

**Instructions for Set Up and Use of Datacast Receiver
for EGR 282: Engineering Economics**

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If you have problems with your datacast laptop receiver, contact
Tina Hauser at Wisconsin Public Television (WPT).
Leave a message and you will be called or emailed back:

Phone (M-F, 9:00 a.m. – 5:00 p.m.): 608-262-6756

Email: hauser@wpt.org

Equipment List

Computer Bag:

- Dell laptop computer (in main zippered pocket)
- Black Dell laptop power pack/AC adapter (in front zippered pocket)
- Tan NOVRA A75 box (main pocket, in bubble wrap)
- Black power pack/AC adapter for NOVRA box
- Red or gray ethernet cable (main pocket)

UHF double-bowtie antenna
Black coaxial cable, tied with black rope

Instructions

NOTE: MAKE SURE TO SET UP EQUIPMENT IN THE CORRECT ORDER:

1. Remove the laptop, power pack, NOVRA box, NOVRA power pack and ethernet cable from the computer bag.
2. Attach the laptop power pack to the laptop, and plug into a grounded power outlet.
3. Connect the network cable from the laptop ethernet jack to the NOVRA box ethernet jack.
4. Screw one end of the black coaxial cable to the antenna cord and screw the other end to the coaxial connector on the NOVRA box (be careful not to bend the pin at each end of the coaxial cable.)
5. Attach the black NOVRA power pack to the NOVRA box and plug into a power outlet. The red POWER light on the NOVRA box should light up. If it does not, then there is no power running to the box.
6. Now turn on the laptop by pressing the silver power button, top and center on the laptop keyboard.
7. On the login page, type your password. Your password will be in lower case letters: wptuwex#
The # stands for your assigned computer number. You will find your computer number on a sticker on your laptop keyboard. The number follows the words **WPT DATACAST**. For instance, my computer's sticker reads **WPT DATACAST 1** so my password is: wptuwex1
After typing your password, click the green arrow.
8. After your computer is done starting up you should see a blue DELL screen background screen. You should also see some icons along the left edge of your screen and two icons in the middle of the screen. The icon on the left should read *SkyScraper DataReceiver 3.2*. The icon on the right should read *EGR 282 content*.
9. Now you will attempt to locate and lock-in a datacast signal being sent by Wisconsin Public Television's TV tower.
 - a. Double click on the *A75Console* icon at the left of your screen. A small window with the title *A75 Management Console* will open.

- b. Single click on the Select Device button. A new window with the title *Please Select a Device* will open. Only one device will appear.
- c. Single click on the green circle (with a check mark inside) to highlight the device.
- d. Single click on the *Select This Device* button. This will bring up the *A75 Management Console* again; however, now all of the buttons are 'live' and the Mac address and IP address for your computer, and the NOVRA box, are shown in the window.
- e. Click on the *Show Status* button. The window will enlarge to show additional information. You are interested in the *Strength* of the digital signal you are receiving, indication by a fluctuating blue bar and the number of *dB's*.
- f. In order to receive your class materials via datacasting, you will need to see a signal strength of 18 dB or more. You will notice the signal strength fluctuates. The best signal will be received when your antenna is facing in the direction of the nearest WPT television tower.

If you are in Sauk County then the nearest WPT tower is in Madison.

If you are in Marathon County then the nearest WPT tower is in Wausau, on Rib Mountain.

If you are in Wood County then the nearest WPT tower is also in Wausau, on Rib Mountain.

If you are in Marinette, then the nearest WPT tower is in Green Bay.

- g. If you need to, use a map (or an online map tool such as Yahoo Maps) to compare where your house is in relation to the tower. You will want to point the antenna in this direction. Start by simply placing the antenna on your desk or table, facing the direction of the tower. It does not matter if there is a wall or furniture in the way. Check the signal strength. Move the antenna around – you may turn it from side to side, or lift it up over you head. Keep checking the signal strength – you will want the strongest signal possible. If the signal is strongest when the antenna is near the ceiling, then try to place it on a tall piece of furniture, or even hang or tape it from the ceiling or wall.
- h. There are many potential obstacles that could prevent you from receiving the digital signal from your nearest WPT television tower. These obstacles include hills, trees, metal structures, metal house siding, etc. If you do not receive a signal, or you cannot get a signal better than 18 dB, please email or call Tina Hauser at Wisconsin Public Television.
- i. Once you have found a location for the antenna where you receive a signal of at least 18 dB, then you can close out of the *A75 Management Console* by clicking the *Exit* button.

10. Now you are ready to begin receiving datacast materials for your class. On your desktop, double click on the *SkyScraper DataReceiver 3.2* icon. A window called *Catalog Viewer* will open. This automatically starts the datacast receiver operation. The "data rate" window will show received bits per second. You will begin to download any current files from your instructor. Even if there are no new files for you to receive the data rate display will continue to show activity. You will be able to see the status of the downloading files by percentage, in the lower right corner of the window.

To see existing or new files, "minimize" the *Catalog Viewer* and open the desktop icon called *EGR 282 content* by double clicking.

To open existing or new files, double click on the desired file. Note that the files will disappear from your laptop after a few days. If you would like to keep the file, drag it to your desktop, or create a new folder and drag it to the folder.