

730V-xW, V-Dipole Antenna for 7MHz Expanded Band

V-Dipole Antenna with BS41 Matching Tuner for 7MHz Expanded Band
Enable to Cover 200kHz Bandwidth on 7MHz for 730V-1W (while 150kHz for 730V-2W)
by Remotely Controlling 4-Band Switcher

730V-1W (7, 14, 21, 28MHz)

730V-1AW (7, 14, 21, 28, 50MHz)

Applicable bandwidth for the above models is 200kHz.

730V-2W (7, 21, 28MHz)

730V-2AW (7, 21, 28, 50MHz)

Applicable bandwidth for above models 150kHz.



BS41. It builds in matching circuit and balun transformer.

4-Band Remote Switch
(Supplied As An Assembly Kit)

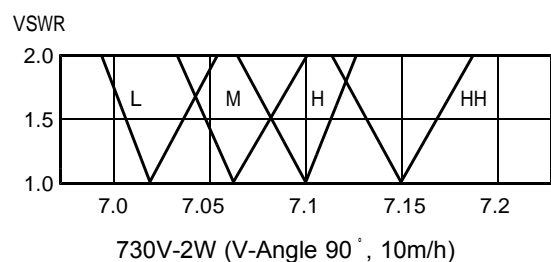
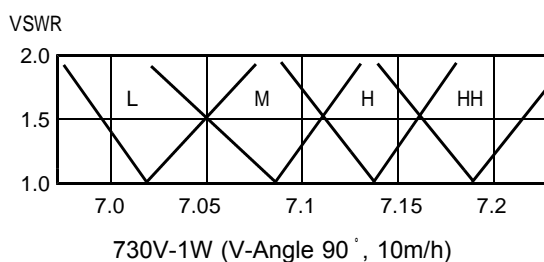
This model 730V-1W is a V-dipole enable to operate on recent newly assigned 7MHz expanded band. It covers approx. 200kHz on 7MHz of 730V-1W with maintaining as lower VSWR as 1.5:1, in the meanwhile 730V-2W covers however approx. 150kHz. (For the band switching, a 13.8VDC power supply and a remote cable of 4-conductors are required.)

Other than 7MHz, it contributes also to improve to maintain lower VSWR on other frequencies band that 730V-series allows. By conducting the band switching, it makes it possible to resonance the antenna tuning in more precisely, those higher frequencies in the ham band assigned for SSB, FM band etc.

Ex: At the best VSWR point on 14MHz of 730V-1W, operational frequency range expands from 14.15 up to 14.35MHz.
At the best VSWR point on 28MHz of 730V-2W, operational frequency range expands from 28.5 up to 29.0MHz.

As being the fact, taking the recent case in Japan, for example, the rules and regulations has been revised to be able to operate 7.060 ~7.140MHz for the PHONE (either AM or SSB) operation in All JA Contest as of 2010. In coupled with the band expansion, needing such an antenna 'ready-for-operation' will help a lot to meet the requests. The same is true of those applications and enthusiasts, seeking for wider bandwidth of operation in upper side of frequencies, for contest, DX-hunting, by determining to band selecting and switching the antenna swiftly into a preferable frequency desired, and quick contacting friends, rag-chewing with a favorite group or party avoiding an unwilling noise and QRM, hence the 730V-1W, 730V-2W will meet the requests.

VSWR for 7MHz (Typical)



- Those users who have already owned either 730V-1x or 730V-2x, the antenna tuner BS41 expanded kit for 7MHz band is only required. Except slight readjustment in tip element, no particular modification on the antenna itself is required as no electrical affection is given by attaching this unit.

BS41, Matching Tuner for 7MHz Expanded Band for 730V Series

This BS41 is a matching tuner designed for the existing 730V-series enable to operate the newly assigned expanded band on 7MHz. Attaching this unit to the model 730V-1x allows to expand the bandwidth on 7MHz for 200kHz bandwidth in keeping VSWR less than 1.5:1 while is approx. 150kHz for the model 730V-2x. A 13.8VDC power supply and 4-conductor cable for remote controlling are additionally required for band switching (customer furnished.)

Attaching this unit brings to helps the VSWR improvement for the other band other than 7MHz too. The VSWR characteristic for those higher bands (assigned for SSB, FM bands) tend to obtain a better VSWR.

Ex: 14MHz of 730V-1 enables to cover 14.15 ~ 14.35MHz bandwidth at the best VSWR point.

28MHz of 730V-2 enables to cover 28.5 ~ 29.0MHz bandwidth at the best VSWR point.

Not only those who owns the existing 730V-series for expanding it for 7MHz, but also those who wish to set up V-dipole seeking to operate on the newly assigned expanded frequencies on the 7MHz together, such as Contest lovers, DX-huntings, rag-chewing with friends, meeting QSO group or party on the air, this antenna meets the demands and is indispensable.

For the details for the BS41, refer to the page for 730V-xW.



WIDEBANDWIDTH, YAGI BEAM ANTENNA

Enable to Operate 7-Entirely 7.0~7.2MHz

Efficient Radiation by use of T-Wire Element

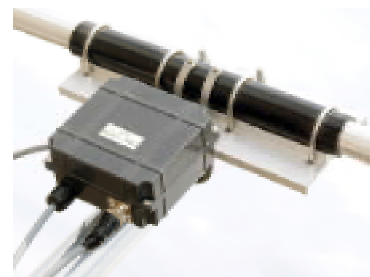
CY402 2-Element

CL40B-5 3-Element

CL40DX 4-Element



Model CY402, 2-Ele. Yagi Beam Antenna



ATU. / Driven



ETU, DTU./ Reflector· Director

These models CY402, CL40B-5 and CL40DX are reduced type, Yagi beam antennas assuring a high performance. In the reduced scale type of antenna, a high efficiency will be expected when designing it to set narrow space. Usually the bandwidth is accordingly related to the length of elements, hence these 2 antennas are being applied the entire band by dividing them into 3 bands for the model CY402, while dividing it into 2 bands, by which a high performance are ascertained to derive. In the center section of the each element is equipped with a band turning switching unit, that enables to change and select the band which is remotely controlled. In the tip of element end for which determines the radiation efficiency and performance, a capacitor rod is attached that gives high loading efficiency, works as electrically equal value of 1.6m longer length than mechanical length for both models, that almost as good performance as a full-sized antenna presents, along with using a low-loss loading inductor. Mechanically, utmost consideration is taking into account, a swaged and light weight tubing rod of high strength for element, and alumo-welded capacitor rod are using for reducing an unwanted weight and minimize a wind surface area. Each model is required with 13.8VDC power supply for band switching.

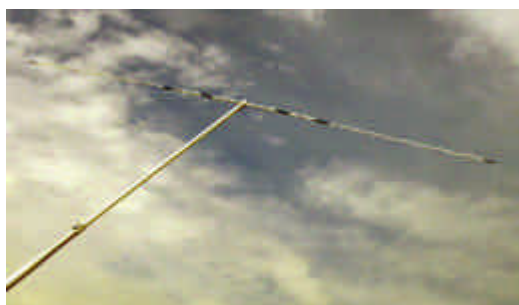
Model	CY402	CL40B-5	CL40B-5
Frequency MHz	7~7.2	7~7.2	7~7.2
Band	3	2	2
No. of Elements	2	3	4
Gain dBi	8	9.8	11
F/B, Ave. dB	20	22	20
Input, PEP kW	3	4	4 (CL40DX-1) 8 (CL40DX-2)
Boom Length m	4.98	10.3	15.2
Element Length m	14.0	15.8	16.0
Rotational Radius m	7.5	9.5	10.9
Wind Surface Area m ²	0.9	1.7	2.2
Weight kg	19	50	68
Control Cable (13.8VDC)	3-Core	2-Core	2-Core



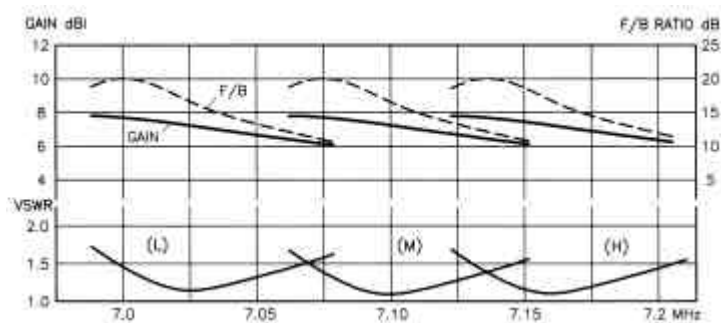
C1/BS-41 Controller

3-band controller for CY402.
This is a assembly kit.

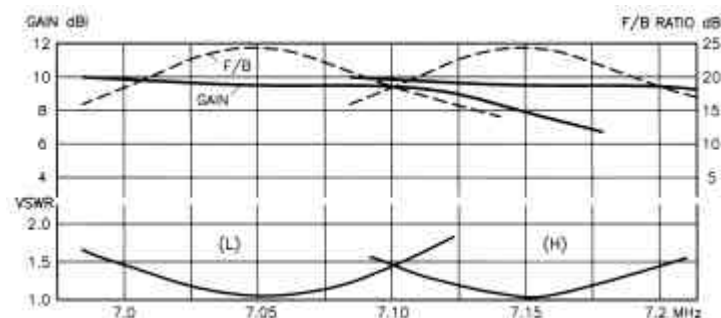
CL40B-5 and CL40DX does not include controller as it is only switching ON-OFF type.



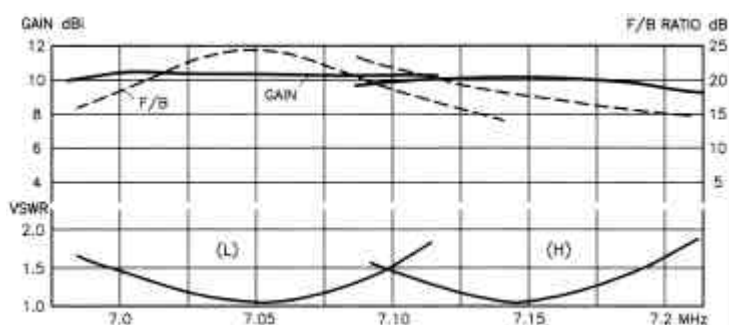
T-Wire •Element



CY402, VSWR, Gain, F/BRatio



CL40B-5, VSWR, Gain, F/B Ratio



CL40DX, VSWR, Gain, F/BRatio



Model CL40B-5, 3-Ele. Yagi Beam Antenna



Model CL40DX, 4-Ele. Yagi Beam Antenna

Upgrade Kit: For those who currently use AFA40 and CL40B-4, a modification kit enable them tougrade andoperatefortheexpandedband,isalsoavailable.