SPECIFICATION SHEET

JFW MODEL 50BA-031-31

BENCHTOP PROGRAMMABLE ATTENUATOR ASSEMBLY

JFW Industries, Inc.
Phone: 317-887-1340
sales@jfwindustries.com
www.jfwindustries.com

Frequency Range	0.1-18 GHz
Configuration	Two individually controlled solid-state programmable attenuators
Enclosure Type	Mini-benchtop
Impedance	50 Ohms nominal
Attenuation Range	0-31 dB in 1 dB steps
Startup/Default States (configurable)	Maximum attenuation (see ATTEN STARTUP command) DHCP enabled (see NET command) 4 Ethernet users (see NET USERS command) Prompts off (see PROMPT command) Jog speed 5 (see JOG SPEED command)
VSWR	2.0:1 maximum < 1.7:1 typical
Attenuation Accuracy (guaranteed monotonic)	± 0.50 dB 1-8 dB ± 1.00 dB 9-31 dB
Insertion Loss	7.0 dB maximum 2.0 dB typical @ 0.1 GHz 3.2 dB typical @ 3 GHz 4.0 dB typical @ 6 GHz 5.5 dB typical @ 12.4 GHz 6.6 dB typical @ 18 GHz
RF Input Power	+20 dBm average +25 dBm (no damage) Warning: DC coupled, DC voltage must not exceed 0 Volts on RF connectors
Switching Speed	1 microsecond typical (after command is received and processed) (3 milliseconds typical processing time)
DC Supply	+12 Vdc (100-240 VAC AC/DC transformer included)
Manual Control	Momentary Lever Actuator Switch with 7-Segment LED Displays (tap to step, hold to jog) (jog speed range is 0-10) (jog speed set to 0 will disable all levers)

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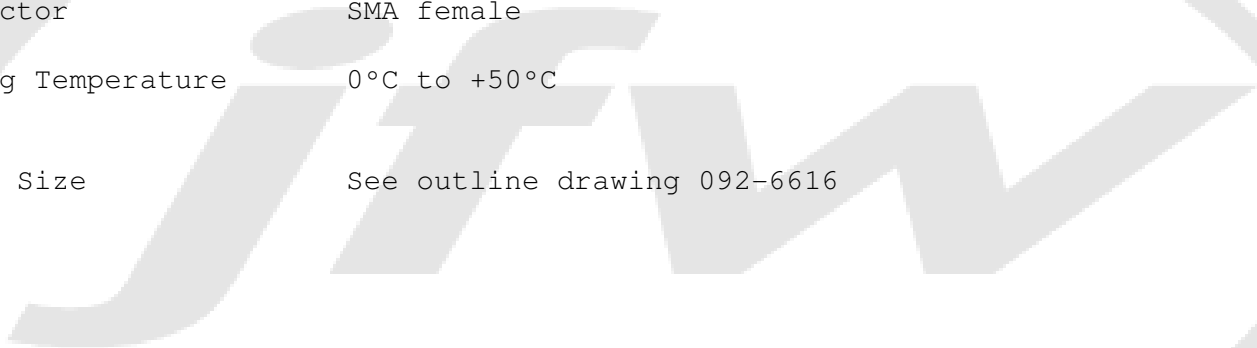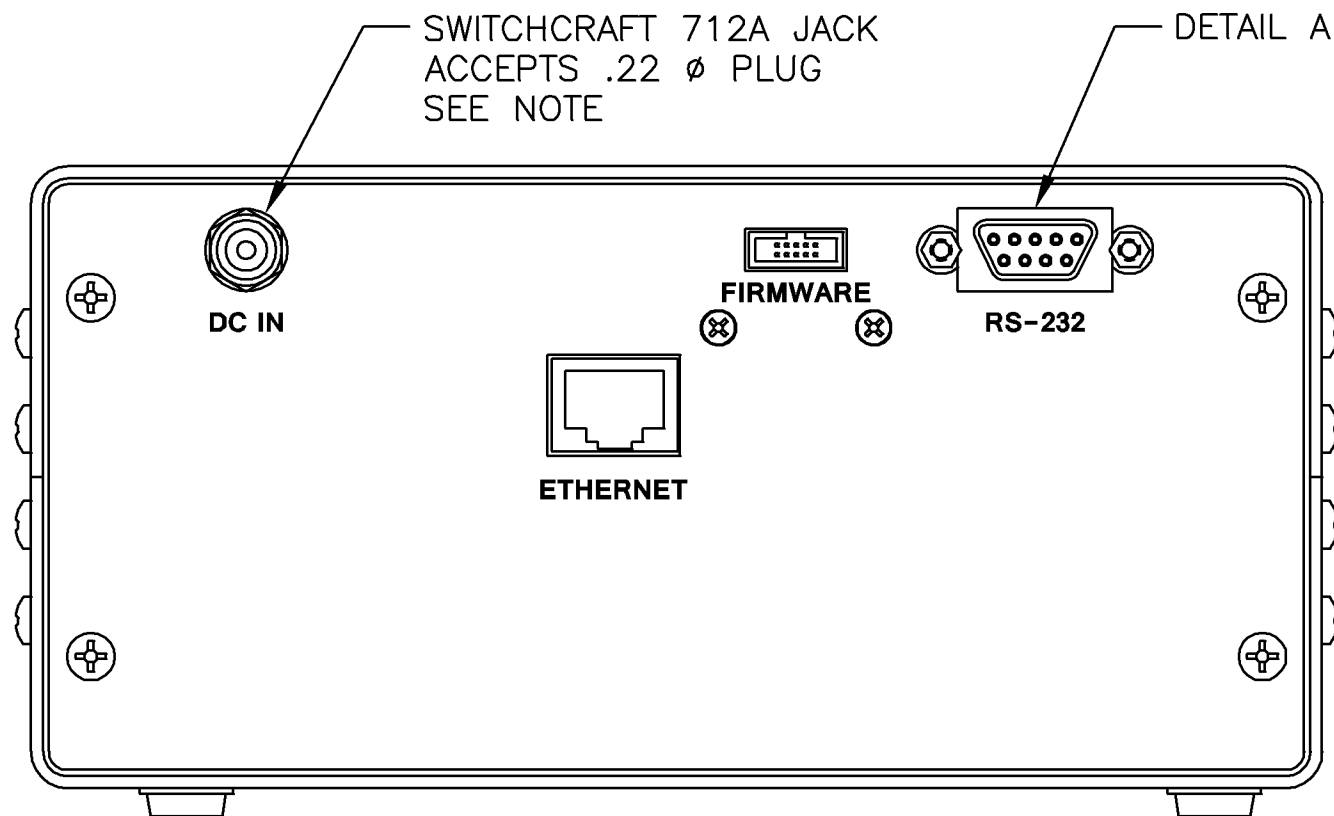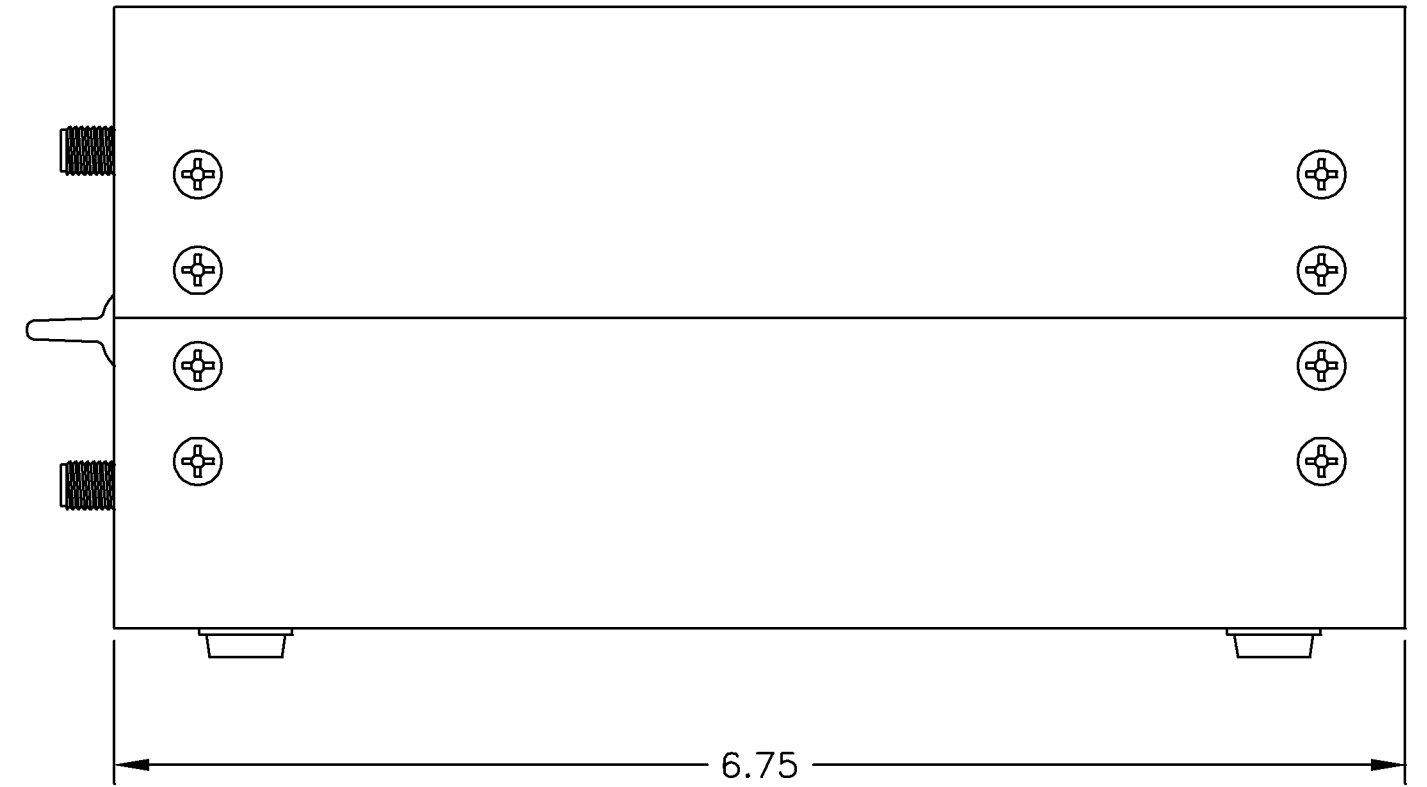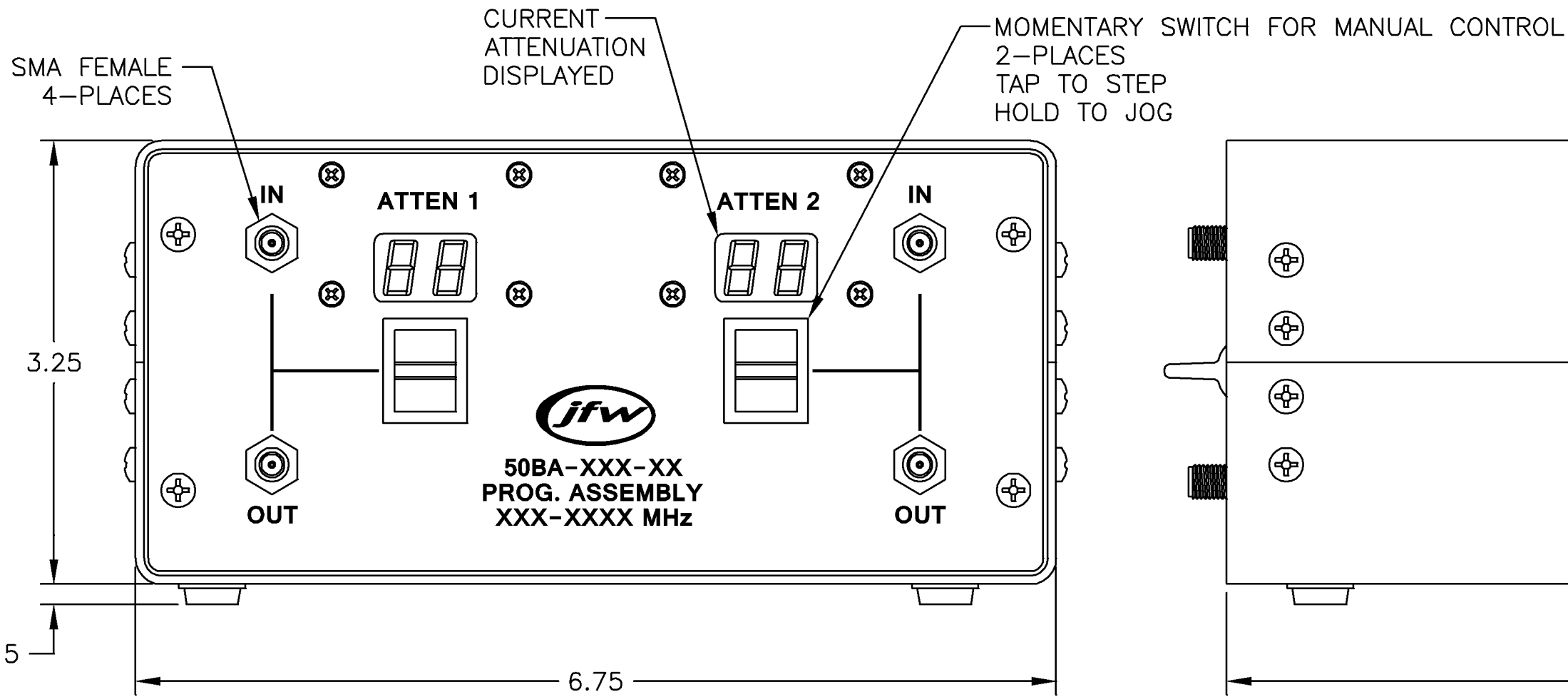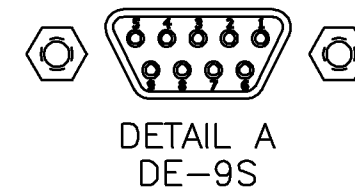|	
Remote Control	Ethernet (DHCP, TCP/IP, 10/100, up to 12 users) RS-232 (up to 115200 Baud)
Remote Commands	Attenuator Control Commands: Atten, Set Attenuator, Read Attenuator, Set All Attenuators, Read All Attenuators, Read All Extended, Fade Attenuator, Variable Attenuator Handover, Block, Set Block, Read Block, Read All Blocks, Fade Block, Variable Block Handover Switch Control Commands: Switch, Set Switch, Read Switch System Commands: Help, Identification, Store, Recall, Pause, Net, Serial, Close, Disconnect, MOTD, Date, Message, Restrict, IDENT, Name, Show Users, Reboot, Uptime, Prompt, Jog Speed
RF Connector	SMA female
Operating Temperature Range	0°C to +50°C
Physical Size	See outline drawing 092-6616

ECR/ECN # DATE	REV APPR / DATE	ECR/ECN # DATE	REV APPR / DATE
09/26/2017	CLK 09/26/2017		

SMA FEMALE
4-PLACES

CURRENT
ATTENUATION
DISPLAYED

MOMENTARY SWITCH FOR MANUAL CONTROL
2-PLACES
TAP TO STEP
HOLD TO JOG

IN   ATTEN 1   ATTEN 2   IN

OUT

jfw

50BA-XXX-XX
PROG. ASSEMBLY
XXX-XXXX MHz

OUT

3.25

.15

6.75

6.75

SWITCHCRAFT 712A JACK
ACCEPTS .22 ⌀ PLUG
SEE NOTE

DETAIL A

DC IN

FIRMWARE   RS-232

ETHERNET

REAR VIEW

PIN	FUNCTION
1	CHASSIS GROUND
2	RECEIVED DATA
3	TRANSMITTED DATA
4	NO CONNECTION
5	SIGNAL GROUND
6	NO CONNECTION
7	RTS
8	CTS
9	NO CONNECTION

DETAIL A
DE-9S

NOTE:
THIS UNIT IS SUPPLIED WITH A 12 VOLT TRANSFORMER (100-240VAC)