X (08)	70	Y (08)	16.28	X (16)		Y (16)	

■ **DETECTING LEVEL (voltage pulse and two-wire current pulse)**

Determine the appropriate detecting level referring to the flow chart below. Input type is for voltage pulse.



\*1. Rounded off to one decimal place.

**Table 1**

SW	PULSE AMPLITUDE	SENSITIVITY SCALE
0	50 – 100 Vp-p	1/20
1	25 – 50 Vp-p	1/10
2	10 – 25 Vp-p	1/5
3	5 – 10 Vp-p	1/2
4	1 – 5 Vp-p	1
5	0.5 – 1 Vp-p	5
6	0.1 – 0.5 Vp-p	10
7	Open collector	1

A specific sensitivity scale is applied according to the pulse amplitude setting. The scaled input voltage is then compared to the preset detecting level.

The scaled H level voltage must be higher than the detecting level so that the pulse state is accurately detected.

[ SETTING EXAMPLE ]

**(DC Offset = Pulse Amplitude / 2)**

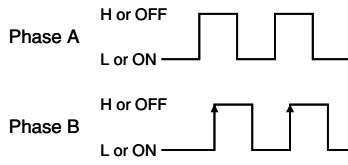
PULSE AMPLITUDE (Vp-p)	AMPLITUDE RANGE (Vp-p)	DETECTING LEVEL (V)
50	50 – 100	1.3
50	25 – 50	2.5
30	25 – 50	1.5
25	10 – 25	2.5
15	10 – 25	1.5
10	5 – 10	2.5
7.5	5 – 10	1.9
5	1 – 5	2.5
3.5	1 – 5	1.8
2	1 – 5	1
1	0.5 – 1	2.5
0.5	0.1 – 0.5	2.5

## ■ COUNT MODE (ITEM 11)

Three count modes are selectable to specify how the JRQ2 judges valid counts in the input waveform.

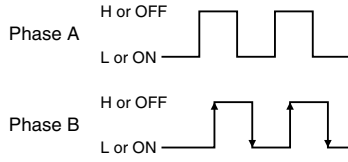
### • 1 Count per Pulse (one edge, Phase B)

Counts are valid at the one pulse edge of Phase B, as indicated with arrows.



### • 2 Counts per Pulse (both edges, Phase B)

Counts are valid at the both pulse edges of Phase B, as indicated with arrows.



### • 4 Counts per Pulse (both edges, Phase A and B)

Counts are valid at the both pulse edges of Phase A and B, as indicated with arrows.

